

Michigan Department of
Transportation

Main Street Bridge

Environmental Assessment

Main Street Bridge (B02-11-21)
M-139 (formerly US-12BR)
Over the St. Joseph River
Niles, Michigan
JN 104152 CS 11021

September 2012



**ABBREVIATED ENVIRONMENTAL ASSESSMENT
PROGRAMMATIC SECTION 4(F) EVALUATION**

**Proposed M-139 (Main Street) Bridge Replacement
City of Niles, Berrien County, Michigan**

Submitted Pursuant to 42 U.S.C. 4332(2)(c) and 49 U.S.C. 303

by the

U.S. Department of Transportation

Federal Highway Administration

and the

Michigan Department of Transportation

9/20/2012

Date of Approval



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This document has been published by authorization of the Director of the State of Michigan's Department of Transportation in keeping with the intent of the National Environmental Policy Act of 1969 and subsequent implementing regulations and policies, including Title VI of the Civil Rights Act of 1964, that direct agencies to provide the public and other agencies an opportunity to review and comment on proposed projects and alternatives so that potential impacts of the project can be considered and taken into account during the decision-making process. Requests for alternative formats of this document under Title II of the Americans with Disabilities Act may be made by calling 517.373.9534 or TDD 800.649.3777. The cost of publishing 100 copies of this document at approximately \$4.35 per copy is \$435.00, and the document has been printed in accordance with Michigan Executive Directive 1991-6.

Preface

The National Environmental Policy Act (NEPA) of 1969 requires the analysis of all social, economic, and natural environmental impacts of any proposed action of the federal government. This project includes the use of federal funds. There are three classes of action. Class I Actions are those that may significantly impact the environment. These projects require the preparation of an Environmental Impact Statement (EIS). Class II Actions (Categorical Exclusions) are those that do not have a significant impact on the environment. Class III Actions are those projects which the significance of impacts is not known. Class III Actions require the preparation of an Environmental Assessment (EA) to determine the significance of impacts and the appropriate environmental document to be prepared - either an EIS or a Finding of No Significant Impact (FONSI).

This document is an Abbreviated Environmental Assessment. The Abbreviated EA is an expanded checklist providing sufficient evidence for determining whether to prepare an EIS or a FONSI. This type of EA specifically applies to historic bridge projects that will have an adverse effect, but little if any other significant impacts to the environment. The project must also have little or no controversy to be documented with this type of EA.

This Abbreviated EA will be used for decision-making and public information purposes for the proposed M-139 (Main Street) bridge replacement in the City of Niles, Berrien County, Michigan. This Abbreviated EA describes and analyzes construction alternatives, and the measures taken to minimize harm to the project area. This analysis is done in compliance with MDOT's Environmental Procedures Manual, developed to implement NEPA. It is being distributed to the public and to various federal, state, and local agencies for review and comment. An opportunity for a public hearing on the project will be advertised in local papers. If requested, a public hearing will be held. If the review comments submitted by the public and interested agencies support the decision that there will be "no significant impact", a FONSI will be prepared. If it is determined that the preferred alternative will have significant impacts that cannot be mitigated, an EIS is required.

This document also contains a Programmatic Section 4(f) Evaluation. This evaluation is required when the proposed project has an adverse effect on a property eligible for or listed on the National Register of Historic Places. This evaluation must determine that there is no prudent and feasible alternative that avoids the 4(f) impact, and that all possible measures to minimize harm have been taken. A signed Memorandum of

Agreement (MOA) can be found in **Attachment D** of the **Programmatic Section 4(f) Evaluation** to satisfy the requirements of Section 106 of the National Historic Preservation Act. The Project Mitigation Summary Green Sheet, found at the back of this document, describes mitigation commitments.

This document was prepared by the Michigan Department of Transportation (MDOT), in cooperation with the Federal Highway Administration (FHWA). The study team includes representatives from the following areas within MDOT: Design, Project Planning, Real Estate, Construction and Technology, Traffic and Safety, Coloma Transportation Service Center, and Southwest Region office in Kalamazoo. Information contained in this Environmental Assessment was also furnished by other federal and state agencies, local units of government, public interest groups, and individual citizens.

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Abbreviated Environmental Assessment Checklist

Project Name: M-139 (Main Street) Bridge Replacement

Project Location: M-139 (Main Street) Bridge Replacement in the City of Niles, Berrien County, Michigan.

Project Control Section and Job Number: Control Section: 11021 Job Number: 104152

Description of Project Area:

The Michigan Department of Transportation (MDOT) in cooperation with the Federal Highway Administration (FHWA) is preparing an Environmental Assessment/Programmatic Section 4(f) Evaluation for the proposed replacement of the M-139 (Main Street) bridge over the St. Joseph River in the City of Niles, Berrien County, Michigan. See **Figure 1: M-139 Project Location** on page four of this document.

History

The existing bridge is a four span earth filled arch constructed in 1919. The bridge spans a bend in the St. Joseph River and is subject to high river velocities. The abutments and piers are founded on spread footings which are susceptible to scour. Bridge rehabilitation was performed in 1995 and included; placing riprap, replacement of sidewalks and bridge barriers, lighting alterations, pavement replacement, pier repair, and coating existing concrete. The bridge is considered to be historically significant and is eligible to be listed on the National Register of Historic Places. A Programmatic Section 4(f) Evaluation is required for this bridge, which is protected by Section 4(f) of the Department of Transportation Act of 1966 (as amended). A discussion of the bridge and its historic significance is included in **Appendix D – Programmatic Section 4(f) Evaluation**.

