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VIA UPS GROUND

October 5, 2016

Village of Arlington Heights Attn: Sam Hubbard 33 S. Arlington Heights Road Arlington Heights, IL 60005 (847) 368-5000

RE:

Pre-Submittal Review – Lexington Heritage Response to Interoffice Memorandum

Haeger File No.: 16-003

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PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

Sam Hubbard:

Enclosed for your review and approval are the following revised plans:

- Four (4) 24x36 & (4) 11x17 sets of Preliminary Engineering Plans
- Four (4) 24x36 & (4) 11x17 sets of Preliminary PUD Plat
- Four (4) 24x36 & (4) 11x17 sets of Preliminary Plat of Subdivision
- Four (4) 24x36 & (4) 11x17 sets of Landscape & Tree Preservation Plans
- Four (4) 24x36 & (4) 11x17 sets of Architect's Elevations
- Four (4) copies of the Traffic Study
- One (1) copy of the Autoturn Exhibit
- One (1) copy of the Photometric Plan
- One (1) copy of the Market Study
- One (1) copy of the HOA Documents
- One (1) copy of the Contract Documents (fully executed)
- One (1) copy of the Building Envelop & PUD Variations
- One (1) copy of the Retaining Wall Details
- One (1) check in the amount of \$2,195

The attached plans have been revised per the comments in your second review letter dated 04/29/2016. The original review comments are shown in *italics*, with our responses immediately below in **bold** text.

Building Services Department

- Design of the townhome project shall conform to the 2009 International Residential Code and local amendments as found in Chapters 23, 24, 25 and 27 of the Arlington Heights Municipal Code. Refer to Village website for specific amendments.
 - We have accessed the Village website and reviewed the amendments in conjunction with the 2009 IRC. The buildings drawings will be submitted to comply with both the model code and amendments.
- Each residence shall be protected by a fire sprinkler system per R313.1. Design shall follow NFPA 13D.
 The building drawings will be submitted to comply with the requirements of NFPA 13D.
- 3. Each residence shall be provided with 2 means of egress. Utilizing the garage man door as a means of egress is prohibited.
 - The two story townhomes comply with the exiting requirements via the front swinging and the rear sliding doors which exit at grade. The three story townhomes comply with the exiting requirements two means of egress as follows. The front swinging door exits at grade. The rear sliding door exits to the balcony and accesses grade via an exterior stair.

Fire Safety Division

- 1. All new construction shall comply with current adopted codes. We have accessed the Village website and reviewed the amendments in conjunction with the 2009 IRC. The buildings drawings will be submitted to comply with both the model code and amendments.
- 2. Fire apparatus roads shall be provided with a cul-de-sac for turning around all fire apparatus. Local Amendment. Dead ends are not permitted. We have eliminated the dead ends per our meeting on 9/21/2016
- 3. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings, or portions of buildings are hereafter constructed or moved into or within the jurisdiction. IFC 507.1. Noted
- 4. Will the water system be public or private? If private, fire service mains and appurtenances shall be installed in accordance with NFPA 24. IFC 507.2.1. The water main from connection to connection will be private, and has been noted on the plans.
- 5. The fire code official shall be notified prior to the water supply test. Water supply tests shall be witnessed by the fire code official or approved documentation of the test shall be provided prior to final approval of the water supply system. IFC 507.4. Noted
- 6. Fire hydrants shall be installed on the distribution system near every street intersection. Intermediate fire hydrants shall be spaced so that the interval between hydrants is approximately 300 feet. Hydrants and hydrant installation shall comply with details specifications on file with the Director of Engineering. Fire hydrants have been installed at intersections, or at watermian dead ends near an intersection.
- 7. Hydrant and valve spacing and installation on private property shall substantially comply with the standards established for the municipal water works system subject to review and modification by appropriate Village departments. Noted

Engineering Department

- 11. The petitioner is notified that these comments are being provided to ensure that the project meets the requirements for submittal to the Plan Commission. Approval by the Plan Commission is not an endorsement or approval of these documents to obtain the required building permits, engineering approval, or permits required by other government or permitting agencies for construction. Detailed plan review with associated comments will be provided upon submittal of plans for a building permit. The petitioner shall acknowledge that they accept We accept and understand.
- 12. Since a subdivision is being proposed the plans must meet all subdivision requirements. Final engineering plans for all public improvements must be approved prior to the final plat of subdivision approval. An Engineers estimate of construction cost for full site improvements is required to complete the calculation for plan review, inspection, and other fees. An Engineers estimate of construction cost for public improvements is also required to complete the calculation for the required public improvement guarantee deposit. The public improvements for this development would be the sanitary sewer main extension, the widening of Old Arlington Heights Road including curb and gutter to match the cross section to the north, street lighting and sidewalks along Old Arlington Heights Road and along Country Lane. These estimates should be submitted at least three weeks prior to the final Plan Commission meeting to allow us time to generate the fee letter and for the petitioner to assemble the proper documents.

