

DOCKET ITEM #3 Development Site Plan #2015-0015 101, 101 ½, 103, 103 ½, & 105 East Reed Avenue – East Reed Townhouses

Application	General Data		
	PC Hearing:	June 4th, 2015	
Project Name:	CC Hearing:	N/A	
East Reed Townhouses	If approved, DSP Expiration:	June 4th, 2018	
	Plan Acreage:	15,287 sf (0.35 acres)	
	Zone:	RB, Townhouse zone	
Location:	Proposed Use:	Residential	
101 & 105 East Reed Ave	Dwelling Units:	5	
	Gross Floor Area:	15,284 sf	
A	Small Area Plan:	Potomac West	
Applicant: Prolandian Corporation	Historic District:	N/A	
Profandian Corporation	Green Building:	LEED Certified or equivalent	

Purpose of Application

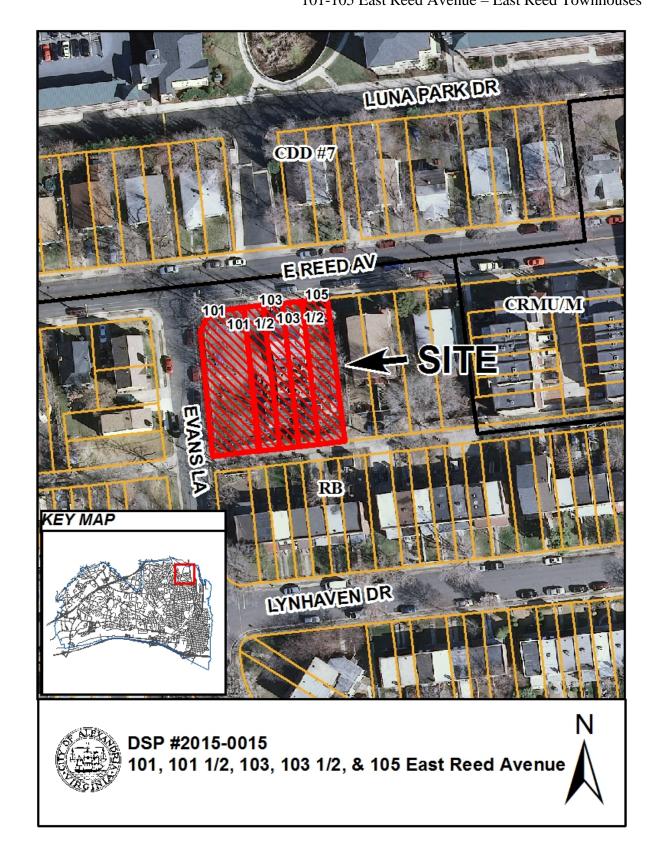
The applicant requests approval of an amendment to an approved development site plan.

Staff Recommendation: APPROVAL WITH CONDITIONS

Staff Reviewers:

Jim Roberts, Urban Planner (P&Z)

Gary Wagner, ASLA, Principal Planner (P&Z)



I. SUMMARY

Recommendation & Summary of Issues

Staff recommends *approval* of an amendment to a development site plan for five townhouses. The applicant requests that the height of the houses is amended to reflect their constructed condition, which is approximately 18 inches higher than that approved.

Staff considers that the amendment to the height will bring into compliance a structure that remains well below the height limit of the zone and remains consistent in scale and massing with its surroundings.

Significant topics that will be covered in this report include:

- Development in conformance with the existing RB zone.
- Mitigation to the site for impacts caused by the increase in height.
- Project timeline.

II. BACKGROUND

A. Project History

The project to construct five townhouses at this location, together with its associated subdivision request, was approved by the planning Commission as a Development Site Plan (DSP) in April 2012 on a vote of 7-0.

The applicant progressed to construct the project in a timely manner and recently applied for a certificate of occupancy. As part of the occupancy process, the applicant submitted a height survey which indicated that the building constructed was approximately 18 inches higher than approved. Staff advised the applicant that they were legally unable to approve a certificate of occupancy under that condition. Further, the applicant was advised that the only option which did not necessitate a substantial re-construction of the building, was to seek and achieve an amendment to the approved DSP.

B. Site Context

The site is a steeply sloped area located at the corner of East Reed Avenue and Evans Lane and within the Potomac West Small Area Plan's boundaries. The surrounding neighborhood is predominantly residential, with a mixture of building forms, which include apartments, townhouses, semi-detached and single family residences. The residences in close proximity to the proposed site vary in height from single story to 4-story and employ a variety of architectural styles and building materials. Within the vicinity of the site, the predominant material for townhouses is brick. The site lies approximately 500 ft. east of Jefferson Davis Highway (with townhouses, semi-detached units and an apartment building in-between). To the north of the site are located the predominantly semi-detached residences on the north side of East Reed Avenue,

and beyond that the 4-story condominiums on Luna Park Drive. To the west and the south of the site is the residential community of Lynhaven, comprised primarily of residential townhouses.

C. Detailed Project and Amendment Description

The project includes construction of five townhouses, each with a detached garage to the rear. The townhouses are setback from the two street frontages by 25 feet. This offset is greater than the setback requirements under the zoning ordinance, which here would be 20 ft.

The townhouses were approved to be 36.45 feet in height when measured from average finished grade (AFG). The AFG for the site was assumed at approval to be 27.25 feet in elevation.

The post-construction height survey submitted by the applicant indicated that although the townhouse height remains at 36.45 feet above AFG, the AFG is at elevation 28.79 feet (approximately 18 inches higher). The applicant admitted to staff that in fact, the houses had been constructed out of compliance with the approved building permit by constructing the basement ceiling higher than approved, and a slightly taller roof form.

III. ZONING

Property Address:	101 & 105 E. Reed Avenue		
Total Site Area:	15,287 sf		
Zone:	Townhouse zone (RB)		
Current Use: Proposed Use:	Residential Residential		
	Permitted/Required	Proposed	
Height	45'	36.45' (as approved) ~37.95' (as built)	
FAR Setbacks	0.75 per lot Lot #1: 2,291 sf Lot #2-4: 1,719 sf Lot #5: 4,015 sf Total: 11,461 sf	1,853 sf = 0.60 FAR 1719 sf = 0.75 FAR 1,853 sf = 0.35 FAR 8,863 sf = 0.58 FAR	
Front **	20' (West) 20' (North)	25' 30' min.	
Side	8' (South) 12.2' (East)	5.5' * Modification requested for garages 6' * Modification requested	
Rear	10'	13'	

Parking			
Residential Use:	2 per dwelling unit	2 per dwelling unit	
Visitor	Approx. 8 on-street	Approx. 8 on-street	
Total:	2 per dwelling unit	2 per dwelling unit	

^{**}Note: Lot #5 has two front yards

IV. STAFF ANALYSIS

A. Constructed height and site mitigation

Despite the constructed height of the townhouses being greater than that approved the proposal (approximately 38 feet rather than approximately 36.5 feet), they are still significantly lower than the maximum that is permitted by the zoning ordinance which allows for a maximum height of 45 feet in the RB zone. (3-706 (d)).

At the original proposal, staff noted that:

"In terms of height, the proposal meets a general pattern from high to low which exists between Jefferson Davis Hwy and the surrounding neighborhood. The change in heights through this area range from the four-story buildings east of site at 181 E. Reed Ave (Preston Condominiums) and 131 – 149 E Reed Ave (Preston Townhouses) to the generally one and two-story buildings to the west and south of the site."

Staff consider that the increase in constructed height is relatively minor in terms of the overall development, and that the increase does not alter staff's original analysis that the townhouse height and massing are still compatible with the surroundings. Nevertheless, staff also considers that the increase is greater than that which may be allotted to construction tolerance; has implications for the site; and, is a breach of the approval.

In terms of site implications, the rise in the basement height has a knock-on effect to the finished floor elevation of the first floor. This means that the stoops, lead walks and grading in the front yards is moderately impacted, effectively adding steeper slopes and more risers.

Staff recommends that as part of any approval of the amendment to the DSP, the applicant shall mitigate the effects on the front yard by:

- a. replacing the steep lead walks with steps; and
- b. Amending the grade of the rain gardens in the front yards to better screen the tall stoops (caused by adding risers), and similarly adding large planting around the base of the stoops.

B. Project Timeline

The delay in the issuance of a Certificate of Occupancy has, according to the applicant, potentially severe financial implications. The buyers which have contracts to purchase the first units have been delayed from reaching settlement, which has negative impacts on both the buyers and on the applicant.

Although this is not the primary concern of staff, the ability of the development team to finish the project and to successfully sell the townhouse units is one important aspect of the overall achievement of the project's goals.

Staff considers that, subject to approval of the amendment and to the mitigation for the impacts to the site which the increased building height caused, the project ought to be allowed to move expeditiously to completion to allow the sale of the townhouse units.

C. Benefits of the original proposal

Aside from the physical benefits of the construction of the townhouses in this location with a distinctive architecture which included large glass corners on the end units and a red brick façade material to complement the surrounding townhouses, the project included:

- a. Design which met the City's Green Building policy
- b. An affordable housing contribution of \$17,726
- c. Streetscape improvement which undergrounded utility wires along the building frontage on East Reed Avenue and which will install street trees and a bus pad.

V. <u>COMMUNITY</u>

The project was originally supported by the Lynhaven Citizen's Association's. The community was satisfied with the garage parking, particularly its location and supported the overall scale of development. The community's discussion on architecture, and most notably materials, served to direct the applicant to provide brick facades. This material was considered to be compatible with other local townhouses.

VI. CONCLUSION

Staff recommends *approval* of the amendment to the development site plan subject to the conditions in the Recommendations section.

VII. GRAPHICS



Illustrative Site Plan



Illustrative View from the original approval (from East Reed Avenue)



As built condition illustrating steeper lead walk grades to the front

VIII. STAFF RECOMMENDATIONS

Note: the conditions of approval added May 2015 with the request for amendment to the Development Site Plan are shown in **bold**. All other conditions remain per the original approval.

1. The Final Site Plan shall be in substantial conformance with the Preliminary Plan dated February 2nd, 2012, the supplemental information provided February 22nd and 29th, 2012, and shall comply with the following conditions of approval.

A. PEDESTRIAN/STREETSCAPE:

- 2. Provide the following pedestrian improvements to the satisfaction of the Directors of P&Z, RP&CA and T&ES:
 - a. Complete all pedestrian improvements prior to the issuance of a certificate of occupancy permit.
 - b. Install ADA accessible pedestrian crossings serving the site.
 - c. All newly constructed curb ramps in Alexandria shall be concrete with detectable warning and shall conform to current VDOT standards.

B. OPEN SPACE/LANDSCAPING:

- 3. Develop, provide, install and maintain an integrated Landscape Plan with the final site plan that is coordinated with other associated site conditions to the satisfaction of the Director of P&Z. At a minimum the Landscape Plan shall:
 - a. Provide an enhanced level of detail plantings throughout the site (in addition to street trees). Plantings shall include a simple mixture of seasonally variable, evergreen and deciduous shrubs, ornamental and shade trees, groundcovers and perennials that are horticulturally acclimatized to the Mid-Atlantic and Washington, DC National Capital Region.
 - b. Ensure positive drainage in all planted areas.
 - c. Provide a section detail of the street trees within the landscape strip showing proposed plantings and associated materials, adjacent curb/pavement construction, dimensions, drainage, and coordination with site utilities. This is supplemental to the typical detail provided under previous submissions.
 - d. Provide planting details for all proposed conditions including multi-trunk trees, shrubs, perennials, and groundcovers. (P&Z)
- 4. Provide the following modifications to the landscape plan and supporting drawings:
 - a. Provide the required 25% crown coverage per lot rather than per the entire site. In effect that means a small increase in CCA is required on lots 2-4.
 - b. Provide notation to identify all plants on the plan with an accompanying planting schedule which includes species, cultivar, size/height, canopy coverage and spacing (where applicable).

- c. Provide section and plan details for the two installation conditions of pervious pavers: at the garage aprons and the front yard paths. The section details shall include the full vertical make-up of the paver and below grade condition, together with the proposed edge treatment. This is supplemental to the typical detail provided under previous submissions.
- d. The narrow landscape strip at the back of the sidewalk and within the right- ofway on Evans Lane, extending to the corner of E. Reed shall be fine graded and re-sodded following construction impacts in this area. (P&Z)
- 5. Provide material, finishes, and architectural details for all retaining walls. (P&Z)
- 5a. Amend the lead walks in the front yards to be code compliant in terms of access and to include steps with retaining wing walls in order to reduce the gradient of the walk. (P&Z)
- 5b. Amend the soil profile and walls of the rain gardens in the front yards. The soil profile shall be raised by a minimum of 18 inches in elevation at the rear of the rain garden, with any drainage and waterproofing amended accordingly. (P&Z)
- 5c. Install plant material to the satisfaction of the Director of Planning and Zoning around the base of the building to screen the front stoops and water table. Plant material shall be of suitable installed size to offer immediate visual mitigation of the building's raised first floor elevation. (P&Z)

C. TREE PROTECTION AND PRESERVATION:

- 6. Provide, implement and follow a tree conservation and protection program that is developed per the City of Alexandria Landscape Guidelines and to the satisfaction of the Directors of P&Z, and RP&CA and the City Arborist. (P&Z)(RP&CA)
- 7. A fine shall be paid by the applicant in an amount not to exceed \$10,000 for each tree that is destroyed and/or the City may request that replacement trees of similar caliper and species be provided for damaged trees if the approved tree protection methods have not been followed. The replacement trees shall be installed and if applicable the fine shall be paid prior to the issuance of the last certificate of occupancy permit. *** (P&Z)(RP&CA)
- 8. The area of the limits of disturbance and clearing for the site shall be limited to the areas as generally depicted on the preliminary site plan dated February 2nd, 2012 and reduced if possible to retain existing trees and grades. (P&Z)(RP&CA)

D. BUILDING:

- 9. Provide the following building refinements to the satisfaction of the Director of P&Z:
 - a. Windows shall correctly reflect the architectural style, building type and period that is referenced by the building design. There shall be a minimum setback of

glass from the face of sash of 3/8". If shown with a historical muntin pattern, such as 2-over-1, 2-over-2, 6-over-1, etc., such applied exterior muntins shall:

