

**Cairo Bridge Project
Section 4(f) Evaluation
Ritchie County, West Virginia**

State Project: S343-31-9.82
Federal Project: STP-0031(037)D



**U.S. Department of Transportation
Federal Highway Administration**



**West Virginia Department of Transportation
Division of Highways**



October 2017

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1.0 INTRODUCTION

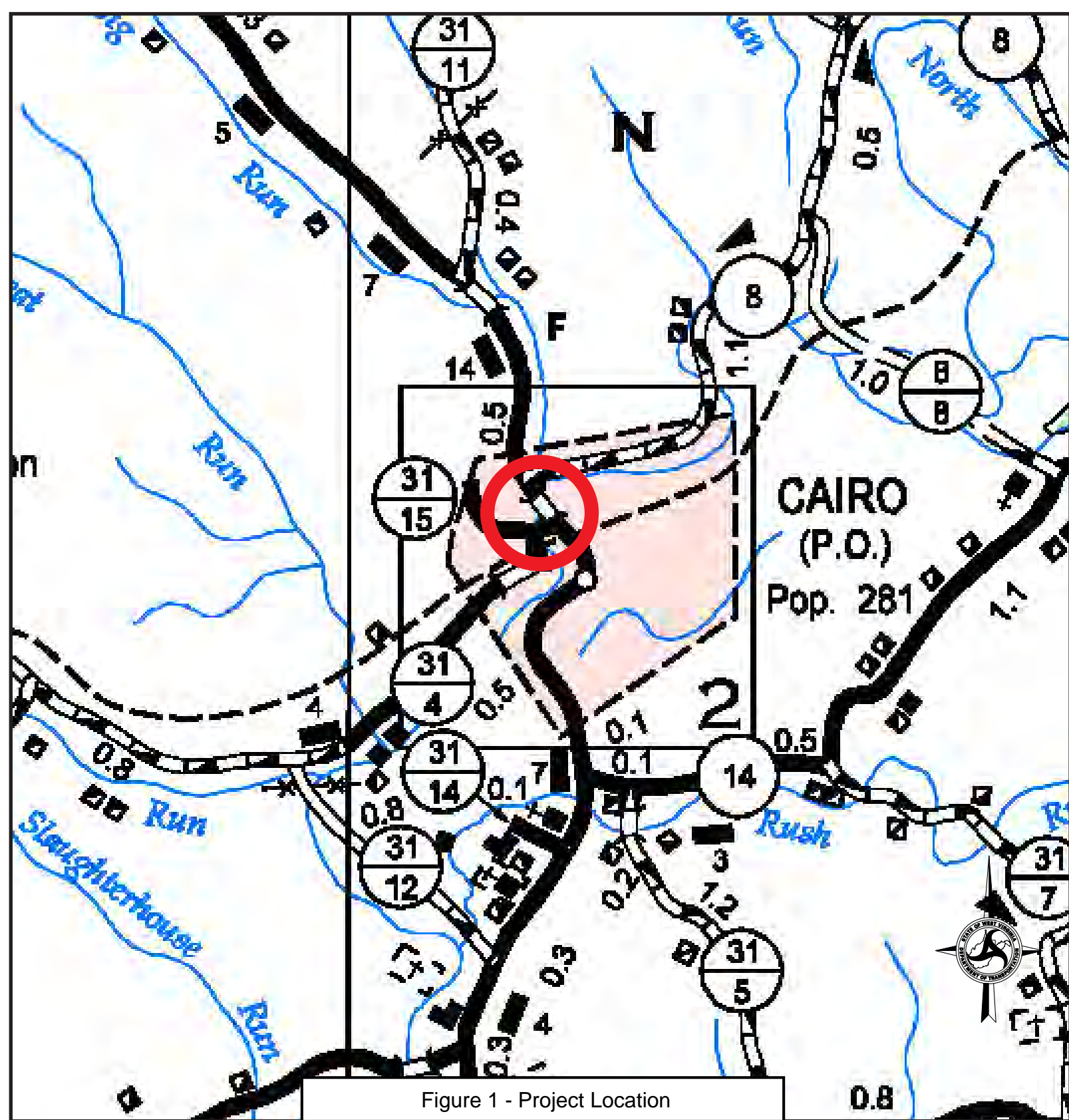
This Section 4(f) Evaluation is being prepared by the West Virginia Department of Transportation, Division of Highways (WVDOH), in conjunction with the Federal Highway Administration (FHWA), to address the applicable provisions of Section 4(f) of the *United States Department of Transportation Act of 1966* (49 U.S. Code [U.S.C.], Section 303) and the *Federal Aid Highway Act of 1968* (23 U.S.C., Section 138) for the Cairo Bridge Project. The Department of Transportation Act of 1966 states, in part, that the Secretary of Transportation may not approve the use of land from any significant publicly owned park, recreation area, or wildlife and waterfowl refuge, or any historic site unless a determination is made that:

- There is no feasible and prudent alternative to the use of land from the property; and,
- The action includes all possible planning to minimize harm to the property resulting from such use.

The following includes a description of the proposed action, a summary of the project purpose and need, a description of the Section 4(f) resource, an analysis of alternatives, potential measures to minimize harm, and an assessment of which alternative results in the least harm to Section 4(f) resources.

2.0 DESCRIPTION OF PROPOSED ACTION

The existing bridge is located on Main Street (WV 31) in Cairo, West Virginia, and carries two lanes of traffic and one sidewalk over the North Fork Hughes River. Figure 1 shows the location of the project. The single-span Parker Through Truss bridge was built in 1925 and is a contributing structure to the Cairo Historic District. It has an 18.5-foot roadway width, a 15-foot high vertical clearance, and its overall length is 180 feet. The existing bridge is currently posted for 16 tons. The WVDOH proposes to construct a new bridge to replace the existing Cairo Bridge.



3.0 PROJECT PURPOSE AND NEED

As a result of WVDOH transportation planning efforts, project scoping, and public comments, a specific purpose and need was established for the project. The purpose of the project is to replace the existing Cairo Bridge with a new crossing over the North Fork Hughes River that meets current design criteria. The new bridge will continue to carry WV 31 traffic over the North Fork Hughes River near its current location.

The project is needed to assure safe and efficient transportation access; assure adequate emergency response times for ambulance, police, and fire services; and, support economic development.

3.1 Safe and Efficient Transportation Access

The current bridge is structurally deficient and functionally obsolete. The Cairo Bridge was built in 1925 and rehabilitated in 1976 and 1989. Since the last time it was rehabilitated, the bridge has experienced substantial deterioration and is currently posted. A bridge inspection conducted in August 2015 rated the deck and superstructure in poor condition. A second inspection conducted in October 2016 showed deterioration of the bridge abutments as well.



While the bridge’s vertical clearance is sufficient for most all regular traffic, some truck traffic requires additional clearance. The approximate 9-foot lane width is considerably less than what is recommended for modern bridges. The substandard width, in and of itself, renders the bridge functionally obsolete for a two-lane, two-way bridge, but the 16-ton weight limit also restricts heavy truck traffic. Larger deliveries to local businesses and residents are hindered by the weight restriction on the bridge. Specifically, deliveries of heating oil and feed are frequently transferred to smaller trucks before arriving in the town because fully loaded delivery trucks can exceed current weight limits. Large household deliveries, like furniture or appliances, can also

be delayed because delivery schedules from regional warehouses are often dictated by “filling a truck.” The need to use smaller trucks for household deliveries can cause further delays for local residents due to the need for special, limited runs to Cairo.

The weight limit is likely to be further reduced due to the bridge’s continued deterioration. The existing substructure is chloride contaminated from years of winter road salt, causing the reinforcing steel rods (rebar) within the bridge’s concrete to corrode. This corrosion has exerted increasing pressure on the surrounding concrete and causes delamination and spalling of the deck concrete. Some of the concrete has broken off, exposing the rebar, further accelerating corrosion of the structure’s steel components. Concrete deterioration on the deck has also created potholes on the bridge’s driving surface.

3.2 Emergency Response Times

Police service in Cairo is provided by the Ritchie County Sheriff’s Department and the West Virginia State Police. Both the Sheriff’s office and the Ritchie County State Police detachment are located in Harrisville. Fire protection service to the community is provided by the Cairo Volunteer Fire Department (VFD). The Cairo VFD has mutual aid agreements with the Deerwalk VFD, Ellenboro VFD, Elizabeth (Wirt County) VFD, Harrisville VFD, Pennsboro VFD, and Smithville VFD. Of these other area fire departments, assistance when needed primarily comes from Harrisville and Pennsboro. Other emergency response services are provided by the Ritchie County Office of Emergency Management and the Ritchie County Ambulance Authority from operation centers in Pennsboro and Harrisville, respectively.

The Cairo VFD is located at 44 McGregor Street, near the community’s central business district and on the southeast side of the Cairo Bridge, but responds to emergency calls on both sides of the bridge. Currently, the Cairo VFD has five vehicles in its service fleet: a 1,000-gallon pumper truck, a 2,000-gallon water tanker, a mini-pump rescue truck, a small rescue brush truck, and a rescue all-terrain vehicle. The heaviest of these trucks, the fully loaded and staffed pumper and tanker, is



already approaching the current weight limit on the bridge. Further reduction of the load posting on the bridge would require the VFD to use a detour to respond to calls on the other side of the river unless they can use one of their lighter trucks.

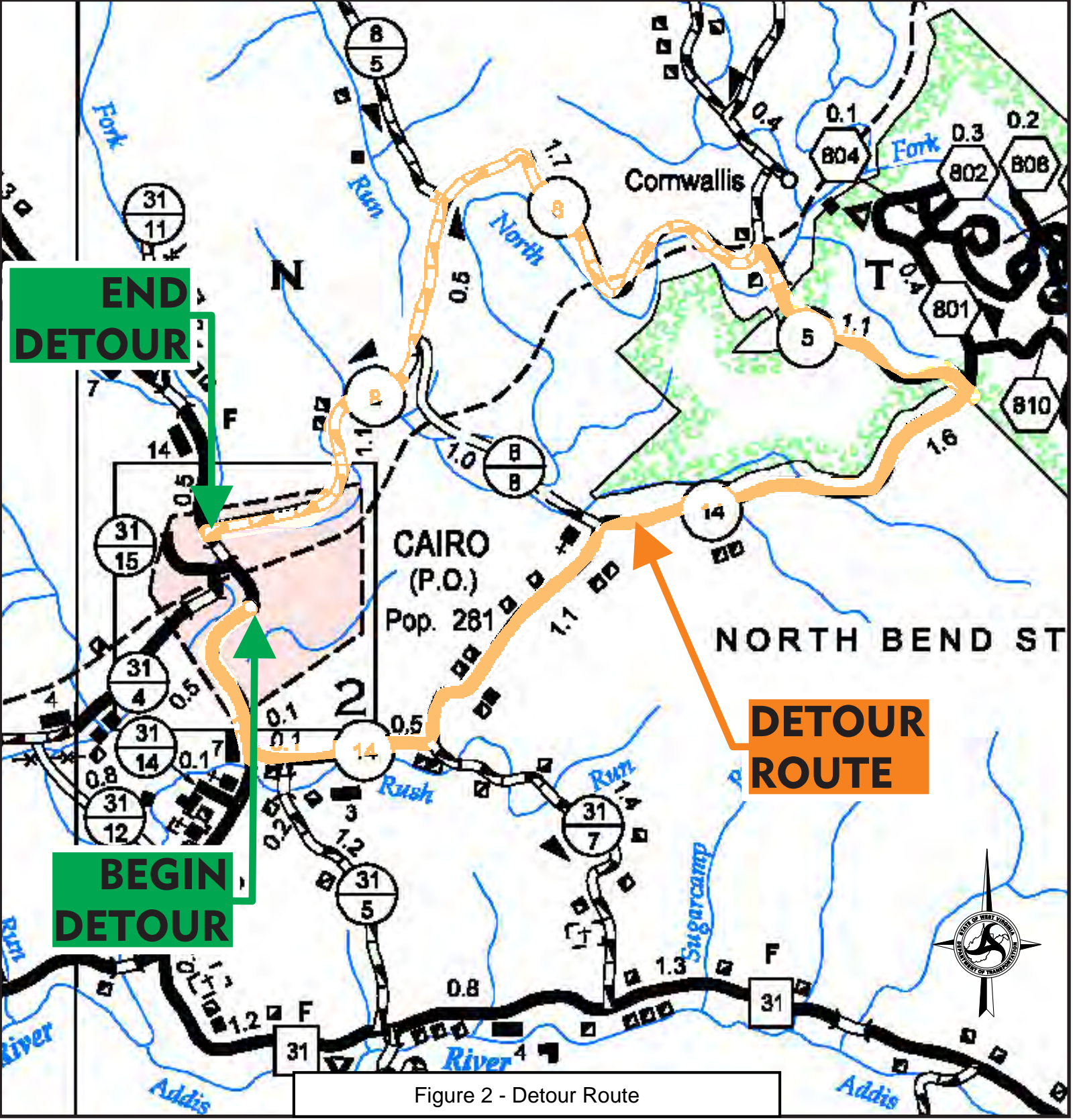
If the bridge was closed, the shortest detour for cars and smaller emergency services vehicles from one side of the bridge to the other is approximately 10 miles via WV 31 south, County Route 14, WV 5, and WV 8. This detour route is shown on Figure 2. Emergency response time using this route is about 25-30 minutes because almost half of this distance is on a gravel road (WV 8), slowing response times down considerably. Heavier trucks, however, would have to be detoured over WV 31 to US 50 to Ellenboro and then on WV 16 through Harrisville and back to Cairo on WV 31, a distance of 28 miles. Emergency response time using the heavy vehicle route would be well over 30 minutes.