An Engineer's Estimate shall be provided upon Final Engineering

- 13. Final engineering plans shall be georeferenced by using State Plane Coordinate System Illinois East. Noted.
- 14. The Final Plat of Subdivision must be reviewed and approved by the Engineering Department prior to final Plan Commission approval. The original signed mylar Final Plat of Subdivision, containing all non-Village signatures, shall be submitted one week before the scheduled date of the final Plan Commission meeting. Village Code Section 29-209 also requires a digital copy of the plat to be provided on disk to the Village. The petitioner shall acknowledge that they accept this understanding.
 We accept and understand.
- 15. The proposed detention vault will be a private system and as such will not be the Village's responsibility to maintain. Provide calculation s for sizing the weir. An Onsite Utility Maintenance Agreement must be executed prior to final engineering approval.
 A detail of the control structure and weir has been provided. Weir calculations and Onsite Utility Maintenance Agreement shall be provided upon Final Engineering.
- 16. Final approval will require final engineering plans including detention calculations showing HWL, storage required, storage provided, and restrictor sizing calculations. Include exhibit and narrative regarding the offsite flow area as trade-off for unrestricted flow from the site. Any detention storage system located under pavement must be designed to AASHTO HS-25 loading standard. Clearly show the overflow route for the site. Restrictors between 2" and 4" must be in a trap in a catch basin. Show the location and size of the restrictor. Provide a detail showing the restrictor catch basin.

 Noted. Some of these calculations have been provided on the Preliminary Plans for reference.
- 17. When on-site lighting is proposed, provide a site photometric lighting diagram indicating lighting intensities. Also provide the associated catalog cuts for all roadway, parking lot, and building mounted luminaires. All fixtures must be flat bottom, sharp cut-off, and no wall pack style fixtures will be permitted. The light fixtures should include optics to provide Night Sky Compliant illumination.

 Noted. A Photometric Plan has been included in this submittal using the lighting details previously provided.
- 18. The exhibit showing the turning path of the Fire Departments responding vehicle is acceptable; however, the layout of the roads includes dead ends. If the layout requires revisions, the exhibit must also be revised. We have included the revised Autoturn Exhibit within this submittal.
- 19. The heavy duty pavement cross section through the site is acceptable. The cross section of the pavement widening on Old Arlington Heights Road will be subject to IDOT review and approval. Noted.
- 20. MWRD permit is required. IEPA Sanitary permit required for the extension of the public sanitary sewer main. The only public sanitary sewer main will be that which is located within the public easement along the west property line. The rest of the sanitary system will be considered private.
 Noted
- 21. IEPA Water permit required for the construction of the water main. The water main throughout the site shall be considered privately owned and maintained. Master meters shall be included at the ROW lines. See the attachment for meter vault details. Show the vault to scale on the plans.

 Noted. The meter vault has been shown to scale on the plans.
- 22. IDOT permit required for all work within the Old Arlington Heights Road ROW, including the drainage connections. Detention vault placement from ROW line must follow IDOT guidelines.

 Noted. We have made a preliminary submittal to IDOT, and we moved the detention vault over.

- 23. Consider including bicycle racks in development plan to encourage alternate modes of transportation for employees and patrons.
 - This has been considered and we feel the development does not warrant the inclusion of bicycle racks.
- 24. Page 3 Geometry: Run the street mainline curb through the driveways on both Country Lane and Old Arlington Heights Road to clearly identify them as driveways, not side streets.
 - The curb has been shown to extend through both entrances of the site.
- 25. Page 3 Geometry: Sidewalk across the driveways to be 8" thick concrete. Curb shall stop at the sidewalk and not run through the sidewalk. Include ADA panels for the sidewalk at the driveways and at the corner of Old Arlington Heights Road and Country Lane.
 - Depressed curb has been shown where the public sidewalks meet the street entrances and ADA panels have been added.

Traffic:

- 26. The traffic report indicates that the Old Arlington Heights Road driveway is to be striped for a 3-lane crosssection. Any striping for this type of cross-section must be provided in advance of the stop sign, or painted stop bar. Provide a revised geometric plan. Include all proposed signing and striping. The traffic study has been revised to reflect the updated site plan that shows the driveway having a 2-lane cross-section.
- 27. The three parking stalls at the west end of the east-west private roadway are not geometrically convenient for safely backing out without backing up into someone's driveway. Reconsider or reconfigure. The site plan has been revised and the parking stalls have been reconfigured.
- 28. Show sight distance triangle to ensure entrance monument signage and landscaping does not block intersection sight distance. The entrance monument has been rotated to alleviate sight distance concerns. A diagram is included in the report.
- 29. The ultimate lane configuration of Old Arlington Heights Road shall be determined in joint cooperation between IDOT, the Village of Arlington Heights, and the Village of Buffalo Grove. Noted.

Preliminary Plot of Subdivision:

- 30. The plat was reviewed against the attached Preliminary Plat of Subdivision Checklist. Items # 1-3 and 5-13 are complete. Item #4: Tie the subdivision to existing Section lines. A map of the section lines has been added and the centerline of Old Arlington Heights Rd being defined.
- 31. For the Final Plat of Subdivision, use the attached Final Plat of Subdivision Checklist. The elementary school district is Consolidated Community School District #21, Township High School District #214, Harper Community College District #512. Add the utility signature blocks and the ComEd easement provisions. Noted. These signature blocks shall be added during the Final Plat.

Arlington Heights Fire Department

- 1. The project to be constructed following the specifications contained within Appendix D of the 2009 International Fire Code, which does not allow for dead ends but does include a dimension of 96' diameter cul-de-sac and minimum access road widths of 26' among other expectations.
 - We have eliminated the dead ends per our meeting on 9/21/2016



2. Units to be sprinkled.

The building drawings will be submitted to comply with the requirements of NFPA 13D.