- i. have a minimum depth/projection of 3/8" and a maximum width of 1";
- ii. have a detailed profile that will create a strong shadow pattern;
- iii. have an integral spacer bar between the panes of glass that matches the muntins in width;
- iv. corresponding interior muntins are encouraged, but not required;
- b. Windows that reflect more modern styles shall be reviewed on an individual basis, but a minimum glass setback from face of sash is required of 3/8". (P&Z)
- 10. Building materials, finishes, and relationships shall be subject to review and approval by the Department of Planning and Zoning to the satisfaction of the Director prior to selection of final building materials:
 - a. Provide a materials board that includes all proposed materials and finishes at first final site plan. *
 - b. The materials board shall remain with the Department of Planning and Zoning until the final certificate of occupancy, upon which all samples shall be returned to the applicant.***
 - c. Advise P&Z staff at the beginning of installation of the exterior finishes to schedule a review for compliance with the submitted materials board. (P&Z)
- 11. Per the City's Green Building Policy adopted April 18, 2009, achieve a green building certification level of LEED Certified or equivalent to the satisfaction of the Directors of P&Z and T&ES. Diligent pursuance and achievement of this certification shall be monitored through the following:
 - a. Provide evidence of the project's registration with LEED (or equivalent) with the submission of the first final site plan.*
 - b. Provide evidence of submission of materials for Design Phase credits to the U.S. Green Building Council (USGBC) (or equivalent) prior to issuance of a certificate of occupancy. ***
 - c. Provide evidence of submission of materials for Construction Phase credits to USGBC (or equivalent) within six months of obtaining a final certificate of occupancy.
 - d. Provide documentation of LEED Certification from USGBC (or equivalent) within two years of obtaining a final certificate of occupancy.
 - e. Failure to achieve LEED Certification (or equivalent) will be evaluated by City staff, and if staff determines that a good faith, reasonable, and documented effort was not made to achieve these certification levels, then any City-wide Green Building policies existing at the time of staffs' release of Final Site Plan will apply. (P&Z)(T&ES)
- 12. The applicant shall work with the City for recycling and/or reuse of the existing building materials as part of the demolition process, including leftover, unused, and/or discarded building materials. (T&ES)(P&Z)

13. In order to provide a more sustainable use of natural resources, the applicant shall use EPA-labeled WaterSense or equivalent low flow fixtures. A list of applicable mechanisms can be found at http://www.epa.gov/WaterSense/pp/index.htm. (T&ES)

E. SIGNAGE

14. Install a temporary informational sign on the site prior to the approval of the final site plan for the project. The sign shall be displayed until construction is complete or replaced with a contractor or real estate sign incorporating the required information; the sign shall notify the public of the nature of the upcoming project and shall provide a phone number for public questions regarding the project.* (P&Z)(T&ES)

F. HOUSING:

15. The developer has offered to make a voluntary contribution of \$2.00 per gross square foot on the 8,863 gross square feet of permitted ("by right") development for a total voluntary contribution of \$17,726, consistent with the conclusions of the "Developer Housing Contribution Work Group Report" dated May 2005 and accepted by the Alexandria City Council on June 14, 2005.***

G. BUS STOPS AND BUS SHELTERS:

- 16. Relocate bus stop sign and passenger loading pad to provide a minimum of fifteen (15) feet from the sign and loading pad to the first parking space to the east of the bus stop. (T&ES/DASH)
- 17. Make bus stop at East Reed Avenue in front of the property ADA compliant. ADA compliance includes:
 - a. Install an unobstructed seven (7) foot wide, parallel to the roadway, by eight (8) foot wide, perpendicular to the curb, bus stop passenger loading pad. The loading pad shall be at the same grade as the sidewalk, connect the curb to the sidewalk, and the pad's surface material shall match the sidewalk. The exiting width of the sidewalk may be counted towards the 8 foot wide perpendicular to the curb area. Passenger loading pads shall never be placed on storm drain inlets, catch basins, and other obstacles that would make the bus stop and bus stop loading pad inaccessible.
 - b. Create a 70 foot "No Parking, Bus Stop Zone" if the bus stop is located along the curbside. If the bus stop is located on a bulb out / extension into the roadway, the 70 foot "No Parking, Bus Stop Zone" shall not be required. (T&ES)

H. SITE PLAN:

- 18. Per Section 11-418 of the Zoning Ordinance, the development site plan shall expire and become null and void, unless substantial construction of the project is commenced within 36 months after initial approval and such construction is thereafter pursued with due diligence. The applicant shall provide a written status report to staff 18 months after initial approval to update the City Council on the project status. (P&Z)
- 19. Submit the plat of subdivision/consolidation and all applicable easements and/or dedications prior to the final site plan submission. The plat(s) shall be approved and recorded prior to the release of the final site plan.* (P&Z) (T&ES)
- 20. Coordinate location of site utilities with other site conditions to the satisfaction of the Directors of P&Z and T&ES. These items include:
 - a. Location of site utilities including above grade service openings and required clearances for items such as transformers, telephone, HVAC units and cable boxes.
 - b. Minimize conflicts with plantings, pedestrian areas and major view sheds.
 - c. Do not locate above grade utilities in dedicated open space areas.
 - d. Amend the limits of disturbance to include all areas impacted by the proposed construction, including the areas identified for the undergrounding of the utility lines. (P&Z)(T&ES)
- 21. Provide a lighting plan with the final site plan to verify that lighting meets City standards. The plan shall be to the satisfaction of the Directors of T&ES and P&Z in consultation with the Chief of Police and shall include the following:
 - a. Clearly show location of all existing and proposed street lights and site lights, shading back less relevant information.
 - b. A lighting schedule that identifies each type and number of all fixtures, mounting height, and strength of fixture in Lumens or Watts.
 - c. Manufacturer's specifications and details for all proposed fixtures including site, landscape, pedestrian, sign(s) and security lighting.
 - d. A photometric plan with lighting calculations that include all existing and proposed light fixtures, including any existing street lights located on the opposite side(s) of all adjacent streets. Photometric calculations must extend from proposed building face(s) to property line and from property line to the opposite side(s) of all adjacent streets and/or 20 feet beyond the property line on all adjacent properties and rights-of-way. Show existing and proposed street lights and site lights.
 - e. Photometric site lighting plan shall be coordinated with architectural/building mounted lights, site lighting, street trees and street lights to minimize light spill into adjacent residential areas.
 - f. Provide location of conduit routing between site lighting fixtures so as to avoid conflicts with street trees.

- g. Detail information indicating proposed light pole and footing in relationship to adjacent grade or pavement. All light pole foundations shall be concealed from view.
- h. The lighting for the areas not covered by the City of Alexandria' standards shall be designed to the satisfaction of Directors of T&ES and P&Z.
- i. Provide numeric summary for various areas (i.e., roadway, walkway/ sidewalk, alley, and parking lot, etc.) in the proposed development.
- j. Full cut-off lighting shall be used at the development site to prevent light spill onto adjacent properties. (P&Z)(T&ES)(Police)

I. CONSTRUCTION:

- 22. Submit a construction phasing plan to the satisfaction of the Director of T&ES, for review, approval and partial release of Erosion and Sediment Control for the final site plan. In addition, building and construction permits required for site preconstruction shall be permitted prior to release of the final site plan to the satisfaction of the Director of T&ES. * (T&ES)
- 23. Submit a construction management plan for review and approval by the Directors of P&Z, T&ES and Code Administration prior to final site plan release. The plan shall:
 - a. Include a plan for temporary pedestrian and vehicular circulation;
 - b. Include analysis as to whether temporary street lighting is needed on the site and how it is to be installed.
 - c. Include the overall schedule for construction and the hauling route;
 - d. Copies of the plan shall be posted in the construction trailer and given to each subcontractor before they commence work;
 - e. If the plan is found to be violated during the course of construction, citations will be issued for each infraction and a correction notice will be forwarded to the applicant. If the violation is not corrected within five (5) calendar days, a "stop work order" will be issued, with construction halted until the violation has been corrected. * (P&Z)(T&ES)(Code)
- 24. Provide off-street parking for all construction workers without charge to the construction workers. For the construction workers who use Metro, DASH, or another form of mass transit to the site, the applicant shall subsidize a minimum of 50% of the fees for mass transit. Compliance with this condition shall be a component of the construction management plan, which shall be submitted to the Department of P&Z and T&ES prior to final site plan release. This plan shall:
 - a. Establish the location of the parking to be provided at various stages of construction, how many spaces will be provided, how many construction workers will be assigned to the work site, and mechanisms which will be used to encourage the use of mass transit.
 - b. Provide for the location on the construction site at which information will be posted regarding Metro schedules and routes, bus schedules and routes.
 - c. If the plan is found to be violated during the course of construction, a correction notice will be issued to the developer. If the violation is not corrected within five

- (5) days, a "stop work order" will be issued, with construction halted until the violation has been corrected. * (P&Z)(T&ES)
- 25. The sidewalks shall remain open during construction or pedestrian access shall be maintained to the satisfaction of the Director of T&ES throughout the construction of the project. (T&ES)
- 26. No major construction staging shall be allowed within the public right-of-way on East Reed Avenue. The applicant shall meet with T&ES to discuss construction staging activities prior to release of any permits for ground disturbing activities. ** (T&ES)
- 27. A "Certified Land Disturber" (CLD) shall be named in a letter to the Division Chief of Construction & Inspection prior to any land disturbing activities. If the CLD changes during the project, that change must be noted in a letter to the Division Chief. A note to this effect shall be placed on the Phase I Erosion and Sediment Control sheets on the site plan. (T&ES)
- 28. Prior to commencing clearing and grading of the site, the applicant shall hold a meeting with notice to all adjoining property owners and civic associations to review the location of construction worker parking, plan for temporary pedestrian and vehicular circulation, and hours and overall schedule for construction. The Departments of P&Z and T&ES shall be notified of the date of the meeting before the permit is issued. (P&Z)(T&ES)
- 29. Identify a person who will serve as a liaison to the community throughout the duration of construction. The name and telephone number, including an emergency contact number, of this individual shall be provided in writing to residents, property managers and business owners whose property abuts the site and shall be placed on the project sign, to the satisfaction of the Directors of P&Z, and/or RP&CA and T&ES. (P&Z)(RP&CA)(T&ES)
- 30. Implement a waste and refuse control program during the construction phase of this development. This program shall control wastes such as discarded building materials, concrete truck washout, chemicals, litter or trash, trash generated by construction workers or mobile food vendor businesses serving them, and all sanitary waste at the construction site and prevent offsite migration that may cause adverse impacts to neighboring properties or to the environment to the satisfaction of Directors of T&ES and Code Administration. All wastes shall be properly disposed offsite in accordance with all applicable federal, state and local laws. (T&ES)
- 31. Submit a wall check prior to the commencement of construction of the first floor above grade framing for the building(s). The wall check shall include the building footprint, as depicted in the approved final site plan, the top-of-slab elevation and the first floor elevation. The wall check shall be prepared and sealed by a registered engineer or surveyor, and shall be approved by the P&Z prior to commencement of framing. (P&Z)

- 32. Submit a height certification and a location survey for all site improvements to the Department of P&Z as part of the request for a certificate of occupancy permit. The height certification and the location survey shall be prepared and sealed by a registered architect, engineer, or surveyor. The height certification shall state that the height was calculated based on all applicable provisions of the Zoning Ordinance. *** (P&Z)
- 33. Contractors shall not cause or permit vehicles to idle for more than 10 minutes when parked. (T&ES)
- 34. If there are outstanding performance, completion or other bonds for the benefit of the City in effect for the property at such time as it may be conveyed or sold to a party other than the applicant, a substitute bond must be provided by that party or, in the alternative, an assignment or other documentation from the bonding company indicating that the existing bond remains in effect despite the change in ownership may be provided. The bond(s) shall be maintained until such time that all requirements are met and the bond(s) released by the City. (T&ES)

J. SOLID WASTE:

- 35. In order for the City to provide solid waste service, the development must meet all the minimum street standards. The trash truck must be able to pick up solid waste from private streets without backing up. The containers must be placed inside the units or within an enclosure that completely screens them from view. The developer must purchase the standard containers from the City or provide containers that are compatible with City collection system and approved by the Director of T&ES. (T&ES)
- 36. Where the City of Alexandria provides the solid waste collection services; all refuse/recycling shall be placed at the City Right-of-Way. (T&ES)
- 37. Provide \$1,150 per receptacle to the Director of T&ES for purchase and installation of one (1) Iron Site Bethesda Series, Model SD-42 decorative black metal trash cans with domed lid by Victor Stanley. The receptacle(s) shall be placed in the public right of way to serve open space and the bus stop. Receptacles shall be generally located along the property frontage and at strategic locations in the vicinity of the site as approved by the Director of T&ES. Payment required prior to release of Final Site Plan.* (T&ES)

K. STREETS / TRAFFIC:

38. If the City's existing public infrastructure is damaged during construction, or patch work required for utility installation then the applicant shall be responsible for construction/installation or repair of the same as per the City of Alexandria standards and specifications and to the satisfaction of Director, Transportation and Environmental Services. (T&ES)

- 39. A pre-construction walk/survey of the site shall occur with Transportation and Environmental Services Construction and Inspection staff to document existing conditions prior to any land disturbing activities. (T&ES)
- 40. Submit a Traffic Control Plan as part of the final site plan, for construction detailing proposed controls to traffic movement, lane closures, construction entrances, haul routes, and storage and staging shall be provided for informational purposes. In addition, the Traffic Control Plan shall be amended as necessary and submitted to the Director of T&ES along with the Building and other Permit Applications as required. The Final Site Plan shall include a statement "FOR INFORMATION ONLY" on the Traffic Control Plan Sheets. (T&ES)
- 41. All Traffic Control Device design plans, Work Zone Traffic Control plans, and Traffic Studies shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. (T&ES)
- 42. Show turning movements of standard vehicles in the parking structure and/or parking garages. Turning movements shall meet AASHTO vehicular guidelines and shall be to the satisfaction of the Director of T&ES. (T&ES)

L. UTILITIES:

- 43. Locate all private utilities outside of the public right-of-way and public utility easements. (T&ES)
- 44. The power lines as shown on the Preliminary Site Plan fronting East Reed Avenue shall be placed underground. (T&ES)

M. SOILS:

45. Provide a geotechnical report, including recommendations from a geotechnical professional for proposed cut slopes and embankments. (T&ES)

N. WATERSHED, WETLANDS, & RPAs:

- 46. The project site lies within Four Mile Run Watershed thus stormwater quantity controls shall be designed to demonstrate that post development stormwater runoff does not exceed the existing runoff quantities for the 2-year, 10-year, and 100-year storm events. (T&ES)
- 47. The storm water collection system is located within the Four Mile Run watershed. All onsite storm water curb inlets and public curb inlets within 50 feet of the property line shall be duly marked using standard City markers, or to the satisfaction of the Director of T&ES. (T&ES)

