

Meeting Minutes

Date	October 11, 2022	Meeting Date	September 20, 2022
Project Name	International Drive (I-Drive) Pedestrian Bridge Overpass Intersection Analysis and Overpass Conceptual Design Study	Project #:	
Subject	Project Advisory Group (PAG) Meeting #1		
Participants	See Below		
Location	Embassy Suites 8250 Jamaican Court Orlando, FL 32819	Prepared By	Rick Baldocchi, P.E. Christine Dellert
Distribution	Meeting Participants		

- Introduction of Participants**

Nicole Wilson, Orange County Commissioner
 Blanche Hardy, Orange County
 Rick Baldocchi, AVCON, Inc.
 Michael Chatham, HHCP
 Krista Barber, OCCC
 Marcos Bastian, Orange County
 Loreen Bobo, FDOT-District 5
 Luann Brooks, I-Drive District
 James Bridges, OCSO
 Fernando Ching, Rosen Hotels & Resorts
 Megan Dowdy, Dowdy Realty
 RJ Dowdy, Dowdy Realty
 Cpl. Kyle Gabrus, OCSO
 David Janssen, OCFR

Marco Manzie, Paramount Hospitality Management
 Sgt. Gerald (David) McDaniels, OCSO
 Tabitha Moore, International Square
 Chris Mueller, Hilton Orlando
 Renzo Nastasi, Orange County
 Marc Reicher, I-Drive CRA
 Brian Sanders, Orange County
 John Stein, Starflyer Gallery
 Tim Swan, Westwood Property Association
 Craig Swygert, Clear Channel Outdoor
 Alberto Vargas, Orange County
 Josh Wallack, Mango's Tropical Café
 Scott Workman, OCFR Fire Marshal

The second Public Advisory Group meeting provided further details on the International Drive Pedestrian Overpass Intersection Analysis and Overpass Conceptual Design Study, including existing site conditions and options for vertical circulation for the bridge and preliminary ideas for the bridge configuration. The meeting organizers also solicited comments from participants. A summary of the discussion is below.

Blanche Hardy introduced the purpose of the meeting and shared a PowerPoint presentation with information on the project's existing site, vertical circulation options, and other site considerations. Items discussed included:

1. PAG
 - a. The PAG consists of key study partners who will periodically meet (4-5 times) to provide strategic guidance and support to ensure the study meets its objectives.
 - b. The project has the support of Orange County leadership. Commissioner Nicole Wilson, whose adjacent District 1 will also benefit from the project, is attending today's meeting.
2. Meeting Objectives
 - a. This second meeting's purpose is to introduce the PAG to the project team, provide information on the site conditions and discuss several vertical circulation options for the bridge, as well as share initial ideas for the design of a pedestrian overpass at the intersection of International Drive and Sand Lake Road. Comments and questions will be solicited from the group.
3. Vertical Circulation Options
 - a. Blanche introduced Michael Chatham with HHCP to discuss four options: ramps, stairs, elevators, and escalators.
 - b. Ramps
 - i. Ramps have advantages, such as accessibility and egress in one component. There is no power required and very little maintenance, and they accommodate bicycles, wheelchairs, and strollers.
 - ii. There are several disadvantages, too. To get to the project planning height elevation of 24' requires the user to climb 343'. Ramps require a larger footprint than other options. They also will potentially block visibility of businesses on the corner. People may not want to travel because of the distance and would need a roof for shade.
 - iii. **Rick Baldocchi** asked Michael to explain accessibility vs. egress.
 1. People must be able to get off the bridge if there is an emergency and need at least two means of egress. Ideally, there would be means of egress at each corner of the intersection. Stairs or ramps can be used for egress, while elevators and escalators cannot. Accessibility is specifically to meet the ADA requirements of the bridge for use with people with disabilities and must be included at every interchange.
 - iv. Michael showed a series of possible ramp configurations, beginning with a straight run ramp. The ramp would need to be a minimum of 8' wide and no foot traffic would be able to pass under the first third of the ramp. Foundations would be needed about every 35' to support it. The ramp entry would be 340' from the intersection.
 - v. A switch-back ramp would use less area and have the user start and end at the same location. To further improve the ramp, a double switch-back ramp would use a smaller footprint of 97' long and 18' wide.