3. Two means of egress from the structure are required. Exiting through the garage is not acceptable. The two story townhomes comply with the exiting requirements via the front swinging and the rear sliding doors which exit at grade. The three story townhomes comply with the exiting requirements two means of egress as follows. The front swinging door exits at grade. The rear sliding door exits to the balcony and accesses grade via an exterior stair.

Arlington Heights Police Department

- The character of use is consistent with the area and is not a concern. Noted
- This is a new project and all lighting should be up to code. Special attention should be given to illuminating parking and other common areas to prevent criminal activity.
 Noted
- There are no traffic problems at this location.
 Noted
- This is not a problem area in relation to traffic accidents.
 Noted
- 5. This development will create an increase in traffic volume. The traffic study indicates a traffic increase due to this development would cause the intersection of Old Arlington Heights Rd and Dundee to receive a rating of LOS F and LOS D, which are both unfavorable. The traffic study was not completed while Buffalo Grove High School was in session, which may cause more traffic congestion at the intersection of Old Arlington Heights and Dundee Rd.

While the intersection LOS decreases as noted, the increases in average delays are marginal (less than six seconds during the morning peak hour and less than two seconds during the evening peak hour). This is due to the minor increase in site traffic attributed to the northbound approach (seven trips during the morning peak hour and four trips during the evening peak hour). Furthermore, the change in LOS can also be attributed to the assumed growth which added 30 trips and 40 trips during the morning and evening peak hours, respectively.

It should also be noted that the traffic counts were conducted on Tuesday, April 19th when Buffalo Grove High School was in session per the attached District 214 2015-2016 school year schedule.

6. Landscaping should provide open sightlines to increase natural surveillance and avoid creating ambush locations.

Agent contact information must be provided to the Arlington Heights Police Department during all construction phases. Emergency contact cards can be filled out at the Village of Arlington Heights website (vah.com). This allows police department personnel to contact an agent during emergency situations or for suspicious/criminal activity on the property during all hours.

Noted. Contact information shall be provided upon beginning of construction.

Health Services Department

 A recycling plan must be submitted and approved by this Department after occupancy. Noted.



Planning & Community Development Department

General:

- 7. Please provide a copy of the fully executed contracts for purchase for each of the 5 properties. Sensitive information can be redacted. Included within this submittal
- 8. Please provide a Market Study that demonstrates the market is strong enough to sustain the proposed residential dwelling units. Included within this submittal.
- 9. The required application amount fee of \$4,795 was not paid. A check in the amount of \$2,600 was received at the time of application, leaving a remaining balance of \$2,195 due. Please provide this amount as soon as possible.

The remaining check is included with this submittal.

- 10. The elevation for the two-story townhome building did not contain a height measurement to peak of roof or to mean roof height. As setbacks for structures in the R-6 District are based in part on the height of the building, certain required setback information could not be determined. Please revise the elevations for the two-story building to include the building height (peak and mean). Updated architectural drawings have been included in this submittal.
- 11. Please provide a detailed Construction Phasing and Staging Plan. This plan needs to include, but shall not be limited to, the following information; anticipated number of construction phases, the anticipated construction start and completion of each phase, the anticipated number of construction works and where they will park during each phase of construction, the type and amount of construction vehicles per phase and where they will be staged, and the location of material storage. Per conversation with Sam Hubbard, Development Planner, detailed construction and staging information will be provided at the time of the final plat approval. The approximate date to begin construction (site clearing, demolitions, and earthwork) is April 2017. There will be only one land development/platting construction phase. The end date of construction is dependent on market and sales pace, but completion is anticipated in late 2019.
- 12. School, Park, and Library contributions will be required prior to the issuance of a building permit. Noted.

Zoning:

- 13. The Plan Commission and Village Board will have to approve the following:
 - A rezoning from the M-1 District into the R-6 District.
 - A preliminary plat of subdivision to divide the property into 49 individual townhome unit lots and one common lot for the roadway network.
 - A preliminary PUD to allow multiple buildings on one zoning lot.
 - An amendment to the Comprehensive Plan to change the designation of the subject property from "Research and Design, Manufacturing, and Warehouse" to "Moderate Density Multi-Family".
 - Repeal of 92-059 and 92-060 relative to the Old Arlington Heights Overlay Zone.

The following Variations have been identified relative to the individual townhome lots:

- 1. For clarification purposes the site plan does show two different unit types for each product type, the rear loaded Mews product and the front loaded townhomes. Each of these units are interchangeable and the ultimate location of each unit will vary depending on ultimate sales. The requested variations did not make a distinction between the various unit types shown on the site plan per their respective location but rather analyzed the worst case scenario for each of the requested variations. The original submittal also did not distinguish an interior lot from an end lot and had assumed that the smaller interior lot would dictate because it created the greatest variation.
- 2. The Subdivision Plat had shown different lot areas for some of the end lots within each product type which seemed to further expand the subtleties of the variation request.
- 3. The revised list of Building Envelope Lot Variations has been revised to reflect a unified lot area standard for end lots and interior lots for each product type. The lot number references have also been revised to reflect the revisions to the site plan that changed building 7 from a six unit to a four unit building and building 9 from a five unit building to a six unit building as a result of other comments pertaining to the dead end drive in the southwest corner of the site.
- a. A Variation from Chapter 28, Section 5.1-6.3 to reduce the required minimum lot size from 3,500 sq. ft. to 1,200 sq. ft. on lots 1-1, 1-6, 3-1, and 3-6.