O. BMP FACILITIES:

- 48. The City of Alexandria's storm water management regulations regarding water quality are two-fold: first, phosphorus removal requirement and second, water quality volume default. Compliance with the phosphorus requirement does not relieve the applicant from the water quality default requirement. The water quality volume determined by the site's proposed impervious area shall be treated in a Best Management Practice (BMP) facility. (T&ES)
- 49. Provide BMP narrative and complete pre and post development drainage maps that include areas outside that contribute surface runoff from beyond project boundaries to include adequate topographic information, locations of existing and proposed storm drainage systems affected by the development, all proposed BMPs and a completed Worksheet A or B and Worksheet C, as applicable. (T&ES)
- 50. The storm water Best Management Practices (BMPs) required for this project shall be constructed and installed under the direct supervision of the design professional or his designated representative. Prior to release of the performance bond, the design professional shall submit a written certification to the Director of T&ES that the BMPs are:
 - a. Constructed and installed as designed and in accordance with the approved Final Site Plan.
 - b. Clean and free of debris, soil, and litter by either having been installed or brought into service after the site was stabilized. **** (T&ES)
- 51. Surface-installed storm water Best Management Practice (BMP) measures, i.e. Bio-Retention Filters, Vegetated Swales, etc. that are employed for this site, require installation of descriptive signage to the satisfaction of the Director of T&ES. (T&ES)
- 52. Submit two originals of the storm water quality BMP and Stormwater Detention Facilities Maintenance Agreement with the City to be reviewed as part of the Final #2 Plan. The agreement must be executed and recorded with the Land Records Division of Alexandria Circuit Court prior to approval of the final site plan.* (T&ES)
- 53. The Applicant shall be responsible for maintaining storm water Best Management Practices (BMPs) until activation of the homeowner's association (HOA), if applicable, or until sale to a private owner. Prior to transferring maintenance responsibility for the BMPs to the HOA or owner, the Applicant shall execute a maintenance service contract with a qualified private contractor for a minimum of three years, and transfer the contract to the HOA or owner. A copy of the contract shall also be placed in the BMP Operation and Maintenance Manual. Prior to release of the performance bond, a copy of the maintenance contract shall be submitted to the City. ****(T&ES)
- 54. If units will be sold as individual units and a homeowner's association (HOA) established the following two conditions shall apply:

- a. The Applicant shall furnish the Homeowner's Association with an Owner's Operation and Maintenance Manual for all Best Management Practices (BMP's) and Stormwater Detention used on site. The manual shall include at a minimum: an explanation of the functions and operations of the BMP(s) and Stormwater Detention; drawings and diagrams of the BMP(s), Stormwater Detention and any supporting utilities; catalog cuts on maintenance requirements including any mechanical or electrical equipment; manufacturer contact names and phone numbers; a copy of the executed maintenance service contract; and a copy of the maintenance agreement with the City.
- b. The Developer shall furnish each home purchaser with a brochure describing the storm water BMP(s) and Stormwater Detention installed on the site, outlining the responsibilities of the homeowners and the Homeowner's Association (HOA) with respect to maintenance requirements. Upon activation of the HOA, the Developer shall furnish five copies of the brochure per unit to the HOA for distribution to subsequent homeowners.

Otherwise the following condition applies:

- 55. The Developer shall furnish the owners with an Owner's Operation and Maintenance Manual for all Best Management Practices (BMPs) and Stormwater Detention on the project. The manual shall include at a minimum: an explanation of the functions and operations of the BMP(s) and Stormwater Detention; drawings and diagrams of the BMP(s), Stormwater Detention and any supporting utilities; catalog cuts on maintenance requirements including mechanical or electrical equipment; manufacturer contact names and phone numbers; a copy of the executed maintenance service contract; and a copy of the maintenance agreement with the City. (T&ES)
- 56. Submit a copy of the Operation and Maintenance Manual to the Office of Environmental Ouality on digital media prior to release of the performance bond. ****(T&ES)
- 57. Prior to release of the performance bond, the Applicant is required to submit a certification by a qualified professional to the satisfaction of the Director of T&ES that any existing storm water management facilities adjacent to the project and associated conveyance systems were not adversely affected by construction operations. If maintenance of the facility or systems were required in order to make this certification, provide a description of the maintenance measures performed. ****(T&ES)

P. CONTAMINATED LAND:

58. Should any unanticipated contamination, underground storage tanks, drums or containers be encountered at the site, the Applicant must immediately notify the City of Alexandria Department of Transportation and Environmental Services, Office of Environmental Quality. (T&ES)

- 59. Design and install a vapor barrier and ventilation system for buildings and parking areas in order to prevent the migration or accumulation of methane or other gases, or conduct a study and provide a report signed by a professional engineer showing that such measures are not required to the satisfaction of Directors of T&ES and Code Administration. (T&ES)
- 60. The final site plan shall not be released, and no construction activity shall take place until the following has been submitted and approved by the Director of T&ES:
 - a. Submit a Site Characterization Report/Extent of Contamination Study detailing the location, applicable contaminants, and the estimated quantity of any contaminated soils and/or groundwater at or in the immediate vicinity of the site.
 - b. Submit a Risk Assessment indicating any risks associated with the contamination.
 - c. Submit a Remediation Plan detailing how any contaminated soils and/or groundwater will be dealt with, including plans to remediate utility corridors. Utility corridors in contaminated soil shall be over excavated by 2 feet and backfilled with "clean" soil.
 - d. Submit a Health and Safety Plan indicating measures to be taken during remediation and/or construction activities to minimize the potential risks to workers, the neighborhood, and the environment.
 - e. Applicant shall submit 3 hard copies and 2 electronic copies of the above. The remediation plan must be included in the Final Site Plan. * (T&ES)

Q. AIR POLLUTION:

61. If fireplaces are utilized in the development, the Applicant is required to install gas fireplaces to reduce air pollution and odors. Animal screens must be installed on chimneys. (T&ES)

CITY DEPARTMENT CODE COMMENTS

Legend: C Code Requirement R Recommendation S Suggestion F-Finding

Planning and Zoning

- C-1 Average finished grade must be drawn on elevations for townhouse units and garages to accurately determine the building height. The townhouses appear to comply with the height limitations.
- C-2 Height of garages should be taken to top of flat roof.
- C-3 Based on the threshold height block-face survey (49, 53, 107A, 107B, 109A & 109B E Reed Avenue) the maximum allowable threshold height cannot exceed 5.98 feet above pre-construction grade. Include this information with zoning tabulations on page 1 of the site plan.
- C-4 As-built documents for all landscape and irrigation installations are required to be submitted with the Site as-built and request for Performance Bond release. Refer to City of Alexandria Landscape Guidelines, Section III A & B. **** (P&Z) (T&ES)
- C-5 The landscape elements of this development shall be subject to the Performance and Maintenance bonds, based on criteria established by the City and available through T&ES. Release of Performance and Maintenance Bonds are subject to inspections by City staff per City Code requirements. A final inspection for landscaping is also required three years after completion. **** (P&Z) (T&ES)

Transportation and Environmental Services

- F 1 ASA has no comments on the Preliminary Submission.
- F 2 Isolator Row has an efficiency of 15%. Correct as appropriate. (T&ES- OEQ)
- F-3 Porous paver detail on sheet 2 0f 16 shows the required underdrain. However, no underdrains are shown on the sidewalks, driveways or stoops. Correct as required. (T&ES-OEQ)
- F 4 All appropriate data blocks shall be included. (T&ES- OEQ)
- F-5 Water Quality Volume left untreated requires a contribution to the Water Quality Improvement Fund. A request to contribute shall be submitted. (T&ES- OEQ)
- F 6 Since the record drawings, maps, and other documents of the City of Alexandria, State, and Federal agencies show the true north pointing upwards, therefore, the Site Plan shall show the true north arrow pointing upward as is customary; however, for the sake of putting the plan together and/or ease of understanding, the project north arrow pointing

upward, preferably east, or west may be shown provided it is consistently shown in the same direction on all the sheets with no exception at all. The north arrow shall show the source of meridian. The project north arrow pointing downward will not be acceptable even if, it is shown consistently on all the sheets. (T&ES)

- F 7 The Final Site Plan must be prepared per the requirements of Memorandum to Industry 02-09 dated December 3, 2009, Design Guidelines for Site Plan Preparation, which is available at the City's following web address:
 - $http://alexandriava.gov/uploadedFiles/tes/info/Memo\%\,20to\%\,20Industry\%\,20No.\%\,2002-09\%\,20December\%\,203,\%\,202009.pdf$
- F-8 The plan shall show sanitary and storm sewer, and water line in plan and profile in the first final submission and cross reference the sheets on which the plan and profile is shown, if plan and profile is not shown on the same sheet. Clearly label the sanitary and storm sewer, or water line plans and profiles. Provide existing and proposed grade elevations along with the rim and invert elevations of all the existing and proposed sanitary and storm sewer at manholes, and water line piping at gate wells on the respective profiles. Use distinctive stationing for various sanitary and storm sewers (if applicable or required by the plan), and water line in plan and use the corresponding stationing in respective profiles. (T&ES)
- F 9 The Plan shall include a dimension plan with all proposed features fully dimensioned and the property line clearly shown. (T&ES)
- F 10 Include all symbols, abbreviations, and line types in the legend. (T&ES)
- F-11 All storm sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter for storm sewers shall be 18" in the public Right of Way (ROW) and the minimum size storm sewer catch basin lead is 15". The acceptable pipe materials will be AWWA C-151 (ANSI A21.51) Class 52 or Reinforced Concrete Pipe (RCP) ASTM C-76 Class IV. For roof drainage system, Polyvinyl Chloride (PVC) ASTM D-3034-77 SDR 26 and ASTM 1785-76 Schedule 40 pipes will be acceptable. The acceptable minimum and maximum velocities will be 2.0 fps and 15 fps, respectively. The storm sewers immediately upstream of the first manhole in the public Right of Way shall be owned and maintained privately (i.e., all storm drains not shown within an easement or in a public Right of Way shall be owned and maintained privately). (T&ES)
- F-12 All sanitary sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter of sanitary sewers shall be 10" in the public Right of Way and sanitary lateral 6" for all commercial and institutional developments; however, a 4" sanitary lateral will be acceptable for single family residences. The acceptable pipe materials will be Polyvinyl Chloride (PVC) ASTM D-3034-77 SDR 26, ASTM 1785-76 Schedule 40, Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52, or reinforced concrete pipe ASTM C-76 Class IV (For 12" or larger diameters); Class III

may be acceptable on private properties. The acceptable minimum and maximum velocities will be 2.5 fps and 10 fps, respectively. Laterals shall be connected to the sanitary sewer through a manufactured "Y" or "T" or approved sewer saddle. Where the laterals are being connected to existing Terracotta pipes, replace the section of main and provide manufactured "Y" or "T", or else install a manhole. (T&ES)

- F-13 Lateral Separation of Sewers and Water Mains: A horizontal separation of 10' (edge to edge) shall be provided between a storm or sanitary sewer and a water line; however, if this horizontal separation cannot be achieved then the sewer and water main shall be installed in separate trenches and the bottom of the water main shall be at least 18" above of the top of the sewer. If both the horizontal and vertical separations cannot be achieved then the sewer pipe material shall be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 and pressure tested in place without leakage prior to installation.(T&ES)
- F 14 Crossing Water Main Over and Under a Sanitary or Storm Sewer: When a water main over crosses or under crosses a sanitary / storm sewer then the vertical separation between the bottom of one (i.e., sanitary / storm sewer or water main) to the top of the other (water main or sanitary / storm sewer) shall be at least 18" for sanitary sewer and 12" for storm sewer; however, if this cannot be achieved then both the water main and the sanitary / storm sewer shall be constructed of Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 with joints that are equivalent to water main standards for a distance of 10 feet on each side of the point of crossing. A section of water main pipe shall be centered at the point of crossing and the pipes shall be pressure tested in place without leakage prior to installation. Sewers crossing over the water main shall have adequate structural support (concrete pier support and/or concrete encasement) to prevent damage to the water main. Sanitary sewers under creeks and storm sewer pipe crossings with less than 6" clearance shall be encased in concrete. (T&ES)
- F-15 No water main pipe shall pass through or come in contact with any part of sanitary / storm sewer manhole. Manholes shall be placed at least 10 feet horizontally from the water main whenever possible. When local conditions prohibit this horizontal separation, the manhole shall be of watertight construction and tested in place. (T&ES)
- F-16 Crossing Existing or Proposed Utilities: Underground telephone, cable T.V., gas, and electrical duct banks shall be crossed maintaining a minimum of 12" of separation or clearance with water main, sanitary, or storm sewers. If this separation cannot be achieved then the sewer pipe material shall be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 for a distance of 10 feet on each side of the point of crossing and pressure tested in place without leakage prior to installation. Sanitary / storm sewers and water main crossing over the utilities shall have adequate structural support (pier support and/or concrete encasement) to prevent damage to the utilities. (T&ES)
- F 17 Show the drainage divide areas on the grading plan or on a sheet showing reasonable information on topography along with the structures where each sub-area drains. (T&ES)

- F 18 Provide proposed elevations (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (T&ES)
- F 19 All the existing and proposed public and private utilities and easements shall be shown on the plan and a descriptive narration of various utilities shall be provided. (T&ES)
- F 20 The Traffic Control Plan shall replicate the existing vehicular and pedestrian routes as nearly as practical and the pedestrian pathway shall not be severed or moved for non-construction activities such as parking for vehicles or the storage of materials or equipment. Proposed traffic control plans shall provide continual, safe and accessible pedestrian pathways for the duration of the project. (T&ES)
- C-1 Per the requirements of the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a drainage study and adequate outfall analysis for the total drainage area to the receiving sewer that serves the site. If the existing storm system is determined to be inadequate then the applicant shall design and build on-site or off-site improvements to discharge to an adequate outfall; even if the post development storm water flow from the site is reduced from the pre-development flow. The Plan shall demonstrate to the satisfaction of the Director of T&ES that a non-erosive stormwater outfall is present. (T&ES)
- C 2 Per the requirements of the City of Alexandria Zoning Ordinance (AZO) Article XIII, the applicant shall comply with the peak flow requirements and prepare a Stormwater Management Plan so that from the site, the post-development peak runoff rate form a two-year storm and a ten-year storm, considered individually, shall not exceed their respective predevelopment rates. If combined uncontrolled and controlled stormwater outfall is proposed, the peak flow requirements of the Zoning Ordinance shall be met. If the project site lies within the Braddock-West watershed then the applicant shall provide an additional 10% storage of the pre-development flows in this watershed to meet detention requirements. (T&ES)
- C 3 Per the requirements of Article 13-113 (d) of the AZO, all stormwater designs that require analysis of pressure hydraulic systems, including but not limited to the design of flow control structures and storm water flow conveyance systems shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. The design of storm sewer shall include the adequate outfall, inlet, and hydraulic grade line (HGL) analyses that shall be completed to the satisfaction of the Director of T&ES. Provide appropriate reference and/or source used to complete these analyses. (T&ES)
- C 4 Location of customer utility services and installation of transmission, distribution and main lines in the public rights of way by any public service company shall be governed by franchise agreement with the City in accordance with Title 5, Chapter 3, Section 5-3-2 and Section 5-3-3, respectively. The transformers, switch gears, and boxes shall be located outside of the public right of way. (T&ES)

