

Determination of Effect
ID No. LRL-2021-560-sjk; Proposed Henry Street Bridge
Indianapolis, Marion County, Indiana

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Report Citation

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2022 *Identification and Effects Report, Henry Street Bridge Project, In the City of Indianapolis, Center Township, Marion County, Indiana*. Report prepared for Crawford, Murphy, and Tilly by Weintraut and Associates, Zionsville.

Background

Crawford, Murphy, and Tilly, on behalf of the City of Indianapolis Department of Public Works (DPW) (Applicant), has submitted a Department of the Army Permit application for impacts to jurisdictional waters of the United States (U.S.) associated with proposed construction of a new bridge over the White River, Marion County. The purpose of the project is to construct a new White River crossing in downtown Indianapolis to provide vehicular and pedestrian connectivity between existing and proposed facilities on the east and west sides of the river, and to reduce the traffic congestion on adjacent Washington and Oliver Streets. The proposed bridge would extend from Henry Street west across the White River and would be a three-span structure with four concrete piers. Three piers would be constructed below Ordinary High Water (OHW) with the foundations constructed below the substrate of the White River. Additionally, the applicant proposes to remove three existing piers associated with the former Oliver Street Bridge. The DPW examined a no build alternative and four additional alternatives, including Henry Street.

No Build:

No crossing would be constructed, and Washington and Oliver Streets would remain the only options for crossing the White River. This alternative would result in no impacts, environmental or otherwise, but would not meet the project's purpose and need.

Alternative 1: Gardener Lane Crossing

This alternative would utilize an access street running between AES Indiana, Citizens Gas & Coke, and the Diamond Chain Company buildings. The crossing would begin at West street proceeding west until it terminates at South White River Parkway West. This alternative would require acquisition of 4.6 acres of ROW and relocation of the utility generating facilities for Citizens Gas & Coke and AES and result in major service disruption during the relocation. There are five potential hazardous material sites in the ROW, it would result in impacts to 0.39 acres of forested areas adjacent to the White River, and would have 1.43 acres of floodplain impact. This alternative would be located in the National Register of Historic Places (NRHP)-listed Indianapolis Parks and Boulevard System and would terminate adjacent to the building face of the NRHP-eligible Diamond Chain building. Based on available maps, it also appears that this alternative includes a portion of the former Greenlawn Cemetery site. The river is deeper at this location and would likely result in greater surcharge of the White River resulting in a larger construction footprint in the river. Since the levee is higher than South White River Parkway West Drive it would be more challenging to connect the crossing on the west side. This alternative does not meet the project purpose because it would not provide sufficient vehicular and pedestrian connectivity to address the existing and future congestion; nor would it provide improved access to area facilities. Due its proximity to Washington Street and Oliver Street Crossings, this alternative could increase congestion.

Alternative 2: South Street Crossing

This alternative examined the construction of a crossing at South Street, which currently terminates at West Street and Kentucky Avenue. Under this alternative South Street would extend west from West Street/Kentucky Avenue across the White River and terminate at South White River Parkway West Drive.

This alternative would require the acquisition of 4.61 acres of ROW and would result in the demolition of a portion of the NRHP-eligible Diamond Chain building dating to the 1940s; it would also be located with the IPBS and impact contributing resources. Based on mapping, this alternative may also include a portion of the former Greenlawn Cemetery site. This alternative includes one potential hazardous material site, would result in 0.41 acre of impacts to forested areas adjacent to the White River, and would have 1.53 acres of floodplain impact. The practicability of this alternative is considered low because it would require work at the Chevy Dam including the extension of the rock dam to eradicate erosion. Construction of the bridge in this area would likely result in a surcharge of the river and additional scour control measures would be required. Construction of this alternative and the resulting South Street/West Street/Kentucky Avenue would result in a five-legged intersection that could potentially be unsafe. It is also unclear if the road would provide a direct connection to Harding Street west of South White River Parkway West Drive, which would eliminate future connectivity. While this alternative would meet the project purpose of relieving current and future congestion and providing vehicular and pedestrian connectivity, it is unclear if it can provide future connectivity through a direct connection to Harding Street.