Existing Conditions

M-139, locally called W. Main Street, is a two lane street through downtown Niles, MI. Currently the Main Street bridge is comprised of one 12 foot wide lane in both directions with three foot shy distances to the toe of the four-foot sidewalks, of which, only 3-feet of them are useable for pedestrians due to the placement of the bridge railings on top of the sidewalk. Future development plans have been discussed within MDOT and the City and the existing section provides enough capacity that it meets any future projections for traffic, therefore no changes are planned.

Along the east bank of the St. Joseph River the City of Niles has created a linear park which contains a walkway/bike path. The park consists of memorials, a gazebo, and parking facilities in the northeast quadrant of the bridge. Adjacent to the roadway and in coordination with the

park, a streetscape project has been constructed with decorative lighting, brick pavers and other amenities along Main Street.

As mentioned previously, this park is a Section 4(f)/6(f) property which means that it must not be impacted by the alternatives unless there is no other option other than replacement for the proposed alternative. Currently the walkway/bike path goes under the existing bridge at the easternmost arch. At this location the path provides access to the park property to the north but does not meet most current design standards for bike path design. Horizontal clear width and vertical clearance are not met for the path under the bridge.

Currently two historic homes reside in the study area. Both homes are located at the southwest quadrant of St. Joseph Avenue and Main Street. These homes are a constraint to this project as they cannot be impacted. These homes have a large stone retaining wall just behind the sidewalk. Improvements may occur to the sidewalk but the wall must not be impacted.

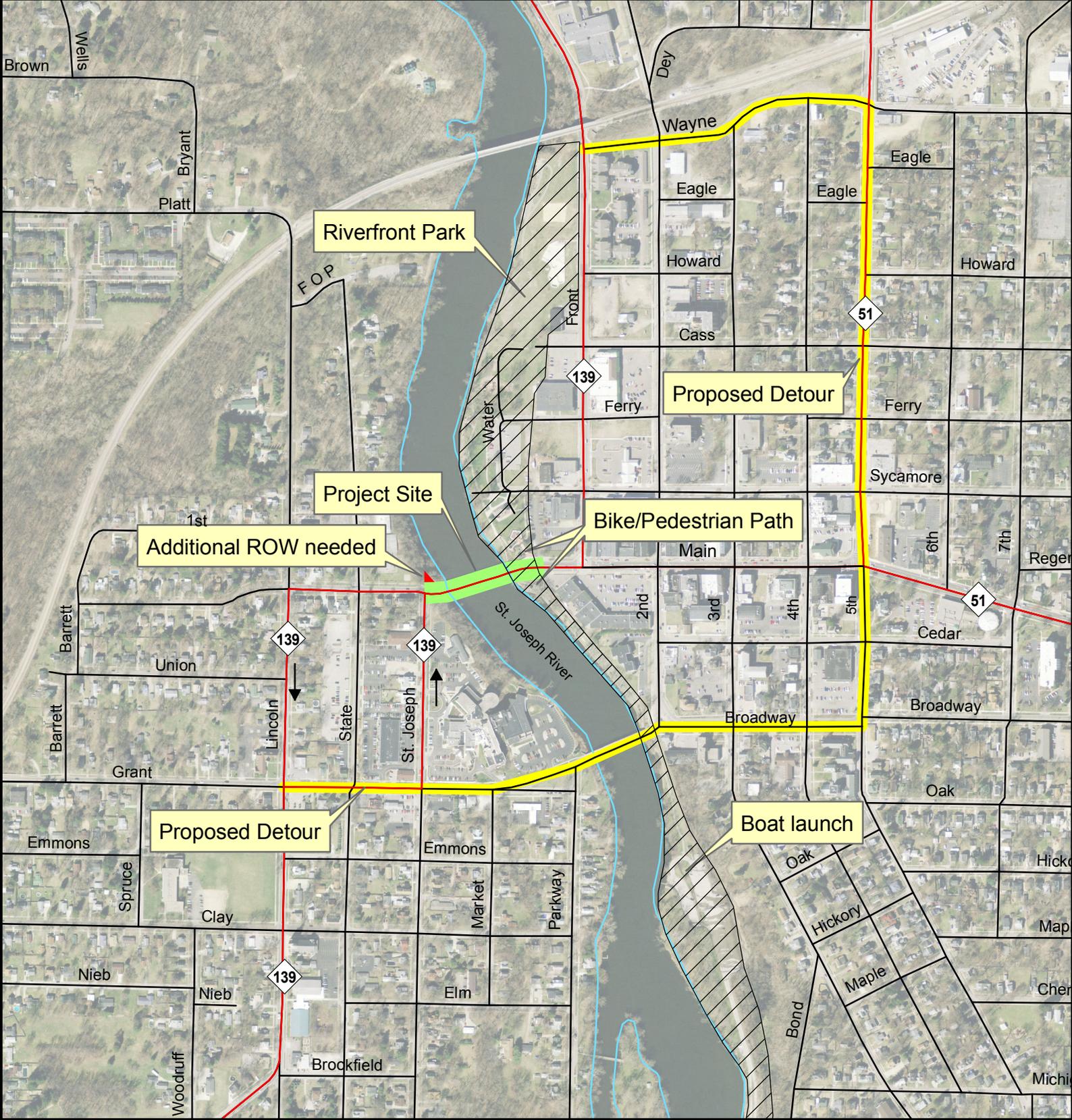
Operations

The bridge connects a residential area of Niles with the Downtown Business District. This creates significant east-west traffic, due to there only being two crossings of the St. Joseph River in the vicinity. Current year Average Daily Traffic (ADT) volumes are 10,000 vehicles per day. Based upon the current traffic operations of existing facilities with similar cross-sections and traffic volumes, and the principles set forth in the Highway Capacity Manual, it can be stated with a high degree of confidence that the proposed two-lane roadway (one through lane in each direction) will accommodate the projected design year (2035) traffic volumes (projected ADT = 11,400) and provide satisfactory traffic operations along this roadway segment.