- C 5 (a) Per the requirements of Section 5-3-2, Article A, Chapter 3 of the City of Alexandria Code, all new customer utility services, extensions of existing customer utility services and existing overhead customer utility services supplied by any existing overhead facilities which are relocated underground shall, after October 15, 1971 be installed below the surface of the ground except otherwise exempted by the City Code and to the satisfaction of the Director, Department of Transportation and Environmental Services. (b) Per the requirements of Section 5-3-3, Article A, Chapter 3 of the City of Alexandria Code, all new installation or relocation of poles, towers, wires, lines, cables, conduits, pipes, mains, and appurtenances used or intended to be used to transmit or distribute any service such as electric current, telephone, telegraph, cable television, traffic control, fire alarm, police communication, gas, water, steam or petroleum, whether or not on the streets, alleys, or other public places of the City shall, after October 15, 1971, be installed below the surface of the ground or below the surface in the case of bridges and elevated highways except otherwise exempted by the City Code and to the satisfaction of Director, Department of Transportation and Environmental Services. (T&ES)
- C 6 Flow from downspouts, foundation drains, and sump pumps shall be discharged to the storm sewer per the requirements of Memorandum to the industry on Downspouts, Foundation Drains, and Sump Pumps, Dated June 18, 2004 that is available on the City of Alexandria's web site. The downspouts and sump pump discharges shall be piped to the storm sewer outfall, where applicable after treating for water quality as per the requirements of Article XIII of Alexandria Zoning Ordinance (AZO). (T&ES)
- C 7 In compliance with the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a sanitary sewer adequate outfall analysis as per the requirements of Memorandum to Industry No. 02-07 New Sanitary Sewer Connection and Adequate Outfall Analysis dated June 1, 2007. The memorandum is available at the following web address of the City of Alexandria (T&ES):
 - http://alexandriava.gov/uploadedFiles/tes/info/New%20Sanitary%20Sewer%20Connection%20and%20Adequate%20Outfall%20Analysis%20 (02-07).pdf
- C 8 In compliance with Title 5: Transportation and Environmental Services, Section 5-1-2(12b) of the City Charter and Code, the City of Alexandria shall provide solid waste collection services to the condominium townhomes portion of the development. All refuse / recycling receptacles shall be placed at the City Right-of-Way. (T&ES)
- C-9 Per the requirements of Title 4, Chapter 2, Article B, Section 4-2-21, Appendix A, Section A 106(6), Figure A 106.1 Minimum Standards for Emergency Vehicle Access: provide a total turning radius of 25 feet to the satisfaction of Directors of T&ES and Office of Building and Fire Code Administration and show turning movements of standard vehicles in the parking lot as per the latest AASHTO vehicular guidelines. (T&ES)
- C 10 The applicant shall provide storage space for solid waste and recyclable materials containers as outlined in the City's "Solid Waste and Recyclable Materials Storage Space

Guidelines", or to the satisfaction of the Director of Transportation & Environmental Services. The plan shall show the turning movements of a trash truck and the trash truck shall not back up to collect trash. The City's storage space guidelines and required Recycling Implementation Plan forms are available at: www.alexandriava.gov or contact the City's Solid Waste Division at 703-746-4410, or via email at commercialrecycling@alexandriava.gov, for information about completing this form. (T&ES)

- C 11 All private streets and alleys shall comply with the City's Minimum Standards for Private Streets and Alleys. (T&ES)
- C 12 Bond for the public improvements must be posted prior to release of the site plan.* (T&ES)
- C 13 The sewer tap fee must be paid prior to release of the site plan.* (T&ES)
- C 14 All easements and/or dedications must be recorded prior to release of the site plan.* (T&ES)
- C 15 Plans and profiles of utilities and roads in public easements and/or public Right of Way must be approved prior to release of the plan.* (T&ES)
- C 16 Provide a phased erosion and sediment control plan consistent with grading and construction plan. (T&ES)
- C 17 Per the Memorandum to Industry, dated July 20, 2005, the applicant is advised regarding a requirement that applicants provide as-built sewer data as part of the final as-built process. Upon consultation with engineering firms, it has been determined that initial site survey work and plans will need to be prepared using Virginia State Plane (North Zone) coordinates based on NAD 83 and NAVD 88. Control points/Benchmarks which were used to establish these coordinates should be referenced on the plans. To insure that this requirement is achieved, the applicant is requested to prepare plans in this format including initial site survey work if necessary. (T&ES)
- C 18 The thickness of sub-base, base, and wearing course shall be designed using "California Method" as set forth on page 3-76 of the second edition of a book entitled, "Data Book for Civil Engineers, Volume One, Design" written by Elwyn E. Seelye. Values of California Bearing Ratios used in the design shall be determined by field and/or laboratory tests. An alternate pavement section for Emergency Vehicle Easements (EVE) to support H-20 loading designed using California Bearing Ratio (CBR) determined through geotechnical investigation and using Virginia Department of Transportation (VDOT) method (Vaswani Method) and standard material specifications designed to the satisfaction of the Director of Transportation and Environmental Services (T&ES) will be acceptable. (T&ES)

- C 19 All pedestrian, traffic, and way finding signage shall be provided in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), latest edition to the satisfaction of the Director of T&ES. (T&ES)
- C 20 No overhangs (decks, bays, columns, post or other obstructions) shall protrude into public Right of Ways, public easements, and pedestrian or vehicular travelways unless otherwise permitted by the City Code. (T&ES)
- C 21 All driveway entrances, curbing, etc. in the public ROW or abutting public ROW shall meet City design standards. (T&ES)
- C 22 All sanitary laterals and/or sewers not shown in the easements shall be owned and maintained privately. (T&ES)
- C 23 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)
- C 24 The applicant shall comply with the Article XIII of the City of Alexandria Zoning Ordinance, which includes requirements for stormwater pollutant load reduction, treatment of the water quality volume default and stormwater quantity management. (T&ES)
- C 25 The applicant shall comply with the City of Alexandria, Erosion and Sediment Control Code, Section 5, Chapter 4. (T&ES)
- C 26 All required permits from Virginia Department of Environmental Quality, Environmental Protection Agency, Army Corps of Engineers, Virginia Marine Resources shall be in place for all project construction and mitigation work prior to release of the final site plan. This includes the state requirement for a VSMP permit for land disturbing activities greater than 2500 SF. * (T&ES)

VAWC Comments:

- 62. The existing 12" water main on Reed Ave does not match our water map. (map provided to applicant). Please re-survey this water main.
- 63. Show the fire service line in plan and profile if required for this project.
- 64. Developer shall submit a Code Administration approved ISO calculation in order to verify whether the existing & proposed water main layouts achieve the Needed Fire Flow.
- 65. Indicate the proposed peak domestic demand (gpm), in order to size the meter.

Code Administration:

- S-1 In order to assist our customers, the City of Alexandria, Department of Code Administration offers an Advanced Plan Review Service (APRS). The APRS allows an applicant to submit for a complete plan review based on the current Virginia USBC while the project is still in the pre-permit land use approval process. Applicants are eligible for the service after all comments have been addressed in the land use, preliminary review process. For the applicable APRS cost, please refer to the current Code Administration Fee Schedule.
- F-1 No comments at this time, additional comments may be forthcoming pending future submission.

Archaeology

- F-1 If this project is a federal undertaking or involves the use of any federal funding, the applicant shall comply with federal preservation laws, in particular Section 106 of the National Historic Preservation Act of 1966. The applicant will coordinate with the Virginia Department of Historic Resources and the federal agency involved in the project, as well as with Alexandria Archaeology.
- C 1 All required archaeological preservation measures shall be completed in compliance with Section 11-411 of the Zoning Ordinance.

No additional comments were received from:

Police & Fire Departments

Asterisks denote the following:

- * Condition must be fulfilled prior to release of the final site plan
- ** Condition must be fulfilled prior to release of the building permit
- *** Condition must be fulfilled prior to release of the certificate of occupancy
- **** Condition must be fulfilled prior to release of the bond

APPLICATION



DEVELOPME	ENT SHE PLAN			
DSP # <u>2015-0</u>	015 P	roject Name:	E REED AVE TOWNHOUSE	<u>s</u>
PROPERTY LOCATION: TAX MAP REFERENCE:	101, 101 1/2, 103 016.01-03-33 thro		East Reed Avenue	
APPLICANT				
Name: Prolandiar	Holding 1 LLC rep	resented by Ash	ley Yuan	
Address: 459 Hernd	lon Pkwy, Ste. 13, I	-lerndon, Virginia	20170	
PROPERTY OWNER Name: Prolandiar	Holding 1 LLC	***		
Address: 459 Hernd	lon Pkwy, Ste 13, H	lerndon, Virginia	20170	
residential townhomes	quest for developments NED hereby applies for of the Zoning Ordinar	or Development Site	e Plan approval in acc	
[] THE UNDERSIGN to the City of Alexandria to p Article XI, Section 11-301 (B		the property for wh	ich this application is	requested, pursuant t
[] THE UNDERSIGN all surveys, drawings, etc., re knowledge and belief.	NED also attests that equired of the applicar	nt are true, correct	and accurate to the b	
Ashley Yuan			m.	
Print Name of Applicant or Agent 459 Herndon Pkwy, Ste.		Signature 571-225-7	500	
Mailing/Street Address	20170	Telephone #	Fax # prolandian.com	
Herndon, VA City and State	Zip Code	Email address 5/21/2015 Date		
	DO NOT WRITE IN	THIS SPACE - OFF	ICE USE ONLY	
Application Received: Fee Paid and Date: ACTION - PLANNING COMMISS			ans for Completeness: lans for Preliminary:	

ALL APPLICANTS MUST COMPLETE THIS FORM.

The applicant is: (check one)
[] the Owner [] Contract Purchaser [] Lessee or [] Other: of the subject property.
State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership in which case identify each owner of more than ten percent. Ashley YUAN: 2783 Middleton Farm of Oak Hill, VA 2017 1 66.67%
Jim Guo: 4990 Centreville Forme Qd. Contreville VA 20120
If property owner or applicant is being represented by an authorized agent, such as an attorney, realtor, or other person for which there is some form of compensation, does this agent or the business in which the agent is employed have a business license to operate in the City of Alexandria, Virginia?
[] Yes. Provide proof of current City business license. [] No. The agent shall obtain a business license prior to filing application, if required by the City Code.

OWNERSHIP AND DISCLOSURE STATEMENT

Use additional sheets if necessary

1. Applicant. State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership, in which case identify each owner of more than ten percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Address	Percent of Ownership
2783 Middleton Farm Ct	66.67%
4990 Centreville Farm Rd	33.33%
	2783 Middleton Farm Ct

2. Property. State the name, address and percent of ownership	of any person or entity owning
an interest in the property located at	(address), unless the
entity is a corporation or partnership, in which case identify each	
percent. The term ownership interest shall include any legal or e	quitable interest held at the time
of the application in the real property which is the subject of the a	application.

Name	Address	Percent of Ownership
Same as above		
2.		
3.		

3. BusinessorFinancialRelationships. Each person or entity listed above (1 and 2), with an ownership interest in the applicant or in the subject property is required to disclose any business or financial relationship, as defined by Section 11-350 of the Zoning Ordinance, existing at the time of this application, or within the12-month period prior to the submission of this application with any member of the Alexandria City Council, Planning Commission, Board of Zoning Appeals or either Boards of Architectural Review.

Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1.		
2. None		
3.		

NOTE: Business or financial relationships of the type described in Sec. 11-350 that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings.

As the applicant or the applicant's authorized agent, I hereby attest to the best of my ability that the information provided above is true and correct.

Date Printed Name Signature



Docket Item #4 Development Site Plan #2011-0014 Subdivision #2012-0001 East Reed Townhouses: 101 & 103 East Reed Avenue

Application	General Data	
	PC Hearing:	April 3, 2012
Project Name:	CC Hearing:	N/A
East Reed Townhouses	If approved, DSP Expiration:	April 3, 2015
	Plan Acreage:	15,287 sf (0.35 acres)
	Zone:	RB, Townhouse zone
Location:	Proposed Use:	Residential
101 & 103 East Reed Ave	Dwelling Units:	5
	Gross Floor Area:	15,284 sf
Amplicante	Small Area Plan:	Potomac West
Applicant: Prolandian Corporation	Historic District:	N/A
	Green Building:	LEED Certified or equivalent

Purpose of Application

The applicant requests approval of a development site plan, with modifications, and subdivision of two existing residential lots into five lots, to permit construction of five townhouses with a total gross floor area of 15,284 sf. Each lot will have a detached garage which will be accessed from the existing rear alley.

Modifications Requested:

- 1. Lot#1: Modification to reduce the end unit lot width from 26' to 24'
- 2. Lot#1: Modification to reduce the sideyard setback from 12.2' to 6'
- 3. Lot# 5: Modification to reduce the sideyard setback from 8' to 5.5'
- 4. Lots# 1-5: Modification to allow 100% area of the required yard for a drive apron to allow access to the garage

Staff Recommendation: APPROVAL WITH CONDITIONS

Staff Reviewers:

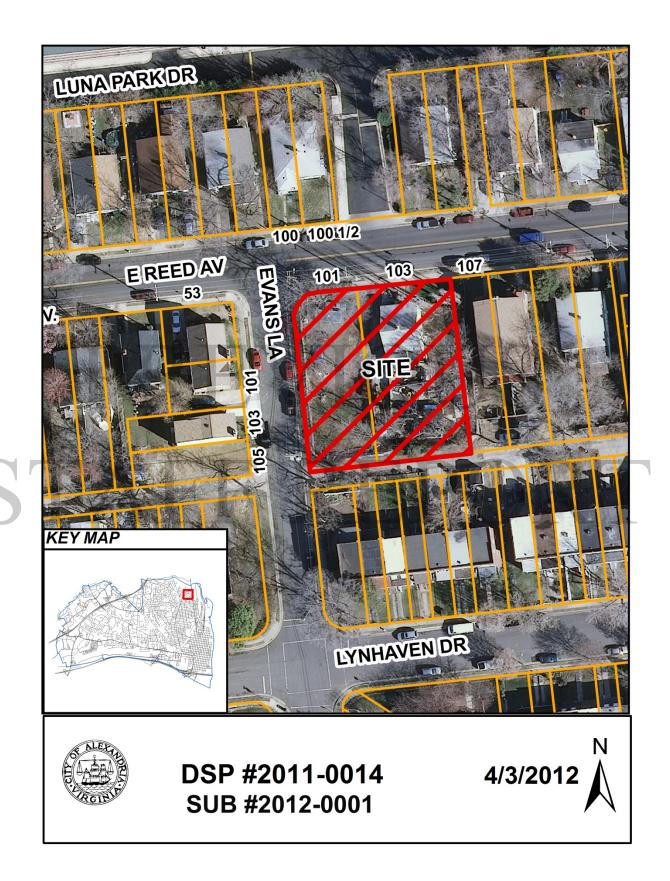
Jim Roberts, Urban Planner (P&Z)

Gary Wagner, ASLA, Principal Planner (P&Z)

PLANNING COMMISSION ACTION, APRIL 3, 2012: On a motion by Ms. Fossum, seconded by Ms. Lyman, the Planning Commission voted to **approve** DSP #2011-0014 and SUB #2012-0001. The motion carried on a vote of 7 to 0.

