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Categorical Exclusion Evaluation

Bridge Street Bridge
Replacement Project
Taylor County, West Virginia

State Project #S246-9-0.03 02

Federal Project #BR-0009(203) D

GAI Project Number C080941.04

September 2014

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1.0 Introduction

The West Virginia (WV) Department of Transportation, Division of Highways (WVDOH), in cooperation with the Federal Highway Administration (FHWA), propose to replace the existing Bridge Street Bridge (WVDOH Bridge No. 46-9-0.02) in the City of Grafton, Taylor County, WV. This bridge carries Taylor County Route 9 (CR 9) and Bridge Street traffic across Three Forks Creek, the Baltimore and Ohio (B&O) Railroad and Yard, and Front Street; it connects South Grafton neighborhoods at the southern approach to Main Street and Grafton's downtown at the northern approach. Figure 1 identifies the project location. The existing bridge, built in 1951, was renovated in 1995 by the WVDOH and has been in continuous use since that time. Based on a September 18, 2013 WVDOH inspection report, the existing bridge has critical structural issues and recommends its replacement.

The Bridge Street Bridge is part of a transportation system providing access to the South Grafton community, to the Department of Health and Human Resources (DHHR) services building, for school bus and emergency services to South Grafton, and for through traffic. With current weight restrictions, the bridge can no longer safely carry large school buses, fire trucks and other heavy vehicles. With increased weight restrictions, even smaller delivery vans and mini buses will be precluded.

Three Fork Creek discharges into the Tygart River approximately 1,150 feet downstream. The Tygart Dam, which supports the Tygart Lake State Park, is located in the Tygart River Valley, approximately 2.25 miles south of Grafton. Many recreational vehicles use the Bridge to access the recreation area.

Bridge closing will force all vehicles to proceed through the historic downtown area, comingling with downtown traffic and increasing traffic congestion presenting greater opportunities for vehicular/pedestrian conflict. The City of Grafton, with the support of current businesses is revitalizing the once vibrant Downtown Historic District. Several years ago the City commenced construction on Phase I of a multi-purpose streetscape project to construct new sidewalks, historic lighting, benches, trash receptacles, and flower planters. Traffic congestion in the downtown revitalization area is a city concern.

Maintaining the bridge in its current condition will compromise the local transportation system, as it is posted at 16-ton capacity. Projected growth could further burden the system. There is a definitive transportation need to have a safe and efficient crossing of Three Fork Creek and the railroad that meets current design standards.

The proposed project originally considered 10 build alternatives as well as the No-Build Alternative to address current bridge structural inadequacies and safety issues. These included eight bridge replacement alternatives, a bridge rehabilitation alternative, bridge removal and upgrading of roads for a permanent detour, and the No-Build option. Four bridge replacement alternatives were located at or near the current bridge, one was downstream (west) of the current bridge, and three were east of the current bridge. New approaches from the north and south, as appropriate to each alternative, were provided (Figure 2).

The WVDOH has identified a Preferred Alternative (Alternative 8), which will incorporate new approaches and result in construction of a new bridge, parallel and 60 feet downstream (west) of the existing bridge. In addition, as part of the Preferred Alternative, the alignments of CR 9 and will be improved, upgraded, and shifted to meet the new location. Replacement of the Bridge Street Bridge with Alternative 8 will result in demolition and removal of the existing bridge as well as impacts to B&O (currently called CSX) Railroad property, both of which are National Register of Historic Places (NRHP)-eligible resources. Also, visual impacts to the National Registered Grafton Commercial Downtown Historic District (Downtown Historic District) will occur.

1.1 Purpose and Need for the Project

1.1.1 Project Purpose

The purpose of the Bridge Street Bridge Replacement Project (Project) is to provide a bridge over Three Fork Creek in Grafton, Taylor County that meets current WVDOH bridge safety and design criteria, maintains community cohesion with access to key local facilities, offers traffic flow that minimizes congestion in the project area and Downtown Historic District, and best suits the geographic limitations of the area.

1.1.2 Project Need

The basic transportation needs of this project include four factors:

- Bridge Replacement providing Structural Safety and Meeting Design Standards;
- Maintain Community Cohesion;
- Provide Efficient Traffic Flow; and
- Retain Geographic Fit.

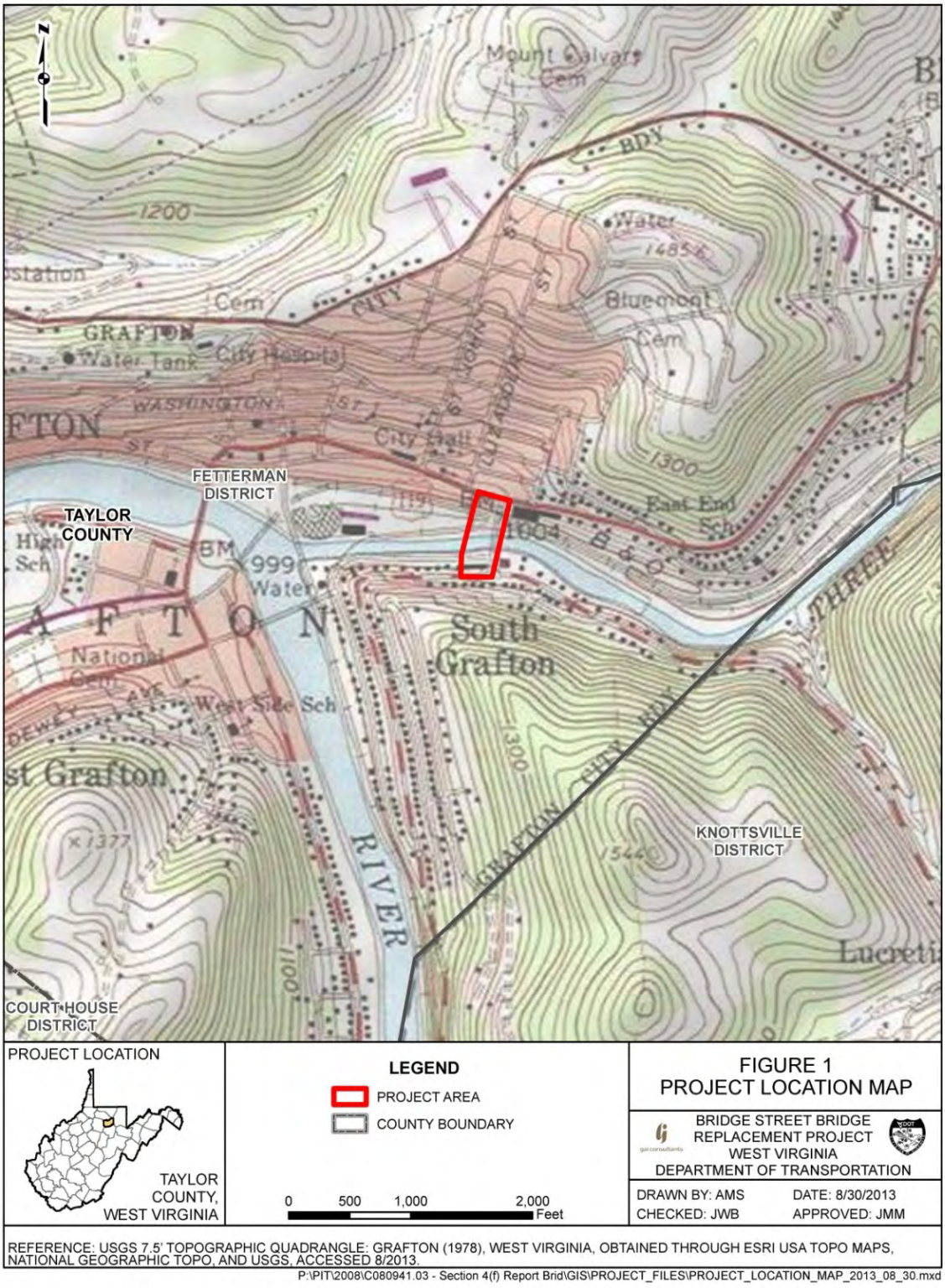
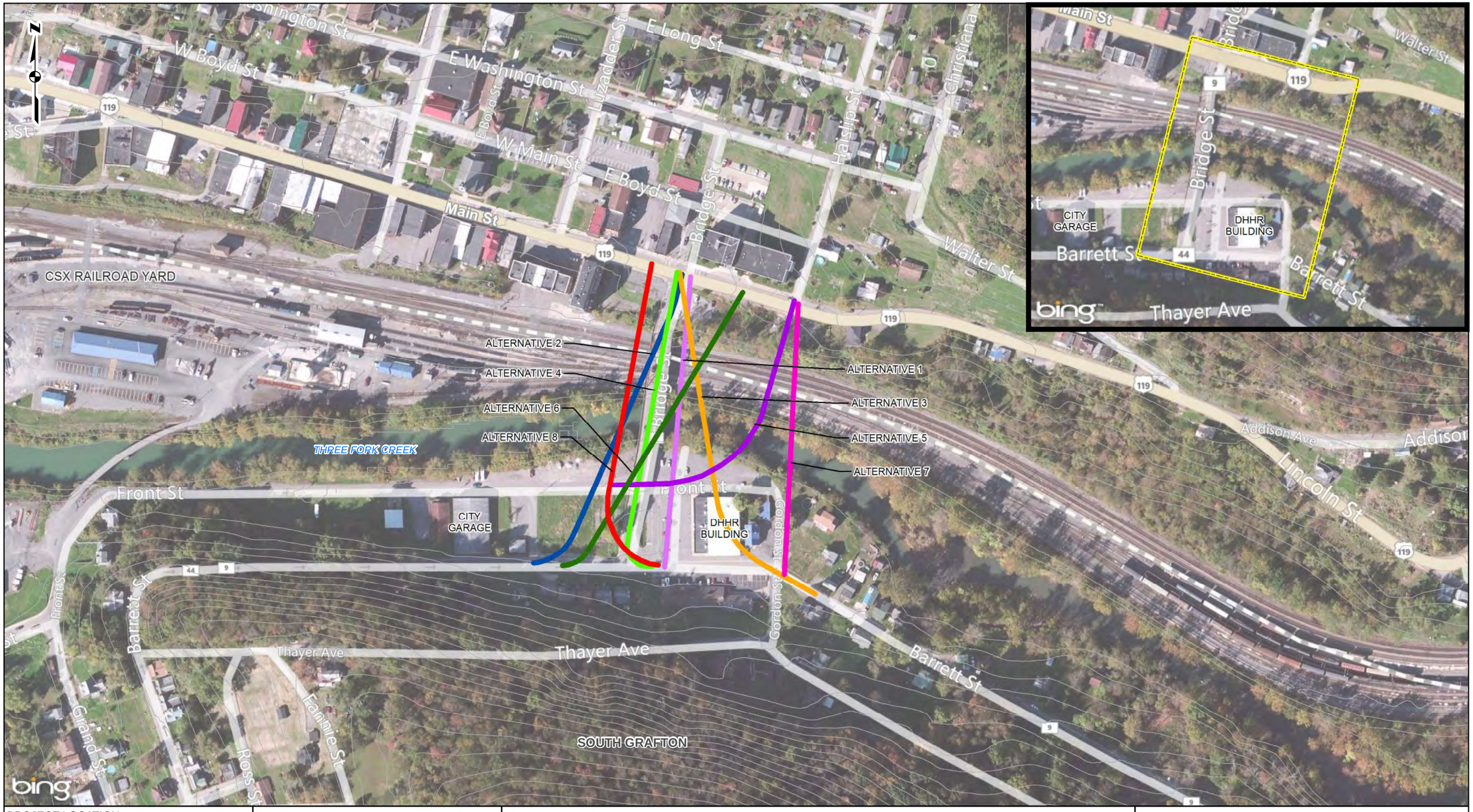


Figure 1. Project Location.



PROJECT LOCATION

TAYLOR COUNTY, WEST VIRGINIA

REFERENCE: BING MAPS HYBRID © 2008 MICROSOFT CORPORATION AND ITS DATA SUPPLIERS, ACCESSED 3/2013.
10FT CONTOURS CREATED BY ARCGIS SOFTWARE USING 3-METER DIGITAL ELEVATION MODEL DATA OBTAINED FROM USGS/SAM, 2003.

LEGEND

- BRIDGE ALTERNATIVE 1
- BRIDGE ALTERNATIVE 2
- BRIDGE ALTERNATIVE 3
- BRIDGE ALTERNATIVE 4
- BRIDGE ALTERNATIVE 5
- BRIDGE ALTERNATIVE 6
- BRIDGE ALTERNATIVE 7
- BRIDGE ALTERNATIVE 8
- 10FT CONTOUR
- STUDY AREA

0 100 200 400 Feet

FIGURE 2
EIGHT BUILD ALTERNATIVES MAP

BRIDGE STREET BRIDGE REPLACEMENT PROJECT
WEST VIRGINIA
DEPARTMENT OF TRANSPORTATION

gai consultants

DRAWN BY: AMS DATE: 3/21/2013
CHECKED: JWB APPROVED: JMM

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1.1.2.1 Bridge Replacement

The existing bridge is structurally deficient to safely handle current and future traffic in the project area. Based on a September 18, 2013 WVDOH inspection report, the existing bridge has the following discrepancies:

- The structure is in poor condition due to extensive deterioration of its components, including corrosion, section loss, cracking, scaling and truss deformation;
- It is a generally deteriorated structure with weak members and can no longer carry heavier vehicles;
- It has poor-rated fracture critical members: only a complete bridge rehabilitation as detailed in Alternative 9 (Rehabilitation Alternative) would resolve this as 75 percent of truss members require replacement;
- The entire floor system and lower cords, encased in concrete, have moisture infiltration leading to corrosion of encased members;
- It has inadequate deck geometry, making it obsolete;
- It cannot accommodate the future transportation demands of the project area, and normal maintenance repairs will only delay bridge closing; and
- Due to extensive deterioration, only repairs to maintain current traffic are recommended until a new bridge is constructed.

The Bridge Street Bridge is part of a transportation system providing access to the South Grafton community, to the Department of Health and Human Resources (DHHR) building, for school bus and emergency services to South Grafton, and for through traffic. It is an alternative for avoiding congested downtown traffic. Bridge deterioration has led to weight restrictions and eventually will lead to bridge closure. Currently, bridge deterioration has precluded its use by fire trucks, large school buses, and heavy vehicles. A safe bridge that meets current design standards is needed as a replacement.

1.1.2.2 Maintain Community Cohesion

Several key community facilities are located in South Grafton. The DHHR facility at the southern end of the Bridge provides a full array of services including eight social services (child care, adoption, etc.), 12 family assistance programs (food stamps, etc.), eight student programs (scholarships, loans, etc.), local health department funding, business work opportunities and many other programs. It supervises the Medicare, Affordable Health Care, and Welfare programs. It is a critical facility for both Grafton and Taylor County residents, particularly for minority and low-income families.

The City Garage that serves the entire city is located on Front Street, a block from the south end of the bridge. Loss of the bridge will be a major inconvenience since a 1.3 mile trip will be required. Garage drivers will be required to navigate through two traffic signals, an at-grade railroad crossing, a four-way intersection, two bridges, and comingle with downtown traffic to proceed to the northern end of the current bridge. Safety will be a concern, particularly in winter for this longer route.

1.1.2.3 Provide Efficient Traffic Flow

Efficient traffic flow will include easy movements onto and off the bridge at Main Street at the north end of the Bridge and Barrett Street at the south end. A connection to Front Street that will allow direct access to the City Garage is desirable.

From the Grafton Fire Department on West Main Street, about two blocks from the north end of the bridge, to Barrett Street at the south end of the bridge, it is a distance of 0.3-mile taking approximately one-minute of automobile travel time. If the bridge were closed, the detour route along Main Street (US 119) to Beech Street, to Front Street, to

Barrett Street would be 1.3 miles long, taking approximately five minutes under traffic-free conditions. Rain, snow or traffic congestion could add substantially to this travel time, and trucks, including City maintenance trucks from the City Garage on Front Street, would take much longer.

1.1.2.4 Geographic Fit

Considerations are required due to terrain and existing development. The narrow valley in which Grafton is located along with Three Fork Creek and the B&O Railroad and Yard has limited the locations where a bridge replacement can best be placed. The six original alternatives presented in 2004 were located near the current bridge, which appeared to be in the most advantaged location. In an attempt to generate all reasonable alternatives, new locations have been utilized for several alternatives; this may have necessitated less desirable bridge characteristics, including steep approaches.

Vertical alignment (grade) according to American Association of Highway and Transportation Officials (AASHTO) guidance for low designs speeds of 20 or 30 miles per hour (appropriate for this project), suggests maximum grades in mountainous terrain such as the Grafton area may be as high as 14 to 16 percent. Practically, steeper grades require more stopping distance, more sight distance, they are harder to navigate safely in snow and rain, and harder to maintain as paving “slump” often occurs from braking on asphalt. High truck use impedes automobile traffic and “climbing lanes” are sometimes required to alleviate this situation.

1.2 Project Location and Description

1.2.1 Location

The Bridge Street Bridge carries two-lane Taylor County Route 9 over Three Fork Creek, the B&O Railroad and Yard, and Front Street (Photograph 1). It is situated approximately 0.3-mile east of the confluence of Three Fork Creek and Tygart Valley River, just to the east of downtown Grafton. The bridge is located in a narrow valley of Three Fork Creek, with nearby topographic and developmental constraints. In the northeast quadrant comprised by Three Fork Creek and the Bridge, is the Elizabeth Cather Towers, just east of the bridge entrance. This is a Section 8, affordable housing complex, with approximately 130 total units.

Photograph 1. The Bridge Street Bridge, Looking North.

Further east, urban development diminishes as a steep, forested ridge limits further construction. The ridge rises sharply 481 feet above the Creek, with the Grafton East End neighborhood located further east. US Route 119 proceeds through the narrow gap between the ridge, Three Fork Creek, and the B&O Railroad and Yard. Except near the bridge entrance, land use is essentially wooded in this quadrant, with a smattering of houses along the road.

In the southeast quadrant is located the DHHR building for Grafton and Taylor County off the east end of the bridge, along with a Laundromat, Jerry's Restaurant and Lounge, and a number of houses along Barrett Street. In the southwest Quadrant is located the City Garage, the adjacent Calvary Apostolic Church, along with more houses along Barrett Street. A steep, wooded ridge rises 540 feet above the Creek further south in both the southeast and southwest quadrants. In the northwest quadrant is the densely developed downtown commercial district of Grafton, and the major maintenance buildings of the B&O Railroad and Yard.

Historic resources in the study area include the Bridge and the B&O Railroad and Yard property, both of which are NRHP-eligible resources. Also, the National Register-listed Downtown Historic District is located adjacent to, and west of the Bridge. These three resources are Section 4(f) Properties.

1.2.2 Description

The bridge superstructure consists of five spans. From the north end, Span 1 is a steel through truss measuring 120 feet, three inches and spanning the B&O Railroad and Yard, and resting on a pier in the railroad yard. Span 2 is a steel deck truss measuring 119 feet, three inches and spans Three Fork Creek. Spans 3 through 5 are steel W-beams. Span 3 measures 60 feet, 2 inches and spans Front Street; Span 4 measures 78 feet; and Span 5 measures 60 feet. Both of the latter spans are elevated over ground. The overall length of the structure is 445 feet, two inches. The bridge is supported by two piers and two bents. Pier 1 (located on railroad property) is constructed of cut stone capped with concrete, while Pier 2 (between Three Fork Creek and Front Street) is constructed of concrete with a concrete cap added in 1951. The abutments are constructed of reinforced concrete, but the bottom portion of Abutment 1 (north end of

bridge) dates from the original bridge at this location (circa 1900), and is not reinforced. The bridge has a concrete deck with asphalt wearing surface, with reinforced concrete sidewalks and parapets located on both sides of the bridge (Photograph 2). The bridge contains overhead street lights. This bridge is currently posted for 16 tons and has a height restriction of 14 feet (which should be 17 feet). The bridge was renovated in 1995 (WVDOH 2007).

Photograph 2. Steel-decked through Truss of Bridge, with 24-foot Cartway and two 4-foot Sidewalks.

The present bridge, built in 1951, replaced a seven-span through and pony truss bridge that was constructed circa 1900 at the same location. The Bridge Street Bridge was built by the Agnew Construction Company of Ronceverte, WV, from plans designed by Frank McEnteer (KCI).

The Project study area for the CEE extends from approximately 100 feet west of Bridge Street to 100 feet east of Haislip Street, and from the north curb of East Main Street to the southern curb of Barrett Street (Figure 2). Most impacts will occur in this area. However, some resources require an extended study area such as community cohesion, noise, etc. The NRHP boundary for the Bridge Street Bridge is defined as the footprint, including piers, superstructure, and immediate floodway approaches (Figure 5). The bridge is not considered a contributing resource to the NRHP-listed Grafton Downtown Commercial Historic District; however, it has been determined individually eligible for NRHP listing under Criterion C as a locally significant bridge (WVDCH Letter, December 14, 2010, see Appendix A).

An Individual Section 4(f) analysis is required for this project because the bridge replacement alternatives require the construction of a new pier within the NRHP-eligible B&O Railroad and yard, which is a Section 4(f) property.

1.3 Alternatives Considered and Selection of a Preferred Alternative

The effort to avoid impacts to resources began with the initial identification of environmental, social and cultural resources in the study area prior to the development of preliminary build alternatives. Potential constraints to highway development identified through this effort involved Section 4(f) properties including the Bridge, the B&O Railroad and Yard, and the Downtown Historic District; and public facilities, residential and commercial development, and natural resources.

WVDOH's Initial Design Section first evaluated six original alternatives presented in the 2004 WVDOH Planning and Research Division (RP) report. These alternatives were at the geographic locations the engineers felt best suited the project. The first four of these alternatives they felt might impact the Downtown Historic District. Alternatives 5 and 6 at Haislip Street do not affect Downtown Historic District property and were removed several hundred yards in sight distance. Subsequently, the WVDOH Initial Design Section added Alternatives 7, 8 and 9 (bridge renovation), in part, to avoid impacts to the Downtown Historic District. Alternative 7 is furthest removed from the Downtown Historic District and the rehabilitation alternative (Alternative 9)

would present approximately the same viewing as the original bridge. Then Alternative 10 was added consisting of closing the current bridge and removing the superstructure with no replacement bridge being constructed. The 1.3-mile detour would become the primary route adding at least five minutes to travel times for emergency and municipal service vehicles, and all traffic. In addition, the No-Build Alternative was considered. These alternatives are located in Figure 2 and are identified below:

1.3.1 No-Build Alternative

The No-Build Alternative will not meet the purpose and need (i.e., no improvement in the structural deficiency of the existing Bridge Street Bridge, not maintain community cohesion, and no improvement in the horizontal and vertical clearance). It was also determined that not replacing the bridge could lead to serious community disruption by requiring local residents to travel a long detour route should the bridge fail. The closure of the bridge will result in a 1.3-mile detour via US Route 119, CR 119/42, and CR 44/8 (Figure 3). The detour would be burdensome on downtown traffic, including residential and commercial city traffic, school buses and emergency vehicles, as well as through traffic using the bridge to access the recreational facilities at Tygart Lake State Park. Motorist will be required to navigate through two traffic signals, an at-grade railroad crossing, a four-way intersection, two bridges, and comingle with downtown traffic. The detour would take approximately five minutes under traffic-free conditions. Rain, snow or traffic congestion could add substantially to this travel time. There will also be sight distance and grade issues along Front Street. These conditions will lead to a less safe route than a bridge crossing. The No-Build alternative does not meet the project's purpose and need. It has been eliminated from further consideration.

Figure 3. Bridge Detour.

1.3.1.1 Alternative 1

Photograph 3. The DHHR Building at the Southeast Corner of Bridge.

Alternative 1 will provide for a structure immediately upstream approximately 70 feet (centerline to centerline) east of the existing location. This alternative requires the displacement of the DHHR building (Photograph 3). The DHHR facility is relatively new, serves Grafton and Taylor County, and will generate community impacts by its removal. The southern end of the bridge will have a steep grade (greater than 12.5 percent) for clearance over Front Street. This vertical alignment (grade) is within AASHTO guidance for the project but steeper grades require more stopping distance, more sight distance, are harder to navigate safely in snow and rain, and more difficult to maintain as paving "slump" often occurs from braking on asphalt; therefore, steep grades are less desirable.

The Section 4(f) resources that will be impacted include the bridge and the B&O Railroad and Yard, the latter being impacted by the placement of a pier (supporting a span) on railroad property. The existing bridge will be used for traffic maintenance until construction of the new bridge is complete. No detour will be required, except perhaps for a short period, for approach road work. The bridge for Alternative 1 will be 365 feet in length, with 1,300 feet of roadway and approach improvements, with a total cost of $12.9 million. Alternative 1 does not meet the project's purpose and need.

1.3.1.2 Alternative 2

Alternative 2 will involve construction of a new bridge at its current location at the northern end, shifting the southern end of the bridge west while using the detour, as identified in the No-Build Alternative, to maintain traffic during construction. This will avoid impacts to the DHHR building, but the bridge will be skewed to the creek and railroad. The total length of the bridge will be 332.5 feet with approximately 1,278 feet of roadway and approach improvements. The new bridge will have three spans with stub abutments founded on piling. The structure will have a 155-foot end span over the railroad yards with a vertical curve, a 132.5-foot center span over Three Fork Creek, and a 45-foot end span at the southern end. A 10.0 percent grade extends onto the bridge for 230 feet before transitioning to a vertical curve. Steeper grades require more stopping distance, more sight distance, are harder to navigate safely in snow and rain, and more difficult to maintain as paving "slump" often occurs from braking on asphalt.

The Section 4(f) resources that will be impacted include the bridge and the B&O Railroad and Yard (pier on railroad property). The intersection of CR 9 with CR 44 and CR 44/8 will be a complex four-legged intersection with the intersecting roads meeting at nearly right angles. This intersection will be a three-way stop with motorists crossing the bridge having the right-of-way (ROW) as the bridge's grade presents concerns during the winter season. This new location will require acquisition of two vacant lots south of the bridge. Alternative 2 does not meet the project's purpose and need.

1.3.1.3 Alternative 3

Alternative 3 will provide for a structure immediately upstream and adjacent to the current Bridge Street Bridge, similar to Alternative 1, but shifting the southern abutment to the east for a different traffic flow. This alternative also requires the displacement of the DHHR building and a laundromat. The Section 4(f) resources that will be impacted include the bridge and the B&O Railroad and Yard, the latter being impacted by the placement of a pier (supporting a span) on railroad property. The existing bridge will be used for traffic maintenance: no detour will be required, except perhaps for a short period for approach road work. The bridge for Alternative 3 will have a complex connection to both Barrett Street and Front Street, will be 375 feet in length, with 1,425 feet of roadway and approach improvements. Alternative 3 does not meet the project's purpose and need.

1.3.1.4 Alternative 4

Alternative 4 entails replacing the bridge at its current location. The detour route as identified in the No-Build Alternative will be utilized to maintain traffic during construction. The Section 4(f) resources that will be impacted include the bridge and the B&O Railroad and Yard, the latter being impacted by the placement of a pier on railroad property. The bridge for Alternative 4 will be 280 feet in length, with 925 feet of roadway and approach improvements. The new bridge will have two spans with stub abutments founded on piling. The structure will have a 140-foot span over the railroad yard with a vertical curve and a 140-foot span over Three Fork Creek. The new bridge will have a similar grade to the existing structure (i.e., 8.8 percent to 9.0 percent) for mainline movements. Front Street will have a direct connection to the bridge with approximately a 10.2 percent grade, placed on fill material. Low traffic volume to Front Street makes this grade acceptable. Front Street's and CR 9's bridge approaches require some additional ROW on vacant property south of the bridge.

This alternative meets the project's purpose and need and was considered as an option for construction but the required detour, 1.3 miles long (requiring approximately five minutes) for the entire construction period, makes it less desirable than Preferred Alternative 8 which does not require a detour.

1.3.1.5 Alternative 5

Alternative 5 involves replacing the bridge east of the existing bridge at Haislip Street while using the existing bridge to maintain traffic during construction. The bridge for Alternative 5 will be 405 feet in length, with 950 feet of roadway and approach improvements. The new bridge will have three spans with stub abutments founded on piling, with 135-foot spans. A horizontal curve will be located on the southern end of the bridge that will connect with Front Street. A complex T-intersection will be utilized at the intersection of Barrett Street (CR 44) with CR 9 and CR 9 with Front Street located approximately 100 feet northwest of the intersection of CR 44/CR 9. The new configuration, combined with the higher railroad clearance, requires the grade of CR 9 and the new bridge to be increased from approximately 8.8 percent to 10.9 percent. Steeper grades require more stopping distance, more sight distance, are harder to navigate safely in snow and rain, and more difficult to maintain as paving "slump" often occurs from braking on asphalt.

The steeper slope with a stop required at the bottom make this alternative less desirable than some other options. The Section 4(f) resources that will be impacted include the bridge and the B&O Railroad and Yard, the latter being impacted by pier construction on railroad property. The CR 9 roadway connector will require the acquisition of a vacant lot south of the bridge. Alternative 5 does not meet the project's purpose and need.

1.3.1.6 Alternative 6

Alternative 6 is similar to Alternative 2; however it replaces the bridge on a skew alignment with the northern abutment to the east and the southern abutment to the west of the existing location. The detour route 1.3 miles long identified in the No Build Alternative will be used to maintain traffic flow during construction. The Section 4(f) resources that will be impacted include the bridge and the B&O Railroad and Yard (from pier construction on railroad property). The bridge for Alternative 6 will be 380 feet in length, with 950 feet of roadway and approach improvements. The structure will have a 140-foot end span over the railroad yard with a vertical curve, a 140-foot center span over Three Fork Creek, and a 100-foot southern end span. The grade of the new bridge will be steeper than the existing bridge, an increase from 8.8 percent to 15.2 percent.

The steeper slope makes this alternative less desirable than some other options. Steeper grades require more stopping distance, more sight distance, are harder to navigate safely in snow and rain, and more difficult to maintain as paving "slump" often occurs from braking on asphalt. Alternative 6 does not meet the project's purpose and need.

1.3.1.7 Alternative 7

Alternative 7 consists of replacing the bridge east of the existing bridge at Haislip Street while using the existing bridge to maintain traffic during construction. The bridge for Alternative 7 will be 360 feet in length, with 1,125 feet of roadway and approach improvements. The new bridge will have three spans with stub abutments founded on piling. The structure will have a 140-foot northern end span over the railroad with a vertical curve, a 140-foot center span over three Fork Creek, and a southern 80-foot end span. The new alignment will require the grade of CR 9 and the new bridge to be increased from approximately 8.8 percent to 16.5 percent.

This vertical alignment may exceed AASHTO guidance for the project of 14 to 16 percent maximum grade: steeper grades require more stopping distance, more sight distance, are harder to navigate safely in snow and rain, and more difficult to maintain as paving "slump" often occurs from braking on asphalt. The Section 4(f) resources that will be impacted include the bridge and the B&O Railroad and Yard (pier construction on railroad property). The new location requires the acquisition of one residential house. The grade and the complex intersection on the south end of the bridge make this alternative far less satisfactory then some other alternatives. Alternative 7 does not meet the project's purpose and need.

1.3.1.8 Alternative 8: The Preferred Alternative

Preferred Alternative 8 will be located adjacent and west of the existing bridge. The bridge's structure will be located parallel and approximately 60-feet downstream of the current bridge, which will be used to maintain traffic during construction. The bridge for Alternative 8 will be 300 feet in length, with 1,050 feet of roadway and approach improvements. The new bridge will have two spans with stub abutments on piling with 150-foot spans over the railroad yard and Three Fork Creek. It will have a similar grade to the existing structure (i.e., 8.8 percent to 9.0 percent) at the southern approach. The road grade and intersection configuration would be favorable to travel in winter in that vertical curves of Alternative 8 approaches are similar to the current bridge, and grades are not substantially increased. Front Street will have a direct connection at the southern end tying to the bridge, and along with the CR 9 bridge approach will require some new ROW on vacant land south of the bridge. The Section 4(f) resources that will be impacted include the bridge and the B&O Railroad and Yard from placement of a pier on railroad property. During an on-site January 3, 2013 meeting with WVDOH design engineers, CSX

representatives indicated they preferred Alternative 8 over Alternative 4 because it provides one-foot of additional clearance over their tracks.

Alternative 8 was identified as the Preferred Alternative owing to its gentle grade, excellent direct traffic flow characteristics, and the ease of construction owing to the use of the existing bridge for traffic maintenance. It also exhibits low community impacts, has a direct tie of Front Street to the bridge for use by City Garage drivers, and has lower cost. Preferred Alternative 8 meets the project's purpose and needs. This alternative was selected over Alternative 4 because it uses the existing bridge for traffic maintenance during construction and does not require a 1.3-mile long detour. As noted above, Alternative 8 was also preferred by CSX officials.

1.3.1.9 Alternative 9

The Rehabilitation Alternative consists of renovating the existing bridge which requires the detour identified in the No-Build Alternative during construction. The Section 4(f) resource that will be impacted consists of the historic bridge. A temporary occupancy of the B&O Railroad property will also be required for pier renovation. However, since the five conditions listed under 23 CFR 774.13(d) are satisfied, this does not constitute a Section 4(f) use to this resource. Rehabilitation of the bridge will result in an adverse effect as approximately 75 percent of the truss members will need to be replaced. A number of the truss members are deemed to be "fracture critical" which could result in a catastrophic failure of the entire structure if they were to fail. The abutments, piers, and bents will also have to be substantially rehabilitated or replaced. It is not possible to rehabilitate the bridge to accommodate today's legal load limits. Upon completion of the rehabilitation, the bridge will be classified as functionally obsolete under FHWA criteria due to its 13-foot 10-inch vertical clearance and the 12-foot clearance over Front Street. Additionally, the rehabilitated bridge will be classified as structurally deficient since it will not accommodate legal loads. A total of 700 feet of roadway and approaches will need to be upgraded.

Alternative 9, the Rehabilitation Alternative, was not selected for construction primarily because the resulting reconstructed bridge will be classified as functionally obsolete and structurally deficient. It does not meet the Project Need to provide a safe bridge that meets current design standards. It has been eliminated from further consideration.

1.3.1.10 Alternative 10

Alternative 10 consists of closing the current bridge and removing the superstructure with no replacement bridge being constructed. The 1.3 mile detour will become the primary route adding at least five minutes to travel times for emergency and municipal service vehicles, and all traffic. Improvements will be required at the intersection of Beech Street with Walnut Street, and at the railroad crossing. County Route 44/8 (Front Street) will be entirely reconstructed and will require the removal of two residences to improve sight distance and grade issues. The Section 4(f) resource that will be impacted will be the historic Bridge Street Bridge. The detour will be burdensome on downtown traffic, including residential and commercial city traffic, school buses and emergency vehicles, as well as through traffic using the bridge to access the recreational facilities at Tygart Dam and Lake. Motorists will be required to navigate through two traffic signals, an at-grade railroad crossing, a four-way intersection, two bridges, and comingle with downtown traffic. There will also be sight distance and grade issues along Front Street. With this option, a total of 2,400 feet of roadway will be upgraded.

This alternative does not meet the project's purpose and need to provide a safe bridge that meets current design standards, that maintains community cohesion, and provides efficient traffic flow. It has been eliminated from further consideration.

1.3.2 Alternatives Analysis and Project's Purpose and Need

This summary correlates to the information in Section 1.3.

No-Build Alternative. The No-Build Alternative was examined as a baseline condition for this project but it does not meet the project's purpose and need of bridge replacement, maintaining community cohesion, and providing efficient traffic flow. It is **not** a feasible and prudent alternative.

Alternative 1. This alternative has high community impacts which are considered flaws for Alternative 1, along with the steeper grade at the southern end. It does not meet the purpose and need of the project since it does not maintain community cohesion and does not offer efficient traffic flow. Consequently, Alternative 1 is **not** considered to be a feasible and prudent alternative for project construction.

Alternative 2. The steep grade at the southern end of the bridge and the complex traffic flow are less desirable than for several other alternatives. It does not meet the project's purpose and need requirement of efficient traffic flow. Consequently, Alternative 2 is **not** considered to be a feasible and prudent alternative for construction.

Alternative 3. High ROW cost, high total cost, and high community impacts were considered major flaws for Alternative 3. It does not meet the project's purpose and need requirement of maintaining community cohesion. Consequently, Alternative 3 is **not** considered to be a feasible and prudent alternative.

Alternative 4. This alternative offers adequate bridge replacement, maintains community cohesion, offers efficient traffic flow, and is a good geographic fit. It fully **meets** the project's purpose and need and **is** considered to be a feasible and prudent alternative for project construction. It is considered the second best option for replacing the Bridge Street Bridge if the recommended alternative (Alternative 8), for any reason, cannot be built.

Alternative 5. High total cost, a T-intersection at the southern end of the bridge along with the steep grade of CR 9 and the bridge, are considered major flaws for Alternative 5. It does not meet the project's purpose and need requirement of efficient traffic flow. Consequently, Alternative 5 is **not** considered a feasible and prudent alternative.

Alternative 6. The grade of the new bridge would be 15.2 percent and a four-legged intersection of CR 9 with CR 44 and CR 44/8 would be required: these are considered major flaws for Alternative 6. These design considerations are the result of the geographic constraints of this site. Consequently, it does not meet the project's purpose and need requirement of efficient traffic flow and geographic fit. Alternative 6 is **not** considered a feasible and prudent alternative.

Alternative 7. The grade of CR 9 and the new bridge would be 16.5 percent and may exceed AASHTO guidelines for vertical alignment. This grade could be a safety issue during the winter season, and the "T-intersection" at CR 9 with CR 44/8 would be complex. The steep grade at the southern end of the bridge and the less desirable traffic flow are considered major flaws for Alternative 7. It does not meet the project's purpose and need requirement of efficient traffic flow and geographic fit. Consequently, Alternative 7 is **not** considered a feasible and prudent alternative.

Alternative 8. The Preferred Alternative. This alternative was identified as the recommended alternative owing to its excellent traffic flow characteristics, the ease of construction owing to the use of the existing bridge for traffic maintenance, low community impacts, the direct tie of Front Street to the Bridge, and its lower cost. It is

considered to offer the best combination for bridge replacement, for maintaining community cohesion, offering efficient traffic flow, and good geographic fit. It fully meets the project's purpose and need and is considered to be a feasible and prudent alternative for project construction. It is recommended as the **Preferred Alternative.**

Alternative 9. The Rehabilitation Alternative. This alternative is the only one having no effect on Section 4(f) resources. However, the Rehabilitation Alternative is **not** a feasible and prudent alternative because the rehabilitated bridge would still be classified as functionally obsolete under FHWA criteria due to its 13-foot, 10-inch vertical clearance, the 12-foot clearance over Front Street, and its 24-foot width. Also, the bridge will be classified as structurally deficient since it would not accommodate legal loads. The Rehabilitation Alternative does **not** meet the project's need of an adequate bridge replacement.

Alternative 10. This alternative requires removing the bridge and upgrading a permanent detour route. The detour would be burdensome on downtown traffic, school buses and emergency vehicles, as well as through traffic. There are also sight distance and grade issues along Front Street. It does not meet the project's purpose and need of an adequate bridge replacement, maintaining community cohesion, and offering efficient traffic flow. Consequently, Alternative is 10 is **not** considered a feasible and prudent alternative.

1.3.3 Summary of Alternatives Analysis

The alternatives analysis indicates that only Alternatives 8 and 4 meet the project's purpose and need. Preliminary environmental evaluations found that resources not protected by Section 4(f) are primarily confined to socio-economic impacts to community facilities (such as the DHHR building), residential and commercial displacements, and minor taking of vacant property. Alternative 8, the Preferred Alternative, and Alternative 4 have few environmental or socioeconomic impacts and require no residential or business displacements. Both require the acquisition of a vacant lot, located within the Downtown Historic District; the vacant lot is not a contributing resource to the historic district.

Alternative 8 was selected for construction for the following reasons:

- The impacts to environmental and social systems are equal to or less than other alternatives;
- It reduces the amount of turning movements and has a free-flow connection to Barrett Street making it a safer and more efficient route;
- It is close to the grade and profile of the existing bridge, making it less visually intrusive to the Downtown Historic District;
- It maintains traffic on the existing bridge during construction of the new bridge, continuing emergency and school bus service to South Grafton;
- It has no residential or business displacements;
- It increases vertical clearance above the railroad to facilitate double stack rail traffic and removes several horizontal obstructions in the rail yard by replacing a five span structure with a two span structure;
- CSX prefers Alternative 8 over Alternative 4 because it provides one-foot of additional vertical clearance over the tracks;
- It is the least expensive of the build alternatives; and
- It meets all of the components of the project's Purpose and Need.

2.0 Environmental Evaluation

2.1 Regional and Community Growth

2.1.1 Land Use

Land use in the northeast quadrant of the study area includes the large, Elizabeth Cather Towers apartment building (Photograph 4) on the north side of Main Street (US Route 119). A small parking lot, a wooded slope, along with the B&O Railroad and Yard and Three Fork Creek is across Main Street from the Towers. A narrow band of mixed trees line Three Forks Creek. Further east, adjacent to the study area, land use is essentially wooded with scattered houses along the road. Figure 2 showing project alternatives and the study area provides an aerial perspective of land use in the project area.

Photograph 4. The Elizabeth Cather Tower Apartments.

In the southeast quadrant is found a narrow band of mixed trees along Three Forks Creek, and then the DHHR building and large parking lot for the DHHR building. A Laundromat is located east of the DHHR building. Adjacent to the study area and south of Barrett Street is Jerry's Restaurant and Lounge and several nearby houses; east of Gordon Street and along Barrett Street is a complex of houses. A large wooded ridge rises south of Barrett Street.

In the southwest Quadrant is located the City Garage and the Calvary Apostolic Church. Six houses south of Barrett Street are found adjacent to the study area, along with the steep, wooded ridge. (Trees line Three Fork Creek in both the southwest and northwest quadrants.) In the northwest quadrant are the densely developed downtown commercial district of Grafton, and the major maintenance buildings of the B&O Railroad and Yard. Prominent historic structures include the Willard Hotel, just west of the northern bridge entrance, and the B&O Station further west. Also located west of the bridge along East Main Street is a complex of clubs and social services including the Central WV Disabled Veterans Chapter #24, a Fraternal Order of Eagles club, the North Central WV Community Action building, and the Mother's Day Shrine.

Located approximately 60 feet downstream of the current bridge, and on vacant land requiring no building displacements, Preferred Alternative 8 will have minimal impacts on land use. Only land within the footprint of the new bridge will be affected, and that is in grass, scrub-shrub vegetation, a few trees, and Three Fork Creek. Also, a pier will be placed on railroad property supporting the bridge superstructure over the railroad.

Historic resources in the study area include the Bridge and the B&O Railroad and Yard, both of which are NRHP-eligible resources. The National Register-listed Downtown Historic District is located adjacent to, and west of the Bridge.

2.1.2 Regional and Community Planning

The repair or replacement of the Bridge Street Bridge is in compliance with city planning. An email (Appendix A) of the Final Section 4(f) which is found in Appendix D of this CEE notes the City's approval of the project. This bridge is currently and historically an important highway connection for both Taylor County and for the City of Grafton.

Without repair or replacement of the bridge, community cohesion will be sorely impacted, and commerce will be curtailed.

2.2 Soil Erosion and Sedimentation

The project will be constructed mostly on the floodplain of Three Fork Creek. According to the *Soil Survey of Harrison and Taylor Counties, West Virginia* (Beverage and Yoakum 1980), the study area is covered entirely with Urban Land (UL) soils (Figure 4). These soils are a mixture of a variety of material that varies in chemical and physical properties, is on flood plains, stream terraces, foot slopes, and uplands and "mainly in the cities and suburbs of Clarksburg, Bridgeville, and Grafton." This material is so altered or obscured by urban works, structures, and earthmoving equipment that identification of soils is not feasible. Slopes range from zero to 35 percent. On-site examination is needed to determine the suitability of any site for specific use. No capability or woodland classification is provided because of the soil diversity.

An Erosion and Sedimentation Control Plan (E&SCP) will be prepared for this project and submitted to the Taylor County Conservation District for review. Special provisions will address the demolition of the existing bridge and the new bridge construction over Three Fork Creek.

No further mitigation measures are required.

Figure 4. Soils Map Showing Urban Land (UL) Soils Covering the Study Area.

2.3 Vegetation, Wildlife and Wildlife Habitat

The Bridge Street Bridge project area is in an urban setting and is part of a highly dissected plateau, ranging in elevation from 1,500 feet to over 2,000-feet above sea level. Erosive agents have reduced this plateau practically all to slope, the streams generally flowing in narrow, deeply indented "V" shaped valleys, with comparatively sharp and narrow divides between (West Virginia Geological Survey 1913).

Photograph 5. Three Fork Creek Looking Downstream, Taken from the Bridge.

The region is characterized by a dominance of white oak (*Quercus alba*), red oak (*Quercus rubra*), and tulip poplar (*Liriodendron tulipifera*). This Mixed Mesophytic Forest Region includes hemlock (*Tsuga canadensis*), red maple (*Acer rubrum*), and white pine (*Pinus strobus*). No unique habitats or communities have been identified in the impact area.

The majority of the project area is in UL use with prominent features being the bridge, Three Fork Creek, the B&O Railroad and Yard, and commercial and housing development in the City of Grafton. Vegetation is sparse, other than some grassed vacant lots, and is generally located in strip riparian areas along Three Fork Creek, which are lined with young sycamore (*Platanus occidentalis*), sugar maple (*Acer saccharum*), and black cherry (*Prunus serotina*) trees. Stands of Japanese knotweed (*Polygonum cuspidatum*) and staghorn sumac (*Rhus typhina*) are interspersed among streamside trees (Photograph 5).

Wildlife habitat quality in the study area is low due to the dominant urban nature of land development. Use of the wooded stream slopes in the riparian zones of Three Fork Creek as wildlife habitat is limited due to its narrow width and small overall size. However, the area connects to forested land both north and south of the study area offering natural habitats. The typical wildlife species using these types of habitats tend to be commonly-occurring generalists, which may include eastern cottontail (*Sylvilagus floridanus*), gray squirrel (*Sciurus carolinensis*), raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), white-tailed deer (*Odocoileus virginianus*), American crow (*Corvus brachyrhynchos*), black-capped chickadee (*Parus atricapillus*), and big brown bat (*Eptesicus fuscus*).

The forested riparian slopes adjacent to the banks of Three Fork Creek will be spanned by Preferred Alternative 8. Forest vegetation will not be reestablished under the bridge but a dispersal corridor along the river banks will be maintained. Due to the small amount of habitat affected, no substantial impacts to local or regional wildlife populations are anticipated. Similar habitats are common in the immediate vicinity.

No mitigation is required.

2.4 Surface Water Hydrology and Water Quality

The project area is located in the Grafton portion of Three Forks Creek basin in the Tygart Valley River Watershed. The Creek drainage is 103 square miles in area, with headwaters on Chestnut Ridge in Monongalia County and flowing southward and westward through Irondale and Thornton to Grafton. Three Fork Creek is listed as a Tier 1 water body and is a Category B water, according to the WV Department of Environmental Protection (WVDEP), Water Resources, Water Use Categories and Water Quality Standards (W. Va. Code Article 22-11-2). As such, it is a cold water fishery stream, which contains populations composed of all cold water aquatic life. Trout are stocked, normally weekly during the trout season, starting at the US Route 119 Bridge, approximately 2,000 feet downstream. However, Three Forks Creek is listed as a Section 303(d) impaired water, which has not precluded using the stream to stock trout for local recreation.

Three Forks Creek is not a source of raw water for municipal use and has no power plants on it. None of the stream reaches in the project area are components of the National Wild and Scenic River System (NWSRS) (United States Department of the Interior [USDI], National Park Service 2006a) nor are they listed on the Nationwide Rivers Inventory (USDI National Park Service 2006b) which lists candidates for NWSRS designation.

Preferred Alternative 8 will not require piers or other bridge appurtenances in Three Fork Creek. No or few impacts are expected to water quality from the proposed project. A Soil Erosion and Sedimentation Control Plan (E&SCP) will be prepared for the project to control sediments, reviewed by the Taylor County Conservation District, and executed during project construction.

Following the construction phase of the project, there are potential impacts to water quality resulting from road operations, with most impacts related to storm water runoff which can carry various materials to nearby streams. Stormwater runoff may contain highway related compounds including salts, organic phosphorus and nitrogen, rubber, heavy metals, petroleum, and chlorinated hydrocarbons.

Because the bridge replacement project is not expected to have an effect on traffic volume, no increases in operation-related pollutants to project area streams are expected. Water quality will be maintained within the standards specified in Title 46: Legislative Rules and Regulations Governing Water Quality Standards, Series I.

Thus, no direct impacts to aquatic life are anticipated. No mitigation is required.

2.5 Wetlands and Floodplains

2.5.1 Wetlands

Wetlands within the project area were initially identified based upon a review of the National Wetland Inventory (NWI) mapping (United States Fish and Wildlife Service [USFWS], 1990a). The NWI mapping shows one wetland in the project area, Three Forks Creek, listed as a riverine upper perennial unconsolidated bottom permanently flooded (R3UBH) wetland.

A wetland delineation was conducted in November 2013 to identify wetlands in the study area. Wetlands were identified in accordance with the procedures outlined in 1987 USACE *Wetlands Delineation Manual* and the Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Eastern Mountains and Piedmont Region (USACE 1987 and 2012). No wetland areas, except Three Fork Creek (riverine wetland), are located in the project area. Riverine wetlands are recognized as streams.