Alternative 3: Henry Street Crossing

This alternative would construct a crossing at Henry Street, which terminates on the east side of Kentucky Avenue. This alignment would extend Henry Street from Kentucky Avenue to the White River along an existing private drive, west across the White River, terminating at South White River Parkway West Drive. This alternative would be constructed within the NRHP-listed IPBS and would require acquisition of land associated with the NRHP-eligible Diamond Chain Company buildings and parcels, and the Neutrality Indy Telco campus.

Alternative 3 would require acquisition of 3.72 acres of ROW, but would likely need a portion of the circa 1970 free-standing building at the south end of the Diamond Chain parcel. Early assessments by the applicant's engineers indicates that this building could be removed without impacting the circa 1918/1940s portions of the building. It is also likely that this alternative includes a portion of the former Greenlawn Cemetery site.

The practicability of this alternative is considered high due to the presence of an existing drive on the proposed alignment, the fact that it would not impact the oldest portions of the Diamond Chain building and would not result in a surcharge, provided the remnant piers from the former Oliver Street bridge are removed. The levee and roadwork are on the same elevation and this alternative would allow for the construction of a traditional, though skewed, four-leg intersection. This alternative meets the project purpose and need including allowing for direct connection to Harding Street west of South White River Parkway West Drive that could enable future connectivity.

Alternative 4: Merrill Street Crossing

Alternative 4 examined the construction of a crossing at Merrill Street, which currently terminates at Kentucky Street approximately 250 feet north of Oliver Avenue. A Merrill Street crossing would connect with Kentucky Avenue and extend west across the White River terminating at South White River Parkway West Drive. Alternative 4 would require the acquisition of 2.82 acres of ROW including land owned by Mahrdt Family Properties, Inc., Indy Telecom Campus, and Neutrality Indy

Telco. Like Alternative 1, this alternative would require the relocation of the Utility Generating Facilities for Indy Telecom and would result in a major disruption of service during construction. Alternate 4 includes three potentially hazardous material sites and would result in impacts to 0.32 acre of forested areas adjacent to the White River. It would also be constructed within the IPBS and impact contributing resources.

This alternative is considered to have “low” practicability since the bridge design and construction would be constrained by the Oliver Avenue Bridge to the south. Additionally, it does not meet the project purpose and need because it would not reduce congestion at Oliver Street/Kentucky Avenue due to its proximity to that corridor. Future connectivity would be limited because the crossing would not provide a direct connection to Harding Street west of South White River Parkway West Drive.

Of the 4 alternatives, only 2 and 3 meet the purpose and need. Alternative 3, Henry Street, was determined to be the most practicable because it required the least amount of ROW, required no utility/telecommunication disruptions, and resulted in the least impact to the NRHP-eligible Diamond Chain Building. Like all of the alternatives, the bridge would be constructed within the boundaries of the NRHP-listed IPBS. Although this alternative has slightly higher floodplain impacts, they are not appreciable. Henry Street would likely result in zero rise to the 100-year flood level and is situated in a location that would allow for ease of vehicular and pedestrian access. The proposed construction at this location would result in permanent impacts to 90 linear feet of the White River and 0.006 acre of wetland. Temporary impacts to 1.16 acres of the White River and 0.14 acre of wetland would be required for the proposed cofferdam, temporary access, and dewatering.

The applicant contracted with Weintraut and Associates to assess the impacts of the proposed bridge on above-ground structures in the Corps’ Permit Area. The above-cited reports detail the results of the surveys.

Permit Area/Area of Potential Effect

In accordance with 36 C.F.R. 800.4(a)(1); 33 C.F.R. 325, Appendix C, Section 1(g)

The permitting process of the Regulatory Branch of the Corps of Engineers is regulated by 33 C.F.R. Part 325. Appendix C of that part outlines how the Corps shall conduct its responsibilities to protect historic properties. For purposes of conducting a cultural resources review, the Corps of Engineers Regulatory Branch defines its permit area based on those areas comprising waters of the United States that would be directly affected by the proposed work or structures, and includes those uplands that would be directly affected as a result of authorizing the work and structures.

Three tests must all be satisfied in order for areas outside the waters of the U.S. to be included within the “permit area.” The first test requires that the activity proposed for areas outside the waters of the U.S. would not occur but for the authorization of the work within the waters of the U.S. The second test mandates that the activity proposed outside the waters of the U.S. must be integrally related to the work to be authorized within the regulated waters, or that the regulated work must be essential to the completeness of the overall project. Finally, the third test requires a direct association (i.e., first order impact) with the work to be authorized within regulated waters.

