

## County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods, and diverse communities of Fairfax County

July 27, 2022

David Levy, Director of Planning and Zoning

Marion Serfass, Director of Finance / Treasurer

Town of Vienna 127 Center Street South Vienna, Virginia 22180

Reference: Patrick Henry Library & Garage

Project LB-000015, Fund 30030

**Project Update** 

Dear Mr. Levy and Ms. Serfass,

The Building Design Branch (BDB) of the Fairfax County Department of Public Works and Environmental Services (DPWES) is pleased to provide the following project update for the redevelopment of the Patrick Henry Library and Garage.

This report includes the following topics:

- 1. Site constraints and land coverage considering principal programmatic requirements.
- 2. Concept design options studied, and justification for the selected concept design direction.
- 3. BDB's responses to the Town Council's questions submitted on June 15, 2022.
- 4. A brief illustration of the design and construction process that Fairfax County typically employs to successfully manage and complete a variety of Capital Building projects.

#### 1. Site Constraints and Programmatic Requirements:

BDB understands the Town's concern regarding site coverage and limited availability of green space on the site. Patrick Henry Library is located on a 1.43-acre site bounded by Maple Avenue and Center Street on southwest, and northwest, by Vienna Elementary School on southeast and a commercial retail site on northeast. The library program needs a 21,000 square foot facility. The library staff and leadership has indicated their need for a single-story library to maintain efficiency in their day-to-day operations and functions. Due to this requirement and the limited site area available, the new building footprint is larger than the existing building In addition, the 125 parking spaces for library alone cannot be accommodated on the surface as shown in figure 1 below. Therefore, a parking structure will be needed for the library program alone. The 84 parking spaces required for the Town of Vienna creates additional levels of parking for the

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garage structure. An added challenge to the site constraints is maintaining access to the neighboring Vienna Elementary School trash dumpsters. This requirement also restricts the open and impervious areas on the site.

All 3 concept options studied by the design consultants showed the building and parking structure covering most of the site.

As we further develop the design, we will evaluate opportunities to gain back open space, and add trees and shrubs where possible.

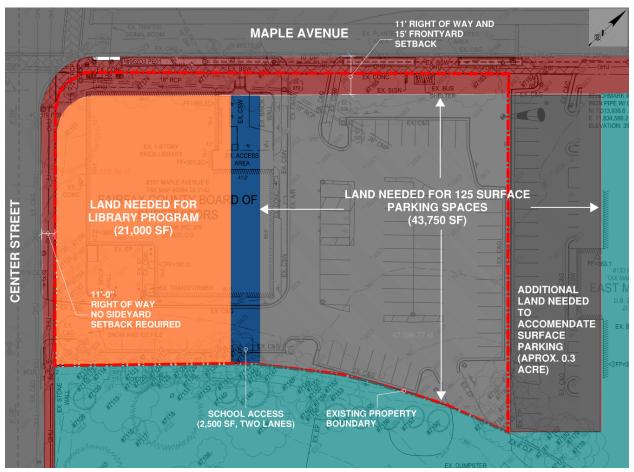


Figure 1. Land coverage needed for library program only, not for design intent.

#### 2. Concept Design Options:

Based on the design phase deliverables, the design consultants, RRMM Architects, provided three preliminary concept design options. BDB evaluated each option with the associated rough order of magnitude costs.

The following pages show the options that were evaluated.

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# Option 1 – This option locates the library along Maple Avenue with the parking garage located behind the library (shared with Town Council)

#### Opportunities:

- Library fronting Maple Avenue.
- Street presence with Corner Plaza.
- Wider sidewalk and public courtyard.
- Parking access from Maple Avenue and Center Street.
- All library services accommodated on single level.
- Meets building height limits.

#### Challenges:

- Large, combined footprint for library and garage covers most of the site.
- Linear library layout.
- Garage massing is taller than library.