The National Fire Protection Association (NFPA) has developed a set of codes and standards that call for first responders to arrive on the scene of an emergency within four minutes 90 percent of the time (NFPA 2016). Use of a detour route would exceed this standard by 400 percent, creating a serious threat to public safety and property. Such a detour, in effect, will prevent the Cairo VFD from providing emergency service to the northwest and northern parts of its own community. Under those circumstances, fire trucks from Pennsboro, a distance of 19 miles and taking 20-25 minutes, may respond to calls in this part of Cairo faster than the Cairo VFD, but its response time would also be substantially higher than the standard recommended by the NFPA.

3.3 Economic Development

Although a small town, Cairo continues to develop as a tourist center aimed at attracting antique collectors, through-hikers, and visitors to nearby North Bend State Park. Cairo is a quaint, small town that has fallen on hard times. Population in the community was nearly 700 at the turn of the twentieth century, but is less than half that today. With the loss of population, what once was a vibrant business district in the town with stores, restaurants, and other businesses, now has only a few viable businesses remaining.

Cairo is a major access point for the North Bend Rail Trail, however, and there are opportunities to capitalize on the growing West Virginia tourism industry. Travel and tourism contributes over



**END
DETOUR**

**BEGIN
DETOUR**

**DETOUR
ROUTE**

Figure 2 - Detour Route

\$4 billion to the West Virginia economy and has been projected to increase by nearly 6 percent annually (West Virginia Division of Tourism 2012). Cairo's location along the trail makes it a logical target for economic redevelopment aimed at hiking and camping and other similar outdoor activities.

The trail is a multi-use recreational path that is part of the coast-to-coast American Discovery Trail, considered by many hikers to be the backbone for the national trails system. Recreationists from outside the area generally arrive in Cairo from US 50 to the north of town. A trail head is located within the town and the trail provides a pedestrian and bike route from Cairo to North Bend State Park where many recreational opportunities, including fishing, hiking, camping, and indoor overnight accommodations (a modern lodge and rustic cabins), are offered. Closure of the bridge would require a detour (see Figure 2) that will make the area less attractive as a travel destination. A lengthy detour will also hinder trail visitors from utilizing trail-related services in Cairo. Additional mileage could discourage stops in town as trail visitors return to their cars and search for supplies or overnight accommodations.

In addition, the bridge is hindering substantial economic development in the oil and gas industry because the equipment used in that industry generally exceeds the bridge's current weight limit. The oil and gas industry is growing at a rapid pace in the state. A study of 230 oil and natural gas vendors in West Virginia showed that the industry contributes \$5.8 billion to the state's economy and supports 80,400 jobs (API 2015). Cairo cannot service this growth industry because its vendors avoid the area due to the condition of the bridge, but, with a new bridge, through-traffic could indirectly stimulate investment in the area and serve as a catalyst for redevelopment of vacant buildings and properties in the business district.

4.0 IDENTIFICATION AND DESCRIPTION OF SECTION 4(F) RESOURCES

During the Section 106 consulting process it was determined that Cairo Bridge is not individually eligible for the National Register of Historic Places (NRHP). However, the town of Cairo was also evaluated as part of an architectural survey conducted for the project, and was recommended as eligible for the NRHP under Criterion A (for contributing to broad patterns of American history) and Criterion C (for architecture) as a historic district. The town of Cairo played an important role in the commercial and industrial history of northern West Virginia, particularly its place in the history of oil and gas production and trade in the region. In addition,

the town still contains a largely intact collection of late-nineteenth and early twentieth century structures. The intact structures are relatively evenly distributed throughout the district. The district is cohesive and has had few intrusions over the years with the exception of flooding, which has resulted in the loss of some resources (TRC 2016).

The survey identified two previously recorded, individually eligible resources (the Bank of Cairo and the Cairo Pony Truss Bridge) and 70 contributing resources within the Cairo Historic District including the Cairo Bridge. It was determined that the bridge “contributes to our understanding of the change in the transportation networks in the town at the end of the first quarter of the twentieth century” (TRC 2016). Prior to the construction of the Cairo Bridge in 1925 there was no bridge at this location; the river crossing was located approximately 150 feet upstream. WV 31 (formerly River Road) continued straight, rounded the base of the ridge, and paralleled the river until its crossing at the covered bridge located on MacGregor Street, which was eventually replaced by the Cairo Pony Truss in 1937 (TRC 2016). The NRHP boundary for the Cairo Historic District includes the Cairo Bridge, WV 31 and the original path of River Road, and the original river crossing. Figure 3 shows the NRHP boundary of the Cairo Historic District, which encompasses 277.94 acres.

The West Virginia State Historic Preservation Office (WVSHPO) concurred with the findings of the survey in a letter dated March 1, 2016 (Appendix).

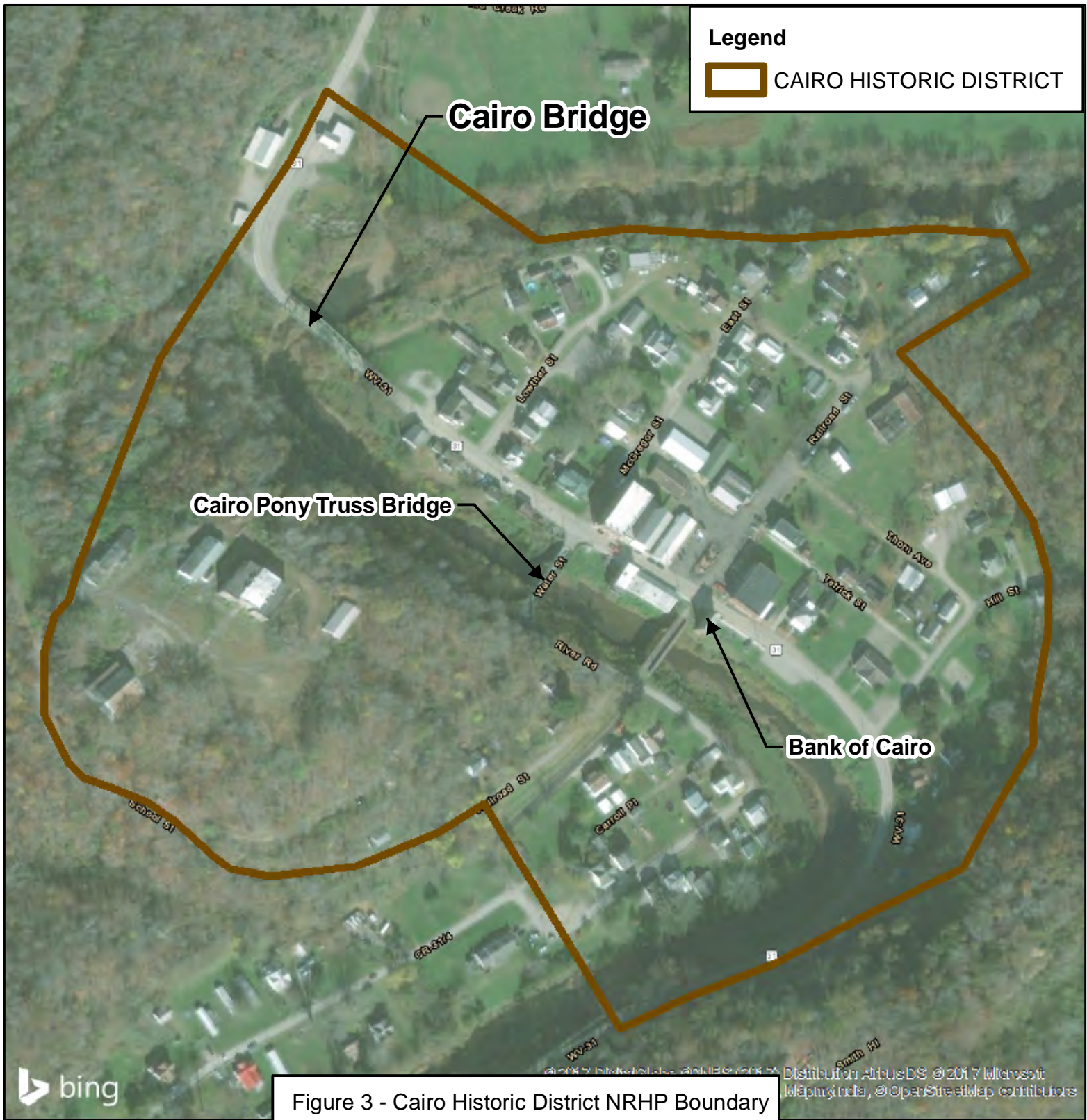
5.0 ALTERNATIVES ANALYSIS

The first step in the Alternatives Analysis is to determine whether there are feasible and prudent alternatives that totally avoid Section 4(f) resources. If none are found, the analysis then considers alternatives that will use Section 4(f) resources and measures to minimize harm to the resources. The final step in the Alternatives Analysis is to determine which alternative, after mitigation, results in the least harm to Section 4(f) resources.

5.1 Avoidance Alternatives

5.1.1 No-Build Alternative

Under the No-Build Alternative, bridge maintenance is continued, but the bridge will continue to deteriorate until closure and complete replacement are unavoidable. It does not provide any



additional lane width, height, or load-bearing capacity and the bridge will remain functionally obsolete. The No-Build Alternative does not meet the purpose and need of the project and is not a feasible and prudent alternative.

5.1.2 Location Alternatives

A new location alternative would re-route the entire project along a different alignment to avoid impacting the Cairo Historic District. To accomplish this, WV 31 would have to be relocated a considerable distance outside the town limits. However, in order to meet the purpose and need of the project, the Cairo Bridge must continue to carry WV 31 traffic over the North Fork Hughes River near its current location. As shown on Figure 3, WV 31 runs through the middle of the Cairo Historic District and therefore there are no other alternatives that would avoid the use of the historic district while still meeting the purpose and need of the project. Relocation of WV 31 away from the community would create a socioeconomic hardship on the residents and businesses of Cairo, increase travel times for all motorists, but especially emergency service vehicles, and induce secondary effects on the surrounding area. A new location alternative does not meet the project's purpose and need and is not a feasible and prudent alternative.

5.1.3 Alternative Actions

An alternative action could be a different mode of transportation, such as rail transit or bus service, or some other action that does not involve construction such as the implementation of transportation systems management (TSM) or similar measures. Preliminary consideration was given to mass transit alternatives. The only public transportation service in the area is provided to persons 65 years of age and older by Ritchie County Integrated Family Services, Inc., primarily for medical appointments. Past transportation research has determined that mass transit alternatives are only relevant in areas with a population of over 200,000 (FHWA 1987), and the current population of Ritchie County is only about 10,000. Other measures such as TSM were considered and were found not to meet the project's purpose. No alternative actions are considered feasible and prudent.

5.1.4 Alignment Shifts

An alignment shift is the rerouting of a portion of the project to a different alignment to avoid a specific resource. Several alignment shift alternatives were developed for this project and are discussed in Section 5.2. However, none of these alternatives avoid the use of the Cairo Historic District.

5.1.5 Design Changes

A design change is a modification of the proposed design in a manner that avoids impacts, such as reducing the planned median width, building a retaining wall, or incorporating design exceptions. There are no feasible and prudent design changes to avoid the use of the Cairo Historic District.