Reason: The Planning Commission agreed with the staff analysis and recommendations.

Speakers: Richard Newlon, representing the applicant spoke in support of the proposal.



I. SUMMARY

Recommendation & Summary of Issues

Staff recommends *approval* of a development site plan and subdivision to construct five townhouses with detached garages in the RB/Townhouse zone, with requests for various modifications, subject to compliance with staff recommendations. The proposed townhouse development is suitable for this location and is compatible with the height, massing, scale, and design of the neighborhood. This proposal also includes improvements to the streetscape on East Reed Avenue.

Significant topics that will be covered in this report include:

- Consistency with the Potomac West Small Area Plan.
- Development in conformance with the existing RB zone. The proposed square footage on the site is compatible with the character of the area and maximizes the permitted FAR at a location in close proximity to mass transit and amenities.
- Requests for modifications.
- Parking, which is proposed to be accommodated totally within garages accessed from the rear alley with no loss of on-street parking for the neighborhood.
- Building design and pedestrian improvements, which provide visual interest at the corner location with a building type that is compatible with the neighborhood.

II. BACKGROUND

A. Procedural Background

This project site – which currently consists of two lots, with one single-family house – is located within the Potomac West Small Area Plan. Although the Small Area Plan (SAP) does not directly address the subject site itself, the recommended type of development for the study area of the north-side of East Reed Avenue (the area directly across the street from the subject site) is townhouses, on the basis that their scale offered a suitable transition between the Lynhaven area and the larger condominium buildings at Luna Park Drive to the north.

The property is currently zoned RB and no change in zoning or SAP amendment is being requested.

The Planning Commission is being asked to take action on the following requests:

- Development Site Plan with modifications, to construct five townhouses with a gross floor area of 15,284 sf.
- Subdivision of two existing residential lots into five townhouse lots

B. Site Context

The site consists of two existing properties, numbers 101 and 103 East Reed Avenue. A one story single family home occupies the existing site together with a driveway and two sheds. The properties are partially wooded with trees prevalent along the west and south boundaries. A fairly rapid change in topography characterizes the site, with a grade change which rises from front to rear by approximately thirteen feet.

The site is located within the Potomac West Small Area Plan's boundaries, at the corner of East Reed Avenue and Evans Lane. The surrounding neighborhood is predominantly residential, with a mixture of building forms, which include apartments, townhouses, semi-detached and single family residences. The residences in close proximity to the proposed site vary in height from single story to 4-story and employ a variety of architectural styles and building materials. Within the vicinity of the site, the predominant material for townhouses is brick.

The site lies approximately 500 ft. east of Jefferson Davis Highway (with townhouses, semi-detached units and an apartment building in-between). To the north of the site are located the predominantly semi-detached residences on the north side of East Reed Avenue, and beyond that the 4-story condominiums on Luna Park Drive. To the west and the south of the site is the residential community of Lynhaven, comprised primarily of residential townhouses.

C. Detailed Project Description

The applicant is the contract purchaser for the two abutting lots on East Reed Avenue. This proposal includes the demolition of the on-site structures (including the one story dwelling) and removal of all but one of the on-site trees. The property will be subdivided into five lots, with a townhouse and garage constructed on each. The row of townhouses will be constructed towards the central and eastern portion of the site, and the garages will be located towards the rear property line and accessed by the existing rear alley.

The location of the townhouse buildings within the site is partly driven by a deeded Building Restriction line which prohibits buildings forward of a line 25 ft. offset from the western and northern property lines. This offset is greater than the setback requirements under the zoning ordinance, which here would be 20 ft.

The townhouses are to be constructed as two and a half story units, each with an additional basement floor. The townhouses are approximately 36.50 ft. in height, measured from the average finished grade. Due to the change in grade across the site, the front doors are accessed via a flight of steps whereas the backdoors are at grade. The garages, set towards the rear property line are approximately 13 ft. in height and can each accommodate two cars. A detailed description of the buildings, garages and architecture is included in the Building Design section of this report.

Some on-site grading is required to accommodate the five new townhouses. In the courtyard formed between the houses and the garages, an underground storm chamber is proposed to

capture and treat run-off stormwater. For the areas of site that cannot be treated by the storm chamber, grading is proposed which diverts any run-off away from the neighboring property at 107 East Reed Avenue, and generally follows the existing site's grading. The site design has been directed to minimize the amount of re-grading and to limit disturbance.

The existing site includes trees along the western and southern property boundaries, all of which will be removed under this proposal with the exception of one large ash tree growing at the corner of East Reed Avenue and Evans Lane. This ash tree is the largest tree on site and notably taller than trees in close proximity, and as such was considered by staff, the applicant and the community to be worthy of retention. This proposal allows the tree's retention.

In terms of streetscape, the proposal includes the introduction of street trees along East Reed Avenue, together with the undergrounding of overhead utility wires for the length of the property's front façade. An existing curb cut on East Reed Avenue will be closed as all parking access can be handled from the alley to the rear of the site.

III. ZONING

Property Address:	101 & 103 E. Reed Aver	nue
Total Site Area:	15,287 sf	
Zone:	Townhouse zone (RB)	
Current Use:	Residential	
Proposed Use:	Residential	
	Permitted/Required	Proposed
FAR	0.75 per lot	HU()U I
	Lot #1: 2,291 sf	1,853 sf = 0.60 FAR
	Lot #2-4: 1,719 sf	1719 sf = 0.75 FAR
	Lot #5: 4,015 sf	1,853 sf = 0.35 FAR
G 41 - 1 -	Total: 11,461 sf	8,863 sf = 0.58 FAR
Setbacks		
Front **	20' (West)	25'
	20' (North)	30' min.
<u>Side</u>	8' (South)	5.5' * Modification requested
	12.2' (East)	6' * Modification requested
Rear	10'	13'
 Parking		
Residential Use:	2 per dwelling unit	2 per dwelling unit
Visitor	Approx. 8 on-street	Approx. 8 on-street
Total:	2 per dwelling unit	2 per dwelling unit

^{**}Note: Lot #5 has two front yards

IV. STAFF ANALYSIS

• Conformance to the Small Area Plan

The proposal meets the following goals and objectives of the Potomac West Area Plan (P.51):

- To preserve and strengthen the residential area in Potomac West
- Require any new residential development to be of the same scale and density as the surrounding residential neighborhood

Although the Small Area Plan (SAP) does not directly address the subject site itself, the recommended type of development for the study area of the north-side of East Reed Avenue (the area directly across the street from the subject site) is townhouses, on the basis that their scale offered a suitable transition between the Lynhaven area and the larger condominiums at Luna Park Drive to the north. In the opinion of staff, this argument for townhouses as a suitable type and scale can also be reasonably made at the subject site.

• Height, Floor Area Ratio and Density

The proposal includes an increase in height, FAR and density from what currently exists on the site. The existing site includes a single, one story dwelling and two smaller shed structures. In all cases, the proposal is in compliance with the zoning ordinance which allows for a maximum height of 45 ft. (3-706 (d)); a maximum FAR of 0.75 (3-706 (c)); and a maximum density of 22 units per acre (3-705 (a)). The proposal involves five dwelling units, with a height of 36.50 ft. above finished grade, an FAR which does not exceed 0.75 per lot, and a density which equates to 14.3 units per acre.

In terms of height, the proposal meets a general pattern from high to low which exists between Jefferson Davis Hwy and the surrounding neighborhood. The change in heights through this area range from the four-story buildings east of site at 181 E. Reed Ave (Preston Condominiums) and 131 - 149 E Reed Ave (Preston Townhouses) to the generally one and two-story buildings to the west and south of the site.

The proposed density is higher than the majority of properties on East Reed Avenue itself (mostly semi-detached homes), but appropriate for the Lynhaven neighborhood generally, which includes the streets of Lynhaven Drive, Wesmond Drive and Evans Lane, all of which are lined with townhouse development.

Requests for modifications and reductions

Four modifications are requested under this proposal.

• For Lot#1: Modification to reduce the end unit lot width from 26' to 24'
Due to the deeded Building Restriction lines on the property, a setback greater than that required under the zoning ordinance is provided from Evans Lane. This, taken in conjunction with the provision of a suitable width for each townhouse, has the effect of pushing the building eastwards, which in turn dictated the lot division on site. A request is made by the

applicant to reduce the required lot width by 2 ft. (which as an end lot in a townhouse development in the RB zone should be 26 ft. (3-705 (c)).

• For Lot#1: Modification to reduce the sideyard setback from 12.2' to 6' Driven by the same constraint as above, and by the height of the proposed townhouses, a sideyard setback of 12.2 ft. is required under the zoning ordinance, which requires one foot of horizontal setback for every three feet of vertical height, or a minimum of eight ft. (3-706 (2) (b)). The applicant is requesting a modification to reduce this requirement to six ft.

This modification is considered by staff to be the most notable as it allows a building of this height to be built closer to the property line than would otherwise be allowed under the ordinance. However, the effect is considered to be partly mitigated by the overall wall to wall distance to the actual neighboring building (107 East Reed Avenue) which would measure 18 ft. That distance is greater than, or equal to the comparable dimension between the end units of townhouse rows in the Lynhaven neighborhood.

- For Lot# 5: Modification to reduce the sideyard setback from 8' to 5.5'
 Lot# 5 is a corner lot and therefore technically has two front yards (north and west) and a side yard to the south (which on the other lots is the rear yard). As the proposed garage is sited 5.5 ft. from the property line, a modification is required because the minimum side yard setback of eight ft. (3-706 (2) (b)) is not met.
- For Lots# 1-5: Modification to allow 100% area of the required yard for a drive apron to allow access to the garage

The drive apron between the garages and the existing alley is located within the required yards for all lots. On Lot #5, the required yard is a side yard, whereas the yards on the other lots are required rear yards. Under the zoning ordinance, a maximum of 50% is allowable as parking area (7-1005). In order to permit vehicles to access the garage, a paved apron is required at this location.

• Parking

Under the zoning ordinance, two parking spaces are required per unit (8-200 (A) (1)). All required parking is accommodated by the provision of the detached garages to the rear which are accessed from the existing alley. This layout allows an efficient parking solution and locates garage entrances to the rear of the development rather than fronting the street, which is considered beneficial to the streetscape by staff.

The actual setback for the garages from the alley has been carefully considered. A balance has been achieved under this proposal which allows the required space for vehicular turning movements while limiting the garage apron's length to prevent vehicles being parked nose-first outside of the garage which may potentially block alley access for other vehicles.

Although not striped, approximately eight on-street parking spaces are available adjacent to the property. The current level and location of on-street parking is maintained under this proposal.

• Traffic

The increase in traffic for this development will be negligible. Less than five additional cars in each of the AM and PM peak hours are projected to be generated by the new development when compared to existing conditions. There will be no perceptible change in traffic volumes on East Reed Avenue after the development is complete.

• Building Design

The proposed townhouses are arranged with their front façade facing East Reed Avenue, forming a traditional relationship with the street. They are arranged in a slightly staggered footprint so that units two and four project forward and allow a variation to the front and rear building facades. The units are two-and-a-half stories high, with the top floor accommodating an open deck area which varies by unit: the decks for units two and four which face northwards while units one, three and five have south-facing decks. All of the units include a basement and an open plan first floor.

The townhouses are designed with two primary objectives. Firstly, the building is designed with the intent of providing visual interest when viewed from any direction, given their prominent corner location. The building materials, fenestration and roofline treatment are carried around the building to provide interest when viewed from multiple directions, and minimizes the sense that the rear or side facades use different quality building materials or treatments which may be considered inferior.

Secondly, the building includes features which assist in breaking down the visual scale and mass, notably by:

- large glass expanses, particularly at the north-east and north-west corners (the latter includes floor to ceiling windows which wrap the corner),
- Articulation along front façade through, recessed doors, projecting unit walls, roof deck setbacks and variety of materials. These features serve to visually break the planar facades into smaller units, and
- The alternating breaks in the roofline created for the rooftop decks serve to visually lessen the building's mass.

The garages share the brick façade material and the roof treatment of the townhouses, in order to provide visual cohesion.

The choice of masonry material (brick) was directly influenced by the applicant's discussion with the local community at the Lynhaven Citizen's Association.

In terms of neighborhood character staff feels the proposed townhouses are appropriate. Although there is a fairly strong visual uniformity to townhouses in the neighborhood, the immediate surroundings at the subject site have a very varied materials palette and built character which ranges from apartment buildings (at the corner of East Reed and Jefferson Davis Hwy),

side-loaded townhouses, semi-detached brick houses and wood or siding-finished one-story houses (directly opposite the subject site). This variation in built character allows for a greater flexibility in the aspects of design such as the complex roofline and the brick/glass façade proportions which are exhibited in this proposal.

• Green Building and Sustainable Design

The proposal will meet the City's Green Building policy of meeting a minimum of LEED Certified or equivalent. This policy outlines the City goal to have newly constructed residential buildings achieve a Certification in Leadership in Energy and Environmental Design

• Affordable Housing

The applicant is proposing to offer a contribution consistent with the "Developer Housing Contribution Work Group Report" dated May 2005 and accepted by the Alexandria City Council on June 14, 2005 \$2.00 per gross square foot on the 8,863 gross square feet of permitted ("by right") development for a total voluntary contribution of \$17,726

• Pedestrian and Streetscape Improvements

A number of improvements are proposed for the streetscape:

- The overhead utility wires along the front of the property on East Read Ave are to be undergrounded. A utility pole mid-way along the East Reed Avenue frontage is set to be moved to the north east of the site, and the wires between it and the a pole at the intersection of East Reed Avenue and Evans Lane are to be placed underground.
- Four street trees are to be installed in the existing landscape strip along East Reed Avenue, offering continuity in the streetscape from that further down the block which was installed with the Preston condominiums and townhouse development.
- An ADA accessible bus pad is to be installed in approximately the same location as the existing bus stop.