Please see above.

b. A Variation from Chapter 28, Section 5.1-6.3 to reduce the minimum lot size from 3,500 sq. ft. to 1,020 sq. ft. on lots 1-2 thru 1-5, 2-2 thru 2-6, and 3-2 thru 3-5.

Please see above.

c. A Variation from Chapter 28, Section 5.1-6.3 to reduce the minimum lot size from 3,500 sq. ft. to 1,194 sq. ft. on lots 2-1 and 2-7.

Please see above.

d. A Variation from Chapter 28, Section 5.1-6.3 to reduce the minimum lot size from 3,500 sq. ft. to 2,229 sq. ft. on lots 4-1, 4-4, 5-1, 5-4, 7-1, 7-6, 8-1, and 8-6.

Please see above.

- e. A Variation from Chapter 28, Section 5.1-6.3 to reduce the minimum lot size from 3,500 sq. ft. to 1,975.6 sq. ft. on lots 4-2, 4-3, 5-2, 5-3, 6-2 thru 6-4, 7-2 thru 7-5, 8-2 thru 8-5, and 9-2 thru 9-4.

 Please see above.
- f. A Variation from Chapter 28, Section 5.1-6.3 to reduce the minimum required lot size from 3,500 sq. ft. to 2,229.4 sq. ft. on lots 6-1, 6-5, 9-1, and 9-5.

Please see above.

g. On the above lot size Variations it is assumed that all units will be 3 bedroom units, although if the buyer opts for a 2 bedroom unit the minimum required lot size will be less and the proposed Variation will therefore accommodate for this scenario.

Please see above.

A Variation from Chapter 28, Section 5.1-6.4.1to reduce the required front yard setback from 30' to 3' for lots 1-1 thru 3-6.

Please see above.

i. A Variation from Chapter 28, Section 5.1-6.4.1to reduce the required front yard setback from (unknown due to building height not being provided)' to 3' for lots 4-1, 4-3, 5-1, 5-3, 6-1, 6-4, 7-1, 7-2, 7-6, 8-1, 8-2, 8-6, 9-1, 9-2, and 9-5.

The requested front yard setback variation for the 2 story Townhome has been changed from 3 ft. to 1.5 ft.

j. A Variation from Chapter 28, Section 5.1-6.4.1to reduce the required front yard setback from (unknown due to building height not being provided)' to 5' for lots 4-2, 4-4, 5-2, 5-4, 6-2, 6-3, 6-5, 7-3 thru 7-5, 8-3 thru 8-5, 9-3, and 9-4.

The requested front yard setback variation for the 2 story Townhome has been changed from 3 ft. to 1.5 ft.

k. A Variation from Chapter 28, Section 5.1-6.4.1to reduce the required side yard setback from 7.5' to 0' on lots 1-1, 1-6, 3-1, and 3-6.

The requested side yard variations are all still shown as a zero ft. setback with the lot references and required side yard setbacks adjusted per site plan revisions.

A Variation from Chapter 28, Section 5.1-6.4.1to reduce the required side yard setback from 7.13' to 0' on lots 1-2 thru 1-5, 2-2 thru 2-6, and 3-2 thru 3-5.

The requested side yard variations are all still shown as a zero ft. setback with the lot references and required side yard setbacks adjusted per site plan revisions.

m. A Variation from Chapter 28, Section 5.1-6.4.1to reduce the required side yard setback from 7.49' to 0' on lots 2-1 and 2-7.

The requested side yard variations are all still shown as a zero ft. setback with the lot references and required side yard setbacks adjusted per site plan revisions.

n. A Variation from Chapter 28, Section 5.1-6.4.1to reduce the required side yard setback from (unknown due to building height not being provided)' to 0' on lots 4-1, 4-4, 5-1, 5-4, 7-1, 7-6, 8-1, and 8-6.

The requested side yard variations are all still shown as a zero ft. setback with the lot references and required side yard setbacks adjusted per site plan revisions.

o. A Variation from Chapter 28, Section 5.1-6.4.1to reduce the required side yard setback from (unknown due to building height not being provided)' to 0' on lots 4-2, 4-3, 5-2, 5-3, 6-2 thru 6-4, 7-2 thru 7-5, 8-2 thru 8-5, and 9-2 thru 9-4.

The requested side yard variations are all still shown as a zero ft. setback with the lot references and required side yard setbacks adjusted per site plan revisions.

p. A Variation from Chapter 28, Section 5.1-6.4.1to reduce the required side yard setback from (unknown due to building height not being provided)' to 0' on lots 6-1, 6-5, 9-1, and 9-5.

The requested side yard variations are all still shown as a zero ft. setback with the lot references and required side yard setbacks adjusted per site plan revisions.

q. A Variation from Chapter 28, Section 5.1-6.4.1to reduce the required rear yard setback from 35' to 4' on lots 1-1 thru 3-6.

The requested rear yard setback variation for the Mews lots 1-1 thru 3-6 remains at 4 ft. The requested rear yard setback variation for the 2 story Townhome lots 4-1 thru 9-6 has been changed to 19.25 ft. from 18 ft.

r. A Variation from Chapter 28, Section 5.1-6.4.1to reduce the required rear yard setback from (unknown due to building height not being provided)' to 20' on lots 4-1, 4-3, 5-1, 5-3, 6-1, 6-4, 7-1, 7-2, 7-6, 8-1, 8-2, 8-6, 9-1, 9-2, and 9-5.