2.5.2 Floodplains

Information concerning floodplains in the study area was obtained through review of the Federal Emergency Management Agency Flood Insurance Rate Maps (FIRM) for Taylor County. As Figure 5 (FIRM map) illustrates, nearly all of the study area through which Preferred Alternative 8 passes is located in the floodplain and 100-year flood hazard boundary (One Percent Occurrence) of Three Fork Creek. Impacts for all build alternatives will be similar. The Preferred Alternative will impact a small area of the 100-year floodplain through placement of fill for the approach roads and a pier on Railroad property (less than one acre total). The embankment supporting Front Street will occupy a lineal position in line with creek flow. The existing bridge has no history of worsening the effects of major flood events upstream. The Preferred Alternative will be equal to or higher in elevation than the current bridge and will have similar hydraulic capacity. The current bridge has two piers, and two concrete bents supporting south approach spans. The proposed bridge will have two piers, and should pass floodwater

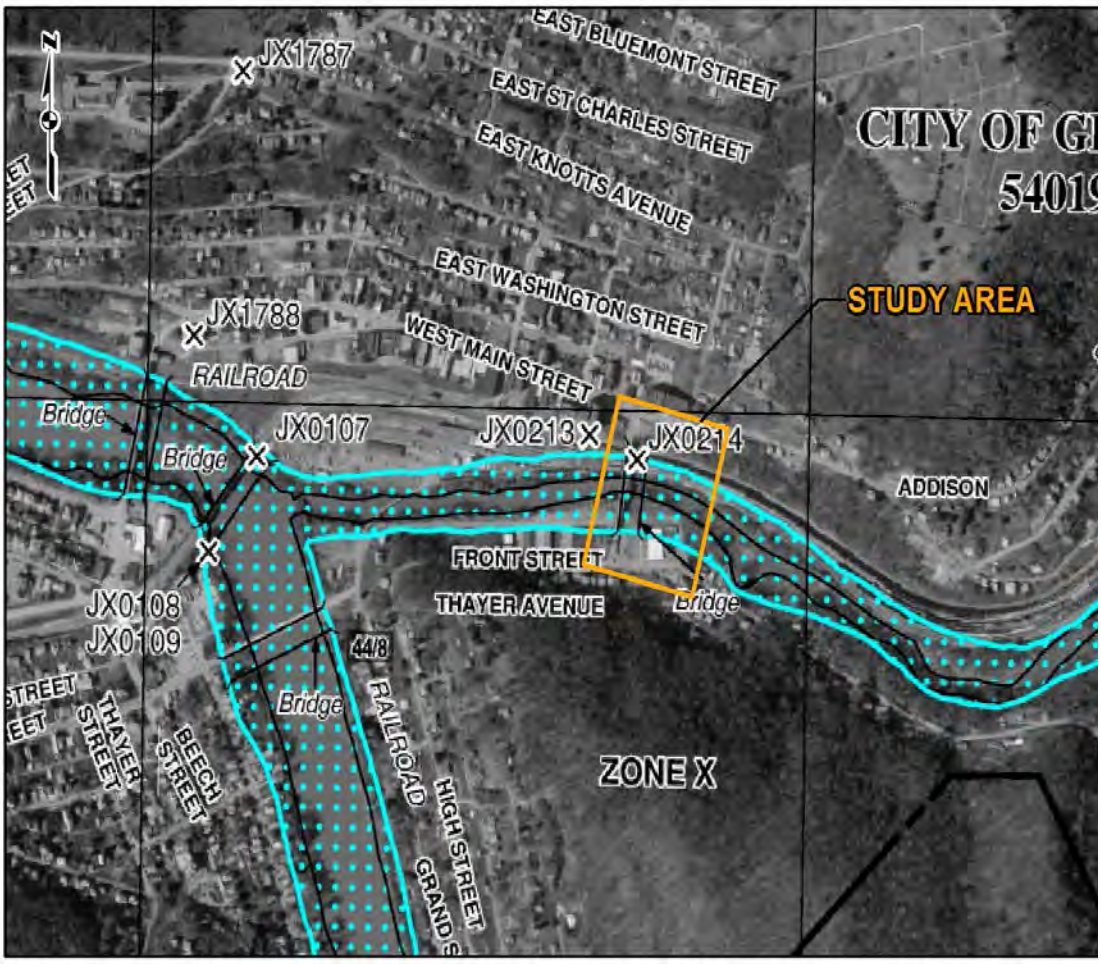

Figure 5. FIRM Map Showing Grafton's Special Hazard Area Subject to the One Percent Annual Chance of Flooding.

equal to or better than the current bridge since there are no bents to catch trees and other floating material.

For Preferred Alternative 8, all major drainage structures for the approach roads will be designed so as not to increase the potential for property damage due to runoff.

No other mitigation is required.

2.6 Ground Water Resources

Public water is the primary source of potable water in the project area. No well water is utilized for any use and no private groundwater wells are known to exist. No important springs as identified by the WV Geological and Economic Survey (McColloch 1988) are located in the project area and no substantial springs were identified during field views.

Little land modification will be required and the amount of earthwork during the construction phase of this project is limited. The implementation of an E&SCP will minimize the potential for groundwater pollution impacts during construction and operation. Construction equipment will be refueled in secure areas. No effects on groundwater, groundwater sources, or springs are anticipated from the proposed project.

2.7 Endangered and Threatened Species

Threatened and endangered wildlife and plant species are protected under Section 7 of the

federal *Endangered Species Act of 1973* (ESA). In West Virginia, there is no state threatened and endangered species legislation. The species listed as either threatened or endangered in West Virginia are those listed by the USFWS as federally protected species. Coordination with the West Virginia Department of Natural Resources (WVDNR) took place to determine if any rare, threatened or endangered (RTE) species are known to occur, or have been reported, in the study area. The WVDNR responded to this request in writing on September 25, 2012 (see **Appendix A**) stating that their records indicate no known occurrences of RTE species or natural trout streams within the study area.

No biological assessment or further Section 7 consultation under the ESA is required unless there is a change in project plans or additional information on listed and proposed species becomes available from the USFWS.

It is known that the Indiana Bat (*Myotis sodalist*) may occur in the region. However, the potential impacts from this proposed project are below the threshold acreages on roosting trees for the Indiana Bat (17 acres); the project impact area is small (less than two acres) and most of the area is already cleared of vegetation. Therefore, the Preferred Alternative will have no effect on the Indiana Bat.

The USFWS proposed on October 2, 2013 to list the northern long-eared bat (NLEB) as an endangered species under the ESA. Since the NLEB and Indiana Bat occupy similar habitat, by letter dated March 18, 2014, the USFWS agreed to allow the NLEB to be covered under the 2012 Memorandum of Understanding (MOU) between the FHWA, WVDOH, and USFWS (FHWA, et al. 2012). Therefore, the Preferred Alternative will have no effect on the NLEB (see USFWS letter in Appendix A).

According to procedures established in the 2012 MOU concerning the ESA, the WVDOH has determined that this proposed project will have “no effect” on federally-listed endangered or threatened species, or proposed or candidate species, eagles, or habitat for the species, including designated critical habitat.

No mitigation is required.

2.8 Farmlands

Virtually all of the land in the study area is listed as UL, with a mixture of materials that vary in chemical and physical properties. The land shows no evidence now or in the past of farming or pasture (but may have occurred prior to the 20th Century). There are no listed Prime Farmland Soils or Soils of Statewide importance in the study area. Thus, no impacts to farmlands will result from this project.

2.9 Energy Conservation

A one-time use energy expenditure will be required to improve the Bridge Street Bridge and to realign its approaches. The option of making no improvements to the existing bridge will eventually cause the closing of the bridge. If the bridge were closed, traffic will have a detour approximately 1.3-miles long. This slow-speed detour will result in an increase in energy use over the life of the project.

The Preferred Alternative will maintain an efficient transportation system in the project area. The new bridge and approach will be realigned in order to have a better transition on the northern and southern approaches, and a direct connection to Front Street. During construction, the existing bridge will be used to carry traffic, so no detour will be required. It is concluded that

energy use for constructing the bridge and approaches will be offset by the transportation efficiency offered by the new facilities versus allowing the existing bridge to decline and eventually be closed.

2.10 Historical and Archaeological Resources

2.10.1 Archaeological Resources

A Phase I archaeological survey was completed to characterize effects of the project on archaeological resources (GAI 2011). The proposed project involves the replacement of the existing bridge with a new bridge located approximately 60 feet west (downstream) of the current Bridge Street Bridge and demolishing the existing bridge. The area investigated measures approximately 274 meters (900 feet) in length and varied in width for a total of approximately 1.22 hectares (three acres). The purpose of the study was to identify archaeological sites within the general project area and develop preliminary assessments of site significance.

The study included background research, field investigations, and laboratory analysis. Background research revealed no recorded archaeological sites and one NRHP district (Downtown Historic District) recorded within the project area. Map research did indicate that there were structures within the project area during the late-nineteenth and mid-twentieth centuries that have since been demolished.

Photograph 6. Shovel Testing Occurred on this Vacant Lot in the Southwest Quadrant of the Bridge.

The archaeological field investigations consisted of a pedestrian ground reconnaissance followed by subsurface testing in locations that possessed moderate to high potential for intact archaeological deposits. Subsurface testing was limited to the southwest quadrant of the bridge area which is currently an open field (Photograph 6). The remaining portions of the project Area of Potential Affect (APE) were excluded from shovel testing due primarily to disturbance. Excavations included six shovel test pits followed by three radial shovel test pits.

These excavations produced 12 artifacts from late-twentieth or early twenty-first century fill deposits. No in situ archaeological sites or deposits were identified. Therefore, GAI Consultants, Inc. recommended that the Project should proceed as planned and without further archaeological investigations. However, if design plans change to include areas not included in the current survey, additional studies may be required in accordance with Section 106 of the National Historic Preservation Act of 1966 and other appropriate federal legislation. The West Virginia Division of Culture and History (WVDCH) concurred with this recommendation (letter dated April 30, 2012, Appendix A).

2.10.2 Historical Resources

Two NRHP-eligible resources, the Bridge Street Bridge and the B&O Railroad and Yard, and the NRHP-listed Grafton Downtown Commercial Historic District are located in the project area.

2.10.2.1 Bridge Street Bridge

The present bridge, built in 1951, replaced a seven-span through and pony truss bridge that was constructed circa 1900 at the same location. The Bridge Street Bridge was built by the Agnew Construction Company of Ronceverte, WV, from plans designed by Frank McEnteer (KCI). McEnteer was a prominent twentieth century WV bridge designer and served as president of the Concrete Steel Bridge Company in Clarksburg from 1912 to 1931. McEnteer served as the district engineer for the WV State Road Commission from 1932 to 1938, and construction engineer for the northern district between 1938 and 1940. He served as a project manager with Johnson, Piper, and Drake in 1942, supervising the construction of an army base near Tel Aviv. Shortly thereafter, he became chief engineer of the United States Armed Forces construction division in the Middle East, where he supervised construction of airports. After World War II, McEnteer continued his engineering career in Clarksburg, WV, opening a firm that specialized in highway, bridge and industrial construction. He continued to run his firm until his death in 1951.

The NRHP boundary for the Bridge Street Bridge is defined as the footprint, including piers, superstructure, and immediate floodway approaches (Figure 6). The bridge is not considered a contributing resource to the NRHP-listed Grafton Downtown Commercial Historic District; however, it has been determined individually eligible for NRHP listing under Criterion C as a locally significant bridge (WVDCH Letter, December 14, 2010, see Appendix A).

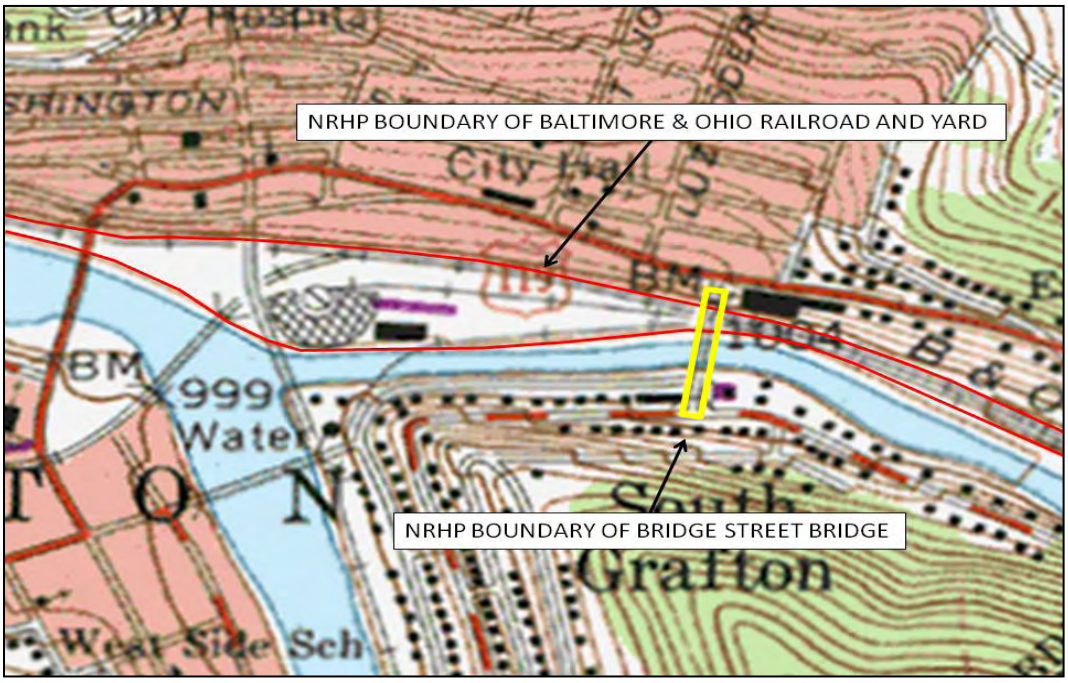

Figure 6. NRHP Boundary of Bridge Street Bridge and B&O Railroad and Yard.

2.10.2.2 Crafton 2.10.2.2 Grafton Downtown Commercial Historic District

The Downtown Historic District extends along Main Street and Latrobe Street from Bridge Street in the east to Saint Mary's Street and Beech Street in the west (Figure 7). Grafton is situated on hills rising from the north side of Three Fork Creek. The character of the town is influenced by the rugged landscape, with most buildings constructed into the sloping terrain. The Downtown Historic District is characterized by commercial, municipal, and religious buildings mostly dating from 1890 to 1920, the period of significance for the historic district. These ornate buildings, many constructed in the Italianate and Beaux Arts style, are generally of brick or wood frame construction and range in height from one story to up to six and one half stories, with the majority of buildings being two to three stories in height.

The Downtown Historic District was NRHP-listed under Criterion A for illustrating the forces which shaped the growth of Grafton which were prevalent in the boom atmosphere of turn of the century America; and Criterion C for its distinctive architectural character stemming from the excellent examples of turn of the century period styles, particularly Italianate and Beaux Arts. According to previous surveys, there are 91 buildings and structures located within the NRHP boundaries of the Downtown Historic District. Of these buildings, 71 are considered contributing, and 20 are considered non-contributing or have been demolished (Figure 7).

Several key buildings are found in the district. Near the Project, to the west of Bridge Street Bridge and anchoring the historic district in the east, are the Willard Hotel and the B&O Station (Chessie System Railroad Station), both contributing resources (see Photographs 7 and 8). These buildings were built in 1911 and are architecturally distinct, reflecting one of Grafton's most prosperous times. Neither of these buildings will be physically impacted by the Project.

Photograph 7. The Willard Hotel; also a Vacant Lot Once Containing an Ashland Gas Station adjacent to the Bridge approach.

The APE of the Project encompasses two non-contributing resources within the Downtown Historic District. The Bridge Street Bridge itself was determined to be a non-contributing resource by the WVDCH. In addition, a vacant lot immediately to the west of Bridge Street Bridge originally contained the Ashland Gas Station a non-contributing resource within the Downtown Historic District, as it post-dated the district's period of significance. This non-contributing resource has been demolished, and the vacant lot remains non-contributing to the historic district. The Preferred Alternative and four other build alternatives affect this vacant lot.

Photograph 8. The B&O Station.

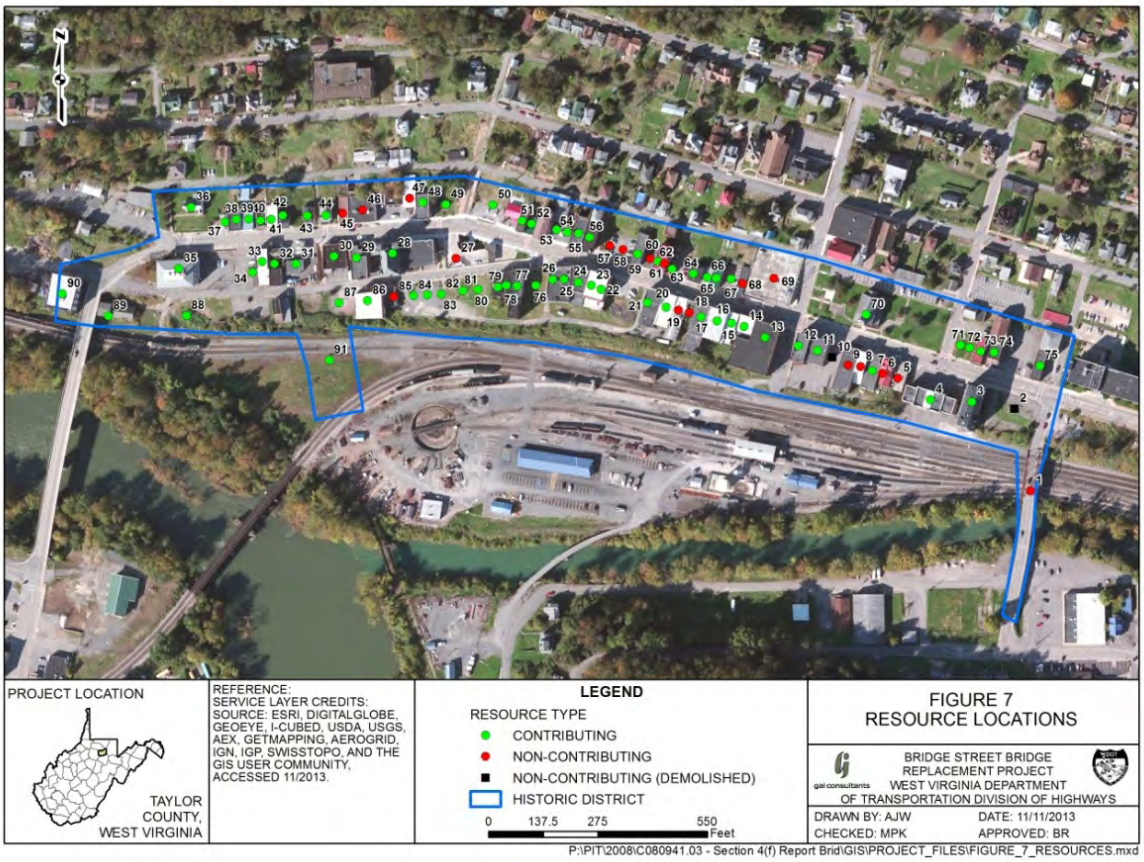

Figure 7. Resource Locations

While the B&O Railroad and Yard were significant in shaping the settlement and growth of downtown Grafton, it is not included within the NRHP boundaries of the Downtown Historic District and is not a contributing resource.

2.10.2.3 Baltimore and Ohio Railroad and Yard (now CSX Railroad and Yard)

The B&O Railroad was America's first common carrier railroad and survived to become one of the world's oldest railroad companies (CSX Transportation). The railroad was chartered on February 28, 1827, and officially incorporated on April 24, 1827. The line reached Cumberland, Maryland by 1842, and by 1852 it stretched to the Ohio River in Wheeling, Virginia. The railroad served to bolster the country's economy and growth by linking growing western markets with the established markets of the east, as well as providing passenger services between these areas. It passes through Grafton along the banks of Three Fork Creek, and was a significant catalyst in the development of the town.

Photograph 9. The B&O Railroad and Yard.

Within the Project area the B&O Railroad and Yard consists of multiple lines composed of steel rails and wooden ties resting on gravel ballast. Numerous tracks are located in the vicinity of the rail yards, though the majority of the original buildings constituting the yard have been demolished and/or replaced by modern construction (Photograph 9). Bridge Street Bridge crosses the B&O Railroad and Yard at the eastern end of the yard (Figure 7).

The B&O Railroad and Yard has been determined NRHP-eligible under Criterion A for its association with significant events that have contributed to the broad patterns of history. Figure 6 identifies the NRHP boundary of the railroad and yard in the vicinity of the Project. All of the project alternatives affect the railroad and yard either by placing piers on railroad property or by removing the existing bridge and piers.

2.10.2.4 Historic Resource Impacts

The WVDOH has prepared a MOA for this project, in compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (see Appendix A). This MOA has been executed by FHWA and the West Virginia State Historic Preservation Officer (WVSHPO), with WVDOH concurrence. It contains stipulations to mitigate the adverse effect resulting from the Bridge Street Bridge Replacement Project, including the following: (1) documentation of the Bridge; (2) location of historic photographs (if possible); (3) a fully-completed WV Historic Property Inventory Form; and (4) monetary provisions to enhance local historic resources.

The MOA also contains context sensitive design measures in Stipulation IV as follows: "The Bridge Street Bridge Replacement bridge will contain historic style lighting and architectural treatments to the bridge to match the Grafton Commercial Historic District."

2.11 Parks and Recreation Facilities

There are no parks or recreation facilities in the study area. However, the Mother's Day Park and Shrine is located about two blocks west of the project Area along East Main Street. The Preferred Alternative will not impact this shrine. Also, the bridge is an integral structure for through-traffic for motorists using the Tygart Lake State Park located approximately 2.5 miles south of the Bridge. The Preferred Alternative will provide through-traffic access to the park without the need to navigate through Grafton's downtown which would occur if the bridge were closed.

2.12 Hazardous and Residual Waste Sites

An assessment of properties using public right-to-know information via the Internet and visual observations of properties in the vicinity of the Preferred Alternative was used to identify potential hazardous waste sites. A computer search of Mid-Atlantic Superfund sites reveals that there are two Superfund sites in Taylor County (Appendix B). One is at the base of the Tygart River Dam and the other is along the bank of the Tygart River. Both sites are well removed from the Bridge Street Bridge study area. A field evaluation and discussions with local residents on November 4, 2013 was used to determine other potential locations affected by the Preferred Alternative that might contain hazardous materials.

The vacant lot at in the northwest quadrant of the bridge was once the location of an Ashland gas station that handled gas, oil, drums of oil-based liquids, and other associated auto service station wastes. The B&O Railroad and Yard has the potential for spills; while the vacant lot in the southwest quadrant contains a natural gas pumping station. Further evaluations of these sites are warranted.

In the bridge final design stage, a Phase I Environmental Site Assessment documenting hazardous waste site investigations will be prepared for the project. Any required further studies

will be provided and any remedial actions indicated in the Phase I assessment will be addressed prior to project construction.

2.13 Public Facilities and Services

Essentially no impacts will occur to public facilities and services as the existing bridge will be in use during construction of the Preferred Alternative. Therefore, fire, police and ambulance services will not be interrupted (except for possible short durations when approach roads are connected to existing streets). There are aerial utility lines (power, telephone, and cable lines) located along the upstream side of the bridge; these will not be affected during replacement construction downstream of the existing bridge. A water line located along Front Street crosses under Span 4, and a gas line crosses under Span 5 to a gas regulating station located approximately 15 feet downstream from the current bridge (Photograph 10); neither of these are expected to be affected by the construction of the Preferred Alternative. A United States Geological Survey (USGS) survey marker is located on top of the northeast wingwall of the northern abutment of the existing bridge; it will be relocated to the desired position that the USGS determines. The DHHR building is located in the southeast quadrant of the bridge and is a key public services facility to Grafton and Taylor County. It will not be impacted by the Preferred Alternative.

Photograph 10. Gas Regulating Station Located 15 Feet West of the Current Bridge.

2.14 Community Cohesion

Community cohesion is a key component of this proposed project. Several important community facilities are located in South Grafton. The DHHR facility at the southern end of the Bridge provides a full array of services including eight social services (child care, adoption, etc.), 12 family assistance programs (food stamps, etc.), eight student programs (scholarships, loans, etc.), local health department funding, business work opportunities and many other programs. It supervises the Medicare, Affordable Health Care, and Welfare programs. It is a critical facility for both Grafton and Taylor County residents, particularly for minority and low-income families.

The Preferred Alternative will not result in disproportionate impact to Environmental Justice low-income and/or minority populations. No businesses or residential structures will be displaced so there are no opportunities for direct impacts. Access to the DHHR building will be maintained for low-income residents in the Elizabeth Cather Towers at the east end of the bridge. This is also the case for many other minority and low-income users of the DHHR building who will not have to detour through Grafton's downtown.

The City Garage that serves the entire city is located on Front Street, a block from the south end of the bridge. Loss of the access will be a major inconvenience since a 1.3-mile trip will be required. Garage drivers will be required to navigate through two traffic signals, an at-grade railroad crossing, a four-way intersection, two bridges, and comingle with downtown traffic to proceed to the northern end of the current bridge. Safety will be a concern, particularly in winter for this longer route.

For Preferred Alternative 8, the existing bridge will be in use during construction, so community functions will continue unabated. Traffic on CR 9 (Bridge Street) will not be affected, except for short delays during approach road construction. The new facility will provide a more efficient and safer transportation network, improving community cohesion.

2.15 Displacements

The Preferred Alternative has no residential or commercial displacements. It will require taking all or portions of two vacant lots, one at the northern end and one at the southern end of the proposed bridge.

2.16 Air and Noise

No negative effect on air quality will result from this project. The project area is in an isolated, high plateau area. Air circulation is excellent and the project is not located in an area where the State Implementation Plan requires transportation control measures. Furthermore, the project will improve traffic flow by construction of a more efficient transportation network, reducing pollutants entering the atmosphere. The current bridge cannot carry Class 4-through-8 vehicles because of weight restrictions (large buses, refuse trucks, fire trucks, etc.). These must detour on a 1.3-mile route through Grafton's downtown increasing vehicular emissions in the City. The Preferred Alternative, which is located near the current bridge, will remove all restrictions. The project area is located within an attainment area. Therefore the conformity procedures as described in Title 23 CFR, Part 770 of the Clean Air Act do not relate to this proposed project.

No increased noise is expected to result from this project. No additional traffic will be generated by the project nor will the Preferred Alternative be located substantially closer to sensitive receptors (it will be 60 feet closer to the Willard Hotel but 60 feet further from the Elizabeth Cather Towers apartments). The project area is in a small city in an otherwise rural area, with low ambient noise levels and low normal traffic flow. Only train traffic on the B&O Railroad generates substantial ambient noise. It is concluded that low traffic volume combined with the low ambient noise will not generate noise levels that approach or exceed WVDOH or FHWA noise abatement criteria.

2.17 Visual Assessment

The viewshed containing the project area is an urban setting in a generally rural landscape. The B&O Railroad and tree-lined Three Fork Creek are the dominant features in the study area, along with urban development. A complex of city structures is located at both the northern and southern terminuses of the Preferred Alternative. Important visual receptors include the Downtown Historic District west of the existing bridge's northern approach, and the NRHP-eligible B&O Railroad and Yard passing under the bridge.

Visual impacts might increase since the Preferred Alternative will be located 60 feet closer than the current bridge to the Downtown Historic District. However the characteristics that qualify the Downtown Historic District as a Section 4(f) resource will not be substantially impaired by visual impacts for the Preferred Alternative.

The basis of this opinion is the existing bridge was determined to be a non-contributing element to the Historic District and since the viewshed of the Historic District includes a bridge, the replacement of the existing bridge with a new structure (located beside the existing bridge) does not significantly alter the Historic District's viewshed to the degree that it changes the qualities or characteristics of the contributing elements.

The Preferred Alternative will place a new, improved span over the railroad/railroad yards, introducing a new visual element. The WVSHPO has indicated that this will generate a change in

viewshed and impacts to the Bridge Street Bridge and the B&O Railroad and Yard in a letter to the WVDOH, dated July 8, 2011 (Appendix A). Subsequently, the WVDOH prepared a MOA for this project, in compliance with Section 106 of the NHPA of 1966, as amended (see Appendix A). This MOA was executed by the FHWA and the WVSHPO for the Advisory Council on Historic Preservation (ACHP). It contains stipulations to mitigate adverse effects resulting from the Project including that the replacement bridge will contain historic-style lighting and architectural treatment to match the Downtown Historic District.

Subsequently, in a letter dated April 16, 2012 (Appendix A), the WVSHPO states that the MOA sufficiently mitigates the project's adverse visual effects. Figure 2 can be used to identify visual relationships of the Preferred Alternative in respect to nearby historic resources.

No further mitigation is required.

2.18 Construction Impacts

Impacts during construction will be limited primarily to temporary noise and water quality impacts.

2.18.1 Noise

The construction and development of the proposed project will typically result in temporary noise increases within the immediate area. The noise will be generated primarily from heavy equipment used in hauling heavy materials and replacing the existing span. Sensitive receptors at the termini points located close to the construction areas may temporarily experience increased noise levels.

Effective control of highway construction noise will be achieved by source control, site control, and time and activity constraints. All potential noise impacts will be limited in duration to the actual construction period and limited to the immediate vicinity of the work in progress. Any anticipated noise impacts will be confined to time periods considered relatively "noise tolerant" and generally accepted as normal working hours.

2.18.2 Water Quality

Only minor and temporary impacts to the Three Fork Creek will occur as a result of the proposed project. The earthwork associated with road and bridge rehabilitation is not anticipated to result in the degradation of the stream's water quality. Actual earth-moving activity will be well protected and construction emissions and fugitive dust will be controlled by the use of approved dust control palliatives. An E&SCP will be prepared for the project and incorporated into the project specifications. Appropriate restrictions on refueling and maintenance areas will minimize the potential for accidental spills during construction. A National Pollution Discharge Elimination System (NPDES) permit for Stormwater Discharges from Construction Activities will be obtained from the WVDEP. Water Quality will be maintained within the standards as specified in *Title 46, Legislative Rules, Regulations Governing Water Quality Standards, Series I*.

No further mitigation is required.

2.19 Section 4(f) Resources

A Section 4(f) Evaluation has been prepared for this project and is found in Appendix D. Following is a brief summary of the findings of the Section 4(f) document.

The Section 4(f) uses include the Bridge Street Bridge, which will eventually be demolished, and the B&O Railroad and Yard, which will be affected by the placement of a new pier for the bridge span. A vacant non-contributing lot in the Downtown Historic District will be required by Alternative 8 but does not constitute a Section 4(f) use.

On August 5, 2010, the WVDOH conducted a public meeting, soliciting comments, suggestions, and recommendations for the project. During this public meeting the WVDOH identified the eight build alternatives for the project, and the Preferred Alternative (Alternative 8), which minimizes impacts to historic resources while satisfying the project purpose and need to replace the deficient existing bridge. The No-Build Alternative and the Rehabilitation Alternative (Alternative 9) were also presented, discussed, and the reasons provided for why each is inadequate for project development. Five members of the community attended the meeting, and one comment was received. The comment (in Appendix A) was from a property owner who recommended Alternative 8, Alternative 6, Alternative 4 or Alternative 2 (Subsequently, Alternative 8 was chosen for construction).

Coordination efforts have been conducted with the WVSHPO and other historical agencies throughout the course of the project. This began in October 2009 when letters and information were sent to the WVSHPO, the Vandalia Heritage Foundation, and the Taylor County Historical and Genealogical (H&G) Society identifying the proposed project and requesting information they might have about the project. Among other times, communications were exchanged between the WVSHPO and the WVDOH in February 2010, July 2010, September 2010 and October 2010; and with the Vandalia Heritage Foundation and the Taylor County H&G Society in July 2010 beginning the process of approval of the project. Subsequently, the WVDOH contacted the Preservation Alliance of WV notifying them of the project and requesting comments. These are also found in Appendix A of the Section 4(f) Evaluation, which is attached as Appendix D of this document.

On September 22, 2011 a Preliminary Field and Span Arrangement Review was held to identify project aspects and to receive input from the different WVDOH engineering sections, from utilities, the railroad, and interested parties (see sign-in sheet in Appendix A). Coordination with the CSX Railroad began on July 20, 2011 when a call was made by the WVDOH to CSX identifying the project, its historic nature, and requesting input. The CSX respondent did not understand how a railroad could be historic and indicated CSX had no interest in the project. Subsequently, an email was submitted to CSX requesting that they become a consulting party (Appendix A. Public Coordination). No response from CSX was received. Subsequently, the WVDOH design engineers met on-site with CSX officials regarding the bridge alternatives on February 29, 2012 and again on January 3, 2013 (Appendix A). CSX personnel included the yardmaster, trainmaster, real estate personnel, chief bridge engineer as well as their bridge plan review consultants AECOM and URS. Since Alternative 4 provided one-foot less vertical clearance above the tracks compared to Alternative 8, CSX was supportive of Alternative 8. Since the two alignments crossed eight active tracks in the Grafton Yard, considerable discussion was held regarding demolition of the existing bridge and construction of the new bridge. The objective was for the WVDOH to secure commitments from CSX in regard to clearances required, track closing times, as well as private crossing easements that the future WVDOH contractor would need from CSX, prior to advertising the project. These were confirmed in a letter dated January 16, 2013 (Appendix A).

After further coordination efforts, the WVDOH prepared a MOA identifying stipulations for mitigating adverse effects related to construction of Preferred Alternative 8, between the WVSHPO and FHWA, for submittal to the ACHP. A copy of the executed MOA, which includes mitigation measures as stipulations, is part of the official project documentation (see Appendix A). The Section 4(f) documentation for this project is attached in Appendix D.

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APPENDIX A

FHWA Approval Letter of CEE and Section 4(f) Evaluation, Executed Memorandum of Agreement, Relevant WVSHPO Letters Threatened and Endangered Species Letters Public Coordination Documents

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

September 29, 2009

Mr. Lyle Bennett
Water Resources Section
Department of Environmental Protection
601 57th Street East
Charleston, West Virginia 25304

Dear Mr. Bennett:

State Project S246-9-0.02 00
Federal Project BR-0009(143)D
Bridge Street Bridge Replacement Study
Taylor County

The Division of Highways is developing the subject project at the location shown on the attached vicinity maps. The project consists of replacing the bridge upstream from its present location with a two lane bridge. The new bridge would consist of two 12' lanes, 10' shoulders/bike lane on the downstream side, 6' shoulder/bike lane on the upstream side and a 5' sidewalk on each side. The overall length would be 410'. The location of the southern end of the bridge allows the grade of CR 44/8 to be raised using fill material and should not impact any structures in the area. The new bridge would be located at an angle when compared to the existing bridge and will maintain a 10% grade to meet the desired clearance over the railroad tracks. The intersection on the southern side of the creek will be reconfigured. The bridge will create a four-way intersection with CR 9 intersecting east of the bridge and CR 44/8 intersecting west of the bridge. CR 44 will intersect this new section of road opposite of the new bridge. This will eliminate the city street which passes under the existing bridge. It will be necessary to provide on-street parking along the proposed section of CR 44/8, CR 44, and CR 9 for the residents in the immediate area. It is assumed that CR 44 will still be a one-way road entering onto CR 44/8. Right of way would require the acquisition of the empty lot on the west side of the southern abutment and property for the new northern intersection. No structures would be impacted by this alternative. Traffic would be maintained on a detour route approximately 1.3 miles across CR 44/8, CR 119/42, and US 119 to reach the intersection of CR 9 and US 119. A few timed runs of this detour were driven and resulted in an average travel time of 3 minutes and 33 seconds.

The project location is shown on the USGS, GRAFTON, quadrangle map.

Your comments on possible water quality impacts are requested so that they may be included in our environmental studies. Should you require additional information, please contact Tracie Moles of our Environmental Section at (304) 558-9731.

Very truly yours

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L. Hark

Ben L. Hark
Environmental Section Head

GLB: Hw

Attachments

Bcc: DDE (TBM)

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

September 29, 2009

Ms. Barbara Sargent
West Virginia Division of
Natural Resources
Post Office Box 67
Elkins, West Virginia 26241

Dear Ms. Sargent:

State Project S246-9-0.02 00
Federal Project BR-0009(143)D
Bridge Street Bridge Replacement Study
Taylor County

The Division of Highways is developing the subject project at the location shown on the attached vicinity maps. The project consists of replacing the bridge upstream from its present location with a two lane bridge. The new bridge would consist of two 12' lanes, 10' shoulders/bike lane on the downstream side, 6' shoulder/bike lane on the upstream side and a 5' sidewalk on each side. The overall length would be 410'. The location of the southern end of the bridge allows the grade of CR 44/8 to be raised using fill material and should not impact any structures in the area. The new bridge would be located at an angle when compared to the existing bridge and will maintain a 10% grade to meet the desired clearance over the railroad tracks. The intersection on the southern side of the creek will be reconfigured. The bridge will create a four-way intersection with CR 9 intersecting east of the bridge and CR 44/8 intersecting west of the bridge. CR 44 will intersect this new section of road opposite of the new bridge. This will eliminate the city street which passes under the existing bridge. It will be necessary to provide on-street parking along the proposed section of CR 44/8, CR 44, and CR 9 for the residents in the immediate area. It is assumed that CR 44 will still be a one-way road entering onto CR 44/8. Right of way would require the acquisition of the empty lot on the west side of the southern abutment and property for the new northern intersection. No structures would be impacted by this alternative. Traffic would be maintained on a detour route approximately 1.3 miles across CR 44/8, CR 119/42, and US 119 to reach the intersection of CR 9 and US 119. A few timed runs of this detour were driven and resulted in an average travel time of 3 minutes and 33 seconds.

The project location is shown on the USGS, GRAFTON, quadrangle map.

Your comments on possible effects to rare or endangered species and natural trout streams are requested so that they may be included in our environmental studies. Should you

DIVISION OF NATURAL RESOURCES
Wildlife Resources Section
Operations Center
P.O. Box 67
Elkins, West Virginia 26241-3235
Telephone (304) 637-0245
Fax (304) 637-0250

Joe Manchin III
Governor

Frank Jezioro
Director

October 9, 2009

Mr. Gregory L. Bailey
Division of Highways
1900 Kanawha Boulevard, East
Building Five, Room 110
Charleston, WV 25305-0430

Dear Mr. Bailey:

We have reviewed our files for information on rare, threatened and endangered (RTE) species and natural trout streams for the areas of the proposed highway projects:

CF State Project S202-1-1.57 Federal Project BR0001(225)E Grade Road Overpass Bridge Replacement Berkeley County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
TBM State Project S217-23/9-8.40 Federal Project Br-0239(003)D Anmoore Run Bridge Replacement Harrison County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
TBM State Project S310-20/8-0.04 Meadow Creek Bridge Replacement Fayette County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
TBM State Project 21-30-1.75 Skin Creek Arch #2 Bridge Repair Lewis County	Our records indicate no known occurrences of RTE species or natural trout streams at this site; however, mussel surveys are required.
TBM State Project 13-39-0.80 Coats Run Culvert Replacement Greenbrier County	Our records indicate no known occurrences of RTE species at this site. Coats Run is a natural trout stream.
TBM State Project S355-1/12-0.08 Hurricane Branch Road Box Wyoming County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.

State Project S246-9-0.02 00 Federal Project BR-0009(143)D Bridge Street Bridge Replacement Taylor County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
State Project S345-20-22.45 Sandstone Mountain Road Landslide #3864 Summers County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
State Project CR 17 MP 13.75 Indian Creek Culvert Replacement Ritchie County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
State Project U348-2/18-0.00 Bens Run Industrial Park Access Road Tyler County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.

The Wildlife Resources Section knows of no surveys that have been conducted in these areas for rare species or rare species habitat. Consequently, this response is based on information currently available and should not be considered a comprehensive survey of the areas under review.

Thank you for your inquiry, and should you have any questions please feel free to contact me at the above number, extension 2048.

Sincerely,

Barbara Sargent
Environmental Resources Specialist
Wildlife Diversity Program

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Joe Manchin III Charleston, West Virginia 25305-0430 • (304) 558-3505
Governor

October 26, 2009

Vandalia Heritage Foundation
704 Benoni Avenue
Fairmont, WV 26554

FILE

To Whom it May Concern,

Bridge St. Bridge
S246-9-0.02
BR-0009(143)D
Taylor County

The West Virginia Division of Highways (WVDOH) is proposing a project to replace the Bridge Street Bridge. The bridge is located on County Route 9 and crosses Three Fork Creek, CSX Railroad, and Front Street. A map showing the location is attached.

As part of project development, the WVDOH staff routinely examines site files at the Division of Culture and History and visits the project area to assess the potential impact to cultural resources. We are asking for comments or information that your organization may have about the project.

If you have information or comments that relate to project impacts, you may contact Randy Epperly III of our Environmental Section by writing to the above address, by calling (304)558-9385, or via e-mail at Randy.T.Epperly@wv.gov.

Very truly yours,

Gregory L. Bailey, P.E., Director
Engineering Division

GLB:re
Enclosures
cc: DDE(RE)

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

October 28, 2009

Tom Dadisman, President
Taylor County Historical and Genealogical Society
P.O. Box 522
Grafton, WV 26354

Dear Mr. Dadisman:

BR-0009(143)D
S246-9-0.02
Bridge St. Bridge
Taylor County (Grafton)

The West Virginia Division of Highways (WVDOH) is proposing a project to replace the Bridge Street Bridge in Grafton on County Route 9 crossing Three Fork Creek, CSX Railroad, and Front Street. A map showing the location is attached.

As part of project development, the WVDOH staff routinely examines site files at the Division of Culture and History and visits the project area to assesst he potential impact to cultural resources. We are asking for comments or information that your orginazataion may have about the project.

If you have information or comments that relate to project impacts, you may contact Randy Epperly III of our Environmental Section by writing to the above address, by calling (304) 558-9385, or via email at Randy.T.Epperly@wv.gov.

Very truly yours,

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L. Hark

Ben L. Hark
Environmental Section Head

GLB:Hw

Enclosures

Cc: DDE(RE)

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

December 23, 2009

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

Dear Ms. Pierce:

Bridge Street Bridge Replacement
State Project: S246-9-0.02
Federal Project: BR-0009(143)D
Taylor County

The proposed project will replace the Bridge Street Bridge located in Grafton, Taylor County. The purpose of this letter report is to determine National Register eligibility for this structure. The bridge is located in the Grafton Downtown Commercial Historic District listed as contributing structure #1, however we question this designation. After the bridge's question is decided, a Cultural Resources Management Report will be submitted to address any effects to the district.

The bridge carries Taylor County Route 9 over Three Fork Creek, CSX Railroad, and Front Street. The existing bridge was built in 1951 to replace a 7 span through and pony truss, built around 1900, in the same location. The bridge plate located on span 1 is dated 1950 and the date of construction is 1951. A possible reason for a different year shown on the bridge plate is that the plate recognizes the year that the bridge was designed. The current bridge was built by Agnew Construction Company using plans designed by Frank McEnteer. Shop drawings were prepared by Pittsburgh-Des Moines Construction Company. The current bridge contains 5 spans for a length of 445'2". Span 1 is a 120'3" long steel through truss and span 2 is a 119'3" long steel deck truss. Span 3 (60 feet 2 inches in length), span 4 (78 feet in length), and span 5 (60 feet in length) are steel W-beams. The abutments are reinforced concrete, but the bottom portion of abutment 1 (north end of bridge) was built around 1900 and is not reinforced. Supporting the bridge

are 2 piers and 2 bents. Pier 1 is cut stone with a concrete cap and pier 2 is concrete with a concrete cap added in 1951. Both bents are concrete with concrete caps. Concrete sidewalks and parapets are located on both sides of the bridge. The deck is concrete with an asphalt wearing surface. The bridge is posted for 16 tons and has a height restriction of 14 feet, which should be 17 feet. The bridge also contains overhead street lights. The structure was renovated in 1995 (WVDOH Bridge inspection Report, 2007).

The Grafton Downtown Commercial Historic District was surveyed in 1983 by Preservation Associates, Inc. from Sharpsburg, Maryland. The period of significance is 1890-1920. The Bridge Street Bridge was included in the district as the eastern boundary. The nomination form states that the bridge is a steel truss built around 1920. The current bridge was built in 1951 replacing the 1900 bridge. Part of abutment 1 and the piers are from the original bridge.

Historic Background

Taylor County was created in 1844 and named for Virginia Senator John Taylor, but the first permanent European settlers were Thomas Merrifield and John Booth in the 1760s. Taylor County is the location of the only national cemetery in West Virginia. Mother's Day was also started in Grafton by Anna Jarvis (WV Blue Book, 2002). Pruntytown, the oldest town in the county, was the original county seat before it was relocated to Grafton.

The city of Grafton was first surveyed by George Washington, who was hired by landowner James Current (Dilger). The Baltimore and Ohio Railroad constructed the first trans-Appalachian railroad and opened in Grafton in 1853. The town of Grafton boomed as a railroad town and was incorporated March 15, 1856. Although the origin of the town's name is disputed, it is thought that Grafton was named for an engineer with the Baltimore and Ohio Railroad, John Grafton (City of Grafton).

Grafton and the B&O Railroad were important during the Civil War for its use in transporting soldiers and supplies. The Union Army was in control of Grafton for the entire war and defeated the Confederate Army during a skirmish in 1861 in present day Grafton. During the skirmish Thornsberry Bailey Brown was the first soldier killed in the Civil War. He is buried in the National Cemetery near Grafton (City of Grafton).

In 1872 Grafton attempted to become the state capitol of West Virginia but its resolutions were not adopted by the Constitutional Convention in Charleston (Dilger).

Many of the buildings presently standing in Grafton were constructed between 1890 and 1930. These were the town's most prosperous years. John T. McGraw, a banker, built many of the buildings and the streetcar system. The town continued to grow along with the railroad and several manufacturing plants were located here. In the 1950s the plants shut down and in the 1980s the railroad relocated most of its jobs to Jacksonville, Florida. The city is currently restoring the Historic District and trying to entice businesses to open (City of Grafton).

The Grafton Downtown Commercial Historic District is located in the project area. The buildings that comprise the district were mostly built between 1890 and 1920. The district boundary begins with the Bridge Street Bridge. Next to the Bridge Street Bridge are the Willard Hotel and the B&O Railroad Station, both built in 1911. Both buildings are currently being restored. The Willard Hotel is named for former B&O President Daniel Willard. It is the tallest building in Grafton. The Taylor County Courthouse and the Andrews Methodist Church are among the buildings included in the Historic District. Andrews Methodist Church was built in 1873 and is the location of the International Mother's Day Shrine (Grafton Historic District). Mother's Day was started by Anna Jarvis in Grafton and was signed into Congress by President Woodrow Wilson on May 9, 1914 (Sanders).

Agnew Construction Company was located in Ronceverte, West Virginia and was in business from the 1940s to the 1960s. They built several bridges designed by Frank McEnteer including Bridge Street Bridge (KCI). Frank McEnteer was one of the premier bridge builders in the 20th Century in West Virginia. He was the president of the Concrete Steel Bridge Company in Clarksburg from 1912 to 1931. The company built over 1,000 bridges in West Virginia (KCI). McEnteer went on to serve as district engineer with the West Virginia State Road Commission between 1932 and 1938, and construction engineer for the northern district from 1938-1940. In 1942, as a project manager with Johnson, Piper, and Drake, he supervised the construction of an army base near Tel Aviv. In April 1943, he was named chief engineer of the construction division of the U.S. Armed Forces in the Middle East and supervised the construction of airports throughout the region. Following World War II, McEnteer returned to Clarksburg and set up practice as a consulting structural engineer specializing in the design of highway bridges and industrial buildings. McEnteer headed his firm until his death in 1951 (Kemp 133-134). McEnteer not only was instrumental in the development of the transportation infrastructure in West Virginia, but also went on to contribute to national and international transportation development.

Eligibility Criteria

The current Bridge Street Bridge was built to replace the original bridge in this location. The current bridge is just over 50 years old and is not within the period of significance for the historic district. Therefore this bridge is not eligible for the National Register of Historic Places under Criterion A.

The Bridge Street Bridge is not associated with the significance of an individual or an individual's historic contribution. The bridge is not eligible under Criterion B.

The Bridge Street Bridge is a 5 span structure. Span 1 is a through truss, span 2 is a deck truss, and spans 3, 4, and 5 are W-beams. Maintenance work to repair the cracks and to support beams, expansion plates, and stringers has been performed several times since 1982. In 1995 a renovation was done on the project including strengthening truss members, replacing parts of the deck, replacing expansion joints, downspouts, and floorbeams, and removing a stairwell from the downstream end of pier 1. This bridge is a combination of 3 bridge types but is not a good representation of any of the three.

Agnew Construction Company was located in Ronceverte, West Virginia and built this bridge based on designs by Frank McEnteer. Agnew is not a master builder and was not in business very long. McEnteer designed many bridges in West Virginia and was known for his work with reinforce concrete structures. Bridge Street was a later design and a steel structure. Based on the amount of alterations to the bridge and a lack of distinguishing features, this bridge is not eligible for the National Register under Criterion C.

The bridge is also not eligible under Criterion D.

A letter was sent October 28, 2009 to the Taylor County Historic Society but no response has been received at the time of this letter. A letter was also sent to Vandalia Heritage Foundation dated October 26, 2009. No response has been received. We are in the process of scheduling a public meeting for sometime in early 2010.

A Historic Property Inventory Form, maps, bridge inspection report, and photographs have been attached.

Your concurrence is requested. Should you have any questions, please contact Randy Epperly III of our Environmental Section at 304-558-9385.

Very truly yours,

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L. H.

Ben L. Hark
Environmental Section Head

GLB:Hw

Enclosure

bcc: DDE(RE)

References

City of Grafton. "History of Grafton." www.graftonwv.org Retrieved 3 December 2009.

Dilger, Dr. Robert Jay. Taylor County History. www.polsci.wvu.edu/wv/Taylor/tayhistory.html Retrieved 3 December 2009.

Grafton Downtown Commercial Historic District. National Register of Historic Places Inventory Nomination Form. Paula Stoner Reed, Preservation Associates. Sharpsburg, Md. 1983. West Virginia State Historic Preservation Office.

KCI Technologies, Inc. Draft Historic Context. West Virginia Statewide Historic Bridge Survey. May 2006.

