

## Indianapolis Public Library - West Perry Branch

Submission Category: New Construction - Project cost greater than \$5 million

Project Type: Community

Project Address: 6650 South Harding Street, Indianapolis, IN 46217

Date of Substantial Completion: July 2021



### **Project Background**

The Indianapolis Public Library's West Perry Branch was completed in 2021 and fills a service gap that resulted when the Fountain Square Branch closed in 2020. It features a large community meeting room, fireplace, marketplace, computer stations, a children's and teen zone, and patio space that abuts a creek. Large picturesque windows throughout the building offer access to natural daylight and peaceful glimpses of nature. At the entrance, there are materials in both Spanish and Burmese languages to support the township's diverse, growing, middle-class community.

View from main entrance

### **Architect's Statement**

The primary goal of the Indianapolis Public Library West Perry Branch was to design a building that brings robust library services to a diverse, rapidly growing middle-class community on Indianapolis' south side.

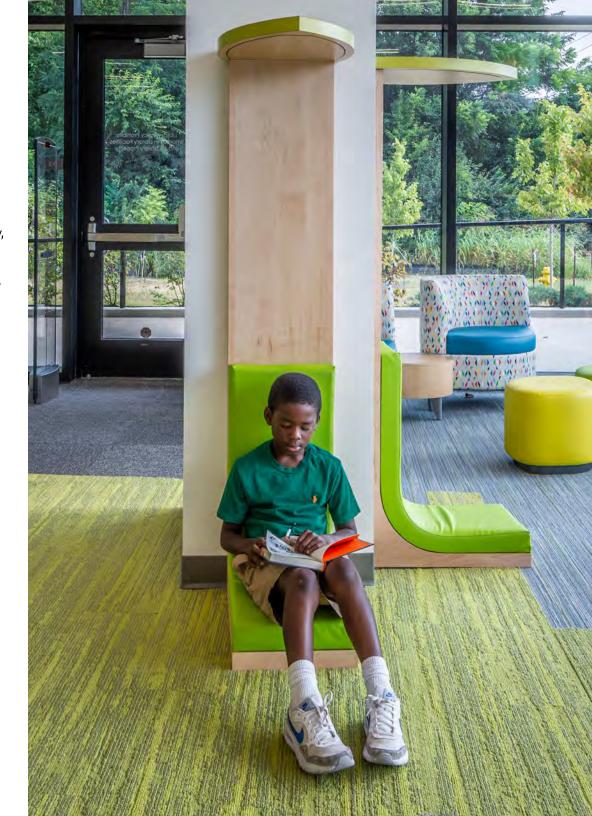
### **Considerations, Limitations and Solutions**

Practical design for a changing community and addressing current needs was a high priority, along with designing a budget-friendly building that was low maintenance, and flexible. The Branch also needed to include 24/7 access with drive-up services, ADA accessibility, self-serve holds and checkout via a book vending machine in the vestibule, expandable A/V technology, meeting and study spaces, exterior patron spaces, right-sized collection, and dedicated spaces for the multiple ways patrons of all ages use the library.

Strategizing a layout to encourage easy wayfinding, material displays and access, and areas for quiet focus study to noisy active social spaces was equally critical. Additionally, creating areas specific to children, teens, and adults while maintaining acoustic quality and visual oversight were necessary.

The \$8.3M, 24,000 sq. ft. West Perry Branch Library is located south of Interstate 465. The site selection process provided a suitable location that bordered the north by riparian woodland. Consideration for both the environmental and contextual impact were important factors contributing to the building's design. A perforated metal panel screen, designed to invoke the enlarged cell structures of a leaf, shades the southern glass wall while lightening the load of the building's mechanical systems and enhancing the connection with nature through the interplay of dappled light into the space. Interior glazing also creates an open feel, drawing the natural light deeper into the library while acoustically separating spaces for different functions. This 'geometry meets nature' aesthetic connects the facility to the surrounding landscape and is reflected both inside and out through geometry, organic forms, and clear glass for visual connectivity to the riparian woodland.

However, the project was not free of challenges. Of note was the site coordination of the utility connections with Citizen's Energy Group's large water supply line that runs diagonally across the site. The final solution was moving the building's footprint further away from the parking lot to avoid the utility.





# Special Considerations and Technical Information

Despite the challenges faced, the design team never lost sight of the project goal to design an inviting community resource that meets a growing populations' needs. One major solution incorporated was a large meeting space for over 200 guests. Before the construction of the West Perry Branch Library, there were no suitable large gathering spaces in the Township. Understanding that libraries build communities, the architects and engineers ensured there was a substantial community room design that could eventually be rented as an additional revenue stream for the Owner.