The requested rear yard setback variation for the Mews lots 1-1 thru 3-6 remains at 4 ft. The requested rear yard setback variation for the 2 story Townhome lots 4-1 thru 9-6 has been changed to 19.25 ft. from 18 ft.

s. A Variation from Chapter 28, Section 5.1-6.4.1to reduce the required rear yard setback from (unknown due to building height not being provided) to 18 on lots 4-2, 4-4, 5-2, 5-4, 6-2, 6-3, 6-5, 7-3 thru 7-5, 8-3 thru 8-5, 9-3, and 9-4.

The requested rear yard setback variation for the Mews lots 1-1 thru 3-6 remains at 4 ft. The requested rear yard setback variation for the 2 story Townhome lots 4-1 thru 9-6 has been changed to 19.25 ft. from 18 ft.

t. A Variation from Chapter 28, Section 5.1-6.5 to increase the maximum allowable Building Lot Coverage from 35% to 75.7% for Lots 1-1, 1-6, 3-1, and 3-6.

The Building Lot coverage variation has been adjusted per the site plan revisions, and worst case scenario.

u. A Variation from Chapter 28, Section 5.1-6.5 to increase the maximum allowable Building Lot Coverage from 35% to 85% on Lots 1-2, 1-5, 2-3, 2-7, 3-2, and 3-5.

The Building Lot coverage variation has been adjusted per the site plan revisions, and worst case scenario.

v. A Variation from Chapter 28, Section 5.1-6.5 to increase the maximum allowable Building Lot Coverage from 35% to 89% on Lots 1-3, 1-4, 2-2, 2-4, 2-5, 3-3, and 3-4.

The Building Lot coverage variation has been adjusted per the site plan revisions, and worst case scenario.

w. A Variation from Chapter 28, Section 5.1-6.5 to increase the maximum allowable Building Lot Coverage from 35% to 76% on Lots 2-1 and 2-7.

The Building Lot coverage variation has been adjusted per the site plan revisions, and worst case scenario.

x. A Variation from Chapter 28, Section 5.1-6.5 to increase the maximum allowable Building Lot Coverage from 35% to 60% on Lots 4-1, 5-1, 7-6, and 8-6.

The Building Lot coverage variation has been adjusted per the site plan revisions, and worst case scenario.

y. A Variation from Chapter 28, Section 5.1-6.5 to increase the maximum allowable Building Lot Coverage from 35% to 67% on Lots 4-2, 5-2, 6-2, 6-3, 7-3 thru 7-5, 8-3 thru 8-5, 9-3, and 9-4.

The Building Lot coverage variation has been adjusted per the site plan revisions, and worst case scenario.

z. A Variation from Chapter 28, Section 5.1-6.5 to increase the maximum allowable Building Lot Coverage from 35% to 67.7% on Lots 4-3, 5-3, 6-4, 7-2, 8-2, and 9-2.

The Building Lot coverage variation has been adjusted per the site plan revisions, and worst case scenario.

aa. A Variation from Chapter 28, Section 5.1-6.5 to increase the maximum allowable Building Lot Coverage from 35% to 59.4% on Lots 4-4, 5-4, 7-1, and 8-1.

The Building Lot coverage variation has been adjusted per the site plan revisions, and worst case scenario.

bb. A Variation from Chapter 28, Section 5.1-6.5 to increase the maximum allowable Building Lot Coverage from 35% to 59.8% on Lots 6-1 and 9-5.

The Building Lot coverage variation has been adjusted per the site plan revisions, and worst case scenario.

cc. A Variation from Chapter 28, Section 5.1-6.5 to increase the maximum allowable Building Lot Coverage from 35% to 59.1% on Lots 6-5 and 9-1.

The Building Lot coverage variation has been adjusted per the site plan revisions, and worst case scenario.

dd. A Variation from Chapter 28, Section 5.3-2 to increase the maximum allowable F.A.R. from 150% to 179.2% for Lots 1-1, 1-6, 3-1, and 3-6.

The FAR variations have been adjusted per the site plan revisions and worst case scenario.

ee. A Variation from Chapter 28, Section 5.1-6.5 to increase the maximum allowable F.A.R. from 150% to 205% on Lots 1-2, 1-5, 2-3, 2-7, 3-2, and 3-5.

The FAR variations have been adjusted per the site plan revisions and worst case scenario.

ff. A Variation from Chapter 28, Section 5.1-6.5 to increase the maximum allowable F.A.R. from 150% to 210.8% on Lots 1-3, 1-4, 2-2, 2-4, 2-5, 3-3, and 3-4.

The FAR variations have been adjusted per the site plan revisions and worst case scenario.

gg. A Variation from Chapter 28, Section 5.1-6.5 to increase the maximum allowable F.A.R. from 150% to 180.1% on Lots 2-1 and 2-7.

The FAR variations have been adjusted per the site plan revisions and worst case scenario.

hh. A Variation from Chapter 28, Section 6.6-5 to allow decks on Lots 1-1 thru Lot 3-6 to be setback 0' from the rear lot line.