The intersections on each end of the bridge have operational characteristics which make them unique. The western intersection of Main Street with St. Joseph Avenue marks the end of split one way traffic for M-139. Westbound M-139 traffic crosses the bridge and heads west along Main Street to Lincoln Street where it turns south. Eastbound M-139 is carried east on Grant Street until St Joseph Avenue where it turns north to intersect with Main Street at the west end of the bridge. Due to the M-139 alignment, northbound traffic is given priority to turn right onto Main Street without traffic control. Left turns from St. Joseph Avenue to Main Street are prohibited. Similarly westbound M-139 traffic is given priority and does not have traffic control enabling a free flow straight or left turn movements. The Main Street eastbound approach is controlled and must stop before proceeding through the intersection or turning right onto St. Joseph Avenue.

The Front Street intersection with Main Street is a tee intersection with three lanes along Main Street and three lanes on the Front Street approach from the north. The west side of the intersection consists of a wide receiving lane, a dedicated left turn lane, and one through lane. The East side of the intersection consists of a dedicated right turn lane, a dedicated through lane, and a wide receiving lane which tapers from two lanes to one lane prior to the on-street parking. The north approach consists of a dedicated right turn lane, a dedicated left turn lane,

and one receiving lane. The uniqueness to this intersection is a commercial drive located on the south of the intersection. It is located in the intersection but the lanes of the drive do not line up correctly with the road lanes. Left turns from westbound Main Street into this drive are prohibited and only right turns are permitted from this drive.



M-139 PROJECT LOCATION

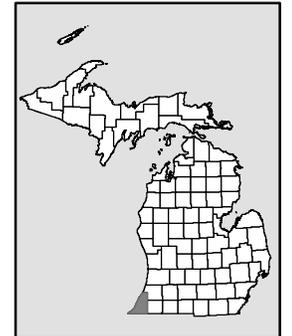
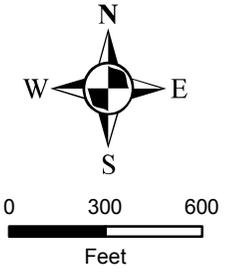


Figure 1

Description of Proposed Action:

The proposed replacement of M-139 (Main Street) bridge includes replacement of the existing bridge, bridge approaches, and improvements to drainage.

The new bridge over the St. Joseph River will be a concrete structure with three equal spans. The number of travel lanes on the new bridge will be two, the same as the existing structure. The new bridge will be designed on the existing alignment, but will implement horizontal and vertical curves to change the skew slightly to improve sight lines.

The new cross-section will include two 15-foot wide lanes, the same as the existing, but will have wider sidewalks of seven-foot on both sides of the bridge. The 15-foot lane will be a shared use lane to allow for bicycle use. MDOT will design the preliminary structure following the 1999 AASHTO guideline for shared roadways, and will mark it using the appropriate marking for a shared use lane. MDOT, Lansing Geometrics approved the cross section prior to completing the preliminary design.

This proposed cross-section was developed as the traffic counts did not show a need for increasing the laneage on the bridge and there are no plans to widen the approaches to either end of the bridge. See **Figure 2** for cross-sections of the existing and proposed structure. More detailed information on the proposed structure can be found in **Appendix 8 (Bridge Span Evaluation) of Appendix A**. MDOT will ensure that the replacement bridge is designed in consultation with the SHPO, nearby property owners, the City of Niles, the Niles Historical Society members and the general public. MDOT will hold at least one meeting to assess community preferences for the aesthetics of the replacement bridge based on engineering requirements and local input.

MDOT is proposing a shared use lane based on discussions with the City of Niles and the Southwest Michigan Planning Commission (SWMPC). Riverfront Park has a non-motorized path and is a potential destination point. According to the City, SWMPC and existing/future region wide bike maps:

- There are no plans to expand the non-motorized path on the west side of the St. Joseph River due to insurmountable grade and ROW issues; and
- The existing surface streets, sidewalks and the non-motorized path on the east side of the river are adequate.

The existing shared roadway is the best option for three reasons:

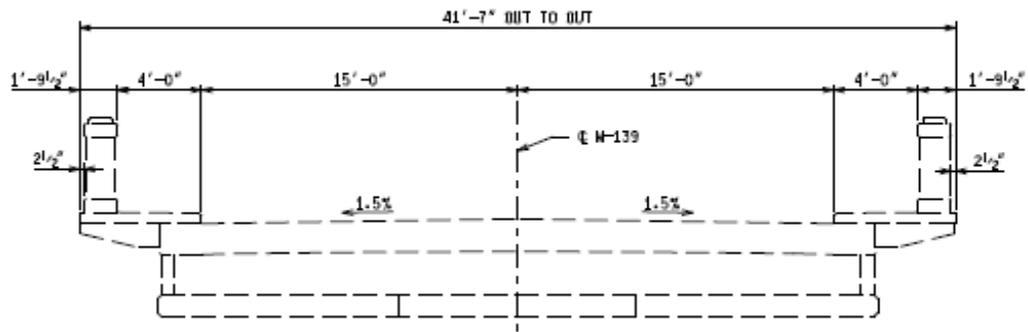
1. There are no bike specific routes on the east side of the river to tie the path into;

2. The existing surface streets on the east side of the river are low volume and bike friendly; and
3. Adding an additional bike lane on the bridge would be out of character for the bridge and could potentially have major safety, ROW, and park (Section 4(f) and Section 6(f)) impacts.