Kemp, Emory. Survey of Historic Bridges in West Virginia. 1984. MS, WVDOH

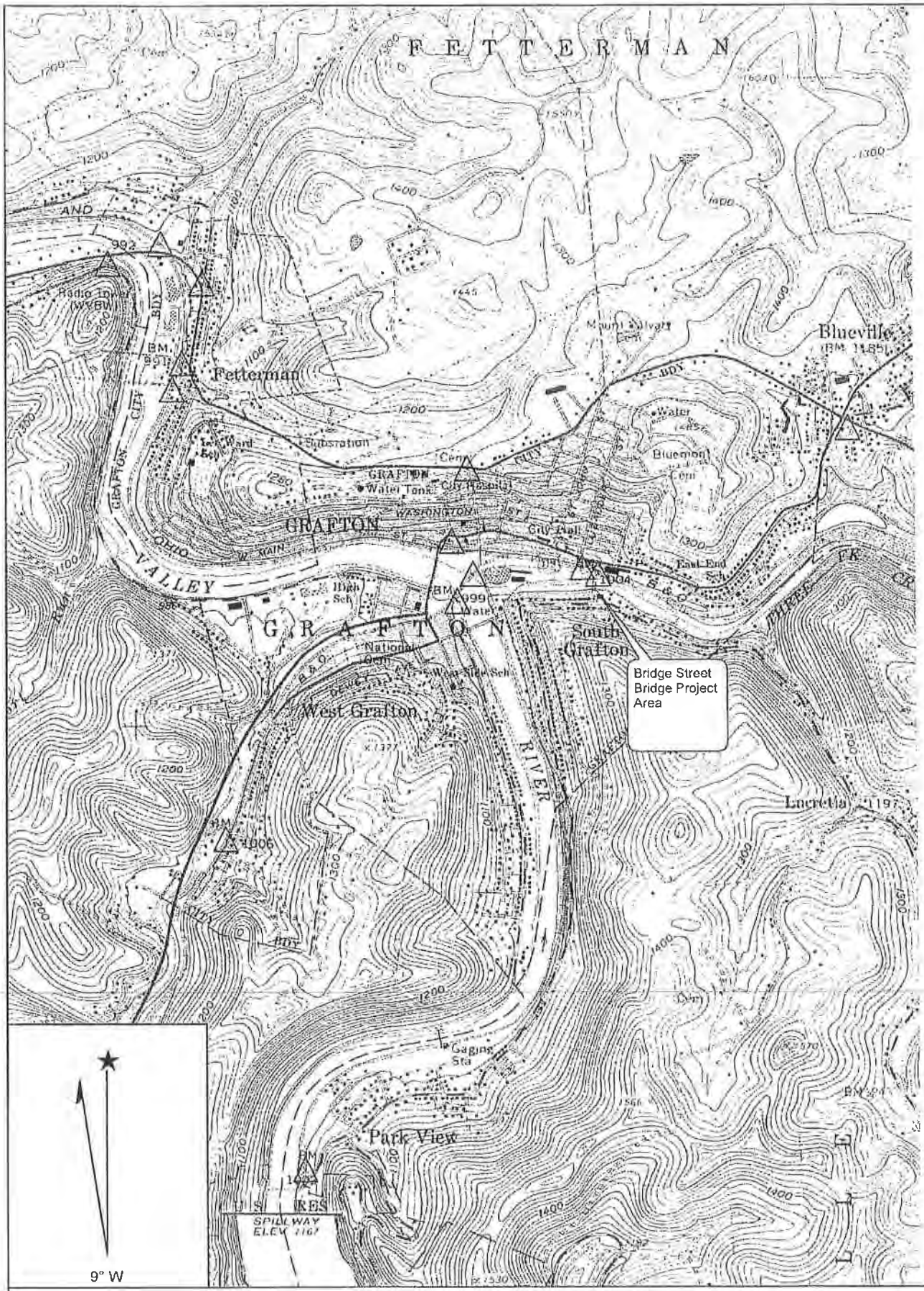
Sanders, Barbara. "Origins of Mother's Day." Barbara's Entourage. 13 April 2004. www.entourages.com/barbs/motherorigin.htm Retrieved 10 December 2009.

WV Blue Book-2002. Darrell E. Holmes, Editor. Chapman Printing, Charleston, WV. 2006.

ATTACHMENT

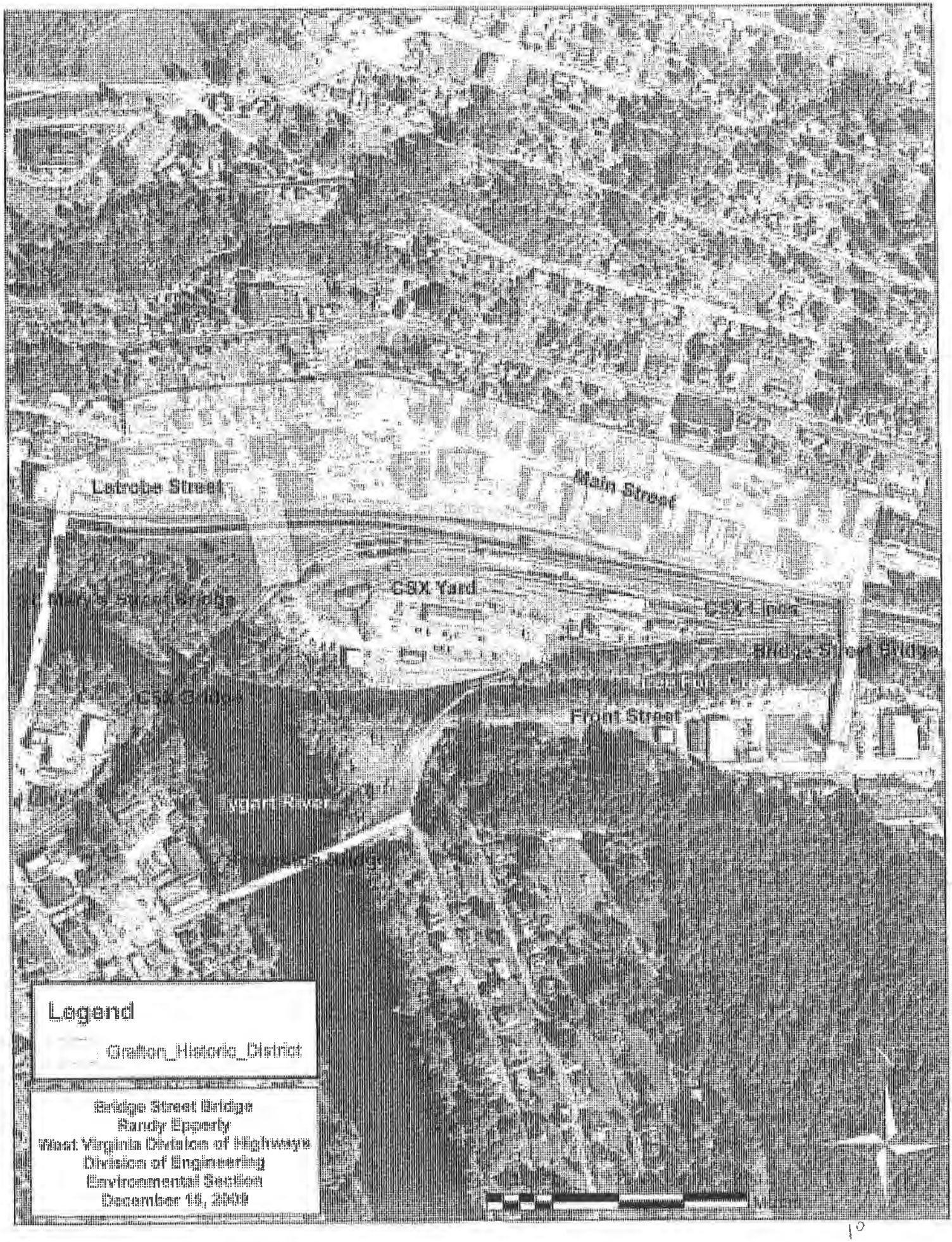
Project Maps


GRAFTON
(P.O.)
Pop 5,489
TYGART
TYGART
LAKE
STATE PARK
Pruntytown
Knottsville
Millertown
Webster
4-H CAMP
SEASONAL POOL
Valley
River
Scab Run



Name: GRAFTON
Date: 12/22/2009
Scale: 1 inch equals 2000 feet

Location: 17 0584479 E 4354598 N
Caption: Bridge Street Bridge
Taylor County
S246-9-0.02
PP 0000/1420

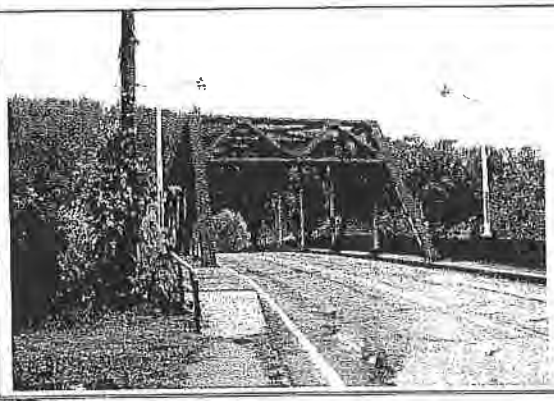

Latrobe Street
Main Street
CSX Yard
CSX Lines
Front Street
Legend
Grafton_Historic_District
Bridge Street Bridge
Sandy Epperly
West Virginia Division of Highways
Division of Engineering
Environmental Section
December 15, 2008

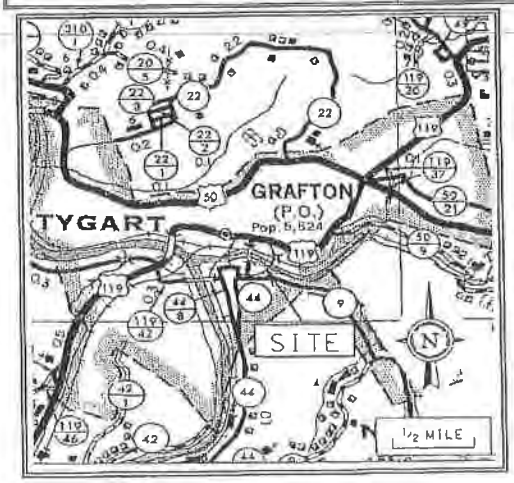
ATTACHMENT

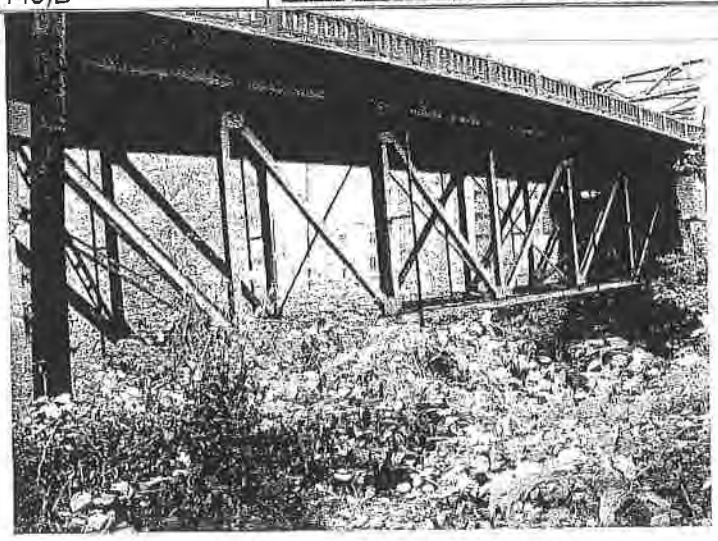
WV Historic Property Inventory Form

Internal Rating: _____

WEST VIRGINIA HISTORIC PROPERTY INVENTORY FORM

Street Address Located on County Route 9, approximately 0.02 miles east of US 119, spanning Three Fork Creek, CSX Railroad, and Front Street.	**Common/Historic Name/Both** ☑ ☐ ☐ Bridge Street Bridge	**Field Survey #** HPI #1	**Site #** **(SHPO Only)**
Town or Community Grafton	**County** Taylor	**Negative No.**	**NR Listed Date**
Architect/Builder Agnew Construction Company	**Date of Construction** 1951	**Style** ***(SHPO Only)***	
Exterior Siding / Materials Span 1: steel through truss Span 2: steel deck truss Spans 3-5: steel W-beam	**Roofing Material** Deck Material: Asphalt over Concrete	**Foundation** **Abutments**: Reinforced concrete (bottom of abutment 1 is not reinforced. **Bents**: Concrete with concrete caps. **Piers**: Pier 1 is original cut stone with concrete cap and pier 2 is concrete with concrete cap.	
Property Use or Function Transportation	**UTM** Zone17 NAD 1981 Easting 0584713E Northing 4354890N		
Survey Organization & Date WVDOH October 15, 2009	**Quadrangle Name** Grafton		
	Part of What Survey / FR# State County Route S246-9-0.02 Federal Route BR-0009(143)D		





12

Name: Bridge Street Bridge
Survey #: HPI #1
Survey / FR#: State County Route: S246-9-0.02 BR-0009(143)D

Present Owners	Owners Mailing Address
WVDOH	Building 5, Capitol Complex Charleston, WV 25305

Describe Setting

Unknown--<1 Acres
☐ Archaeological Artifacts Present

The bridge is located in a commercial historic district of Grafton in Taylor County. The structure carries County Route 9 over Three Fork Creek, CSX Railroad, and Front Street.

Description of Buildings or Site (Original and Present) Stories Front Bays

The structure is a 5 span bridge. Span 1 is a steel through truss, Span 2 is a steel deck truss, and spans 3-5 are steel w-beams. The abutments are reinforced concrete but the bottom portion of abutment 1 is the original abutment. The bents are concrete with concrete caps. Pier 1 is original cut stone with a concrete cap installed in 1951. Pier 2 is concrete with a concrete cap. The bridge is 445 feet 2 inches long. There is a sidewalk and concrete parapets on both sides. Bridge contains overhead light fixtures. A bridge plate is located on span 1. Bridge is posted for weight and height restrictions.

Alterations ☑ Yes ☐ No If yes, describe
1982: Spalled areas patched.
1986: Abutment repaired and stringers supported.
1988: Deck repaired and floorbeam supported.
1994: Sidewalks, deck, handrail, and expansion plates repaired.
1995: Expansion plate repaired.
1995: Renovation completed including: Replacing expansion joints, areas of deck, stringer diaphragms, and drain downspouts. Strengthened and installed floorbeams, truss members, and repaired sidewalk. Removed stairwell at pier one.
1997: Renovation including replacing top cover plates on the stringers over the bents.

Additions ☐ Yes ☑ No If yes, describe

Describe All Outbuildings
N/A

Statement of Significance:
See Continuation Sheet

Bibliographical References
WVDOH Maintenance Division. Bridge Inspection Report.
KCI. West Virginia Statewide Historic Bridge Survey. Draft Historic Context. May 2006.

Form Prepared By: **Date:** December 14, 2009

Name/Organization: Randy Epperly
Address: WV Division of Highways
Capitol Complex
Building 5, Rm. 463
Charleston, WV 25305

Phone #: 304-558-9385

WEST VIRGINIA HISTORIC PROPERTY FORM
CONTINUATION SHEET

Name: Bridge Street Bridge
Survey Number: HPI #1
Project / FR#: State County Route: S246-9-0.02 BR-0009(143)D

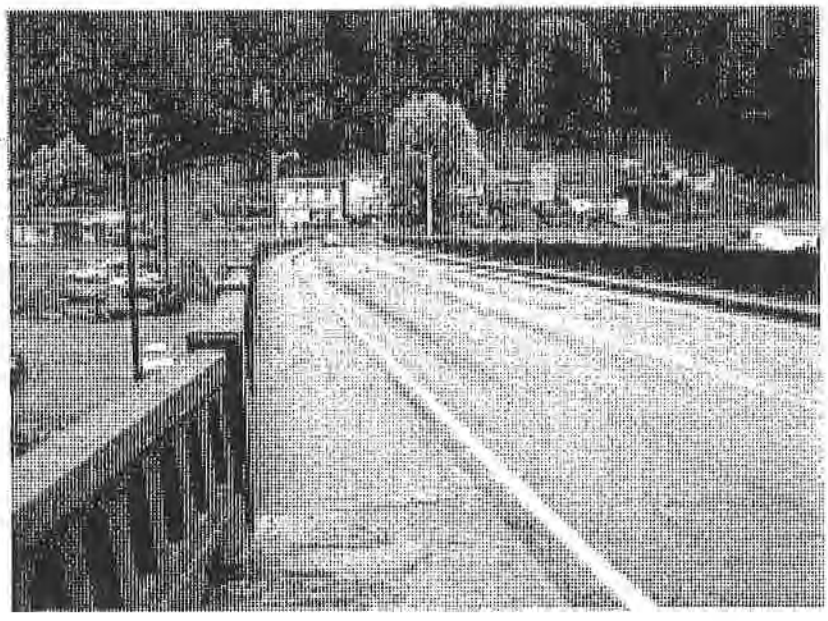
The current Bridge Street Bridge was built to replace the original bridge in this location. The current bridge is just over 50 years old and is not within the period of significance for the historic district. Other than a general association with the area the bridge does not have an important link with a significant historical period or event. Therefore we feel this bridge is not eligible for the National Register of Historic Places under Criterion A.

The Bridge Street Bridge is not associated with the significance of an individual or an individual's historic contribution. The bridge is not eligible under Criterion B.

Agnew Construction Company was located in Ronceverte, West Virginia and was in business from the 1940s to the 1960s. They built several bridges designed by Frank McEnteer including Bridge Street Bridge (KCI). Frank McEnteer was one of the premier bridge builders in the 20th Century in West Virginia. He was the president of the Concrete Steel Bridge Company in Clarksburg from 1912 to 1931. The company built over 1,000 bridges in West Virginia (KCI). McEnteer went on to serve as district engineer with the West Virginia State Road Commission between 1932 and 1938, and construction engineer for the northern district from 1938-1940. In 1942, as a project manager with Johnson, Piper, and Drake, he supervised the construction of an army base near Tel Aviv. In April 1943, he was named chief engineer of the construction division of the U.S. Armed Forces in the Middle East and supervised the construction of airports throughout the region. Following World War II, McEnteer returned to Clarksburg and set up practice as a consulting structural engineer specializing in the design of highway bridges and industrial buildings. McEnteer headed his firm until his death in 1951 (Kemp 133-134). McEnteer not only was instrumental in the development of the transportation infrastructure in West Virginia, but also went on to contribute to national and international transportation development.

Agnew Construction Company was located in Ronceverte, West Virginia and built this bridge based on designs by Frank McEnteer. Agnew is not a master builder and was not in business very long. McEnteer designed many bridges in West Virginia and was a pioneer in the reinforced concrete structures. Bridge Street Bridge is a steel structure of later design. This bridge is a combination of 3 bridge types but is not a good representation of any of them. Based on the amount of alterations to the bridge, a renovation in 1995, and a lack of distinguishing features, this bridge is not eligible for the National Register under Criterion C.

The Bridge Street Bridge does not contain any important information that will contribute to the understanding of human history or prehistory. The potential for information is minimal. Therefore the bridge is not eligible under Criterion D.



Attachment

Project Photos

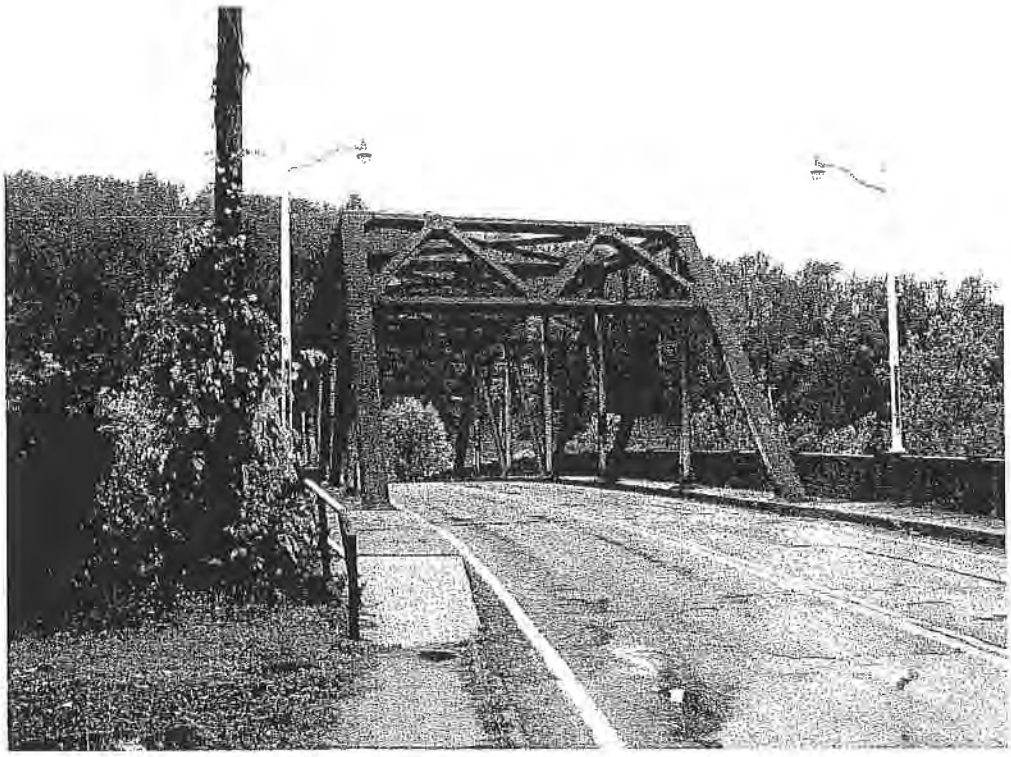


Photo #1: Bridge Street Bridge looking south at span 1, through truss.

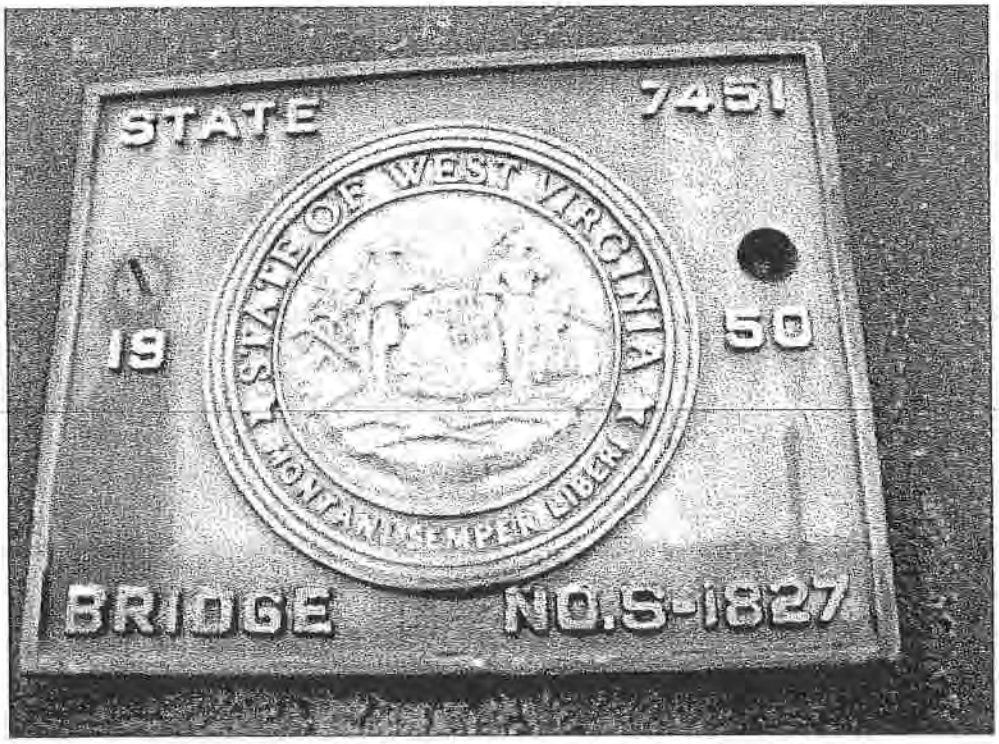


Photo #2: Bridge plate located on truss member at northern end of bridge.

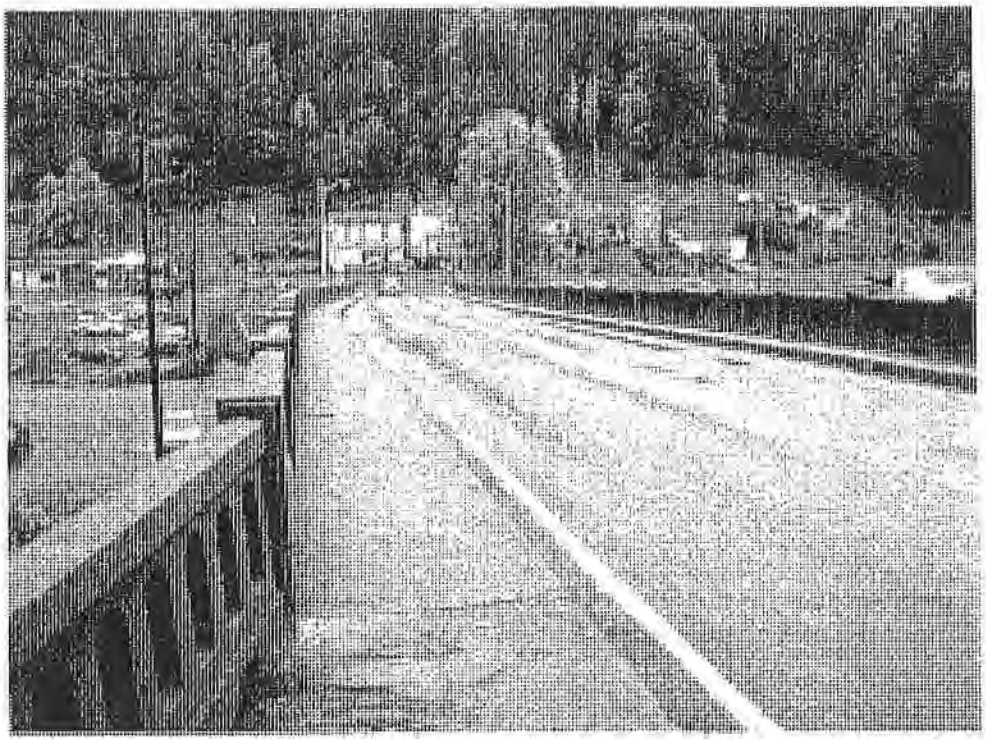


Photo #3: Looking south at spans 3, 4, and 5.

Photo #4: Looking at span 2, deck truss.

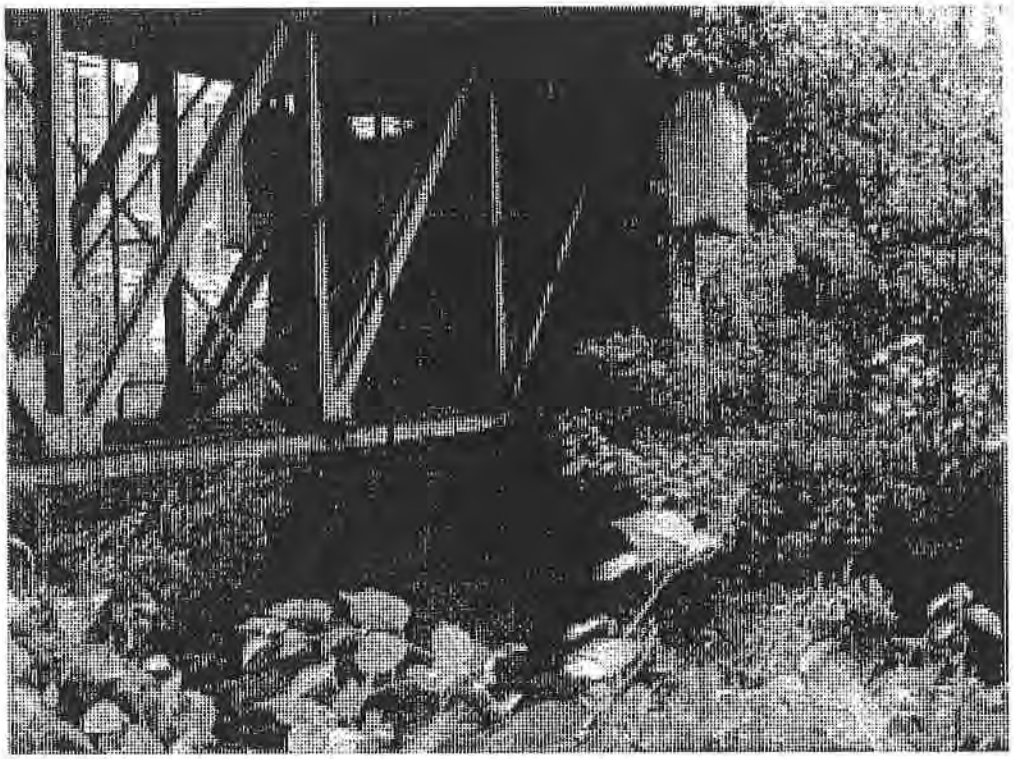


Photo #5: Cut-stone pier capped with concrete.

Photo #6: Looking north at deck truss and through truss.

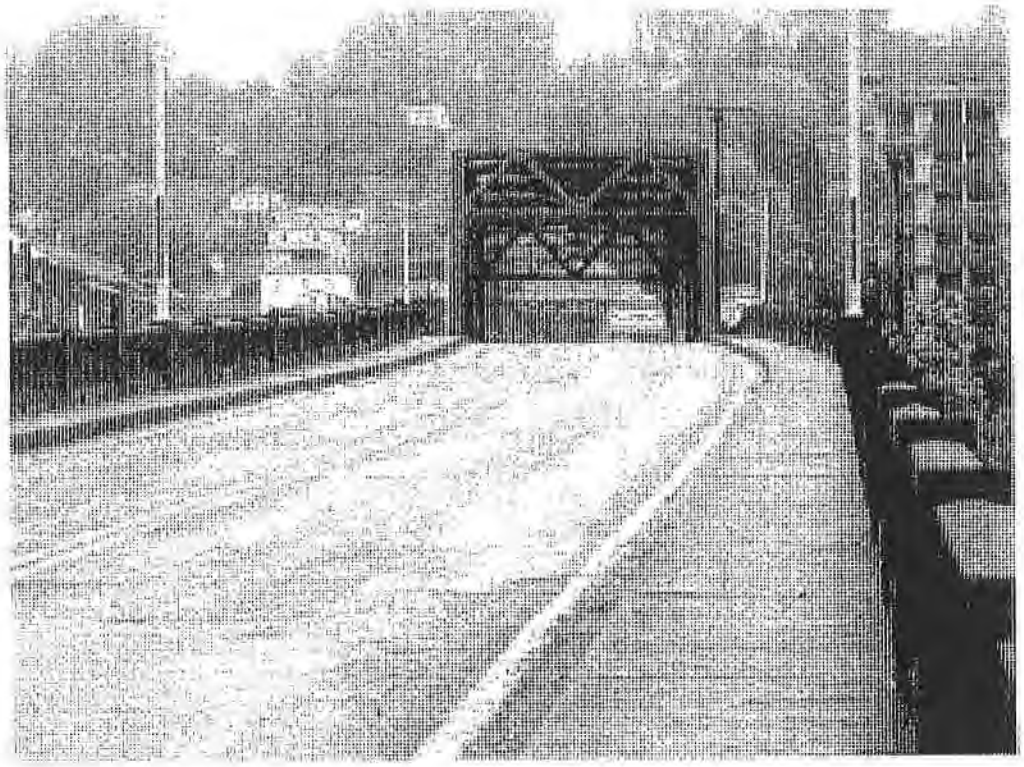


Photo #7: Looking north toward spans 1 and 2.

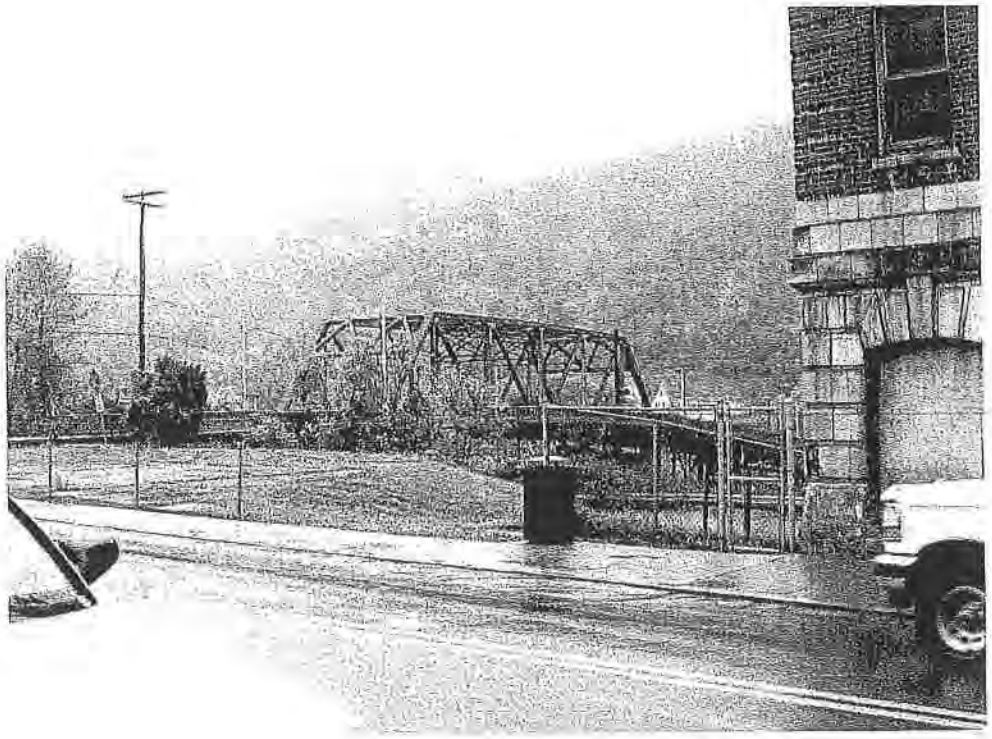


Photo #8: Looking toward bridge from Main Street.

Photo #9: Looking west at CSX yard.

Photo #10: View of Willard Hotel from bridge.

Photo #11: View of B&O depot from bridge.

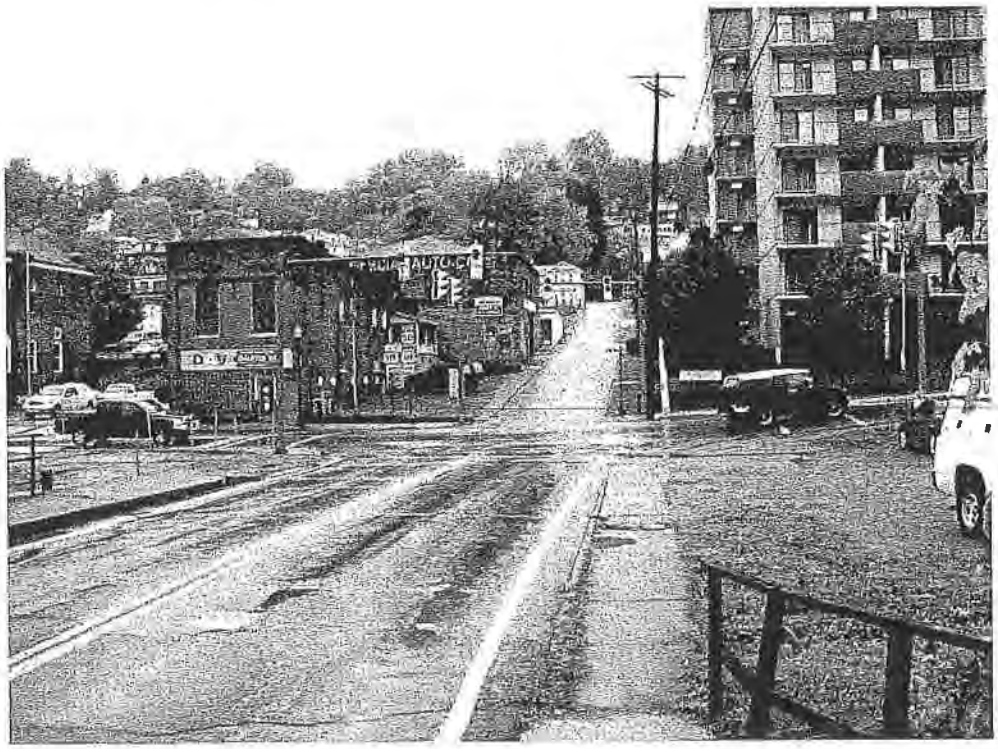


Photo #12: Looking north at intersection of US 119 and County Route 9 from bridge.

Photo #13: Looking at DHHR building southeast of bridge.

ATTACHMENT

Bridge Inspection Report

Bridge No. 46-9-0.02 (1827)

BARS NO. 46A015

TYPE: SSTT, SSDT & CSWB

LOCAL NAME: Bridge Street Bridge

SPANNING: Three Fork Creek, CSX Railroad and Front Street

ROUTE: Taylor County Route 9 (SLS)

LOCATED: 0.02 Mi. E. of U.S. 119 (T)

COUNTY: Taylor

DISTRICT: Four

NON NHS (FA)

A.D.T. 3,000 in 2005

BRIDGE INSPECTION REPORT

2nd In-Depth Periodic Inspection

FIELD INSPECTED

BY _____
Inspector In Charge

STRUCTURAL EVALUATION

BY _____
District Bridge Evaluation Engineer

REVIEWED & APPROVED

BY _____
Stephen R. Harris
District Bridge Engineer
Registered Professional Engineer No. 8160

FOR: The W.Va. Division of Highways

DATE: September 25, 2007

DIF = 12 Months ✓

Bridge No. 46-09-0.02 (1827)
Date: September 25, 2007

PROCEDURE

The data for this inspection report was obtained on the following dates by the indicated personnel:

August 28, 2007 - D. Smith (team leader)
September 24, 2007 - D. Smith (team leader) and J. Leggett
September 25, 2007 - D. Smith (team leader) and J. Leggett

On August 28, 2007 the Reachall UB-30 was utilized to inspect the deck truss (Span 2), the stringers and underside of the deck in this area.

On September 24 and 25, 2007 the remainder of the structure was inspected by climbing the truss members of span 1, from an extension ladder erected under the structure, from the bridge roadway and from the roadways beneath the structure.

Most areas received hands on attention except the floor system over the railroad tracks (gunnite enclosed area).

The last Periodic Inspection of this bridge was completed on August 30, 2005 by R. Underwood and team. The structure was rated as poor at that time.

The last Interim Inspection was performed by R. Underwood on August 18, 2006. A Special Inspection was performed by R. Edgell on August 10, 2007.

SUMMARY AND RECOMMENDATIONS

This structure is in poor condition. Per BMD-I285 it will receive one year Interim Inspections to view the poor rated fracture critical U_0L_1 members in span 2. It is a generally deteriorated structure with weak members and inadequate deck geometry. Replacement is recommended.

Following is a list of the most significant deficiencies along with suggested repairs to maintain the structure at its current level:

1). The paint on this bridge is generally poor with a significant portion being in critical condition. Heavy rust scale with section loss is present throughout, particularly at the joints, and is continuing to worsen. A complete cleaning and painting is desperately needed if the structure is to remain in place for any length of time.

2). The concrete deck slab is heavily spalled along the edges in spans 3 through 5 and is leaking at bents 1 and 2 at the curbline. The underside shows evidence of moisture absorption and deterioration that can only worsen. The underside of span no. 1 has numerous spalls. The condition of the deck will make it difficult to maintain a protective paint system on the superstructure. If the current superstructure is to remain in service, a new deck should be considered.

25

Bridge No. 46-9-0.02 (1827)
Date: September 25, 2007

SUMMARY AND RECOMMENDATIONS (cont'd)

3). Span no. 2 (deck truss) has areas of rather heavy deterioration. The truss members at the U_0 connections are heavily deteriorated as are several nearby bracing members. The exterior stringers at U_6 are also deteriorated at the floorbeam connections. Heavy rust is forming on some of the floorbeams. Appropriate repairs should be made.

4). Pier no. 1 has two large spalled areas in the cap with rebars exposed. Spalling is also present on the upstream end of the cap. Repair is needed.

5). Abutment no. 1 is generally scaled throughout the lower 12'-0", with heavier scaling at the junction of the breastwall and downstream wingwall. Spalling is present in the backwall behind the span 1 truss bearings. Repair is recommended.

6). Bents no. 1 and 2 have developed several spalls where moisture has reached and corroded the reinforcing steel. The steel appears to be generally too close to the concrete surface. All spalled areas should be patched and both bents given a protective coating of epoxy resin.

7). The members of the span 1 through truss are deteriorating where they pass through the concrete sidewalks. Any paint contract should include removal of the immediate concrete around these members, thorough cleaning and painting of the affected areas, replacement of the concrete and sealing.

8). The entire floorsystem and lower chords of the span 1 through truss are encased in concrete. The concrete is deteriorating and moisture is undoubtedly reaching and corroding the encased members. The floorbeams are fracture critical. This is an undesirable situation.

9). The expansion joint seals at abutment 1, pier 1, pier 2, and abutment 2 have developed holes or torn areas. The seals should be replaced.

10). Several of the drain extensions are heavily deteriorated at the deck underside. These should be replaced.

Bridge No. 46-9-0.02 (1827)
Date: September 25, 2007

TRAFFIC CONDITIONS AND RESTRICTIONS

This bridge is posted for a 16 ton load limit per a Commissioner's Order dated January 5, 1998. This restriction is violated on occasion. Span no. 1 is a through truss and has an overhead clearance of 14'-1". This does not appear to cause a problem. Front Street passes under span no. 4 and has a minimum overhead clearance of only 12'-3". Over height loads have scraped this span on occasion.

WATERWAY

The waterway (Three Fork Creek) located under span no. 2 is in good condition. The North (Pier 1) side of the channel is lined with large stone along the base to prevent embankment erosion. An old cut stone abutment (or pier) is located at the South embankment. This adequately prevents erosion of this embankment. There are no stream bed scouring problems and the capacity is good. The channel banks are quite high in this area with no records on file of the stream ever leaving the channel. The channel profile has not changed significantly since records have been kept.

According to the DS-34 dated November 6, 1991 the structure has no scour potential. The foundations will be checked during regularly scheduled inspections.

ENVIRONMENTAL CONDITIONS

Pigeons use the upper chords and connections of span 1 as roosting and nesting areas. Their droppings create unhealthy and unpleasant working conditions and also damage the paint system.

The area under span no. 2 adjacent to pier 2 is used by local vagrants. They use this area as a restroom, creating unhealthy conditions.

SUBSTRUCTURE CONDITION

Abutment No. 1

This full-height, concrete abutment is in fair condition. The bottom portion of the abutment was built around 1900 and does not have reinforcing steel. The upper portion was added in 1951 and is reinforced.

SUBSTRUCTURE CONDITION (cont'd)

Abutment No. 1 (cont'd)

The lower 12'-0" of the breastwall (original section) is lightly to heavily scaled. This scaling extends around both wingwalls. More severe scaling is present along a construction joint between the breastwall and downstream wingwall, being a maximum of 12" deep adjacent to the newer section. The scaled portions of the abutment also have fine map cracking. The upstream end of the bridge seat is heavily scaled. Spalled areas are located in the backwall behind both truss bearings. See the sketch on sheet 52 for condition detail. See photos 3 thru 9.

Pier No. 1

This is a solid cut stone pier with a cantilevered concrete cap. The pier is in fair condition. No problems were noted with the stone portions of the pier. There are two large spalled areas with exposed rebars in the concrete cap adjacent to the backward face. The first is located 3'-6" to 7'-0" from the span 2 upstream truss bearing and is 42" long, 36" wide and 5" deep. The other is located adjacent to the downstream bearing of span 2 and is 42" long, 36" wide and 4 ½" deep. There are two large patched areas on the backward face of the cap adjacent to these spalled areas. The upstream end of the cap is also spalled adjacent to the span 1 truss bearing.

Pier No. 2

This is a solid concrete, non-reinforced concrete pier with a reinforced concrete cap added in 1951. The pier is in fair condition. The original concrete is lightly to moderately scaled, with the heavier scaling being on the backward side and upstream end. The cap also has localized heavy spalling on the ends. See photos 10, 11 and 12.

Bent No. 1

This is a reinforced concrete, column bent with a concrete beam cap. This bent is in fair condition. A leaking deck joint over this bent allowed water and deicing agents to drain onto the bent for years, causing rebar corrosion and subsequent spalling.

SUBSTRUCTURE CONDITION (cont'd)

Bent No. 1 (cont'd)

The heaviest spalling is located on the upstream end of the cap and on the forward face between stringers no. 1 and 2 and stringers 2 and 3. A rather large spall is also located on the bottom of the cap at the upstream end. Smaller spalls are developing on the forward corners of both columns. See photos 13, 14 and 14A and the sketch on sheet 53 for detail.

Bent No. 2

This is a reinforced concrete, column bent with a concrete beam cap. This bent is in fair condition. This bent has also been damaged by water and deicing agents over the years. Both ends of the cap have small spalls due to rebar corrosion. Spalling is developing throughout the bottom side of the cap between the columns due to rebar corrosion. This reinforcing is located unusually close to the concrete surface. See photos 15, 16 and 16A.

Abutment 2

This concrete, stub abutment is generally in good condition. Some concrete has popped off the upstream corner of the breastwall due to corroding rebar. A shallow spall also exists on the top of the backwall between stringers 1 and 2.

The cut stone upstream wingwall is generally in good condition. The mortar is broken and missing in some of the stone joints, however. No repair is needed.

Steel Superstructure - Span 1 Through Truss

A). Fracture Critical Members

The lower chord members are normally considered fracture critical but due to adequate stringer to floorbeam connections, they are not fracture critical in this span. However, the floorbeams and the hip verticals (U_1L_1 and U_5L_5) are considered fracture critical.

B). Bearings

The bearings are in poor condition. They are very rusty and deteriorated but appear to be performing their function. See photo 17.

Steel Superstructure - Span 1 Through Truss (cont'd)

C). Bracing

The truss bracing is in good condition. Minor collision damage was noted to the portal bracing at pier 1.

D). Stringers

The stringers are encased in concrete and could not be inspected. The concrete is beginning to crack and spall at sporadic locations.

E). Floorbeams

For the most part, the floorbeams, like the stringers, are encased in concrete and could not be inspected. An exception to this is the L6 floorbeam (at pier 1) where the concrete has broken away from the lower flange, exposing heavy rust scale. See photo 18. Section loss has developed and was estimated at 3% loss to the top flange, 7% loss to the web and 14% loss to the lower flange. See the span 1 floorplan deterioration schematic on sheet 73.

F.) Trusses and Connections

The Pratt through trusses are in fair condition. The diagonal and vertical members are deteriorating where they pass through the concrete sidewalk. The concrete traps moisture and deicing agents against the steel in these areas, causing extensive corrosion. See photos 19 and 20. The heaviest loss is on the U_2L_3 downstream truss member which is 31% reduced. The concrete around these members and the sealant is generally deteriorated, allowing moisture access to the encased steel. The sealant was replaced around the U_5L_6 members during expansion joint replacement.

The endpost at L_0U_1 downstream also has corrosion at the top of the sidewalk amounting to 8% loss of the inside channel. The lower chord members are encased in concrete and cannot be inspected. Corrosion of the steel is occurring, causing the concrete to break away in some areas.

See the truss schematic on sheets 74 and 75 for deterioration detail.

Bridge No. 46-9-0.02 (1827)
Date: September 25, 2007

Superstructure Span 2 (Deck Truss)

A.) Fracture Critical Members

The lower chord members L_1L_2 through L_4L_5 and the end post members U_0L_1 and L_5U_6 are designated fracture critical. These members were closely examined. Significant section loss exists on the upstream and downstream U_0L_1 end post members at U_0. These members were strengthened during 1997 renovation work. The floorbeams are also considered fracture critical. Heavy rust is developing on the U_1 floorbeam due to the leaking deck.

B.) Bearings

The bearings are in poor condition. They are heavily rusted but are performing their designated function.

C.) Bracing

The truss bracing system is in generally good condition with localized areas being in poor condition. The connection plate for the upper lateral from U_0 upstream to U_1 downstream is approximately 80% reduced at U_0 upstream. The lower connection plate for the bracing between the U_0L_1 members is severely deteriorated at U_0 upstream. The three stay plates on this member closest to U_0 are also severely deteriorated. See photo 21. See the endpost sway bracing sketch on sheet 85 and the floorplan schematic on sheet 86 for detail.

D). Stringers

The W21 x 62 interior stringers are in fair condition. Rust is developing at sporadic locations due to the leaking deck. There is a localized area of deterioration on stringer no. 2 in panel 5 amounting to 20% loss of the top flange and 11% loss of the bottom flange.

The fabricated exterior stringers are also in generally good condition, with the exception being adjacent to the U_6 floorbeam. Both stringers have rather heavy section loss in this area and are in poor condition. The lower flange of stringer no.4 has been repaired. See the floorplan deterioration schematic on sheet 86 for detail.

All exterior stringers are bowed.

Span No. 2 (Deck Truss) (cont'd)

E). Floorbeams

The W24 x 76 floorbeams are in fair condition. Heavy rust is developing due to the leaking deck and expansion joints. See photo 22.

F). Trusses and Connections

These trusses are in poor condition due to localized areas of heavy section loss. The outside channels of the U_0U_1 members of both trusses are heavily deteriorated at the U_0 connections, with the outside channel on the upstream side being 58% reduced and the outside channel on the downstream side being 43% reduced. The U_0L_1 members are also heavily deteriorated at the U_0 connections with the maximum loss to a channel being 47% to the outside channel on the downstream truss. See photos 23 thru 26. The lower stay plates on these members adjacent to the U_0 connections are also heavily deteriorated. These members (U_0L_1) were strengthened with 1" diameter dywidag rods during 1997 renovation work. The connection plates at U_0 are also heavily deteriorated between the U_0L_1 members and the pin stiffener plates. Corrosion is developing on the inside lower connection plates along the top of the bottom chords. See the span 2 truss deterioration schematics on sheets 87 and 88 for detail.

