

Levering Hall and the Glass Pavilion: Center for Art and Community

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Abstract

The Center for Art and Community aims to deepen the connection between Johns Hopkins University and Baltimore's urban landscape by focusing on art, community, and transportation. To achieve these goals, this project proposed a new shuttle service to connect local schools, community hubs, and urban agriculture sources to the JHU campus. Additionally, a renovation of Levering Hall and the Glass Pavilion was proposed to create a new space that reflects sustainability, encourages creativity, and fosters deep connections.

Methods

- Distributed a community-wide pairwise wiki-survey to determine structural and transportation design choices
- Modeled shuttle route options through Poisson process simulations
- Modeled existing & proposed structure using Sketchup & CAD
- Performed structural design for new footings and beams required in the proposed structure

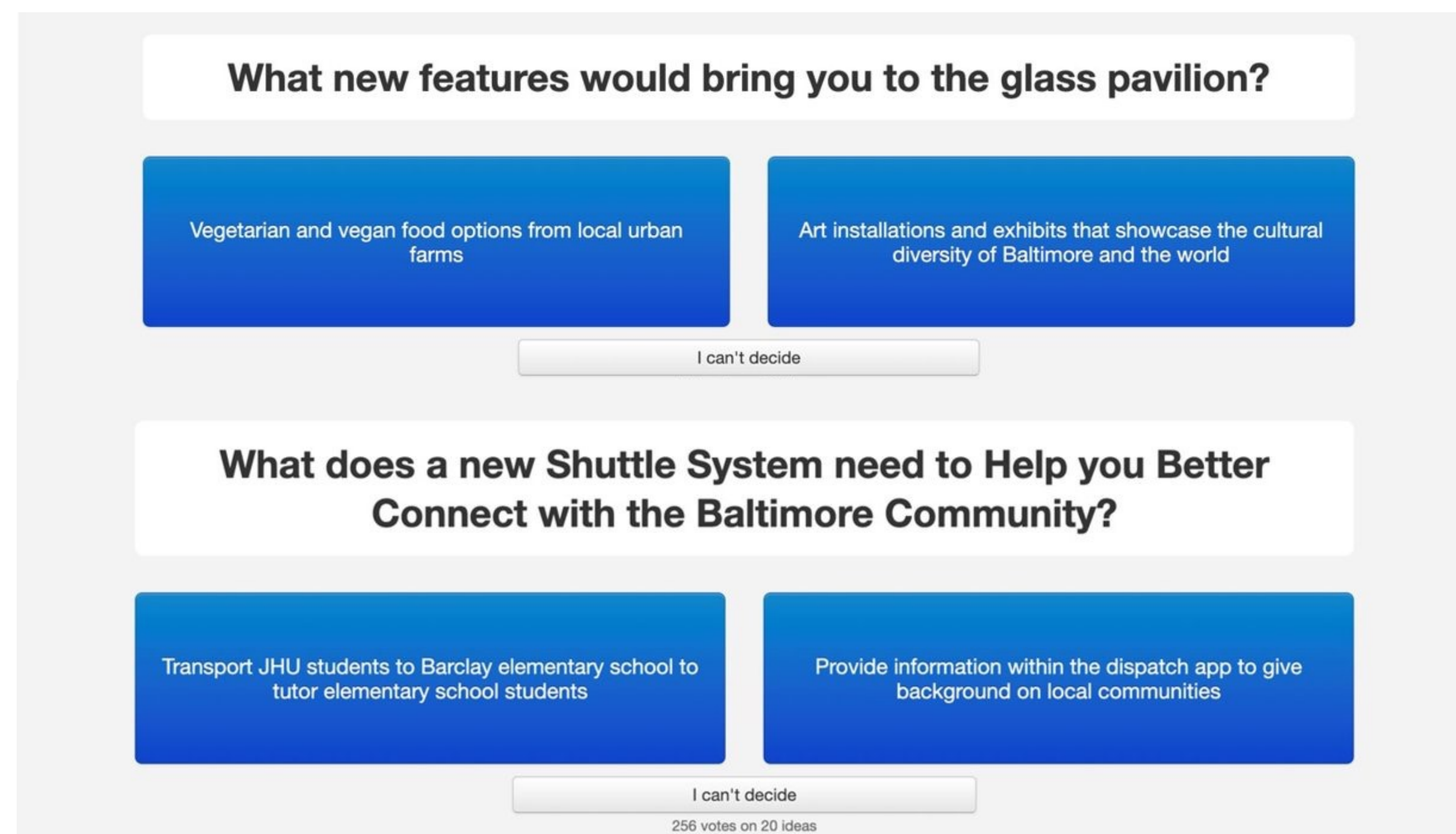


Figure 1. Community survey for building (top) and transportation (bottom)

