Design Update

June 10, 2024

https://www.bethpl.org/building-project-updates/





Recap



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1 ADDRESS OUTDATED AND AGING COMPONENTS OF THE LIBRARY FACILITY.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.

$m{arphi}$ 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"

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.

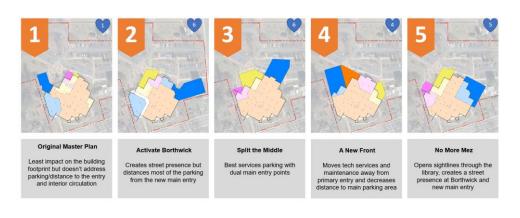
Site & Expansion Organization

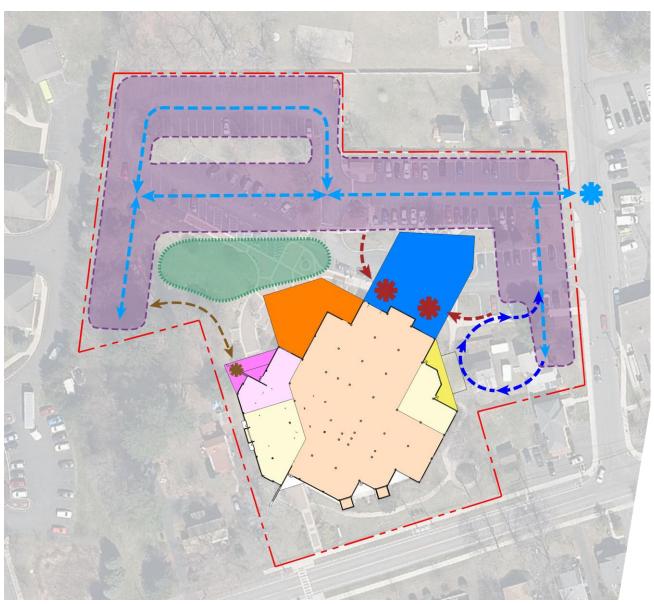
SPLIT THE MIDDLE

Bringing the building closer to the entry to improve sense of arrival and wayfinding.

Activating both sides of the building in relationship to parking and patron access.

Increase opportunities for natural lighting into all interior spaces.



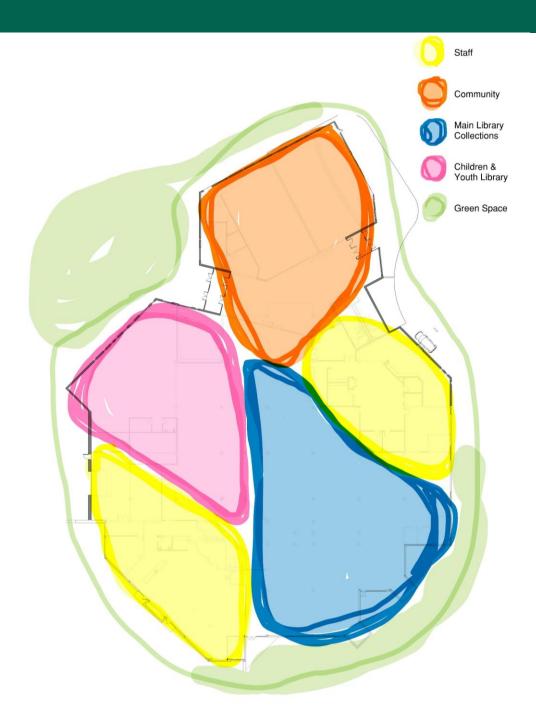


Planning Study January 2023

"Dovetail" Concept Narrative

The dovetail concept provides opportunity to patrons of all ages to access the library resources they seek out. It optimizes space needed for program areas while allowing them to interface at key opportunities. Strategic intersections will allow for the primary functions of the library to co-exist.

Stretching and expanding the program areas throughout the interior allows for accessible daylighting to people of all ages. Additionally, the building is surrounded by nature and outdoor resources on all sides.