Part 33 C.F.R. 325, Appendix C, Section 1(g i-ii) discusses the Corps’ Permit Area for linear projects such as highways. Per Section 1 (g-i) linear projects can almost always be designed to avoid jurisdictional waters. Often, avoiding waters is neither cost-effect nor convenient so Applicants choose to seek Corps authorization to impact jurisdictional waters. Therefore, the but

for test is not met for the entire Right of Way (ROW) since waters could likely be avoided. The same undertaking and integral relationship tests are met, but all three tests must be met to include the entire ROW in the Permit Area. Some portion of the ROW “approaching the crossing, would not be in its given configuration but for the authorized activity.” This portion of the ROW meets all three tests and is included in the Permit Area. Taking this into consideration, Appendix C, Section 1(g-ii) describes the Permit Area for linear projects as extending “in either direction from the crossing to that point at which alternative alignments leading to reasonable alternative locations for the crossing can be considered and evaluated.”

Based on the maps submitted by the applicant, the White River crossing is the only proposed impact to jurisdictional waters. Because the crossing is located in downtown Indianapolis, the ROW leading to the crossing could be redesigned to utilize multiple other existing roads. The but for test is not met for the entire ROW between Kentucky Street and the White River Crossing. Bridge approaches are designed to create a smooth transition between the roadway and their design is dependent upon the crossing. The but for test is met for the eastern and western approaches. The approaches are integrally related the work to be authorized, i.e., the bridge, and, therefore, the approaches have a direct association to the work to be authorized. All three tests are met for the eastern and western approaches for White River crossing. The Permit Area is limited to the impacted waters, the bridge approaches, the work in the uplands directly affected by the result of the authorized work (e.g. placement of rip rap, portions of the cofferdam) and any associated access and staging areas.

Identification of Historic Properties

In accordance with 36 C.F.R. 800.4(b); 33 C.F.R. 325, Appendix C

The consultant conducted background research to determine if any National Register of Historic Places (NRHP)-listed-or-eligible properties or archaeological sites were recorded in the Permit Area and a 1-mile search zone. Resources consulted included the NRHP, the Indiana State Register of Historic Sites and Structures, the Indiana State Historic Architectural and Archaeological Research Database (SHAARD), The Indiana Historic Sites and Structures Survey Inventory (IHSSI) interim report for Marion County, and the Indiana Buildings, Bridges, and Cemeteries (IBBC) list. The NRHP-listed IPBS and the NRHP-eligible Diamond Chain Company Complex are located in the Permit Area.

The Indianapolis Parks and Boulevard System includes 12 individual parks, 6 parkways, and two boulevards. Contributing resources to the listing include 28 sites, 23 buildings, 104 structures, and 7 objects spanning 3400 acres along the White River. The IPBS is representative of the City Beautiful movement and was designed by noted landscape architect George Kessler. It is listed on the NRHP under Criteria A and C for its significance in the areas of landscape architecture, community planning, transportation, engineering, and entertainment/recreation. The period of significance for the IPBS is 1873-1972.

The earliest portion of the Diamond Chain Company complex was constructed in 1918 by L.M. Wainwright to produce timing chains and drive chains for the Indianapolis automobile industry. The tallest portion of the building is 5 stories high with reinforced concrete walls resting on a reinforced concrete foundation. Rows of windows pierce the façade of building, some of which retain their original casements. A circa 1940s addition is present to the south and a modern addition is located on the south side of the main building. A 1970s-era addition is also located on the south end of the property. The Diamond Chain Complex is considered eligible for listing in the NRHP under Criterion A for its association with the Indianapolis automobile industry and Criterion C as a significant example of an early industrial building constructed of reinforced concrete.