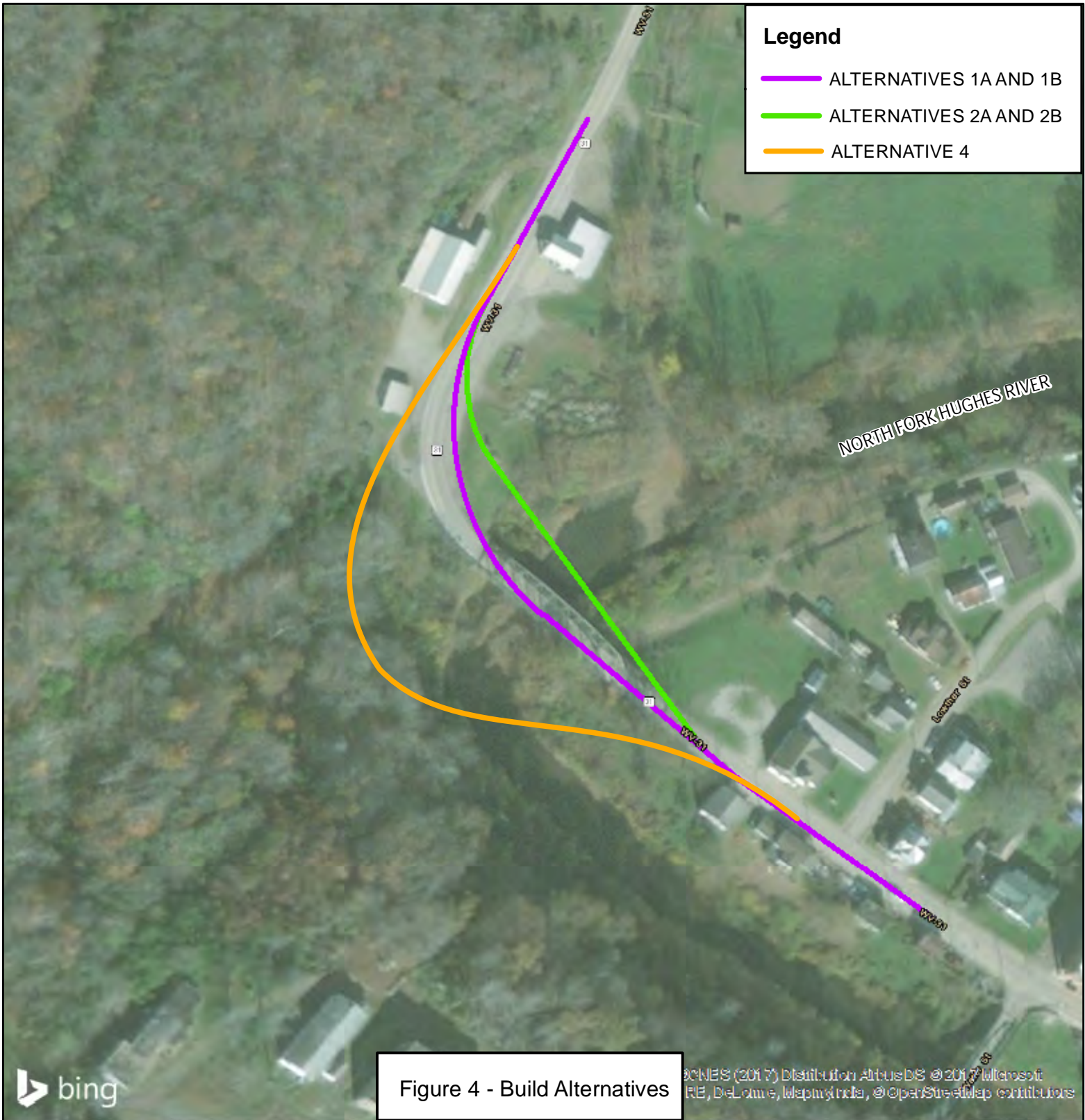
5.2 Other Alternatives Considered

Since no feasible and prudent avoidance alternatives were found for this project a rehabilitation alternative and five build alternatives were considered. The centerlines of the build alternatives are shown on Figure 4.

5.2.1 Single Span Bridge Replacement on Existing Alignment (Alternative 1A)

Alternative 1A is a single span bridge replacement on the existing alignment. It requires a temporary bridge to the upstream to maintain traffic during construction. Once the replacement bridge is open to regular traffic, the temporary bridge will be removed. The cost of this alternative is \$3,472,000 (construction = \$3,362,000; right-of-way = \$110,000).

Alternative 1A removes the Cairo Bridge but it does not displace any other contributing structures of the Cairo Historic District. It permanently uses 0.662 acre of the historic district, however, including parcels containing four other contributing resources (Figure 5). Alternative 1A also results in approximately 0.9 acre of temporary use of the historic district. Alternative 1A meets the purpose and need and was retained for further analysis.



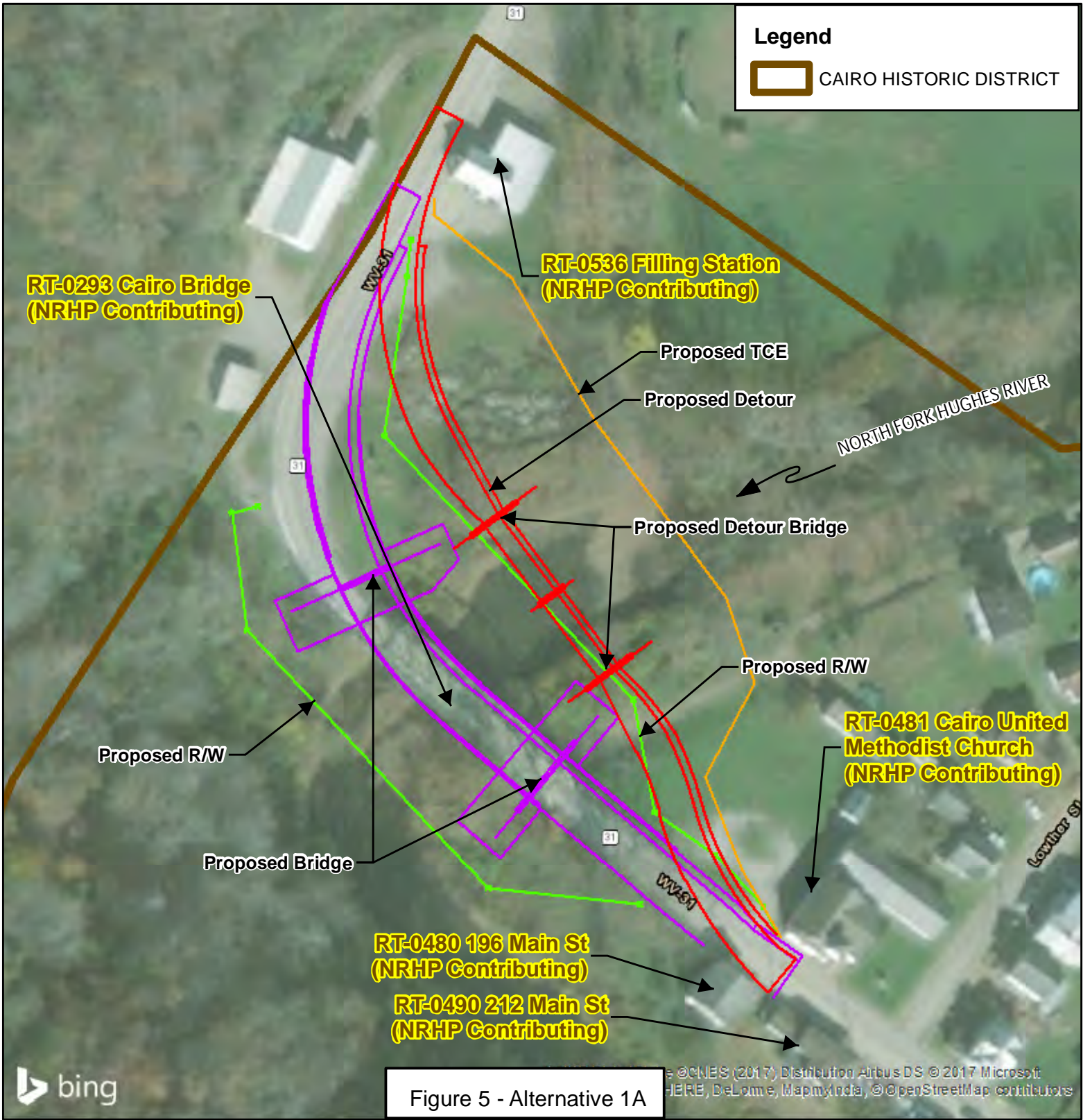


Figure 5 - Alternative 1A

5.2.2 Three Span Bridge Replacement on Existing Alignment (Preferred Alternative 1B)

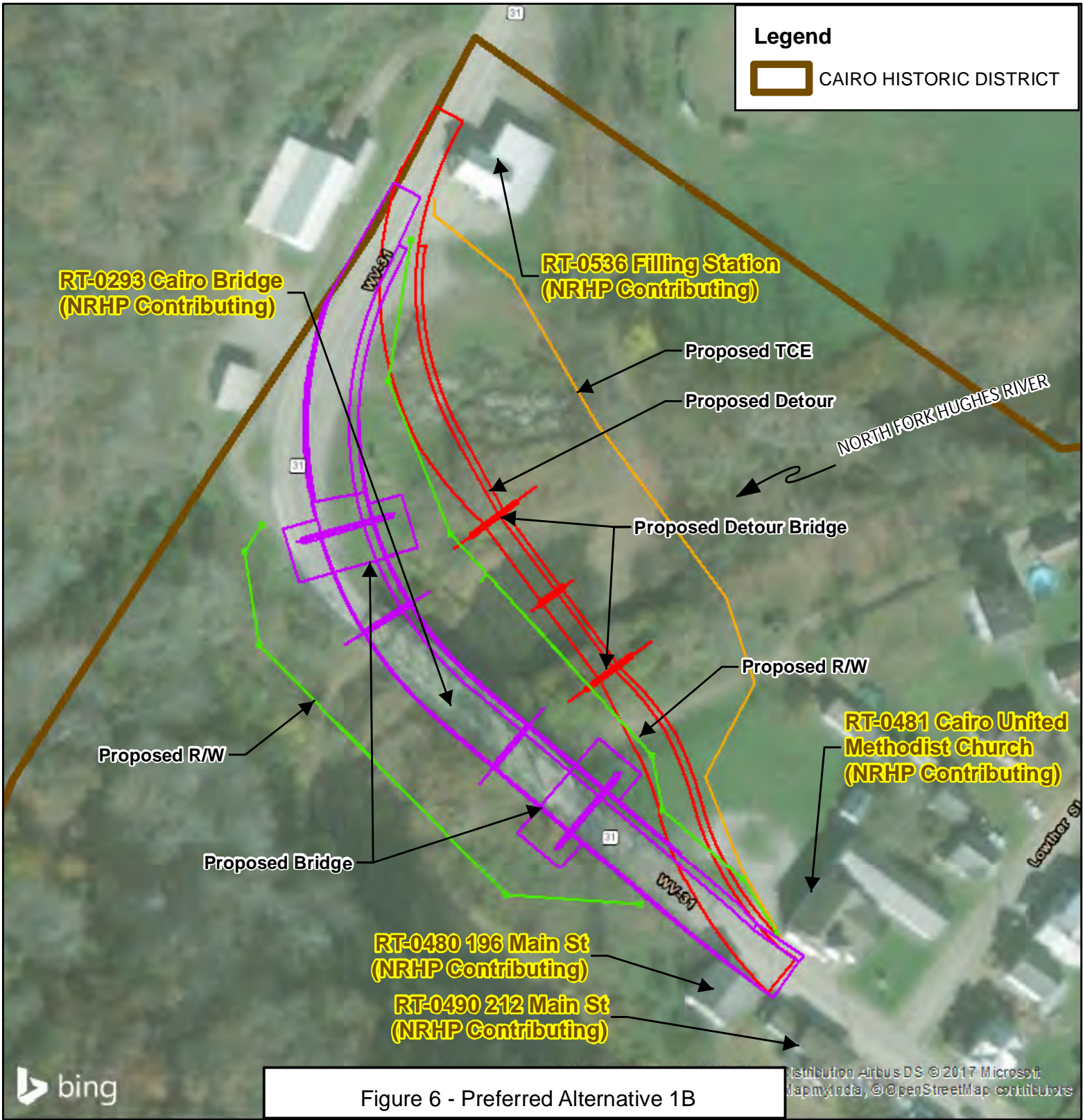
Preferred Alternative 1B involves replacing the existing Cairo Bridge on the same alignment. It will have three equidistant spans of approximately 68 feet and 258 feet in length. During construction, a temporary bridge will be utilized to maintain traffic on WV 31. Once the replacement bridge is open to regular traffic, the temporary bridge will be removed. Alternative 1B will cost \$3,220,000 (construction = \$3,112,000; right-of-way = \$108,000).

Preferred Alternative 1B results in the removal of the NRHP contributing Cairo Bridge and permanently uses 0.622 acre of the Cairo Historic District, including the same four parcels containing contributing resources as Alternative 1A (Figure 6). It does not displace any other contributing structures to the historic district. Preferred Alternative 1B also results in approximately 1.0 acre of temporary use of the historic district. Preferred Alternative 1B meets the purpose and need and was retained for further analysis.

5.2.3 Single Span Bridge Replacement on Upstream Alignment (Alternative 2A)

Alternative 2A is the construction of a new, single-span bridge upstream of the existing location. Traffic will be maintained on the existing bridge during construction. Alternative 2A has an estimated cost of \$2,952,000 (construction = \$2,839,000; right-of-way = \$113,000).

Alternative 2A removes the Cairo Bridge and results in approximately 0.909 acre of permanent use of the Cairo Historic District, but does not displace any other contributing structures to the historic district. It uses the same four contributing parcels as Alternatives 1A and 1B, but uses more of the Cairo United Methodist Church property, a contributing resource to the historic district and a focal point of the community, because it is an alignment shift alternative (Figure 7). In addition, Alternative 2A results in approximately 0.4 acre of temporary use of the historic district. Alternative 2A meets the purpose and need and was retained for further analysis.