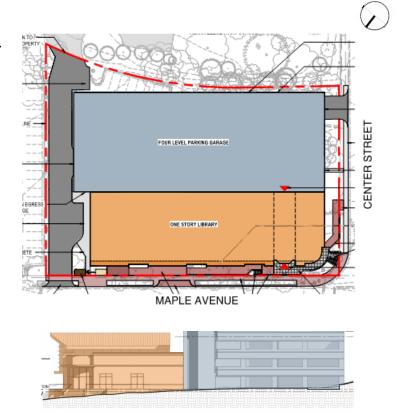


Figure 2. Option 1 Conceptual Massing Plan and Elevation (Center Street)

The BDB is currently working with the design consultants to further develop concept option 1. This concept creates an outdoor reading space for the library patrons in the courtyard, pedestrian access to a wider sidewalk along Maple Avenue, and a landscaped ground level plaza at the corner of Maple Avenue and Center Street. Additionally, the design team is developing a building exterior design that fits within the context of the Maple Avenue corridor, while distinguishing itself as a landmark. The developed conceptual model will be presented to the using agency, the Fairfax County Public Library, and the Town Council. The using agency and the Town Council will have the opportunity to provide feedback on the exterior design and material options. BDB plans to present this developed concept design to the Town Council at the August 29, 2022, meeting. Additionally, the project will be submitted to the Vienna Department of Planning and Zoning (DPZ) for site plan and 2232 for review and approval. Per code of Virginia §15.2-2232, a 2232 review determines the compatibility of proposed public facilities with the locational guidelines in the Comprehensive Plan in terms of approximate location, character, and extents.

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### Option 2 – This option locates a portion of the garage over the library.

#### Opportunities:

- Library layout is more efficient.
- All library services accommodated on single level.

#### Challenges:

- Garage partially over the library. Building would exceed allowable height.
- Garage fronting Maple Avenue.
- Potential for traffic backup on Maple Ave. and conflict with pedestrian movement along sidewalk.
- Façade enhancement required for garage along Maple Ave.
- Sound and vibration transfer requires enhanced structural and acoustical design.
- Additional maintenance for level between garage deck and library roof.
- Cost prohibitive due to structural enhancements, acoustics, and vibration mitigation.

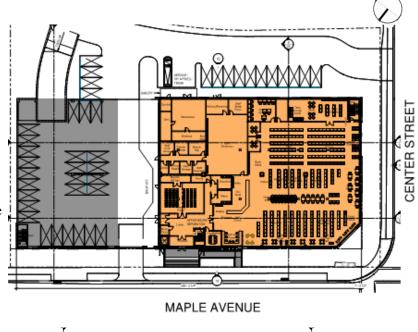


Figure 3. Option 2 Conceptual Massing Plan and Elevation (Maple Avenue)

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Option 3 - This option locates the library and garage adjacent to each other along Maple Avenue with one level underground parking.

#### Opportunities:

- Library layout is more efficient.
- All library services accommodated on single level.
- Complementary massing of library and garage.

#### **Challenges:**

- Garage fronting Maple Avenue.
- Potential for traffic backup on Maple Ave. and conflict with pedestrian movement along sidewalk.
- Façade enhancement required for garage along Maple Ave.
- Cost prohibitive due to below grade parking

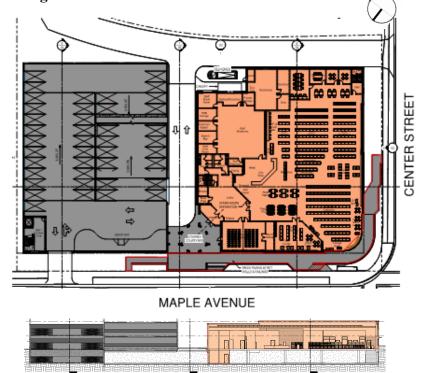


Figure 4. Conceptual Massing Plan and Elevation (Maple Avenue)

All 3 options were presented to the Town Staff on March 7, 2022. During the meeting with the Town Staff, BDB received valuable feedback on each design option regarding zoning requirements. After further evaluation with the library staff and leadership, it was determined that options 2 and 3 may not be feasible or practicable due to the challenges noted above. Therefore option 1 was selected to be further developed.