Project Scope

The planned renovation aimed to build new public spaces and embody sustainability through reuse of the existing buildings and inclusion of new green spaces. The key components were as follows:

- Extensive green roof over the Glass Pavilion
- Redesigned West entrance and lobby
- ADA accessible urban farm on the southern roof of Levering Hall
- Extension of the western terrace
- New structure for food services and delivery at the West entrance

The new shuttle service is intrinsic to the success of the new space, connecting the Hopkins campus to culturally significant and sustainability-focused community spaces. The new service includes:

- Shuttle routes with locations suggested by the community-based survey
- Optimized shuttle timing and capacity to minimize passenger wait time and cost

New Center for Art and Community

Entrance Expansion and Terrace Extension

The Arellano Theater is housed in the lower level of the Glass Pavilion. The proposed expansion of the West entrance of the Glass Pavilion maximizes the potential of the space through increased visibility and accessibility. The new entrance is easily accessible by vehicles, including the new shuttle, and the reception area invites guests into the space. The extended terrace above provides outdoor space for visitors and students.

Food Services Building Addition

Produce from urban farms in the Baltimore community can be easily distributed to the Hopkins campus at the new loading dock included on the Western entrance of the glass pavilion. When considering structural design of this new structure, the roof beams, which must support visitors above, were determined as the most essential. The structural plan for the new beams is shown in Figure 3.

Levering Urban Farm

Fresh produce can be grown in the new urban garden on the southern rooftop of Levering Hall. This space provides the opportunity for students to participate in this urban agriculture project. The addition of the farm significantly increases the building load such that the existing footings must be reinforced. The new footings are detailed in Figure 5.