Legend

 CAIRO HISTORIC DISTRICT

**RT-0293 Cairo Bridge
(NRHP Contributing)**

**RT-0536 Filling Station
(NRHP Contributing)**

Proposed TCE

Proposed Detour

NORTH FORK HUGHES RIVER

Proposed Detour Bridge

Proposed R/W

Proposed R/W

**RT-0481 Cairo United Methodist Church
(NRHP Contributing)**

Proposed Bridge

**RT-0480 196 Main St
(NRHP Contributing)**

**RT-0490 212 Main St
(NRHP Contributing)**

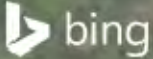
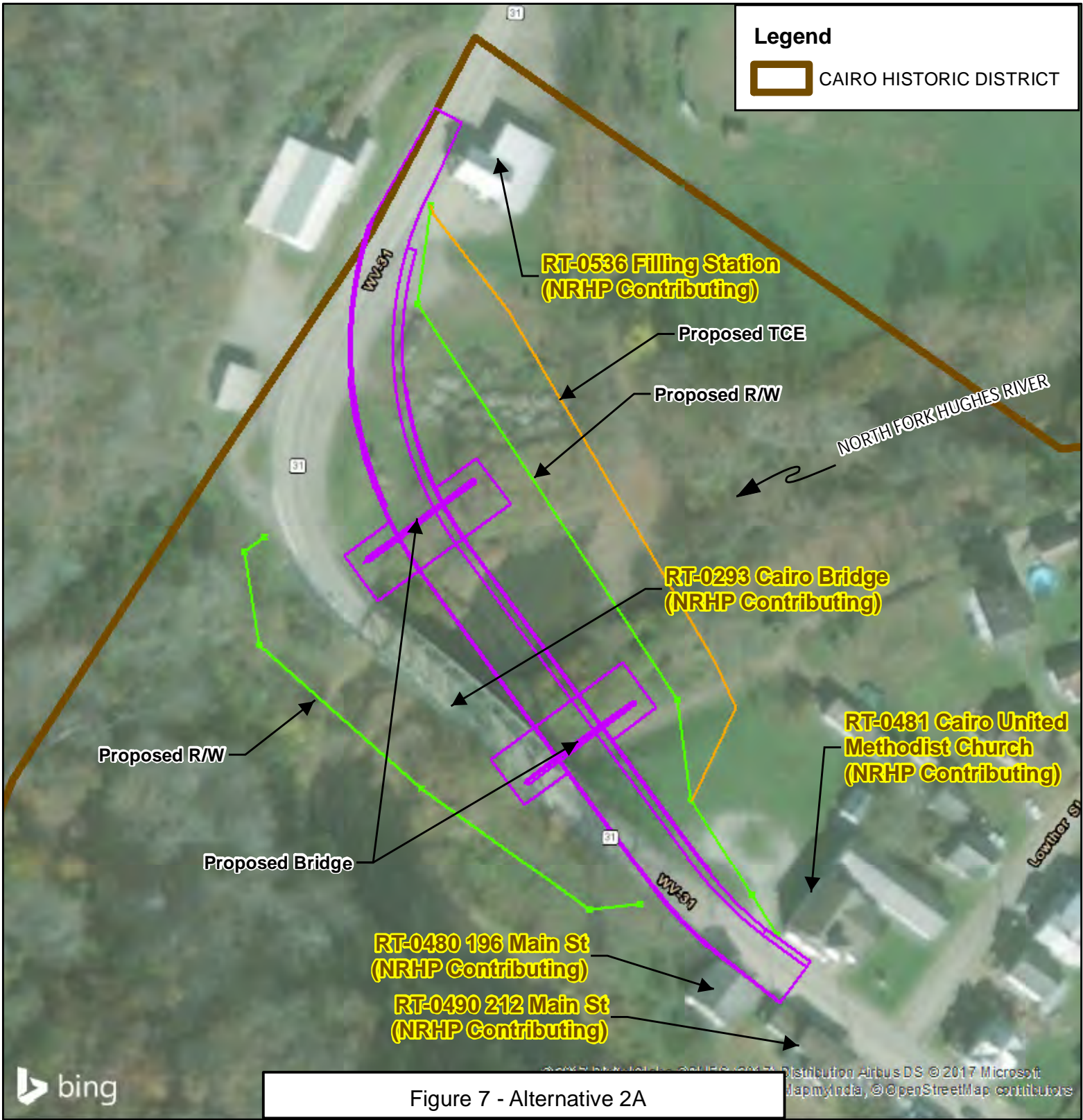


Figure 6 - Preferred Alternative 1B

Distribution Airbus DS © 2017 Microsoft MapmyIndia, © OpenStreetMap contributors



5.2.4 Three Span Bridge Replacement on Upstream Alignment (Alternative 2B)

Alternative 2B consists of constructing a new, three-span bridge upstream of the existing location. Traffic is maintained on the existing bridge during construction. Alternative 2B has an estimated cost of \$2,917,000 (construction = \$2,805,000; right-of-way = \$112,000).

Alternative 2B permanently uses 0.869 acre of land from the historic district, including more of the Cairo United Methodist Church property than Alternatives 1A and 1B, and removes the NRHP contributing Cairo Bridge. Similar to Alternative 2A, Alternative 2B also results in approximately 0.4 acre of temporary use of the historic district (Figure 8). Alternative 2B meets the purpose and need and was retained for further analysis.

5.2.5 Rehabilitation of the Existing Bridge (Alternative 3)

Alternative 3, rehabilitation of the existing bridge, involves the replacement of the stringers and reinforces the concrete deck. Structural repairs will also be made to the corroded steel members and substructure elements would be rehabilitated and re-used. Any concrete contaminated by chloride will also be repaired or replaced. A temporary bridge will be utilized to maintain traffic during construction and will result in 0.557 acre of temporary use of the Cairo Historic District.

Over the lifespan of the bridge, one of the abutments has rotated toward the river, resulting in the expansion bearings at the abutment being backset. This has caused zero clearance at both truss endposts. Horizontal cracks are present in the seat and backwall. Following an inspection of the bridge in 2014, a preliminary plan was developed to rehabilitate the bridge. To strengthen the bridge, the preliminary plan called for the stringers to be replaced and the end floorbeams plated. Visible concrete would be coated for protection. Structural repairs would also be made to the corroded steel members prior to abrasively cleaning and painting of the entire structure. The existing substructures and remaining portions of the existing superstructure would be rehabilitated and re-used. The chloride contaminated concrete of the substructure units would have the chlorides extracted through electrochemical chloride extraction (ECE). ECE removes chloride ions from contaminated concrete and reinstates the passivity of steel reinforcement by temporarily applying an electric field between the reinforcement in the concrete and an externally mounted anode mesh.

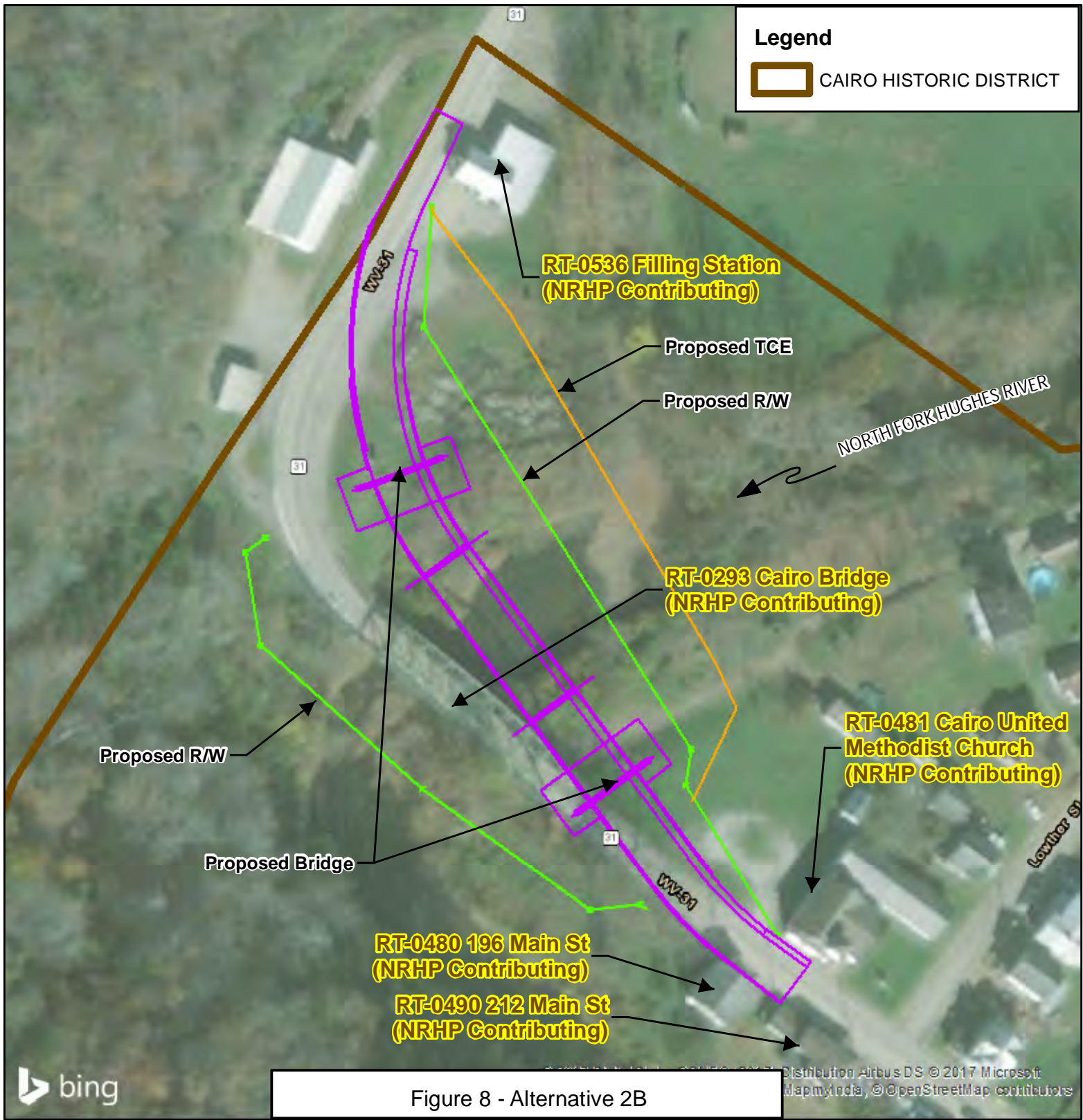


Figure 8 - Alternative 2B

An inspection conducted in October 2016, however, determined that a rehabilitation alternative is no longer feasible. The more recent inspection detected significant distress in the deck, stringers, and lower chord of the truss. The low chord is bowed 3" to the downstream, most likely caused by corrosion of the grid deck bars which is known to exert compressive stress on the bridge as the corrosion expands. Instability of the abutment may also be increasing the compressive stress in the lower chord. This rotation could result in as much as 6" of movement at the cap level. Two abutments may now be rotating as well. As a result, rehabilitation of the bridge is no longer under consideration. The WVDOH concluded that in its present condition rehabilitation of the bridge would be impractical (Burgess & Niple 2017). Also, no additional lane width, height, or load-bearing capacity will result from this alternative so it will not meet the project purpose and need.

5.2.6 Bridge Replacement on Downstream Alignment (Alternative 4)

Alternative 4, construction of a new bridge downstream of the existing location, extends WV 31 approximately 150 feet further to the west before entering a reverse curve to cross the North Fork Hughes River (see Figure 4). The crossing of the North Fork Hughes River at a downstream location requires a skewed structure and longitudinal impacts to the waterway because of a 90 degree bend in the river here. Once across the river, a second reverse curve is necessary to align the roadway with WV 31 through Cairo. The relocated bridge approaches for a downstream alternative require placement of fill material entirely within the floodplain of the North Fork Hughes River. The fill creates an embankment for the extended roadway as it approaches the new bridge.

During the conceptual analysis of this alternative, WVDOH engineers and their consultants determined that any downstream alternative will have impacts above and beyond the upstream alternatives being considered. Based on qualitative, professional engineering judgement, Alternative 4 will cost considerably higher than the other alternatives. The higher costs are expected due to the complicated geometric design necessary to build a new bridge downstream of the bridge's present location. With two reverse curves and a skewed crossing of the North Fork Hughes River, a much longer structure across the river will be needed. By relocating the bridge downstream, longer approaches will need to be built, a small portion of WV 31 will be relocated through undisturbed forestland, and a house (196 Main Street) on WV 31, which is a contributing structure to the Cairo Historic District, will be razed. Although Alternative 4 meets the project purpose and need, it was not fully developed as an alternative because of its high

right-of-way costs, its high construction costs, and its displacement of a residence. However, it has been retained herein for further analysis.

Table 1 includes a summary of impacts for each of the alternatives retained for further analysis for the proposed project.

**TABLE 1
Summary of Section 4(f) Impacts**

Alternative	Permanent Uses	Temporary Uses	Contributing Resources
1A	0.662 ac	0.9 ac	4 parcels, no contributing structures
1B	0.622 ac	1.0 ac	4 parcels, no contributing structures
2A	0.909 ac	0.4 ac	4 parcels, no contributing structures; however, uses more property from the Cairo United Methodist Church than 1A and 1B
2B	0.869 ac	0.4 ac	4 parcels, no contributing structures; however, uses more property from the Cairo United Methodist Church than 1A and 1B
4	Alternative not fully developed	Alternative not fully developed	Use of one contributing structure

5.3 Minimization of Harm

During the project design phase, coordination was conducted with the WVSHPO and the FHWA. The WVDOH has prepared a Memorandum of Agreement (MOA) for this project, in compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (see Appendix). This MOA will be executed by the FHWA and the WVSHPO for the Advisory Council on Historic Preservation (ACHP). It contains the following stipulations to mitigate the adverse effect resulting from the Cairo Bridge Project:

- The Cairo Bridge will be documented in its present historic setting. The documentation package will include 5” x 7” black and white digital prints in accordance with the National Register of Historic Places and National Historic Landmarks Survey Photo Policy Expansion of January 2009.
- A brief history of the structure will be included along with fully completed West Virginia Historic Property Inventory forms and copies of any available plan sheets and drawings of the bridge from the WVDOH bridge files.

