ILSLEY PUBLIC LIBRARY

ilsleypubliclibrary.org

**Ilsley Public Library**
Main Street, Middlebury VT | 802-388-4095

**Sarah Partridge Community Library**
East Main Street, East Middlebury VT | 802-388-7588

# RENOVATION and EXPANSION PROJECT – Design Phase

## Clerk of the Works Report No. 4 September 5, 2024

**Activities:**

**1.0 Contracts and Payments Status**

A. Original contract: ***Reference only.***
The total fee for that Schematic Design contract was $155,000. Paid in full. ***Item closed.***

B. Contract amendment: ***Reference only.***
The amount of this current lump sum contract amendment is $15,350,675. (includes professional fees, construction costs, and two escalations). The balance of $1,642,334 is reserved for Owner Costs. The Total Project Budget is therefore $16,995,000 to match the Bond Vote number (potential credits and rebates may offset approximately $552,064 of this total). Contract amendment executed and dated July 1, 2024. ***Item closed.***

C. A schedule of likely payment request amounts through Construction Documents has been provided by ReArch Company. ***Item closed.***

**D. Invoice No. 1 (for the Design Development Phase of the Contract Amendment noted above) dated 8/22/2024 has been submitted and approved for payment. The amount of that Application was $129,276.00, leaving a balance of $15,221,399.00 (with zero retainage).**

**1.1 Design Progress / systems integration**

**In-person bi-weekly design meetings continue, as scheduled by WLA / ReArch. The Owner is represented by Dana Hart, Library Director, and Judith Harris, Clerk of the Works. Our most recent meeting (in 2 parts) was held on September 4th. The first part took place on-site (outdoors) to discuss logistics for upcoming Geothermal Test Well Drilling. Refer to Section 1.1 C Mechanical, below.**

**The second part was conducted for the purpose of our Design/Build Team to walk Dana and Judith through a page-by-page review of a detailed Design Development package: 114 sheets, including disciplines of structural, architectural, civil, fire protection, plumbing, mechanical, electrical, and civil. Landscape architecture will be added soon. This package represents approx. 50% of total construction document completion, and will form the basis for our <u>first detailed cost estimate since the bond vote</u>. A list of Alternates will also be included.**

**Following receipt of this estimate, Owner representation will work closely with ReArch and our Design Team to engage in a value-engineering process that will balance design and price to create the best possible project Middlebury's Bond Vote will allow.**

***Notes: The total time for estimating and VE will be approximately 4 weeks. Reviews will then be conducted with both the IPL 100 Project Team, followed by a summary presentation to the Selectboard as we advance into Construction Documentation in late September.***

***Design meetings will continue on an alternate-week basis through 100% Construction Document Completion, in early December of 2024. At this point, bidding to subcontractors will begin, and extend into January – the ideal window for best pricing. A second contract amendment will then be executed to verify the final construction amount, with demolition to begin in Spring of 2025.***

A. Floor Plans / interiors

**Floor plan refinement is nearly complete, following thorough reviews and feedback sessions with Dana Hart and library staff. Engineering systems have been introduced to the building, as follows:**

B. Structural System

**As previously noted, our design team has evaluated and now also <u>estimated</u> (by soliciting pricing from vendors) 3 options: all mass timber, a hybrid mass timber and traditional steel structure, or an all-steel system. The latter has been eliminated from consideration due to the environmental impact of its manufacture.**

**ReArch's estimating process has revealed that detailed pricing for the hybrid system as developed by our structural engineers is less expensive than the all-mass timber option by $375,000. However, the hybrid system falls within our Total Project Budget allocation, whereas the All-Mas-Timber option exceeds that allocation. Their recommendation is to carry the hybrid system, and track the additional cost of all-mass-timber as an add alternate.**

**The effect on our project as currently envisioned will be that columns and beams are steel, whereas exposed wood deck forming most of the separation between floors will be CLT – an engineered product composed of Cross-Laminated Timber and adhesive layers with wood grain alternating at 90 degrees between each layer.**

Geotechnical engineering services (Owner cost 9,000$) were approved to be provided by M&W Soils. Test borings, and exploratory excavations (by DPW staff) adjacent the Marquis theater were conducted on June 27. **A geotechnical report has been issued by M&W Soils, providing an informed direction for structural design for Ilsley's renovation and expansion project, based on soils and adjacent structures conditions at the site. Findings were informative, but not concerning.**

C. Mechanical System

A preliminary geothermal feasibility study (an Owner cost) has been conducted by Steve Revell. Continued development of Ilsley's mechanical systems to utilize geothermal heat is now dependent

upon determination of potential yield and water quality from a series of well sites numbered 1 through 6*, ranked according to production likelihood. **See attached map in Appendix.**