- c. Stairs
 - i. The biggest advantage to stairs is that they provide egress in an emergency with a smaller footprint. No power requirement and no maintenance. However, they are not accessible. They do not work for bicycles, strollers, or wheelchairs. Climbing 24' of stairs is not physically possible for all users.
 - ii. Michael showed a series of possible stair configurations, starting with a straight run stair where the entry would be 60' away from the intersection. Could also consider a switch-back staircase that starts and ends at the same location. They could additionally consider a multiple switch-back configuration that would minimize the footprint with each run of stairs going up 6', making it more inviting for users.
 - iii. The team is looking at a reduced rise in the stairs to make the stairs easier to climb.
 - iv. **Josh Wallack:** Is it possible to put an elevator in the core of the multiple switch back stair configuration?
 - 1. Michael said this is one of the most efficient ways and will share that option shortly.
- d. Elevators
 - i. Elevators provide accessibility and a smaller footprint. They can accommodate bicycles, wheelchairs, and strollers and would be high capacity. There would be minimal waiting because there are only two stops and reduce walking or climbing.
 - ii. The disadvantages are that elevators are not a means of egress in an emergency; they require power and maintenance; and there may be security issues because they are an enclosed space.
 - iii. In an emergency, the project team looked at what first responders would need to get a stretcher into an elevator—3500-pound capacity. The team only looked at elevators at least that size. The elevator shaft would be about 9'8" by 8'6.5" and the foundations would be about 5' larger. The elevator pit would extend down about 4' and 2' thick.
 - iv. The project team looked at multiple types of elevators and recommended a hydraulic elevator for this project. These elevators have fewer moving parts and less maintenance and can use biodegradable or vegetable-based hydraulic fluid, which has no odor and less likely to cause environmental damage.
- e. Escalators
 - i. Escalators have high capacity; there is no waiting; and they reduce walking and climbing.

- ii. The disadvantages are that they are not accessible and not a means of egress. The team would also have to design up-and-down escalators; they require power and maintenance; they don't handle bicycles, strollers, or wheelchairs; they would likely need a canopy; they must be built linearly; and they are the most expensive option.
 - iii. An escalator would need to be 57' in length to go up 24'. Michael showed several diagrams of an escalator configuration. He said that it would block some of the visibility of the adjoining properties and would need to support a foundation base and mechanical pits at base and top. They would need a canopy on them.
 - iv. Michael commented on challenges of keeping escalators running all the time in Florida's weather and other environmental challenges.
- f. Vertical circulation comparison matrix
- i. The team provided a comparison matrix that attributed scores to each option according to its footprint; means of egress; accessibility; cost; operating cost; power requirement; and horizontal travel distance. The lower score the better.
 - ii. The lowest-scoring options were either the ramp at all four corners, which meets all the requirements, or the combination of a stair and an elevator, which also meets all project requirements.
 - iii. **Marc Reicher:** Is there a possibility of a switch back ramp with an elevator in the center for accessibility?
 - 1. Michael said they could be combined, but the ramp alone would meet all the requirements.
4. Site Conditions
- a. Michael introduced Rick Baldocchi of AVCON, Inc. to discuss the site conditions impacting the bridge and project area.
 - b. Rick shared a series of drawings that show the utility locations at the intersection of International Drive and Sand Lake Road, as well as the location plans for each corner.
 - c. Rick showed the road right of way on the project site. The maps also showed the multiple utility lines in the right of way—fiber optics, power, water, sewer, and gas. The team has not found any easements through a title search. All the utilities are located within the right of way.
 - d. The site has limited right of way to start with and many utilities underground there. Utilities can be relocated, but there are limited options where they could be put.
 - e. Another consideration is sight distance and safety for the traveling public at the intersection. Rick showed two diagrams of view angles at the site—one leaving the crosswalks on grade with the stop bars pulled back; the other has the crosswalks removed and stop bars moved up with better sight distance.

5. Bridge Tower Configurations

- a. Michael said there is very little room within the right of way for foundations because of the existing utilities. He showed a series of possible configurations that would minimize footprint and minimize the impact on the surrounding properties.
- b. The first option had an elevator and multiple switch back stairs with each run 6' in rise, with a platform in the center. The elevator would be on the side. The footprint would be about 20' by 13'4".
- c. From conversations with the Sheriff's Office and first responders, Michael said that there was a concern that if access to on-grade crossing wasn't blocked people would still try to walk across the street. The team is looking at incorporating a barrier at the corner of each intersection that would block pedestrian use on grade and remove the crosswalk. This could be a seat wall or other decorative element.
- d. Michael showed diagrams with this first configuration on different intersections, including the southwest intersection corner, which would be the tightest fit. At each intersection, it is likely they would have to relocate a utility, but not all utilities; the team wants to relocate as few as possible.
- e. The team is looking at glass elevators to address safety concerns and could use them as a visual element to make the elevators a dynamic piece of art.
- f. Michael showed several three-dimensional conceptual renderings of what this configuration could look like, including at the southwest intersection and the overall project site and what the configuration would look like from the perspective of driving down Sand Lake Road looking east. The glass elevators could become a gateway for drivers.
- g. The second option includes a stair and elevator placed at 45-degrees as a result of studying the different intersections. Each intersection is different, and each vertical circulation may not need to be the same. This configuration could allow properties to connect into the bridge. This configuration also hugs the property lines, so it does not encroach as much on the adjacent properties. Michael showed a series of renderings of what this configuration would look like at the intersection and in a three-dimensional view.
- h. **Marc Reicher:** What are the dimensions of the stairs and platform and on the ramp?
 - i. Michael said the stairs are 6' wide and where the stairs turn the platforms are about 6' deep and 13' wide. They are 5' deep on the ramp and width of the ramp, which is 8'. If a ramp is the circulation option, there would not be another option.
- i. **Josh Wallack:** How wide is the landscape buffer at the intersection and would it have multiple layers?