- The WVDOH will provide a sum of \$10,000 to the Ritchie County Historic Landmarks Commission who has requested interpretive signs, ornamental railing from the old bridge and preservation work to the Veterans Memorial in Town Square. Funding will be provided once all projects have been identified. Any work completed on historic buildings must comply with the Secretary of Interior's Standards for the Treatment of Historic Properties and must be submitted for review by the WVSHPO prior to commencement of work. Any interpretive material, such as signs and brochures, will be submitted to the WVDOH for review and approval by the WVSHPO and the WVDOH. The Ritchie County Historic Landmarks Commission will provide status reports summarizing progress and financial information in writing or via email to the WVDOH every six (6) months.
- 500 color brochures of the Cairo Bridge will be developed by the WVDOH and distributed to the Town of Cairo and the Ritchie County Historic Landmarks Commission. The WVSHPO will be given the opportunity to review all educational materials developed for this stipulation. A CD containing the brochure will also be given to the Town and Landmarks Commission to print brochures when the original total has been exhausted.
- The Cairo Bridge will be documented on the West Virginia historic bridge website: Highways Through History (<http://www.highwaysthroughhistory.com>).

To lessen the temporary impact to the Cairo Historic District, the WVDOH will utilize a signal-controlled, one-lane temporary bridge instead of a full two lanes. A one-lane temporary bridge will minimize any impacts on the district caused by the temporary structure and limit the restoration footprint after it is removed. If necessary, property owned by the Town of Cairo along the banks of the North Fork Hughes River that was impacted by the temporary bridge will be enhanced. In addition, minor, temporary construction easement and staging areas will be required adjacent to WV 31 and the existing Cairo Bridge. All construction staging areas and temporary work areas, regardless of their location, will be restored to their original condition. The parking lot and adjoining property of the Cairo United Methodist Church will be re-graded and restored.

5.4 Least Overall Harm Analysis

Pursuant to 23 CFR 774.3(c) and the FHWA's 2012 Section 4(f) Policy Paper, if the avoidance analysis determines that there is no feasible and prudent avoidance alternative, then only the alternative that causes the least overall harm to Section 4(f) property may be approved. As demonstrated in Section 5.1, there is no feasible and prudent avoidance alternative; therefore, each of the alternatives that were carried on for further analysis was evaluated to determine which alternative causes the least overall harm to Section 4(f) property. To determine which of

the alternatives causes the least overall harm, a comparison must be made among seven factors set forth in 23 CFR 774.3(c)(1) concerning the alternatives under consideration. The first four factors relate to the net harm that each alternative will cause to Section 4(f) property. The four factors are:

- 1) The ability to mitigate adverse effects to each Section 4(f) property (including any measures that result in benefits to the property).
- 2) The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection.
- 3) The relative significance of each Section 4(f) property.
- 4) The views of the official with jurisdiction over each Section 4(f) property.

When comparing the alternatives under these factors, FHWA policy is to develop comparable mitigation measures where possible. In other words, the comparison may not be skewed by over-mitigating one alternative while under-mitigating another alternative for which comparable mitigation could be incorporated. In addition, the mitigation measures relied upon as part of this comparison should be incorporated into the selected alternative. If subsequent design or engineering work occurs after the alternative is selected that requires changes to the mitigation plans for Section 4(f) property, the FHWA may require revisions to previous mitigation commitments commensurate with the extent of design changes in accordance with 23 CFR 771.109(b) and (d), 127(b), 129, and 130.

The remaining three factors enable the FHWA to take into account any substantial problem with any of the alternatives remaining under consideration on issues beyond Section 4(f). These factors are:

- 5) The degree to which each alternative meets the purpose and need for the project.
- 6) After reasonable mitigation, the magnitude of any adverse effects to resources protected by Section 4(f).
- 7) Substantial differences in costs among the alternatives.

By balancing the seven factors, four of which concern the degree of harm to Section 4(f) properties, the FHWA will be able to consider all relevant concerns to determine which alternative will cause the least overall harm in light of the statute's preservation purpose. The

least overall harm balancing test is set forth in 774.3(c)(1). This allows the FHWA to fulfill its statutory mandate to make project decisions in the best overall public interest required by 23 U.S.C. 109(h). Through this balancing of factors, the FHWA may determine that a serious problem identified in factors (5) through (7) outweighs relatively minor net harm to a Section 4(f) property. The least overall harm determination also provides FHWA with a way to compare and select between alternatives that will use different types of Section 4(f) properties when competing assessments of significance and harm are provided by the official(s) with jurisdiction over the impacted properties.

In evaluating the degree of harm to Section 4(f) properties, the FHWA is required by the regulations to consider the views (if any) expressed by the official(s) with jurisdiction over each Section 4(f) property. If an official with jurisdiction states that all resources within that official's jurisdiction are of equal value, the FHWA may still determine that the resources have different value if such a determination is supported by information in the project file. Also, if the official(s) with jurisdiction over two different properties provide conflicting assessments of the relative value of those properties, the FHWA should consider the officials' views but then make its own independent judgment about the relative value of those properties. Similarly, if the official(s) with jurisdiction decline to provide any input at all regarding the relative value of the affected properties, the FHWA should make its own independent judgment about the relative value of those properties.

1) Ability to Mitigate Adverse Impacts to Each Section 4(f) Property

As previously identified, the Cairo Bridge, a contributing resource to the NRHP-eligible Cairo Historic District, will be eventually removed by whichever project alternative is chosen for construction, except for Alternative 3, which was determined to not meet the purpose and need of the project since it will not add lane width, height, or load-bearing capacity. In addition, all of the alternatives result in minor, sliver takes to contributing properties within the district (see Figures 5, 6, 7 and 8). Alternatives 2A and 2B result in more permanent impacts to the Cairo United Methodist Church (a contributing resource and focal point of the community) since they are alignment shift alternatives. Alternative 4 would result in the use of a contributing structure (196 Main Street) within the historic district, the only alternative to require the use of a contributing resource. All of the build alternatives constitute a Section 4(f) use. Mitigation measures are detailed in Section 5.3 and in the MOA (see Appendix) developed by the WVDOH and WVSHPO. No additional mitigation will benefit the district.

2) Relative Severity of the Remaining Harm After Mitigation

The Cairo Historic District meets Criteria A and C as noted in Section 4.0. The district contains two previously recorded, individually eligible resources (the Bank of Cairo and the Cairo Pony Truss Bridge) and 70 contributing resources within the Cairo Historic District including the Cairo Bridge. Other than the MOA (see Appendix) between the WVDOH and WVSHPO and the mitigation measures detailed in Section 5.3, no additional mitigation will benefit the district.

3) Relative Significance of Each Section 4(f) Property

Referring to historic districts, FHWA Section 4(f) regulations are applicable to those components that are considered to be contributing components of the district. However, within a historic district there may be components that have a higher “status” than contributing elements including those that are individually eligible or components that have been designated as National Historic Landmarks. No National Historic Landmarks are located within the Cairo Historic District; however, there are two individually eligible resources within the historic district (the Bank of Cairo and the Cairo Pony Truss Bridge) and 70 contributing resources including the Cairo Bridge. The Bank of Cairo and the Cairo Pony Truss Bridge will not be used by any project alternative. The Cairo United Methodist Church is a contributing resource to the district and is considered a focal point of the community. More property will be permanently used from it by the two alignment shift alternatives, Alternatives 2A and 2B.

4) Views of Officials with Jurisdiction over Each Section 4(f) Property

The WVSHPO has agreed that the project will have an adverse effect on the Cairo Historic District (including the Cairo Bridge) in a letter to the WVDOH dated February 7, 2017 (Appendix). The WVSHPO has also signed the MOA for the project on June 1, 2017 (see Appendix).

5) The Degree Each Alternative Meets the Purpose and Need of the Project

It was determined that all of the build alternatives equally meet the project purpose and need to assure safe and efficient transportation access; assure adequate emergency response times for ambulance, police, and fire services; and, support economic development. Alternative 3 does

not meet the project purpose and need since it will not add lane width, height, or load-bearing capacity.

6) After Reasonable Mitigation, the Magnitude of Any Adverse Impacts to Resources Not Protected by Section 4(f)

There are no substantial differences among the build alternatives in environmental or socioeconomic impacts. Alternative 4 requires the displacement of a residence while no other alternative requires any displacements. Alternative 3 does not meet the project purpose and need.

7) Substantial Difference in Cost Among Alternatives

There are no substantial cost differences among the alternatives, ranging from a low of \$2,917,000 (Alternative 2B) to a high of \$3,472,000 (Alternative 1A). A cost for Alternative 4 was not developed, but it is anticipated to cost considerably more than the other alternatives. The higher costs are expected due to the complicated geometric design necessary to build a new bridge downstream of the bridge's present location. Alternative 3 does not meet the project's purpose and need.

5.5 Least Overall Harm Analysis Conclusion

All of build alternatives (Alternatives 1A, 1B, 2A, 2B, and 4) studied for this project result in the use of one Section 4(f) resource, the Cairo Historic District (see Table 1). Each alternative meets the project purpose and need. Of all of the alternatives considered Alternative 4 will cost considerably more to construct (see section 5.2.6). Mitigation measures for the use of the Cairo Historic District are the same for each alternative. Since all temporarily impacted areas will be restored to their pre-existing conditions, temporary impacts are considered negligible for this project.

Alternatives 1A, 1B, 2A, and 2B remove the Cairo Bridge and use property from four other contributing resources, but do not displace any other contributing structures. The house to be used by Alternative 4 is a contributing structure to the Cairo Historic District. The demolition will constitute the only use of a contributing element of the historic district. While other alternatives also use property within the district, Alternative 4 is the only alternative that would require

anything other than a sliver take. Alternatives 2A and 2B result in more permanent impacts to the Cairo United Methodist Church (a contributing resource and focal point of the community) than Alternatives 1A and 1B.

Alternative 1B results in slightly less permanent use of property from the historic district than any of the build alternatives (see Table 1). It appears to be the least overall harm alternative and is the preferred alternative for the project. Specifically, Alternative 1B:

- Takes the distressed existing bridge out of service earlier in the project schedule;
- Is the most feasible to erect; and
- Minimizes permanent right-of-way impacts.

6.0 CONSTRUCTIVE USE

A constructive use occurs when proximity impacts of the project are so great that the characteristics that qualify the resource as a Section 4(f) property are substantially impaired. No proximity (visual) impacts associated with the build alternatives, including the preferred alternative (Alternative 1B), have been identified for the Cairo Historic District. The characteristics that qualify the Cairo Historic District as a Section 4(f) resource will not be substantially impaired by visual impacts for the preferred alternative or for any of the build alternatives.

Guidance provided in the FHWA's 2012 Section 4(f) Policy Paper indicates that the "change" in the viewshed of the historic district will not rise to the level of constructive use. Since the viewshed of the Cairo Historic District currently includes the bridge, the replacement of the existing bridge with a new structure (adjacent to the existing bridge) does not alter the historic district's viewshed to the degree that it changes the significance of the other contributing elements. It is unlikely, with the minimization measures noted in Section 5.3, that the new bridge would substantially impair the attributes which qualify the Cairo Historic District to be eligible for the National Register. The Cairo Historic District would continue to retain its historic setting and features.

7.0 ALL POSSIBLE PLANNING TO MINIMIZE HARM

All possible planning, as defined in 23 CFR 774.17, includes all reasonable measures identified in the Section 4(f) Evaluation to minimize harm and mitigate for adverse impacts and effects.

The existing bridge was not marketed for re-use due to the extent of deterioration. Preferred Alternative 1B minimizes harm to Section 4(f) resources by incorporating measures into the project (see MOA in Appendix) that minimize the impact on and the use of the resource.

The assessment of the avoidance alternatives (see Section 5.1) determined that there are no alignment shifts (i.e., design shifts) that will avoid or minimize the Section 4(f) use of the historic district. After evaluation of project alternatives, the Least Harm Analysis and assessment of Constructive Use, it is concluded that there are no feasible and prudent alternatives that avoid Section 4(f) use.

8.0 COORDINATION

A public informational meeting was held on December 5, 2016, at the Cairo Community Center. The meeting was held to present current information on the project, answer questions from the public, and listen to ideas or concerns from community residents and businesses. The meeting complied with the public involvement requirements of the *National Environmental Policy Act* and Section 106 of the *National Historic Preservation Act*.

Approximately 30 people attended the public informational meeting. At the meeting, the WVDOH showed the public five potential alternatives for replacing the bridge and provided other supporting documentation for the project. All information presented at the meeting was also available online at the WVDOH project website (<http://go.wv.gov/dotcomment>).