In addition to the U_0L_1 members, the L_5U_6 members and the lower chord from L_2 to L_4 were strengthened with 1" diameter dywidag rods in 1997.

Spans 3, 4 and 5 (Continuous Wide Flange Spans)

A). Fracture Critical Members

Due to the redundancy of multiple stringers, these spans have no fracture critical members.

B). Bearings

The bearings are in poor condition. Nearly all the bearings are severely rusted due to either leaking expansions or leaking

Spans 3, 4, and 5 (Continuous Wide Flange Spans) (cont'd)

B). Bearings (cont'd)

construction joints in the deck. The anchor bolts on the exterior stringers are also heavily rusted and have loss of section near the bottom. See photos 27 thru 33 along with the sketch on sheet 101.

The rockers for span 3 on pier 2 are tilted 5° backward. See photo 34.

C). Bracing

The diaphragms are in generally good condition. The diaphragms at bents no. 1 and 2 were replaced during the 1997 renovation work. The lower bracing angles between stringers no. 1 and 2 of span 3 at pier 2 are heavily deteriorated adjacent to stringer no. 1.

D). Stringers

The W36 x 160 stringers are in poor condition. Expansion and deck joint leakage over the years has caused heavy rust scale to develop, particularly on the exterior stringers. See photos 35 thru 39. The maximum loss to a top flange is 25%, the maximum loss to a web is 10% and the maximum loss to a lower flange is 21%. The web stiffeners are also deteriorating on the exterior stringers at the substructure units. See the floorplan schematic on sheet 102 for deterioration detail.

The lower flange of stringer no. 1 in span 4 over Front Street has been scraped by overheight loads and is slightly bent. The damage is superficial. See photo 40.

During 1997 renovation work the top cover plates on the stringers over the bents were replaced.

Expansion Joints and Openings

The armored joints with silicon seals are in critical condition. The upstream sidewalk seal at abutment no. 2 is damaged due to chipped concrete. The seals at abutment 1, pier 1, pier 2, and abutment 2 also have damaged areas and are leaking. See photos 41 thru 44. The seals should be replaced.

See sheets 51 and 51A for a comparison of joint openings.

Bridge No. 46-9-0.02 (1827)
Date: September 25, 2007

Deck Slab

The reinforced concrete deck is in poor condition.

In span no. 1 the deck underside has numerous spalled areas due to corrosion of the steel reinforcing. This appears to be the result of a combination of water absorption through the deck and locomotive emissions. In spans 2 through 5 no spalls are present but there is considerable cracking with efflorescence and evidence of continued moisture penetration. See photos 45 thru 52.

The deck edges are heavily spalled in spans 3 thru 5 due to leaking deck joints. These joints were sealed during renovation work and some concrete patching was performed at the bents. However, leakage is continuing. See photos 53 thru 56.

A ¼" separation was noted between the deck slab and stringer no. 1 at abutment 2.

The asphalt wearing surface is in fair condition. Areas of depressions with map cracking are developing and potholes have been patched. See photos 57 thru 59.

The curbs are in fair condition. Areas of rather heavy spalling exist in the vicinity of several panel points in span 1. See photo 60.

The deck drains are in poor condition. Many of the drain extensions are heavily deteriorated at the underside of the deck. Several of the drain extensions were replaced with plastic pipe during renovations. The remainder should also be replaced.

Sidewalks

The concrete sidewalks are in fair condition. During 1997 renovation work the joints at both abutments and piers were replaced and all other construction joints sealed with silicon. The worst spalled areas in the top side were also patched.

The top sides are generally lightly to moderately scaled with areas of rust stains visible, indicating reactive aggregate. Some of the patchwork is also delaminating and spalling. See photos 61 thru 64. Some spalls are also present along the construction joints. A small hole has developed in the downstream sidewalk in span 5, near abutment 2. See photo 65. The bottom sides typically have small spalls where the concrete has broken away from the corroding steel reinforcing. See photo 66.

The approach sidewalk transition at abutment 2, downstream is rough with a high step.

Bridge No. 46-9-0.02 (1827)
Date: September 25, 2007

Railings

The concrete parapet walls are in good condition.

Signs

The following signs are located at the bridge and are in good condition: 16 ton weight limit signs and 13'-10" vertical clearance signs at both ends. See photos 67 and 68. 12'-0" vertical clearance signs are attached to the exterior stringers in span 4.

Paint

The paint is in poor condition with localized areas that are critical. Much of the superstructure is rusty due to leaking expansions and deck construction joints. However, much of the paint is poor due to old age and weathering. A complete cleaning and painting is desperately needed. In addition to all previously referenced photos showing steel superstructure elements, see photos 69 and 70.

Lighting

The overhead street lights appear to be in working order.

Approach Pavement

The asphalt approach at abutment 1 is in fair condition. It contains cracking and evidence of settlement. See photo 71. The asphalt approach at abutment 2 is in good condition.

Inspection History

Checklist	-	07/16/71
Original 1st	-	09/07/77
Revised	-	08/16/79
Revised	-	08/10/81
Original 2nd	-	08/29/83
Revised	-	08/21/85
Revised	-	08/13/87
Original 3rd	-	08/10/89
Periodic	-	08/14/91

WEST VIRGINIA
Division of Culture and History

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

February 4, 2010

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement 5316-9-0.03
FR#: 10-374-TA

Dear Mr Bailey:

It is our understanding that the proposed project will involve demolition and replacement of the existing Bridge Street Bridge in Grafton.

The Bridge Street Bridge is currently listed as a contributing structure to the Grafton Historic District. It is our understanding that you are questioning this designation. After reviewing the National Register nomination and researching the bridge, we agree with your findings and feel the bridge should not have been listed as a contributing structure to the Grafton Historic District.

However, it is our opinion that the bridge is considered eligible for listing in the National Register of Historic Places as an individual structure. It now meets the fifty year requirement, retains integrity, and according to the draft of the West Virginia Statewide Bridge Survey, is the only existing steel through truss bridge in Taylor County; therefore, it is our opinion that it is eligible under Criterion C.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Aubrey Von Lindern, Historian in the Historic Preservation Office at (304) 558-0240.*

Sincerely,

Susan M. Pierce

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/ACV

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

July 22, 2010

Vandalia Heritage Foundation
704 Benoni Avenue
Fairmont, West Virginia 26554

Dear Vandalia Heritage Foundation:

The West Virginia Department of Transportation, Division of Highways is in the process of studying the future replacement of a bridge in your area. The project will consist of replacing the existing Bridge Street Bridge, which crosses Three Fork Creek, CSX railroad, and Front Street in Grafton, Taylor County. The existing bridge is located near the western end of Taylor County Route (CR) 9, approximately 0.02 miles east (south by direction) of the intersection of US Route 119.

The West Virginia Division of Highways will be conducting an informational workshop public meeting on Thursday, August 5, 2010 at the Taylor County Public Library Assembly Room from 4 to 7 pm. This meeting will afford participants an opportunity to ask questions and state their views and opinions on the bridge replacement project.

Written comments may also be sent to Gregory L. Bailey, P.E., Director, Engineering Division, West Virginia Division of Highways, 1900 Kanawha Boulevard East, Building 5, Room A-317, Charleston, West Virginia 25305-0430 on or before September 7, 2010. Comments may also be made online at www.transportation.wv.gov.

Should you require additional information, feel free to contact Tracie Moles of our Environmental Section at (304) 558-9731.

Very truly yours

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L. Hark

Ben L. Hark
Environmental Section Head

GLB: Hw
Attachments
Bcc: DDE(TBM,RE)

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

July 22, 2010

Mr. Tom Dadisman, President
Taylor County Historical and Genealogical Society
P.O. Box 522
Grafton, West Virginia 26354

Dear Mr. Dadisman:

The West Virginia Department of Transportation, Division of Highways is in the process of studying the future replacement of Bridge Street Bridge in Taylor County, West Virginia. The project will consist of replacing the existing bridge, which crosses Three Fork Creek, CSX railroad, and Front Street in Grafton. The existing bridge is located near the western end of Taylor County Route (CR) 9, approximately 0.02 miles east (south by direction) of the intersection of US Route 119.

The West Virginia Division of Highways will be conducting an informational workshop public meeting on Thursday, August 5, 2010 at the Taylor County Public Library Assembly Room from 4 to 7 pm. This meeting will afford participants an opportunity to ask questions and state their views and opinions on the bridge replacement project.

Written comments may also be sent to Gregory L. Bailey, P.E., Director, Engineering Division, West Virginia Division of Highways, 1900 Kanawha Boulevard East, Building 5, Room A-317, Charleston, West Virginia 25305-0430 on or before September 7, 2010. Comments may also be submitted online at www.transportation.wv.gov.

Should you require additional information, feel free to contact Tracie Moles of our Environmental Section at (304) 558-9731.

Very truly yours

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L Hark

Ben L. Hark
Environmental Section Head

GLB: Hw
Attachments
Bcc: DDE (TBM,RE)

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

July 22, 2010

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

Dear Ms. Pierce:

The West Virginia Department of Transportation, Division of Highways is in the process of studying the future replacement of Bridge Street Bridge in Taylor County, West Virginia. The project will consist of replacing the existing bridge, which crosses Three Fork Creek, CSX railroad, and Front Street in Grafton. The existing bridge is located near the western end of Taylor County Route (CR) 9, approximately 0.02 miles east (south by direction) of the intersection of US Route 119.

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Written comments may also be sent to Gregory L. Bailey, P.E., Director, Engineering Division, West Virginia Division of Highways, 1900 Kanawha Boulevard East, Building 5, Room A-317, Charleston, West Virginia 25305-0430 on or before September 7, 2010. Comments may also be submitted online at www.transportation.wv.gov.

Should you require additional information, feel free to contact Tracie Moles of our Environmental Section at (304) 558-9731.

Very truly yours

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L Hark

Ben L. Hark
Environmental Section Head

GLB: Hw
Attachments
Bcc: DDE (TBM,RE)

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

INFORMATIONAL WORKSHOP PUBLIC MEETING
ATTENDANCE SHEET

PROJECT: Bridge Street Bridge Replacement
DATE: August 5, 2010
Federal Project: BR-0009(143)E
State Project: S246-9-0.03
LOCATION: Taylor County Public Library Assembly Room
200 Beech Street, Grafton, West Virginia 26354
Taylor County, West Virginia

PLEASE PRINT

	NAME	ORGANIZATION or ADDRESS
1.	Jenny Brewer	
2.	[illegible]	CITY OF GRAFTON
3.	Kevin Stead	City of Grafton
4.	[illegible]	
5.	Dave Clevenger	TRC
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

August 23, 2010

MEMORANDUM

TO: File

FROM: DDE Ben L Hark

SUBJECT: Bridge Street Bridge
State Project S246-9-0.03
Federal Project BR-0009(143)E
Taylor County
Public Involvement

On August 5, 2010, the Environmental Engineering Division held a public meeting at the Taylor County Public Library to afford members of the public an opportunity to ask questions and state their views and opinions on the replacement of the Bridge Street Bridge in Grafton, West Virginia. The meeting was advertised in the local newspaper thirty days prior to the meeting as well as the day before the meeting. This advertisement was also sent to the delegates and representatives for that area as well as the Post Office, emergency agencies, and local government offices. Individual invitations were sent to CSX, Taylor County Historical Society, State Historic Preservation Office, and the Vandalia Heritage Foundation. Notice of the public meeting and project handout was and is currently available for review and comment online at www.transportation.wv.gov.

Only five members of the community attended the meeting. In complying with Title VI of the Civil Rights Act of 1964 that protects individuals and groups from discrimination on the basis of their race, color, and national origin in programs and activities that receive Federal financial assistance, Mrs. Tracie Moles of our staff visited the area on August 12, 2010 to pass out project handouts. Places given this information included the Taylor County Development Office, Post Office, Court House Annex, Circuit Clerk's Office, Veterans of Foreign Wars, Department of Health and Human Resources, Taylor County Public Library, Salvation Army, Foodland, Tygart Lake State Park Visitor Information Center, Elizabeth Cather Towers, and the Housing Authority of the City of Grafton. The City Manager of Grafton was also contacted to insure no groups or individuals were overlooked. He suggested a local restaurant, Jerry's Restaurant, and stated that if handouts were sent to him, that he would personally take them to that location. Those handouts have since been mailed so that those wishing to make comments can do so before the thirty day deadline of September 7, 2010.

BH:w

bcc: DDE (TBM, RE), DDR (CL), AH (Drema Smith)

Bridge Street Bridge All Sites Advanced Search

Transportation > Highways > Engineering > Comment on Projects > Bridge Street Bridge > Comments > (no title)

Comments: (no title)

New Item | Edit Item | Delete Item | Manage Permissions | Alert Me

_Title	
FirstName	Jenny
LastName	Brewer
Organization	owner of South Side Laundry Mat
Email	whiteday1@netscape.com
MailingAddress	R.R.#3, Box 161
City	Grafton,
State	WV
ZipCode	26354
Comments	I own property on two (2) of the alternatives for the Bridge Street Bridge in Grafton, WV. My chocies for the replacement bridge are, Alternative #8, Alternavtive #6, Alternavtive #2 and Alternative #4. I am against Alternative #7 and Alternative #3. The No-Build Alternative should not be considered, because a new bridge is needed for emergencies and travel to and from Tygart Lake State Park.
CommentType	Online

Created at 8/22/2010 7:47 AM by
Last modified at 8/22/2010 7:47 AM by

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

September 8, 2010

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

Dear Ms. Pierce:

State Project: S246-9-0.03
Federal Project: BR-000-143)E
Bridge Street Bridge Replacement
Grafton
Taylor County

Attached for your review and comment is the Cultural Resources Management Report for the subject project.

Archaeology for this project will be submitted in a separate report.

Should you have any questions, please do not hesitate to contact Randy Epperly III of our Environmental Section at (304) 558-9385.

Very truly yours,

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L Hark

Ben L. Hark
Environmental Section Head

GLB:Hw

Enclosures

cc: DDE(RE)

WEST VIRGINIA
Division of Culture and History

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 28, 2010

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement S346-9-0.03
FR#: 10-374-TA-2

Dear Mr Bailey:

We have reviewed 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.

Based on submitted information, plans call for the replacement of the Bridge Street Bridge in Grafton. It is our understanding that the preferred alternative involves demolition of the existing bridge and replacing it with a bridge 60 feet downstream.

We are unable to complete our review based on the information provided. It is your opinion that the proposed bridge replacement will constitute an adverse effect on the Bridge Street Bridge, which is eligible for inclusion in the National Register of Historic Places. We concur with this assessment. It is also your opinion that the buildings along Barrett Street, which are located in the Area of Potential Effect, are not eligible for inclusion in the National Register of Historic Places. We cannot concur with this assessment at this time. It is our opinion that additional information regarding the history of this South Grafton Neighborhood is needed in order to assess the eligibility of these building as part of a potential district. It is also your opinion that the proposed bridge replacement will have no adverse effect on the Grafton Commercial Historic District. We cannot concur with this assessment at this time.

In order for us to complete our review we ask that additional information be provided on what type of bridge will be built to replace the existing bridge. There has been a metal truss bridge located at this crossing since 1900, therefore, replacing it with, for example, a concrete slab

bridge, would be changing the setting of the Grafton Commercial District and changing the setting of any potential district that may exist in the South Grafton neighborhood. We will provide further comment upon receipt of the requested information.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Aubrey Von Lindern, Historian in the Historic Preservation Office at (304) 558-0240.*

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/ACV

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

October 18, 2010

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

Dear Ms. Pierce:

State Project: S246-9-0.03
Federal Project: BR-000-143)E
FR#: 10-374-TA-2
Bridge Street Bridge Replacement
Grafton
Taylor County

The West Virginia Division of Highways (WVDOH) received your letter of September 28, 2010 regarding the project referenced above.

Your letter asked for more information regarding the buildings on Barrett Street and the South Grafton area. We feel that these buildings are not part of the South Grafton neighborhood. The area along Front Street and Barrett Street where the buildings are located consists mostly of modern businesses. There are few houses and none are of the type or age of the inventoried properties. The South Grafton area that could possibly be considered as a historic district is located along Tygart Valley River. This area is on the other side of the mountain and out of view from the inventoried properties. These five buildings on Barrett Street are isolated from the South Grafton neighborhood and are not eligible for the National Register.

The Bridge Street Bridge is not a contributing resource within the district. WVDOH maintains the opinion that the project will not adversely effect the Grafton Commercial District. The construction of a new bridge will maintain the current viewshed of a bridge.

Due to the terrain, the Grafton Commercial Historic District, and financial concerns; the new bridge type has design limitations and affects the type of bridge that can be constructed. The new bridge will also need to be raised to meet the minimum clearance height over the railroad. The current bridge does not meet that standard. WVDOH In-House Bridge Design Unit Leader Bob Blosser advised that multiple temporary piers

would be needed in order to build a truss bridge. The railroad will not permit these piers to be placed along the tracks, even temporarily. Blosser also stated: "Recent projects have shown that the most economical bridge type for this size of bridge is a conventional girder bridge. Truss options on these projects have been estimated to increase project costs as much as fifty percent over the girder option."

Should you have any questions, please do not hesitate to contact Randy Epperly III of our Environmental Section at (304) 558-9385.

Very truly yours,

Gregory L. Bailey, P.E.
Director
Engineering Division

By:

Ben L. Hark
Environmental Section Head

GLB:Hw

Enclosures

cc: DDE(RE)

WEST VIRGINIA
Culture and History

The Culture Center
[illegible]
Randall Reid-Smith, Commissioner
[illegible]

December 14, 2010

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement
FR#: 10-374-TA-3

Dear Mr Bailey:

We have reviewed 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.

We are still unable to complete our review based on the information submitted. It is our opinion that the demolition of the Bridge Street Bridge would constitute an adverse effect on several resources. The Bridge Street Bridge is not a contributing resource to the Grafton Historic District; however, it is our opinion that it is eligible on its own for listing in the National Register. It is a locally significant bridge eligible under Criterion C. The demolition of the bridge would be considered a direct effect on an historic resource.

Secondly, it is our opinion that the demolition of the Bridge would have an adverse effect on the Grafton Historic District. Based on research submitted by your office, it appears that a truss bridge has been in this location since the early 20th century. Therefore, removing this truss bridge and replacing it with a "conventional girder bridge" would effect the setting of the historic district. It is also our opinion that its demolition would adversely effect the setting of the CSX Railroad Yard, which is considered eligible for inclusion in the National Register.

Additionally, it is our opinion that the proposed demolition may also have an effect on potentially eligible buildings along Barrett and Front Streets. These resources may be contributing to a district, whether it is or is not called "South Grafton" is of no consequence. Please see the enclosed USGS Topographic map where we have outlined the potential district. We ask that you evaluate the buildings in the view-shed of the bridge as potential contributing resources to this district. We will comment further upon receipt of the requested information.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Aubrey Von Lindern, Historian in the Historic Preservation Office at (304) 558-0240.*

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/ACV

enclosure

WV State Historic Preservation Online Map

National Register ◇Point ▭Area Archeological Survey ◆Point ▭Area

Architectural △Point ▭Area Archeological Site ■Point ▭Area

Map created by WV GIS Technical Center

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

March 4, 2011

Mr. Patrick DesMarais
AECOM
1700 Market Street, Suite 1600
Philadelphia, Pennsylvania 19103

Dear Mr. DesMarais:

State Project: S346-9-0.03
Federal Project: BR-0009(143)E
Bridge Street Bridge Replacement
Taylor County

The West Virginia Division of Highways (WVDOH) is proposing a project to replace the Bridge Street Bridge in Grafton located on County Route 9 which crosses Three Fork Creek, CSX Railroad, and Front Street. A map showing the location has been attached. Also attached is the preferred alternative, although final design has not been completed.

The bridge and the rail yard are potentially eligible for the National Register of Historic Places. This letter is requests comments concerning the project's impacts to the Grafton Rail Yard.

If you have comments that relate to historical impacts, please do not hesitate to contact Randy Epperly III of our Environmental Section by calling (304) 558-9385, or via e-mail at Randy.T.Epperly@WV.Gov.

Very truly yours,

Gregory L. Bailey, P.E.
Director
Engineering Division

By: G. L. Hark

Ben L. Hark
Environmental Section Head

GLB:Hw
Enclosures
cc: DDE(RE)

Epperly, Randy T

From: Epperly, Randy T
Sent: Wednesday, July 20, 2011 3:56 PM
To: Scott, Gary W - DOT
Subject: Bridge Street Bridge (Grafton)
Attachments: Preferred.pdf; SHPO letter.pdf

Gary, below is a description of the project and a brief description of consulting party participation in the MOA. I have attached the preferred alternative and SHPO letter. Please

send this to CSX and ask if they would like to participate in the MOA. I will be out next week, but will answer my e-mails if you have any questions or you can ask Sondra.

If you need this in letter form, I can provide that as well. Thanks for your help.

Bridge Street Bridge

Taylor County
State Project #S246-9-0.02
Federal Project #BR-

0009(143)D

The West Virginia Division of Highways (WVDOH) is proposing a project to replace the Bridge Street Bridge in Grafton. The bridge is located on County Route 9 and crosses Three Fork Creek, CSX Railroad, and Front Street. Alternative 8 is the preferred alternative. This alignment would be 60 feet downstream of the existing bridge. The new bridge would be 300 feet long with 2 spans and stub abutments. Total length of construction would be 900 feet and would acquire a vacant lot within the historic district. Front Street and County Route 9 will need to be reconstructed. Traffic will be maintained on the existing bridge during construction, but may use existing roads as a detour route during the reconfiguration of Front Street and County Route 9. The preferred alternative plan sheet is attached.

The rail yard is eligible for the National Register of Historic Places under Criterion A for its significance with historic events. The track was built around 1860 and was the economic source for Grafton. The railroad was an important transportation method as well as a target during the Civil War. As part of environmental clearance, the State Historic Preservation Office (SHPO) has asked that we submit a Memorandum of Agreement to mitigate the impacts to historic properties. The SHPO letter is attached.

Per Section 106 of the National Historic Preservation Act of 1966, the West Virginia Division of Highways (WVDOH) is affording your organization the opportunity to request consulting party status for the subject project. 36 CFR 800.2 (F) (5) addresses consulting parties by stating, "certain individuals and organizations with a demonstrated interest in the undertaking may participate as consulting parties due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking's effects on historic properties."

By being granted consulting party status your organization will be copied on documents and reports generated for the proposed project and be given the opportunity to comment on them within a specific time frame. In addition, your organization will be given the opportunity to review and comment on any Memorandum of Agreement (MOA) that is developed concerning this project and will have the option of being a signatory to the MOA if you choose. Please let us know of your decision for or against participation in the MOA.

Randy Epperly III

WVDOH
Engineering Division
Environmental Section
304-558-9385

State Project S346-9-0.03 00
Federal Project BR-0009(141)D
Bridge Street Bridge
Taylor County
Preliminary Field and Span Arrangement Review

September 22, 2011

Name	*Organization*	*Phone/Email*
1. Dirar Ahmad	Engineering	dirar.m.Ahmad@wv.gov
2. Sarah Daniel	Railroads+Utilities	sarah.l.daniel@wv.gov
3. Bob Blosser	Engineering - Bridge	Robert.L.Blosser@wv.gov
4. Gary Scott	Railroads - DOH	gary.w.scott2@wv.gov
5. ~~Steven Jarrell~~	~~Env - Bridge~~	~~Steven.R.Jarrell@wv.gov~~
6. Dave Verno	TRC	dverno@trcsolutions.com
7. Paul Misch Jr.	TRC	~~pmisch@trcsolutions.com~~ pmisch@trcsolutions.com
8. Dave Clevenger	TRC	dclevenger@trcsolutions.com
9. Tim Shoemaker	TRC	Tshoemaker@trcsolutions.com
10. Dave Verno	TRC	dverno@trcsolutions.com
11. George Chappell	DOH-Geotech	george.A.Chappell@wv.gov
12. Joe Crate	"	Joe.D.Crate "
13. Ralph W Sapp	D.O.H.	304-842-1576
14. Tonya Perkins	Equitable Gas	tperkins@equitablegas.com
15. Tim Priode	DOH	Timothy.R.Priode@wv.gov
16. Raymond Tackett	DOH D-4 R/W	Raymond.N.Tackett@wv.gov
17 Chuck Bartley	WVDOH R/W	
18. ERIC DECKER	FRONTIER	
19 SCOTT MOORE	MW POWER	

From: DesMarais, Patrick [mailto:Patrick.DesMarais@aecom.com]
Sent: Friday, February 24, 2012 3:49 PM
To: Scott, Gary W - DOT
Subject: RE: Bridge Street Bridge Erection/Demo Write-up, PE, Cover Letter
Importance: High

SUBJECT: Grafton, Taylor County, West Virginia – Proposed replacement of the Bridge Street Bridge over CSXT, DOT# 146 227 Y; Milepost BA-280.02, C&O Division, Mountain Subdivision; OP# WV0302; WVDOH Project S346-9-0.03

Gary –
It is official. Wednesday, Feb 29th at 10AM at CSXT Grafton Yard office.

Confirmed on our end will be CSXT's Tom Crawford, Roadmaster Robert Barr & Trainmaster Sandy Workman. AECOM's Vaughn Neill and I will also attend.

Please let me know if you have any further questions/concerns.
Have a great weekend.
Thank you,
Pat

Patrick J. DesMarais
Project Engineer, Freight Rail Group
Direct 215.789.2158
patrick.desmarais@aecom.com

AECOM
1700 Market Street, Suite 1600
Philadelphia, PA 19103
T 215.735.0832 F 215.735.0903
From: Scott, Gary W - DOT [mailto:Gary.W.Scott2@wv.gov]
Sent: Wednesday, February 08, 2012 9:59 AM
To: DesMarais, Patrick
Subject: Bridge Street Bridge Erection/Demo Write-up, PE, Cover Letter

Patrick:

Please see attached.

Gary

Gary W. Scott
Railroad Coordinator
WV Division of Highways
Engineering Division-Railroad & Utilities
gary.w.scott2@wv.gov
304-558-9763 (office)
304-552-9304 (mobile)

Ben Resnick

From: Scott, Gary W - DOT <Gary.W.Scott2@wv.gov>
Sent: Saturday, February 25, 2012 8:09 AM
To: Priddy, Timothy R
Subject: FW: Bridge Street Bridge Erection/Demo Write-up, PE, Cover Letter

Importance: High

FYI

From: DesMarais, Patrick [mailto:Patrick.DesMarais@aecom.com]
Sent: Friday, February 24, 2012 3:49 PM
To: Scott, Gary W - DOT
Subject: RE: Bridge Street Bridge Erection/Demo Write-up, PE, Cover Letter
Importance: High

SUBJECT: Grafton, Taylor County, West Virginia – Proposed replacement of the Bridge Street Bridge over CSXT, DOT# 146 227 Y; Milepost BA-280.02, C&O Division, Mountain Subdivision; OP# WV0302; WVDOH Project S346-9-0.03

Gary –
It is official. Wednesday, Feb 29th at 10AM at CSXT Grafton Yard office.

Confirmed on our end will be CSXT's Tom Crawford, Roadmaster Robert Barr & Trainmaster Sandy Workman. AECOM's Vaughn Neill and I will also attend.

Please let me know if you have any further questions/concerns.
Have a great weekend.
Thank you,
Pat

Patrick J. DesMarais
Project Engineer, Freight Rail Group
Direct 215.789.2158
patrick.desmarais@aecom.com

AECOM
1700 Market Street, Suite 1600
Philadelphia, PA 19103
T 215.735.0832 F 215.735.0903

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Gary

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304-558-9763 (office)
304-552-9304 (mobile)

WEST VIRGINIA DIVISION OF HIGHWAYS
ENGINEERING DIVISION
IN-HOUSE SECTION

Subject:	Project Name:	of
Prepared By: Date:	Project No: County:	

PRE-TSL MEETING DOH / TRC / CSX
2/29/12
GRAFTON, WV
BRIDGE STREET BRIDGE

Tim Proudt	DOH	Timothy.R.Proudt@wv.gov
Kyle Murr	Shaw Envir. / CSX Env. Field Services	kyle_murr@csx.com
David Clevenger	TRC Engineers	dclevenger@trcsolutions.com
~~Steven Jarrell~~	~~DOH~~	~~steven.r.jarrell@wv.gov~~
Tim Shoemaker	TRC Engineers	tshoemaker@trcsolutions.com
Matthew Masterson	Trainmaster / CSX	matthew_masterson@csx.com
Robert Barr	Roadmaster	robert_barr@csx.com
Gary W. Scott	WVDOH RR Coord	gary.w.scott2@wv.gov
Vaughn Neill	AECOM (for CSX)	~~vaughn~~ vaughn.neill@aecom.com 412 260 2983
Patrick DesMarais	AECOM (for CSXT)	patrick.desmarais@aecom.com
Feras Tolaymat	OEM	feras.tolaymat@wv.gov
~~Tim Priddy~~		
Sarah Daniel	DOH - Railroads & Utilities	sarah.l.daniel@wv.gov
Dave Verno	TRC Engineers	dverno@trcsolutions.com
Paul Misch Jr.	TRC	pmisch@trcsolutions.com

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 BRIDGE STREET
BRIDGE REPLACEMENT PROJECT
TAYLOR COUNTY, WEST VIRGINIA
APRIL 2012

WHEREAS, the Federal Highway Administration (FHWA), in cooperation with the West Virginia Division of Highways (WVDOH), proposes to replace the Bridge Street Bridge, which spans the Three Fork Creek, Front Street, and CSX Railroad in Grafton, Taylor County, hereinafter referred to as the Project. The improvements involve the construction of a new bridge and the removal of the existing bridge; and

WHEREAS, the FHWA has determined that the Project will have an adverse effect upon the Bridge Street Bridge, CSX Railroad, properties eligible for the National Register of Historic Places (NRHP) and the Grafton Commercial Historic District.

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 effect archaeological properties; and

WHEREAS, the WVDOH contacted the Taylor County Historic Society, Vandalia Heritage Foundation, CSX, and Preservation Alliance of West Virginia regarding the Project. The Vandalia Heritage Foundation chose not to respond. CSX responded by phone and does not want to be involved in the MOA. Taylor County Historical Society responded supporting the project. The Preservation Alliance of West Virginia did respond by e-mail. A public workshop was held in which the City of Grafton expressed support for the project. Five members of the public were present for the workshop.

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:

Bridge Street Bridge

I. A sum of $5,000 will be given to the City of Grafton to be used for historic Preservation related activities and improvements within the Grafton Commercial Historic District. All activities and improvements using these funds shall be approved by both the West Virginia Division of Highways and the West Virginia State Historic Preservation Office before the expenditure of any funds.

II. The Bridge Street Bridge will be documented in its present historic setting. The documentation package will include 5"x7" black and white digital prints in accordance with the National Register of Historic Places and National Historic Landmarks Survey Photo Policy Expansion of March 2005. A copy of the documentation will be given to the Grafton Public Library.

III. A brief history of the structure will be included along with fully completed West Virginia Historic Property Inventory forms and any available copies of plan sheets and drawings of the bridge from WVDOH bridge files.

IV. The Bridge Street Bridge Replacement bridge will contain historic style lighting and architectural treatments to the bridge to match the Grafton Commercial Historic District.

V. The bridge will be documented on a future website listing historic bridges once the WV Historic Bridge Survey is complete.

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 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 X, 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, WVSHPO, the WVDOH and the Council, and implementation of its terms evidence that the FHWA has afforded the Council an opportunity to comment on the Bridge Street Bridge Replacement 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 — Date

West Virginia Deputy State Historic Preservation Officer — Date 5/9/12

APPROVED:

Advisory Council on Historic Preservation — Date

CONCUR:

West Virginia Division of Highways — Date

Signature Page 2

Consulting Parties

City of Grafton

6/1/12
Date

WEST VIRGINIA
Division of Culture and History

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
An Equal Opportunity Employer

April 30, 2012

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement
FR#: 10-374-TA-8

Dear Mr. Bailey:

We have reviewed the abbreviated technical report on archaeological investigations 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 the submitted report, survey of the proposed project area consisted of field reconnaissance to assess ground condition and determine locations of areas with high and moderate archaeological potential and systematic shovel probe excavation within those areas. Wetlands, steep slope and previous disturbance were documented. Much of the project area was determined to be previously disturbed by urban development. Shovel probes excavated in a seemingly undisturbed area resulted in the documented fill deposits from which a mixture of historic and modern debris was recovered. We concur that these items do not constitute an archaeological site. No cultural resources were identified. We concur that no further archaeological work is necessary. In our opinion, there are no archaeological resources within the proposed project area that are eligible for listing in the National Register of Historic Places.

We appreciate the opportunity to be of service. *If you have 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 Officer

SMP/LLD

MEMORANDUM OF UNDERSTANDING
BETWEEN
THE FEDERAL HIGHWAY ADMINISTRATION,
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, AND
THE U.S. FISH AND WILDLIFE SERVICE

1.0 PURPOSE & SCOPE

This is a Memorandum of Understanding (MOU) between the Federal Highway Administration (FHWA), the West Virginia Department of Transportation (WVDOT) and the U.S. Fish and Wildlife Service (USFWS). All parties are committed to achieving timely planning, development, design and implementation of adequate, safe, environmentally sound and economical transportation improvements while assuring the protection of Federally-listed endangered and threatened, and proposed and candidate species, and eagles, in accordance with the goals and requirements of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d, 54 Stat. 250), and the National Environmental Policy Act (NEPA) (42 U.S.C. 4321-4347). References to habitat in this MOU and attached appendices include critical habitat as defined in the ESA.

2.0 BACKGROUND

The ESA (section 7 (a) (2)) requires that each Federal agency consult with the USFWS to insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat. In addition, Federal agencies shall utilize their authorities in order to conserve listed species that are protected under the ESA (section 7 (a) (1)). The BGEPA prohibits anyone without a permit, including Federal and State agencies, from taking eagles, including their nests and eggs, or disturbing eagles. The ESA and BGEPA and their associated policies, regulations, and guidelines set forth procedures by which Federal agencies, their designated representatives, and the USFWS shall work together to achieve these objectives.

NEPA requires Federal agencies to conduct environmental reviews to consider the potential impacts on the environment from implementation of their proposed actions. The NEPA statute and regulations set forth a process to evaluate potential impacts as well as requirements for documentation of decisions resulting from that process. These include determination of the proposed project's potential environmental impacts; coordination with relevant agencies; and documentation of the analysis and decisions through an environmental impact statement, an environmental assessment, or a categorical exclusion supported by the administrative record.

This MOU between FHWA, WVDOT, and USFWS is intended to become an ongoing agreement among the parties to facilitate the conservation of these species and expedite the informal consultation process as required by the ESA and the BGEPA. The USFWS reserves the right to comment separately on any project pursuant to the Clean Water Act, NEPA, the Fish and Wildlife Coordination Act, or other statutes, laws and regulations. This MOU shall replace the

existing Blanket Letter Agreement between WVDOT and USFWS, which was signed March 15, 2005, and renewed on May 17, 2007. All parties recognize that the original "No Effect"/May Affect, Not Likely to Adversely Affect" Blanket Agreement Approval has been an effective streamlining tool and wish to solidify the process with the signing of this MOU.

This MOU is limited to minor projects and maintenance activities routinely completed by WVDOT to ensure access and safety for the traveling public. Projects that do not fall under the "minor projects" definition are not covered under the MOU. For the purpose of this MOU "minor projects" are defined as all WVDOT projects that meet the standards for Categorical Exclusion or Programmatic Categorical Exclusion as set forth by NEPA. Examples of such projects include but are not limited to: pavement resurfacing; culvert replacement, extension or repair; bank stabilization; road realignment; safety improvement measures; guardrail placement or elimination; walking trails; bike paths; city improvement projects; bridge replacement or repair; landscaping; drainage modifications; and utility placement along existing rights-of-way. In order to screen these projects for potential impacts to Federally-listed, proposed and candidate species, and eagles, WVDOT in coordination with USFWS and WVDNR developed a checklist and collection of Geographic Information System (GIS) layers that identify areas where these species may occur, as shown in Appendices A, B, and C.

Information on known locations of listed species and the potential range of listed species and their habitats were used in establishing the GIS layers. When appropriate, these layers also incorporate buffer zones around known or suspected species occurrence areas. To the extent possible, these buffer zones were based on information from established recovery plans (e.g., Cheat Mountain salamander), guidance documents (e.g., Bald Eagle Management Guidelines) or other appropriate sources.

3.0 WVDOT RESPONSIBILITIES UNDER THIS MOU

WVDOT shall undertake the following activities:

3,1 The WVDOT or its authorized agent will screen all proposed minor project actions covered under this MOU using the GIS layers (Appendices B and C) and associated screening tool checklist (Appendix A).

A. The WVDOT will determine that the project will have "no effect" on Federally-listed, proposed and candidate species, and eagles when the proposed action:

- does not occur within any of the identified environmentally sensitive areas; AND
- does not require an individual Clean Water Act section 404 permit (issued through the U.S. Army Corps of Engineers); AND
- will have less than 17 acres (6.88 hectares) of timbering/clearing necessary for each project in its entirety.

No further coordination with USFWS will be required. A copy of the completed checklist (Appendix A) for the proposed action will be attached to the environmental document.

B. The WVDOT will document the proposed action has a minimum discountable affect on Federally-proposed and candidate species, and on eagles, and will determine that the project "may affect, but is not likely to adversely affect" Federally-listed species, when the proposed action:

- occurs within any of the identified environmentally sensitive areas AND
- can implement all the identified specialized measures as identified in Appendix C; AND
- does not require an individual Clean Water Act section 404 permit (issued through the U.S. Army Corps of Engineers); AND
- will have less than 17 acres (6.88 hectares) of timbering/clearing necessary for each proposed action in its entirety.

The WVDOT will send a notification (Appendix H) to USFWS that will include a copy of the completed checklist (Appendix A) for the proposed action, and a copy of the specialized measure(s) that will be implemented. A copy of the specialized measures will also be attached to any environmental and contracting documents prepared for the project. No further coordination with the USFWS will be required for those projects that will implement all specialized measures to avoid impacts to potentially affected species.

C. For projects that do not meet the "no effect" or the "may affect, not likely to adversely affect" criteria as defined above, WVDOT shall consult with the USFWS by submitting the package of information as outlined in Appendix I.

D. WVDOT will refer to and use Appendices D through G which contain requirements, special provisions and specialized Best Management Practices (BMPs) to reduce potential effects of construction projects on species protected under ESA and BGEPA as determined using Appendix A.

E. In the event that any species protected under the ESA or BGEPA is found during a stream or habitat assessment, all impacts and work shall stop, and the USFWS and other appropriate agencies shall be notified immediately.

F. The buffer zones and potential impact areas delineated in the referenced GIS layers were specifically designed to address small-scale proposed projects with limited additional rights-of-way that are the subject of this MOU. As a result, these buffer zones and impact areas are not appropriate to use when screening new construction and other larger-scale projects. Larger-scale proposed projects are still required to be submitted to the USFWS for individual project review. However, WVDOT may utilize the screening tool on larger projects to gain an initial perspective of whether the project will have ESA and/or BGEPA species issues. On such larger projects the GIS layers will only be used as a prescreening tool to help with early coordination with the USFWS. WVDOT desires to further develop the GIS screening tool to improve its future use and effectiveness on large scale projects.

G. Annually, by August 31, WVDOT will provide a summary or table listing each project that was cleared through this MOU, including the county in which it occurred. The

annual lists will be broken down into "no effect" and "may affect/not likely to adversely affect" projects.

4.0 USFWS RESPONSIBILITIES UNDER THIS MOU

USFWS shall undertake the following activities:
USFWS will inform all parties of any changes to the relevant policy, listing status, species information, and species protected under ESA and BGEPA. USFWS will also review submittals, as described under Section 3.1 C, above, and will participate in any update or changes to the Appendices in this MOU.

If a project meets the criteria listed under Section 3.1 A of this MOU, USFWS concurs that such projects will have "no effect" on Federally-listed species; therefore, no Biological Assessment or further section 7 consultation pursuant to the ESA is required. If a project meets the criteria listed under Section 3.1 B with implementation of the specialized measures found in Appendices D through G, USFWS concurs that these projects "may affect, but are not likely to adversely affect" Federally-listed species.

5.0 FHWA RESPONSIBLITIES UNDER THIS MOU

FHWA shall undertake the following activities:
FHWA will work cooperatively with all parties to ensure that the goals of WVDOT are met and proposed actions are in compliance with the ESA and BGEPA. FHWA agrees that WVDOT may perform informal consultation with USFWS on behalf of the FHWA. However, FHWA reserves the right to consult directly with any party to this agreement when FHWA deems such consultation appropriate.

6.0 EMERGENCY PROJECTS

For the purposes of this agreement an emergency project is defined as a situation when a transportation corridor area is cut off from normal emergency services after the collapse of a WVDOT structure, washout of roads, emergency closures of structures, etc.

6.1 WVDOT Emergency Consultation Procedures

WVDOT will work to rectify emergency situations as quickly as possible for the safety and welfare of the citizens of West Virginia. Before any work on an emergency project begins, WVDOT will screen these projects for any ESA/BGEPA issues per the procedures outlined in Sections 3.1 A and 3.1 B of this MOU. If the project requires further consultation with USFWS, WVDOT environmental personnel will immediately contact USFWS and verbally consult on the project to ensure that the work can begin as quickly as possible. Consultation will only occur on proposed projects that do NOT meet the criteria under Section 3.1 A or Section 3.1 B. WVDOT will subsequently send USFWS a notification of what was agreed to verbally and any documentation on the project's construction/reconstruction activities. Any minimization and/or avoidance measures implemented in compliance with ESA or BGEPA pertaining to the emergency project will be included in the correspondence.

6.2 USFWS Procedures

USFWS will consult with WVDOT to address any emergency project issues when a project falls within the species zones outlined in this MOU. USFWS will review documentation submitted regarding emergency projects and any minimization and avoidance measures implemented, and inform WVDOT of any further action, information or documentation required.

6.3 FHWA Procedures

FHWA will assist both WVDOT and USFWS in any aspect of the emergency consultation procedures in order to facilitate implementation of emergency projects that potentially affect ESA Federally-listed, proposed, and candidate species, and/or species protected under BGEPA.

7.0 IT IS MUTUALLY UNDERSTOOD AND AGREED BY AND BETWEEN THE PARTIES THAT:

7.1. Modifications

As new information becomes available regarding the listing status of a species, new range and distribution data, changes in recovery plans or changes in relevant policy, procedures or guidelines, then modifications to this MOU will be made in the form of updates to the Appendices. Updates or changes to the Appendices will not require new signatures of the parties but will be adopted by letters to the respective agency heads from the initiating agency.

7.2. Monitoring

WVDOT will track the usage of the MOU including the following information: Project Name, Project Number, County, Type of Project (i.e. bank stabilization, culvert replacement, bridge repair, etc.), and map coordinates in decimal degrees. This information will be kept in an approved electronic format and provided to USFWS annually by August 31.

7.3. Annual Meeting

All parties agree to participate in an annual meeting or conference call to be held during the month of August. This meeting will be used to discuss any changes in listing status, range, distribution, recovery plans, relevant policy, and issues or changes that need to be made to this MOU.

7.4. Termination

This MOU will be terminated if any one party withdraws by notification of termination in writing to all parties. The termination will take place 30 days after the date of the notification letter. The notification letter must be sent certified mail to the following personnel:

A. Field Office Supervisor
United States Department of the Interior
U.S. Fish and Wildlife Service
West Virginia Field Office
694 Beverly Pike
Elkins, WV 26241

B. Division Administrator
Federal Highway Administration
West Virginia Division
700 Washington Street East, Suite 200
Charleston, WV 25301

C. Secretary of Transportation
West Virginia Department of Transportation
Division of Highways
1900 Kanawha Blvd. East, Bldg. 5
Charleston, WV 25305

8.0 EFFECTIVE DATE AND SIGNATURE

This MOU shall be effective upon the signature of the authorized officials of U.S. Fish and Wildlife Service, Federal Highway Administration, and West Virginia Division of Highways, and can be terminated by the procedure written above.

Signatures and dates

U.S. Fish and Wildlife Service

Deborah Carter 12/15/2011
Signature Date

Federal Highway Administration

Thomas J. Smith 1/3/12
Signature Date

West Virginia Department of Transportation

Paul A. Mattox, Jr. 12/21/11
Signature Date

Appendices

NOTE: References to habitat include critical habitat as defined in the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq).*

Appendix A
WVDOT MINOR PROPOSED PROJECTS ESA/BGEPA CHECKLIST
Use the Environmentally Sensitive GIS Layers to answer these questions for each proposed project*

	Yes	No	Special Cond.
1. Requires clearing of 17 acres or more?	☐	☑	–
2. Requires an individual Clean Water Act section 404 permit?	☐	☑	–
3. Located within Zone 1?	☐	☑	A
4. Located within Zone 2 AND requires removal of trees >5" DBH?	☐	☑	B-1
5. Located within Zone 3 AND requires removal of more than 1/2 acre of forested habitat?	☐	☑	B-2
6. Located within Zone 4?	☐	☑	B-3
7. Located within Zone 5 or 7?	☐	☑	C
8. Located in Zone 6?	☐	☑	C or E
9. Located within Zone 8?	☐	☑	App E
10. Located within Zone 9?	☐	☑	App D
11. Located within Zone 10?	☐	☑	F
12. Located within Zone 11?	☐	☑	E
13. Located within Zone 12 AND requires removal of more than ½ acre of trees from 4/1 to 11/15?	☐	☑	C
14. Located within Zone A **	☐	☑	

If you answered YES to either question 1,2 or 13, then the project is not covered under the procedures established in this MOU. Individual consultation with the USFWS is required. Please complete this entire checklist and then prepare a submittal package as outlined in Appendix I.

If you answered NO to all questions except 14, then the project is a "no effect" and no further consultation with USFWS is required. Please check the following box.

☑ According to the procedures established in this MOU, the WVDOT has determined that this proposed project will have "no effect" on Federally-listed endangered or threatened species, or proposed or candidate species, eagles, or habitat for the species, including designated critical habitat.. Therefore no biological assessment or further section 7 consultation under the Endangered Species Act is required with the U.S. Fish and Wildlife Service (USFWS). Should project plans change, or if additional information on listed and proposed species becomes available, this determination may be reconsidered.

If you answered "NO" to questions 1 and 2 but "YES" to any question 3-13, please refer to special conditions or appendices listed for each question to which you answered "yes".

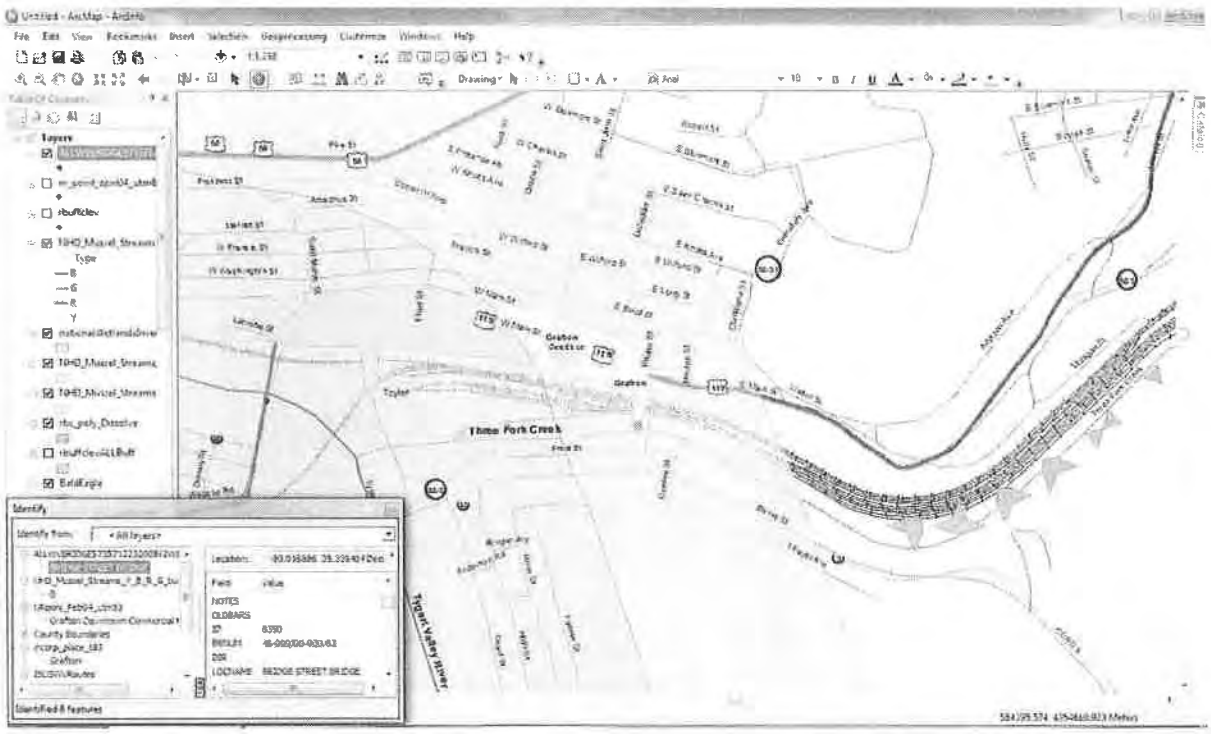
- If you can implement ALL the special conditions for affected species, as found in Appendices D thru G, then the project is determined to be a "may affect, not likely to adversely affect." Prepare a notification package as outlined in Appendix H and send it to the USFWS. No additional reply is needed from the USFWS. A copy of all the special conditions that will be implemented shall also be attached to any environmental and contracting documents prepared for the project.

- If you cannot implement ALL the special conditions, as found in Appendices D thru G, then further consultation with USFWS is required. Prepare a project review package as outlined in Appendix I and send it to the USFWS for their review and response.

Comments: Bridge Street Bridge
S241C-9-0.03
BR-0009(143)E
Taylor County

Reviewed by: Traci Mews Date: 10/19/12

*This form may only be used on "minor proposed projects" that are defined and included in the MOU between FHWA, WVDOT, USFWS, and WVDNR.
**Additional Zones not included in this MOU exist. These zones, however, do not pertain to endangered or threatened species and were not included in this MOU. They are included in this checklist for ease of overall project review. For example, Zone A refers to state listed mussel streams.