- i. Michael said that pedicabs typically run in the vehicle lanes, as opposed to using the bridge. The bridge design would need to be considered for pedicabs if they are going to use it.
7. Summary Discussion and Comments
 - a. Blanche Hardy shared a summary for the PAG:
 - i. Preference for eliminating pedestrian crossing on grade.
 - ii. Elimination of the crosswalks will increase pedestrian safety and reduce traffic congestion.
 - iii. Wrapping corner seat wall or barriers will be required to prevent people from attempting to cross the intersection on grade.
 - iv. Determined limited space exists in the ROW for bridge vertical circulation tower and supports.
 - v. Evaluation of vertical circulation options identifies ramps or combination of elevator and stairs as the most viable options.
 - vi. We are seeking PAG input on vertical circulation tower option preferences and will prepare development of bridge configuration options for the next PAG meeting.
 - b. **Tim Swan:** Is I-Drive being built to accommodate pedicabs on the street?
 - i. The County advised that pedicabs are treated as vehicles in the travel lane; there is a bicycle lane that has been added along Sand Lake Road, but they are not on all the roads now.
 - c. **Josh Wallack:** Eliminate pedestrian crossings on grade and give a major jaywalking fine if pedestrians try to cross on grade. Each corner has its own unique footprint, and various configurations can all be employed at the site. Constructability and feasibility are the most important. We have seen solutions for all four corners.
 - i. Blanche asked if the property owners would favor different designs for each corner if they are cohesive, gave the same message, shared an aesthetic that tied them together—and then each corner could have a custom structure. Property owners in attendance and PAG members agreed.
 - ii. Rick clarified that none of the vertical circulation options completely fit within the public right of way.
 - d. **RJ Dowdy:** Favors the 45-degree alignment because it opens up future development of these corners and users are looking at the businesses. Would like to see these four corner developers make use and activate on this development.
 - e. **Rick Baldocchi** asks **Loreen Bobo:** Could different options be discussed regarding FDOT criteria, such as length of development from curb. Loreen said that options could be discussed.
 - f. **Loreen Bobo:** Agree that eliminating the crosswalks makes the most sense and having a barrier.
 - g. **Commissioner Wilson:** What about motorized devices like motorized bicycles or other micro-mobility devices?

- i. The County says it is working on an ordinance that will clarify this issue.
 - h. **Megan Dowdy:** The barrier needs to be tiered, hardscaped, and permanent so that it cannot be breached.
 - i. **RJ Dowdy:** Would prefer to see a barrier with minimal maintenance. Asks if there could be other use for the vacant lot next to McDonald's.
 - i. The County has been looking at that property for other uses, such as additional parking and ways to enhance the property with this project.
 - j. **John Stein:** Would like to see rails put in to guide pedestrians onto using the bridge, before they get to the corner, to further prevent people from trying to cross on grade.
 - k. **Commissioner Wilson:** How are we balancing the need for visibility for security purposes and translucent elevators in the Florida climate?
 - i. Michael said that diagrams are showing options as translucent, but these elements would evolve as the project develops. The County advised that there was a concern about covering the top because it would become a gathering place; they also cannot allow the sides of the bridge to be open because it could be a hazard for the drivers below. Coverings will be discussed at the next PAG meeting.
 - l. **JR Dowdy:** The covers will be more aesthetic than functional and could become a place for vagrants and does not want to be forcing pedestrians to walk through, as well. How does someone in a wheelchair get off the bridge in an emergency if an elevator is not an egress? Does this meet ADA?
 - i. Yes, the design will meet ADA requirements. Stairs are an egress, and this is similar to designs in buildings.
 - m. **Josh Wallack:** Is there an update on the financing or the grant?
 - i. The County advised that they did not receive the grant but will continue to pursue partners in financing and other grant opportunities.
 - n. **Marc Reicher:** Are you going to come back to us and share with us walk patterns and efficiency costs for these designs? Are we going to be able to build any of these configurations as a clear span?
 - i. The team will provide more information at the next meeting and has done other single-span bridges of equivalent spans. Michael says the bridge supports are still to be determined.
- 8. Next Meeting
 - a. Will share more details on the bridge design at the next meeting.