Staff considers the various streetscape improvements to be beneficial to the local community, offering a less visually cluttered streetscape and a greater level of consistency with nearby streetscape improvements

• Open Space

Required Open Space per lot for the RB zone is 800 sq. ft. (3-706 (b)). The proposal meets this requirement, and exceeds it substantially for the two end lots. The property has a deeded Building Restriction line which means that no part of the building can be within 25 feet of the north and west property boundaries. This restriction has the effect of providing large open spaces to the yards which front onto East Reed Avenue and Evans Lane.

V. COMMUNITY

The project was presented at the Lynhaven Citizen's Association's January meeting and received general support from those present. The community was satisfied with the garage parking,

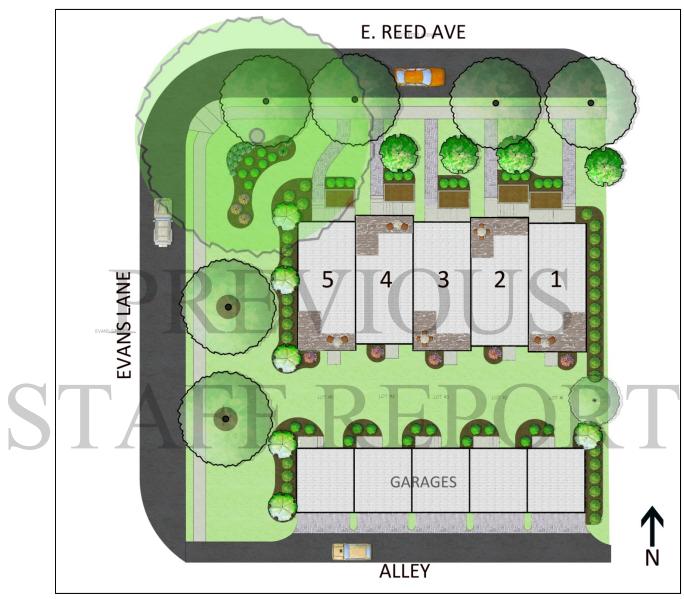
particularly its location and supported the overall scale of development. The community's discussion on architecture, and most notably materials, served to direct the applicant to provide brick facades. This material was considered to be compatible with other local townhouses.

VI. CONCLUSION

Staff recommends *approval* of the development site plan, subdivision and modifications, subject to the conditions in the Recommendations section.

PREVIOUS STAFF REPORT

VII. GRAPHICS



Illustrative Site Plan



Illustrative North Elevation (from East Reed Ave.)



Illustrative West Elevation (from Evans Lane)



Illustrative View (from East Reed Ave.)

VIII. STAFF RECOMMENDATIONS

1. The Final Site Plan shall be in substantial conformance with the Preliminary Plan dated February 2nd, 2012, the supplemental information provided February 22nd and 29th, 2012, and shall comply with the following conditions of approval.

A. PEDESTRIAN/STREETSCAPE:

- 2. Provide the following pedestrian improvements to the satisfaction of the Directors of P&Z, RP&CA and T&ES:
 - a. Complete all pedestrian improvements prior to the issuance of a certificate of occupancy permit.
 - b. Install ADA accessible pedestrian crossings serving the site.
 - c. All newly constructed curb ramps in Alexandria shall be concrete with detectable warning and shall conform to current VDOT standards.

B. OPEN SPACE/LANDSCAPING:

- 3. Develop, provide, install and maintain an integrated Landscape Plan with the final site plan that is coordinated with other associated site conditions to the satisfaction of the Director of P&Z. At a minimum the Landscape Plan shall:
 - a. Provide an enhanced level of detail plantings throughout the site (in addition to street trees). Plantings shall include a simple mixture of seasonally variable, evergreen and deciduous shrubs, ornamental and shade trees, groundcovers and perennials that are horticulturally acclimatized to the Mid-Atlantic and Washington, DC National Capital Region.
 - b. Ensure positive drainage in all planted areas.
 - c. Provide a section detail of the street trees within the landscape strip showing proposed plantings and associated materials, adjacent curb/pavement construction, dimensions, drainage, and coordination with site utilities. This is supplemental to the typical detail provided under previous submissions.
 - d. Provide planting details for all proposed conditions including multi-trunk trees, shrubs, perennials, and groundcovers. (P&Z)
- 4. Provide the following modifications to the landscape plan and supporting drawings:
 - a. Provide the required 25% crown coverage per lot rather than per the entire site. In effect that means a small increase in CCA is required on lots 2-4.
 - b. Provide notation to identify all plants on the plan with an accompanying planting schedule which includes species, cultivar, size/height, canopy coverage and spacing (where applicable).

- c. Provide section and plan details for the two installation conditions of pervious pavers: at the garage aprons and the front yard paths. The section details shall include the full vertical make-up of the paver and below grade condition, together with the proposed edge treatment. This is supplemental to the typical detail provided under previous submissions.
- d. The narrow landscape strip at the back of the sidewalk and within the right- ofway on Evans Lane, extending to the corner of E. Reed shall be fine graded and re-sodded following construction impacts in this area. (P&Z)
- 5. Provide material, finishes, and architectural details for all retaining walls. (P&Z)

C. TREE PROTECTION AND PRESERVATION:

- 6. Provide, implement and follow a tree conservation and protection program that is developed per the City of Alexandria Landscape Guidelines and to the satisfaction of the Directors of P&Z, and RP&CA and the City Arborist. (P&Z)(RP&CA)
- 7. A fine shall be paid by the applicant in an amount not to exceed \$10,000 for each tree that is destroyed and/or the City may request that replacement trees of similar caliper and species be provided for damaged trees if the approved tree protection methods have not been followed. The replacement trees shall be installed and if applicable the fine shall be paid prior to the issuance of the last certificate of occupancy permit. *** (P&Z)(RP&CA)
- 8. The area of the limits of disturbance and clearing for the site shall be limited to the areas as generally depicted on the preliminary site plan dated February 2nd, 2012 and reduced if possible to retain existing trees and grades. (P&Z)(RP&CA)

D. BUILDING:

- 9. Provide the following building refinements to the satisfaction of the Director of P&Z:
 - a. Windows shall correctly reflect the architectural style, building type and period that is referenced by the building design. There shall be a minimum setback of glass from the face of sash of 3/8". If shown with a historical muntin pattern, such as 2-over-1, 2-over-2, 6-over-1, etc., such applied exterior muntins shall:
 - i. have a minimum depth/projection of 3/8" and a maximum width of 1";
 - ii. have a detailed profile that will create a strong shadow pattern;
 - iii. have an integral spacer bar between the panes of glass that matches the muntins in width;
 - iv. corresponding interior muntins are encouraged, but not required;
 - b. Windows that reflect more modern styles shall be reviewed on an individual basis, but a minimum glass setback from face of sash is required of 3/8". (P&Z)
- 10. Building materials, finishes, and relationships shall be subject to review and approval by the Department of Planning and Zoning to the satisfaction of the Director prior to selection of final building materials:

- a. Provide a materials board that includes all proposed materials and finishes at first final site plan. *
- b. The materials board shall remain with the Department of Planning and Zoning until the final certificate of occupancy, upon which all samples shall be returned to the applicant.***
- c. Advise P&Z staff at the beginning of installation of the exterior finishes to schedule a review for compliance with the submitted materials board. (P&Z)
- 11. Per the City's Green Building Policy adopted April 18, 2009, achieve a green building certification level of LEED Certified or equivalent to the satisfaction of the Directors of P&Z and T&ES. Diligent pursuance and achievement of this certification shall be monitored through the following:
 - a. Provide evidence of the project's registration with LEED (or equivalent) with the submission of the first final site plan.*
 - b. Provide evidence of submission of materials for Design Phase credits to the U.S. Green Building Council (USGBC) (or equivalent) prior to issuance of a certificate of occupancy. ***
 - c. Provide evidence of submission of materials for Construction Phase credits to USGBC (or equivalent) within six months of obtaining a final certificate of occupancy.
 - d. Provide documentation of LEED Certification from USGBC (or equivalent) within two years of obtaining a final certificate of occupancy.
 - e. Failure to achieve LEED Certification (or equivalent) will be evaluated by City staff, and if staff determines that a good faith, reasonable, and documented effort was not made to achieve these certification levels, then any City-wide Green Building policies existing at the time of staffs' release of Final Site Plan will apply. (P&Z)(T&ES)
- 12. The applicant shall work with the City for recycling and/or reuse of the existing building materials as part of the demolition process, including leftover, unused, and/or discarded building materials. (T&ES)(P&Z)
- 13. In order to provide a more sustainable use of natural resources, the applicant shall use EPA-labeled WaterSense or equivalent low flow fixtures. A list of applicable mechanisms can be found at http://www.epa.gov/WaterSense/pp/index.htm. (T&ES)

E. SIGNAGE

14. Install a temporary informational sign on the site prior to the approval of the final site plan for the project. The sign shall be displayed until construction is complete or replaced with a contractor or real estate sign incorporating the required information; the sign shall notify the public of the nature of the upcoming project and shall provide a phone number for public questions regarding the project.* (P&Z)(T&ES)

F. HOUSING:

15. The developer has offered to make a voluntary contribution of \$2.00 per gross square foot on the 8,863 gross square feet of permitted ("by right") development for a total voluntary contribution of \$17,726, consistent with the conclusions of the "Developer Housing Contribution Work Group Report" dated May 2005 and accepted by the Alexandria City Council on June 14, 2005.***

G. BUS STOPS AND BUS SHELTERS:

- 16. Relocate bus stop sign and passenger loading pad to provide a minimum of fifteen (15) feet from the sign and loading pad to the first parking space to the east of the bus stop. (T&ES/DASH)
- 17. Make bus stop at East Reed Avenue in front of the property ADA compliant. ADA compliance includes:
 - a. Install an unobstructed seven (7) foot wide, parallel to the roadway, by eight (8) foot wide, perpendicular to the curb, bus stop passenger loading pad. The loading pad shall be at the same grade as the sidewalk, connect the curb to the sidewalk, and the pad's surface material shall match the sidewalk. The exiting width of the sidewalk may be counted towards the 8 foot wide perpendicular to the curb area. Passenger loading pads shall never be placed on storm drain inlets, catch basins, and other obstacles that would make the bus stop and bus stop loading pad inaccessible.
 - Create a 70 foot "No Parking, Bus Stop Zone" if the bus stop is located along the curbside. If the bus stop is located on a bulb out / extension into the roadway, the 70 foot "No Parking, Bus Stop Zone" shall not be required. (T&ES)

H. SITE PLAN:

b.

- 18. Per Section 11-418 of the Zoning Ordinance, the development site plan shall expire and become null and void, unless substantial construction of the project is commenced within 36 months after initial approval and such construction is thereafter pursued with due diligence. The applicant shall provide a written status report to staff 18 months after initial approval to update the City Council on the project status. (P&Z)
- 19. Submit the plat of subdivision/consolidation and all applicable easements and/or dedications prior to the final site plan submission. The plat(s) shall be approved and recorded prior to the release of the final site plan.* (P&Z) (T&ES)
- 20. Coordinate location of site utilities with other site conditions to the satisfaction of the Directors of P&Z and T&ES. These items include:
 - a. Location of site utilities including above grade service openings and required clearances for items such as transformers, telephone, HVAC units and cable boxes.

- b. Minimize conflicts with plantings, pedestrian areas and major view sheds.
- c. Do not locate above grade utilities in dedicated open space areas.
- d. Amend the limits of disturbance to include all areas impacted by the proposed construction, including the areas identified for the undergrounding of the utility lines. (P&Z)(T&ES)
- 21. Provide a lighting plan with the final site plan to verify that lighting meets City standards. The plan shall be to the satisfaction of the Directors of T&ES and P&Z in consultation with the Chief of Police and shall include the following:
 - a. Clearly show location of all existing and proposed street lights and site lights, shading back less relevant information.
 - b. A lighting schedule that identifies each type and number of all fixtures, mounting height, and strength of fixture in Lumens or Watts.
 - c. Manufacturer's specifications and details for all proposed fixtures including site, landscape, pedestrian, sign(s) and security lighting.
 - d. A photometric plan with lighting calculations that include all existing and proposed light fixtures, including any existing street lights located on the opposite side(s) of all adjacent streets. Photometric calculations must extend from proposed building face(s) to property line and from property line to the opposite side(s) of all adjacent streets and/or 20 feet beyond the property line on all adjacent properties and rights-of-way. Show existing and proposed street lights and site lights.
 - e. Photometric site lighting plan shall be coordinated with architectural/building mounted lights, site lighting, street trees and street lights to minimize light spill into adjacent residential areas.
 - f. Provide location of conduit routing between site lighting fixtures so as to avoid conflicts with street trees.
 - g. Detail information indicating proposed light pole and footing in relationship to adjacent grade or pavement. All light pole foundations shall be concealed from view.
 - h. The lighting for the areas not covered by the City of Alexandria' standards shall be designed to the satisfaction of Directors of T&ES and P&Z.
 - i. Provide numeric summary for various areas (i.e., roadway, walkway/ sidewalk, alley, and parking lot, etc.) in the proposed development.
 - j. Full cut-off lighting shall be used at the development site to prevent light spill onto adjacent properties. (P&Z)(T&ES)(Police)

I. CONSTRUCTION:

22. Submit a construction phasing plan to the satisfaction of the Director of T&ES, for review, approval and partial release of Erosion and Sediment Control for the final site plan. In addition, building and construction permits required for site preconstruction shall be permitted prior to release of the final site plan to the satisfaction of the Director of T&ES. * (T&ES)

- 23. Submit a construction management plan for review and approval by the Directors of P&Z, T&ES and Code Administration prior to final site plan release. The plan shall:
 - a. Include a plan for temporary pedestrian and vehicular circulation;
 - b. Include analysis as to whether temporary street lighting is needed on the site and how it is to be installed.
 - c. Include the overall schedule for construction and the hauling route;
 - d. Copies of the plan shall be posted in the construction trailer and given to each subcontractor before they commence work;
 - e. If the plan is found to be violated during the course of construction, citations will be issued for each infraction and a correction notice will be forwarded to the applicant. If the violation is not corrected within five (5) calendar days, a "stop work order" will be issued, with construction halted until the violation has been corrected. * (P&Z)(T&ES)(Code)
- 24. Provide off-street parking for all construction workers without charge to the construction workers. For the construction workers who use Metro, DASH, or another form of mass transit to the site, the applicant shall subsidize a minimum of 50% of the fees for mass transit. Compliance with this condition shall be a component of the construction management plan, which shall be submitted to the Department of P&Z and T&ES prior to final site plan release. This plan shall:
 - a. Establish the location of the parking to be provided at various stages of construction, how many spaces will be provided, how many construction workers will be assigned to the work site, and mechanisms which will be used to encourage the use of mass transit.
 - b. Provide for the location on the construction site at which information will be posted regarding Metro schedules and routes, bus schedules and routes.c. If the plan is found to be violated during the course of construction, a correction
 - notice will be issued to the developer. If the violation is not corrected within five (5) days, a "stop work order" will be issued, with construction halted until the violation has been corrected. * (P&Z)(T&ES)
- 25. The sidewalks shall remain open during construction or pedestrian access shall be maintained to the satisfaction of the Director of T&ES throughout the construction of the project. (T&ES)
- 26. No major construction staging shall be allowed within the public right-of-way on East Reed Avenue. The applicant shall meet with T&ES to discuss construction staging activities prior to release of any permits for ground disturbing activities. ** (T&ES)
- 27. A "Certified Land Disturber" (CLD) shall be named in a letter to the Division Chief of Construction & Inspection prior to any land disturbing activities. If the CLD changes during the project, that change must be noted in a letter to the Division Chief. A note to this effect shall be placed on the Phase I Erosion and Sediment Control sheets on the site plan. (T&ES)