#### 3. BDB Staff Response to the Town Council's Questions:

During the Vienna Town Council conference on June 13, 2022, Town staff provided a project update to the Council to assist them in determining whether the Council would continue with the Town's partnership with Fairfax County on developing the garage including 84 parking spaces for the Town. The Council members requested that BDB staff provide responses to the following questions submitted on June 15, 2022. The following section includes the Council's questions and BDB's responses:

**Council Question 1:** The mass of the combined building and height of the garage was the overriding concern. Can a 2-story library / 3 or 4 level parking garage be designed?

**BDB Response:** The design of a 2-story library was evaluated by Library staff and leadership. In addition, the Town Zoning staff recommended that the County evaluate moving the library administration spaces to the second floor. After further assessment, BDB and the Library staff determined that locating library functions on two levels did not provide efficiency in their day-to-day operations, due to the need for additional staff, duplication of circulation desk, additional check-out kiosks, and additional supervision and oversight on two levels of the library. A 2-story design also requires stairs, elevators, and additional circulation space, which adds to the overall square footage and cost.

The garage floor to floor height is approximately 11 feet, which equates to a building height of 35 feet, comparable to a 3-story building with parking on the roof. However, based on the average grade and slope of the site, the garage exceeds the 35' height limit per zoning. As advised by the Town Zoning staff, a height waiver cannot be granted. BDB and the design team, with the guidance of the Town's Zoning staff, are currently working on alternative solutions to lower the building height, without compromising the programmatic and structural criteria, to meet the zoning requirements.

**Council Question 2:** Can the parking garage be sunken a bit to reduce the height? Related - what is the cost increase to put one parking level below grade?

**BDB Response:** The design consultants are evaluating the possibility of lowering the first level of the garage while coordinating with the grade levels for vehicle access from Center Street.

The cost increase for one level of underground parking will result in 30% cost increase compared to the on-grade options. This is due to site excavation, waterproofing, and structural enhancements required to design an underground garage.

Additionally, the design team is exploring the possibility of reducing the overall garage height.

**Council Question 3:** The Town wants as much setback as possible from Maple Avenue to allow walkers and bikers to have access. One Council member mentioned a 40-foot

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setback, but that is not in the current code. The current planned setback meets the current code of 26 feet. Could more be achieved?

**BDB Response:** The Town of Vienna Zoning Area for C-2 zone requires a 26-foot setback from Maple Avenue, consisting of a 11-foot right of way from the curb to the property line and a 15-foot setback from the property line to the building (refer to Figure 1). Although the proposed design meets the required 11-foot right of way, it will not meet the requirement for a full 15-foot setback from the property line and will require a waiver. BDB will work with zoning for further evaluation and adjustment.

A 40-foot setback from either Maple Avenue or property line would significantly reduce the buildable area and make both the library and/or garage layout infeasible.

BDB would also like to note that the proposed design provides a minimum 15-foot-wide sidewalk along Maple Avenue. In comparison, the current sidewalk is less than 5-foot wide.

Council Question 4: Clearly define the garage entrance on Maple Avenue.

**BDB Response:** As the consultant team develops the concept and building facades further, the design of the garage entrance will be studied, and adequate wayfinding signage will be designed to better identify the entrance from Maple Avenue.

**Council Question 5:** How many spaces are on the top floor of the garage? If you were to eliminate that parking level, how many spaces would that eliminate, and how would that affect the cost?

**BDB Response:** Removing the top level would also eliminate the need for the upper-level ramp which contains additional spaces. Removing the top level and the ramp would eliminate 66 parking spaces.

Eliminating 66 parking spaces would reduce the cost by approximately \$2.5 Million.

**Council Question 6:** Would any of these changes require a new agreement or a change to the Town's financial contribution to of the project?

**BDB Response:** Per the terms of the Agreement the Town's contribution toward the project is up to \$5.05 Million. Any major change to the programmatic and structural requirements of the project will result in a redesign, impacting the design, construction cost and schedule. If the garage layout is changed to accommodate one level underground, or removal of the top level, it may impact the Town's contribution.