A variation has been added to the revised Building Envelope Lot Variations list to accommodate the need for a deck variation for buildings 1 thru 3 due to the change in the definition status of the rear balconies to a deck because of the addition of the stairs that are required by fire code.

ii. A Variation from Chapter 28, Section 6.6-5.1to allow bay windows to project 2' into the required side yard on Lots 1-1, 1-6, 2-1, 2-7, 3-1, 3-6, 4-1, 4-4, 5-1, 5-4, 6-1, 6-5, 7-1, 7-6, 8-1, 8-6, 9-1, and 9-5.

The same variation applies but is revised per the new lot numbers per the site plan revisions.

- 14. The "Building Envelope Lot Variation" analysis submitted in conjunction with the application requested the following variations, which need to be clarified:
 - a. The letter requested a reduction in front yard setbacks to 3' for Lots 4-1 thru 9-5 (two-story townhome units). Based on the site plan, not all of the units will be 3' setback (the units have staggered front setbacks), and it appears that some of the units will be setback 5' from the front yard line (+2, 4-4, 5-2, 5-4, 6-2, 6-3, 6-5, 7-3 thru 7-5, 8-3 thru 8-5, 9-3, and 9-4). Please clarify if a 5' setback is what is proposed for these units.

As per the response to comment 13a thru 13gg, the unit type location depicted on the site plan may not be the ultimate location, and therefore the requested variations for the front yard, rear yard, building coverage, and FAR are based on the worst case. The revised Building Envelope Lot Variation sheet has been updated to reflect changes to the front and rear yard setback variations for the 2-story Townhomes, and slight adjustments to the building coverage and FAR variations per the site plan revisions.

b. The letter requested a reduction in rear yard setbacks to 4' for Lots 1-1 thru 3-6 (three-story townhome units). Based on the scale of the site plan, it appears that these units will be 5' setback from the rear property line. Please clarify if a 5' rear yard setback is what is proposed for these units.

The requested 4 ft. rear yard setback for Lots 1-1 thru 3-6 is still requested. The previous site plan did not show the 1 ft. third floor projection at the rear of the building. The revised site plan has added this element to the building footprint.

c. As previously indicated above, the two-story townhome units are staggered, which means some of those units provide a 20' rear yard setback and some provide a 18' rear yard setback. Based on the setback provided, the required Variation is different for each unit. Please clarify if the correct units have been assigned an 18' setback vs. a 20' setback as outlined in 11r. and 11s. above. As per the response to comment 13a thru 13gg, the unit type location depicted on the site plan may not be the ultimate location, and therefore the requested variations for the front yard, rear yard, building coverage, and FAR are based on the worst case. The revised Building Envelope Lot Variation sheet has been updated to reflect changes to the front and rear yard setback variations for the 2-story Townhomes, and slight adjustments to the building coverage and FAR variations per the site plan revisions.

d. The letter requested Building Coverage and FAR Variations as differentiated between end units (exterior) and interior units. However, two different models are proposed within interior units and on end units, for example model 815 and 830 can be found on the end units and also within interior units (as opposed to all end units being model 815 and all interior units being 830). This therefore alters the building coverage and FAR based on which unit is proposed on which lot. Please clarify if the Variations as identified in 11t. thru 11gg. have been correctly assigned based on the location of each model on the subject lots.

As per the response to comment 13a thru 13gg, the unit type location depicted on the site plan may not be the ultimate location, and therefore the requested variations for the front yard, rear yard, building coverage, and FAR are based on the worst case. The revised Building Envelope Lot Variation sheet has been updated to reflect changes to the front and rear yard setback variations for the 2-story Townhomes, and slight adjustments to the building coverage and FAR variations per the site plan revisions.

e. The letter requested a Variation to allow chimney encroachment into the required yard of up to 24 inches, however, no chimneys are shown on the elevations. Please clarify the need for this Variation.

The chimneys only occur on one of the 2-story townhome unit types at the rear of the unit and would not extend beyond the deepest part of the unit. Therefore, this variation has now been eliminated.

f. Please clarify if all necessary Variations have been outlined/included for each townhome lot.

To the best of our knowledge, all necessary Variations have been identified, and both the overall PUD and the Building Envelope Lot variations sheets have been updated to include any relevant adjustments per the round 1 staff report.

- The following Variations have been identified relative to the overall PUD:
 - a. A Variation from Chapter 28, Section 5.1-6.4.1 to reduce the required side yard setback from (unknown due to building height not being provided) to 33' for Townhome Buildings 8 and 9.

The 25' 1" building height has been added to the elevation for the Townhome Architecture which verifies the building height shown on the Preliminary Plat site data. The variation request for buildings 8 and 9 is to reduce the side yard setback to 31 feet, which is to the deepest projection of the building. The 33 ft. dimension that was labeled was to a point on the building 2 ft. further recessed.

b. A Variation from Chapter 28, Section 5.1-6.4.1 to reduce the required side yard setback from (unknown due to building height not being provided) to 31' for Townhome Building 7.

A side yard variation for Townhome building 7 is no longer needed as a result of site plan revisions per other staff comments.

c. A Variation from Chapter 28, Section 5.1-6.9(a) to reduce the minimum spacing requirements between Townhome Buildings 8 and 9 from 50' to approx. 36.5'.

The dimensions shown did not reflect the loss of separation due to the addition of brick along the sides of the buildings. The building footprints have been revised to include brick and the dimensions between buildings 8 & 9 have been revised accordingly.

d. A Variation from Chapter 28, Section 5.1-6.9(a) to reduce the minimum spacing requirements between Townhome Buildings 6 and 7 from 50' to approx. 44'.