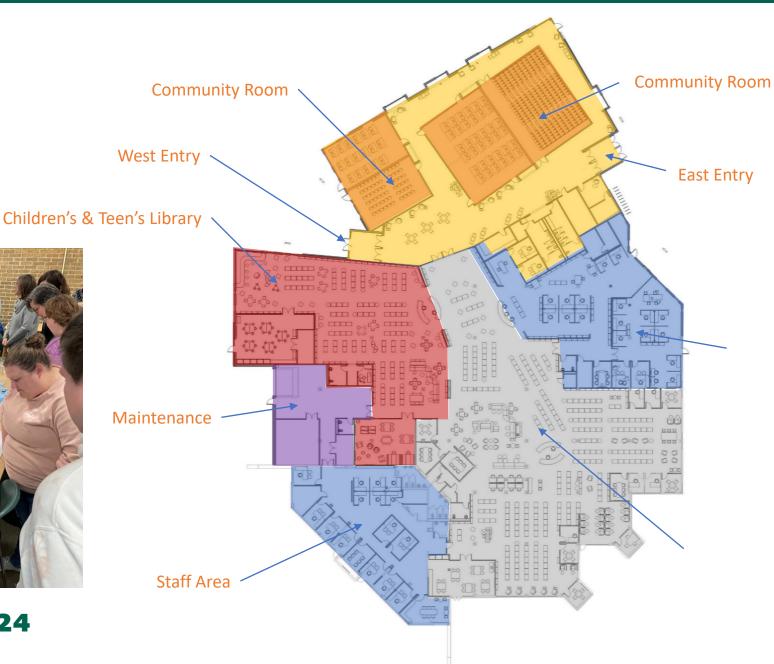


Schematic Concept June 2023

Proposed Floor Plan







Schematic Design January 2024

Site & Connection to Nature

native plantings, pollinator garden

green
space:
-teaching
opportunity

sensory garden

bird collision prevention permeable ground cover in the parking modules; such as rocks in the existing path on the suth

using storm
water for
water
closets

Daylighting & Views

Several existing skylights - potential for natural lights in enclosed spaces such as study rooms and maker room

natural light and views

solar tubes

Indoor Air Quality

want more operable windows

interested in sustainable building materials such as red list free items but dont want to be so restrictive where cost is added Indoor air quality
is a concern both
for spread of
viruses and
pollutants

indoor air quality
- materials,
ventilation,
operable
windows

Alternative Transportation

traffic & safety in the neighborhood how to embrace alternative transportation methods especially influencing staff members during high traffic events

bike repair station, encourage alternative Transporation for staff partnerships
with local
organizations
for pedestrian
advocacy

Energy

Level 3 not level 2 Electric Vehicules chargers

net positive energy can exterior amenities be powered by their own sources (i.e. solar powered tables, using geo as a snow melt system, solar pavilion) highly interested in solar opportunities as this is a visible indicator to the community about power - serves as a teaching opportunity

energy modeling for glazing

solar
powered site
elements:
charging
tables

geothermal to heat walkways?