- 28. Prior to commencing clearing and grading of the site, the applicant shall hold a meeting with notice to all adjoining property owners and civic associations to review the location of construction worker parking, plan for temporary pedestrian and vehicular circulation, and hours and overall schedule for construction. The Departments of P&Z and T&ES shall be notified of the date of the meeting before the permit is issued. (P&Z)(T&ES)
- 29. Identify a person who will serve as a liaison to the community throughout the duration of construction. The name and telephone number, including an emergency contact number, of this individual shall be provided in writing to residents, property managers and business owners whose property abuts the site and shall be placed on the project sign, to the satisfaction of the Directors of P&Z, and/or RP&CA and T&ES. (P&Z)(RP&CA)(T&ES)
- 30. Implement a waste and refuse control program during the construction phase of this development. This program shall control wastes such as discarded building materials, concrete truck washout, chemicals, litter or trash, trash generated by construction workers or mobile food vendor businesses serving them, and all sanitary waste at the construction site and prevent offsite migration that may cause adverse impacts to neighboring properties or to the environment to the satisfaction of Directors of T&ES and Code Administration. All wastes shall be properly disposed offsite in accordance with all applicable federal, state and local laws. (T&ES)
- 31. Submit a wall check prior to the commencement of construction of the first floor above grade framing for the building(s). The wall check shall include the building footprint, as depicted in the approved final site plan, the top-of-slab elevation and the first floor elevation. The wall check shall be prepared and sealed by a registered engineer or surveyor, and shall be approved by the P&Z prior to commencement of framing. (P&Z)
- 32. Submit a height certification and a location survey for all site improvements to the Department of P&Z as part of the request for a certificate of occupancy permit. The height certification and the location survey shall be prepared and sealed by a registered architect, engineer, or surveyor. The height certification shall state that the height was calculated based on all applicable provisions of the Zoning Ordinance. *** (P&Z)
- 33. Contractors shall not cause or permit vehicles to idle for more than 10 minutes when parked. (T&ES)
- 34. If there are outstanding performance, completion or other bonds for the benefit of the City in effect for the property at such time as it may be conveyed or sold to a party other than the applicant, a substitute bond must be provided by that party or, in the alternative, an assignment or other documentation from the bonding company indicating that the existing bond remains in effect despite the change in ownership may be provided. The bond(s) shall be maintained until such time that all requirements are met and the bond(s) released by the City. (T&ES)

J. SOLID WASTE:

- 35. In order for the City to provide solid waste service, the development must meet all the minimum street standards. The trash truck must be able to pick up solid waste from private streets without backing up. The containers must be placed inside the units or within an enclosure that completely screens them from view. The developer must purchase the standard containers from the City or provide containers that are compatible with City collection system and approved by the Director of T&ES. (T&ES)
- 36. Where the City of Alexandria provides the solid waste collection services; all refuse/recycling shall be placed at the City Right-of-Way. (T&ES)
- 37. Provide \$1,150 per receptacle to the Director of T&ES for purchase and installation of one (1) Iron Site Bethesda Series, Model SD-42 decorative black metal trash cans with domed lid by Victor Stanley. The receptacle(s) shall be placed in the public right of way to serve open space and the bus stop. Receptacles shall be generally located along the property frontage and at strategic locations in the vicinity of the site as approved by the Director of T&ES. Payment required prior to release of Final Site Plan.* (T&ES)

K. STREETS / TRAFFIC:

- 38. If the City's existing public infrastructure is damaged during construction, or patch work required for utility installation then the applicant shall be responsible for construction/installation or repair of the same as per the City of Alexandria standards and specifications and to the satisfaction of Director, Transportation and Environmental Services. (T&ES)
- 39. A pre-construction walk/survey of the site shall occur with Transportation and Environmental Services Construction and Inspection staff to document existing conditions prior to any land disturbing activities. (T&ES)
- 40. Submit a Traffic Control Plan as part of the final site plan, for construction detailing proposed controls to traffic movement, lane closures, construction entrances, haul routes, and storage and staging shall be provided for informational purposes. In addition, the Traffic Control Plan shall be amended as necessary and submitted to the Director of T&ES along with the Building and other Permit Applications as required. The Final Site Plan shall include a statement "FOR INFORMATION ONLY" on the Traffic Control Plan Sheets. (T&ES)
- 41. All Traffic Control Device design plans, Work Zone Traffic Control plans, and Traffic Studies shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. (T&ES)

42. Show turning movements of standard vehicles in the parking structure and/or parking garages. Turning movements shall meet AASHTO vehicular guidelines and shall be to the satisfaction of the Director of T&ES. (T&ES)

L. UTILITIES:

- 43. Locate all private utilities outside of the public right-of-way and public utility easements. (T&ES)
- 44. The power lines as shown on the Preliminary Site Plan fronting East Reed Avenue shall be placed underground. (T&ES)

M. SOILS:

45. Provide a geotechnical report, including recommendations from a geotechnical professional for proposed cut slopes and embankments. (T&ES)

N. WATERSHED, WETLANDS, & RPAs:

- 46. The project site lies within Four Mile Run Watershed thus stormwater quantity controls shall be designed to demonstrate that post development stormwater runoff does not exceed the existing runoff quantities for the 2-year, 10-year, and 100-year storm events. (T&ES)
- The storm water collection system is located within the Four Mile Run watershed. All onsite storm water curb inlets and public curb inlets within 50 feet of the property line shall be duly marked using standard City markers, or to the satisfaction of the Director of T&ES. (T&ES)

O. BMP FACILITIES:

- 48. The City of Alexandria's storm water management regulations regarding water quality are two-fold: first, phosphorus removal requirement and second, water quality volume default. Compliance with the phosphorus requirement does not relieve the applicant from the water quality default requirement. The water quality volume determined by the site's proposed impervious area shall be treated in a Best Management Practice (BMP) facility. (T&ES)
- 49. Provide BMP narrative and complete pre and post development drainage maps that include areas outside that contribute surface runoff from beyond project boundaries to include adequate topographic information, locations of existing and proposed storm drainage systems affected by the development, all proposed BMPs and a completed Worksheet A or B and Worksheet C, as applicable. (T&ES)

- 50. The storm water Best Management Practices (BMPs) required for this project shall be constructed and installed under the direct supervision of the design professional or his designated representative. Prior to release of the performance bond, the design professional shall submit a written certification to the Director of T&ES that the BMPs are:
 - a. Constructed and installed as designed and in accordance with the approved Final Site Plan.
 - b. Clean and free of debris, soil, and litter by either having been installed or brought into service after the site was stabilized. **** (T&ES)
- 51. Surface-installed storm water Best Management Practice (BMP) measures, i.e. Bio-Retention Filters, Vegetated Swales, etc. that are employed for this site, require installation of descriptive signage to the satisfaction of the Director of T&ES. (T&ES)
- 52. Submit two originals of the storm water quality BMP and Stormwater Detention Facilities Maintenance Agreement with the City to be reviewed as part of the Final #2 Plan. The agreement must be executed and recorded with the Land Records Division of Alexandria Circuit Court prior to approval of the final site plan.* (T&ES)
- 53. The Applicant shall be responsible for maintaining storm water Best Management Practices (BMPs) until activation of the homeowner's association (HOA), if applicable, or until sale to a private owner. Prior to transferring maintenance responsibility for the BMPs to the HOA or owner, the Applicant shall execute a maintenance service contract with a qualified private contractor for a minimum of three years, and transfer the contract to the HOA or owner. A copy of the contract shall also be placed in the BMP Operation and Maintenance Manual. Prior to release of the performance bond, a copy of the maintenance contract shall be submitted to the City. ****(T&ES)
- 54. If units will be sold as individual units and a homeowner's association (HOA) established the following two conditions shall apply:
 - a. The Applicant shall furnish the Homeowner's Association with an Owner's Operation and Maintenance Manual for all Best Management Practices (BMP's) and Stormwater Detention used on site. The manual shall include at a minimum: an explanation of the functions and operations of the BMP(s) and Stormwater Detention; drawings and diagrams of the BMP(s), Stormwater Detention and any supporting utilities; catalog cuts on maintenance requirements including any mechanical or electrical equipment; manufacturer contact names and phone numbers; a copy of the executed maintenance service contract; and a copy of the maintenance agreement with the City.
 - b. The Developer shall furnish each home purchaser with a brochure describing the storm water BMP(s) and Stormwater Detention installed on the site, outlining the responsibilities of the homeowners and the Homeowner s Association (HOA) with respect to maintenance requirements. Upon activation of the HOA, the

Developer shall furnish five copies of the brochure per unit to the HOA for distribution to subsequent homeowners.

Otherwise the following condition applies:

- 55. The Developer shall furnish the owners with an Owner's Operation and Maintenance Manual for all Best Management Practices (BMPs) and Stormwater Detention on the project. The manual shall include at a minimum: an explanation of the functions and operations of the BMP(s) and Stormwater Detention; drawings and diagrams of the BMP(s), Stormwater Detention and any supporting utilities; catalog cuts on maintenance requirements including mechanical or electrical equipment; manufacturer contact names and phone numbers; a copy of the executed maintenance service contract; and a copy of the maintenance agreement with the City. (T&ES)
- 56. Submit a copy of the Operation and Maintenance Manual to the Office of Environmental Quality on digital media prior to release of the performance bond. ****(T&ES)
- 57. Prior to release of the performance bond, the Applicant is required to submit a certification by a qualified professional to the satisfaction of the Director of T&ES that any existing storm water management facilities adjacent to the project and associated conveyance systems were not adversely affected by construction operations. If maintenance of the facility or systems were required in order to make this certification, provide a description of the maintenance measures performed. ****(T&ES)

P. CONTAMINATED LAND:

- 58. Should any unanticipated contamination, underground storage tanks, drums or containers be encountered at the site, the Applicant must immediately notify the City of Alexandria Department of Transportation and Environmental Services, Office of Environmental Quality. (T&ES)
- 59. Design and install a vapor barrier and ventilation system for buildings and parking areas in order to prevent the migration or accumulation of methane or other gases, or conduct a study and provide a report signed by a professional engineer showing that such measures are not required to the satisfaction of Directors of T&ES and Code Administration. (T&ES)
- 60. The final site plan shall not be released, and no construction activity shall take place until the following has been submitted and approved by the Director of T&ES:
 - a. Submit a Site Characterization Report/Extent of Contamination Study detailing the location, applicable contaminants, and the estimated quantity of any contaminated soils and/or groundwater at or in the immediate vicinity of the site.
 - b. Submit a Risk Assessment indicating any risks associated with the contamination

- c. Submit a Remediation Plan detailing how any contaminated soils and/or groundwater will be dealt with, including plans to remediate utility corridors. Utility corridors in contaminated soil shall be over excavated by 2 feet and backfilled with "clean" soil.
- d. Submit a Health and Safety Plan indicating measures to be taken during remediation and/or construction activities to minimize the potential risks to workers, the neighborhood, and the environment.
- e. Applicant shall submit 3 hard copies and 2 electronic copies of the above. The remediation plan must be included in the Final Site Plan. * (T&ES)

Q. AIR POLLUTION:

61. If fireplaces are utilized in the development, the Applicant is required to install gas fireplaces to reduce air pollution and odors. Animal screens must be installed on chimneys. (T&ES)

PREVIOUS STAFF REPORT

CITY DEPARTMENT CODE COMMENTS

Legend: C Code Requirement R Recommendation S Suggestion F – Finding

Planning and Zoning

- C-1 Average finished grade must be drawn on elevations for townhouse units and garages to accurately determine the building height. The townhouses appear to comply with the height limitations.
- C-2 Height of garages should be taken to top of flat roof.
- C-3 Based on the threshold height block-face survey (49, 53, 107A, 107B, 109A & 109B E Reed Avenue) the maximum allowable threshold height cannot exceed 5.98 feet above pre-construction grade. Include this information with zoning tabulations on page 1 of the site plan.
- C-4 As-built documents for all landscape and irrigation installations are required to be submitted with the Site as-built and request for Performance Bond release. Refer to City of Alexandria Landscape Guidelines, Section III A & B. **** (P&Z) (T&ES)
- C-5 The landscape elements of this development shall be subject to the Performance and Maintenance bonds, based on criteria established by the City and available through T&ES. Release of Performance and Maintenance Bonds are subject to inspections by City staff per City Code requirements. A final inspection for landscaping is also required three years after completion. **** (P&Z) (T&ES)

Transportation and Environmental Services

- F 1 ASA has no comments on the Preliminary Submission.
- F 2 Isolator Row has an efficiency of 15%. Correct as appropriate. (T&ES- OEQ)
- F-3 Porous paver detail on sheet 2 0f 16 shows the required underdrain. However, no underdrains are shown on the sidewalks, driveways or stoops. Correct as required. (T&ES-OEQ)
- F 4 All appropriate data blocks shall be included. (T&ES- OEQ)
- F 5 Water Quality Volume left untreated requires a contribution to the Water Quality Improvement Fund. A request to contribute shall be submitted. (T&ES-OEQ)
- F 6 Since the record drawings, maps, and other documents of the City of Alexandria, State, and Federal agencies show the true north pointing upwards, therefore, the Site Plan shall show the true north arrow pointing upward as is customary; however, for the sake of

putting the plan together and/or ease of understanding, the project north arrow pointing upward, preferably east, or west may be shown provided it is consistently shown in the same direction on all the sheets with no exception at all. The north arrow shall show the source of meridian. The project north arrow pointing downward will not be acceptable even if, it is shown consistently on all the sheets. (T&ES)