**Council Question 7:** Would Council be able to have input in the plans if the Town were to exercise one of their opt-outs during design?

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**BDB Response:** If the Town opts-out of the partnership, BDB will go through the Town of Vienna and Fairfax County's requirements for Zoning reviews and approval processes, including the Board of Architectural Review. This will provide opportunities for the Town's input on the design. It is our understanding that Town Council approval is not part of the Town's zoning review process. However, we are happy to provide updates to the Council on project process.

**Council Question 8:** Could the smaller building footprint be achieved if our parking spots were removed, or is that not related?

**BDB Response:** A smaller garage will be achieved if 84 parking spaces are eliminated. The library footprint size will not change. However, with fewer parking space requirements a different building configuration may be possible. However, to accommodate the 125 spaces required for the library, a parking garage structure will still be required.

#### 4. Design and Construction Process:

In response to the Town's concern regarding opportunities for input on the design of the project, as requested by Town staff, BDB would like to provide an outline of the County's typical process for a Capital Building project, which will be followed for the Patrick Henry Library project. The diagram below indicates the various phases of a project from start to finish. Highlighted in orange are the design phases during which we anticipate the Town of Vienna Council and staff's involvement.

The project completed a feasibility study in 2019 and the County procured the services of an Architect/Engineer consultant team with the Town staff's involvement. The project is currently in the Concept Design stage. As the conceptual building design and facades are further developed, the BDB will present the design and seek feedback from the Town Council at their meeting on August 29, 2022. Once the project moves into Schematic Design phase, the building structure, mechanical systems, exterior envelope design, and sustainability goals will be further developed. At the end of the Schematic Design phase, BDB will prepare for zoning submission for DPZ review and approval. During this process, BDB will present to the Town Council and the Board of Architectural Review, for feedback opportunities. Once BDB presents the proposed site plan to the Planning Commission and the Planning Commission prepares a recommendation, the Town Council will have the opportunity to review and potentially approve any site plan modifications. Also, at the end of the Design Development phase and during Construction Documents phase, the Town Council will have an opportunity to see the project progress and vote on continuing the partnership.

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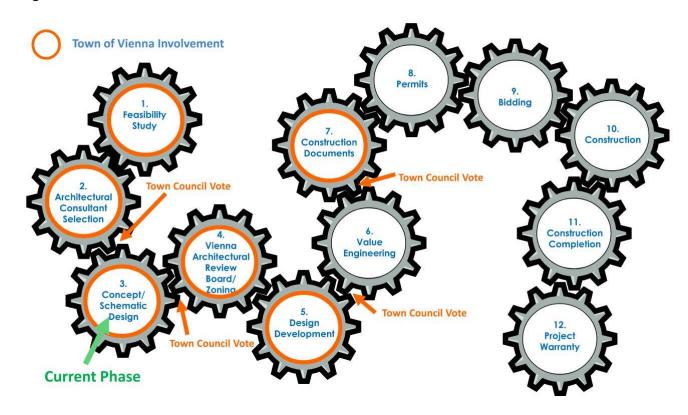


Figure 5. Building Design and Construction Division design and construction process diagram showing the Town's involvement in phases 1 through 5 and 7.

BDB appreciates and values the feedback that has been received to date from the Town Council and staff and will continue to evaluate and respond to comments. Fairfax County staff looks forward to continuing our partnership with the Town of Vienna on the Patrick Henry Library Project.

Sincerely,

Maryam Mostamandi, Project Manager

**Building Design Branch** 

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Tiva Raju, Director, Building Design and Construction Division (BDCD), cc: Department of Public Works and Environmental Services (DPWES) Vrushali Oak, Chief, Building Design Branch (BDB), BDCD, DPWES Jun Li, Section Manager, BDB, BDCD, DPWES Susan Timoner, Fairfax County Attorney David Levy, Director, Department of Planning and Zoning, Town of Vienna Steven Briglia, Vienna Town Attorney Andrew Jinks, Transportation Engineer, Town of Vienna