Plan & Scope Review



Proposed Site Plan

KEY FACTS: PARKING

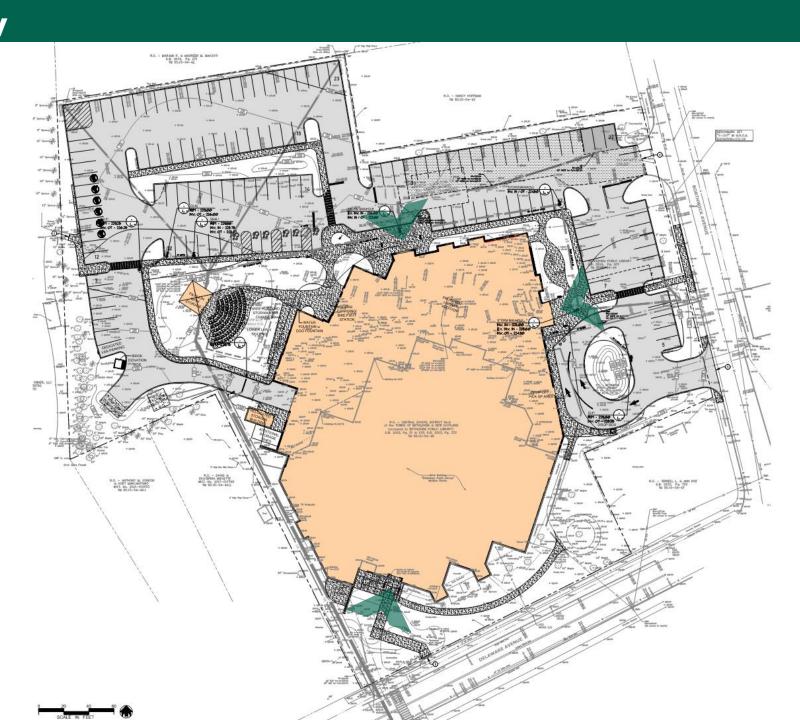
• Existing: 117 spaces

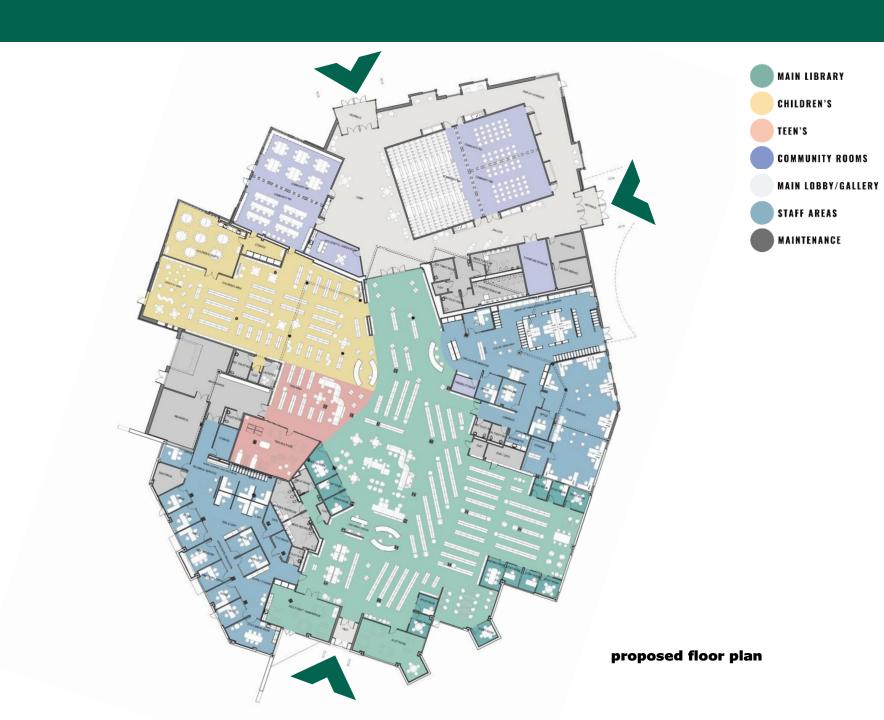
• Proposed: 136 spaces

√ 16.2% increase

• 6 EV charging stations

• 6 HC spot





KEY FACTS: OVERALL AREA

Existing Library Area: 32,710 gsf

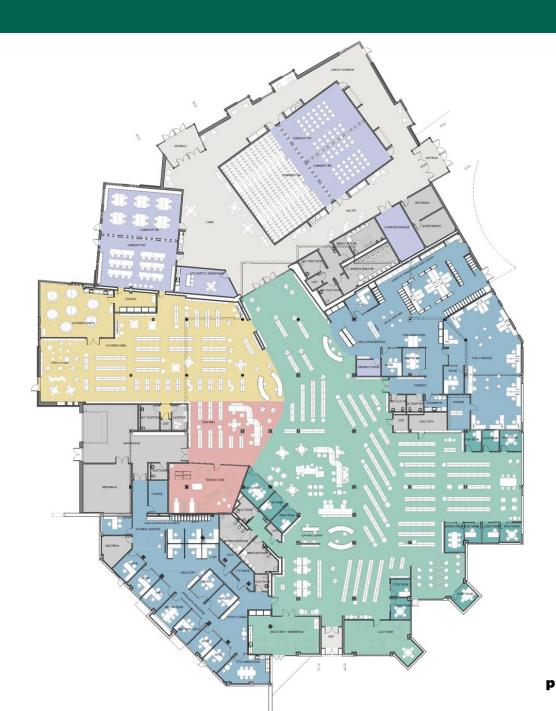
- 29,870 gsf ground floor
- 2,840 gsf mezzanine