Figure 4. New urban farm, food services building, and extended terrace



Figure 2. Expanded theater entrance

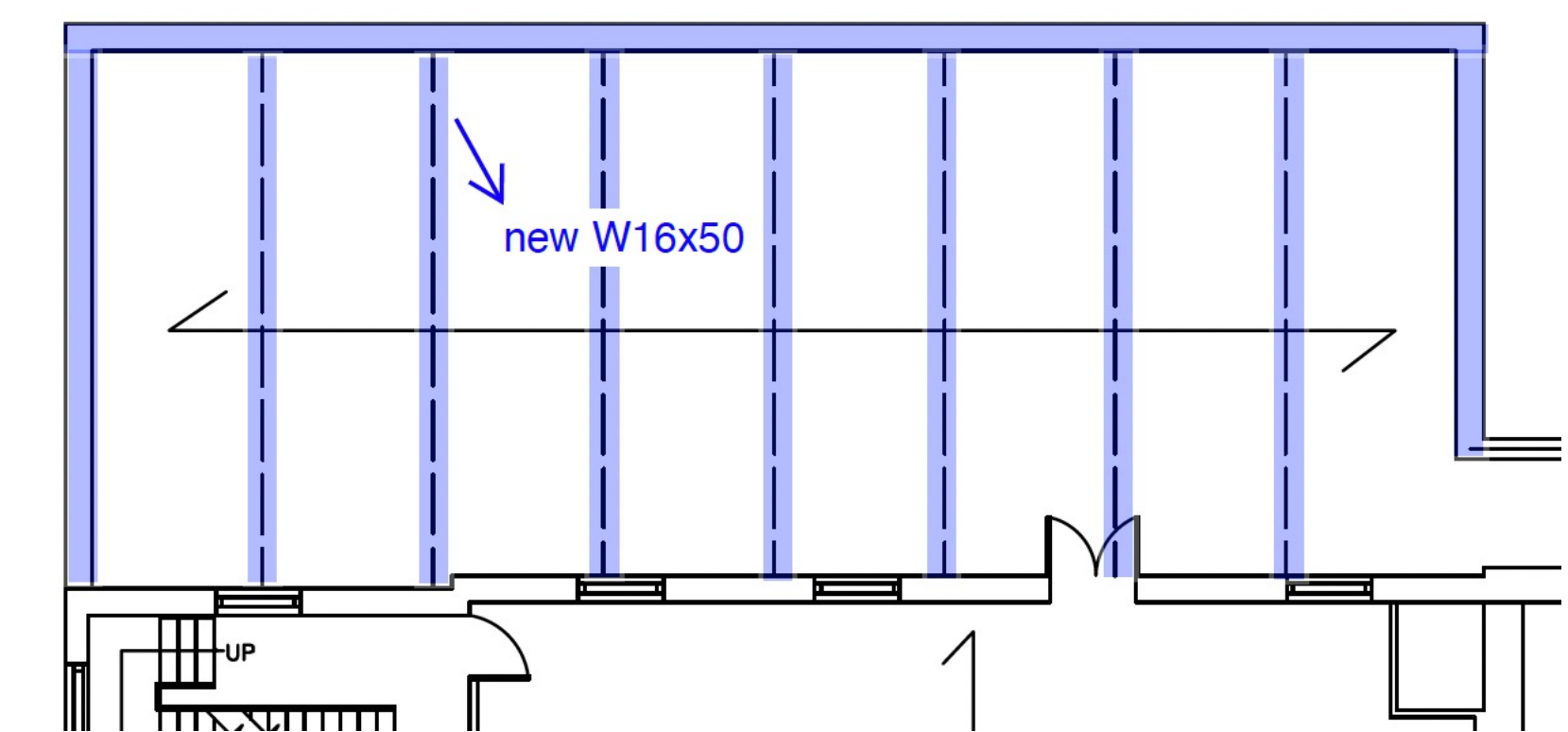


Figure 3. Roof beams in new loading dock

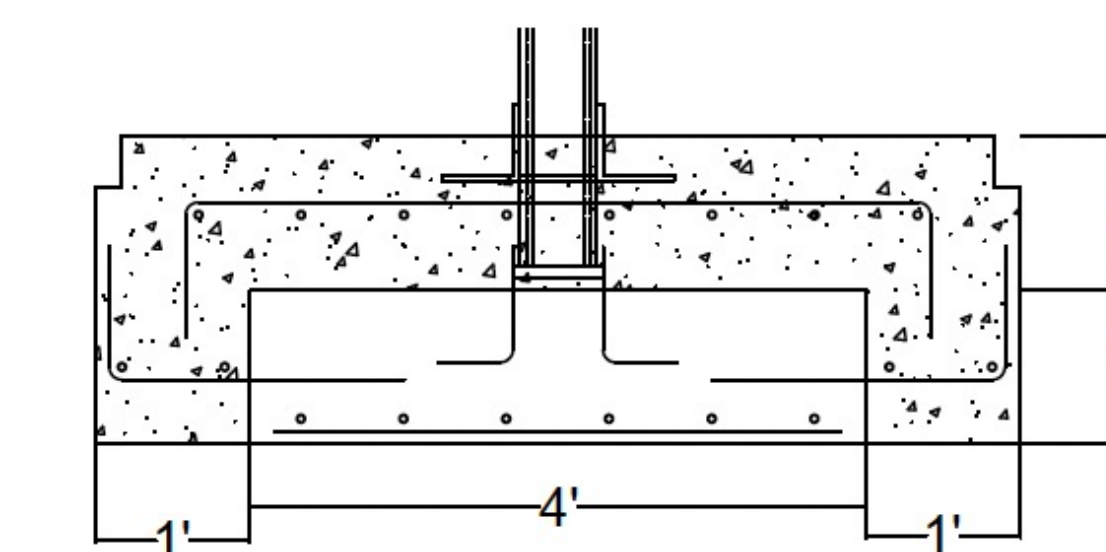
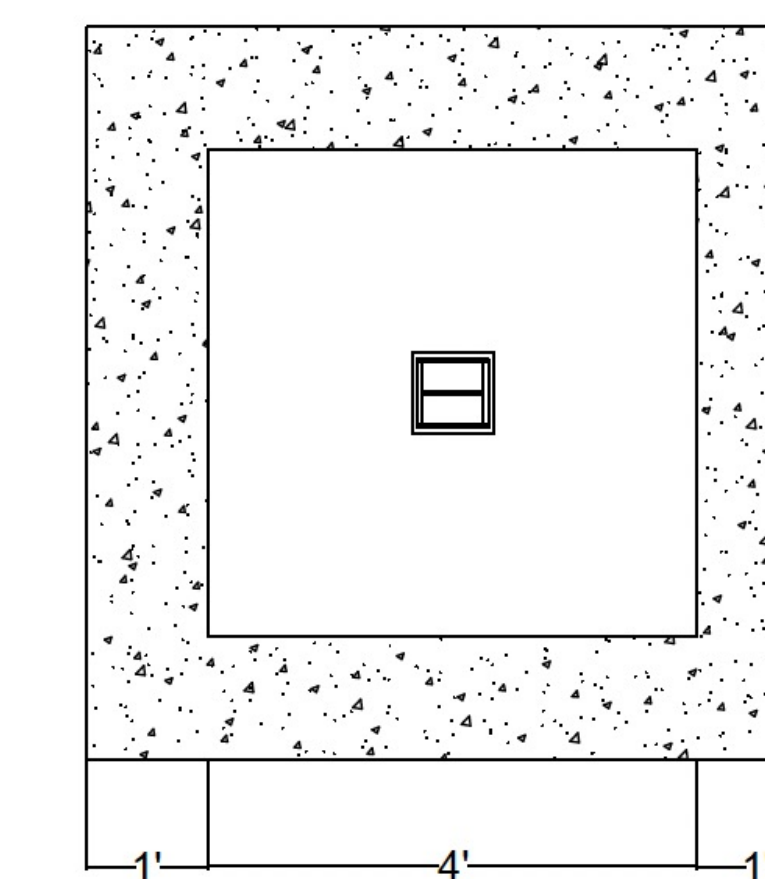