6/19/2012

Bridge Street Bridge
S246-9-0.03
BR-0009(143)E
Taylor County

No RTE Species Found

Within ½ mile buffer of mussel stream – Tygart Valley River
Cleared by DNR 10/9/2009, no mussel survey necessary.

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 11, 2012

Ms. Barbara Sargent
West Virginia Division of
Natural Resources
Post Office Box 67
Elkins, West Virginia 26241

Dear Ms. Sargent:

State Project S246-9-0.03
Federal Project BR-0009(143)E
Bridge Street Bridge
Taylor County

The Division of Highways is developing the subject project at the location shown on the attached vicinity maps. The project consists of replacing the bridge adjacent to the existing bridge. The proposed structure is located approximately 60 feet downstream of the existing bridge. The total length of construction is about 900 feet, which includes a 300 foot bridge. The new bridge will have 2 spans with stub abutments founded on piling with 150 foot spans over the railroad and Three Fork Creek. The alignment requires acquisition of a vacant lot within the Grafton Historic District just north of the bridge. Front Street and CR 9 bridge approaches require some right of way south of the bridge as well. The existing bridge will primarily be utilized to maintain traffic during construction; however, the detour route may be needed intermittently after the new bridge is constructed to facilitate the construction of Front Street and the southern approach of the bridge.

The project location is shown on the USGS, GRAFTON, quadrangle map.

Your comments on possible effects to rare or endangered species and natural trout streams are requested so that they may be included in our environmental studies. Should you require additional information, please contact Tracie Moles of our Environmental Section at (304) 558-9731.

Very truly yours

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L. Hark

Ben L. Hark
Environmental Section Head

GLB: Hk
Attachments
Bcc: DDE (TBM)

require additional information, please contact Tracie Moles of our Environmental Section at (304) 558-9731.

Very truly yours

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L Hark

Ben L. Hark
Environmental Section Head

GLB: Hw

Attachments

Bcc: DDE (TBM)

DIVISION OF NATURAL RESOURCES
Wildlife Resources Section
Operations Center
P.O. Box 67
Elkins, West Virginia 26241-3235
Telephone (304) 637-0245
Fax (304) 637-0250

Earl Ray Tomblin
Governor

Frank Jezioro
Director

September 25, 2012

Mr. Gregory L. Bailey
Division of Highways
1900 Kanawha Boulevard, East
Building Five, Room 110
Charleston, WV 25305-0430

Dear Mr. Bailey:

We have reviewed our files for information on rare, threatened and endangered (RTE) species and natural trout streams for the areas of the proposed highway projects:

RE	State Project S246-9-0.03 Federal Project BR-0009(143)E Bridge Street Bridge Taylor County	Our records indicate no known occurrences of RTE species or natural trout streams at this site.
GW	State Project S352-20/5-0.00 Firemans Bridge Replacement Wetzel County	Our records indicate no known occurrences of RTE species or natural trout streams at this site. Surveys for freshwater mussels are required.

The Wildlife Resources Section knows of no surveys that have been conducted in these areas for rare species or rare species habitat. Consequently, this response is based on information currently available and should not be considered a comprehensive survey of the areas under review.

Thank you for your inquiry, and should you have any questions please feel free to contact me at the above number, extension 2048.

Sincerely,

Barbara Sargent
Environmental Resources Specialist
Wildlife Diversity Unit

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

April 4, 2013

MEMORANDUM

TO: DDR (Tim Priddy)

FROM: DDR (GWS)

SUBJECT: State Project S346-9-0.03
Federal Project BR-0009(141)D
Bridge Street Bridge), Taylor County
CSX Transportation, Inc.

Attached are comments from the above referenced company based on our meeting of January 3, 2013 for your incorporation into project plans.

Please address the above referenced comments and incorporate the attached CSXT requirements in the plans and provide 5 sets of plans to DDR (Railroad and Utilities Unit) for resubmission to the railroad.

GWS:s

Attachments

cc: DDR(GWS), DD(MF)

URS

January 16, 2013

Mr. Gary W. Scott
Railroad Coordinator
West Virginia Department of Transportation
Division of Highways
1900 Kanawha Boulevard East, Building Five, Room 110
Charleston, West Virginia 25305-0430

SUBJECT: **Grafton, Taylor County, West Virginia**
Proposed Bridge Replacement – Bridge Street over CSXT
Agency Reference: **State Project: S346-9-0.03**
Federal Proj: BR-0009(143)D
AAR/DOT No.: **146 227Y**
CSXT Reference: **Milepost: BA-280.02**
C&O Division
Mountain Subdivision
OP No.: WV0302

Dear Mr. Scott:

URS Corporation (URS) on behalf of the CSX Transportation, Inc. (CSXT) Public Projects Group has reviewed the FINAL FIELD REVIEW PLANS submittal for the subject project. We interpret the project scope impacting CSXT to be the construction of a new highway bridge over CSXT and the removal of the existing highway bridge over CSXT. Based upon the aforementioned plan review and the discussions of the project meeting held January 3, 2013, we offer the following comments and information:

PLAN REVIEW

1) Sheet 23 - It appears that shoring may be required for the installation of manholes 1-13 & 1-14 and the 53.5' of 24" pipe. Please provide scaled cross section showing a 1½ horizontal: 1 vertical theoretical slope line starting 1'-6" below top of rail and at 12'-0" minimum from centerline of the track (live load influence zone) for verification.

2) The minimum temporary horizontal clearance from the track centerline to any obstruction is 8'-6". Please confirm all temporary bents meet this criteria.

CONSTRUCTION REQUIREMENTS

3) When performing work on, over or adjacent to CSXT right-of-way or operations, the West Virginia Department of Transportation, Division of Highways selected contractor must abide by the current CSXT Special Provisions, CSXT Construction Submission Criteria and additional requirements as outlined in the to be provided ***CONSTRUCTION REQUIREMENTS*** document.

URS Corporation
One Indiana Square, Suite 2100
Indianapolis, IN 46204
Tel: 317-532-5481
Fax: 317-532-5499
Larry.Shaw@urs.com

Providing Engineering Services for CSX How tomorrow moves

WIRELINES / PIPELINES / UTILITIES

4) This review by the CSXT Public Projects Group does not address overhead or underground facilities (wirelines, conduits, pipelines, fiber optics, other) within CSXT right-of-way (other than CSXT's own facilities). Owners of such facilities must coordinate directly with the CSXT Property Services Office. This includes all new installations, modifications, removals or retirements in place. Application packages are available online (www.csx.com; Quick Links; Non-Freight Services; Property Services; Property/Real Estate; Permitting: Utility Installations and Rights of Entry). Please ensure that all utilities that may be affected are notified of this requirement. For project continuity please copy this office with direct communications with the CSXT Property Services Office. A courtesy copy to this office of a listing of all such impacted facilities would be appreciated. If no such facilities are impacted, please so advise. ***Please acknowledge that it is understood all such facility owners are responsible to initiate direct coordination with the CSXT Property Services Office and as the project sponsor your Agency will advise the facility owners of this responsibility.***

REAL ESTATE / PROPERTY RIGHTS

5) This review by the CSXT Public Projects Group does not address real estate matters. Real Estate matters are handled internally by CSX Real Property, Inc. You are directed to contact Mr. Jim Shircliff, CSX Highway Projects Specialist (904.279.4597) to initiate real estate coordination. For project continuity, please copy this office with any real estate related correspondence. ***Please acknowledge that it is understood that your Agency is responsible to initiate direct communication with Mr. Shircliff.***

CSXT FORCE ACCOUNT ESTIMATE

6) The CSXT Railroad Force Account Estimate for this project will be finalized after all railroad concerns and modifications have been addressed and the FINAL PLANS have been reviewed and accepted.

SUBMITTALS REQUESTED

7) ***Please forward*** REVISED PLANS or NEXT STAGE SUBMITTAL PLANS (including bridge plans) directly to this office for CSXT review and handling. Plan submittals should be 11"x17" and be comprised of two (2) hard copies and one (1) compact disc in pdf format. Alternative submittal methods include five (5) hard copies or electronic submittal in pdf format (may be governed by file size).

Feel free to contact URS Project Manager, Terry Bump, P.E. (412.503.4642) to discuss plan review comments or technical questions. For general or administrative questions, feel free to contact me. All future CSXT Public Projects Group submittals regarding this project are to be directed to this office and should reference CSXT **OP# WV0302**, including the subject line of electronic transmissions.

Sincerely,

Larry J. Shaw, P.E.
Program Manager
URS Corporation

WEST VIRGINIA
Division of Culture and History

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 13, 2013

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement
FR#: 10-374-TA-10

Dear Mr. Bailey:

We have reviewed 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.

We are in receipt of the additional submitted information and reassessment request for the above referenced project. Provided information states that the proposed new bridge no longer requires the use of any property from the Willard Hotel, a contributing resource to the National Register of Historic Places-listed Grafton Commercial Historic District. Because of this (and because the viewshed of the historic district already contains a bridge), it is your opinion that the proposed project will have no adverse effect on the historic district.

Provided information also states that the proposed new bridge will span the National Register of Historic Places-eligible CSX Railroad Yard on one pier and have a clearance height of 23' (in contrast to the two piers and 17' clearance height of the existing bridge). Because of this, it is your opinion that the proposed new bridge will decrease the visual intrusion over the railroad.

After review of the submitted information, we remain in concurrence with our previous opinion that the proposed project will result in an *adverse effect* to the National Register-listed Grafton Commercial Historic District and the National Register-eligible CSX Railroad Yard, as well as the National Register-eligible Bridge Street Bridge.

Although the new bridge will no longer be located within the Grafton Commercial Historic District, the removal of the existing bridge will irrevocably alter the district's viewshed. Also, while the existing bridge will be replaced with a new bridge, the existing bridge has historical significance and a feeling and association which cannot be replicated by the new bridge, despite any perceived improvements.

Therefore, it is our opinion that the final Memorandum of Agreement which was received by our office and signed on May 9, 2012 continues to be applicable to this project.

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

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/MLK

United States Department of the Interior

FISH AND WILDLIFE SERVICE
West Virginia Field Office
694 Beverly Pike
Elkins, West Virginia 26241

March 18, 2014

Mr. Ben Hark
West Virginia Department of Transportation
Division of Highways
1900 Kanawha Boulevard East
Charleston, West Virginia 25305

Re: West Virginia Division of Highways, Northern Long Eared Bat in the Memorandum of Understanding, West Virginia

Dear Mr. Hark:

This responds to your request of March 7, 2014, for information regarding use of the Memorandum of Understanding (MOU) between West Virginia Division of Highways and the U.S. Fish and Wildlife Service (Service) as it pertains to the northern long eared bat (*Myotis septentrionalis*).

On October 2, 2013, in the *Federal Register* (78 FR 61045 -61080) the Service proposed the northern long eared bat for listing under the ESA. A final listing determination is anticipated within one year of the proposal.

In your March 7, 2014, request you proposed covering the northern long eared bat under the current MOU using protocols in place for the federally listed Indiana bat (*Myotis sodalis*) until further guidance is available on the northern long eared bat. The Service concurs that the current MOU and associated Indiana bat protocols will be sufficient to cover the northern long eared bat until further information is available.

If you have any questions regarding this letter, please contact Liz Stout of my staff at (304) 636-6586 Ext. 15, Elizabeth_Stout@fws.gov, or at the letterhead address.

Sincerely,

John E. Schmidt
Field Supervisor

APPENDIX B
Hazardous Waste Evaluation Documents

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http://www.epa.gov/reg3hwmd/super/sites/WVN000306608/index.htm
Last updated on Friday, September 27, 2013

Mid-Atlantic Superfund

Carr China

EPA ID# WVN000306608

NPL Status: Not on NPL

Bank of Tygart River
Grafton, WV 26354
Taylor County

Contacts

On-Scene Coordinator
Robert F. Kelly
215-814-3268
kelly.robertj@epa.gov

On-Scene Coordinator
Dominic Ventura
215-814-2363
ventura.dominic@epa.gov

Administrative Record Locations

Public files (Administrative Record) on EPA's actions and decisions for this site can be examined at the following location:

U.S. EPA Region 3
http://www.epa.gov/arweb/

Administrative Record

Site Actions

http://www.epa.gov/reg3hwmd/super/sites/WV0001986744/index.htm
Last updated on Friday, September 27, 2013

Mid-Atlantic Superfund

Taylor County Mercury

EPA ID# WV0001986744

NPL Status: Not on NPL

base of Tygart Lake Dam
Grafton, WV 26354
Taylor County

Public files (Administrative Record) on EPA's actions and decisions for this site can be examined at the following location:

U.S. EPA Region 3
http://www.epa.gov/arweb/

Administrative Record

Site Actions

APPENDIX C
Preliminary Design Plans for Preferred Alternative 8

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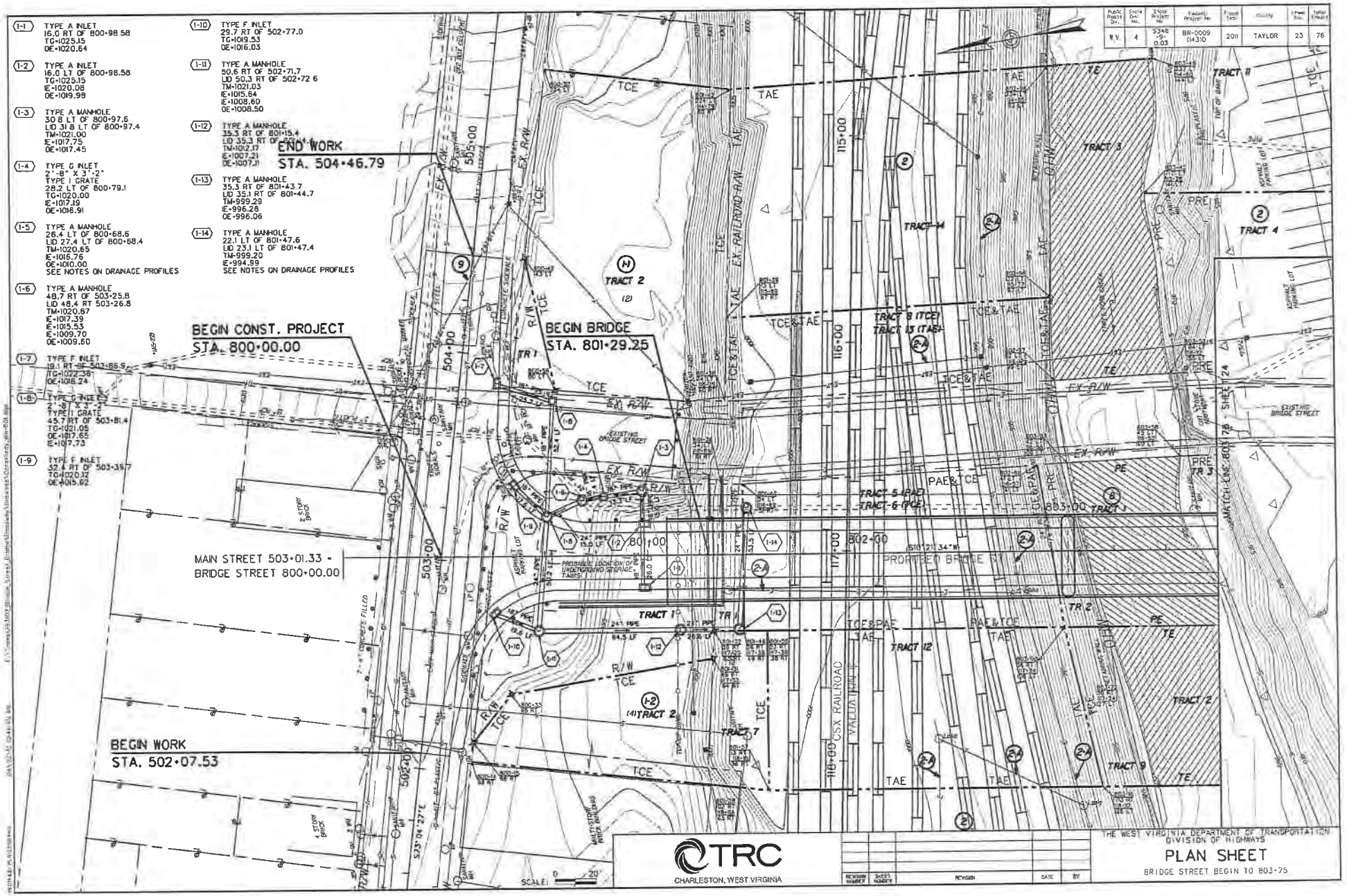

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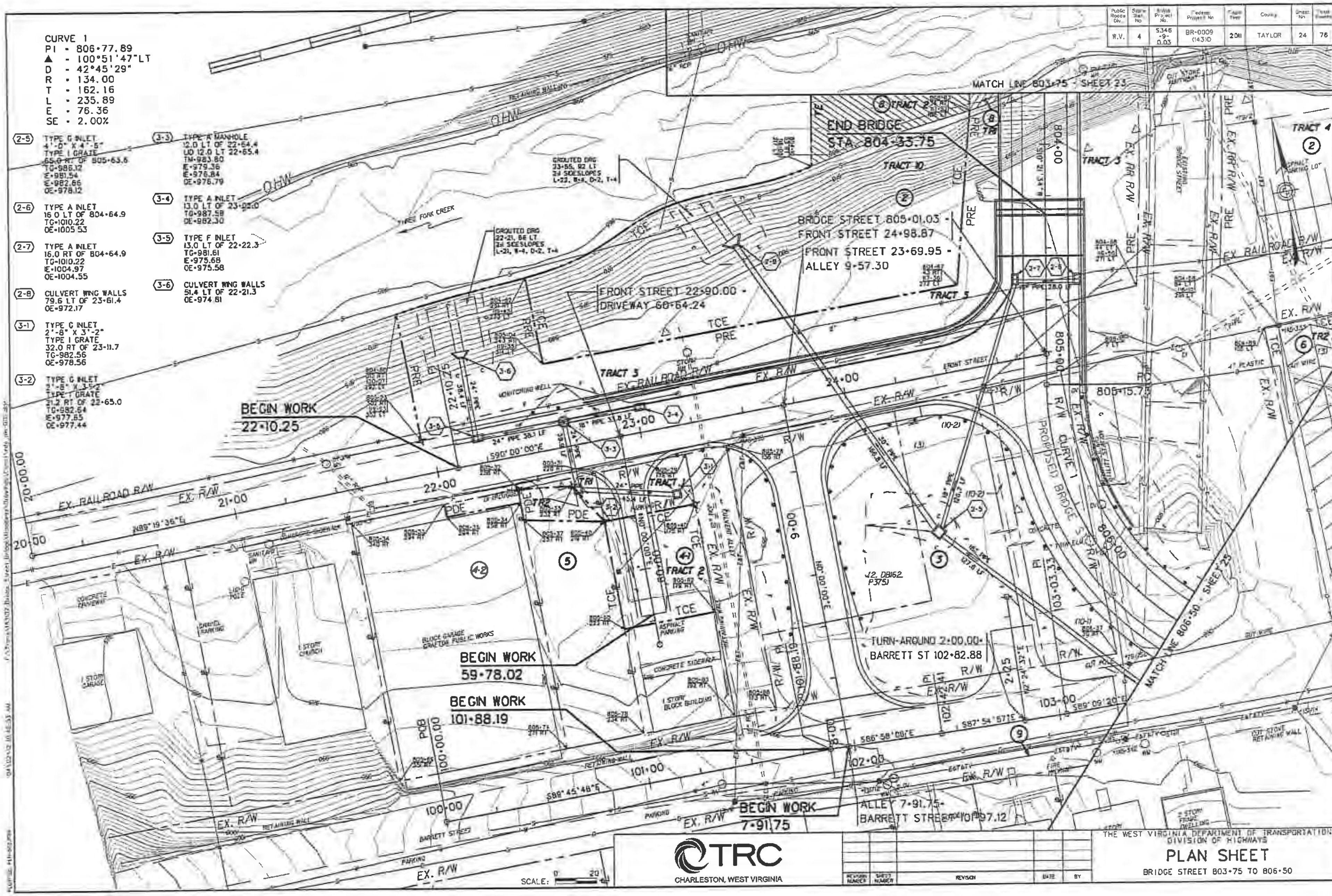
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY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SE - 2.00%
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2-7 TYPE A INLET 16.0 RT OF 804+64.9 TG=1010.22 E=1004.97 OE=1004.55
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3-2 TYPE G INLET 2'-8" X 3'-2" TYPE I GRATE 21.2 RT OF 22+65.0 TG=982.64 E=977.65 OE=977.44
3-3 TYPE A MANHOLE 12.0 LT OF 22+64.4 UD 12.0 LT 22+65.4 TM=983.80 E=979.36 E=976.84 OE=976.79
3-4 TYPE A INLET 13.0 LT OF 23+25.0 TG=987.58 OE=982.30
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BEGIN WORK 101+88.19
BEGIN WORK 7+91.75
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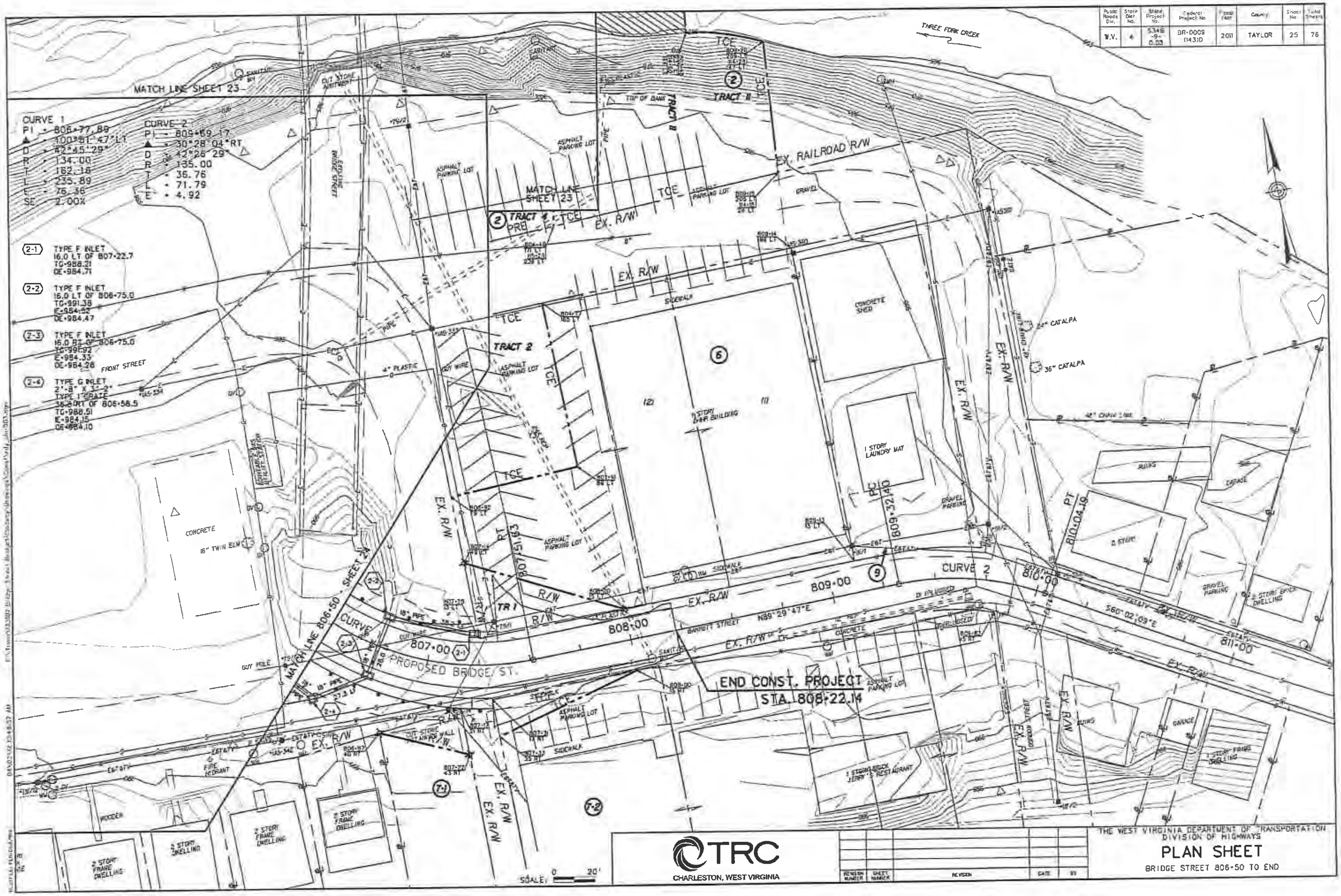
BRIDGE STREET 805+01.03 - FRONT STREET 24+98.87
FRONT STREET 23+69.95 - ALLEY 9+57.30
FRONT STREET 22+90.00 - DRIVEWAY 60+64.24
TURN-AROUND 2+00.00 - BARRETT ST 102+82.88
ALLEY 7+91.75 - BARRETT STREET 101+97.12
MATCH LINE 803+75 - SHEET 23
MATCH LINE 806+50 - SHEET 25
PROPOSED BRIDGE
THREE FORK CREEK
EX. RAILROAD R/W
EX. R/W
TRACT 2
TRACT 3
TRACT 4
TRACT 5
TRACT 10
BLOCK GARAGE GRAFTON PUBLIC WORKS
1 STORY CHURCH
1 STORY GARAGE
1 STORY BLOCK BUILDING
BARRETT STREET
FRONT STREET
SCALE: 0 20
Public Roads Div. | State | State Project No. | Federal Project No. | Fiscal Year | County | Sheet No. | Total Sheets
R.V. | 4 | S346-9-0.03 | BR-0009(143)D | 2011 | TAYLOR | 24 | 76
TRC
CHARLESTON, WEST VIRGINIA
REVISION NUMBER | SHEET NUMBER | REVISION | DATE | BY
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLAN SHEET
BRIDGE STREET 803+75 TO 806+50



| Public Roads Div. | State Dist No. | State Project No. | Federal Project No. | Fiscal Year | County | Sheet No. | Total Sheets |
W.V.
4
S346-9-0.03
BR-0009 (143)D
2011
TAYLOR
25
76
THREE FORK CREEK
MATCH LINE SHEET 23
CURVE 1
PI = 806+77.89
Δ = 100°51'47" LT
D = 42°45'29"
R = 134.00
T = 162.16
L = 235.89
E = 76.36
SE = 2.00%
CURVE 2
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FRONT STREET
EX. RAILROAD R/W
MATCH LINE SHEET 23
TRACT II
TRACT 2
TCE
EX. R/W
CONCRETE SHED
1 STORY LAUNDRY MAT
CONCRETE
MATCH LINE 806+50 SHEET 24
CURVE 1
807+00
PROPOSED BRIDGE ST.
808+00
PT 807+51.63
809+00
PC 809+32.40
CURVE 2
810+00
PT 810+04.19
811+00
N89°29'47"E
S60°02'09"E
END CONST. PROJECT
STA. 808+22.14
24" CATALPA
36" CATALPA
1 STORY BRICK JERRY'S RESTAURANT
SCALE: 0 20'
TRC
CHARLESTON, WEST VIRGINIA
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLAN SHEET
BRIDGE STREET 806+50 TO END

APPENDIX D
Final Section 4(f) Evaluation

gai consultants

Final Section 4(f) Evaluation

Bridge Street Bridge
Replacement Project
Taylor County, West Virginia

State Project #S246-9-0.03 02

Federal Project #BR-0009(203) D

GAI Project Number C080941.03

September 2014

Prepared for:
West Virginia Department of Transportation
Division of Highways
Engineering Division
1900 Kanawha Boulevard East
Charleston West Virginia. 25305

Prepared by:
GAI Consultants, Inc.
Pittsburgh Office
385 East Waterfront Drive
Homestead, Pennsylvania 15120

. . . transforming ideas into reality

State Project #S246-9-0.03 02
Federal Project #BR-0009(203) D

Bridge Street Bridge Replacement Project
City of Grafton, Taylor County, WV

Final Section 4(f) Evaluation

Pursuant to: 49 U.S.C. 303(c)

United States Department of Transportation
Federal Highway Administration

And

West Virginia Department of Transportation
Division of Highways
Engineering Division

Approved by: _____
Federal Highway Administration Date

Table of Contents

Table of Contents (Continued)

1.0 Introduction

Section 4(f) of the U.S. Department of Transportation Act of 1966 as amended [49 USC Section 303(c)] stipulates that the Federal Highway Administration (FHWA) and other U.S. Department of Transportation (USDOT) agencies cannot approve the use of land from a significant publicly-owned public park, recreation area, wildlife or waterfowl refuge, or any significant historic site unless the following conditions apply:

- There is no feasible and prudent avoidance 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 or;
- The use of the Section 4(f) properties, including any measures to minimize harm (such as avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a de minimis impact on the property.

This Draft Section 4(f) Evaluation has been prepared in accordance with 23 CFR Part 774. The evaluation describes Section 4(f) resources within the project area, the use of those resources, avoidance alternatives to use of the resources, identification of the alternative with the least overall harm, and a discussion of all possible planning to minimize harm. This evaluation also presents the FHWA's determination that there is no feasible and prudent avoidance alternative to the use of Section 4(f) property, and that Preferred Alternative 8 includes all possible planning to minimize harm to Section 4(f) property.

A Project Summary (Table 1) following is a comparison of alternatives for replacement of the Bridge Street Bridge that were evaluated in this document. Figure 1 in the Figures Section locates the project.

Table 1
Project Summary:
Comparison of Preliminary Alternatives

Alternative:	No Build	1	2	3	4	5	6	7	8#	9	10
Alternative Description											
New Bridge Location	N/A	Approximately 70'Upstream of Current Bridge	Same Location with Shift to South End	Approximately 115' Upstream	Same Location	At Haislip Street with Horizontal Curve	Same Location with Skew	At Haislip Street About 315' Upstream	**Preferred:** Approximately 60' Downstream	Rehabilitation of Existing Structure	Remove Bridge and Upgrade Permanent Detour
Bridge Length (ft)	445	365	333	375	280	405	380	360	300	445	N/A
Roadway Improvements (ft)	N/A	1,300	1,278	1,425	925	950	950	1,125	1,050	700	2,400
Traffic Maintenance	N/A	Existing Bridge	1.3 mi Detour	Existing Bridge	1.3 mi Detour	Existing Bridge	1.3 mi Detour	Existing Bridge	Existing Bridge	1.3 mi Detour	1.3 mi Detour
Cost (Millions)	N/A	$12.9	$12.9	$13.6	$12.8	$13.3	$12.8	$13.1	$12.7	$13.5	$6.3
Purpose and Need Assessment Factors											
Adequate Bridge Replacement	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No*	No
Keeps Community Cohesion	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No
Offers Efficient Traffic Flow	No	No	No	Yes	Yes	No	No	No	Yes	Yes	No
Geographic Fit	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	N/A
Section 4(f) Impacts											
Bridge Street Bridge	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Grafton Downtown Historic District	No	No	No	No	No	No	No	No	No	No	No
B&O Railroad and Yard	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Constructive Use Impact	No	No	No	No	No	No	No	No	No	No	No
Environmental and Social Impacts											
T&E species Impacts	N/A	No	No	No	No	No	No	No	No	No	No
Wetlands	N/A	No	No	No	No	No	No	No	No	No	No
Flood Prone	N/A	No	No	No	No	No	No	No	No	No	No
Removes DHHR** Building	N/A	Yes	No	Yes	No	No	No	No	No	No	No
Residence/Business Impacts	N/A	1 Business	0	2 businesses	0	0	0	1 Business	0	0	2 Residences

Notes:

* The Rehabilitated Bridge will be classified as structurally deficient and functionally obsolete under FHWA criteria

\# Alternative 8, Recommended for Construction

** DHHR Building refers to the Department of Health and Human Resources Building

2.0 Proposed Action

2.1 Description of Proposed Action

The West Virginia (WV) Department of Transportation, Division of Highways (WVDOH), in cooperation with the FWHA, proposes to replace the Bridge Street Bridge that is structurally deficient and functionally obsolete. The project will also provide safe and efficient connections to South Grafton streets and a reconstruction of the northern approach road which does not have sufficient turning radius to accommodate large vehicles.

2.2 Study Area

The project is located in the City of Grafton, Taylor County, WV. Figure 1 in the Figures Section identifies the project location. The study area includes the existing Bridge Street Bridge and adjacent neighborhoods along Main Street at the northern approach, and neighborhoods in South Grafton at the southern approach. The existing bridge carries Bridge Street over Three Fork Creek, the Baltimore & Ohio (B&O) Railroad and Yard, and Front Street which are included in the study area. The existing bridge is near the western end of Taylor County Route 9 (CR 9), approximately 0.02-mile east of the intersection of CR 9 and US Route 119.

In the year 2012, Grafton's population of 5,177 residents was estimated to be 97.1 percent white, with a per capita income of $16,431 (well below the state average of $22,482); and having 26.2 percent of residents below the poverty level, in comparison to the state average of 17.6 percent (US Census Bureau). Immediately adjacent to the east end of the current bridge is the Elizabeth Cather Towers, a Section 8 Affordable housing complex of 130 units.

Historic resources are located in the vicinity of the Bridge including:

- The bridge itself is eligible for listing in the National Register of Historic Places (NRHP).
- The NRHP-listed Grafton Downtown Commercial Historic District includes the non-contributing bridge and the land and buildings adjacent to and west of the bridge.
- The B&O Railroad and Yard (now CSX Railroad and Yard), a NRHP-eligible resource, is spanned and bridge piers are located on railroad property.

2.3 Project History

The existing structure was built in 1951 and is a five-span, steel truss and continuous span, wide flange structure. It replaced a combined Through and Pony Truss structure at the same location. Portions of the original concrete substructure units were utilized (which date back to approximately 1900) for the current bridge. (There was one pier from the 1900-era bridge that was used in the 1951 reconstruction; it was capped in concrete for the reuse. No old bridge units will be used in the current project.) The overall length of the current bridge is 445 feet 2-½ inches, with a clear width of 24 feet. In addition, the bridge has two four-foot sidewalks. The bridge is situated perpendicular to Three Fork Creek, which discharges into the Tygart River approximately 1,150 feet downstream. It has a sufficiency rating of 31.1 on a scale of one to 100. Currently the bridge is posted for a weight limit restriction of 16 tons which allows up to and including Class 4 vehicles such as city delivery and conventional van trucks, but restricts Class 5-8 vehicles including fire, furniture, dump, semi-trucks, refuse trucks, and school buses. Future weight reductions could restrict truck traffic altogether.

Design considerations that the WVDOH engineers had to evaluate to generate alternatives include:

- The existing bridge is part of the NRHP-listed Grafton Downtown Commercial Historic District which extends along Main Street at the northern bridge approach from Bridge Street to St. Mary's Street.
- The bridge currently crosses multiple tracks of the NRHP-eligible B&O Railroad and Yard, with piers on railroad property and a vertical clearance of 20 feet 6 inches; pier stability near the railroad tracks is an issue.

- The northern bridge approach includes a tight radius turn from Main Street onto the bridge that precludes bridge use by some large recreational vehicles.
- At the southern end, the vertical bridge clearance is a substandard 12 feet 3 inches over Front Street.
- City emergency vehicle access to South Grafton during bridge reconstruction is a major issue with City officials.
- Geotechnical and geographical issues in this narrow valley limit options.
- The structure is located reasonably close to Tygart Lake State Park and is part of the route many park guests typically use to access the park.

These and other factors were considered when the WVDOH's Initial Design Section evaluated six original alternatives presented in the 2004 WVDOH Planning and Research Division report. These alternatives were at the geographic locations the engineers felt best suited the project. Alternatives 1 and 3 were dismissed early in the review process (but are further identified and evaluated in this document) for the following reasons:

- Alternative 1 will replace the bridge approximately 70 feet (centerline to centerline) upstream of the existing location. This alternative was dismissed as it will require acquisition of the Department of Health and Human Resource (DHHR) Building, a new, key facility for local low-income and minority populations, as well as for many others. Alternative 1 has high right-of-way costs and a steep grade (greater than 12.5 percent) at the southern end of the bridge at Barrett Street, which affects mainline bridge traffic movements. The steeper slope will require diligent winter traction maintenance at the stop-sign-controlled intersection at Barrett Street.
- Alternative 3 is similar to Alternative 1; however, it shifts the southern abutment to the east. Alternative 3 was dismissed owing to high RIGHT-OF-WAY costs and requiring the removal of the DHHR building and a Laundromat facility resulting in community impacts.

The WVDOH Initial Design Section then reevaluated Alternatives 2, 4, 5, and 6 from the RP's 2004 report, and added Alternatives 7, 8, 9 (bridge renovation), and 10 (bridge demolition and upgrade of a permanent detour) to carry forward for a Preferred Alternative selection. It was felt that all reasonable alternatives were presented for evaluation.

2.4 Existing Bridge Conditions

The 1951 bridge was renovated in 1995 by the WVDOH and has been in continuous use since that time. Based on a September 18, 2013 WVDOH inspection report, the existing bridge has the following issues:

- The structure is in poor condition due to extensive deterioration of its components, including corrosion, section loss, cracking, scaling and truss deformation.
- It is a generally deteriorated structure with weak members and can no longer carry heavier vehicles.
- It has poor-rated fracture critical members: only a complete bridge rehabilitation as detailed in Alternative 9 (Rehabilitation Alternative) would resolve this as 75 percent of truss members require replacement.
- The entire floor system and lower cords, encased in concrete, have moisture infiltration leading to corrosion of encased members.
- It has inadequate deck geometry, making it obsolete.
- It cannot accommodate the future transportation demands of the project area, and normal maintenance repairs will only delay bridge closing.
- Due to extensive deterioration, only repairs to maintain current traffic are recommended until a new bridge is constructed.

The Bridge Street Bridge is part of a transportation system providing access to the South Grafton community, to the DHHR services building, for school bus and emergency services to South Grafton, and for through traffic. With current weight restrictions, the bridge can no longer safely carry large school buses, fire trucks and other heavy vehicles. With increased weight restrictions, even smaller delivery vans and mini-buses will be precluded. Three Fork Creek discharges into the Tygart River approximately 1,150 feet downstream. The Tygart Dam, which supports the Tygart Lake State Park, is located in the Tygart Valley River, approximately 2.25 miles south of Grafton. Many recreational vehicles use the Bridge to access the recreation area. Bridge closing will force all vehicles to proceed through the historic downtown area, comingling with downtown traffic and increasing traffic congestion presenting greater opportunities for vehicular/pedestrian conflict. The City of Grafton, with the support of current businesses is revitalizing the once vibrant Downtown Historic District. Several years ago the city commenced construction on Phase I of a multi-purpose streetscape project to construct new sidewalks, historic lighting, benches, trash receptacles, and flower planters. Traffic congestion in the downtown revitalization area is a city concern.

Maintaining the bridge in its current condition will compromise the local transportation system, as it is posted at 16-ton capacity. Projected growth could further burden the system. There is a definitive transportation need to have a safe and efficient crossing of Three Fork Creek and the railroad that meets current design standards. Current traffic data (2009) indicates the average daily traffic (ADT) as 4,000 vehicles per day (VPD) and it is projected to increase to 6,100 VPD in the year 2029 (Bridge Street Bridge Replacement Recommendation, WVDOH 2010).

2.5 Future No-Build Conditions

The WVDOH has determined that the Bridge Street Bridge is so deteriorated that it cannot be rehabilitated and brought up to current standards. As the bridge continues to function in its current condition, the capacity of the bridge and corresponding load posting will decline over time. Eventually, the bridge will have to be closed to traffic and the bridge structure removed.

2.6 Project Purpose and Need

Purpose and needs statements can take many forms, depending on local circumstances. For the Bridge Street Bridge Replacement Project, the key issues are efficient and safe traffic flow, access to community facilities, geographic consideration of steep slopes and watercourses, as well as consideration for historic resources. These were used to develop the following purpose and need statement:

"The purpose of the Bridge Street Bridge Replacement Project is to provide a bridge over Three Fork Creek in Grafton, Taylor County that meets current WVDOH bridge safety and design criteria, maintains community cohesion with access to key local facilities, offers traffic flow that minimizes congestion in the project area and Downtown Historic District, and best suits the geographic limitations of the area."

The different components of the purpose and needs statement are developed in the following sections.

2.6.1 Bridge Replacement

The Bridge Street Bridge functions as an important connection between downtown Grafton and South Grafton; it is normally an alternative for avoiding congested downtown traffic and for providing school bus and emergency services to South Grafton. Bridge deterioration has led to weight restrictions currently precluding its use by fire trucks, large school buses, and heavy vehicles. Eventually, deterioration will lead to bridge closure. A safe bridge that meets current design standards is needed as a replacement.

2.6.2 Maintain Community Cohesion

Several key community facilities are located in South Grafton. The DHHR facility at the southern end of the Bridge provides a full array of services including eight social services (child care, adoption, etc.), 12 family assistance programs (food stamps, etc.), eight student programs (scholarships, loans, etc.), local health department funding, business work opportunities and many other programs. It supervises the Medicare and Welfare programs. It is a critical facility for

both Grafton and Taylor County residents, particularly for minority and low-income families. In 2012, a total of 26.2 percent of Grafton's population had household income below the poverty level (in comparison with 17.6 percent for the state).

The City Garage that serves the entire city is located on Front Street, a block from the south end of the bridge. Loss of the bridge will be a major inconvenience since a 1.5-mile trip will be required. Garage drivers will be required to navigate through two traffic signals, an at-grade railroad crossing, a four-way intersection, two bridges, and comingle with downtown traffic to proceed to the northern end of the current bridge. Safety will be a concern, particularly in winter for this longer route.

2.6.3 Provide Efficient Traffic Flow

Efficient traffic flow will include easy movements onto and off the bridge at Main Street at the north end of the Bridge and Barrett Street at the south end, with no need for a stop sign and other traffic controls. A connection to Front Street that will allow direct access to the City Garage is desirable.

From the Grafton Fire Department on West Main Street, about two blocks from the north end of the bridge, to Barrett Street at the south end of the bridge, it is a distance of 0.3-mile taking approximately one-minute of automobile travel time. If the bridge were closed, the detour route along Main Street (US 119) to Beech Street, to Front Street, to Barrett Street would be 1.3 miles long, taking approximately five minutes under traffic-free conditions. Rain, snow or traffic congestion could add substantially to this travel time, and trucks, including city maintenance trucks from the City Garage on Front Street, would take much longer.

2.6.4 Geographic Fit

Under this heading are considerations due to terrain and existing development. The narrow valley in which Grafton is located along with Three Fork Creek and the B&O Railroad and Yard has limited the locations where a bridge replacement can best be placed. The six original alternatives presented in 2004 are located near the current bridge, which appears to be in the most advantaged location. In an attempt to generate all reasonable alternatives, new locations have been utilized for several alternatives; this may have necessitated less desirable bridge characteristics, including steep approaches.

Vertical alignment (grade) according to American Association of Highway and Transportation Officials (AASHTO) guidance for low designs speeds of 20 or 30 miles per hour (appropriate for this project), suggests maximum grades in mountainous terrain such as the Grafton area may be as high as 14 to 16 percent. Practically, steeper grades require more stopping distance, more sight distance, they are harder to navigate safely in snow and rain, and harder to maintain as paving "slump" often occurs from braking on asphalt. High truck use impedes automobile traffic and "climbing lanes" are sometimes required to alleviate this situation.

3.0 Description of Section 4(f) Resources

Two NRHP-eligible resources, the Bridge Street Bridge and the B&O Railroad and Yard, and the NRHP-listed Grafton Downtown Commercial Historic District are located in the project area.

3.1 Bridge Street Bridge

The Bridge Street Bridge (WVDOH Bridge No. 46-9-0.02) carries two-lane Taylor County Route 9 over Three Fork Creek, the B&O Railroad and Yard, and Front Street (Photographs 1 and 2, in Photographs Section). The bridge is situated approximately 0.3-mile east of the confluence of Three Fork Creek and Tygart Valley River, just to the east of downtown Grafton, WV. The bridge superstructure consists of five spans. Span 1 is a steel through truss measuring 120 feet, three inches. Span 2 is a steel deck truss measuring 119 feet, three inches. Spans 3 through 5 are steel W-beams. Span 3 measures 60 feet, 2 inches; Span 4 measures 78 feet; and Span 5 measures 60 feet. The overall length of the structure is 445 feet, two inches. The bridge is supported by two piers and two bents. Pier 1 is constructed of cut

stone capped with concrete, while Pier 2 is constructed of concrete with a concrete cap added in 1951. Both bents are constructed of concrete with concrete caps. The abutments are constructed of reinforced concrete, but the bottom portion of Abutment 1 (north end of bridge) dates from the original bridge at this location (circa 1900), and is not reinforced. The bridge has a concrete deck with asphalt wearing surface, and reinforced concrete sidewalks and parapets are located on both sides of the bridge. The bridge also contains overhead street lights. This bridge is posted for 16 tons with a height restriction of 14 feet, which should be 17 feet. The bridge was renovated in 1995 (WVDOH 2007).

The present bridge, built in 1951, replaced a seven-span through and pony truss bridge that was constructed circa 1900 at the same location. The Bridge Street Bridge was built by the Agnew Construction Company of Ronceverte, WV, from plans designed by Frank McEnteer (KCI). McEnteer was a prominent 20th century West Virginian bridge designer and served as president of the Concrete Steel Bridge Company in Clarksburg from 1912 to 1931. McEnteer served as the district engineer for the WV State Road Commission from 1932 to 1938, and construction engineer for the northern district between 1938 and 1940. He served as a project manager with Johnson, Piper, and Drake in 1942, supervising the construction of an army base near Tel Aviv, Israel. Shortly thereafter he became chief engineer of the U.S. Armed Forces construction division in the Middle East, where he supervised construction of airports. After World War II, McEnteer continued his engineering career in Clarksburg, WV, opening a firm that specialized in highway, bridge and industrial construction. He continued to run his firm until his death in 1951.

The Bridge Street Bridge Replacement Project Area of Potential Effect (APE) is shown in Figure 2. The NRHP boundary for the Bridge Street Bridge is defined as the footprint, including piers, superstructure, and immediate floodway approaches (Figure 3). The bridge is not considered a contributing resource to the NRHP-listed Grafton Downtown Commercial Historic District; however, it has been determined individually eligible for NRHP listing under Criterion C as a locally significant bridge (WVDCH Letter, December 14, 2010, see Appendix A).

3.2 Grafton Downtown Commercial Historic District

The Grafton Downtown Commercial Historic District extends along Main Street and Latrobe Street from Bridge Street in the east to Saint Mary's Street and Beech Street in the west (Figure 4). Grafton is situated on hills rising from the north side of Three Fork Creek. The character of the town is influenced by the rugged landscape, with most buildings constructed into the sloping terrain. The Grafton Downtown Commercial Historic District is characterized by commercial, municipal, and religious buildings mostly dating from 1890 to 1920, the period of significance for the historic district. These ornate buildings, many constructed in the Italianate and Beaux Arts style, are generally of brick or wood frame construction and range in height from one story to up to six and one-half stories, with the majority of buildings being two to three stories in height (Photographs 3-5).

The Grafton Downtown Commercial Historic District was NRHP-listed under Criterion A for illustrating the forces which shaped the growth of Grafton which were prevalent in the boom atmosphere of turn of the century America; and Criterion C for its distinctive architectural character stemming from the excellent examples of turn of the century period styles, particularly Italianate and Beaux Arts. According to previous surveys, there are 91 buildings and structures located within the NRHP boundaries of the Grafton Downtown Commercial Historic District (Table 2, in Tables Section). Of these buildings, 71 are considered contributing, and 20 are considered non-contributing or have been demolished (Figure 4).

The Grafton Downtown Commercial Historic District was originally surveyed in 1983 by Preservation Associates, Inc. from Sharpsburg, Maryland. During that survey, the Bridge Street Bridge was included in the district as the eastern boundary, and was originally considered a contributing resource. However, the Bridge Street Bridge post-dates the Grafton Downtown Commercial Historic District, and in a letter dated February 4, 2010, the WV Division of Culture and History (WVDCH) concurred with the WVDOH that the Bridge Street Bridge is non-contributing to the historic district.

Several key buildings are found in the district. Near the Bridge Street Bridge Replacement Project, to the west of the Bridge Street Bridge and anchoring the historic district in the east, are the Willard Hotel

(Grafton Hotel, Resource 3) and the B&O Station (Chessie System Railroad Station, Resource 4), both contributing resources (see Photographs 3 and 5, Figure 4, and Table 2). These buildings were built in 1911 and are architecturally elaborate, reflecting one of Grafton's most prosperous times. Neither of these buildings will be physically impacted by the Bridge Street Bridge Replacement Project.

The direct APE of the Bridge Street Bridge Replacement Project encompasses two non-contributing resources within the Grafton Downtown Commercial Historic District. The Bridge Street Bridge itself (Resource 1) was determined to be a non-contributing resource by the WVDCH. In addition, a vacant lot immediately to the west of Bridge Street Bridge originally contained the Ashland Gas Station (Resource 2) a non-contributing resource within the historic district, as it post-dated the district's period of significance. This non-contributing resource has been demolished, and the vacant lot remains non-contributing to the historic district. (This vacant lot is used by a number of project alternatives.)

Additional nearby buildings include the Knights of Columbus building (Resource 75), to the north of Bridge Street Bridge, on the north side of Main Street; and the BPOE building (Resource 74) to the northeast of Bridge Street Bridge, also on the north side of Main Street. Both of these buildings are contributing resources within the historic district; however, they will not be physically impacted by the project. While the B&O Railroad and Yard were significant in shaping the settlement and growth of downtown Grafton, it is not included within the NRHP boundaries of the Downtown Historic District.