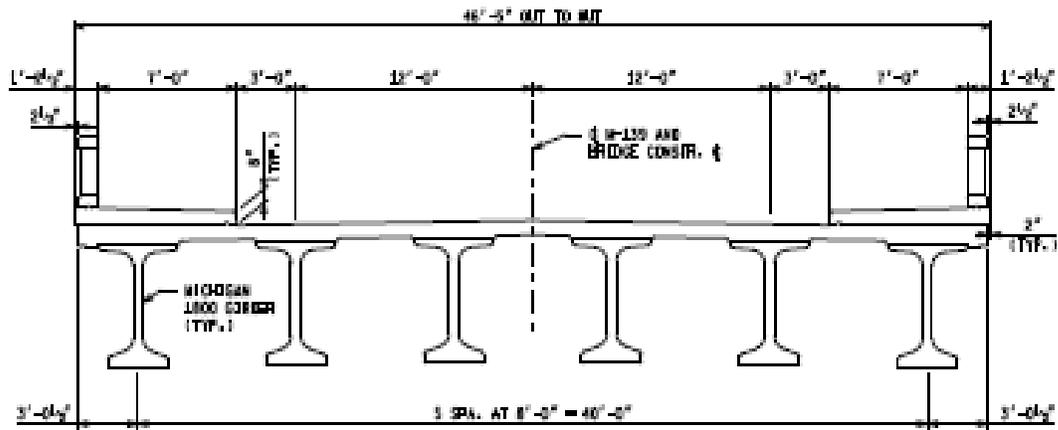
MDOT designed the preliminary structure following the 1999 AASHTO guideline for shared roadways, and will be marked using the appropriate marking for a shared use lane. The minimum requirement is 14 feet of clear roadway and we currently have it designed at 15 feet. MDOT, Lansing Geometrics approved the cross section prior to completing the preliminary design.

During construction of the new bridge MDOT will need to detour M-139 traffic. MDOT has coordinated with the city of Niles regarding the proposed detour. The detour route and associated information can be found in **Appendix B**. Pedestrian and bike traffic under the bridge will also be detoured, signed and ADA accessible.

Utilities on the bridge and surrounding area have been identified for impacts caused by the proposed project. Water, sanitary sewer, gas, phone and electrical lines adjacent to or crossed by the project may require relocation or adjustment. If this should be the case, coordination between MDOT and the affected utility company will take place during design, and relocation will take place prior to construction of the new facilities if possible. All utility work will be done within the footprint of MDOT right-of-way or existing utility easements. The contractor will coordinate the construction activities with the affected utility company. Service to the project area may be temporarily interrupted during the adjustment period. A utility conflict chart listing the utility owner and how the relocation of the impacted utilities will be resolved can be found in **Appendix F**.



EXISTING CROSS SECTION



PROPOSED CROSS SECTION

Figure 2:
Bridge Cross Sections

Description of Purpose and Need for the Project:

The primary purpose of the proposed project is to replace the M-139(Main Street) bridge over the St. Joseph River. The bridge is in poor structural condition and is scour critical and therefore, needs to be replaced. In addition to being scour critical the structure is in poor condition overall as it is showing signs of delamination (internal deterioration) and spalling (external deterioration). The Secondary purpose is to improve safety. The safety concerns on the current bridge include: poor geometrics, narrow sidewalks, and access issues into parking lots on the east end of the bridge. Currently, crashes on the structure are not part of the safety concerns, but do exist at the east and west approaches to the bridge. Since the completion of the Practical Alternatives document the Road Safety Audit has been completed as well which identifies these issues and is available upon request. Please see **Page 8 of Appendix A** for a more detailed discussion of how the safety improvements will be implemented. Existing and future traffic projections are not at a level that they be considered as a need for the bridge replacement or widening.

The need to replace the existing structure is because the structure is scour critical. This means that during high intensity rain events the bridge foundation can be substantially undermined and the structural integrity compromised. An analysis of scour countermeasures such as riprap or articulating block mats were analyzed, and it was determined that these measures would not protect the structures. Both measures would decrease the waterway area and are not allowed under the state floodplain statute. The bridge is an important monument to the city of Niles.

The proposed improvements will improve the safety of the crossing, not only for vehicles, but for pedestrians as well. The community will have an opportunity to provide input into the design of the new bridge during a Context Sensitive Solutions (CSS) workshop to be held during the design phase of the project.

Traffic Considerations:	Yes	No
Does the project adequately serve the existing and planned future traffic projections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the future traffic year 20 years from the date of construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Do changes in traffic cause additional project impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Describe any necessary actions and mitigation.		

Future traffic has been projected to 11,400 ADT in year 2035, which adequately serves the future years.

Alternatives Considered and Dismissed:

MDOT reviewed several options to avoid demolishing the existing bridge. Scour countermeasures such as riprap or articulating block mats were considered, but dismissed due to the advanced deterioration of the substructure and the potential to destabilize the spread footing substrate. In addition, both scour countermeasures would decrease the waterway area and would not be permissible under the state floodplain statute. Another option, to drive piles into the bridge piers for support, is not feasible due to the concrete arch design of the bridge. Constructability of driving piles would require coring holes through the bridge deck and arches, and therefore, result in the loss of metal rebar that strengthens the concrete, which would compromise the structural integrity of the bridge. Additionally, the concrete arch design would make it near impossible to physically get the required equipment to drive the piles, into position under the bridge. Based on this analysis, MDOT determined that the structure could not be rehabilitated without compromising the integrity of the structure. See **Appendix A** for all Alternatives considered and dismissed.

Existing Environment and Potential Impacts

Identify (yes or no) if there are any project impacts. For each “yes,” describe the impact and the potential for significant impact. Attach all agency correspondence.

Land Use:	Yes	No
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Is the project consistent with the existing and future local transportation plans, land use plans, and zoning ordinances?