The citizens who voiced an opinion at the public informational meeting expressed support for the project to the WVDOH staff present. Written comments were provided by eight people, all expressing support for the replacement of the Cairo Bridge.



The West Virginia Division of Culture and History has been consulted with concerning the eligibility of the Cairo Historic District and its contributing resources as well as the effects of the project on the historic district and has concurred with the eligibility and effects determinations (see Appendix). The WVDOH has also contacted the Preservation Alliance of West Virginia, the Town of Cairo, the Ritchie County Historical Society, and the Ritchie County Historical Museum Association to solicit input on the project. The WVSHPO, the Town of Cairo, and Ritchie County Historic Landmarks Commission have all signed the MOA for the project.

9.0 REFERENCES

American Petroleum Industry (API). 2015. *Energizing West Virginia*. Washington, District of Columbia.

Burgess & Niple. 2017. *Cairo Bridge Final Design Study Report*. Revised January 9, 2017. Parkersburg, West Virginia.

Federal Highway Administration. July 20, 2012. Section 4(f) Policy Paper. Washington, District of Columbia.

National Fire Protection Association (NFPA). 2016. *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*. Quincy, Massachusetts.

TRC Environmental Corp. (TRC). 2016. *Cairo Bridge Replacement Project Architectural Survey and National Register Evaluation*. Lanham, Maryland.

West Virginia Division of Tourism. 2012. *West Virginia Ten Year Tourism Plan*. Charleston, West Virginia.

10.0 LIST OF PREPARERS

Amy L. Pinizzotto

B.A. Political Science/Sociology
19 years of experience

Bradley S. Reese

B.A. Urban Planning
14 years of experience

Joseph C. Romano, AICP

M.A. Geography
B.S. Regional Planning
42 years of experience

APPENDIX



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Earl Ray Tomblin
Governor

Paul A. Mattox, Jr., P. E.
Secretary of Transportation/
Commissioner of Highways

September 1, 2015

Ms. Susan Pierce, Deputy State
Historic Preservation Officer
Division of Culture and History
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305-0430

Dear Ms. Pierce:

State Project: S243-31-9.82
Federal Project: BR-0031-038(D)
Phase I Archaeological Survey
Cairo Bridge Replacement
Ritchie County, West Virginia

Enclosed for your review is the Phase I Archaeological Survey for the Cairo Bridge Replacement project, Ritchie County, West Virginia.

The Phase I Archaeological Survey was conducted to determine the effects of the proposed 2.8 acre proposed bridge replacement project. A total of 28 shovel test pits were excavated resulting in one previously unrecorded historic site (46RT142). Site 46RT142 is considered to have poor research value and is recommended as ineligible for inclusion on the National Register of Historic Places (NRHP). No prehistoric cultural material was recovered. No further investigation of the project area is recommended.

This report was reviewed by archaeologist Ms. Rachel Crawford.

Should you have any questions, please contact Rachel Crawford at (304) 558-9674.

Very truly yours,

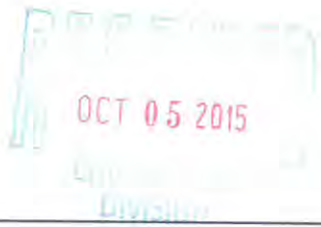
A handwritten signature in blue ink that reads "Ben L. Hark".

Ben L. Hark
Environmental Section Head
Engineering Division

BH:h

Attachments

bcc: DDE



The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

EEO/AA Employer

September 30, 2015

Mr. Ben Hark
Environmental Section Head
WV Division of Highways
1334 Smith Street
Charleston, WV 25301

RE: Cairo Bridge Replacement
State Project S243-31-9.82; Federal Project BR-0031-038(D)
FR#: 15-986-RT

Dear Mr. Hark;

We have reviewed the Phase I archaeological survey report that was submitted for the above referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to submitted information, the WV Division of Highways proposes to replace the existing Cairo Bridge, which carries State Route 31 over the North Fork of the Hughes River in Cairo, Ritchie County, WV, with a new bridge in the same location. It is our understanding that the proposed project area consists of 2.8 acres of land located on the western and eastern banks of the river

Architectural Resources:

The submitted project materials do not address the proposed project's potential to affect architectural historic resources. We will provide comment upon receipt of that information.

Archeological Resources:

According to the archaeological report, the proposed project area was divided into two survey areas. Survey Area 1 is located on the eastern bank of the river, while Survey Area 2 is on the western bank. Archaeological investigation of the project area included pedestrian reconnaissance and shovel probe excavation. Although portions of the project area were determined to be previously disturbed, one new archaeological site, 46RT142, was discovered. The site consists of a scatter of historic period and modern refuse and is located on the western and eastern banks of the river. It is our understanding that all of the historic artifacts were recovered from fill and alluvial deposits and intermixed with modern debris. Although the artifacts may be associated with historic use of the area, the site lacks integrity. As a result, we concur that site 46RT142 is not eligible for inclusion in the National Register of Historic Places and that no further archaeological investigations are necessary for the proposed project as currently designed.

We appreciate the opportunity to be of service. *If you have any questions regarding our comments or the Section 106 process, please contact Lora A Lamarre-DeMott, Senior Archaeologist, at 304-558-0240.*

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Office

SMP/LLD



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Earl Ray Tomblin
Governor

Paul A. Mattox, Jr., P. E.
Secretary of Transportation/
Commissioner of Highways

February 8, 2016

Ms. Susan Pierce, Deputy State
Historic Preservation Officer
Division of Culture and History
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305

Dear Ms. Pierce:

State Project S243-31-9.82
Federal Project BR-0031-038(D)
Cairo Bridge Replacement Project
Ritchie County

Enclosed for your review is the Architectural Survey and National Register Evaluation Report for the Cairo Bridge Replacement Project. Included in this report are maps of the project area, photographs, and detailed information of historic resources. The project consists of replacing the existing bridge located on West Virginia State Route 31 over the North Fork of the Hughes River in Cairo, West Virginia.

If you have any questions please you may contact Sondra Mullins of our Environmental Section by writing to the above address, by calling (304)558-9487, or via e-mail at Sondra.L.Mullins@wv.gov.

Yours very truly,

A handwritten signature in blue ink that reads "Ben L. Hark".

Ben L. Hark
Environmental Section Head
Engineering Division

H:h
Attachments
Bcc: DDE(SM)



The Culture Center
1900 Kanawha Blvd., E.
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Randall Reid-Smith, Commissioner

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EEO/AA Employer

March 1, 2016

Mr. Ben L. Hark
Environmental Section Head
Engineering Division
West Virginia Division of Highways
1334 Smith Street
Charleston, West Virginia 25305

RE: Cairo Bridge Replacement; Cairo, Ritchie County, West Virginia
State Project #: S243-31-9.82
Federal Project #: BR-0031-038(D)
FR#: 15-986-RT-1

Dear Mr. Hark:

We have reviewed the report titled *Architectural Survey and National Register Evaluation, Cairo Bridge Replacement Project, Ritchie County, West Virginia* that was submitted for the above-referenced project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to submitted information, the West Virginia Division of Highways proposes to replace the existing Cairo Bridge—which carries State Route 31 over the North Fork of the Hughes River in Cairo, Ritchie County, West Virginia—with a new bridge in the same location. It is our understanding that the proposed project area consists of 2.8 acres of land located on the western and eastern banks of the river.

Architectural and Bridge Resources:

Thank you for the survey and evaluation report. Between July and October 2015, TRC Environmental Corp (TRC) surveyed architectural and bridge resources located within and surrounding the City of Cairo, Ritchie County, West Virginia, and considered their eligibility for the National Register of Historic Places as an historic district. TRC's report identified fourteen (14) previously surveyed properties and identified an additional sixty-three (63) resources within the boundaries of the potential historic district.

Two individually properties eligible for or included in the National Register are located within the district: the Bank of Cairo (RT-0048) was included in the National Register in 1996, and the 2015 West Virginia Statewide Bridge Survey conducted by KCI and Mead & Hunt determined the Cairo Pony Truss Bridge (RT-0292) as individually eligible for listing in the National Register under Criterion C.

March 1, 2016

Mr. Hark

15-986-RT-1

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Of the remaining seventy-five (75) resources, TRC identified one (1), RT-0052, as having been demolished. TRC also recommended six (6) as neither individually eligible nor contributing to the historic district (RT-0486, RT-0496, RT-0535, RT-0537, RT-0539, and RT-0542). TRC recommended the remaining sixty-eight (68) resources as contributing to the Cairo Historic District, including the Cairo Bridge (RT-0293). Finally, TRC recommended the Cairo Historic District as eligible for inclusion in the National Register under Criteria A and C.

After reviewing the submitted survey report we have determined that the Bank of Cairo (RT-0048) is listed on the National Register. We concur with KCI and Mead & Hunt's determination that the Cairo Pony Truss Bridge is eligible for inclusion in the National Register under Criterion C. We acknowledge that the property previously identified as RT-0052 has been demolished, and concur with TRC's recommendation that the properties identified with site numbers RT-0486, RT-0496, RT-0535, RT-0537, RT-0539, and RT-0542 are neither individually eligible for inclusion in the National Register nor are they contributing elements within the potential historic district. We concur with TRC's recommendations that the remaining sixty-eight (68) resources are contributing to the potential Cairo Historic District except for the following four (4) resources, which in our opinion are neither individually eligible for the National Register nor are they contributing to the potential historic district: RT-0494, RT-0507, RT-0508 and RT-0519. Finally, we concur with TRC's recommendation that the Cairo Bridge (RT-0293) is a contributing element within the potential Cairo Historic District, and that said district is eligible for inclusion in the National Register of Historic Places under Criteria A and C. Please see the attached *Table 1. Individual Resources within the Cairo Historic District with West Virginia SHPO Determinations of Eligibility*, which lists our specific determinations for each resource.

In accordance with 36 CFR § 800.5, we request your office assess the effects of the proposed project on the Cairo Historic District. We will provide additional comments upon receipt of the requested information.

Public Comments:

We note that your office sent letters about the proposed project to Preservation Alliance of West Virginia, the Town of Cairo, the Ritchie County Historical Society, and the Ritchie County Historical Museum Association on September 28, 2015. We request you also provide the same information to David Scott, Chairman of the Ritchie County Historic Landmark Commission, at the following address:

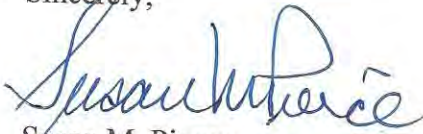
David M. Scott, Chairman
Ritchie County Historic Landmark Commission
115 East Main Street, Room 201
Harrisville, West Virginia 26362

We understand that copies of any further correspondence or comments will be sent to our office.

March 1, 2016
Mr. Hark
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We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Mitchell K. Schaefer, Structural Historian, at (304) 558-0240.*

Sincerely,



Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/MKS

CC: David M. Scott, Chairman
Ritchie County Historic Landmark Commission
115 East Main Street, Room 201
Harrisville, West Virginia 26362

**Table 1. Individual Resources within the Cairo Historic District
with West Virginia SHPO Determination of Eligibility**