The dimensions shown did not reflect the loss of separation due to the addition of brick along the sides of the buildings. The building footprints have been revised to include brick and the dimensions between buildings 6 & 7 have been revised accordingly.

e. A Variation from Chapter 28, Section 5.1-6.10 to increase the allowable projections in outer courts from 5' to 21' for Townhome Buildings 4-9.

We believe that there is no variation needed from this provision. Although the entries for the townhome units do create an outer court as defined in the Zoning Ordinance, these spaces are unobstructed to the sky as required and therefore no projection occurs that would necessitate this variation.

f. A Variation from Chapter 28, Section 11.2-11.2 to allow off-street parking spaces to be located in the front yard setback (relative to the northern most guest parking stall which is setback approximately 18' from the front yard line and required to be setback a minimum of 25').

A separate variation has been added to the overall PUD sheets (items 3 & 4) regarding this comment.

g. A Variation from Chapter 28, Section 6.13-3b to increase the maximum height of fences from 5' to 6' tall in the rear yard to allow board on board fences in the rear yards of the units in Townhome Buildings 4 thru 9.

A separate variation has been added to the overall PUD sheets (items 3 & 4) regarding this comment.

h. A Variation from Chapter 28, Section 6.13-3a to increase the maximum height of fences from 3' to 6' tall (solid) in the front yard along Country Lane as depicted on the Landscape Plan (6' tall solid fence along western and southern property lines is allowed due to adjacent zoning districts). Please note that it is recommended that this fence not encroach into the front yard and that screening be provided with landscaping instead.

The referenced variation in this comment has been eliminated.

- i. A Variation from Chapter 28, Section 9.3-6f(5) to allow non-parallel parking on a private roadway. The referenced variation in this comment has been eliminated.
- 16. The "Land Use / Zoning Code / Variation Criteria" analysis submitted in conjunction with the application requested the following variations, which need to be clarified:
 - a. The letter requested a reduction in the building spacing requirements between buildings 6 and 7 to allow 39' of spacing. The site plan shows a measurement indicating that these buildings will be spaced 41' apart, however, when measured with a scale this distance appears to be 44'. Please clarify the actual distance between the buildings and revise the site plan to show the correct distance.

The response to comments 15c & 15d explained the discrepancy between the scaled and shown dimensions. The dimensions on the current plan have been adjusted accordingly. To the best of our knowledge no additional variations to the overall PUD are required.

b. The letter requested a reduction in the building spacing requirements between buildings 8 and 9 to allow 32' of spacing. The site plan shows a measurement indicating that these buildings will be spaced 34' apart, however, when measured with a scale this distance appears to be 36.5'. Please clarify the actual distance between the buildings and revise the site plan to show the correct distance.

The response to comments 15c & 15d explained the discrepancy between the scaled and shown dimensions. The dimensions on the current plan have been adjusted accordingly. To the best of our knowledge no additional variations to the overall PUD are required.

Please clarify if all necessary Variations have been outlined/included for the overall PUD lot.

The response to comments 15c & 15d explained the discrepancy between the scaled and shown dimensions. The dimensions on the current plan have been adjusted accordingly. To the best of our knowledge no additional variations to the overall PUD are required.

Plat of Subdivision:

17. Please revised the Plat to show the requested front and rear yard setbacks for each townhome unit. The plat of subdivision has been revised accordingly.

Site Plan:

- 18. Please clarify if F.A.R. calculations took into account the optional bay windows for the 3-story townhome units. Yes, the FAR includes calculations for the optional bay windows for the 3-story Townhome units.
- 19. Please clarify the need for all retaining walls proposed within the development, i.e. if the site will be cleared and graded, why are the grades not being leveled?
 Retaining walls still need to be required when the grade transitions quickly. The Village of Arlington Heights has a restrictive maximum grade of 5:1 allowable. Since the site is not flat from one end to the other, and buildings need to be, the grade is made up within the walls. Also, some of the townhomes provided on this site have a 4' grade transition from front to back.
- 20. A cross section and material details for all retaining walls is required. Retaining wall details have been included in this submittal.
- 21. Please provide a photometric plan. Photometric plan has been included.
- 22. Please show all bay projections on Site Plan for buildings 4 thru 9.

 Bay projections, bump outs, and fireplaces are now shown on the site plan.

Buildings:

- 23. Will any HVAC or mechanical units be located outside of the buildings or will all mechanical equipment be located within the buildings? If these elements will be located exterior to the units, please revise the site plan to show their locations.
 - HVAC units will be located outside the building and are now shown on the plans.
- 24. Will any energy efficient/green design features be included on the buildings and site?

 The site does not include any energy efficient features, the buildings will meet the Energy Conservation Code.

Landscaping:

- 25. The landscape plan does not match the civil plan (location of retaining walls, services walks, etc.). Please revise the landscape plan so that it matches the civil plan.
 - The Landscaping matches the most current Engineering as of the time of revision. The Landscape Plan shall be revised as new Engineering changes are made.
- 26. Landscaping will be required between all tiers of the retaining walls and at the base of the retaining walls. Landscaping has been added between all retaining wall tiers and at the base of all retaining walls.

Parking and Circulation:

27. These three non-parallel spaces appear to be 9' in width but the 9' width appears to be measured from back of curb. The required 9' width must be measured from the face of the curb. Please revise the site plan to show

measurement from face of curb, which will likely reduce the width of the northern and southern parking space to 8.5'. An exception to allow 8.5' wide parking spaces is at the discretion of the Engineering Dept. We have removed this parking area.