Will the project affect existing or proposed land uses?

Describe any necessary actions and mitigation.

The City of Niles Land Use and Zoning Plans were reviewed and the project is consistent with the future intentions of those plans.

Right-of-way Impacts:	Yes	No
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Will the project require additional fee right-of-way, easements, or grading permits?

Will the project require any relocations?

Describe any necessary actions and mitigation.

Additional fee right-of-way (ROW) (approximately 1000 square feet) in the northwest quadrant of the bridge will need to be acquired in order to construct the new bridge, sidewalk, roadway and retaining walls. The parcel which includes the old vacant YMCA building is currently for sale.

The acquisition of this ROW would not require the relocation of businesses or homes. MDOT has no plans to acquire the vacant YMCA building. MDOT only needs 1000 square feet of fee ROW from the entire parcel and it is identified in **Figure 1, Project Location Map**, as well as **Figure 7 of Appendix A**.

All fee right-of-way will be acquired in conformance with the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

Agricultural Impacts:	Yes	No
Will the project affect lands zoned for agriculture or forestry?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will Federal Farmland Protection Policy Act coordination be required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If yes, what resource coordination is required?		
Will the project affect PA 116 lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are there any other agricultural impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Describe any necessary actions and mitigation.

Based on a review of the land use and the city of Niles zoning map there are no parcels currently zoned for agriculture or forestry and no active farmlands present within the project influence area. Therefore, no coordination with USDA/NRCS will be required under the Federal Farmland Protection Policy Act (FPPA).

Per a Michigan Department of Agriculture Part 361 of Public Act 451 (more commonly known as PA 116) database inquiry there are no enrolled parcels within the project influence area. There are no enrolled parcels in the entire section 26 of T07S R17W. Part 361 falls under the Farmland and Open Space Preservation Program of the MDA.

Berrien County has a Purchase of Development Rights (PDR) program for preserving farmlands. It is a voluntary program that compensates owners of agricultural properties for their willingness to accept a permanent deed restriction on their land that limits future development of the land for non-agricultural purposes. No properties within the study limits are in the PDR program or in the areas targeted for agricultural preservation.

Social Impacts:	Yes	No
Will the project affect neighborhoods or community cohesion?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Will the project affect travel patterns or accessibility for vehicles, bicycles, transit users, commuters or pedestrians?

Will the project affect the elderly, handicapped, non-motorized users, transit-dependent users, minority and ethnic groups or the economically disadvantaged?

Will the project impact any school district, recreation areas, churches, businesses, police and fire protection services, etc.?

If yes, what are the direct and the indirect impacts that may result from the displacement of households, businesses, and services.

Describe any necessary actions and mitigation.

The proposed project will not cause any long-term negative impacts on low-income, minority, ethnic, elderly, people with disabilities, or on area schools, churches, or emergency services (police, fire, ambulance). The proposed sidewalk improvements will be done in accordance with the 1990 Americans with Disabilities Act (ADA). No neighborhood within the project area will be permanently separated from community facilities or services. Access for motorists, school buses, emergency vehicles, and public transit will be maintained during construction. MDOT will coordinate with local officials in providing updated information to assist all motorists and pedestrians.

However, there will be temporary impacts to the residents, businesses, community services, motorists, pedestrians, bicyclists, transit users, and emergency services during the construction of the new bridge. Additionally, the use of recreational water traffic will be restricted during construction, as well as the use of the Riverfront Park boat launch. Please see **Appendix D – Programmatic Section 4(f) Evaluation** of this document for a complete list of the recreational impacts. MDOT will need to close the existing bridge and detour traffic for one year in order to construct the new bridge. During the one year construction period, motorists (including emergency vehicles) and transit and non-motorized users will incur longer travel times and distances in crossing the St. Joseph River to reach their destinations. Access will be maintained to area businesses and residents located on each side of the river during construction. The detour routes for both pedestrians (walkway/bike path) and motorists are shown in **Appendix B- Maintenance of Traffic Concept**.

Mitigation measures to address these temporary impacts include: minimizing disruption of traffic in the construction area by coordinating with local agencies and the community; placing signs in all of the construction areas notifying motorists and pedestrians; require construction equipment to have mufflers in good working order and portable compressors must meet federal noise-level standards for equipment; and require that contractors during construction will be responsible for adequate dust-control measures.

As part of an on-going coordination effort, MDOT will continue to coordinate with the city of Niles and the community in providing updated information about the proposed project and detour route during construction.

Environmental Justice	Yes	No
Will the project affect minorities or low income population groups?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will the project have a disproportionately high and adverse effect on minorities or low-income populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are there any persons with limited English proficiency in the project area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Describe any necessary actions and mitigation.

The purpose of Executive Order 12898 on Federal Actions to Address Environmental Justice in Minority and Low-Income Populations is to identify, address, and avoid disproportionately high and adverse human health or environmental effects on minority and low-income populations. The proposed replacement of the bridge will not cause a disproportionately high and adverse human health or environmental effects on minority and low-income populations.

An analysis of the U.S. census Data for 2010 along with field reviews of the project area determined that there were minority and non-minority population groups who reside in the city of Niles, and utilize the pedestrian sidewalks along the existing bridge and in the surrounding area. According to the 2010 U.S. Census, the total population for the city of Niles is 11,600, while the total population for Berrien County and the State of Michigan is 156,813 and 9,883,640, respectively. The minority population in the city of Niles is almost 17 percent; while the minority population in Berrien County and the state is over 18 percent. According to the U.S. Census 2005-2009 Estimated Data, the percentage of individuals who are below the poverty level over a 12 month period (2009) is 23 percent. This percentage is higher than the county and state levels which were estimated to be 16.7 percent and 14.5 percent, respectively during same period. The proposed improvements along with the temporary inconvenience of having to walk further during the construction of the bridge will affect minority and low-income populations as well as non-minority population groups.