New Library Area: 49,800 gsf

• Area of new construction: 20,815 gsf

• Area of renovation: 29,870 gsf

√ 52% increase in overall library area



MAIN LIBRARY

COMMUNITY ROOMS

MAIN LOBBY/GALLERY

STAFF AREAS
MAINTENANCE

CHILDREN'S

TEEN'S

KEY FACTS: PROGRAM AREAS

Children's Area

Existing: 4,915 sf
 Proposed: 6,057 sf
 ✓ 23% increase

Teen Area

Existing: 855 sf
 Proposed: 2,022 sf
 ✓ 136% increase

Main Area

Existing: 6,761 sf
 Proposed: 12,827 sf
 ✓ 90% increase

Study/Small Meeting Rooms

Existing: 457 sfProposed: 1,287 sf✓ 182% increase

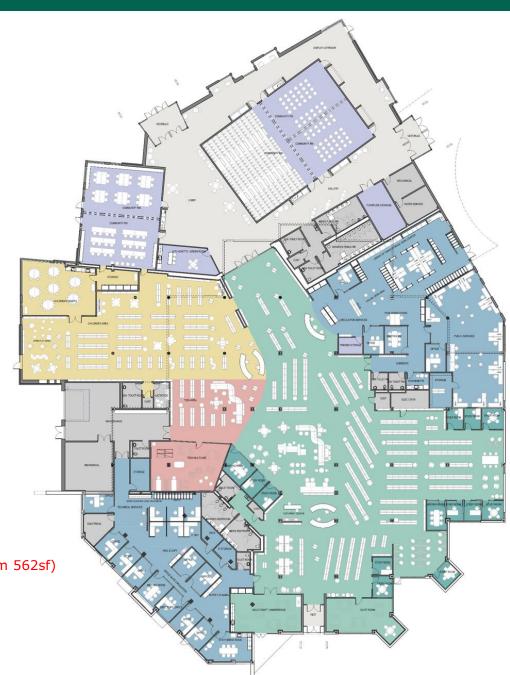
Staff Space (excludes maintenance)

Existing: 6,264 sf
 Proposed: 9,877 sf
 ✓ 58% increase

Community Rooms

• Existing: 2,186 sf (includes children's reading room 562sf)

Proposed: 5,000 sf
 ✓ 128% increase



proposed floor plan

MAIN LIBRARY

COMMUNITY ROOMS

MAIN LOBBY/GALLERY

CHILDREN'S

STAFF AREAS

MAINTENANCE

TEEN'S

Architectural

- Phase I New Construction / Phase II Renovation
- Renovation of existing spaces including removal of existing partitions, ceiling systems, flooring, millwork, finishes, etc.
- Removal of mezzanine and reconstruction of roof area
- New addition to accommodate staff space, children's space, community space
- Community Rooms with movable partitions and telescopic seating
- Removal of existing EPDM Roofing System and installation of new EPDM Roofing System with insulation values to meet current code
- Installation of new skylight at two (2) locations in the existing building where they had been removed
- Relocate entry on Delaware Avenue
- Relocate loading dock and maintenance areas
- Redistribution of staff areas
- Repositioning front of library
- Replacement of "stacks"
- Re-pointing and replacement of exterior brick masonry as required

Structural

- Structural enhancements to meet current building code to provide shear wall steel diagonal bracing installation at interior and exterior locations between existing columns
- New construction will be similar to the existing building having shallow cast-inplace spread footing foundations and steel columns and beams and a steel roof deck"



- Simplified Vehicular and Pedestrian Circulation.
- Sidewalk access improvements.
- Accessible Parking Areas & Navigation closer to the building and overall parking increase, including EV.
- Multiple areas located exterior to the building for sitting and enjoying the outdoors.
 Areas have been planted to create a park-like feel.
- Landscaping improvements to keep with the park feel of the exterior spaces and to separate parking areas from public spaces.
- Maintenance Area access at the back of the building instead of in front, maintenance storage buildings and dumpsters located at the back of the building.
- Curbside pickup loop.
- Pavilion / Stage Area includes paved seating areas for ease of ADA / stroller navigation and areas designed specifically for viewing performances.
- A new Flagpole and planting area has been added at the front of the building near the main entry.
- Curb side drop off area / Parking for busses near main entrance.
- Bike racks included near main entrance.
- Bike fix-it station.
- Water fountain with bottle filling capability included near pavilion area.
- Book donation box included back near maintenance area.
- Dedicated Library Van parking space included.
- Signage to be included for ease of navigating the site and wayfinding.

Mechanical

- · Geothermal wells will provide heating and cooling for the building.
- 50 wells, each 450 feet deep, will be installed under the parking area.
- Piping from these wells will connect to heat pump units in the building ceilings.
- The heat pump units will distribute air for heating and cooling via ductwork above the ceilings.
- A water-to-water heat pump will supply hot water for fin tube radiators in some locations.
- Four energy recovery ventilation units located in building mechanical rooms will distribute fresh air throughout the building.
- The HVAC system will be controlled by a new Building Management System.