Site Number	Property	Location/Address	Date	Previous Determination (Year)	TRC Determination (2016)	WV SHPO Determination (2016)
—	Cairo Historic District	Main, Lowther, MacGregor, Railroad, Tetrick, and Carroll Streets	1856-1940	—	Eligible under Criteria A and C	Eligible
<i>Previously Surveyed Properties</i>						
RT-0041	R.C. Marshall Hardware	273 Main Street	1902	Not Evaluated	Contributing	Contributing
RT-0042	Cairo Theatre	281 Main Street	Ca. 1920	Not Evaluated	Contributing	Contributing
RT-0043	IOOF Hall (Town Hall)	285 Main Street	1890	Not Evaluated	Contributing	Contributing
RT-0044	Cairo Mercantile Company	Railroad Street	Ca. 1890	Not Evaluated	Contributing	Contributing
RT-0045	Ramsey's Mercantile	286 Main Street	1917	Not Evaluated	Contributing	Contributing
RT-0046	Village Inn Restaurant and Gallery	296 Main Street	Ca. 1920	Not Evaluated	Contributing	Contributing
RT-0047	B&O Railroad Bridge	Railroad Street	Ca. 1940	Not Evaluated	Contributing	Contributing
RT-0048	Bank of Cairo	Main Street	1896	Listed in NRHP (1996)	Listed; Contributing	Listed; Contributing
RT-0049	Haddox Block	233 Railroad Street	1913	Not Evaluated	Contributing	Contributing
RT-0050	Commercial Building	172 Railroad Street	Ca. 1915	Not Evaluated	Contributing	Contributing
RT-0051	Cairo Supply Company	37422 Railroad Street	Ca. 1910	Not Evaluated	Contributing	Contributing
RT-0052		Main Street	No Date	Not Evaluated	Contributing	Contributing
RT-0292	Cairo Pony Truss Bridge	McGregor and Water Streets (39.208620 N, 81.157417 W)	1937	Individually Eligible, Criterion C (2013)	Individually Eligible under Criterion C; Contributing	Individually Eligible under Criterion C; Contributing
RT-0293	Cairo Bridge	Main Street (39.209844 N, 81.158983 W)	1925	Not Individually Eligible under Criterion C (2011)	Not Individually Eligible; Contributing	Not Individually Eligible; Contributing
<i>Additional Properties Surveyed by ACP (2016)</i>						
RT-0480	House	196 Main Street	Ca. 1900	—	Contributing	Contributing
RT-0481	Cairo United Methodist Church	150 Main Street	1870	—	Contributing	Contributing
RT-0482	House	41 Lowther Street	Ca. 1890	—	Contributing	Contributing
RT-0483	House	53 Lowther Street	Ca. 1930	—	Contributing	Contributing
RT-0484	House	119 Lowther Street	Ca. 1920	—	Contributing	Contributing
RT-0485	House	Lowther Street	Ca. 1900	—	Contributing	Contributing
RT-0486	House	244 Railroad Street	Ca. 1920	—	Contributing	Contributing
RT-0487	House	26 Lowther Street	Ca. 1890	—	Not Eligible; Non-Contributing	Not Eligible; Non-Contributing
RT-0488	House	18 Lowther Street	Ca. 1890	—	Contributing	Contributing
RT-0489	House	Corner of Main and Lowther Streets	Ca. 1910	—	Contributing	Contributing
RT-0490	House	212 Main Street	Ca. 1900	—	Contributing	Contributing
RT-0491	House	Main Street	Ca. 1900	—	Contributing	Contributing
RT-0492	House	Main Street	Ca. 1920	—	Contributing	Contributing
RT-0493	House	253 Main Street	Ca. 1890	—	Contributing	Contributing
RT-0494	House	Main Street	Ca. 1920	—	Contributing	Contributing
RT-0495	House	45 McGregor Street	Ca. 1890	—	Contributing	Not Eligible; Non-Contributing
RT-0496	McCullough-Raiguel Funeral Home	McGregor Street	Ca. 1890	—	Contributing	Contributing
RT-0497	House	95 McGregor Street	Ca. 1890	—	Not Eligible; Non-Contributing	Not Eligible; Non-Contributing
RT-0498	House	109 McGregor Street	Ca. 1890	—	Contributing	Contributing
RT-0499	House	121 McGregor Street	Ca. 1880	—	Contributing	Contributing
RT-0500	House	37322 East Street	Ca. 1910	—	Contributing	Contributing
RT-0501	J. B. Hill House	82 McGregor Street	Ca. 1880	—	Contributing	Contributing
RT-0502	House	74 McGregor Street	Ca. 1890	—	Contributing	Contributing
RT-0503	House	62 McGregor Street	Ca. 1900	—	Contributing	Contributing
RT-0504	House	Railroad Street	Ca. 1880	—	Contributing	Contributing
RT-0505	House	233 Railroad Street	Ca. 1910	—	Contributing	Contributing
RT-0506	House	243 Railroad Street	Ca. 1910	—	Contributing	Contributing
RT-0507	Railroad Warehouse	Railroad Street	Ca. 1920	—	Contributing	Contributing
RT-0508	Cairo Oil Well Supply Company Office	Railroad Street	Ca. 1890	—	Contributing	Not Eligible; Non-Contributing
RT-0509	House	Tetrick Street	Ca. 1900	—	Contributing	Not Eligible; Non-Contributing
RT-0510	House	32 Tetrick Street	Ca. 1910	—	Contributing	Contributing

Table 1
FR#: 15-986-RT-1
Page 2 of 2

RT-0511	House	Tetrick Street	Ca. 1900	—	Contributing	Contributing
RT-0512	House	Corner of Tetrick and Hill Street	Ca. 1890	—	Contributing	Contributing
RT-0513	House	7 Thorn Avenue	Ca. 1910	—	Contributing	Contributing
RT-0514	House	96 Hill Street	Ca. 1920	—	Contributing	Contributing
RT-0515	House	Main Street	Ca. 1910	—	Contributing	Contributing
RT-0516	House	417 Main Street	Ca. 1900	—	Contributing	Contributing
RT-0517	House	423 Main Street	Ca. 1890	—	Contributing	Contributing
RT-0518	House	353 Main Street	Ca. 1940	—	Contributing	Contributing
RT-0519	House	Main Street	Ca. 1900	—	Contributing	Not Eligible; Non-Contributing
RT-0520	House	35 Railroad Street	Ca. 1890	—	Contributing	Contributing
RT-0521	House	150 Railroad Street	Ca. 1890	—	Contributing	Contributing
RT-0522	House	19 Railroad Street	Ca. 1890	—	Contributing	Contributing
RT-0523	House	129 Railroad Street	Ca. 1890	—	Contributing	Contributing
RT-0524	House	8 Carroll Street	Ca. 1890	—	Contributing	Contributing
RT-0525	House	22 Carroll Street	Ca. 1900	—	Contributing	Contributing
RT-0526	House	54 Carroll Street	Ca. 1920	—	Contributing	Contributing
RT-0527	House	64 Carroll Street	Ca. 1890	—	Contributing	Contributing
RT-0528	House	Carroll Street	Ca. 1880	—	Contributing	Contributing
RT-0529	House	43 Carroll Street	Ca. 1890	—	Contributing	Contributing
RT-0530	House	23 Carroll Street	Ca. 1890	—	Contributing	Contributing
RT-0531	House	7 Carroll Street	Ca. 1890	—	Contributing	Contributing
RT-0532	Cairo High School	School Hill Road	1913	—	Contributing	Contributing
RT-0533	House	Water Street/School Hill Road	Ca. 1900	—	Contributing	Contributing
RT-0534	Outbuilding	Alley off Carroll Street	Ca. 1890	—	Contributing	Contributing
RT-0535	Town Water Treatment Plant	At the end of Lowther Street	1963	—	Not Eligible; Non-Contributing	Not Eligible; Non-Contributing
RT-0536	Filling Station	59 Main Street	Ca. 1930	—	Contributing	Contributing
RT-0537	Cairo Town Building	1006 Thorn Avenue	Ca. 1950	—	Not Eligible; Non-Contributing	Not Eligible; Non-Contributing
RT-0538	House	245 School Hill Road	Ca. 1900	—	Contributing	Contributing
RT-0539	House	88 McGregor Street	Ca. 1965	—	Not Eligible; Non-Contributing	Not Eligible; Non-Contributing
RT-0540	Industrial Arts Building	School Hill Road	Ca. 1940	—	Contributing	Contributing
RT-0541	Gymnasium	School Hill Road	1921	—	Contributing	Contributing
RT-0542	Shop Building	School Hill Road	1953	—	Not Eligible; Non-Contributing	Not Eligible; Non-Contributing



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Earl Ray Tomblin
Governor

Paul A. Mattox, Jr., P. E.
Secretary of Transportation/
Commissioner of Highways

January 11, 2017

Ms. Susan Pierce
Deputy State Historic Preservation Officer
West Virginia State Historic Preservation Office
WV Division of Culture and History
1900 Kanawha Boulevard East
Charleston WV 25305-0300

Dear Ms. Pierce:

Cairo Bridge Replacement Project
State Project# S243-31-9.82
Federal Project# BR-0031-038(D)
Ritchie County
FR# 15-986-RT

The purpose of this letter is to address the effects to the Cairo Bridge and the Cairo Historic District. Your office previously reviewed the Architectural Survey and National Register Evaluation Report and provided comments March 1, 2016 (FR#15-986-Rt-1). Since submission of this report, the WVDOH has held a public meeting and coordinated with local officials and interested parties. In addition the condition of the existing bridge has worsened.

A Routine Bridge Inspection Report dated September 9, 2016, rates the deck and superstructure in poor condition and in need of replacement. An additional inspection in October 2016 noted new deterioration in the stringers, floorbeams, and abutments. Originally noted in the September 2016 report that there is out of plane bending of the floorbeams and stringers. Surveyed again one month later additional out of plane bending was examined. Stringer two is twisting at floorbeam three. The deck at this location has lifted 2" off the stringer and the stringer appears to be in extreme compression. The interior lower chords are moving downstream. Abutment two is rotating forward and breaking off the backwall and pushing the entire lower chord (including stringers) in compression. The bridge is being inspected every three months to evaluate any additional deterioration. The Cairo Bridge is currently considered functionally obsolete in need of immediate replacement. Any future deterioration will result in the immediate closure of the bridge.

The report *Architectural Survey and National Register Evaluation, Cairo Bridge Replacement Project, Ritchie County, West Virginia* was submitted to your agency in February 2016 describing the finding of the architectural survey. In the report, it was recommended that the Cairo Historic District is eligible for inclusion in the National

Register of Historic Places (NRHP) under Criteria A and C with a period of significance of 1856-1940. Further, it was recommended that the Cairo Bridge was not individually eligible for the NRHP, but is a contributing resource to the Cairo Historic District. In a March 1, 2016 letter, your agency concurred with the recommendations and requested that further information regarding the effects of this project be submitted for your review and comment.

On January 9, 2017, a revised Final Design Study Report for the Cairo Bridge Replacement Project was completed (Attachment B). The purpose of the Design Study Report is to compare various alternatives for replacement or rehabilitation of the existing Cairo Bridge. Temporary traffic control during construction is a primary concern, as no reasonable detour appear to be available for vehicular or pedestrian traffic. The goal of the design study is to select an alternative that meets the following criteria:

- Minimizes impact to traffic during construction;
- Economically feasible to construct;
- Minimizes impact to the federal mussels;
- Maintains hydraulic performance;
- Addresses the historical significance;
- Accommodate pedestrians and bicycles;
- Creates a long-term, durable solution; and
- Provides acceptable level of aesthetics.

Seven alternatives were examined for the Cairo Bridge Replacement Project. These alternatives are outlined in Table 1 and five of the seven alternatives are shown in in Figures 2 through 6. Five of the seven alternatives will involve demolishing the Cairo Bridge (RT-0293). Two alternatives, No-Build and Alternative 3, will allow the Cairo Bridge to remain in place. The No-Build option is not considered viable because it will lead to the eventual closure of the bridge. Rehabilitation Alternative 3 will rehabilitate the Cairo Bridge and use an upstream detour during construction.

Rehabilitation Alternative 3 will replace the stringers and the reinforced concrete deck and maintain the current configuration of two roughly nine-foot lanes. Various structural repairs will be made to the corroded steel members prior to abrasively cleaning and painting of the entire structure. The existing substructures and remaining portions of the existing superstructure will be rehabilitated and re-used. The chloride contaminated concrete of the substructure units will need to have the chlorides extracted. Visible existing and proposed concrete will be coated for protection. Over the last 90 years, Abutment 1 has rotated toward the river. Horizontal cracks are present in the seat and back wall. A new concrete slab will have to be anchored to the bedrock through micropiles behind the abutment. In addition, the superstructure of the bridge will have to be elevated, temporarily supported, and the steel rocker bearings replaced.

Though a custom repair solution for the deterioration of Abutment 1 and the rocker bearings has been proposed, no additional lane width, height, or load bearing capacity will result from Rehabilitation Alternative 3. Significant ongoing maintenance costs will also occur. The functionally obsolete bridge is hindering substantial economic development of the oil and gas industry and WVDOH predicts that the average daily traffic (ADT) and average daily truck traffic (ADTT) will increase if the bridge crossing is improved to current standards. Rehabilitation Alternative 3 does not meet the purpose and need of the project.

On December 5, 2016, the WVDOH held a public meeting in the town of Cairo to discuss the bridge replacement project. Twenty-seven citizens attended the public meeting and eight comments were received on the project (Attachment C). All the comments received are in favor of the bridge replacement and Preferred Alternative 1B. One of the comments received is from the Ritchie County Historic Landmarks Commission. In

their letter they support the project along with mitigation recommendations for the town. All of these suggestions will be taken into account as mitigation is developed to address the adverse effects.

Based on the conclusions of the attached Revised Final Design Study Report dated January 9, 2017, **Alternative 1B is the preferred alternative.** The existing Cairo Bridge will be demolished and replaced with a three span replacement bridge on the same alignment. Traffic will be maintained on an upstream temporary detour bridge.

Preferred Alternative 1B will result in the demolition of Cairo Bridge (RT-0293), which is a contributing resource to the NRHP eligible-Cairo Historic District. Figure 1 shows the location of the Cairo Bridge within the Cairo Historic District. Figures 7 & 8 present photos of Cairo Bridge from both sides of the North Fork of the Hughes River and show the general position of the upstream detour for the new bridge. Figure 9 shows the view of the Cairo Bridge from the intersection of Main and Railroad streets in Cairo demonstrating how the view of the historic truss bridge is a part of the town's landscape.

Preferred Alternative 1B will have an adverse effect on the Cairo Bridge and the Cairo Historic District. WVDOH will continue to work with the Town of Cairo and the Ritchie County Historic Landmarks Commission on a Memorandum of Agreement to address the adverse effects which will be submitted to your office at a later date.

If you have any questions please contact Sondra Mullins of our Environmental Section by writing to the above address, by calling (304) 558-9487, or via e-mail at Sondra.L.Mullins@wv.gov.