The Census 2005-2009 Estimated data also indicated that there are individuals who may be Limited in English Proficiency (LEP) in the city of Niles, Berrien County and the state of Michigan. In the city of Niles, 8.6 percent of individuals speak a language other than English at home. In Berrien County the percentage of individual who speak a language other than English is 7 percent; while in the entire state, it is estimated that 9.0 percent of individuals speak a language other than English at home.

As part of public outreach, MDOT held two public information meetings inviting residents and local officials to learn more about the project and the proposed detour route. Everyone who attended the meeting supported the project. Approximately 12 people attended the meeting held in May 2010; while 22 people attended the meeting that was held in January 2011. MDOT did not receive any requests to have translation services at the public information meeting or to have brochures or other materials translated into another language. If MDOT does receive a request for translation services during subsequent phases of this project, MDOT will make translation services available.

Although the proposed project will not displace or cause disproportionate affects on minority and low-income populations within the project area, a continuing effort will be made to identify any additional impacts that may have a disproportionately high and adverse affect on minority and low-income population groups during subsequent phases of this project. If additional impacts are identified, every effort will be made to actively involve the impacted groups in the project development process.

Economic Impacts	Yes	No
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Will the project affect the regional or local economy resulting in changes to development, tax revenues, public expenditures, employment opportunities, accessibility, or retail sales?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Will the project have an impact on established businesses or business districts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Describe any necessary actions and mitigation.

The proposed project will likely take an entire calendar year with the movement of utilities, demolition and construction of the new bridge. The proposed project will have no long-term effect on the local economy or tax base in the area. Access to area businesses will be maintained during construction.

Effects on Historic (Above Ground) Resources:	Yes	No
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Will the project affect historic resources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Are any sites in the project area eligible for or already listed on the National Register of Historic Places?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Has a survey of the area been conducted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Describe any necessary actions and mitigation.

The Main Street/M-139 Bridge (Bridge) is the only National Register-eligible property adversely affected by the project. The State Historic Preservation Office (SHPO) was consulted and determined that the proposed project would have an adverse effect on the Bridge due to its replacement. Please refer to **Attachment C** in the **Programmatic Section 4(f) Evaluation** for the SHPO letter dated August 15, 2011. A Memorandum of Agreement (MOA) has been prepared in compliance with Section 106 of the National Historic Preservation Act. A signed copy of the MOA is included in **Attachment D** in the **Programmatic Section 4(f) Evaluation** and outlines the mitigation required for the project. For more information including photographs of the bridge, please also refer to **Attachments A-G** in the **Programmatic Section 4(f) Evaluation**.

There are three additional historic properties within the Area of Potential Effect, namely the National Register-listed Niles Downtown Historic District, and the National Register-eligible Chapin and Dewey Houses. The proposed project will have no adverse effect on the Chapin and Dewey Houses, and the project will have no effect on the Niles Downtown Historic District.

Effects on Archaeological Resources:	Yes	No
Will the project affect archaeological resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are any sites in the project area eligible for or listed on the National Register of Historic Places?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Has a survey of the area been conducted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Describe any necessary actions and mitigation.

MDOT consulted with the Michigan State Historic Preservation Office (SHPO) and Michigan Indian Tribes, and conducted an archaeological survey to comply with Section 106 of the National Historic Preservation Act. As a result of these consultations and the archaeological survey, no National Register-eligible archaeological sites or sites of traditional cultural or religious significance to Michigan Indian Tribes are located within the Area of Potential Effects for the proposed project. The project will have no effect on archaeological resources per the SHPO letter in **Appendix D**.

Effects on Traditional Cultural Properties:	Yes	No
Will the project affect any Traditional Cultural Properties? A traditional cultural property is defined as one that is eligible for inclusion in the National Register of Historic Places because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Are any Traditional Cultural Properties in the project area eligible for or listed on the National Register of Historic Places?

Will consultations with Indian tribes be required regarding Traditional Cultural Properties?

Describe any changes or necessary action.

MDOT consulted with the Michigan State Historic Preservation Office (SHPO) and Michigan Indian Tribes, and conducted an archaeological survey to comply with Section 106 of the National Historic Preservation Act. As a result of these consultations and the archaeological survey, no National Register-eligible archaeological sites or sites of traditional cultural or religious significance to Michigan Indian Tribes are located within the Area of Potential Effects for the proposed project.

Twelve federally recognized and two state-recognized Indian Tribes were contacted regarding culturally significant and/or religious properties. Two Tribes responded and neither Tribe was aware of any culturally significant and/or religious properties in the project area. See the response letters from the Tribes located in **Appendix C**.

Effect on Air Quality:	Yes	No
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Will the project affect a non-attainment area?

Is the project adding a lane in a single direction of 1 mile or more?

Is the project listed in the state or MPO's long range plan?

Is the project in the MPO's TIP?

Will the project require a CO, PM_{2.5}, or PM₁₀ microscale "hot-spot" analysis?

Describe any necessary actions and mitigation.

The project is exempt from air quality conformity analysis under 23 CFR 93.126 bridge reconstruction without adding lanes. The project is identified in the Southwest Michigan Commission's, which is the MPO for this area, Long Range Plan and TIP.

Noise Impacts:	Yes	No
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Are any noise sensitive receivers or land uses adjacent to the proposed project?

Has there been a substantial change in vertical or horizontal alignment?

Will traffic volumes change?

Is the project adding a lane in a single direction of one mile or more?

Will a noise analysis be required?

Describe any necessary actions and mitigation.