3.3 Baltimore & Ohio Railroad and Yard (now CSX Railroad and Yard)

The B&O Railroad was America's first common carrier railroad and survived to become one of the world's oldest railroad companies (CSX Transportation). The railroad was chartered on February 28, 1827, and officially incorporated on April 24, 1827. The line reached Cumberland, Maryland by 1842, and by 1852 it stretched to the Ohio River in Wheeling, Virginia. The railroad served to bolster the country's economy and growth by linking growing western markets with the established markets of the east, as well as providing passenger services between these areas. It passes through Grafton along the banks of Three Fork Creek, and was a significant catalyst in the development of the town. While the railroad was important to the development of downtown Grafton, it is not considered a contributing resource, or located within the NRHP boundaries of the Grafton Downtown Commercial Historic District.

Within the Project area, the B&O Railroad and Yard consists of multiple lines composed of steel rails and wooden ties resting on gravel ballast. Numerous tracks are located in the vicinity of the rail yards, though the majority of the original buildings constituting the yards have been demolished and/or replaced by modern construction (Photograph 6). Bridge Street Bridge crosses the B&O Railroad just to the east of the Yard (Figure 4).

The B&O Railroad and Yard has been determined NRHP-eligible under Criterion A for its association with significant events that have contributed to the broad patterns of history. Figure 3 identifies the NRHP boundary of the railroad and yard in the vicinity of the Project.

4.0 Avoidance Analysis

The proposed project considered the No-Build Alternative, eight build alternatives, the Rehabilitation Alternative (Alternative 9), Bridge Removal and upgrading of roads for a permanent detour (Alternative 10). As noted in Section 2.4, the Bridge Street Bridge has deteriorated to the point that repairs are not possible.

All of the alternatives considered, except for the Rehabilitation Alternative and the No-Build Alternative, require the immediate demolition and removal of the current Bridge Street Bridge, a NRHP-eligible resource. This constitutes an adverse effect. The Rehabilitation Alternative requires the replacement of 75 percent of the truss members of the existing bridge, as well as the potential replacement of the abutments, piers and bents. This would also constitute an adverse effect as the bridge is eligible for listing in the NRHP under Criterion C. Bridge renovation also does not satisfy the project need in that the rehabilitated bridge will not meet current bridge design standards; therefore, the rehabilitation alternative

is not an avoidance alternative. Finally, the No-Build Alternative results in conditions where the Bridge will eventually require removal, again causing an impact to this historical resource.

Thus it has been determined that it is not prudent or feasible to develop and implement any alternative that avoids a Section 4(f) use of the Bridge Street Bridge.

The Section 4(f) uses include the Bridge Street Bridge, which will eventually be demolished/substantially renovated whatever project alternative is chosen for construction, and the B&O Railroad and Yard, which will be affected by the placement of a new pier for the bridge span. A vacant non-contributing lot in the Downtown Historic District will be required by a number of alternatives but does not constitute a Section 4(f) use.

4.1 Alternative Descriptions

The alternatives are identified in Figure 5 in the Figures Section. See also Table 1 for a comparison of alternatives.

4.1.1 No-Build Alternative

The No-Build alternative initially will have no impact on Section 4(f) resources, but eventually it requires bridge removal. It does not address the rehabilitation or safety improvements that are needed to provide a viable bridge crossing. In this scenario, the existing bridge will continue in service temporarily until it must be closed due to the deteriorating condition of the structure. The closure of the bridge for the No-Build Alternative results in a 1.3-mile detour via US 119, CR 119/42, and CR 44/8. The detour would be burdensome on downtown traffic, including residential and commercial city traffic, city maintenance vehicles, school buses, and emergency vehicles, as well as through traffic using the bridge to access the recreational facilities at Tygart Lake State Park. The detour would take approximately five minutes under traffic-free conditions. Rain, snow or traffic congestion could add substantially to this travel time. Motorists are required to navigate through two traffic signals, an at-grade railroad crossing, a four-way intersection, two bridges, and comingle with downtown traffic. There will also be sight distance and grade issues along Front Street. These conditions lead to a less safe route than a bridge crossing. Therefore, the No-Build alternative does not meet the transportation requirements of the project. Because this alternative does not meet the project purpose and need, it is also not a feasible and prudent alternative.

Figure 6 identifies the detour route. All recreational vehicles are required to negotiate the center of Grafton for 1.3 miles to access the Tygart Lake State Park from the north. Direct access to South Grafton, the DHHR building, and the City Garage will eventually be curtailed.

4.1.2 Alternative 1

Alternative 1 provides for a structure immediately upstream and adjacent to the current Bridge Street Bridge. It replaces the existing bridge approximately 70 feet (centerline-to-centerline) east of the existing location. Alternative 1 requires the displacement of the DHHR building. The DHHR facility is relatively new and has a high RIGHT-OF-WAY cost, as well as generating community impacts. The southern end of the bridge mainline has a steep grade (greater than 12.5 percent) for clearance over Front Street. This vertical alignment (grade) is within AASHTO guidance for the project but steeper grades require more stopping distance, more sight distance, they are harder to navigate safely in snow and rain, and harder to maintain as paving “slump” often occurs from braking on asphalt; therefore, they are less desirable.

The Section 4(f) resources that are impacted include the bridge and the B&O Railroad and Yard, the latter being impacted by the placement of a pier (supporting a span) on railroad property. The existing bridge will be used for traffic maintenance until construction of the new bridge is complete. No detour is required, except perhaps for a short period, for approach roadwork. The bridge for Alternative 1 will be 365 feet in length, with 1,300 feet of roadway and approach improvements, with a total cost of $12.9 million.

4.1.3 Alternative 2

Alternative 2 involves construction of a new bridge at its current location at the northern end, shifting the southern end of the bridge west while using the detour, as identified in the No-Build Alternative, to maintain traffic during construction. This avoids impacts to the DHHR building. The total length of the bridge is 332.5 feet with approximately 1,278 feet of roadway and approach improvements. Cost of the bridge is approximately $12.9 million. The new bridge has three spans with stub abutments founded on piling. The structure has a 155-foot end span over the railroad yards with a vertical curve, a 132.5-foot center span over Three Fork Creek, and a 45-foot end span at the southern end. The Section 4(f) resources that are impacted include the bridge and the B&O Railroad and Yard, the latter being impacted by the placement of a pier (supporting a span) on railroad property.

The Bridge and roadway layout, combined with the higher railroad clearance, requires the grade of CR 9 and the new bridge to be increased from the existing grade of 8.8 percent to 10.0 percent. The 10.0 percent grade extends onto the bridge for 230 feet before transitioning to a vertical curve. Steeper grades and vertical curves require more stopping distance, more sight distance, they are harder to navigate safely in snow and rain, and harder to maintain as paving "slump" often occurs from braking on asphalt.

The intersection of CR 9 with CR 44 and CR 44/8 will be a complex four-legged intersection with the intersecting roads meeting at nearly right angles. This intersection is a three-way stop and the bridge's grade presents safety concerns during the winter season. This new location requires acquisition of two vacant lots south of the bridge.

4.1.4 Alternative 3

Alternative 3 provides for a structure immediately upstream and adjacent to the current Bridge Street Bridge, similar to Alternative 1, but shifting the southern abutment to the east for a different traffic flow. Alternative 3 also requires the displacement of the DHHR building and a laundromat. The Section 4(f) resources that will be impacted include the bridge and the B&O Railroad and Yard, the latter being impacted by the placement of a pier (supporting a span) on railroad property. The existing bridge will be used for traffic maintenance: no detour is required, except perhaps for a short period, for approach roadwork. The bridge for Alternative 3 has a complex connection to both Barrett Street and Front Street, will be 375 feet in length, with 1,425 feet of roadway and approach improvements. Total cost is $13.6 million, the most expensive of the alternatives.

4.1.5 Alternative 4

Alternative 4 entails replacing the bridge at its current location. The detour route as identified in the No-Build Alternative is utilized to maintain traffic during construction. The Section 4(f) resources that are impacted include the bridge and the B&O Railroad and Yard, the latter being impacted by the placement of a pier (supporting a span) on railroad property. The bridge for Alternative 4 is 280 feet in length, with 925 feet of roadway and approach improvements, with a total cost of $12.8 million. The new bridge will have two spans with stub abutments founded on piling. The structure has a 140-foot span over the railroad yard with a vertical curve and a 140-foot span over Three Fork Creek.

The new bridge has a similar grade to the existing structure (i.e., 8.8 percent to 9.0 percent) for mainline movements. Front Street has a direct connection to the bridge with approximately a 10.2 percent grade, placed on fill material. Low traffic volume to Front Street makes this grade acceptable. Front Street's and CR 9's bridge approaches require some additional RIGHT-OF-WAY on vacant property south of the bridge.

4.1.6 Alternative 5

Alternative 5 involves replacing the bridge east of the existing bridge at Haislip Street while using the existing bridge to maintain traffic during construction. The detour route will also be used

intermittently in order to build the new connector roads. The Section 4(f) resources that are impacted include the bridge and the B&O Railroad and Yard, the latter being impacted by the placement of a pier (supporting a span) on railroad property. The bridge for Alternative 5 is 405 feet in length, with 950 feet of roadway and approach improvements, with a total cost of $13.3 million. The new bridge has three spans with stub abutments founded on piling, with 135-foot spans. A horizontal curve is located on the southern end of the bridge that connects with Front Street.

A complex T-intersection is utilized at the intersection of Barrett Street (CR 44) with CR 9 and CR 9 with Front Street located approximately 100 feet northwest of the intersection of CR 44/CR 9. The new configuration, combined with the higher railroad clearance, requires the grade of CR 9 and the new bridge to be increased from approximately 8.8 percent to 10.9 percent. Steeper grades require more stopping distance, more sight distance, they are harder to navigate safely in snow and rain, and harder to maintain as paving "slump" often occurs from braking on asphalt. The steeper slope with a stop required at the bottom makes this alternative less desirable than other options. The CR 9 roadway connector requires the acquisition of a vacant lot south of the bridge.

4.1.7 Alternative 6

Alternative 6 is similar to Alternative 2; however it replaces the bridge on a skew alignment with the northern abutment to the east and the southern abutment to the west of the existing location. The detour route identified in the No-Build Alternative will be used to maintain traffic flow during construction. The Section 4(f) resources that are impacted include the bridge and the B&O Railroad and Yard, the latter being impacted by the placement of a pier (supporting a span) on railroad property. The bridge for Alternative 6 is 380 feet in length, with 950 feet of roadway and approach improvements, with a total cost of $12.8 million. The structure has a 140-foot end span over the railroad yard with a vertical curve, a 140-foot center span over Three Fork Creek, and a 100-foot southern end span.

The grade of the new bridge is steeper than the existing bridge as it increases from approximately 8.8 percent to 15.2 percent. Steeper grades require more stopping distance, more sight distance, they are harder to navigate safely in snow and rain, and harder to maintain as paving "slump" often occurs from braking on asphalt. This grade could present safety issues during the winter; as such, the four-legged intersection of CR 9 with CR 44 and CR 44/8 will be a three-way stop with motorists crossing the bridge having the right-of-way. Still, the grade and the complex intersection on the south end of the bridge make this alternative less satisfactory then some other alternatives.

4.1.8 Alternative 7

Alternative 7 consists of replacing the bridge east of the existing bridge at Haislip Street while using the existing bridge to maintain traffic during construction. The Section 4(f) resources that are impacted include the bridge and the B&O Railroad and Yard, the latter being impacted by the placement of a pier (supporting a span) on railroad property. The bridge for Alternative 7 is 360 feet in length, with 1,125 feet of roadway and approach improvements, with a total cost of approximately $13.1 million. The new bridge has three spans with stub abutments founded on piling.

The structure has a 140-foot northern end span over the railroad with a vertical curve, a 140-foot center span over three Fork Creek, and a southern 80-foot end span. The new alignment requires the grade of CR 9 and the new bridge to be increased from approximately 8.8 percent to 16.5 percent. This vertical alignment may exceed AASHTO guidance for the project of 14 to 16 percent maximum grade: steeper grades require more stopping distance, more sight distance, they are harder to navigate safely in snow and rain, and harder to maintain as paving "slump" often occurs from braking on asphalt; therefore, they are less desirable.

This grade could be a safety issue during the winter season, and the "T-intersection" at CR 9 with CR 44/8 requires stop controls to permit right-of-way to vehicles crossing the bridge to mitigate safety concerns. The new location requires the acquisition of one residential house. The grade and the complex intersection on the south end of the bridge make this alternative far less satisfactory than some other alternatives.

4.1.9 Alternative 8, The Preferred Alternative

Preferred Alternative 8 replaces the existing bridge adjacent and west of the existing bridge. The proposed structure is located parallel and approximately 60 feet downstream of the current bridge, which will be used to maintain traffic during the construction of the replacement bridge. The Section 4(f) resources that are impacted include the bridge and the B&O Railroad and Yard, the latter being impacted by the placement of a pier (supporting a span) on railroad property. The bridge for Alternative 8 is 300 feet in length, with 1,050 feet of roadway and approach improvements, with a total cost of approximately $12.7 million. The new bridge has two spans with stub abutments on piling with 150-foot spans over the railroad yard and Three Fork Creek.

The new bridge has a similar grade to the existing structure (i.e., 8.8 percent to 9.0 percent) at the southern approach. Front Street has a direct connection at the southern end tying to the bridge. Front Street and CR 9 bridge approaches require some right-of-way on vacant land south of the bridge. An intermittent detour (same as for the No-Build Alternative) may be needed after the bridge is constructed to facilitate reconstruction of Front Street and the southern approach to the bridge. The road grade and intersection configuration would be more favorable to travel in winter than most other alternatives in that the vertical curves of the approaches are similar to the current bridge and grades are not substantially increased.

Alternative 8 is identified as the preferred alternative owing to its gentle grade, excellent direct traffic flow characteristics, the ease of construction owing to the use of the existing bridge for traffic maintenance, low community impacts, the direct tie of Front Street to the Bridge for use by City Garage drivers, and its lower cost. Alternative 8 fully meets the purpose and need of the project.

4.1.10 Alternative 9

The Rehabilitation Alternative consists of renovating the existing bridge which requires the detour identified in the No-Build Alternative during construction. The Section 4(f) resource that is impacted consists of the historic bridge. A temporary occupancy of the B&O Railroad property will also be required for pier renovation. However, since the five conditions listed under 23 CFR 774.13(d) are satisfied, this does not constitute a Section 4(f) use to this resource. Rehabilitation of the bridge will result in an adverse effect as approximately 75 percent of the truss members will need to be replaced. A number of the truss members are deemed to be "fracture critical" which could result in a catastrophic failure of the entire structure if they were to fail. The abutments, piers, and bents will also have to be substantially rehabilitated or replaced. It is not possible to rehabilitate the bridge to accommodate today's legal load limits. Upon completion of the rehabilitation, the bridge will be classified as functionally obsolete under FHWA criteria due to its 13-foot, 10-inch vertical clearance and the 12-foot clearance over Front Street. Additionally, the rehabilitated bridge will be classified as structurally deficient since it will not accommodate legal loads. A total of 700 feet of roadway and approaches is needed to be upgraded, with a total project cost of approximately $13.5 million.

4.1.11 Alternative 10

Alternative 10 consists of closing the current bridge and removing the superstructure with no replacement bridge being constructed. The Section 4(f) resource that will be impacted is the historic Bridge Street Bridge. The 1.3-mile detour becomes the primary route, adding at least four minutes to travel times for emergency and municipal service vehicles. Improvements will be required at the intersection of Beech Street with Walnut Street, and at the railroad crossing. County Route 44/8 (Front Street) will be entirely reconstructed and requires the removal of

two residences to improve sight distance and grade issues. The detour will be burdensome on downtown traffic, including residential and commercial city traffic, school buses and emergency vehicles, as well as through traffic using the bridge to access the recreational facilities at Tygart Dam and Lake. Motorists are required to navigate through two traffic signals, an at-grade railroad crossing, a four-way intersection, two bridges, and comingle with downtown traffic. There are also sight distance and grade issues along Front Street. With this option, a total of 2,400 feet of roadway is upgraded, with a total cost of approximately $6.3 million.

4.2 Summary of Alternatives in Regard to Project's Purpose and Need

This summary correlates to data in **Table 1. Project Summary, Comparison of Preliminary Alternatives**, and information in the Project Purpose and Need (Section 2.6) as well as in Section 4.0 and Section 5.0.

No-Build Alternative. The No-Build Alternative was examined as a baseline condition for this project but it does not meet the project's purpose and need of bridge replacement, maintaining community cohesion, and providing efficient traffic flow. It is **not** a feasible and prudent alternative.

Alternative 1. This alternative has high community impacts which are considered flaws for Alternative 1, along with the steeper grade at the southern end. It does not meet the purpose and need of the project since it does not maintain community cohesion and does not offer efficient traffic flow. Consequently, Alternative 1 is **not** considered to be a feasible and prudent alternative for project construction.

Alternative 2. The steep grade at the southern end of the bridge and the complex traffic flow are less desirable than several other alternatives. It does not meet the project's purpose and need requirement of efficient traffic flow. Consequently, Alternative 2 is **not** considered to be a feasible and prudent alternative for construction.

Alternative 3. High right-of-way cost, high total cost, and high community impacts were considered major flaws for Alternative 3. It does not meet the project's purpose and need requirement of maintaining community cohesion. Consequently, Alternative 3 is **not** considered to be a feasible and prudent alternative.

Alternative 4. This alternative offers adequate bridge replacement, maintains community cohesion, offers efficient traffic flow, and is a good geographic fit. It fully **meets** the project's purpose and need and **is** considered to be a feasible and prudent alternative for project construction. It is considered the second best option for replacing the Bridge Street Bridge if the recommended alternative (Alternative 8), for any reason, cannot be built.

Alternative 5. High total cost, a T-intersection at the southern end of the bridge along with the steep grade of CR 9 and the bridge, are considered major flaws for Alternative 5. It does not meet the project's purpose and need requirement of efficient traffic flow. Consequently, Alternative 5 is **not** considered a feasible and prudent alternative.

Alternative 6. The grade of the new bridge would be 15.2 percent and a four-legged intersection of CR 9 with CR 44 and CR 44/8 would be required: these are considered major flaws for Alternative 6. These design considerations are the result of the geographic constraints of this site. Consequently, it does not meet the project's purpose and need requirement of efficient traffic flow and geographic fit. Alternative 6 is **not** considered a feasible and prudent alternative.

Alternative 7. The grade of CR 9 and the new bridge would be 16.5 percent and may exceed AASHTO guidelines for vertical alignment. This grade could be a safety issue during the winter season, and the "T-intersection" at CR 9 with CR 44/8 would be complex. The steep grade at the southern end of the bridge and the less desirable traffic flow are considered major flaws for Alternative 7. It does not meet the project's purpose and need requirement of efficient traffic

flow and geographic fit. Consequently, Alternative is 7 is **not** considered a feasible and prudent alternative.

Alternative 8. The Preferred Alternative. This alternative was identified as the recommended alternative owing to its excellent traffic flow characteristics, the ease of construction owing to the use of the existing bridge for traffic maintenance, low community impacts, the direct tie of Front Street to the Bridge, and its lower cost. It is considered to offer the best combination for bridge replacement, for maintaining community cohesion, offering efficient traffic flow, and good geographic fit. CSX preferred this alternative over Alternative 4 because it provides an additional foot of clearance over tracks. Alternative 8 fully **meets** the project's purpose and need and **is** considered to be a feasible and prudent alternative for project construction. It is recommended as the **Preferred Alternative**.

Alternative 9. The Rehabilitation Alternative. The Rehabilitation Alternative is **not** a feasible and prudent alternative because the rehabilitated bridge would still be classified as functionally obsolete under FHWA criteria due to its 13-foot, 10-inch vertical clearance, the 12-foot clearance over Front Street, and its 24-foot width. Also, the bridge will be classified as structurally deficient since it would not accommodate legal loads. The Rehabilitation Alternative does not meet the project need of an adequate bridge replacement.

Alternative 10. This alternative requires removing the bridge and upgrading a permanent detour route. The detour would be burdensome on downtown traffic, school buses and emergency vehicles, as well as through traffic. There are also sight distance and grade issues along Front Street. It does not meet the project's purpose and need of an adequate bridge replacement, maintaining community cohesion, and offering efficient traffic flow. Consequently, Alternative 10 is **not** considered a feasible and prudent alternative.

4.3 Feasible and Prudent Avoidance Alternatives

The most recent FHWA guidance (July 20, 2012) relative to Section 4(f) analysis states in part that: "The first step in determining whether a feasible and prudent avoidance alternative exists is to identify a reasonable range of project alternatives including those that avoid using Section 4(f) property. The avoidance alternatives include the no-build," and may include one or more of the following, depending on project context:

- Location Alternatives
- Alternative Actions
- Alignment Shifts
- Design Changes

Each of these alternative types for each of the Section 4(f) resources is discussed following.

4.3.1 Location Alternatives

As previously identified in Section 4.0, all of the alternatives considered require the "use" of the Bridge Street Bridge. The No-Build Alternative results in conditions where the Bridge would eventually require removal and the Rehabilitation Alternative (Alternative 9) includes the rehabilitation/replacement of substantial bridge elements. As identified in Section 4.2, neither alternative is considered a feasible and prudent alternative.

4.3.2 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 management systems (TSM) or similar measures. The purpose and need of this project is to provide a safe, efficient connection of downtown Grafton with South Grafton, and to maintain existing community cohesion. Clearly, rail or transit service will not meet or be

consistent with the project purpose and need. Other measures such as TSM were considered for the City of Grafton and were found not to meet the project's purpose.

Alternative actions are not considered as feasible and prudent alternatives.

4.3.3 Alignment Shifts

An alignment shift is the rerouting of a portion of the project to a different alignment to avoid a specific resource. There are no alignment shifts available to avoid impacts to the Bridge Street Bridge, nor the B&O Railroad and Yard. Three of the ten alternatives under consideration (Alternatives 5, 6 and 7) were developed to avoid the Downtown Historic District. However, their designs incorporate less favorable engineering characteristics due to geographic considerations and urbanization. Alternatives 5, 6 and 7 do not meet the project's purpose and need and are not considered feasible and prudent.

4.3.4 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. A design change was applied to Alternative 8, the Preferred Alternative, after a meeting on July 31, 2013 with the FHWA. A 0.002-acre portion of the Willard Hotel property, a contributing resource to the Downtown Historic District, would have originally been impacted by Alternative 8. A redesign of this alternative removed that impact rendering Alternative 8 a feasible and prudent alternative (Alternative 8 still impacts the B&O Railroad and Yard with a pier). No design changes were applied to other alternatives since all but Alternative 4 were not considered feasible and prudent; Alternative 4 did not require a design change.

4.4 Minimization of Harm

During the project design phase, coordination was conducted with the WV State Historic Preservation Office (WVSHPO) (see Appendix A) 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 B). This MOA was executed by the FHWA and the WVSHPO for the Advisory Council on Historic Preservation (ACHP). It contains stipulations to mitigate the adverse effect resulting from the Bridge Street Bridge Replacement Project, including documentation of the Bridge according to the NRHP and National Historic Landmarks Survey Photo Policy Expansion of March 2005. A copy of the documentation will be given to the Grafton Public Library. This will include five-inch by seven-inch black-and-white photography; a detailed history of the resource; location of historic photographs, if possible; and a fully-completed West Virginia Historic Property Inventory Form. In addition, the following stipulations will be carried out:

- A sum of $5,000 will be given to the City of Grafton for historic preservation within the Downtown Historic District.
- The replacement bridge will contain historic-style lighting and architectural treatment to match the Downtown Historic District.
- The bridge will be documented on a future website listing historic bridges once the WV Historic Bridge Survey is complete.

The WVDOH Initial Design Section evaluated six original alternatives presented in the 2004 WVDOH Planning and Research Division report. These alternatives were placed at geographic locations the engineers felt best suited the project. The first four of these alternatives they felt might impact the Downtown Historic District. Alternatives 5 and 6 at Haislip Street do not affect Downtown Historic District property and were removed several hundred yards in sight distance. Subsequently, the WVDOH Initial Design Section added Alternatives 7, 8 and 9 (bridge renovation), in part, to avoid impacts to the Downtown Historic District. Alternative 7 is furthest removed from the Downtown Historic District and the Rehabilitation alternative (Alternative 9) would present approximately the same viewshed as the original bridge. However, only Alternatives 8 and 4 satisfy the purpose and need of the project.

Coordination with the CSX Railroad began on July 20, 2011 when a call was made by the WVDOH to CSX identifying the project, its historic nature, and requesting their input. The CSX respondent did not understand how a railroad could be historic and indicated CSX had no interest in the project. Subsequently, an email was submitted to CSX requesting that they become a consulting party (Appendix A). No response from CSX was received. Subsequently, the WVDOH design engineers met on site with CSX officials regarding the bridge alternatives on February 29, 2012 and again on January 3, 2013. CSX personnel included the yardmaster, trainmaster, real estate personnel, chief bridge engineer as well as their bridge plan review consultants AECOM and URS (Appendix A). At the January 3, 2013 meeting, the WVDOH indicated that the vertical bridge clearance has been increased more than two feet and meets the CSX required 23-foot clearance requirements. The horizontal clearance has been increased by more than 40 feet. The number of piers within railroad property for the proposed bridge is less than the number for the existing bridge, and the new bridge will improve hydraulics on the river.

Since Alternative 4 provided one-foot less vertical clearance above the tracks compared to Alternative 8, CSX was supportive of Alternative 8. Also, since the two alignments crossed eight active tracks in the Grafton Yard, considerable discussion was held regarding demolition of the existing bridge and construction of the new bridge. The objective was for the WVDOH to secure commitments from CSX in regard to clearances required, track closing times, as well as private crossing easements that the future WVDOH contractor will need from CSX, prior to advertising the project. These were confirmed in a letter dated January 16, 2013 (Appendix A).

5.0 Least Overall Harm Analysis

Pursuant to 23 CFR 774.3(c), 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 4.0, there is no feasible and prudent avoidance alternative; therefore, each of the alternatives was evaluated to determine which alternative will cause 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 officials 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:

1) The degree to which each alternative meets the purpose and need for the project.
2) After reasonable mitigation, the magnitude of any adverse effects to resources not protected by Section 4(f).
3) 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 (v) through (vii) 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 and are provided by the officials 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 officials 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.

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

Bridge Street Bridge. As previously identified, the NRHP-eligible (under Criterion C) Bridge Street Bridge will eventually be demolished by whatever project alternative is chosen for construction, except for the Rehabilitation Alternative, which does not meet the Purpose and Need for the project. All alternatives constitute a Section 4(f) use. No interested party has expressed a statement for retaining the bridge for pedestrian or bicycling use. The WVDOH and the WVSHPO have developed an MOA (Appendix B) that details the mitigation measures to be employed prior to the demolition of the bridge.

Grafton Downtown Commercial Historic District. The Downtown Historic District meets Criteria A and C for its illustration of the forces that shaped the growth of Grafton prior to the turn of the Century and for its distinctive architecture. The district contains 71 contributing resources and 20 non-contributing resources. All or part of a vacant lot which is a non-contributing resource will be required by Alternatives 1, 2, 3, 4, 5 and 8. According to Section 4(f) Policy Paper Q & A Section, Question 7C, and current FHWA policy, this is not a Section 4(f) use. The Bridge Street Bridge is also considered a non-contributing resource within the district. Other than the stipulations detailed in the MOA between the WVDOH and WVSHPO in Appendix B (covering only Alternative 8), no additional mitigation will benefit the district. Mitigation of visual intrusions in the MOA include that the replacement bridge will contain historic style lighting and architectural treatment to match the Downtown Historic District.

B&O Railroad and Yard. The B&O Railroad and Yard is NRHP-eligible under Criterion A. The railroad is associated with events that have made a significant contribution to the broad patterns of our history as put forth in the NRHP Criterion A. The B&O Railroad was America's first common carrier railroad and runs from Baltimore, Maryland to St. Louis, Missouri. Other than Alternatives 9 and 10, all other project alternatives constitute a Section 4(f) use on the B&O Railroad property. Placing a pier on historic railroad property, including a permanent easement required for construction, constitute a Section 4(f) use as defined in 23 CFR 774.14 (permanent occupancy). For Alternative 9 (renovation), no Section 4(f) use exists as all five conditions listed under 23 CFR 774.13(d) are satisfied (temporary, minor, no permanent impact, full restoration, and agreement of officials). It is expected that while the superstructure will be demolished for Alternative 10, the piers will remain in their current place and condition. No additional mitigation is projected other than the MOA between the WVDOH and WVSHPO in Appendix B (covering only Alternative 8). No additional mitigation benefits the railroad.

5.2 The Relative Severity of the Remaining Harm, After Mitigation

Bridge Street Bridge. As identified in Section 5.1, the historic Bridge Street Bridge will be demolished. No interested party has expressed an interest in retaining the bridge for pedestrian or bicycling use. The WVDOH and the WVSHPO have developed an MOA (Appendix B) that details the mitigation measures to be employed prior to the demolition of the bridge.

Grafton Downtown Commercial Historic District. The Downtown Historic District meets Criteria A and C as noted above. The district currently contains 71 contributing resources and 20 non-contributing resources. All or part of a vacant lot which is a non-contributing resource will be required by Alternatives 1, 2, 3, 4, 5 and 8. The Bridge Street Bridge is a non-contributing resource to the district. There will be no other effects to the Downtown Historic District. Other than the MOA between the WVDOH and WVSHPO in Appendix B (covering only Alternative 8), no additional mitigation will benefit the district. Mitigation of visual intrusions in the MOA include that the replacement bridge will contain historic style lighting and architectural treatment to match the Downtown Historic District.

B&O Railroad and Yard. The B&O Railroad and Yard is NRHP-Eligible under Criterion A as noted above. All project alternatives, other than Alternatives 9 and 10, use the B&O Railroad and Yard with the placement of a pier on railroad property. A new pier will be smaller and fewer in number as compared to current conditions and the height of the bridge deck above the railroad will be higher as compared to current conditions. No additional mitigation is projected other than the MOA between the WVDOH and WVSHPO in Appendix B. No additional mitigation will benefit the railroad.

5.3 Relative Significance of Each Section 4(f) Property

Bridge Street Bridge. The Bridge Street Bridge is eligible individually (Criterion C) and is a non-contributing resource for the Downtown Historic District. All alternatives except the Rehabilitation Alternative remove this historic bridge.

Grafton Downtown Commercial Historic District. 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. There is one non-contributing resource, the Bridge Street Bridge which is individually eligible; there are no National Historic Landmarks in the Downtown Historic District. All or part of a vacant lot which is a non-contributing resource and will not generate a Section 4(f) use will be required by Alternatives 1, 2, 3, 4, 5 and 8. No other contributing resource has any additional significance.

B&O Railroad and Yard. The B&O Railroad and Yard is NRHP-Eligible under Criterion A as noted above. There are no contributing resources at the B&O Railroad and Yard or along the mainline in or near the project area. As identified previously, other than Alternatives 9 and 10, all project alternatives use the resource with the placement of a pier on railroad property. It is expected that temporary occupancy of the B&O Railroad and Yard for pier renovation (Alternative 9) will meet the five conditions listed under 23 CFR 774.13(d); as a result, this does not constitute a Section 4(f) use. Piers are to remain in place for Alternative 10 although the superstructure will be removed.

5.4 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 Bridge Street Bridge and the B&O Railroad and Yard in a letter to the WVDOH dated July 8, 2011 (Appendix A). Subsequently, in a letter dated April 16, 2012 (Appendix A), the WVSHPO states that the MOA (covering only Alternative 8) sufficiently mitigates the project’s adverse effect on historic resources and requested that funds be provided to the City of Grafton for historic preservation purposes.

As stated in an email dated May 11, 2011, the City of Grafton gave city verbal approval for the project (Appendix A). City officials indicated that they preferred Alternative 8 over Alternative 4 because, while there are no residential impacts and minimal business impacts for both, maintenance of traffic is more

favorable for Alternative 8 using the existing bridge rather than a detour through town. The City of Grafton on June 1, 2012 agreed to the MOA for the project that was also signed by the FHWA, WVSHPO and WVDOH with the stipulations that the replacement bridge will contain historic style lighting and architectural treatment to match the Downtown Historic District, and that $5,000 will be given to the city to be used for historic preservation-related activities and improvements. Alternative 8 was preferred over Alternative 4 by the City because traffic could be maintained over the current bridge while construction was underway on the new bridge.

WVDOH design engineers met onsite with CSX officials regarding the bridge alternatives on February 29, 2012 and again on January 3, 2013. CSX personnel included the yardmaster, trainmaster, real estate personnel, chief bridge engineer as well as their bridge plan review consultants AECOM and URS (Appendix A). The two alignments cross eight active tracks in the Grafton Yard. Therefore, considerable discussion was held regarding demolition of the existing bridge and construction of the new bridge. The objective was for the WVDOH to secure commitments from CSX in regard to clearances required, track closing times, as well as private crossing easements that the future WVDOH contractor would need from CSX, prior to advertising the project. These were confirmed in a letter dated January 16, 2013 (Appendix A). Since Alternative 4 provided one-foot less vertical clearance above the tracks compared to Alternative 8, CSX stated a preference for Alternative 8.

5.5 The Degree Each Alternative Meets the Purpose and Need of the Project

All of the 10 build alternatives (Section 4.0) and the No-Build Alternative were assessed for their ability to meet each of the Purpose and Need components. Only Alternatives 8 and 4 meet the project's purpose and need. Justification for the Purpose and Need components is presented in Section 2.6. Several comparable factors were used in this assessment and are presented in Table 1.

5.5.1 Bridge Replacement

Alternatives 1 through 8 adequately replace the existing Bridge Street Bridge. The No-Build Alternative and Alternative 10 will not. Alternative 9, the Rehabilitation Alternative, replaces the existing bridge but is classified as functionally obsolete under FHWA criteria due to its 13-foot, 10-inch vertical clearance, the 12-foot clearance over Front Street, and its 24-foot width. Thus, it does not satisfy the project's purpose and need.

5.5.2 Maintain Community Cohesion

Alternatives 1, 3, 10 and the No-Build Alternative do not maintain community cohesion either because they do not provide permanent access between Grafton's downtown area and South Grafton, or they require removal of the DHHR building, a key community facility for the low-income and minority populations, and others that may require public services. All other alternatives do maintain community cohesion.

5.5.3 Provide Efficient Traffic Flow

Alternatives 1, 2, 5, 6 and 7 do not provide efficient traffic flow between Main Street and South Grafton either because of steep grades at the southern bridge approach at Barrett Street, or by requiring traffic controls at complex intersections. Alternatives 8 and 4 have efficient traffic flow between Main Street and Barrett Street, plus a direct connection to Front Street facilitating easy access to the City Garage.

Steeper grades require more stopping distance, more sight distance, and are harder to navigate safely in snow and rain; moreover they are harder to maintain as paving "slump" often occurs from braking on asphalt.

5.5.4 Geographic Fit

Alternatives 6 and 7 have poor geographic fit with Alternative 6 exhibiting a 15.21 percent grade at its southern approach, while Alternative 7 will have a 16.53 grade. In comparison, the existing

bridge has an 8.8 percent grade at its southern approach. Alternatives 8 and 4 and remaining alternatives exhibit good geographic fit similar to the existing bridge.

After consideration of all factors, Alternative 8, the alternative recommended by the WVDOH for construction, best meets the project's purpose and need. Figure 7 depicts details of Preferred Alternative 8. Alternative 4 also meets the project's purpose and need and is recommended if, for any reason, Alternative 8 is not approved for construction.

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

There are no Threatened or Endangered (T&E) species or wetlands in the project area, nor are any of the proposed construction areas exposed to 100-year flood hazard. Because of the urban nature of the project area, the only resources not protected by Section 4(f) are confined to socio-economic impacts to community facilities (DHHR building), residential and commercial displacements, and minor taking of vacant property. A vacant lot within the boundaries of the Downtown Historic district will be affected by the Preferred Alternative, but it is not a contributing resource.

Alternatives 1 and 3 require acquisition of the DHHR building, while Alternative 1 impacts one business, Alternative 3 impacts two businesses, Alternative 7 impacts one business, and Alternative 10 impacts two residential structures. None of these alternatives meet the project's purpose and need.

The Elizabeth Cather Towers, a Section 8 Affordable housing complex of 130 units is located adjacent to the east end of the current bridge but will not be impacted by project alternatives. During field observations and an interview with a business owner, no minorities or low-income individuals were identified in any businesses or residential structures potentially affected by the project (Alternatives 8 and 4 do not displace any structures).

Alternative 8, the Preferred Alternative, and Alternative 4, have no environmental or socioeconomic impacts and require no residential or business displacements. Both require the acquisition of vacant property.

5.7 Substantial Differences in Cost among Alternatives

There are no substantial cost differences among the build alternatives ranging from a low of approximately $12.7 million (Alternative 8, the Preferred Alternative) to a high of $13.6 million (Alternative 3). While Alternative 10 has an estimated construction cost of $6.3 million, it includes only demolition of the existing bridge and upgrading of a permanent 1.3-mile detour. Alternative 10 does not meet the project's purpose and need.

5.8 Least Overall Harm Analysis Conclusion

Based on the least overall harm analysis detailed above and summarized in the Project Summary on Page 2, Alternative 8 is the alternative that provides the least overall harm. Specifically, Alternative 8:

- Reduces the amount of turning movements and has a free-flow connection to Barrett Street making it a safer and more efficient route.
- Is close to the grade and profile of the existing bridge, making it less intrusive to the Downtown Historic District.
- Maintains traffic on the existing bridge during construction of the new bridge, continuing emergency and school bus service to South Grafton.
- Has no residential or business displacements.
- Increases vertical clearance above the railroad to facilitate double-stack rail traffic and removes several horizontal obstructions in the rail yard by replacing a five-span structure with a two-span structure.
- CSX prefers Alternative 8 over Alternative 4 because it provides one-foot more vertical clearance over CSX tracks.

- It is the least costly of the build alternatives.
- Meets all of the components of the project's Purpose and Need.

Alternative 4, which is replacement at the current bridge location, contains most of the attributes of the above bulleted items: free flow to Barrett Street, close to the profile of the current bridge, increases vertical clearance over the railroad, is lower cost, and meets the project's Purpose and Need. However, it displaces the current bridge during construction and requires a 1.3-mile detour for all vehicles during construction. The detour necessity for Alternative 4 is the primary reason Alternative 8 was chosen as the Preferred Alternative.

6.0 Constructive Use

A constructive use occurs when proximity impacts of the highway are so great that the characteristics that qualify the resource as a Section 4(f) property are substantially impaired.

6.1 Grafton Downtown Commercial Historic District

No proximity impacts (visual impacts) associated with alternative alignments, including the preferred alignment, have been identified for the Downtown Historic District. Visual impacts might increase since the preferred alternative is located 60 feet closer than the current bridge. However the characteristics that qualify the Downtown Historic District as a Section 4(f) resource will not be substantially impaired by visual impacts for the preferred alternative or for any other build alternative. Moreover, mitigation of visual intrusions in the MOA stipulates that the replacement bridge will contain historic-style lighting and architectural treatments to match the Downtown Historic District, minimizing impacts.

Guidance provided in the 2012 Section 4(f) Policy Paper indicates that the "change" in the viewshed of the Historic District will not rise to the level of a constructive use. The basis of this opinion is that the existing bridge was determined to be a non-contributing element to the Historic District. The WVSHPO has concurred that the Bridge Street Bridge is not a contributing resource to the Downtown Historic District (see WVSHPO Letter 12-14-10 in Appendix A). Further, since the viewshed of the Downtown Historic District currently includes a 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 contributing elements. It is unlikely with the minimization measures noted above, that the new bridge would substantially impair the attributes which qualify the Downtown Historic District to be eligible for the National Register. The Downtown Historic District would continue to retain its historic setting and features.

6.2 B&O Railroad and Yard

All of the project build alternatives, except for Alternative 10, place a new or improved span over the railroad/railroad yards, introducing a new visual element. However, a constructive use impact occurs only 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. This will not occur for the preferred alternative. Guidance provided in the 2012 Section 4(f) Policy Paper identified in Section 6.1, holds true for the railroad property. It is unlikely that the visual intrusion of a new bridge, treated to conform to the Downtown Historic District's architectural features, would reach the threshold of substantial impairment of the attributes which cause the B&O Railroad and Yard to be eligible for the National Register. The Railroad and Yard would retain their historic fabric and use 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. Preferred Alternative 8 minimizes harm to Section 4(f) resources by incorporating measures into the project (see MOA, Appendix B) that minimize the impact on and the use of the resources. Planning to minimize harm has specifically involved a design change where a 0.002-acre portion of the Willard Hotel property, a contributing resource to the Downtown Historic District, was avoided by re-engineering the preferred

alternative. Also, several alternatives were added that would minimize impacts to the Downtown Historic District but were later found to have characteristics that did not meet the project's purpose and need.

The WVDOH design engineers met on site with CSX officials regarding the project on February 29, 2012 and again on January 3, 2013. CSX personnel included the yardmaster, trainmaster, real estate personnel, chief bridge engineer as well as their bridge plan review consultants, AECOM and URS (Appendix A). The objective was for the WVDOH to secure commitments from CSX in regard to clearances required, track closing times, as well as private crossing easements that the future WVDOH contractor will need from CSX. At the January 3, 2013 meeting, the WVDOH indicated that the vertical bridge clearance has been increased more than two feet and meets the CSX required 23-foot clearance requirement. The horizontal clearance has been increased by more than 40 feet. The number of piers within railroad property for the proposed bridge is less than the number for the existing bridge, and the new bridge will improve hydraulics on the river.

The assessment of avoidance alternatives (Section 4.0) determined that there are no alignment shifts (i.e., design shifts) that will avoid or minimize the Section 4(f) use of historic properties. After evaluation of project alternatives, the Least Harm Analysis and Assessment of Constructive Use, it is concluded that there are no prudent and feasible alternatives that avoid Section 4(f) use.

8.0 Coordination

Coordination efforts have been conducted with the WVSHPO and other historical agencies throughout the course of the project (see the Project Correspondence in Appendix A). This began in October 2009 when letters and information were sent to the WVSHPO, the Vandalia Heritage Foundation, and the Taylor County Historical and Genealogical (H&G) Society identifying the proposed project and requesting information they might have about the project. Among other times, communications were exchanged between the WVSHPO and the WVDOH in February 2010, July 2010, September 2010 and October 2010; and with the Vandalia Heritage Foundation and the Taylor County H&G Society in July 2010 beginning the process of approval of the project. Subsequently, the WVDOH contacted the Preservation Alliance of West Virginia (PAWV) notifying them of the project and requesting comments. These are also found in Appendix A.

On August 5, 2010, the WVDOH conducted a public meeting, soliciting comments, suggestions, and recommendations for the project. During this public meeting the WVDOH identified the eight build alternatives for the project, and the preferred alternative (Alternative 8), which minimizes impacts to historic resources while satisfying the project purpose and need to replace the deficient existing bridge. The No-Build Alternative and the Rehabilitation Alternative (Alternative 9) were also presented, discussed, and the reasons provided for why each is inadequate for project development. One comment was received after the public meeting. The comment (in Appendix A) was from a property owner who recommended Alternative 8, Alternative 6, Alternative 4 or Alternative 2 (Subsequently, Alternative 8 which the property owner recommended was chosen for construction).

After further coordination efforts, the WVDOH prepared a MOA for construction of Preferred Alternative 8 between the WVSHPO and FHWA, for submittal to the Advisory Council on Historic Preservation. A copy of the executed MOA, which includes mitigation measures as stipulations, is part of the official project documentation (see Appendix B).

Coordination with the CSX Railroad began March 4, 2011 when a letter was sent to AECOM, the bridge consultant to CSX, requesting comments concerning impacts to the Grafton Yard (Appendix A). None were forthcoming. On July 20, 2011 a call was made by the WVDOH to CSX identifying the project, its historic nature, and requesting input. The CSX respondent did not understand how a railroad could be historic and indicated CSX had no interest in the project. An email was then submitted to CSX requesting that they become a consulting party (Appendix A). No response from CSX was received. Subsequently, WVDOH design engineers met onsite with CSX officials regarding the bridge alternatives proposed for construction (either Alternative 4 or Alternative 8) on February 29, 2012 and again on January 3, 2013. CSX personnel included the yardmaster, trainmaster, real estate personnel, chief bridge engineer as well

as their bridge plan review consultants AECOM and URS. Because Alternative 4 provided one-foot less vertical clearance above the tracks compared to Alternative 8, CSX was supportive of Alternative 8. Since the two alignments crossed eight active tracks in the Grafton Yard, considerable discussion was held regarding demolition of the existing bridge and construction of the new bridge. The objective was for the WVDOH to secure commitments from CSX in regard to clearances required, track closing times, as well as private crossing easements that the future WVDOH contractor will need from CSX, prior to advertising the project.

Following is a chronology of the extensive coordination effort for this project with local, county, state and federal agencies:

- 10/26/2009 – Letter to historical agencies from the WVDOH notifying them of the project.
- 10/28/2009 – Letter to historical agencies from the WVDOH notifying them of the project.
- 12/23/2009 – Letter to the WVSHPO providing details of project.
- 02/04/2010 – Letter to the WVDOH from the WVSHPO stating Bridge is eligible for listing under Criterion C.
- 05/18/2010 – Internal WVDOH memo from the Design Unit recommending Alternative 8.
- 07/22/2010 – Letter to the Vandalia Heritage Foundation notifying them of public meeting.
- 07/22/2010 – Letter to Taylor County H&G Society notifying them of public meeting.
- 07/22/2010 – Letter to WVSHPO notifying them of public meeting.
- 08/05/2010 – Public Meeting presenting all alternatives and Alternative 8 as the Preferred Alternative.
- 08/22/2010 – Comment sheet from property owner stating she prefers Alternative 8, 6, 4 or 2.
- 08/23/2010 – Public Meeting Memorandum for public viewing, offering another opportunity to comment.
- 09/08/2010 – Letter to the WVSHPO from the WVDOH providing project's Cultural Resources Management Report.
- 09/28/2010 – Letter to the WVDOH from the WVSHPO requesting more data on Barrett Street houses eligibility.
- 10/18/2010 – Letter to the WVSHPO from the WVDOH providing data on Barrett Street houses.
- 12/14/2010 – Letter to WVDOH from WVSHPO disagreeing on effects of project; requesting more data.
- 03/04/2011 – Letter to CSX Railroad requesting comments on effect to Grafton Rail Yard.
- 04/04/2011 – Letter to the WVSHPO from the WVDOH answering 12/14/2010 request for data.
- 05/03/2011 – Letter to WVDOH from WVSHPO concurring on five South Grafton houses as Not Eligible.
- 05/11/2011 – Email to City of Grafton from the WVDOH confirming City's verbal approval of Project (Alternative 8).
- 05/11/2011 – Letter to Taylor Co. H&G Society from the WVDOH requesting additional comments on Project.
- 05/11/2011 – Email to PAWV from the WVDOH requesting comments on Project and Preferred Alternative 8.
- 05/16/2011 – Letter to the WVDOH from PAWV identifying concerns and requesting rehabilitation of bridge.
- 05/25/2011 – Email to PAWV from the WVDOH providing detailed project information.
- 05/25/2011 – Email from PAWV thanking the WVDOH for comprehensive information, and concerns.

- 06/09/2011 – Letter to the WVSHPO from the WVDOH stating adverse effects to historic resources.
- 06/13/2011 – Letter to WVDOH from Taylor Co. H&G society approving project (Alternative 8).
- 07/08/2011 – Letter to the WVDOH from the WVSHPO stating need for preparation of MOA.
- 07/20/2011 – Telephone call and email to CSX requesting comments and interest in becoming a consulting party to the project.
- 10/25/2011 - Letter to the FHWA from the WVDOH submitting a Draft MOA.
- 10/27/2011 – Letter to the WVSHPO from the WVDOH transmitting MOA for review.
- 11/21/2011 – Letter to the WVDOH from the WVSHPO stating Draft MOA not adequate, needs added stipulations.
- 11/28/2011 – Letter to ACHP from the FHWA notifying them of Adverse Effects of Project.
- 11/30/2011 – Letter to the FHWA from the ACHP indicating they do not want to participate in project.
- 02/29/2012 – WVDOH design engineers' meeting onsite with CSX officials.
- 04/16/2012 – Letter to the WVDOH from the WVSHPO approving MOA Sec. II, III, IV, V, and VI; wants $5,000 in Section I
- 04/19/2012 – Internal WVDOH memo approving $5,000 for MOA Section I.
- 04/30/2012 – Letter to the WVDOH from the WVSHPO concurring with no further archaeological work for Project.
- 05/07/2012 – Letter to the WVDOH from the WVSHPO with signed and executed MOA, for Preferred Alternative 8.
- 05/14/2012 – Email to City of Grafton from the WVDOH providing final MOA to sign.
- 01/03/2013 - WVDOH design engineers' meeting onsite with CSX officials.
- 09/13/2013 – Letter to the WVDOH from the WVSHPO assessing additional submitted information on Grafton Commercial Historic District.

9.0 Conclusions

9.1 Avoidance

Based on the above considerations, the FHWA has determined that there is no feasible and prudent alternative to the use of the historic Bridge Street Bridge and B&O Railroad and Yard property for this project. All of the alternatives considered require the "use" of the Bridge Street Bridge. The No-Build Alternative results in conditions where the Bridge would eventually require removal and the Rehabilitation Alternative (Alternative 9) includes the rehabilitation/replacement of substantial bridge elements, constituting an adverse effect. Moreover, as identified in Section 4.2, neither alternative is considered a feasible and prudent alternative. Placing a pier on historic railroad property, including a permanent easement required for construction, constitutes a Section 4(f) use as defined in 23 CFR 774.14 (permanent occupancy). Other than Alternatives 9 and 10, all other project build alternatives constitute a Section 4(f) use on the B&O Railroad property. Neither Alternative 9 nor Alternative 10 meets the project need and neither is considered a feasible and prudent alternative. Therefore, there are no avoidance alternatives that meet the project's purpose and need.