Figure 5. Top view (left) and side view (right) of adjusted footings

Connected Shuttle Route

The new shuttle will support the goals the Center for Art and Community set out to accomplish. Incorporating feedback from the community, one proposed shuttle routes includes the Baltimore Design School, the Charles Theater, the North Ave Light Rail Station, and Druid Hill Park. The second shuttle route includes the 32nd Street Farmer's Market, Blue Jays Perch Community Garden, Lake Montebello, and Barclay Elementary School.

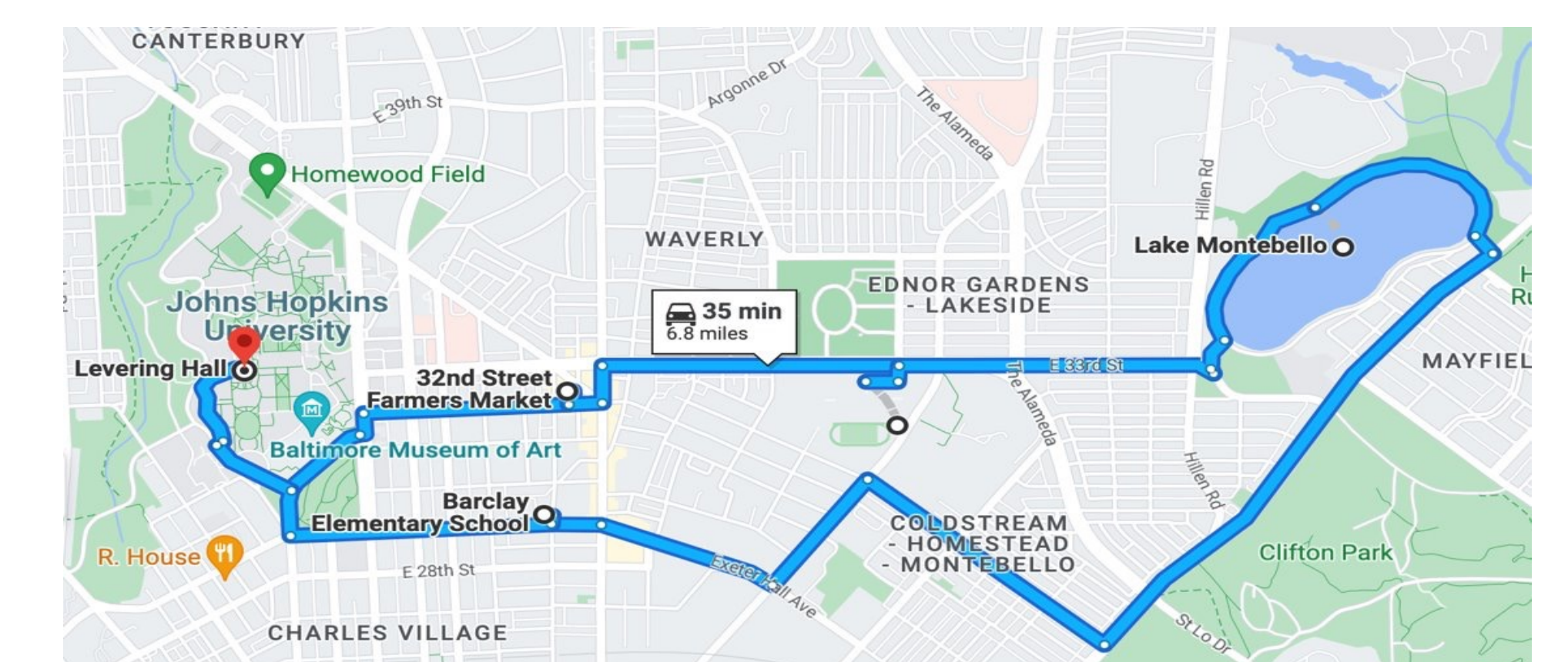


Figure 6. Shuttle route option



Figure 7. Full view of Levering Hall and the Glass Pavilion with proposed renovations

Conclusions

The Center for Art and Community re-imagines the existing Levering Hall & Glass Pavilion into a sustainable space that narrows the gap between the university and the broader community. The introduction of a shuttle service bolsters this integration. The proposed renovations meet all necessary design requirements for safety and accessibility.

Additional Questions?

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