- 28. No width or length measurement is provided for the northernmost 2 guest parking stalls. Please revise the site plan to provide this measurement.
 - We have added a measurement for this parking area.
- 29. Please clarify why the parallel guest parking spaces are proposed at 22' in length when the code allows a 18' length dimension for parking spaces.
 - We understand that VAH code allows for 18', however we feel 22' is a preferable length based off our experience with previous projects.
- Per Section 11.7 of Chapter 28, Multiple-Family developments between 10,000 200,000 sq. ft. must provide one off street loading space. Please clarify if a Variation from this requirement is requested.
 - The proposed Townhome units by definition in the Zoning Code are defined as Dwelling, Attached which are more single family in character and not by definition Multiple Family. Therefore, we believe this provision of the Zoning Ordinance does not apply and no variation is required.
- 31. Will Lot 10 be dedicated as an easement for shared access and shared parking? If so, this should be included on the proposed Plat of Subdivision.
 - Lot 10 will have a blanket utility easement that will include parking.
- 32. Consider permeable pavers or decorative pavement for guest parking areas. Decorative pavers have been added to the site entrances.

Traffic:

- 33. The traffic study must be revised so that it is based on 49 residential units rather than 52 residential units. The traffic study has been revised and is included with this submittal.
- 34. The traffic study must be revised so that it is based on 209 parking spaces (98 within garages) rather than 222 parking spaces (104) being within garages).
 - The traffic study has been revised based on the updated number of parking spaces.
- 35. The traffic study should be revised so that in includes the current site plan as the exhibit, not the previous site plan which depicted 52 residential units.
 - The current site plan is included in the updated traffic study.
- 36. The "Proposed Development Plan" section of the study does not highlight that the development has included the addition of a 2nd southbound travel lane to Old Arlington Heights Road. The report should identify and discuss the rationale behind the need for this additional lane.
 - The addition of the second southbound through lane has been included.

Tree Preservation:

- 1. Per Chapter 28, Section 6.15-5.3 A reasonable effort shall be made to retain existing trees on the tree survey through the integration of those trees into the site and landscaping plan for a proposed development. If a reasonable integration of existing trees into the development plan is not possible, the developer may choose to mitigate the trees based on the exchange rate set forth in sections 6.15-6.4. It appears that the majority of the trees are identified for removal. Opportunities for preserving additional trees must be explored. Please include the disposition for each tree on the tree inventory.
 - Due to the Engineering requirements of the site, there are very limited opportunities for retaining existing vegetation on site. The only opportunities exist along the perimeter of the site where we are meeting grade. The poor volunteer nature of the existing trees does not warrant any special preservation techniques to be

employed. The quality of the proposed trees is superior to those being removed. The disposition of each tree is indicated on the tree inventory which is shown on the second sheet of the Tree Preservation Plan.

2. Tree preservation must consider grading and any digging or trenching for utilities which should be identified on the preservation plan.

Grading and utility trenching has been considered on the Tree Preservation Plan.

Landscape Issues:

- 1. Provide additional landscaping along the west and south property line. Overall, the landscaping is minimal along the shared property line.
 - Additional Landscaping has been provided along the west and south property lines.
- It is recommended that additional landscaping be provided along Country Lane and Old Arlington Heights Road.
 - Additional Landscaping has been provided along Country Lane and Old Arlington Heights Road.
- 3. In front of the proposed retaining wall, provide landscaping that consists of shrubs and perennials in order to soften/buffer the wall.
 - Additional Landscaping has been provided in front of the proposed retaining walls.
- 4. Must increase the size of the shade trees from 3 inch caliper to four inch caliper (Chapter 28, Section 6.16). Trees have been increased in size to 4" caliper.
- 5. Must provide a 6 foot solid screen along the west and south property line. The plan indicates a board on board fence and the fence must be solid. The six foot fence along Country Lane does not meet code and it is recommended that landscaping be provided in place of the proposed fence along Country Lane.
 The 6' fence is now specified as a solid dog-eared fence. The fence section along Country Lane has been removed and replaced with more extensive landscaping.
- 6. The proposed ground sign and the landscaping appear to be located within the vision triangle. Per Chapter 28, No building or structure hereafter erected and no planting or other obstruction to the vision of drivers of motor vehicles or pedestrians shall be located: 6.11.1 In any "R" Districts, exceeding a height of three feet above the street grade within 12 feet of the intersecting street lines bordering corner lots and between private properties within 12 feet of walks, driveways, bike paths, and walking paths. Please evaluate the location of the proposed sign.
 - The ground sign has been relocated to the corner of Country Lane and Old Arlington Heights Road. It is located 12' from either sidewalk and outside of the vision triangle.
- 7. It is recommended that landscaping that consists of shrubs and perennials be provided near the drive aisle/entrances to the development.
 - Additional Landscaping has been provided near the drive aisle/entrances to the development.
- A tree fee of \$4 per lineal foot of frontage is required at the time of permit along with a landscape compliance bond that is 30% of the estimated landscape costs.
 Noted.
- 9. All mechanical units must be fully screened.
 All utilities shall be fully screened.

This concludes our resubmittal. Should you require further information or have any questions, please do not hesitate to contact us.

Sincerely,

HAEGER ENGINEERING, LLC

Timothy J. Burda, P.E. Project Manager