**renovations of the BETHLEHEM PUBLIC LIBRARY**

**the WHY’s?**

1. **ADDRESS OUTDATED AND AGING COMPONENTS OF THE LIBRARY FACILITY.**
   - The last significant update was around 50 years ago.
   - There is some presence of asbestos which puts limitations on some maintenance needs.
   - The mezzanine level is not suitable for public or staff needs.

2. **ADD IN-DEMAND SPACE FOR LIBRARY USERS.**
   - Patrons are routinely turned away from the limited meeting and study rooms.
   - Meeting space/popular Library programs are limited to 100 people.
   - Improve performance space functionality.

3. **ADD IN-DEMAND COLLECTIONS SPACE AND IMPROVE LIBRARY FUNCTION.**
   - Bethlehem Public Library’s circulation is the highest in the Upper Hudson Library System.
   - Children’s area is often crowded and limited in terms of offerings. Teen area is lacking dedicated space.
   - Properly address curbside pickup function.
   - Improve and expand staff space for better workflow, safety, efficiency, and adequacy.

4. **ENHANCE ACCESSIBILITY OF THE LIBRARY FACILITY & RESOURCES.**
   - Improve accessibility to and within the facility to the spaces as well as to resources.
   - Improve parking area safety and add parking spaces.
   - Reduce distance between parking and entry.
   - Improve sense of arrival and wayfinding.

5. **ENHANCE THE LIBRARY’S ENVIRONMENTAL SUSTAINABILITY FOOTPRINT.**
   - Increase energy efficiency leading to operational savings.
   - Update the green space around the Library and preserve the park-like feel.
   - Modernize site utilities to improve Library as a “good neighbor”

**meet the DESIGN TEAM.**

**ASHLEY MCGRAW ARCHITECTS + VAYSEN STUDIO**

- Susanne Angarano: Principal
- Elbert Eller: Senior Architect
- Daniele Jayson: Architectural Designer
- Carlos Cardenas: Architectural Designer
- Brooke Williams: Interior Designer
- Gabrielle Macera: Interior Designer

**DESIGN COLLABORATORS**

- Ed Keplinger & Lisa Freeman: Keplinger Freeman Associates
- John Edwards: Sage Engineering
- Mark Flarisi: Strategy & Environment

**the PURPOSE.**

TO POSITION THE BETHLEHEM PUBLIC LIBRARY AS a community resource that is accessible to all, offering modern programming in a mindful environment that’s nestled within the fabric of the community.

Designed in a way that’s welcoming, simple to navigate, modern, and adaptable to a variety of programs, both inside the library and throughout the site.

Optimizing the library so that both patrons and staff have cohesive environments to suit their evolving needs, and to support the next generation of collaboration, discovery, and learning.

**GREAT DESIGN THRIVES FROM INPUT OF THOSE IT WILL IMPACT.**

Our design team routinely meets with various project stakeholders including, board members, library staff, and patrons as we progress through the design process. This high level of engagement has played a pivotal role in furthering the vision for the Bethlehem Public Library.

The following outlines the engagement sessions conducted to date and provides insight into upcoming participation opportunities.

**the SCHEDULE.**
We are meticulously assessing the implications of expanding community programming spaces, increasing the quantity of study rooms, incorporating additional reading nooks, and modifying staff areas, all while ensuring adequate space for the extensive library collections. Our objective is to uphold the current capacity for all collections and expand wherever feasible.

STACK TYPE PRECEDENTS

The library is undergoing expansion to enhance its facilities. Key objectives include enlarging the children’s section to host crafting events, reading groups, and other interactive activities, introducing more multi-functional community rooms to accommodate diverse group sizes for larger community gatherings, and establishing a dedicated space for teenagers to congregate and study.

INCREASED SQUARE FOOTAGES

- **Children’s Area**
  - Existing: 4,915 SF
  - Proposed: 5,712 SF
  - Increase: 16%

- **Teen’s Area**
  - Existing: 520 SF
  - Proposed: 1,165 SF
  - Increase: 124%

- **Community Rooms**
  - Existing: 1,650 SF
  - Proposed: 5,000 SF
  - Increase: 203%

- **Overall Library**
  - Existing: 32,710 SF
  - Proposed: 49,705 SF
  - Increase: 52%

MAINTAIN THE COLLECTION VOLUME

We are meticulously assessing the implications of expanding community programming spaces, increasing the quantity of study rooms, incorporating additional reading nooks, and modifying staff areas, all while ensuring adequate space for the extensive library collections. Our objective is to uphold the current capacity for all collections and expand wherever feasible.
Cost – When considering refundable tax credits from the Federal government and a rebate from National Grid, the cost of a geothermal option becomes comparable to that proposed for the “standard” HVAC option, utilizing similar rooftop units as the existing library.

Energy Efficiency – Upgrading and expanding the current Traditional Gas Fired Rooftop Air Handling Units with VAV terminal units for zoning would result in an Energy Use Intensity (EUI) of: 62.9 total site energy / 105 total source energy. Switching to a Distributed Water Source Heat Pump Units and a DOAS system would lead to an EUI of: 24.2 total site energy / 72.7 total source energy. This change will decrease total site energy consumption by 61.5% and total source energy consumption by 30.8%!

Carbon Footprint Reduction – No fossil fuels will be utilized on site. A geothermal heat pump option would be the most efficient system for heating and cooling the building using an all-electric energy source.

Energy Source Long-Term Reliability – Although natural gas is presently a cheaper fuel source than electricity, that is unlikely to be the case in the years ahead. Both federal and state governments have developed climate legislation to drastically reduce reliance on fossil fuels for energy consumption.

Noise - The proposed geothermal option will provide heat pumps above the ceiling inside the building, alleviating concerns about noise from present roof top HVAC equipment. The heat pumps include acoustic insulation and are designed to operate at low fan speeds to ensure quite operation in a library setting.

What about ENERGY.

Advantages of Geothermal with Distributed Heat Pumps

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The current site presents numerous opportunities for improvement. Following the demolition of the home on Borthwick Avenue, the expanded library will boast a more prominent street presence. The library’s main entrance is currently concealed, leading to confusion among patrons. Additionally, the parking lot is situated far from the entrance, requiring patrons to cover considerable distances to access the library. The greenery surrounding the site is meticulously cared for and will be preserved to the greatest extent possible.

**PARKING, ACCESSIBILITY, & CIRCULATION**

As the building’s overall footprint grows, it’s essential to optimize parking to cater to bigger public events and establish clear pathways for both vehicles and pedestrians to move around safely on the site. This includes providing sufficient accessible parking and incorporating sustainable electric charging stations.

**PARKING COUNTS**

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<th>Existing Spaces</th>
<th>Proposed Spaces</th>
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<tr>
<td>TOTAL EXISTING PARKING CAPACITY</td>
<td>117 Spaces</td>
<td>136 Spaces</td>
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<tr>
<td>TOTAL PROPOSED PARKING CAPACITY</td>
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**INCREASED PARKING CAPACITY**

16.2% increase in overall spaces

136 Spaces

Prioritize 15 Electric Vehicles

105 Spaces