**A test well at the bottom of the lower-to-upper parking lot ramp, followed by up to 5 additional production or ejection wells will be drilled and cased by Spafford and Sons, beginning in late September – a ReArch cost. Each well will require approximately 5 days to complete, followed by an analysis of data time period to confirm viability and next steps. This process of drilling, casing, and analysis could extend into December of this year. However, the first well will likely confirm geothermal viability specifically for the Ilsley project. Our mechanical system has been designed with production targets to guide validity. Any future networking possibilities will reveal themselves should additional production capacity (not required by Ilsley) be available.**

**Note: Well sites have been determined by fault-line mapping as provided Steve Revell. Steve will also confer with drillers as each well is being drilled, to provide guidance. Reminder – best results would be a ducted mechanical system with fan coil units operated by geothermal sources, which may be eligible for partial funding through the Federal Inflation Reduction Act.*

**1.2 Site Design**

A. Site Design / Permitting

**Application to Middlebury's Town Planning & Zoning Office is nearing completion, as details can are confirmed. A courtesy review with the State Division for Historic Preservation will follow.**

B. Property Line Adjustment

**NO PROPERTY LINE ADJUSTMENT WILL BE REQUIRED for the Ilsley project.**

The east property line for Ilsley Public Library, as surveyed by Timothy Short – shown just inside the west curb line of the upper parking lot – has proven to be a misinterpretation of a prior survey for the Cross Street Bridge Project. The actual east property line is further east, across the existing parking lot. **See attached drawing by Otter Creek Engineering in Appendix.**

The footprint of the proposed addition to Ilsley is indeed well within the confirmed eastern boundary. Only the retaining wall structure for the new angled parking lot will involve the adjoining Town parcel. **Benjamin Putnam** has clarified the location of this shared property line of both abutting town properties. Survey corrections are being pursued by Town Administration to clarify recorded documentation. No utility easements for geothermal lines will be required.

**C. Parking**

**In Report No. 3, Jen Murray and Kathleen Ramsay advised that performing a small study focusing on existing/proposed parking and circulation in the lower lot could be beneficial for demonstrating the potential impacts of the proposed library project. The project team may seek input/assistance from Jen in her capacity as town planner if there is interest in pursuing this further. She will most likely have some interns collecting parking inventory background data in the near future.**

**1.3 Temporary Location(s)**

A. Discussions and on-site visits continue with Jamie McKenna of the National Bank of Middlebury. Ben Allred of VIA has prepared drawings of two approaches to separate second floor bank and library operations during the library's temporary tenancy.

Silver Maple is NBM's contractor of choice. **John Tenny has provided costs for both approaches to meet separation and egress code requirements as well as desirability for each party. Total pass-through cost estimates to Ilsley for architect's fees, renovation costs, hardware changes and card access system changes currently stand at 70K$. Moving and utilities, maintenance, and repairs will also be passed through to Ilsley. Rent will remain cost-free.**

**B. A facility to store the library's collections during construction has been located at 75 Meigs Road in Vergennes. The building is owned by Vermont Industrial Parks, LLC (subsidiary of JP Carrara & Sons). The space is conditioned for office occupancy, and accessible by loading dock as well as an at-grade entrance on the east side.**

**LOI documents are being crafted. However, the handshake agreement offered by Bill Townsend on behalf of the owner is "rent-free" for the time period required by the library. Jbh has prepared CADD drawings of the existing spaces within the building that would be required for the collection to be housed (suitable to clarify the LOI – approval on the Selectboard agenda Sept 24).**

**1.4 Security Systems**

**Jason Covey, Chief of Police and his recommended security system consultant (Tom Uchace / CNS) have met with DH over a set of the proposed Ilsley drawings to discuss and price strategic security system cameras for the new facility (Owner Cost). This approach will begin a process to unify security systems across all town facilities, enhancing the Police Department's ability to respond in a timely fashion as needed.**

**1.5 Neighbors - No Change from Report No.3.**

1.6 Marble Façade Stabilization ***Item closed.***

**1.7 Environmental Testing**

**Claypoint Associates was at the library Tuesday Aug 27 doing some environmental testing. A report has not yet been published.**

- **Reference: 1.1 Design Progress / systems integration Section C, Mechanical**
  **Well site mapping for geothermal testing, production, and injection:**

2024-7-24 C-2 WITH GEOTHERMAL MARKI

Well sites will be explored in order of highest likely production, from No. 1 to No. 6, as needed to meet library requirements. Extra capacity from any production well can be tapped at any time in the future for network purposes.

- **Reference: 1.2 Site Design, Section B, Property Line Adjustment**
  **Conceptual Site Plan of Ilsley property as confirmed by Benj Putnam:**

2-greensSITE PLAN.pdf

Ilsley's property has been confirmed to contain both dark and light green areas as illustrated on this site plan. "I believe that entire area corresponds to the original library parcel that was conveyed from the College to the Village of Middlebury in 1921", per Benjamin Putnam, July 16, 2024. No subsequent subdivision has been created, to his knowledge.

- **Development Sketch of Future Ilsley Library Interior**
  **View toward Main Street from Circulation Desk**
  Courtesy Wiemann Lamphere, Architects, Michael Minadeo, Design Director