9.2 Least Harm

Alternative 8, the Preferred Alternative, and Alternative 4, replacement at the current location, have been found to be feasible and prudent. The new bridge resulting from Alternative 8, the Preferred Alternative, is in the viewshed of the Downtown Historic District. Guidance provided in the 2012 Section 4(f) Policy Paper indicates that the "change" in the viewshed of the Downtown Historic District and B&O Railroad and Yard will not rise to the level of a constructive use. Mitigation of visual intrusions has been agreed to in an MOA between the FHWA, WVSHPO, WVDOH, ACHP, and City of Grafton stipulating that the

replacement bridge will contain historic-style lighting and architectural treatment to match the Downtown Historic District and that $5,000 will be given to the city to be used for historic preservation-related activities and improvements.

All or part of a vacant lot, which is a non-contributing resource to the Downtown Historic District, will be required by Alternative 8, the Preferred Alternative. According to current FHWA policy guidelines, this is not a Section 4(f) use. Alternative 8, the Preferred Alternative, and Alternative 4 have minimal environmental and socioeconomic impacts, and require no residential or business displacements.

Analysis has shown that Alternative 8, which is replacement just downstream of the current bridge location, contains the following attributes: free flow to Barrett Street, close to the profile of the current bridge, increases vertical clearance over the railroad, does not require a detour, is lower cost, and meets the project's Purpose and Need. Alternative 4 includes similar attributes as Alternative 8, the Preferred Alternative. However, Alternative 4 displaces the current bridge during construction and requires a 1.3-mile detour for all vehicles during the new bridge construction period. The required detour for Alternative 4 is the primary reason Alternative 8 was chosen as the Preferred Alternative. Finally, CSX prefers Alternative 8 over Alternative 4 because it provides an additional one foot of vertical clearance over the tracks.

Therefore, Preferred Alternative 8 has been found to generate least harm to Section 4(f) properties and includes all possible planning to minimize harm resulting from the use of these properties.

10.0 References

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Figures

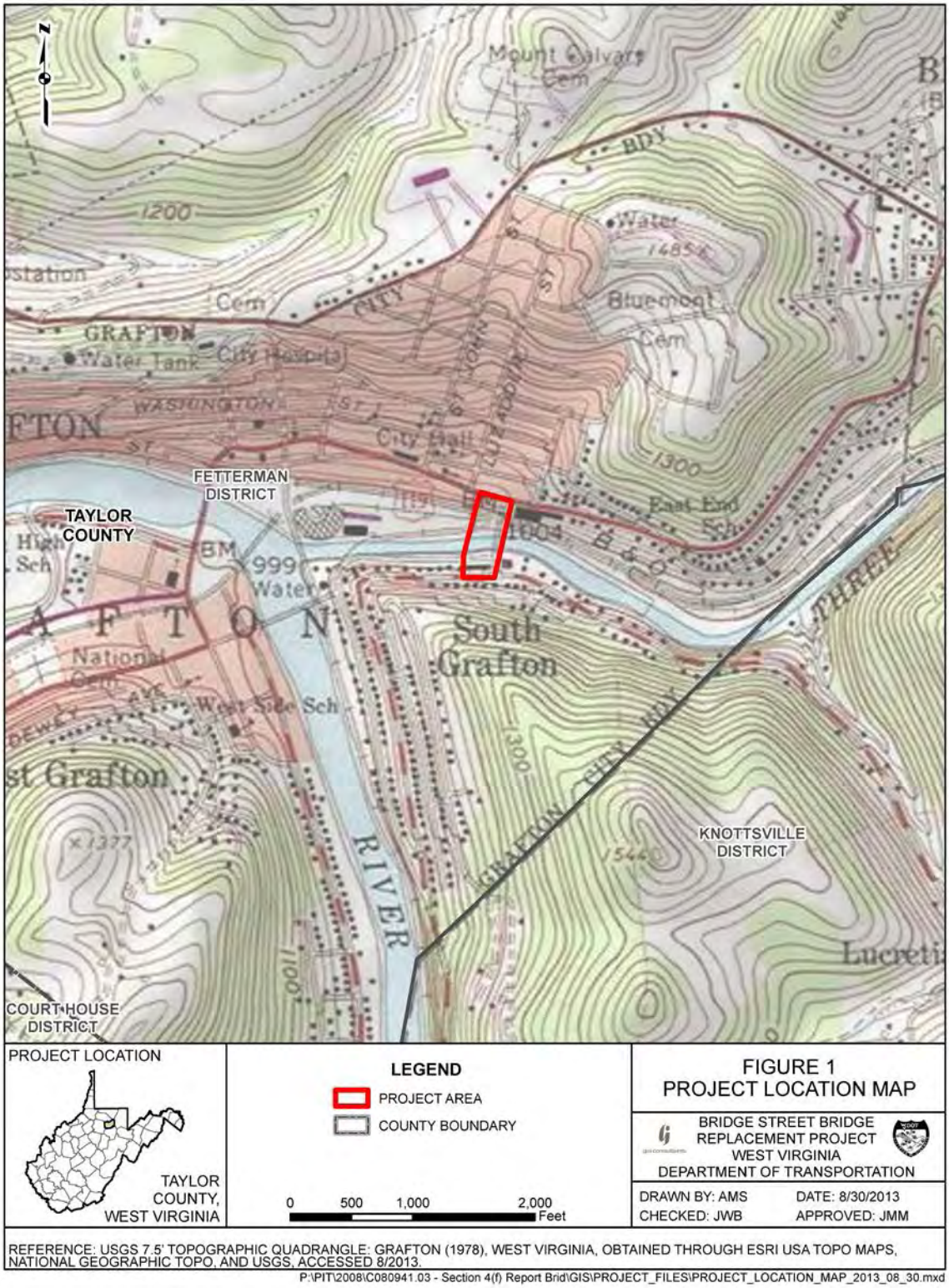
N
Mount Calvary Cem
BDY
1200
Water
1485
Cem
CITY
Blue Moat
Cem
GRAFTON
Water Tank
City Hospital
WASHINGTON ST
City Hall
1300
FETTERMAN DISTRICT
TAYLOR COUNTY
East End Sch
1004
B & O
BM 999
Water
South Grafton
THREE
National Cem
West Side Sch
DEWEY AVE
1300
RIVER
KNOTTSVILLE DISTRICT
1544
COURT HOUSE DISTRICT
PROJECT LOCATION
TAYLOR COUNTY, WEST VIRGINIA
LEGEND
PROJECT AREA
COUNTY BOUNDARY
0 500 1,000 2,000 Feet
FIGURE 1
PROJECT LOCATION MAP
BRIDGE STREET BRIDGE REPLACEMENT PROJECT
WEST VIRGINIA
DEPARTMENT OF TRANSPORTATION
DRAWN BY: AMS
DATE: 8/30/2013
CHECKED: JWB
APPROVED: JMM
REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLE: GRAFTON (1978), WEST VIRGINIA, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO, AND USGS, ACCESSED 8/2013.
P:\PIT\2008\C080941.03 - Section 4(f) Report Brid\GIS\PROJECT_FILES\PROJECT_LOCATION_MAP_2013_08_30.mxd

Figure 2 - APE for the Bridge Street Bridge Replacement Project (Blue Line). White Dotted Line Delineates B&O Rail Line.

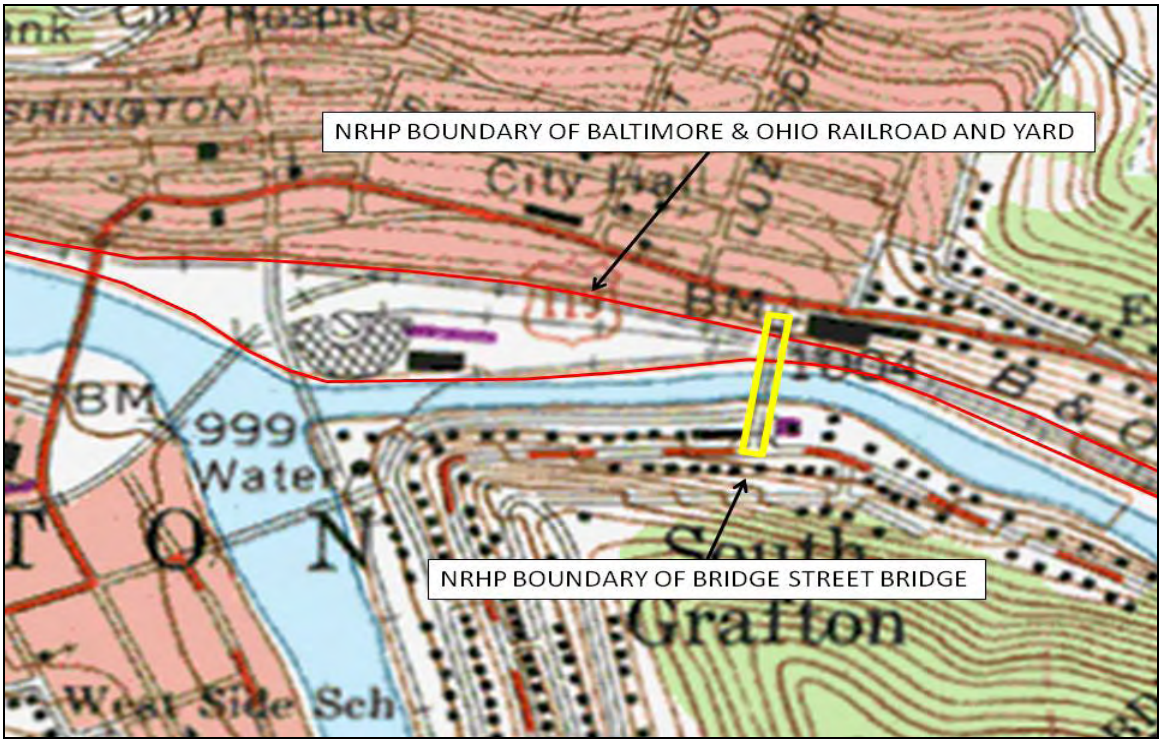

Figure 3 – NRHP Boundary of Bridge Street Bridge and B&O Railroad and Yard.

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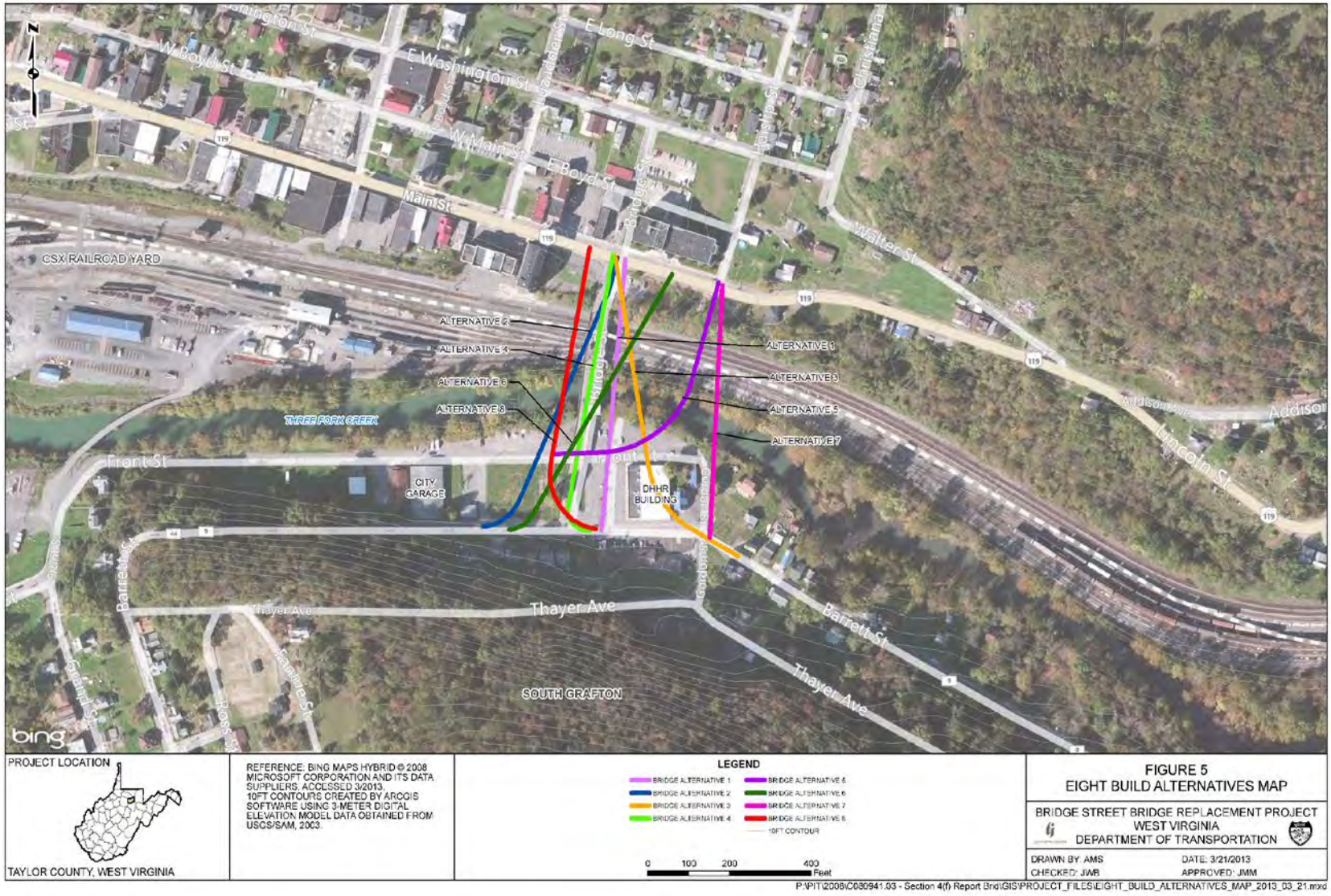

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Figure 6 - Detour Route.

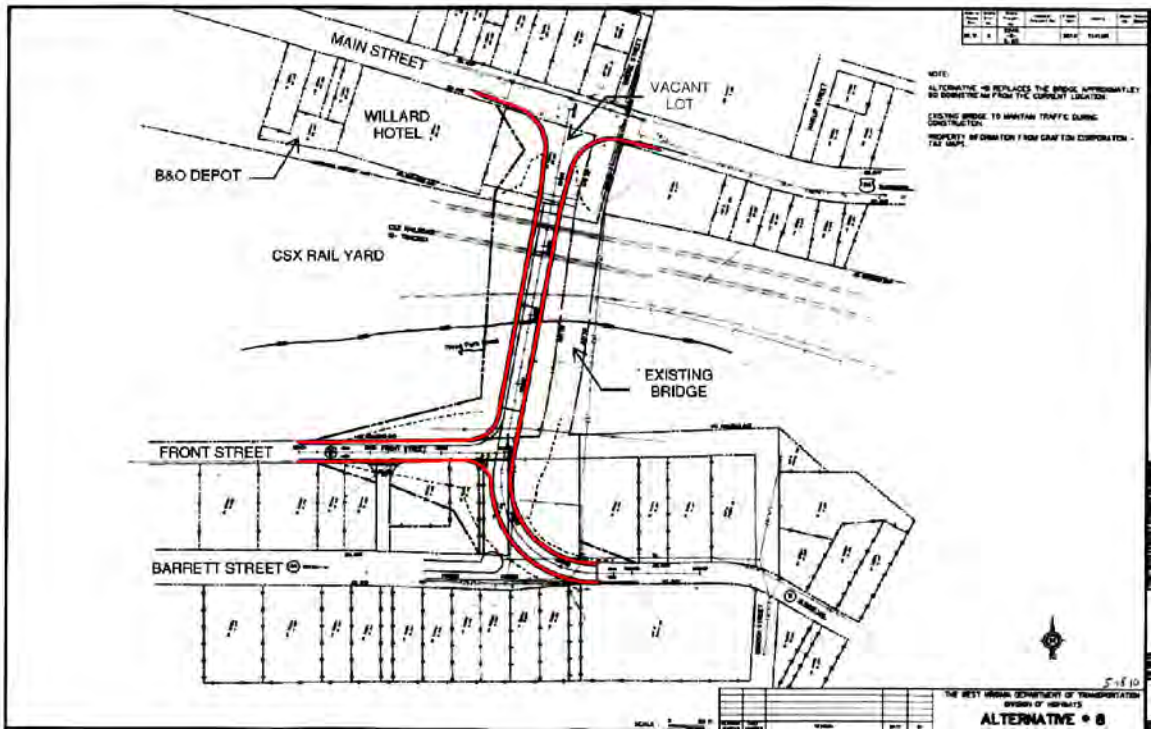

Figure 7 – Preferred Alternative 8.

Photographs

Photograph 1 – Bridge Street Bridge, Facing Northeast from South End.

Photograph 2 – Bridge Street Bridge through Truss Facing North to Main Street.

Photograph 3 – Grafton Downtown Commercial Historic District at North End of Bridge Street Bridge, showing Vacant Lot and Willard Hotel, Facing West.

Photograph 4 – Grafton Downtown Commercial Historic District, Typical Streetscape, Facing Southwest.

Photograph 5 – Grafton Downtown Commercial Historic District, showing Vacant Lot, Willard Hotel, and B&O Station, Facing Northwest from Bridge Street Bridge.

Photograph 6 – B&O Railroad and Yard, Facing West from Bridge Street Bridge.

Tables

Table 2
Grafton Downtown Commercial Historic District, Contributing and Non-Contributing Resources.

Resource Number	Name	Address	NRHP Status
1	Steel Truss Bridge (Bridge Street Bridge)	Three Fork Creek and B&O Railroad	Non-contributing
2	Ashland Gas Station	118 East Main Street	Non-contributing (demolished)
3	Grafton Hotel	110 East Main Street	Contributing
4	Chessie System Railroad Station	40 East Main Street	Contributing
5	Town House	34 East Main Street	Non-contributing
6	Peoples Restaurant	28 East Main Street	Non-contributing
7		24 East Main Street	Contributing
8	Capri Pizza Parlor	18 East Main Street	Non-contributing
9	Manos Game Room	16 East Main Street	Non-contributing
10	Mickey's Discount	12 East Main Street	Non-contributing (demolished)
11	Parts Plus	6 East Main Street	Contributing
12	Masonic Temple	4 East Main Street	Contributing
13	Cohen Building	2-10 West Main Street	Contributing
14	Country Cupboard/Strand Pool Room	12-14 West Main Street	Contributing
15	Malone's Drugs	16 West Main Street	Contributing
16		22-24 West Main Street	Contributing
17	Dollar General Store	26 West Main Street	Contributing
18	Burned Out Building	32 West Main Street	Non-contributing
19	Health Mart	34 West Main Street	Non-contributing
20	Radio Shack	40 West Main Street	Contributing
21	Western Auto	44 West Main Street	Contributing
22	McCrory's (east building)	50 West Main Street	Contributing
23	McCrory's (west building)	54 West Main Street	Contributing
24	Hall's Floor Coverings/Nancy C. Bartleet, Flowers and Gifts	60-62 West Main Street	Contributing
25	Madison Shoes	66 West Main Street	Contributing
26	Grafton Cable Company	76 West Main Street	Contributing
27	First National Bank	128 West Main Street	Non-contributing
28	Taylor County Court House	216 West Main Street	Contributing
29	Court House Annex	216a West Main Street	Contributing
30	Monongahela Power	224 West Main Street	Contributing
31	Union 76 Station	228 West Main Street	Contributing
32		234 West Main Street	Contributing
33	Leonards	238 West Main Street	Contributing
34		242-246 West Main Street	Contributing
35	U.S. Post Office	260 West Main Street	Contributing
36	St. Matthias Episcopal Church	263 West Main Street	Contributing
37		259 West Main Street	Contributing
38		255 West Main Street	Contributing
39		251 West Main Street	Contributing

Resource Number	Name	Address	NRHP Status
40		247-249 West Main Street	Contributing
41		241-243 West Main Street	Contributing
42	Nationwide Insurance Agency	237 West Main Street	Contributing
43		231 West Main Street	Contributing
44		229 West Main Street	Contributing
45	Parrish Agency, Inc.	227 West Main Street	Non-contributing
46	VFW	225 West main Street	Non-contributing
47	Ike's Tire Service	209-215 West Main Street	Non-contributing
48	Haislip Buildings	207 West Main Street	Contributing
49	Former Grafton Bank and Trust Building	201-203 West Main Street	Contributing
50	First Baptist Church	129 West Main Street	Contributing
51		125 West Main Street	Contributing
52	Myers News Stand	123 West Main Street	Contributing
53	Loar Building	119 West Main Street	Contributing
54		115 West Main Street	Contributing
55		107 West Main Street	Contributing
56		101 West Main Street	Contributing
57	J.C. Penney	61 West Main Street	Non-contributing
58	Carolyn Jackson Dance Studio	57-59 West Main Street	Non-contributing
59	Taylor County American Legion	55 West Main Street	Contributing
60		53 West Main Street	Non-contributing
61		51 West Main Street	Contributing
62		45 West Main Street	Non-contributing
63		33-35 West Main Street	Contributing
64	Adlington's Barber Shop	31 West Main Street	Contributing
65	Painter's Jewelry	25 West Main Street	Contributing
66		23 West Main Street	Contributing
67		19-21 West Main Street	Contributing
68	Gavitt and Schatz Real Estate	17 West Main Street	Non-contributing
69	Grafton City Hall	1-15 West Main Street	Non-contributing
70	Andrews Methodist Church	11 East Main Street	Contributing
71	Jan's Beauty Palace	101 East Main Street	Contributing
72	Cue Club	105-107 East Main Street	Contributing
73		109 East Main Street	Contributing
74	BPOE	111 East Main Street	Contributing
75	Knights of Columbus	119-121 East Main Street	Contributing
76	Archdeacon's	2 Latrobe Street	Contributing
77		4-6 Latrobe Street	Contributing
78		12 Latrobe Street	Contributing
79		12 Latrobe Street	Contributing
80		16 Latrobe Street	Contributing
81		18-22 Latrobe Street	Contributing
82	The Chatter Box	24-26 Latrobe Street	Contributing
83		28-32 Latrobe Street	Contributing
84		34-36 Latrobe Street	Contributing
85		108 Latrobe Street	Non-contributing
86		112-120 Latrobe Street	Contributing

Resource Number	Name	Address	NRHP Status
87		154 Latrobe Street	Contributing
88	Grafton Farm and Home Supply	174 Latrobe Street	Contributing
89	Chessie System Freight Station	1 St. Mary's Street	Contributing
90	Musgrove's Wholesale Grocery	204 Latrobe Street	Contributing
91	Steel Truss Foot Bridge	McGraw Alley/B&O Railroad	Contributing

APPENDIX A
Agency and Public Correspondence and Important WVDOH Communiques

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Joe Manchin III Charleston, West Virginia 25305-0430 • (304) 558-3505
Governor

October 26, 2009

Vandalia Heritage Foundation
704 Benoni Avenue
Fairmont, WV 26554

FILE

To Whom it May Concern,

Bridge St. Bridge
S246-9-0.02
BR-0009(143)D
Taylor County

The West Virginia Division of Highways (WVDOH) is proposing a project to replace the Bridge Street Bridge. The bridge is located on County Route 9 and crosses Three Fork Creek, CSX Railroad, and Front Street. A map showing the location is attached.

As part of project development, the WVDOH staff routinely examines site files at the Division of Culture and History and visits the project area to assess the potential impact to cultural resources. We are asking for comments or information that your organization may have about the project.

If you have information or comments that relate to project impacts, you may contact Randy Epperly III of our Environmental Section by writing to the above address, by calling (304)558-9385, or via e-mail at Randy.T.Epperly@wv.gov.

Very truly yours,

Gregory L. Bailey, P.E., Director
Engineering Division

GLB:re
Enclosures
cc: DDE(RE)

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

October 28, 2009

Tom Dadisman, President
Taylor County Historical and Genealogical Society
P.O. Box 522
Grafton, WV 26354

Dear Mr. Dadisman:

BR-0009(143)D
S246-9-0.02
Bridge St. Bridge
Taylor County (Grafton)

The West Virginia Division of Highways (WVDOH) is proposing a project to replace the Bridge Street Bridge in Grafton on County Route 9 crossing Three Fork Creek, CSX Railroad, and Front Street. A map showing the location is attached.

As part of project development, the WVDOH staff routinely examines site files at the Division of Culture and History and visits the project area to assesst he potential impact to cultural resources. We are asking for comments or information that your orginazataion may have about the project.

If you have information or comments that relate to project impacts, you may contact Randy Epperly III of our Environmental Section by writing to the above address, by calling (304) 558-9385, or via email at Randy.T.Epperly@wv.gov.

Very truly yours,

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L. Hark

Ben L. Hark
Environmental Section Head

GLB:Hw

Enclosures

Cc: DDE(RE)

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Joe Manchin III Charleston, West Virginia 25305-0430 • (304) 558-3505
Governor

December 23, 2009

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

Dear Ms. Pierce:

Bridge Street Bridge Replacement
State Project: S246-9-0.02
Federal Project: BR-0009(143)D
Taylor County

The proposed project will replace the Bridge Street Bridge located in Grafton, Taylor County. The purpose of this letter report is to determine National Register eligibility for this structure. The bridge is located in the Grafton Downtown Commercial Historic District listed as contributing structure #1, however we question this designation. After the bridge's question is decided, a Cultural Resources Management Report will be submitted to address any effects to the district.

The bridge carries Taylor County Route 9 over Three Fork Creek, CSX Railroad, and Front Street. The existing bridge was built in 1951 to replace a 7 span through and pony truss, built around 1900, in the same location. The bridge plate located on span 1 is dated 1950 and the date of construction is 1951. A possible reason for a different year shown on the bridge plate is that the plate recognizes the year that the bridge was designed. The current bridge was built by Agnew Construction Company using plans designed by Frank McEnteer. Shop drawings were prepared by Pittsburgh-Des Moines Construction Company. The current bridge contains 5 spans for a length of 445'2". Span 1 is a 120'3" long steel through truss and span 2 is a 119'3" long steel deck truss. Span 3 (60 feet 2 inches in length), span 4 (78 feet in length), and span 5 (60 feet in length) are steel W-beams. The abutments are reinforced concrete, but the bottom portion of abutment 1 (north end of bridge) was built around 1900 and is not reinforced. Supporting the bridge

are 2 piers and 2 bents. Pier 1 is cut stone with a concrete cap and pier 2 is concrete with a concrete cap added in 1951. Both bents are concrete with concrete caps. Concrete sidewalks and parapets are located on both sides of the bridge. The deck is concrete with an asphalt wearing surface. The bridge is posted for 16 tons and has a height restriction of 14 feet, which should be 17 feet. The bridge also contains overhead street lights. The structure was renovated in 1995 (WVDOH Bridge inspection Report, 2007).

The Grafton Downtown Commercial Historic District was surveyed in 1983 by Preservation Associates, Inc. from Sharpsburg, Maryland. The period of significance is 1890-1920. The Bridge Street Bridge was included in the district as the eastern boundary. The nomination form states that the bridge is a steel truss built around 1920. The current bridge was built in 1951 replacing the 1900 bridge. Part of abutment 1 and the piers are from the original bridge.

Historic Background

Taylor County was created in 1844 and named for Virginia Senator John Taylor, but the first permanent European settlers were Thomas Merrifield and John Booth in the 1760s. Taylor County is the location of the only national cemetery in West Virginia. Mother's Day was also started in Grafton by Anna Jarvis (WV Blue Book, 2002). Pruntytown, the oldest town in the county, was the original county seat before it was relocated to Grafton.

The city of Grafton was first surveyed by George Washington, who was hired by landowner James Current (Dilger). The Baltimore and Ohio Railroad constructed the first trans-Appalachian railroad and opened in Grafton in 1853. The town of Grafton boomed as a railroad town and was incorporated March 15, 1856. Although the origin of the town's name is disputed, it is thought that Grafton was named for an engineer with the Baltimore and Ohio Railroad, John Grafton (City of Grafton).

Grafton and the B&O Railroad were important during the Civil War for its use in transporting soldiers and supplies. The Union Army was in control of Grafton for the entire war and defeated the Confederate Army during a skirmish in 1861 in present day Grafton. During the skirmish Thornsberry Bailey Brown was the first soldier killed in the Civil War. He is buried in the National Cemetery near Grafton (City of Grafton).

In 1872 Grafton attempted to become the state capitol of West Virginia but its resolutions were not adopted by the Constitutional Convention in Charleston (Dilger).

Many of the buildings presently standing in Grafton were constructed between 1890 and 1930. These were the town's most prosperous years. John T. McGraw, a banker, built many of the buildings and the streetcar system. The town continued to grow along with the railroad and several manufacturing plants were located here. In the 1950s the plants shut down and in the 1980s the railroad relocated most of its jobs to Jacksonville, Florida. The city is currently restoring the Historic District and trying to entice businesses to open (City of Grafton).

The Grafton Downtown Commercial Historic District is located in the project area. The buildings that comprise the district were mostly built between 1890 and 1920. The district boundary begins with the Bridge Street Bridge. Next to the Bridge Street Bridge are the Willard Hotel and the B&O Railroad Station, both built in 1911. Both buildings are currently being restored. The Willard Hotel is named for former B&O President Daniel Willard. It is the tallest building in Grafton. The Taylor County Courthouse and the Andrews Methodist Church are among the buildings included in the Historic District. Andrews Methodist Church was built in 1873 and is the location of the International Mother's Day Shrine (Grafton Historic District). Mother's Day was started by Anna Jarvis in Grafton and was signed into Congress by President Woodrow Wilson on May 9, 1914 (Sanders).

Agnew Construction Company was located in Ronceverte, West Virginia and was in business from the 1940s to the 1960s. They built several bridges designed by Frank McEnteer including Bridge Street Bridge (KCI). Frank McEnteer was one of the premier bridge builders in the 20th Century in West Virginia. He was the president of the Concrete Steel Bridge Company in Clarksburg from 1912 to 1931. The company built over 1,000 bridges in West Virginia (KCI). McEnteer went on to serve as district engineer with the West Virginia State Road Commission between 1932 and 1938, and construction engineer for the northern district from 1938-1940. In 1942, as a project manager with Johnson, Piper, and Drake, he supervised the construction of an army base near Tel Aviv. In April 1943, he was named chief engineer of the construction division of the U.S. Armed Forces in the Middle East and supervised the construction of airports throughout the region. Following World War II, McEnteer returned to Clarksburg and set up practice as a consulting structural engineer specializing in the design of highway bridges and industrial buildings. McEnteer headed his firm until his death in 1951 (Kemp 133-134). McEnteer not only was instrumental in the development of the transportation infrastructure in West Virginia, but also went on to contribute to national and international transportation development.

Eligibility Criteria

The current Bridge Street Bridge was built to replace the original bridge in this location. The current bridge is just over 50 years old and is not within the period of significance for the historic district. Therefore this bridge is not eligible for the National Register of Historic Places under Criterion A.

The Bridge Street Bridge is not associated with the significance of an individual or an individual's historic contribution. The bridge is not eligible under Criterion B.

The Bridge Street Bridge is a 5 span structure. Span 1 is a through truss, span 2 is a deck truss, and spans 3, 4, and 5 are W-beams. Maintenance work to repair the cracks and to support beams, expansion plates, and stringers has been performed several times since 1982. In 1995 a renovation was done on the project including strengthening truss members, replacing parts of the deck, replacing expansion joints, downspouts, and floorbeams, and removing a stairwell from the downstream end of pier 1. This bridge is a combination of 3 bridge types but is not a good representation of any of the three.

Agnew Construction Company was located in Ronceverte, West Virginia and built this bridge based on designs by Frank McEnteer. Agnew is not a master builder and was not in business very long. McEnteer designed many bridges in West Virginia and was known for his work with reinforce concrete structures. Bridge Street was a later design and a steel structure. Based on the amount of alterations to the bridge and a lack of distinguishing features, this bridge is not eligible for the National Register under Criterion C.

The bridge is also not eligible under Criterion D.

A letter was sent October 28, 2009 to the Taylor County Historic Society but no response has been received at the time of this letter. A letter was also sent to Vandalia Heritage Foundation dated October 26, 2009. No response has been received. We are in the process of scheduling a public meeting for sometime in early 2010.

A Historic Property Inventory Form, maps, bridge inspection report, and photographs have been attached.

Your concurrence is requested. Should you have any questions, please contact Randy Epperly III of our Environmental Section at 304-558-9385.

Very truly yours,

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L. H.

Ben L. Hark
Environmental Section Head

GLB:Hw

Enclosure

bcc: DDE(RE)

References

City of Grafton. "History of Grafton." www.graftonwv.org Retrieved 3 December 2009.

Dilger, Dr. Robert Jay. Taylor County History. www.polsci.wvu.edu/wv/Taylor/tayhistory.html Retrieved 3 December 2009.

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Kemp, Emory. Survey of Historic Bridges in West Virginia. 1984. MS, WVDOH

Sanders, Barbara. "Origins of Mother's Day." Barbara's Entourage. 13 April 2004. www.entourages.com/barbs/motherorigin.htm Retrieved 10 December 2009.

WV Blue Book-2002. Darrell E. Holmes, Editor. Chapman Printing, Charleston, WV. 2006.

ATTACHMENT

Project Maps

(NOT ATTACHED)

WEST VIRGINIA
Division of Culture and History

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

February 4, 2010

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement 5316-9-0.03
FR#: 10-374-TA

Dear Mr Bailey:

It is our understanding that the proposed project will involve demolition and replacement of the existing Bridge Street Bridge in Grafton.

The Bridge Street Bridge is currently listed as a contributing structure to the Grafton Historic District. It is our understanding that you are questioning this designation. After reviewing the National Register nomination and researching the bridge, we agree with your findings and feel the bridge should not have been listed as a contributing structure to the Grafton Historic District.

However, it is our opinion that the bridge is considered eligible for listing in the National Register of Historic Places as an individual structure. It now meets the fifty year requirement, retains integrity, and according to the draft of the West Virginia Statewide Bridge Survey, is the only existing steel through truss bridge in Taylor County; therefore, it is our opinion that it is eligible under Criterion C.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Aubrey Von Lindern, Historian in the Historic Preservation Office at (304) 558-0240.*

Sincerely,

Susan M. Pierce

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/ACV

TBM
5-18

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Joe Manchin III
Governor

May 18, 2010

MEMORANDUM

TO: DD

FROM: DDC CJB

SUBJECT: State Project S246-9-0.03 00
Federal Project BR-0009(143)E
Bridge Street Bridge Replacement Study
Taylor County

The Design Study Unit of the Initial Design Section (DDC) has completed a review of the Draft Study Report by Planning and Research Division (RP) for the Bridge Street Bridge Replacement, dated June 2004, and recommends Alternative 8 as the preferred alternative for construction. A copy of the 2004 Draft Study Report and evaluation documents are attached for your reference. If you have any questions, please contact Steve Boggs (304-558-9662) or Feras Tolaymat (304-558-9713), Leader of the Design Study Unit.

CJB:BJ

Attachments

cc: HP, DDE, DDC(SB)

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

July 22, 2010

Vandalia Heritage Foundation
704 Benoni Avenue
Fairmont, West Virginia 26554

Dear Vandalia Heritage Foundation:

The West Virginia Department of Transportation, Division of Highways is in the process of studying the future replacement of a bridge in your area. The project will consist of replacing the existing Bridge Street Bridge, which crosses Three Fork Creek, CSX railroad, and Front Street in Grafton, Taylor County. The existing bridge is located near the western end of Taylor County Route (CR) 9, approximately 0.02 miles east (south by direction) of the intersection of US Route 119.

The West Virginia Division of Highways will be conducting an informational workshop public meeting on Thursday, August 5, 2010 at the Taylor County Public Library Assembly Room from 4 to 7 pm. This meeting will afford participants an opportunity to ask questions and state their views and opinions on the bridge replacement project.

Written comments may also be sent to Gregory L. Bailey, P.E., Director, Engineering Division, West Virginia Division of Highways, 1900 Kanawha Boulevard East, Building 5, Room A-317, Charleston, West Virginia 25305-0430 on or before September 7, 2010. Comments may also be made online at www.transportation.wv.gov.

Should you require additional information, feel free to contact Tracie Moles of our Environmental Section at (304) 558-9731.

Very truly yours

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L. Hark

Ben L. Hark
Environmental Section Head

GLB: Hw
Attachments
Bcc: DDE(TBM,RE)

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

July 22, 2010

Mr. Tom Dadisman, President
Taylor County Historical and Genealogical Society
P.O. Box 522
Grafton, West Virginia 26354

Dear Mr. Dadisman:

The West Virginia Department of Transportation, Division of Highways is in the process of studying the future replacement of Bridge Street Bridge in Taylor County, West Virginia. The project will consist of replacing the existing bridge, which crosses Three Fork Creek, CSX railroad, and Front Street in Grafton. The existing bridge is located near the western end of Taylor County Route (CR) 9, approximately 0.02 miles east (south by direction) of the intersection of US Route 119.

The West Virginia Division of Highways will be conducting an informational workshop public meeting on Thursday, August 5, 2010 at the Taylor County Public Library Assembly Room from 4 to 7 pm. This meeting will afford participants an opportunity to ask questions and state their views and opinions on the bridge replacement project.

Written comments may also be sent to Gregory L. Bailey, P.E., Director, Engineering Division, West Virginia Division of Highways, 1900 Kanawha Boulevard East, Building 5, Room A-317, Charleston, West Virginia 25305-0430 on or before September 7, 2010. Comments may also be submitted online at www.transportation.wv.gov.

Should you require additional information, feel free to contact Tracie Moles of our Environmental Section at (304) 558-9731.

Very truly yours

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L Hark

Ben L. Hark
Environmental Section Head

GLB: Hw
Attachments
Bcc: DDE (TBM,RE)

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

July 22, 2010

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

Dear Ms. Pierce:

The West Virginia Department of Transportation, Division of Highways is in the process of studying the future replacement of Bridge Street Bridge in Taylor County, West Virginia. The project will consist of replacing the existing bridge, which crosses Three Fork Creek, CSX railroad, and Front Street in Grafton. The existing bridge is located near the western end of Taylor County Route (CR) 9, approximately 0.02 miles east (south by direction) of the intersection of US Route 119.

The West Virginia Division of Highways will be conducting an informational workshop public meeting on Thursday, August 5, 2010 at the Taylor County Public Library Assembly Room from 4 to 7 pm. This meeting will afford participants an opportunity to ask questions and state their views and opinions on the bridge replacement project.

Written comments may also be sent to Gregory L. Bailey, P.E., Director, Engineering Division, West Virginia Division of Highways, 1900 Kanawha Boulevard East, Building 5, Room A-317, Charleston, West Virginia 25305-0430 on or before September 7, 2010. Comments may also be submitted online at www.transportation.wv.gov.

Should you require additional information, feel free to contact Tracie Moles of our Environmental Section at (304) 558-9731.

Very truly yours

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L Hark

Ben L. Hark
Environmental Section Head

GLB: Hw
Attachments
Bcc: DDE (TBM,RE)

Workshop Public Meeting

Taylor County Public Library Assembly Room

200 Beech Street, Grafton, West Virginia 26354

WV Department of Transportation
Division of Highways

State Project S246-9-0.03
Federal Project BR-0009(143)E

Bridge Street Bridge Replacement
Grafton, Taylor County, West Virginia
August 5, 2010

Comments: (no title)

_Title	
FirstName	Jenny
LastName	Brewer
Organization	owner of South Side Laundry Mat
Email	whiteday1@netscape.com
MailingAddress	R.R.#3, Box 161
City	Grafton,
State	WV
ZipCode	26354
Comments	I own property on two (2) of the alternatives for the Bridge Street Bridge in Grafton, WV. My chocles for the replacement bridge are, Alternative #8, Alternavtive #6, Alternavtive #2 and Alternative #4. I am against Alternative #7 and Alternative #3. The No-Build Alternative should not be considered, because a new bridge is needed for emergencies and travel to and from Tygart Lake State Park.
CommentType	Online

Created at 8/22/2010 7:47 AM by
Last modified at 8/22/2010 7:47 AM by

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

August 23, 2010

MEMORANDUM

TO: File

FROM: DDE BH

SUBJECT: Bridge Street Bridge
State Project S246-9-0.03
Federal Project BR-0009(143)E
Taylor County
Public Involvement

On August 5, 2010, the Environmental Engineering Division held a public meeting at the Taylor County Public Library to afford members of the public an opportunity to ask questions and state their views and opinions on the replacement of the Bridge Street Bridge in Grafton, West Virginia. The meeting was advertised in the local newspaper thirty days prior to the meeting as well as the day before the meeting. This advertisement was also sent to the delegates and representatives for that area as well as the Post Office, emergency agencies, and local government offices. Individual invitations were sent to CSX, Taylor County Historical Society, State Historic Preservation Office, and the Vandalia Heritage Foundation. Notice of the public meeting and project handout was and is currently available for review and comment online at www.transportation.wv.gov.

Only five members of the community attended the meeting. In complying with Title VI of the Civil Rights Act of 1964 that protects individuals and groups from discrimination on the basis of their race, color, and national origin in programs and activities that receive Federal financial assistance, Mrs. Tracie Moles of our staff visited the area on August 12, 2010 to pass out project handouts. Places given this information included the Taylor County Development Office, Post Office, Court House Annex, Circuit Clerk's Office, Veterans of Foreign Wars, Department of Health and Human Resources, Taylor County Public Library, Salvation Army, Foodland, Tygart Lake State Park Visitor Information Center, Elizabeth Cather Towers, and the Housing Authority of the City of Grafton. The City Manager of Grafton was also contacted to insure no groups or individuals were overlooked. He suggested a local restaurant, Jerry's Restaurant, and stated that if handouts were sent to him, that he would personally take them to that location. Those handouts have since been mailed so that those wishing to make comments can do so before the thirty day deadline of September 7, 2010.

BH:w

bcc: DDE (TBM, RE), DDR (CL), AH (Drema Smith)

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

September 8, 2010

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

Dear Ms. Pierce:

State Project: S246-9-0.03
Federal Project: BR-000-143)E
Bridge Street Bridge Replacement
Grafton
Taylor County

Attached for your review and comment is the Cultural Resources Management Report for the subject project.

Archaeology for this project will be submitted in a separate report.

Should you have any questions, please do not hesitate to contact Randy Epperly III of our Environmental Section at (304) 558-9385.

Very truly yours,

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L Hark

Ben L. Hark
Environmental Section Head

GLB:Hw

Enclosures

cc: DDE(RE)

WEST VIRGINIA
Division of Culture and History

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Randall Reid-Smith, Commissioner
Phone 304.558.0220 • www.wvculture.org
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EEO/AA Employer

September 28, 2010

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement
FR#: 10-374-TA-2

Dear Mr Bailey:

We have reviewed 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.

Based on submitted information, plans call for the replacement of the Bridge Street Bridge in Grafton. It is our understanding that the preferred alternative involves demolition of the existing bridge and replacing it with a bridge 60 feet downstream.

We are unable to complete our review based on the information provided. It is your opinion that the proposed bridge replacement will constitute an adverse effect on the Bridge Street Bridge, which is eligible for inclusion in the National Register of Historic Places. We concur with this assessment. It is also your opinion that the buildings along Barrett Street, which are located in the Area of Potential Effect, are not eligible for inclusion in the National Register of Historic Places. We cannot concur with this assessment at this time. It is our opinion that additional information regarding the history of this South Grafton Neighborhood is needed in order to assess the eligibility of these building as part of a potential district. It is also your opinion that the proposed bridge replacement will have no adverse effect on the Grafton Commercial Historic District. We cannot concur with this assessment at this time.

In order for us to complete our review we ask that additional information be provided on what type of bridge will be built to replace the existing bridge. There has been a metal truss bridge located at this crossing since 1900, therefore, replacing it with, for example, a concrete slab

bridge, would be changing the setting of the Grafton Commercial District and changing the setting of any potential district that may exist in the South Grafton neighborhood. We will provide further comment upon receipt of the requested information.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Aubrey Von Lindern, Historian in the Historic Preservation Office at (304) 558-0240.*

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/ACV

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Joe Manchin III
Governor

October 18, 2010

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

Dear Ms. Pierce:

State Project: S246-9-0.03
Federal Project: BR-000-143)E
FR#: 10-374-TA-2
Bridge Street Bridge Replacement
Grafton
Taylor County

The West Virginia Division of Highways (WVDOH) received your letter of September 28, 2010 regarding the project referenced above.

Your letter asked for more information regarding the buildings on Barrett Street and the South Grafton area. We feel that these buildings are not part of the South Grafton neighborhood. The area along Front Street and Barrett Street where the buildings are located consists mostly of modern businesses. There are few houses and none are of the type or age of the inventoried properties. The South Grafton area that could possibly be considered as a historic district is located along Tygart Valley River. This area is on the other side of the mountain and out of view from the inventoried properties. These five buildings on Barrett Street are isolated from the South Grafton neighborhood and are not eligible for the National Register.

The Bridge Street Bridge is not a contributing resource within the district. WVDOH maintains the opinion that the project will not adversely effect the Grafton Commercial District. The construction of a new bridge will maintain the current viewshed of a bridge.

Due to the terrain, the Grafton Commercial Historic District, and financial concerns; the new bridge type has design limitations and affects the type of bridge that can be constructed. The new bridge will also need to be raised to meet the minimum clearance height over the railroad. The current bridge does not meet that standard. WVDOH In-House Bridge Design Unit Leader Bob Blosser advised that multiple temporary piers

would be needed in order to build a truss bridge. The railroad will not permit these piers to be placed along the tracks, even temporarily. Blosser also stated: "Recent projects have shown that the most economical bridge type for this size of bridge is a conventional girder bridge. Truss options on these projects have been estimated to increase project costs as much as fifty percent over the girder option."

Should you have any questions, please do not hesitate to contact Randy Epperly III of our Environmental Section at (304) 558-9385.

Very truly yours,

Gregory L. Bailey, P.E.
Director
Engineering Division

By:

Ben L. Hark
Environmental Section Head

GLB:Hw

Enclosures

cc: DDE(RE)

WEST VIRGINIA
Division of Culture and History

The Culture Center
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Randall Reid-Smith, Commissioner
Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562

December 14, 2010

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement
FR#: 10-374-TA-3

Dear Mr Bailey:

We have reviewed 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.

We are still unable to complete our review based on the information submitted. It is our opinion that the demolition of the Bridge Street Bridge would constitute an adverse effect on several resources. The Bridge Street Bridge is not a contributing resource to the Grafton Historic District; however, it is our opinion that it is eligible on its own for listing in the National Register. It is a locally significant bridge eligible under Criterion C. The demolition of the bridge would be considered a direct effect on an historic resource.

Secondly, it is our opinion that the demolition of the Bridge would have an adverse effect on the Grafton Historic District. Based on research submitted by your office, it appears that a truss bridge has been in this location since the early 20th century. Therefore, removing this truss bridge and replacing it with a "conventional girder bridge" would effect the setting of the historic district. It is also our opinion that its demolition would adversely effect the setting of the CSX Railroad Yard, which is considered eligible for inclusion in the National Register.

Additionally, it is our opinion that the proposed demolition may also have an effect on potentially eligible buildings along Barrett and Front Streets. These resources may be contributing to a district, whether it is or is not called "South Grafton" is of no consequence. Please see the enclosed USGS Topographic map where we have outlined the potential district. We ask that you evaluate the buildings in the view-shed of the bridge as potential contributing resources to this district. We will comment further upon receipt of the requested information.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Aubrey Von Lindern, Historian in the Historic Preservation Office at (304) 558-0240.*

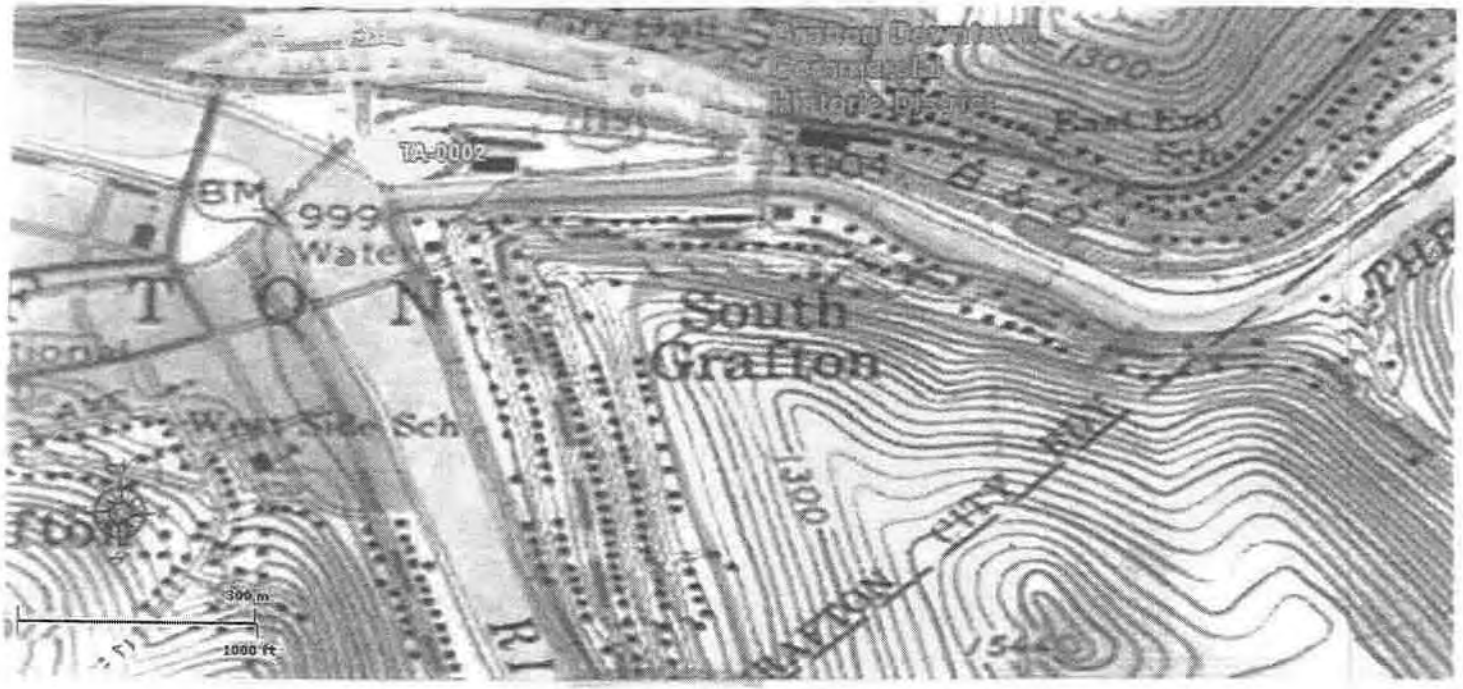
Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/ACV

enclosure

WV State Historic Preservation Online Map



National Register ◉Point ▭Area Archeological Survey ◆Point ▭Area

Architectural △Point ▭Area Archeological Site ■Point ▭Area

N

Map created by WV GIS Technical Center

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

March 4, 2011

Mr. Patrick DesMarais
AECOM
1700 Market Street, Suite 1600
Philadelphia, Pennsylvania 19103

Dear Mr. DesMarais:

State Project: S346-9-0.03
Federal Project: BR-0009(143)E
Bridge Street Bridge Replacement
Taylor County

The West Virginia Division of Highways (WVDOH) is proposing a project to replace the Bridge Street Bridge in Grafton located on County Route 9 which crosses Three Fork Creek, CSX Railroad, and Front Street. A map showing the location has been attached. Also attached is the preferred alternative, although final design has not been completed.