The bridge meets the definition of a Type III project under 23 CFR 772.5 and identified under 23 CFR 771.117(d)(3). Type III projects are exempt from noise analysis. Please see the Green Sheet at the end of this document for the mitigation measure resulting from noise resulting from construction impacts.

Fish & Wildlife Impacts:	Yes	No
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Will the project affect aquatic wildlife (i.e., fish, mussels, ...)?

Will the project affect a designated trout stream or lake, a cold water lake, or an outstanding State Resource Water?

Will the project affect terrestrial wildlife (i.e., turtles, birds, ...)?

Will the project affect migratory birds?

Will the project affect Michigan designated Species of Special Concern?

Will the project affect Forester Sensitive Species designated by the U.S. Forest Service?

Describe any necessary actions and mitigation.

A review of the Michigan Natural Resources Inventory (MNFI) endangered species database indicated that 3 species of mussel are located in this portion of the St. Joseph River. Two of the species are listed as special concern; the Elktoe (*Alismidonta marginata*) and Lilliput (*Toxolasma parvus*) and one species listed as endangered; the Paper Pondshell (*Utterbackia imbecilis*). A mussel survey will be completed prior to construction. Any mussels found during the survey will be relocated up stream of the crossing site. Implementation of standard soil erosion and sedimentation control measures will reduce the potential for impact.

No work will occur in the St. Joseph River channel from May 1 through June 30 to protect juvenile and spawning life stages and habitats of warm-water fish species in the St. Joseph

River. Any work in the water that is necessary during this seasonal time restriction must be performed inside an enclosed cofferdam installed prior to May 1.

There is potential for the presence of migratory bird use of the structure. Potential impacts to migratory birds will be mitigated by implementation of the migratory bird species provision that will be contained in the plans and specifications for the project.

Effect on Threatened and Endangered Species:	Yes	No
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Will the project affect any threatened or endangered species listed in state or federal laws and regulations?

Describe any necessary actions and mitigation.

The MNFI endangered species database was checked for known locations of listed species adjacent to the proposed project. The following four plant species are known to occur in the local area: *Silphium integrifolium* (Rosinweed) State Threatened, *Baptisa lactea* (Prairie False Indigo) State Special Concern, *Panax quinquefolius* (Ginseng) State Threatened and *Trillium recurvatum* (Prairie Trillium) State Threatened. There are no records for animal species.

On April 23, 2008, the project corridor was surveyed for the presence of Prairie Trillium which was not found. The habitat within all four quadrants of the bridge was documented. The east side of the bridge does not contain suitable habitat for any listed species because it is mowed and maintained yearly. The west side of the bridge is dominated by steep wooded upland slopes. These slopes are highly eroded and contain no understory or shrub layer. Based on the poor conditions of these highly disturbed wooded slopes, suitable habitat for the remaining three species is not present. Therefore, additional field surveys for the other three species are not required.

Based on the field survey and documentation of the habitat conditions, there will be no impact to any state or federally listed endangered species. Further coordination or endangered species permits with the MDNRE and USFWS will not be required.

Wetland Impacts:	Yes	No
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Will the project affect wetlands? If yes, complete the following:

Wetland Type	Number of acres	Fill quantity (cubic yds.)	Dredge quantity(cubic yds.)
NA	NA	NA	NA

Describe any necessary actions and mitigation.

No wetlands were identified in the project area based on a database search and field survey.

Effect on Lakes, Streams, or Other Bodies of Water:	Yes	No
Does the project affect navigation of a water body (as defined by the U. S. Coast Guard)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project affect navigable waters of the U.S. (as defined by the Army Corps of Engineers)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will construction require any access pads or placement of rip rap in the stream?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will the project require stream relocations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project include replacement or widening of bridges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will work take place in the water or below the ordinary high water mark?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Describe any necessary actions and mitigation.

The final determination of construction techniques to be employed during construction has not been made. Any use of construction pads will be completed in accordance with state regulations based upon a hydraulics analysis. Placement of riprap will be included in the final plans and will be completed in accordance with state permits and hydraulics analysis.

All activities will be conducted consistent with state requirements and by use of best management practices. See the **Project Mitigation Summary Green Sheet** at the end of this section of the document for additional mitigation measures.

Floodplain Impacts:	Yes	No
Will project affect a regulated floodway or alter floodplain functions or values? If yes, complete the following:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Number of acres	Fill quantity (cubic yds.)	Dredge quantity(cubic yds.)
Data not yet available	Data not yet available	Data not yet available

Is the project consistent with local flood protection standards?

Is the project consistent with MDEQ flood hazard ordinances?

Describe any necessary actions and mitigation.

A preliminary hydraulic analysis was conducted for this project and The final design will be consistent and meet all requirements of state and federal laws and permits. The hydraulic analysis has indicated that the new three-span bridge will have a slight decrease in back water elevation for the 100-year storm event compared to the existing bridge. Riprap will be placed around the piers and abutment slopes to provide scour protection. Additionally, riprap may be required to provide protection for eroded slopes.

Effects on Wild and Scenic Rivers or State Designated Natural Rivers:	Yes	No
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Will the project affect any federally-designated Wild and Scenic Rivers?

Will the project affect any State-designated Natural Rivers?

Describe any necessary actions and mitigation.

Water Quality Impacts:	Yes	No
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Does the project impact a public or private drinking water source?

Will the project affect the potential discharge of storm water into the waters of the State?

Does the project affect a designated impaired water body or a water body with total maximum daily load restrictions?

If yes, list name(s), location(s), and pollutant(s) of concern:

The St. Joseph River near the city of Niles is listed as impaired for E. Coli, Mercury and PCB's. MDOT does not address these pollutants because these are not usually constituents that are associated with storm water runoff for roadways.