- F 7 The Final Site Plan must be prepared per the requirements of Memorandum to Industry 02-09 dated December 3, 2009, Design Guidelines for Site Plan Preparation, which is available at the City's following web address:
 - http://alexandriava.gov/uploadedFiles/tes/info/Memo%20to%20Industry%20No.%2002-09%20December%203,%202009.pdf
- F 8 The plan shall show sanitary and storm sewer, and water line in plan and profile in the first final submission and cross reference the sheets on which the plan and profile is shown, if plan and profile is not shown on the same sheet. Clearly label the sanitary and storm sewer, or water line plans and profiles. Provide existing and proposed grade elevations along with the rim and invert elevations of all the existing and proposed sanitary and storm sewer at manholes, and water line piping at gate wells on the respective profiles. Use distinctive stationing for various sanitary and storm sewers (if applicable or required by the plan), and water line in plan and use the corresponding stationing in respective profiles. (T&ES)
- F 9 The Plan shall include a dimension plan with all proposed features fully dimensioned and the property line clearly shown. (T&ES)
- F 10 Include all symbols, abbreviations, and line types in the legend. (T&ES)
- F-11 All storm sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter for storm sewers shall be 18" in the public Right of Way (ROW) and the minimum size storm sewer catch basin lead is 15". The acceptable pipe materials will be AWWA C-151 (ANSI A21.51) Class 52 or Reinforced Concrete Pipe (RCP) ASTM C-76 Class IV. For roof drainage system, Polyvinyl Chloride (PVC) ASTM D-3034-77 SDR 26 and ASTM 1785-76 Schedule 40 pipes will be acceptable. The acceptable minimum and maximum velocities will be 2.0 fps and 15 fps, respectively. The storm sewers immediately upstream of the first manhole in the public Right of Way shall be owned and maintained privately (i.e., all storm drains not shown within an easement or in a public Right of Way shall be owned and maintained privately). (T&ES)
- F 12 All sanitary sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter of sanitary sewers shall be 10" in the public Right of Way and sanitary lateral 6" for all commercial and institutional developments; however, a 4" sanitary lateral will be acceptable for single family residences. The acceptable pipe materials will be Polyvinyl Chloride (PVC) ASTM D-3034-77 SDR 26, ASTM 1785-76

Schedule 40, Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52, or reinforced concrete pipe ASTM C-76 Class IV (For 12" or larger diameters); Class III may be acceptable on private properties. The acceptable minimum and maximum velocities will be 2.5 fps and 10 fps, respectively. Laterals shall be connected to the sanitary sewer through a manufactured "Y" or "T" or approved sewer saddle. Where the laterals are being connected to existing Terracotta pipes, replace the section of main and provide manufactured "Y" or "T", or else install a manhole. (T&ES)

- F 13 Lateral Separation of Sewers and Water Mains: A horizontal separation of 10' (edge to edge) shall be provided between a storm or sanitary sewer and a water line; however, if this horizontal separation cannot be achieved then the sewer and water main shall be installed in separate trenches and the bottom of the water main shall be at least 18" above of the top of the sewer. If both the horizontal and vertical separations cannot be achieved then the sewer pipe material shall be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 and pressure tested in place without leakage prior to installation.(T&ES)
- F 14 Crossing Water Main Over and Under a Sanitary or Storm Sewer: When a water main over crosses or under crosses a sanitary / storm sewer then the vertical separation between the bottom of one (i.e., sanitary / storm sewer or water main) to the top of the other (water main or sanitary / storm sewer) shall be at least 18" for sanitary sewer and 12" for storm sewer; however, if this cannot be achieved then both the water main and the sanitary / storm sewer shall be constructed of Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 with joints that are equivalent to water main standards for a distance of 10 feet on each side of the point of crossing. A section of water main pipe shall be centered at the point of crossing and the pipes shall be pressure tested in place without leakage prior to installation. Sewers crossing over the water main shall have adequate structural support (concrete pier support and/or concrete encasement) to prevent damage to the water main. Sanitary sewers under creeks and storm sewer pipe crossings with less than 6" clearance shall be encased in concrete. (T&ES)
- F 15 No water main pipe shall pass through or come in contact with any part of sanitary / storm sewer manhole. Manholes shall be placed at least 10 feet horizontally from the water main whenever possible. When local conditions prohibit this horizontal separation, the manhole shall be of watertight construction and tested in place. (T&ES)
- F 16 Crossing Existing or Proposed Utilities: Underground telephone, cable T.V., gas, and electrical duct banks shall be crossed maintaining a minimum of 12" of separation or clearance with water main, sanitary, or storm sewers. If this separation cannot be achieved then the sewer pipe material shall be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 for a distance of 10 feet on each side of the point of crossing and pressure tested in place without leakage prior to installation. Sanitary / storm sewers and water main crossing over the utilities shall have adequate structural support (pier support and/or concrete encasement) to prevent damage to the utilities. (T&ES)

- F 17 Show the drainage divide areas on the grading plan or on a sheet showing reasonable information on topography along with the structures where each sub-area drains. (T&ES)
- F 18 Provide proposed elevations (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (T&ES)
- F 19 All the existing and proposed public and private utilities and easements shall be shown on the plan and a descriptive narration of various utilities shall be provided. (T&ES)
- F 20 The Traffic Control Plan shall replicate the existing vehicular and pedestrian routes as nearly as practical and the pedestrian pathway shall not be severed or moved for non-construction activities such as parking for vehicles or the storage of materials or equipment. Proposed traffic control plans shall provide continual, safe and accessible pedestrian pathways for the duration of the project. (T&ES)
- C-1 Per the requirements of the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a drainage study and adequate outfall analysis for the total drainage area to the receiving sewer that serves the site. If the existing storm system is determined to be inadequate then the applicant shall design and build on-site or off-site improvements to discharge to an adequate outfall; even if the post development storm water flow from the site is reduced from the pre-development flow. The Plan shall demonstrate to the satisfaction of the Director of T&ES that a non-erosive stormwater outfall is present. (T&ES)
- C 2 Per the requirements of the City of Alexandria Zoning Ordinance (AZO) Article XIII, the applicant shall comply with the peak flow requirements and prepare a Stormwater Management Plan so that from the site, the post-development peak runoff rate form a two-year storm and a ten-year storm, considered individually, shall not exceed their respective predevelopment rates. If combined uncontrolled and controlled stormwater outfall is proposed, the peak flow requirements of the Zoning Ordinance shall be met. If the project site lies within the Braddock-West watershed then the applicant shall provide an additional 10% storage of the pre-development flows in this watershed to meet detention requirements. (T&ES)
- C-3 Per the requirements of Article 13-113 (d) of the AZO, all stormwater designs that require analysis of pressure hydraulic systems, including but not limited to the design of flow control structures and storm water flow conveyance systems shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. The design of storm sewer shall include the adequate outfall, inlet, and hydraulic grade line (HGL) analyses that shall be completed to the satisfaction of the Director of T&ES. Provide appropriate reference and/or source used to complete these analyses. (T&ES)

- C 4 Location of customer utility services and installation of transmission, distribution and main lines in the public rights of way by any public service company shall be governed by franchise agreement with the City in accordance with Title 5, Chapter 3, Section 5-3-2 and Section 5-3-3, respectively. The transformers, switch gears, and boxes shall be located outside of the public right of way. (T&ES)
- C 5 (a) Per the requirements of Section 5-3-2, Article A, Chapter 3 of the City of Alexandria Code, all new customer utility services, extensions of existing customer utility services and existing overhead customer utility services supplied by any existing overhead facilities which are relocated underground shall, after October 15, 1971 be installed below the surface of the ground except otherwise exempted by the City Code and to the satisfaction of the Director, Department of Transportation and Environmental Services. (b) Per the requirements of Section 5-3-3, Article A, Chapter 3 of the City of Alexandria Code, all new installation or relocation of poles, towers, wires, lines, cables, conduits, pipes, mains, and appurtenances used or intended to be used to transmit or distribute any service such as electric current, telephone, telegraph, cable television, traffic control, fire alarm, police communication, gas, water, steam or petroleum, whether or not on the streets, alleys, or other public places of the City shall, after October 15, 1971, be installed below the surface of the ground or below the surface in the case of bridges and elevated highways except otherwise exempted by the City Code and to the satisfaction of Director, Department of Transportation and Environmental Services. (T&ES)
- C 6 Flow from downspouts, foundation drains, and sump pumps shall be discharged to the storm sewer per the requirements of Memorandum to the industry on Downspouts, Foundation Drains, and Sump Pumps, Dated June 18, 2004 that is available on the City of Alexandria's web site. The downspouts and sump pump discharges shall be piped to the storm sewer outfall, where applicable after treating for water quality as per the requirements of Article XIII of Alexandria Zoning Ordinance (AZO). (T&ES)
 - C 7 In compliance with the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a sanitary sewer adequate outfall analysis as per the requirements of Memorandum to Industry No. 02-07 New Sanitary Sewer Connection and Adequate Outfall Analysis dated June 1, 2007. The memorandum is available at the following web address of the City of Alexandria (T&ES):
 - http://alexandriava.gov/uploadedFiles/tes/info/New%20Sanitary%20Sewer%20Connection%20and%20Adequate%20Outfall%20Analysis%20 (02-07).pdf
- C 8 In compliance with Title 5: Transportation and Environmental Services, Section 5-1-2(12b) of the City Charter and Code, the City of Alexandria shall provide solid waste collection services to the condominium townhomes portion of the development. All refuse / recycling receptacles shall be placed at the City Right-of-Way. (T&ES)
- C 9 Per the requirements of Title 4, Chapter 2, Article B, Section 4-2-21, Appendix A, Section A 106(6), Figure A 106.1 Minimum Standards for Emergency Vehicle Access:

provide a total turning radius of 25 feet to the satisfaction of Directors of T&ES and Office of Building and Fire Code Administration and show turning movements of standard vehicles in the parking lot as per the latest AASHTO vehicular guidelines. (T&ES)

- C 10 The applicant shall provide storage space for solid waste and recyclable materials containers as outlined in the City's "Solid Waste and Recyclable Materials Storage Space Guidelines", or to the satisfaction of the Director of Transportation & Environmental Services. The plan shall show the turning movements of a trash truck and the trash truck shall not back up to collect trash. The City's storage space guidelines and required Recycling Implementation Plan forms are available at: www.alexandriava.gov or contact the City's Solid Waste Division at 703-746-4410, or via email at commercialrecycling@alexandriava.gov, for information about completing this form. (T&ES)
- C 11 All private streets and alleys shall comply with the City's Minimum Standards for Private Streets and Alleys. (T&ES)
- C 12 Bond for the public improvements must be posted prior to release of the site plan.* (T&ES)
- C 13 The sewer tap fee must be paid prior to release of the site plan.* (T&ES)
- C 14 All easements and/or dedications must be recorded prior to release of the site plan.*

 (T&ES)
- C 15 Plans and profiles of utilities and roads in public easements and/or public Right of Way must be approved prior to release of the plan.* (T&ES)
- C 16 Provide a phased erosion and sediment control plan consistent with grading and construction plan. (T&ES)
- C 17 Per the Memorandum to Industry, dated July 20, 2005, the applicant is advised regarding a requirement that applicants provide as-built sewer data as part of the final as-built process. Upon consultation with engineering firms, it has been determined that initial site survey work and plans will need to be prepared using Virginia State Plane (North Zone) coordinates based on NAD 83 and NAVD 88. Control points/Benchmarks which were used to establish these coordinates should be referenced on the plans. To insure that this requirement is achieved, the applicant is requested to prepare plans in this format including initial site survey work if necessary. (T&ES)
- C 18 The thickness of sub-base, base, and wearing course shall be designed using "California Method" as set forth on page 3-76 of the second edition of a book entitled, "Data Book for Civil Engineers, Volume One, Design" written by Elwyn E. Seelye. Values of California Bearing Ratios used in the design shall be determined by field and/or

laboratory tests. An alternate pavement section for Emergency Vehicle Easements (EVE) to support H-20 loading designed using California Bearing Ratio (CBR) determined through geotechnical investigation and using Virginia Department of Transportation (VDOT) method (Vaswani Method) and standard material specifications designed to the satisfaction of the Director of Transportation and Environmental Services (T&ES) will be acceptable. (T&ES)

- C 19 All pedestrian, traffic, and way finding signage shall be provided in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), latest edition to the satisfaction of the Director of T&ES. (T&ES)
- C 20 No overhangs (decks, bays, columns, post or other obstructions) shall protrude into public Right of Ways, public easements, and pedestrian or vehicular travelways unless otherwise permitted by the City Code. (T&ES)
- C 21 All driveway entrances, curbing, etc. in the public ROW or abutting public ROW shall meet City design standards. (T&ES)
- C 22 All sanitary laterals and/or sewers not shown in the easements shall be owned and maintained privately. (T&ES)
- C 23 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)
- C 24 The applicant shall comply with the Article XIII of the City of Alexandria Zoning Ordinance, which includes requirements for stormwater pollutant load reduction, treatment of the water quality volume default and stormwater quantity management. (T&ES)
- C 25 The applicant shall comply with the City of Alexandria, Erosion and Sediment Control Code, Section 5, Chapter 4. (T&ES)
- C 26 All required permits from Virginia Department of Environmental Quality, Environmental Protection Agency, Army Corps of Engineers, Virginia Marine Resources shall be in place for all project construction and mitigation work prior to release of the final site plan. This includes the state requirement for a VSMP permit for land disturbing activities greater than 2500 SF. * (T&ES)

VAWC Comments:

- 62. The existing 12" water main on Reed Ave does not match our water map. (map provided to applicant). Please re-survey this water main.
- 63. Show the fire service line in plan and profile if required for this project.

- 64. Developer shall submit a Code Administration approved ISO calculation in order to verify whether the existing & proposed water main layouts achieve the Needed Fire Flow.
- 65. Indicate the proposed peak domestic demand (gpm), in order to size the meter.

Code Administration:

- S-1 In order to assist our customers, the City of Alexandria, Department of Code Administration offers an Advanced Plan Review Service (APRS). The APRS allows an applicant to submit for a complete plan review based on the current Virginia USBC while the project is still in the pre-permit land use approval process. Applicants are eligible for the service after all comments have been addressed in the land use, preliminary review process. For the applicable APRS cost, please refer to the current Code Administration Fee Schedule.
- F-1 No comments at this time, additional comments may be forthcoming pending future submission.

Archaeology

- F-1 If this project is a federal undertaking or involves the use of any federal funding, the applicant shall comply with federal preservation laws, in particular Section 106 of the National Historic Preservation Act of 1966. The applicant will coordinate with the Virginia Department of Historic Resources and the federal agency involved in the project, as well as with Alexandria Archaeology.
- C 1 All required archaeological preservation measures shall be completed in compliance with Section 11-411 of the Zoning Ordinance.

No additional comments were received from:

Police & Fire Departments

Asterisks denote the following:

- * Condition must be fulfilled prior to release of the final site plan
- ** Condition must be fulfilled prior to release of the building permit
- *** Condition must be fulfilled prior to release of the certificate of occupancy
- **** Condition must be fulfilled prior to release of the bond