The bridge and the rail yard are potentially eligible for the National Register of Historic Places. This letter is requests comments concerning the project's impacts to the Grafton Rail Yard.

If you have comments that relate to historical impacts, please do not hesitate to contact Randy Epperly III of our Environmental Section by calling (304) 558-9385, or via e-mail at Randy.T.Epperly@WV.Gov.

Very truly yours,

Gregory L. Bailey, P.E.
Director
Engineering Division

By: G. L. Hark

Ben L. Hark
Environmental Section Head

GLB:Hw
Enclosures
cc: DDE(RE)

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

April 4, 2011

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: S346-9-0.03
Federal Project: BR-0009(143)E
FR#10-374-TA-3
Bridge Street Bridge Replacement
Taylor County

The West Virginia Division of Highways (WVDOH) received your letter of December 14, 2010 concerning effects to eligible resources.

Your letter also stated that the bridge demolition would have an effect on the buildings along Barrett Street and Front Street and that they could be contributing resources to a potential historic district located in South Grafton. The 5 buildings that were inventoried along Barrett and Front Streets have no historic integrity and are in state of disrepair. Due to the deterioration, we maintain our recommendation that these houses are not eligible for the National Register.

In our agency status meeting on February 16, 2011 you mentioned a study on the South Grafton area. To date, we have not seen any evidence of this study. Because the mountain between the inventoried buildings separates them from the rest of South Grafton, it is our opinion that they should not be included in a potential district. The topo map that was included in your letter shows a suggested boundary for South Grafton. This topo map appears to be outdated and the majority of the buildings shown along Three Fork Creek are no longer present. The structures surrounding the 5 inventoried buildings are modern and do not fit in the same time frame as the inventoried structures.

We feel that our responses to past letters from your office dated February 4, 2010 and September 28, 2010 have sufficiently answered the questions. However we once again express the opinion that any potential South Grafton Historic District is not within the viewshed or APE of the project. Therefore the South Grafton area will not be impacted by this project. The demolition of the Bridge Street Bridge will not impact the 5 inventoried buildings or any potential historic districts.

The south Grafton resources is the last eligibility question for all potential historic resources for the project. The next step for the project is to address effects and mitigation for historic resources. Archaeology for this project will be provided in a separate report.

A girder option appears to be the most desirable and economic bridge design. A truss would require temporary supports in the rail yard, which would require the temporary closure of some of the rail lines. Once a bridge type is selected, plans will be provided to your office for review.

A letter dated March 1, 2011 was sent to AECOM, a consultant for CSX Railroad, to provide CSX a opportunity to comment on the project's impacts to the rail yard.

Should you have any questions, please do not hesitate to contact Randy Epperly III of our Environmental Section at (304) 558-9385.

Very truly yours,

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L Hark

Ben L. Hark
Environmental Section Head

GLB:Hw

Enclosures

cc: DDE(RE)

WEST VIRGINIA
Division of Culture and History

The Culture Center
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Randall Reid-Smith, Commissioner
Phone 304.558.0220 • www.wvculture.org
Fax 304.558.2779 • TDD 304.558.3562
An EEO/AA Employer

May 3, 2011

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement
FR#: 10-374-TA-4

Dear Mr Bailey:

We have reviewed 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.

After a site visit to Grafton to assess the eligibility of a *potential* South Grafton Historic District, we now concur with your findings that this area has no integrity and is not eligible for inclusion in the National Register of Historic Places. No further assessment is necessary regarding this neighborhood.

Based on information submitted, it is our understanding that the Grafton Historic District, the bridge itself, which is considered eligible, and one potential historic district, the CSX railyard, are all located within the project's Area of Potential Effect(APE). We request that an assessment of effect be completed on each of these resources prior to moving forward with any mitigation efforts.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Aubrey Von Lindern, Historian in the Historic Preservation Office at (304) 558-0240.*

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/ACV

Epperly, Randy T

From: Epperly, Randy T
Sent: Wednesday, May 11, 2011 10:34 AM
To: 'CityofGrafton@hotmail.com'
Subject: Bridge Street Bridge

Mr. Stead,

I talked with you at the Bridge Street Bridge public workshop last August. I remember you were in favor of the project. We are still trying to receive clearance from WV State Historic Preservation Office to proceed with this project. We encourage you to submit any questions, comments, or support regarding the effects of this project on the city and the Grafton Commercial Historic District. You can contact me by phone but written comments are preferred. Thank you.

Randy Epperly III
WVDOH
Engineering Division
Environmental Section
304-558-9385

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

May 11, 2011

Mr. Tom Dadisman, President
Taylor County Historical and Genealogical Society
P.O. Box 522
Grafton, West Virginia 26354

Dear Mr. Dadisman:

State Project: S346-9-0.03
Federal Project: BR-0009(143)E
Bridge Street Bridge Replacement
Taylor County

The West Virginia Division of Highways (WVDOH) is proposing a project to replace the Bridge Street Bridge in Grafton. The bridge is located on County Route 9 and crosses Three Fork Creek, CSX Railroad, and Front Street. This letter is a follow up to the letter sent to you on October 27, 2009. A public workshop was also held on August 5, 2010 at the Grafton Public Library for the project. The preferred alternative has been attached to this letter.

The bridge and the rail yard are eligible for the National Register of Historic Places. This letter is soliciting comments about the project's effects on the rail yard and the Grafton Commercial Historical District. We encourage you to submit any questions, comments, or support regarding this project by June 13, 2011.

If you have comments that relate to historical impacts, please do not hesitate to contact Randy Epperly III of our Environmental Section by calling (304) 558-9385, or via e-mail at Randy.T.Epperly@WV.Gov.

Very truly yours,

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L Hark

Ben L. Hark
Environmental Section Head

GLB:Hw

Enclosures

cc: DDE(RE)

Epperly, Randy T

From: Epperly, Randy T
Sent: Wednesday, May 11, 2011 9:47 AM
To: 'info@pawv.org'
Subject: Bridge Street Bridge, Grafton
Attachments: Preferred.pdf; Tayl_1.pdf

The West Virginia Division of Highways (WVDOH) is proposing a project to replace the Bridge Street Bridge. The bridge is located on County Route 9 and crosses Three Fork Creek, CSX Railroad, and Front Street. Attached is the preferred alternative and map showing the location.

As part of project development, the WVDOH staff routinely examines site files at the Division of Culture and History and visits the project area to assess the potential impact to cultural resources. We are asking for comments or information that your organization may have about the project.

If you have information or comments that relate to project impacts, you may contact Randy Epperly III of our Environmental Section by writing to the above address, by calling (304)558-9385, or via e-mail at Randy.T.Epperly@wv.gov.

Randy Epperly III
WVDOH
Engineering Division
Environmental Section
304-558-9385

Epperly, Randy T

From: Martha Ballman [mballman@pawv.org]
Sent: Monday, May 16, 2011 12:01 PM
To: Epperly, Randy T
Cc: hbattle1@suddenlink.net; 'Mike Gioulis'; 'Lynn Stasick'; 'Paul Lindquest'; bobwinecellar@yahoo.com; 'Logan Smith'
Subject: Bridge St bridge in Grafton

Randy Epperly,

This reply is in reference to West Virginia Division of Highways proposal project to replace the Bridge Street Bridge on County Route 9 that crosses Three Fork Creek, CSX Railroad, and Front Street in Grafton.

Preservation Alliance of West Virginia would like to comment as requested in your May 11 email. We were not able to discern a lot form the maps provided and request more information to be provided. Electronic format is best. A conference call is also a very good way to have this discussion since our members are all over the state.

From past visits, Google maps and a recent drive-through the area, we have the following comments:

- The bridge is a two lane, standard through truss metal bridge. Significant if it were within the district.
- The impact on the district is to be considered. The first building to the west of the intersection is the Willard Hotel, and adjacent to that is the highly significant depot. Vandalia has worked on the depot a lot.
- Right now there is an empty lot on the corner, but that looks like it will be taken as part of this project, and the approach will be close to the hotel, so the approach may visually impact the hotel. I'm guessing that the curved double line represents a sidewalk, not a parapet wall, so the impact may not be as visually intrusive as can be, on the hotel.
- To the northeast of the intersection is a modern high-rise housing project, non-significant and another vacant lot to the southeast of the intersection. The historic district boundary line runs through the street at the intersection, so the intersection, but not the bridge is within the district.
- An interesting feature of the bridge architecturally is the concrete balustrade with the arched panels.
- Was an analysis done to see if the bridge could be rehabbed? Is it obsolete because of turning radii and access? or because of deterioration?
- Would the money they are spending on the replacement be enough to rehab it if it is only being replaced because of deterioration?
- Can it be constructed somewhere else and this one retained?
- It would be good if the new bridge had a balustrade like this one, they did it in Alderson.
- The surrounding area that has some great buildings, the hotel is very impressive as is the train station. They are very near the bridge; encroachment would certainly be a negative impact.
- I think we definitely need more information about this project.
- This area does not seem to have enough traffic to warrant a larger bridge, especially since there is another bridge across the river about a block away. This other bridge should be able to carry the traffic while the bridge street span is either rebuilt(preferred) or replaced in the same location(second option) which would eliminate the need to encroach on the historic district sites and demolish a resource that adds to the overall authenticity of this industrial area.

We appreciate the opportunity to comment.

Regards, Martha

Martha Ballman
Preservation Alliance of West Virginia

Epperly, Randy T

From: Epperly, Randy T
Sent: Wednesday, May 25, 2011 2:51 PM
To: 'Martha Ballman'
Cc: Lowther, Chad S; Hark, Ben L; Mullins, Sondra L
Subject: Bridge Street Bridge
Attachments: Phase 1.pdf; Photo key.pdf

Martha Ballman,

We have been in contact with WVSHPO and have sent a report and have their comments. I have attached the text from my report that includes the history. I have also attached my photo sheet. We held a public workshop on August 5, 2010 at the Taylor County Public Library. Everyone in attendance voiced their desire for a new bridge. The rest of this e-mail will attempt to answer some of the questions from your e-mail on May 16, 2011.

- **1: The bridge is a two lane, standard through truss metal bridge. Significant if it were within the district.** The bridge is significant and is eligible for the National Register but is not part of the historic district. The period of significance is much earlier for the historic district than the bridge construction date.

- **2. The impact on the district is to be considered. The first building to the west of the intersection is the Willard Hotel, and adjacent to that is the highly significant depot. Vandalia has worked on the depot a lot.** We are looking at the effects on the district, the bridge, and the railroad. This is standard for any project. From information I have received, it appears that Vandalia is no longer in operation and have not responded to attempts to contact them.

- **3. Right now there is an empty lot on the corner, but that looks like it will be taken as part of this project, and the approach will be close to the hotel, so the approach may visually impact the hotel. I'm guessing that the curved double line represents a sidewalk, not a parapet wall, so the impact may not be as visually intrusive as can be, on the hotel.** There will be a sidewalk on the bridge and there will also be a railing. Specifications for the new bridge have not yet been worked out, so any visual impacts from a railing or wall is unknown at this time.

- **4. To the northeast of the intersection is a modern high-rise housing project, non-significant and another vacant lot to the southeast of the intersection. The historic district boundary line runs through the street at the intersection, so the intersection, but not the bridge is within the district.** The bridge is not part of the historic district.

- **5. An interesting feature of the bridge architecturally is the concrete balustrade with the arched panels.** This feature is a standard feature on many bridges across the state. It was commonplace construction for several decades by many different bridge builders. It is not considered a significant architectural characteristic.

- **6. Was an analysis done to see if the bridge could be rehabbed? Is it obsolete because of turning radii and access? or because of deterioration?** A rehab study was completed and concluded that the bridge would not accommodate legal loadings for the bus route after rehab. Around 75% of the truss members would need replaced and 100% of the deck. The bridge is functionally obsolete due to width and vertical clearance. It is also structurally deficient due to deterioration.

- **7. Would the money they are spending on the replacement be enough to rehab it if it is only being replaced because of deterioration?** The rehab cost was $4.9 million and the preferred alternative is $12.6 million. A

new bridge will last much longer with less maintenance cost than a rehabilitated bridge. A rehabilitated bridge will not meet legal load criteria.

- **8. Can it be constructed somewhere else and this one retained?** Due to the historic district and businesses in the area, there are limitations on where a new bridge could be built.

- **9. It would be good if the new bridge had a balustrade like this one, they did it in Alderson.** Bridge specifications and mitigation measures have not been determined at this time.

- **10. The surrounding area that has some great buildings, the hotel is very impressive as is the train station. They are very near the bridge; encroachment would certainly be a negative impact.** Impacts will be taken into consideration and we will work with SHPO to address these issues.

- **11. I think we definitely need more information about this project.** Attached is the text and photo sheet that was submitted to SHPO.

- **This area does not seem to have enough traffic to warrant a larger bridge, especially since there is another bridge across the river about a block away. This other bridge should be able to carry the traffic while the bridge street span is either rebuilt(preferred) or replaced in the same location(second option) which would eliminate the need to encroach on the historic district sites and demolish a resource that adds to the overall authenticity of this industrial area.** This bridge serves the community as a needed transportation link across the river. There has been a bridge in this location for over 100 years. This bridge is needed by buses, tourists, Tygart Lake State Park visitors and boaters, emergency transportation and access, and as an access point in case of a train derailment.

Epperly, Randy T

From: Martha Ballman <mballman@pawv.org>
Sent: Wednesday, May 25, 2011 3:57 PM
To: Epperly, Randy T
Cc: Lowther, Chad S; Hark, Ben L; Mullins, Sondra L
Subject: RE: Bridge Street Bridge

Mr. Epperly

Thank you for your time and expertise in making this thoughtful reply. I am sorry that we were not a party to the information form the outset since we are asked to comment on this project. It would be a time saver for us all. PAWV is trying to find ways to better communicate in this process.

I understand the enthusiasm of the folks in Grafton to have a safe, reliable bridge for their town. It was disappointing to learn that rehabilitation would not adequately meet this need. Since this bridge was constructed by a WV company and designed by a WV engineer it is a shame to lose it. I am glad it will be documented by the NRHP listing process.

I am still unclear though why building new 60 ft. downstream is preferable to building on-site. The cost is very comparable. Does traffic volume prohibit this?

With the preferred option, the Willard Hotel would be hard to rehabilitate with the traffic so close and it is such a great site. This site and the depot are the lynchpins of the historic district. Your images are so nice of these two.

This said, I will forward this information to my associates and gather whatever additional comments they have for you.

Thank you again for your considerate reply and information.

Please let us know how PAWV can help move this project to a satisfactory conclusion?

Martha Ballman

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

June 9, 2011

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: S346-9-0.03
Federal Project: BR-0009(143)E
FR#10-374-TA-4
Bridge Street Bridge Replacement
Taylor County

The West Virginia Division of Highways (WVDOH) received your letter of May 3, 2011. The Cultural Resources Management Report dated August 31, 2010 addressed the effects of the project on the National Register eligible properties. This letter is a reassessment of the effects.

The Bridge Street Bridge (HPI #1) is considered eligible under Criterion C. The project will remove the existing bridge creating an adverse effect.

The CSX Railroad Yard (HPI #7) is eligible under Criterion A for its significance with historic events. All of the original bnildings have been removed and replaced. The depot is still standing and is addressed in the effects to the Grafton Commercial Historic District. It is unlikely that any railroad lines will be shnt down. There will be no excavation on the railroad property and some of the equipment will be brought in on Three Forks Creek. There will be no impact to any of the railroad lines or bnildings; therefore there will be a no adverse effect to the CSX Railroad Yard.

The Grafton Commercial Historic District is also in the project area and includes the Willard Hotel and old B&O Depot. A corner of the Willard Hotel property may be used for the turning radius on the new bridge. This would be no more than 0.002 acres of the hotel's property and we feel this small amount of property will constitute a no adverse effect. The viewshed will change slightly due to the new bridge bcing built closer to the hotel. This could he an adverse effect to the viewshed of the Grafton Commercial Historic District

A second letter was sent to the Taylor County Historical and Genealogical Society dated May 11, 2011 and no response has been received. An e-mail was sent to the City of Grafton on May 11, 2011, but no response has been received. Also an e-mail was sent to the Preservation Alliance of West Virginia on May 11, 2011. They responded with questions about the project, which were responded to by the attached e-mails.

Should you have any questions, please do not hesitate to contact Randy Epperly III of our Environmental Section at (304) 558-9385.

Very truly yours,

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L Hark

Ben L. Hark
Environmental Section Head

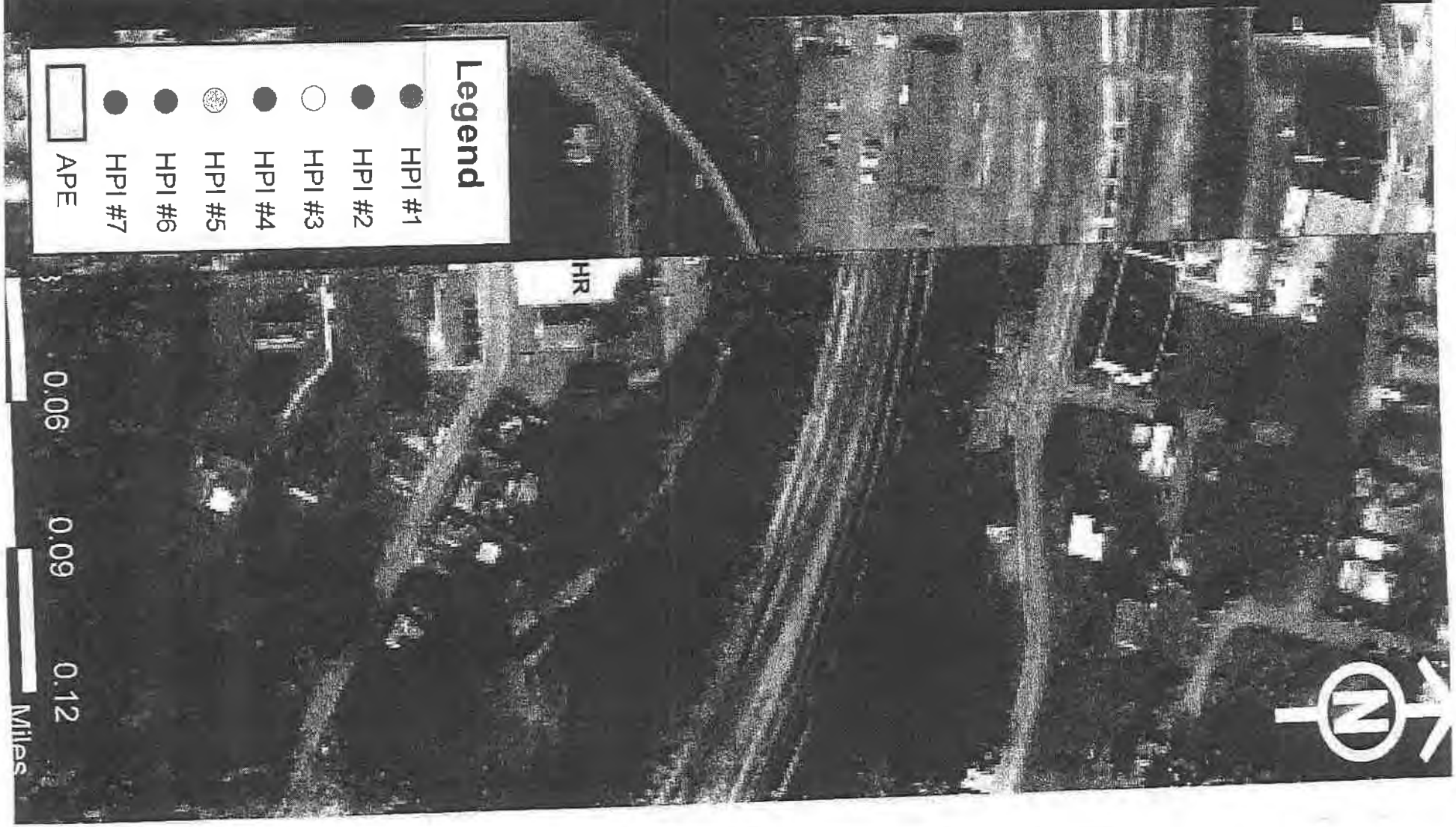
GLB:Hw

Enclosures

cc: DDE(RE)

Bridge Street Bridge
Taylor County
S246-9-0.03
BR-0009(143)E

West Virginia Division of Highways
Engineering Division
Environmental Section
Randy Epperly
August 23, 2010



June 13, 2011

Division of Highways
% Randy Epperly III
1900 Kanawha Blvd. East
Building 5 Room 110
Charleston, WV 26305

Dear Mr. Epperly III,

The Taylor County Historical Society does not have a problem with the replacement of the Bridge Street Bridge due to the fact that it is in very bad shape. We also want you to know that we do save as much history as we can, but know that sometimes that is not possible.

We thank you for letting us know about the replacement and letting us comment on this.

Sincerely,

Olive Dadisman

Olive Dadisman, Sec

WEST VIRGINIA
Division of Culture and History

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

July 8, 2011

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement
FR#: 10-374-TA-5

Dear Mr Bailey:

We have reviewed 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.

Based on the information submitted, the Grafton Commercial Historic District, which is listed on the National Register of Historic Places , the CSX Railroad Yard and the Bridge Street Bridge, which are considered eligible for inclusion in the National Register of Historic Places, are all located in the project's Area of Potential Effect (APE). It is your opinion that the proposed bridge replacement will have an adverse effect on the Bridge Street Bridge. We concur with this finding.

It is also your opinion that the proposed project will have no adverse effect to the CSX Railroad Yard because "there will be no impact to any of the railroad lines or buildings." We do not concur with this assessment. The proposed project will not have a direct effect; however, it is our opinion it will have an indirect visual effect on the resource.

Additionally, regarding the Grafton Historic Commercial District, it is your opinion the viewshed will change slightly, which "could" be an adverse effect on the resource. It is our opinion that it *will* have an adverse effect on the district. The setting of each of the resources will be irrevocably changed with the demolition of the Bridge Street Bridge. The adverse effects on each of these resources will necessitate completion of a Memorandum of Agreement(MOA), one that justifies the effect of this undertaking and the irreparable harm it will have on each of the historic resources. The mitigation should go above and beyond the standard documentation efforts and should be done in consultation with any concerned parties. We will provide further comments upon receipt of the draft MOA.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Aubrey Von Lindern, Historian in the Historic Preservation Office at (304) 558-0240.*

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/ACV

Epperly, Randy T

From: Epperly, Randy T
Sent: Wednesday, July 20, 2011 3:56 PM
To: Scott, Gary W - DOT
Subject: Bridge Street Bridge (Grafton)
Attachments: Preferred.pdf; SHPO letter.pdf

Gary, below is a description of the project and a brief description of consulting party participation in the MOA. I have attached the preferred alternative and SHPO letter. Please send this to CSX and ask if they would like to participate in the MOA. I will be out next week, but will answer my e-mails if you have any questions or you can ask Sondra.

If you need this in letter form, I can provide that as well. Thanks for your help.

Bridge Street Bridge

Taylor County
State Project #S246-9-0.02
Federal Project #BR-

0009(143)D

The West Virginia Division of Highways (WVDOH) is proposing a project to replace the Bridge Street Bridge in Grafton. The bridge is located on County Route 9 and crosses Three Fork Creek, CSX Railroad, and Front Street. Alternative 8 is the preferred alternative. This alignment would be 60 feet downstream of the existing bridge. The new bridge would be 300 feet long with 2 spans and stub abutments. Total length of construction would be 900 feet and would acquire a vacant lot within the historic district. Front Street and County Route 9 will need to be reconstructed. Traffic will be maintained on the existing bridge during construction, but may use existing roads as a detour route during the reconfiguration of Front Street and County Route 9. The preferred alternative plan sheet is attached.

The rail yard is eligible for the National Register of Historic Places under Criterion A for its significance with historic events. The track was built around 1860 and was the economic source for Grafton. The railroad was an important transportation method as well as a target during the Civil War. As part of environmental clearance, the State Historic Preservation Office (SHPO) has asked that we submit a Memorandum of Agreement to mitigate the impacts to historic properties. The SHPO letter is attached.

Per Section 106 of the National Historic Preservation Act of 1966, the West Virginia Division of Highways (WVDOH) is affording your organization the opportunity to request consulting party status for the subject project. 36 CFR 800.2 (F) (5) addresses consulting parties by stating, "certain individuals and organizations with a demonstrated interest in the undertaking may participate as consulting parties due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking's effects on historic properties."

By being granted consulting party status your organization will be copied on documents and reports generated for the proposed project and be given the opportunity to comment on them within a specific time frame. In addition, your organization will be given the opportunity to review and comment on any Memorandum of Agreement (MOA) that is developed concerning this project and will have the option of being a signatory to the MOA if you choose. Please let us know of your decision for or against participation in the MOA.

Randy Epperly III

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

October 25, 2011

Ms. Amy Fox
Federal Highway Administration
West Virginia Division
Geary Plaza, Suite 200
700 Washington Street E,
Charleston, West Virginia 25301

Dear Ms. Fox:

State Project: S346-9-0.03
Federal Project: BR-0009(143)E
Bridge Street Bridge
Grafton
Taylor County

Enclosed for transmittal to the Advisory Council on Historic Preservation, for the participation interest, is a Draft Memorandum of Agreement (MOA) for the above referenced project. This MOA is pursuant to the determination that removal of the Bridge Street Bridge will have an adverse effect to the National Register of Historic Places (NRHP)-eligible bridge and the Grafton Commercial Historic District, and the NRHP-eligible CSX Railroad. Along with the MOA, the initial Phase I Report that was submitted to the WVSHPO has been attached.

Archaeology fieldwork has been complete and no further testing is recommended, but has not been submitted to the State Historic Preservation office. The report is expected to be transmitted to SHPO in November 2011.

Should you have any questions, please do not hesitate to contact Randy Epperly, III of our Environmental Section at (304) 558-9385.

Yours very truly,

Gregory L. Bailey, P.E.
Director
Engineering Division

By: Ben L. Hark

Ben L. Hark
Environmental Section Head

GLB:Hk

Attachments

bcc: DDE(RE), DDR

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 BRIDGE STREET
BRIDGE REPLACEMENT PROJECT
TAYLOR COUNTY, WEST VIRGINIA
OCTOBER 2011

WHEREAS, the Federal Highway Administration (FHWA), in cooperation with the West Virginia Division of Highways (WVDOH), proposes to replace the Bridge Street Bridge, which spans the Three Fork Creek, Front Street, and CSX Railroad in Grafton, Taylor County, hereinafter referred to as the Project. The improvements involve the construction of a new bridge and the removal of the existing bridge; and

WHEREAS, the FHWA has determined that the Project will have an adverse effect upon the Bridge Street Bridge, CSX Railroad, properties eligible for the National Register of Historic Places (NRHP) and the Grafton Commercial Historic District.

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 effect archaeological properties; and

WHEREAS, the WVDOH contacted the Taylor County Historic Society, Vandalia Heritage Foundation, CSX, and Preservation Alliance of West Virginia regarding the Project. The Vandalia Heritage Foundation chose not to respond. CSX responded by phone and does not want to be involved in the MOA. Taylor County Historical Society responded supporting the project. The Preservation Alliance of West Virginia did respond by e-mail. A public workshop was held in which the City of Grafton expressed support for the project. Five members of the public were present for the workshop.

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:

Bridge Street Bridge

I. A brochure of the Bridge Street Bridge will be developed and distributed to the Taylor County Historical Society, Taylor County Schools, and Grafton Public Library as appropriate for content and grade level. The WVSHPO will be given the opportunity to review all educational materials developed for this stipulation.

II. The Bridge Street Bridge will be documented in its present historic setting. The documentation package will include 5"x7" black and white digital prints in accordance with the National Register of Historic Places and National Historic Landmarks Survey Photo Policy Expansion of March 2005. A copy of the documentation will be given to the Grafton Public Library.

III. A brief history of the structure will be included along with fully completed West Virginia Historic Property Inventory forms and any available copies of plan sheets and drawings of the bridge from WVDOH bridge files.

IV. **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 VIII below. FHWA shall notify the signatories as to the course of action it will pursue.

V. 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 800.13 (b).

VI. 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.

VII. 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.

VIII. 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.

IX. 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, WVSHPO, the WVDOH and the Council, and implementation of its terms evidence that the FHWA has afforded the Council an opportunity to comment on the Bridge Street Bridge Replacement project and its effects on historic properties, and that the FHWA has taken into account the effects of the undertaking on the historic property.

Bridge Street Bridge Replacement

Memorandum of Agreement

Signatories Page

_____ _____

Federal Highway Administration Date

_____ _____

West Virginia Deputy State Historic Preservation Officer Date

APPROVED:

_____ _____

Advisory Council on Historic Preservation Date

CONCUR:

_____ _____

West Virginia Division of Highways Date

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways
1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

October 27, 2011

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

Dear Ms. Pierce:

State Project: S346-9-0.03
Federal Project: BR-0009(143)E
Bridge Street Bridge
Grafton
Taylor County

Attached for your review and comment is a Draft Memorandum of Agreement (MOA) for the subject project. This MOA is pursuant to the determination that removal of the Bridge Street Bridge will have an adverse effect to the National Register of Historic Places (NRHP) eligible bridge, the Grafton Commercial Historic district, and the NRHP eligible CSX Railroad. A copy of the MOA was submitted to Federal Highway Administration on October 25, 2011 to be submitted to the Advisory Council on Historic Preservation. The letter from the Advisory Council will be submitted to your office when available.

Also attached is the most recent letter from your office and correspondence with the Preservation Alliance of West Virginia, Taylor County Historical Society, and the comments from the public workshop held on August 5, 2010. The Vandalia Heritage Foundation chose not to respond and CSX Railroad responded by phone and asked not to be involved in the MOA.

Archaeology fieldwork has been completed by our consultant GAI and no further work is being recommended. The report is expected to be submitted to your office in November 2011.

Should you have any questions, please do not hesitate to contact Randy Epperly, III of our Environmental Section at (304) 558-9385.

Yours very truly,

Gregory L. Bailey, P.E.
Director
Engineering Division
By: Ben L Hark

Ben L. Hark
Environmental Section Head

GLB:Hk

Attachments

bcc: DDE(RE)

WEST VIRGINIA
Division of Culture and History

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

November 21, 2011

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement
FR#: 10-374-TA-6

Dear Mr Bailey:

We have reviewed 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.

After review of the submitted Memorandum of Agreement (MOA), it is our opinion the proposed stipulations do no adequately mitigate the adverse effect the demolition will have on the Grafton Historic District or the CSX Railroad Yard. We request that additional stipulations be added, for example, the publication of a walking tour of the Downtown Historic District. We also request the development of a sign that illustrates the history of the town, the bridge and the railroad yard, to be located near the entrance of the new bridge. We will provide further comment upon receipt of the updated MOA.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Aubrey Von Lindern, Historian in the Historic Preservation Office at (304) 558-0240.*

Sincerely,

Susan M. Pierce

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/ACV

U.S. Department
of Transportation

**Federal Highway
Administration**

West Virginia Division

Geary Plaza, Suite 200
700 Washington Street, East
Charleston, West Virginia 25301
Phone (304) 347-5928
Fax (304) 347-5103

November 28, 2011

IN REPLY REFER TO:
Federal Project BR-0009(143)E
State Project S246-9-0.03
Bridge Street Bridge
Taylor County

Najah Duvall-Gabriel
Office of Federal Agency Programs
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue NW, Suite 809
Washington, DC 20004

Dear Ms. Duvall-Gabriel:

The Federal Highway Administration (FHWA) in consultation with the West Virginia State Historic Preservation Officer has determined that the above referenced undertaking will have an adverse effect on the Bridge Street Bridge located in Taylor 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) 347-5271 or via e-mail at jason.workman@dot.gov Thank you for your attention to this matter.

Sincerely yours,

Jason E. Workman
Environmental Protection Specialist

Preserving America's Heritage

November 30, 2011

Jason E. Workman
Environmental Protection Specialist
FHWA – West Virginia Division
Geary Plaza, Suite 200
700 Washington Street, East
Charleston, WV 25301

Ref: *Proposed Bridge Street Bridge Replacement Project*
Grafton, Taylor County, West Virginia

Dear Mr. Workman:

On November 28, 2011, the Advisory Council on Historic Preservation (ACHP) 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, 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 Office (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 Ms. Najah Duvall-Gabriel at 202 606-8585 or at ngabriel@achp.gov.

Sincerely,

LaShavio Johnson

LaShavio Johnson
Historic Preservation Technician
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION

1100 Pennsylvania Avenue NW, Suite 803 • Washington, DC 20004
Phone:202-606-8503 • Fax: 202-606-8647 • achp@achp.gov • www.achp.gov

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EEO/AA Employer

April 16, 2012

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement
FR#: 10-374-TA-7

Dear Mr. Bailey:

We have reviewed 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.

After review of the submitted Memorandum of Agreement (MOA), it is our opinion the proposed stipulations II, III, IV, V and VI sufficiently mitigate the project's adverse effect on historic resources. However, we request that Stipulation I be revised to say "A sum of $5,000 will be given to the City of Grafton to be used for *historic preservation related activities* and improvements within the Grafton Commercial Historic District." Also, please add that all activities should be approved by both the West Virginia Department of Highways and the West Virginia State Historic Preservation Office before the expenditure of any funds. This ensures that the money is actually spent to mitigate the adverse effect and that it is used for preservation related activities only. We will sign the Memorandum of Agreement once these changes have been made.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Aubrey Von Lindern, Historian in the Historic Preservation Office at (304) 558-0240.*

Sincerely,

Susan M. Pierce

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/ACV

Epperly, Randy T

From: Epperly, Randy T
Sent: Thursday, April 19, 2012 9:50 AM
To: Von Lindern, Aubrey C
Subject: RE: Bridge Street Bridge CE
Attachments: Pages from MEMORANDUM OF AGREEMENT.pdf

It is attached. Thanks.

From: Von Lindern, Aubrey C
Sent: Thursday, April 19, 2012 9:47 AM
To: Epperly, Randy T
Subject: RE: Bridge Street Bridge CE

No problem!

From: Epperly, Randy T
Sent: Thursday, April 19, 2012 9:46 AM
To: Von Lindern, Aubrey C
Subject: Bridge Street Bridge CE

I received your letter dated April 16, 2012. Is it ok if I e-mail you a pdf of the revised stipulation 1 for the Bridge Street Bridge MOA?

WEST VIRGINIA
Division of Culture and History

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

April 30, 2012

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement
FR#: 10-374-TA-8

Dear Mr. Bailey:

We have reviewed the abbreviated technical report on archaeological investigations 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 the submitted report, survey of the proposed project area consisted of field reconnaissance to assess ground condition and determine locations of areas with high and moderate archaeological potential and systematic shovel probe excavation within those areas. Wetlands, steep slope and previous disturbance were documented. Much of the project area was determined to be previously disturbed by urban development. Shovel probes excavated in a seemingly undisturbed area resulted in the documented fill deposits from which a mixture of historic and modern debris was recovered. We concur that these items do not constitute an archaeological site. No cultural resources were identified. We concur that no further archaeological work is necessary. In our opinion, there are no archaeological resources within the proposed project area that are eligible for listing in the National Register of Historic Places.

We appreciate the opportunity to be of service. *If you have 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 Officer

SMP/LLD

WEST VIRGINIA
Division of Culture and History

The Culture Center
1900 Kanawha Blvd., E.
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Randall Reid-Smith, Commissioner
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Fax 304.558.2779 • TDD 304.558.3562
EEO/AA Employer

May 7, 2012

Mr. Gregory Bailey
Director
WVDOH
1900 Kanawha Blvd East
Building Five, Room 110
Charleston, WV 25306

RE: Bridge Street Bridge Replacement
State project – S346-9-0.03
FR#: 10-374-TA-9

Dear Mr. Bailey:

We have reviewed the above referenced project to determine potential effects to cultural resource. 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.

Enclosed please find the signed Memorandum of Agreement. Once you complete the documentation required for mitigation, please forward it to our office for review

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Aubrey Von Lindern, Historian, in the Historic Preservation Office at (304) 558-0240.*

Sincerely,

Susan M. Pierce

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/ACV

enclosure

Signatories Page

Federal Highway Administration — Date

Susan M Pierce — 5/7/12

West Virginia Deputy State Historic Preservation Officer — Date

APPROVED:

Advisory Council on Historic Preservation — Date

CONCUR:

West Virginia Division of Highways — Date

Epperly, Randy T

From: Epperly, Randy T
Sent: Monday, May 14, 2012 10:31 AM
To: CityofGrafton@hotmail.com
Cc: Hark, Ben L
Subject: Bridge Street Bridge MOA
Attachments: Bridge St. MOA.pdf

Attached is the Memorandum of Agreement for Bridge Street Bridge. Please send the signed original to the address below. Let me know if you have questions. Thanks.

Ben Hark
Room 450, Engineering Division
West Virginia Division of Highways
Building 5, Capitol Complex
1900 Kanawha Blvd. East
Charleston, WV 25305

WEST VIRGINIA
Division of Culture and History

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 13, 2013

Mr. Gregory L. Bailey, PE
Director
WV DOH
Building Five, Room 110
Capitol Complex
Charleston, WV 25305

RE: Bridge Street Bridge Replacement
FR#: 10-374-TA-10

Dear Mr. Bailey:

We have reviewed 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.

We are in receipt of the additional submitted information and reassessment request for the above referenced project. Provided information states that the proposed new bridge no longer requires the use of any property from the Willard Hotel, a contributing resource to the National Register of Historic Places-listed Grafton Commercial Historic District. Because of this (and because the viewshed of the historic district already contains a bridge), it is your opinion that the proposed project will have no adverse effect on the historic district.

Provided information also states that the proposed new bridge will span the National Register of Historic Places-eligible CSX Railroad Yard on one pier and have a clearance height of 23' (in contrast to the two piers and 17' clearance height of the existing bridge). Because of this, it is your opinion that the proposed new bridge will decrease the visual intrusion over the railroad.

After review of the submitted information, we remain in concurrence with our previous opinion that the proposed project will result in an *adverse effect* to the National Register-listed Grafton Commercial Historic District and the National Register-eligible CSX Railroad Yard, as well as the National Register-eligible Bridge Street Bridge.

Although the new bridge will no longer be located within the Grafton Commercial Historic District, the removal of the existing bridge will irrevocably alter the district's viewshed. Also, while the existing bridge will be replaced with a new bridge, the existing bridge has historical significance and a feeling and association which cannot be replicated by the new bridge, despite any perceived improvements.

Therefore, it is our opinion that the final Memorandum of Agreement which was received by our office and signed on May 9, 2012 continues to be applicable to this project.

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

Sincerely,

Susan M. Pierce

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/MLK

State Project S346-9-0.03 00
Federal Project BR-0009(141)D
Bridge Street Bridge
Taylor County
Preliminary Field and Span Arrangement Review

September 22, 2011

Name	*Organization*	*Phone/Email*
1. Dinar Ahmad	Engineering	dinar.m.ahmad@wv.gov
2. Sarah Daniel	Railroads+Utilities	sarah.l.daniel@wv.gov
3. Bob Blosser	ENGINEERING - Bridge	ROBERT.L.BLOSSER@WV.GO
4. Gary Scott	Railroads - DOH	gary.w.scott2@wv.gov
5. ~~Steven Darrell~~	ENG - BRIDGE	~~STEVEN.R.DARRELL@WV.G~~
6. Dave Verno	TRC	dverno@trcsolutions.com
7. Paul Misch Jr	TRC	~~Paul~~ Pmisch@trcsolutions.
8. Dave Clevenger	TRC	dclevenger@trcsolutions.com
9. Tim Shoemaker	TRC	Tshoemaker@trcsolutions.com
10. Dave Verno	TRC	dverno@trcsolutions.com
11. George Chappell	DOH Geotech	george.A.Chappell@wv.gov
12. Joe Chase	"	Joe.D.Chase "
13. Ralph W. Sapp	D.O.H.	304-842-1576
14. Tonya Perkins	Equitable Gas	Tperkins@equitablegas.co
15. Tim Priddy	DOH	Timothy.R.Priddy@wv.gov
16. Raymond Tackett	DOH D-4 Rlw	Raymond.N.Tackett@wv.gov
17 Chuck Bartley	WV DOH R/W	
18. ERIC DECKER	FRONTIER	
19 SCOTT MOORE	MEW POWER	

Donna Zeno

From: Scott, Gary W - DOT <Gary.W.Scott2@wv.gov>
Sent: Saturday, February 25, 2012 8:09 AM
To: Priddy, Timothy R
Subject: FW: Bridge Street Bridge Erection/Demo Write-up, PE, Cover Letter

Importance: High

FYI

From: DesMarais, Patrick [mailto:Patrick.DesMarais@aecom.com]
Sent: Friday, February 24, 2012 3:49 PM
To: Scott, Gary W - DOT
Subject: RE: Bridge Street Bridge Erection/Demo Write-up, PE, Cover Letter
Importance: High

SUBJECT: Grafton, Taylor County, West Virginia – Proposed replacement of the Bridge Street Bridge over CSXT, DOT# 146 227 Y; Milepost BA-280.02, C&O Division, Mountain Subdivision; OP# WV0302; WVDOH Project S346-9-0.03

Gary –
It is official. Wednesday, Feb 29th at 10AM at CSXT Grafton Yard office.

Confirmed on our end will be CSXT's Tom Crawford, Roadmaster Robert Barr & Trainmaster Sandy Workman. AECOM's Vaughn Neill and I will also attend.

Please let me know if you have any further questions/concerns.
Have a great weekend.
Thank you,
Pat

Patrick J. DesMarais
Project Engineer, Freight Rail Group
Direct 215.789.2158
patrick.desmarais@aecom.com

AECOM
1700 Market Street, Suite 1600
Philadelphia, PA 19103
T 215.735.0832 F 215.735.0903

From: Scott, Gary W - DOT [mailto:Gary.W.Scott2@wv.gov]
Sent: Wednesday, February 08, 2012 9:59 AM
To: DesMarais, Patrick
Subject: Bridge Street Bridge Erection/Demo Write-up, PE, Cover Letter

Patrick:

Please see attached.

Gary

Gary W. Scott
Railroad Coordinator
WV Division of Highways
Engineering Division-Railroad & Utilities
gary.w.scott2@wv.gov
304-558-9763 (office)
304-552-9304 (mobile)

WEST VIRGINIA DIVISION OF HIGHWAYS
ENGINEERING DIVISION
IN-HOUSE SECTION

Subject:	Project Name:	of
Prepared By: Date:	Project No: County:	

PRE-TSL MEETING DOH / TRC / CSX
2/29/12
GRAFTON, WV
BRIDGE STREET BRIDGE

Tim Priddy	DOH	Timothy.R.Priddy@wv.gov
Kyle Murr	Shaw Envir. / CSX Env. Field Services	kyle_murr@csx.com
David Clevenger	TRC Engineers	dclevenger@trcsolutions.com
~~Steven Jarrell~~	~~DOH~~	~~Steven.R.Jarrell@wv.gov~~
Tim Shoemaker	TRC Engineers	tshoemaker@trcsolutions.com
Matthew Masterson	Trainmaster / CSX	Matthew_Masterson@csx.com
ROBERT BARR	ROADMASTER	robert_barr@csx.com
GARY W. SCOTT	WVDOH RR COORD	gary.w.scott2@wv.gov
VAUGHN NEILL	AECOM (FOR CSX)	vaughn.neill@aecom.com 412 260 2983
Patrick DesMarais	AECOM (for CSXT)	patrick.desmarais@aecom.com
Feras Tolaymat	DOH	feras.tolaymat@wv.gov
~~Tim Priddy~~ Sarah Daniel	DOH - Railroads & Utilities	sarah.l.daniel@wv.gov
DAVE DERVO	TRC ENGINEERS	dvervo@trcsolutions.com
Paul Misch Jr.	TRC	pmisch@trcsolutions.com

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

April 4, 2013

MEMORANDUM

TO: DDR (Tim Priddy)

FROM: DDR (GWS)

SUBJECT: State Project S346-9-0.03
Federal Project BR-0009(141)D
Bridge Street Bridge), Taylor County
CSX Transportation, Inc.

Attached are comments from the above referenced company based on our meeting of January 3, 2013 for your incorporation into project plans.

Please address the above referenced comments and incorporate the attached CSXT requirements in the plans and provide 5 sets of plans to DDR (Railroad and Utilities Unit) for resubmission to the railroad.

GWS:s

Attachments

cc: DDR(GWS), DD(MF)

URS

January 16, 2013

Mr. Gary W. Scott
Railroad Coordinator
West Virginia Department of Transportation
Division of Highways
1900 Kanawha Boulevard East, Building Five, Room 110
Charleston, West Virginia 25305-0430

SUBJECT: **Grafton, Taylor County, West Virginia**
Proposed Bridge Replacement – Bridge Street over CSXT
Agency Reference: **State Project: S346-9-0.03**
Federal Proj: BR-0009(143)D
AAR/DOT No.: **146 227Y**
CSXT Reference: **Milepost: BA-280.02**
C&O Division
Mountain Subdivision
OP No.: WV0302

Dear Mr. Scott:

URS Corporation (URS) on behalf of the CSX Transportation, Inc. (CSXT) Public Projects Group has reviewed the FINAL FIELD REVIEW PLANS submittal for the subject project. We interpret the project scope impacting CSXT to be the construction of a new highway bridge over CSXT and the removal of the existing highway bridge over CSXT. Based upon the aforementioned plan review and the discussions of the project meeting held January 3, 2013, we offer the following comments and information:

PLAN REVIEW

1) Sheet 23 - It appears that shoring may be required for the installation of manholes 1-13 & 1-14 and the 53.5' of 24" pipe. Please provide scaled cross section showing a 1½ horizontal: 1 vertical theoretical slope line starting 1'-6" below top of rail and at 12'-0" minimum from centerline of the track (live load influence zone) for verification.

2) The minimum temporary horizontal clearance from the track centerline to any obstruction is 8'-6". Please confirm all temporary bents meet this criteria.

CONSTRUCTION REQUIREMENTS

3) When performing work on, over or adjacent to CSXT right-of-way or operations, the West Virginia Department of Transportation, Division of Highways selected contractor must abide by the current CSXT Special Provisions, CSXT Construction Submission Criteria and additional requirements as outlined in the to be provided ***CONSTRUCTION REQUIREMENTS*** document.

URS Corporation
One Indiana Square, Suite 2100
Indianapolis, IN 46204
Tel: 317-532-5481
Fax: 317-532-5499
Larry.Shaw@urs.com

Providing Engineering Services for CSX How tomorrow moves

WIRELINES / PIPELINES / UTILITIES

4) This review by the CSXT Public Projects Group does not address overhead or underground facilities (wirelines, conduits, pipelines, fiber optics, other) within CSXT right-of-way (other than CSXT's own facilities). Owners of such facilities must coordinate directly with the CSXT Property Services Office. This includes all new installations, modifications, removals or retirements in place. Application packages are available online (www.csx.com; Quick Links; Non-Freight Services; Property Services; Property/Real Estate; Permitting: Utility Installations and Rights of Entry). Please ensure that all utilities that may be affected are notified of this requirement. For project continuity please copy this office with direct communications with the CSXT Property Services Office. A courtesy copy to this office of a listing of all such impacted facilities would be appreciated. If no such facilities are impacted, please so advise. ***Please acknowledge that it is understood all such facility owners are responsible to initiate direct coordination with the CSXT Property Services Office and as the project sponsor your Agency will advise the facility owners of this responsibility.***

REAL ESTATE / PROPERTY RIGHTS

5) This review by the CSXT Public Projects Group does not address real estate matters. Real Estate matters are handled internally by CSX Real Property, Inc. You are directed to contact Mr. Jim Shircliff, CSX Highway Projects Specialist (904.279.4597) to initiate real estate coordination. For project continuity, please copy this office with any real estate related correspondence. ***Please acknowledge that it is understood that your Agency is responsible to initiate direct communication with Mr. Shircliff.***

CSXT FORCE ACCOUNT ESTIMATE

6) The CSXT Railroad Force Account Estimate for this project will be finalized after all railroad concerns and modifications have been addressed and the FINAL PLANS have been reviewed and accepted.

SUBMITTALS REQUESTED

7) ***Please forward*** REVISED PLANS or NEXT STAGE SUBMITTAL PLANS (including bridge plans) directly to this office for CSXT review and handling. Plan submittals should be 11"x17" and be comprised of two (2) hard copies and one (1) compact disc in pdf format. Alternative submittal methods include five (5) hard copies or electronic submittal in pdf format (may be governed by file size).

Feel free to contact URS Project Manager, Terry Bump, P.E. (412.503.4642) to discuss plan review comments or technical questions. For general or administrative questions, feel free to contact me. All future CSXT Public Projects Group submittals regarding this project are to be directed to this office and should reference CSXT **OP# WV0302**, including the subject line of electronic transmissions.

Sincerely,

Larry J. Shaw, P.E.
Program Manager
URS Corporation