Historical documentation reviewed by the consultant indicates that part of the former Greenlawn Cemetery may extend into the Permit Area. The Indiana General Assembly established a 4-acre city burial ground in 1821 near Kentucky Avenue. The “graveyard” first appears on an 1830 plat. Between 1830 and 1852, the cemetery expanded to approximately 25 acres and an 1852 map shows the cemetery divided into an “Old Burying Ground” and a “New Burying Ground.” Research suggests that the Old Burying Ground may have served as the African American Cemetery. During the Civil War approximately 1,000 Union soldiers and 1,600 Confederate soldiers were interred in the cemetery. Following the war the Union soldiers were reinterred in Crown Hill Cemetery and the Confederate soldiers were moved to the Confederate Mound. By 1887, the cemetery was known as Greenlawn and was surrounded by industrial operations. The cemetery was in significant disrepair prompting families and the city to reinter burials in other cemeteries such as Crown Hill. After the burials had been removed, the city intended to create a park on the former cemetery property as part of parks and boulevard system designed by landscape architect George Kessler. The park did not materialize and in 1918, the Diamond Chain Company building was built on the former cemetery property.

Data available on SHAARD shows no previously recorded archaeological sites located within or adjacent to the Permit Area.

Historic Properties Identification and Effect Assessment Report Review

The cultural resources consultant examined the Corps’ Permit and assessed the potential impacts to both the IPBS and the Diamond Chain Company Complex. The proposed White River bridge at Henry Street is not original to Kessler’s IPBS design and would result in a visual impact to the IPBS that would be out of character with the setting and design. Additionally, a portion of the greenspace and levee along the White River would be directly impacted as a result of the proposed project. The consultant recommends that the proposed project would have an adverse effect on the IPBS.

The Henry Street alternative, as proposed, would avoid direct impacts to the circa 1918/1940s Diamond Chain Company structure; however, a free-standing circa 1970s structure would need to be demolished and the City would need to acquire a portion of the recommended NRHP boundary on the south side of the complex. The consultant recommends that taking a portion of the property located within the NRHP boundary would result in an adverse effect to the integrity of setting and design.

The burials in the Greenlawn cemetery appear to have been reinterred in other cemeteries by the time the Diamond Chain Company building was constructed in 1918. Research conducted by the consultant indicates that this is mostly accurate, but inadvertent discoveries of human remains likely associated with the cemetery have occurred, including the discovery of remains beneath the Diamond Chain Company building and also along Henry Street. The mapped location of the former Greenlawn Cemetery is completely covered in asphalt, so archaeological survey may not be feasible until ground-disturbing activities occur.

Recommended Determination of Effect

I concur with the consultant’s recommendation that the proposed undertaking would result in direct and indirect adverse impacts to the IPBS and the Diamond Chain Company property. In accordance with 36 C.F.R. §800.5(d)(2) and 33 C.F.R. §325, Appendix C(7)(d), and the Interim Guidance issued by the Corps on 25 April 2005, I recommend that the Corps make a determination of adverse effect to an historic property from the proposed undertaking.

The Corps should seek resolution of these adverse effects through consultation with the Indiana Department of Historic Preservation and Archaeology (DHPA), the applicant, Native American tribes and other consulting parties per 36 C.F.R. §800.6 and 33 C.F.R. §325, Appendix C(7)(d) to develop a Memorandum of Agreement (MOA) to mitigate for the adverse effects. Additionally, the Advisory Council on Historic Preservation will be notified of the adverse effects and given a chance to participate in the effect resolution.

The effect of the proposed undertaking on archaeological sites cannot be fully assessed due to the impervious nature of the current ground cover. An archaeological survey or monitoring plan for ground disturbing activities should be developed along with a plan for the inadvertent discovery of human remains. These plans can be developed as part of the MOA process.

This determination of effect, along with proposed project information and historic properties report should be submitted to the DHPA for review and comment. The documentation may be submitted to the DHPA via email at DHPAreview@dnr.in.gov. The DHPA has 30 days to respond.

I also recommend that the Corps send the determination of effect and associated documentation to the potential consulting parties on the attached spreadsheet provided by the cultural resources consult and the following Native American tribes: Miami Tribe, Eastern Shawnee, Shawnee, Absentee Shawnee, Delaware Tribe, Delaware Nation, Wyandotte Nation, Pokagon Band of Potawatomi, Forest County Potawatomi, Hannahville Indian Community, Gun Lake Potawatomi, Nottawaseppi Huron Band of Potawatomi, and the Prairie Band of Potawatomi. The DHPA may recommend additional consulting parties.

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