Yours very truly,



Ben L. Hark
Environmental Section Head
Engineering Division

H:h
Attachments
Bcc: DDE(SM)



The Culture Center
1900 Kanawha Blvd., E.
Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

EEC/AA Employer

February 7, 2017

Mr. Ben L. Hark
Environmental Section Head
Engineering Division
West Virginia Division of Highways
1334 Smith Street
Charleston, West Virginia 25305



RE: Cairo Bridge Replacement; Cairo, Ritchie County, West Virginia
State Project #: S243-31-9.82
Federal Project #: BR-0031-038(D)
FR#: 15-986-RT-2

Dear Mr. Hark:

We have reviewed the "Effects Report" prepared for the aforementioned project to determine potential effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

According to submitted information, the West Virginia Division of Highways (WV DOH) proposes to replace the existing Cairo Bridge that carries State Route 31 over the North Fork of the Hughes River in Cairo, Ritchie County, West Virginia. It is our understanding that the proposed project area consists of 2.8 acres of land located on the western and eastern banks of the river. WV DOH has evaluated seven different alternatives for the project, including a No-Build option. Alternative 1B, which will require demolition of the existing bridge, is the preferred alternative.

Architectural and Bridge Resources:

Thank you for the effects report. In our previous letter dated March 1, 2016, we concurred with KCI and Mead & Hunt's determination that the Cairo Pony Truss Bridge (RT-0292) was eligible for inclusion in the National Register under Criterion C. We also concurred with TRC's recommendations that the Cairo Historic District was eligible for inclusion in the National Register under Criteria A and C. Nearly seventy resources, including the Cairo Bridge (RT-0293), contributed to that district.

The aforementioned report indicated that it was WV DOH's intention to demolish the existing bridge as Alternative 1B was preferred for the project. The report argued that "Cairo Bridge is currently considered functionally obsolete in need of immediate replacement" and Rehabilitation Alternative 3 "does not meet the purpose and need of the project." It is our opinion, therefore, that the proposed undertaking will have an *adverse effect* on the Cairo Bridge (RT-0293) because it will lead to the existing bridge's physical destruction. Since attempts to avoid and minimize the effects of the project have been considered but have proven ineffective for the intended undertaking, it is our opinion

February 7, 2017
Mr. B. Hark
15-986-RT-2
Page 2

mitigation will be necessary before proceeding with construction work. According to the report, WV DOH is currently working with the Town of Cairo and the Ritchie County Historic Landmarks Commission to consider adequate mitigation plans that will be enumerated in a memorandum of agreement (MOA). Once a draft MOA is available, please submit it to our office for review. We will provide additional comments upon receipt of that information.

Public Comments:

We again note that your office sent letters about the proposed project to Preservation Alliance of West Virginia, the Town of Cairo, the Ritchie County Historical Society, and the Ritchie County Historical Museum Association on September 28, 2015. On December 5, 2016, representatives from your office held a public meeting in Cairo to allow residents the opportunity to comment on the project. 27 individuals attended and WV DOH received 8 comments regarding the undertaking, all of which voiced approval of the bridge's replacement. We also note that the Town of Cairo and the Ritchie County Historic Landmarks Commission are currently being involved in the consultation process to prepare the MOA. We understand that copies of any further correspondence or comments will be sent to our office.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Mitchell K. Schaefer, Structural Historian, at (304) 558-0240.*

Sincerely,



Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/MKS

CC: Ritchie County Historic Landmark Commission
c/o David M. Scott, Chairman
45 Skyline Drive
Harrisville, West Virginia 26362

**MEMORANDUM OF AGREEMENT
BY AND AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
THE WEST VIRGINIA STATE HISTORIC PRESERVATION OFFICER
AND THE WEST VIRGINIA DIVISION OF HIGHWAYS**

**REGARDING IMPLEMENTATION OF THE CAIRO BRIDGE PROJECT
STATE PROJECT #S343-31-9.82
FEDERAL PROJECT #STP-0031(037)D
RITCHIE COUNTY, WEST VIRGINIA
APRIL 2017**

WHEREAS, the Federal Highway Administration (FHWA), in cooperation with the West Virginia Division of Highways (WVDOH), proposes to replace the Cairo Bridge, which spans the North Fork Hughes River in Ritchie County, West Virginia, hereinafter referred to as the Project. The improvements involve the construction of a new bridge on its current location while detouring traffic on a temporary bridge upstream; and

WHEREAS, the FHWA has determined that the Project will have an adverse effect upon the Cairo Historic District and the Cairo Bridge, properties on or eligible for the National Register of Historic Places (NRHP); and

WHEREAS, the FHWA has consulted with the West Virginia State Historic Preservation Officer (WVSHPO) pursuant to 36 CFR Part 800 Implementing Section 106 of the National Historic Preservation Act; (16 U.S.C., 470f); and

WHEREAS, the FHWA has determined that the Project will not affect archaeological properties; and

WHEREAS, The WVDOH has contacted the Preservation Alliance of West Virginia, Ritchie County Historical Society, Ritchie County Historical Museum Association, and the Ritchie County Historic Landmarks Commission regarding the project. The Ritchie County Historic Landmark Commission responded in support of the project.

WHEREAS, in accordance with 36 CFR 800.6 (a) (1), the FHWA has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination providing the specified documentation, and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR 800.6 (a) (1) (iii);

NOW, THEREFORE, the FHWA, the WVSHPO, and the WVDOH agree that the undertaking will be implemented in accordance with the following stipulations in order to take into account the effects of the undertaking on historic properties.

STIPULATIONS

The FHWA shall ensure that the following stipulations are carried out:

Cairo Bridge Project

- I. The Cairo Bridge will be documented in its present historic setting. The documentation package will include 5" x 7" black and white digital prints in accordance with the National Register of Historic Places and National Historic Landmarks Survey Photo Policy Expansion of January 2009.
- II. A brief history of the structure will be included along with fully completed West Virginia Historic Property Inventory forms and copies of any available plan sheets and drawings of the bridge from the WVDOH bridge files.
- III. The WVDOH will provide a sum of \$10,000 to the Ritchie County Historic Landmarks Commission who has requested interpretive signs, ornamental railing from the old bridge and preservation work to the Veterans Memorial in Town Square. Funding will be provided once all projects have been identified. Any work completed on historic buildings must comply with the Secretary of Interior's Standards for the Treatment of Historic Properties and must be submitted for review by the WVSHPO prior to commencement of work. Any interpretive material, such as signs and brochures, will be submitted to the WVDOH for review and approval by the WVSHPO and the WVDOH. The Ritchie County Historic Landmarks Commission will provide status reports summarizing progress and financial information in writing or via email to the WVDOH every six (6) months.
- IV. 500 color brochures of the Cairo Bridge will be developed by the WVDOH and distributed to the Town of Cairo and the Ritchie County Historic Landmarks Commission. The WVSHPO will be given the opportunity to review all educational materials developed for this stipulation. A CD containing the brochure will also be given to the Town and Landmarks Commission to print brochures when the original total has been exhausted.
- V. The Cairo Bridge will be documented on the West Virginia historic bridge website: Highways Through History (<http://www.highwaysthroughhistory.com>).

VI. Duration

This MOA will expire if its stipulations are not carried out within five (5) years from the date of its execution. At such time, and prior to work continuing on the undertaking, the FHWA shall either (a) execute an MOA pursuant to 36 CFR 800.6, or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR 800.7. Prior to such time, FHWA may consult with other signatories to reconsider the terms of the MOA

and amend it in accordance with Stipulation X below. FHWA shall notify the signatories as to the course of action it will pursue.

VII. Post-Review Discoveries

If any unanticipated discoveries of historic properties or archaeological sites, including human burial sites and/or skeletal remains, are encountered during the implementation of this undertaking, work shall be suspended in the area of the discovery until the WVDOH has developed and implemented an appropriate treatment plan in consultation with the WVSHPO pursuant to 36 CFR 800.13 (b).

VIII. Monitoring and Reporting

Each year following the execution of this MOA until it expires or is terminated, FHWA shall provide all parties to this MOA a summary report detailing work carried out pursuant to its terms. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in FHWA's efforts to carry out the terms of this MOA.

IX. Dispute Resolution

Should any signatory or concurring party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, FHWA shall consult with such party to resolve the objection. If FHWA determines that such objection cannot be resolved, FHWA will:

- A. Forward all documentation relevant to the dispute, including the FHWA's proposed resolution, to the ACHP. The ACHP shall provide FHWA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. FHWA will then proceed according to its final decision.
- B. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, FHWA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, FHWA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA, and provide them and the ACHP with a copy of such written response.
- C. FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

X. Amendments

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

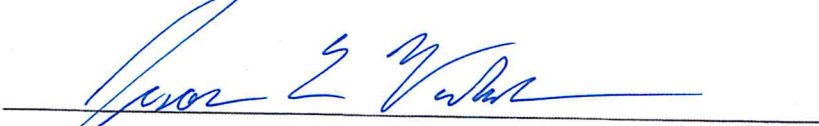
XI. Termination

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation VIII, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the undertaking, FHWA must either (a) execute a MOA pursuant to 36 CFR 800.6, or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR 800.7. FHWA shall notify the signatories as to the course of action it will pursue.

EXECUTION of the Memorandum of Agreement by the FHWA, WWSHPO, the WVDOH and the Council, and implementation of its terms evidence that the FHWA has afforded the Council an opportunity to comment on the Cairo Bridge Project and its effects on historic properties, and that the FHWA has taken into account the effects of the undertaking on the historic properties.

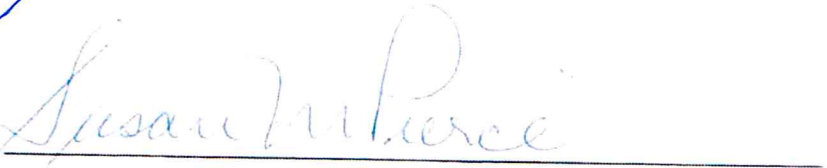
Signatories Page



Federal Highway Administration

12/12/17

Date



West Virginia Deputy State Historic Preservation Officer

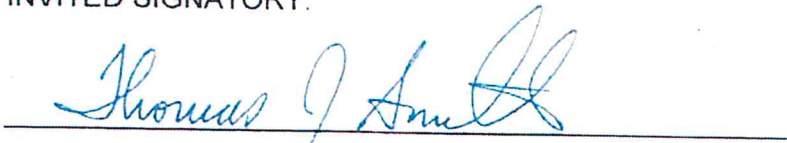
6/1/2017

Date

Advisory Council on Historic Preservation

Date

INVITED SIGNATORY:



West Virginia Division of Highways

6-15-17

Date

Consulting Parties

David M. Scott, CHAIRMAN
Ritchie County Historic Landmarks Commission

MAY 30, 2017
Date

NOTE: The Ritchie County Historic Landmarks Commission hereby agrees to this Memorandum of Agreement with the understanding that the Bank of Cairo Building is the historic building for which a portion of the \$10,000 will be appropriated. (See MOA Page 2, Stipulations, Paragraph 3.)

Consulting Parties

Gary S Haugh

Mayor, Town of Cairo

4-15-17

Date



U.S. Department
of Transportation

**Federal Highway
Administration**

West Virginia Division

March 21, 2017

154 Court Street
Charleston, West Virginia 25301
Phone (304) 347-5928
Fax (304) 347-5103

IN REPLY REFER TO:

Federal Project STP-0031(037)D
State Project U343-31-9.82
Cairo Bridge Replacement
Ritchie County

Ms. Mary Ann Naber
Office of Federal Agency Programs
Advisory Council on Historic Preservation
401 F Street NW., Suite 308
Washington, DC 20001-2637

Dear Ms. Naber:

The Federal Highway Administration (FHWA) in consultation with the West Virginia State Historic Preservation Office (SHPO) has determined that the above referenced undertaking could have an adverse effect to the Cairo Bridge located in Ritchie County, West Virginia. This correspondence is intended to serve as the notification of an adverse effect finding as required under 36 CFR 800.6(a)(1). Supporting documentation prepared in accordance with 36 CFR 800.11(e) has been enclosed to assist in your review of this undertaking.

Please advise the FHWA within fifteen (15) days of receipt of this notice whether or not the Council wishes to enter the Section 106 process for this undertaking. Should you have any questions regarding the accompanying information, please contact me at (304) 347-5436 or via e-mail at alison.rogers@dot.gov. Thank you for your attention to this matter.

Sincerely yours,

Alison M. Rogers
Environmental Protection Specialist

Enclosures



Preserving America's Heritage

March 30, 2017

Ms. Alison M. Rogers
Environmental Protection Specialist
Federal Highway Administration
West Virginia Division
154 Court Street
Charleston, WV 25301

Ref: *Proposed Cairo Bridge Replacement Project*
Federal Project STP-0031(037)D; State Project U343-31-9.82
Ritchie County, West Virginia

Dear Ms. Rogers:

The Advisory Council on Historic Preservation (ACHP) has received your notification and supporting documentation regarding the adverse effects of the referenced undertaking on a property or properties listed or eligible for listing in the National Register of Historic Places. Based upon the information provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and it is determined that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the West Virginia State Historic Preservation Officer (SHPO), and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA, and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with the notification of adverse effect. If you have any questions or require further assistance, please contact MaryAnn Naber at 202-517-0218 or via e-mail at mnaber@achp.gov.

Sincerely,

LaShavio Johnson
Historic Preservation Technician
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION

401 F Street NW, Suite 308 • Washington, DC 20001-2637
Phone: 202-517-0200 • Fax: 202-517-6381 • achp@achp.gov • www.achp.gov