Plumbing

- A high-efficiency heat pump water heater will supply hot water.
- New roof drainage will be added for new or renovated areas.
- Most existing sanitary pipes will remain; new ones will be added for the new building sections.
- Plumbing piping will be provided for new bathroom fixtures.

Fire Protection

- A new sprinkler system will cover the entire building, both existing and new sections.
- Separate riser valves and mains will be installed for the old and new parts of the building.
- A combined domestic/fire protection water service with backflow prevention will be used.
- The sprinkler system will be a wet pipe system, as required by NFPA 13.

Electrical

- The existing electrical service and panels will be replaced.
- A new 1200-amp, 480/277-volt service will be installed with a new transformer.
- New electrical distribution and panels will be provided throughout the building.
- All lighting will be upgraded to LED, with automatic and manual controls for energy efficiency.
- Emergency lighting will be battery-powered or have integral battery backups.
- The fire alarm system will be replaced with a modern, addressable system including smoke, heat, and carbon monoxide detectors.
- New telephone and data infrastructure will be installed, with Cat 6A cabling and power-overethernet systems.
- Security cameras will be added at entry points, connected to a central recording system.

Hazardous Material Abatement

- Library roof and associated roof drain bowls/elbows
- Residence on Borthwick Ave
- Acoustic sprayed-on ceiling material in library

Design Update



Essence of...

Bethlehem Public Library

- Welcoming, inviting
- Inclusive, unbiased, accepting
- Cozy, homey, home away from home
- Diverse
- Accessible
- Engaging
- Helpful, knowledgeable, intelligent
- Responsive, provides what people need
- Always there, constant, reliable, dependable

Bethlehem Community

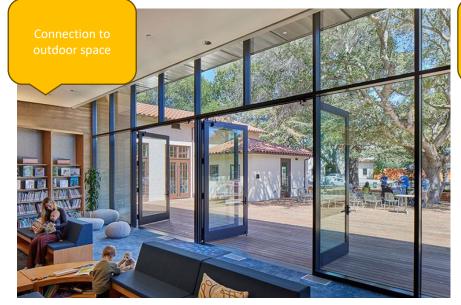
- Expanding, evolving, growing
- Divided, conflicted
- Diverse, multi-faceted
- Aspiring
- Green
- Smart, educated
- Caring, friendly, decent
- Intergenerational, diverse ages
- Active, engaged

Connect and balance

- A place to accommodate everyone, individually and as a collection of diverse community members
- Connection to nature
- Connect exterior design to interior design
- Juxtaposition of geometric shape of the library building with and organic forms
- Meandering path of ceiling, interrupted by relief of column recesses and light coves
- Complexity of stacks, furniture, flooring balanced with an organic and refined ceiling
- Ceiling heights and materials to zone elements of loud and quiet, open and closed, enhancing the gradient of the dovetail concept



























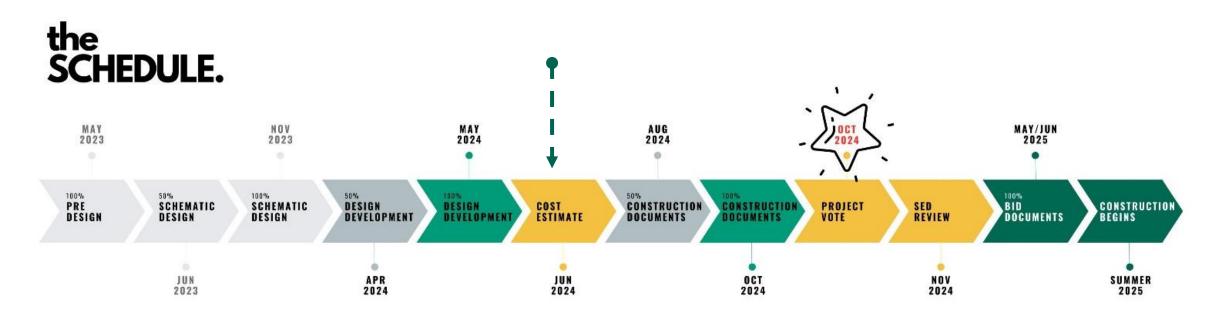












What's Next?

- Board Meeting Presentation June 10th
- Children session June 18th
- Design Development & Cost Estimate Package to Library July 1st
- Talk to the Architects, Round 2 July 31st
- · Community Forum August 20th
- Community Informational Session September
- Bond Vote October 1st