They also used natural materials to create a calming presence throughout the buildingincluding textured green carpet imitating grass and restroom tile in an organic pattern. Furniture also mimics nature with tables resembling tree stumps. Acoustic wood ceiling panels extend the entry total of the building's experience. The wood ceilings also create a floating dimensional surface to accentuate visual pathways in an open library space. Expansive windows throughout the building offer nature views, and well-spaced low shelving and separated finishes help organize zones while presenting the illusion of an open, yet secluded concept. The children's area features acoustic wall-mounted leaves at the entry. The adjacent covered patio is a feature for youth programming.

### Floor Plan

- 1 Entry
- Service desk
- Popular materials
- 4 Adult collections
- Periodicals
- 6 Study rooms
- Quiet reading
- 8 Meeting room
- Ohildren's area
- Teen area
- 11 Staff workroom
- Restrooms





### **Building Elevation**

















### **Sustainability Statement**

While the Branch provides many amenities to a once literary-underserved area, the biggest cost savings is from the use of a white TPO roof in conjunction with a series of solar photovoltaic panels, which reflects sun and prevents heat from entering the building, giving a break to the mechanical systems. The solar panels or solar photovoltaic (solar PV), which cover most of the roof, also produce up to 75% of the facility's power, further reducing taxpayer burden. To educate guests and patrons, an indoor digital display shows the amount of power being generated, and whatever is not used gets released into the power grid, resulting in an energy credit for the Branch.

Solar panel installation Photo courtesy of Telamon Energy Solutions

### Sustainable and Environmental Design Strategies and Approaches

The 25 Solar PV panels have resulted in an annual electrical energy savings of approximately 80%. Energy modeling was used during the design phase with many options presented to maximize the potential of the Solar PV system. The expected electrical usage in the building was then compared to the electrical energy supplied by the solar panels. The Solar PV system was right-sized to meet 80% of the total electrical use of the building. This green design technique has reduced operating costs dramatically, thereby decreasing taxpayer burden over time. To date, the Owners have obtained \$12,400 in utility rebates from AES Indiana to offset costs of the building's operating systems. For more information on the Solar PVs, watch the video at <a href="bit.ly/3tmAydx">bit.ly/3tmAydx</a> and learn how Indianapolis Public Library Facilities Director Mike Coghlan describes the significant utility savings and building contribution.

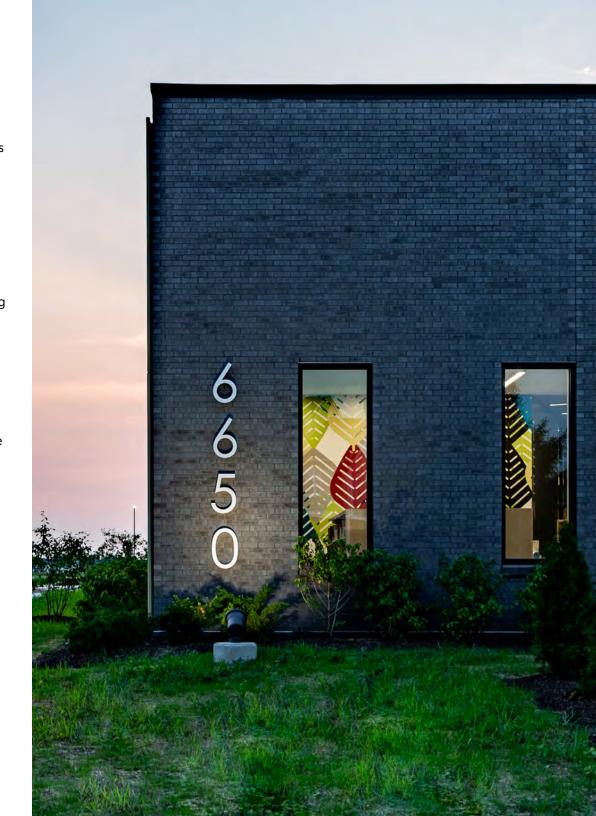
#### Sustainable Performance

Energy savings also can be noted within the HVAC system design, specifically as it relates to air handling. The air conditioning, which comes from the floor through a UFAD system (Under Floor Air Distribution), provides comfort and energy efficiency. Combined, these options have kept operating costs lower and resulted in the building Owners surpassing the goal of becoming LEED Silver certified. In July, Owners achieved LEED-Gold status from the U.S. Green Building Council. Building payback is expected within 12 years.

#### **Technical Data**

Original EUI: 259.768

New FUI: 21.634





Left: Reading area facing patio Right: Exterior view of patio