Bridge runoff will be collected from the bridge and tied into the city enclosed drainage system. Two enlarged catch basins will better contain any sand contained in the bridge runoff.

Is the project located in an area with an approved local watershed plan?

Describe any necessary actions and mitigation.

For Water Quality Impacts associated with construction, please see the Construction Impacts section of this document.

Coastal Management Zone Impacts:	Yes	No
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Will fill or excavation be required within the Coastal Zone Management boundary, critical dunes or Coastal Barrier areas?

Describe any necessary actions and mitigation.

Visual Impacts:	Yes	No
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Will the project require removal of trees near streams?

Will the project require removal of trees near buildings?

Will the project affect other visual resources?

Describe any necessary actions and mitigation.

MDOT will facilitate a “context sensitive design workshop” during the design phase to involve the community and State Historic Preservation Office (SHPO) in determining the aesthetic treatment for the proposed new structure. Currently many locals congregate on the bridge to view the river. Widening of the sidewalks and potential bump-outs will make this a more pleasurable experience.

Contaminated Sites:	Yes	No
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Are there any known or potentially contaminated sites along the corridor? If, yes, answer the following two questions:

Are any utility trenches (i.e., storm or sanitary sewer, water main, ...) in the vicinity of a contaminated site?

Are there any groundwater monitoring wells in the vicinity of a contaminated site?

If buildings or residences are relocated, have they been evaluated for hazardous waste (i.e. asbestos?).

Describe any necessary actions and mitigation.

A Preliminary Site Investigation (i.e., PSI, Phase II Environmental Site Assessment) was performed within the area of the proposed M-139 (Main Street) over the St. Joseph River Bridge Replacement Project in the City of Niles, Berrien County, Michigan. The PSI was conducted to determine if environmental contamination exists that could affect the project's design, cost, or schedule, and to meet the requirements of Part 201 of the Michigan Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended. The Executive Summary of the PSI is included as **Appendix E** of this document.

The PSI entailed advancing of four (4) soil borings and collecting 16 sediment samples adjacent to Bridge Structure B02-11021 over the St. Joseph River. The soil and sediment samples were submitted for chemical analysis of Polychlorinated Biphenyls (PCBs) and Michigan Ten Metals. Soil and sediment analytical results were compared to the State of Michigan Part 201 Residential and Commercial Cleanup Criteria.

Concentrations of mercury above the Part 201 Groundwater Surface Water Interface Protection Cleanup Criteria were detected in soil samples collected at the east and west bridge abutments at depths ranging from zero (0) to ten (10) feet below grade surface (bgs). Concentrations of lead above the Drinking Water Value were detected in sediment samples collected north and south of Pier 3 at depths ranging from zero (0) to three (3) feet bgs, and south of the east abutment at depths between zero (0) to one (1) feet bgs. A concentration of selenium above the Part 201 Groundwater Surface Water Interface Protection Cleanup Criteria was detected in the soil sample collected at the west bridge abutment at a depth ranging from nine (9) to ten (10) feet below grade surface (bgs).

MITIGATION

In order to meet MDOT's due care obligations, which include preventing the exacerbation of existing contamination, and addressing potential worker health and safety issues, and to avoid, minimize, and mitigate adverse impacts, the following standard mitigation measures are required:

- 1) Areas of contamination should be identified in the plans.
- 2) Safety measures in accordance with the rules and regulations of the Michigan Occupational Safety and Health Administration (MIOSHA), OSHA (29 CFR 1910.120 and 1926) should be implemented.
- 3) An estimated quantity (i.e., pay item) of non-hazardous contaminated media should be included in the project plans for the appropriate handling and disposal of contaminated soil at the bridge abutments, and dredged/excavated sediment at Pier 3 and the east abutment.
- 4) Conditions stipulated in the "Special Provision for Non-Hazardous Contaminated Material Handling and Disposal" must be met during construction, including laboratory testing to solicit landfill approval, temporary storage requirements, and restrictions for reusing contaminated media as fill.

- 5) Proper measures must be taken to contain disturbed contaminated soil and sediment. Soil erosion and sedimentation controls based on Best Management Practices must be installed and monitored by the project engineer during soil and sediment disturbance activities. All contaminated media, which includes dredged sediment, must be handled and disposed of appropriately in accordance with state and federal regulations.
- 6) The "Supplemental Specification for Asbestos Removal and Disposal" should be included in the project package in anticipation asbestos conduits are encountered on the bridge.

Indirect and Cumulative Impacts:	Yes	No
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Will the project cause adverse indirect or cumulative effects?

Describe any necessary actions and mitigation.

Permits and Authorizations:	Yes	No
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Will the project require any of the following permits and authorizations?

U.S. Army Corps, Section 404 and Section 10	<input type="checkbox"/>	<input checked="" type="checkbox"/>
U.S. Coast Guard, Section 9	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Flood Hazard, MDEQ, and Act 451 Part 31	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wetland Protection, MDEQ, Act 451 Part 303	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Inland Lakes and Streams, MDEQ, Act 451 Part 301	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wild and Scenic Rivers Act	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Municipal separate storm sewer system (MS4) NPDES permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Storm water discharge NPDES permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Construction site NPDES permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Michigan Coastal Management Program, Section 307 permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
County Drain Commissioner review/approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other (for example, Threatened and Endangered Species, Critical Dunes).	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If "yes, list additional permits and authorizations.

Describe any necessary actions and mitigation.

MDEQ Permits needed for the M-139 bridge replacement in Niles include Part 31 (Floodplains and Water Quality) and Part 301 (Inland Lakes and Streams) of ACT 451 (Natural Resources and Environmental Protection).

Construction Impacts:	Yes	No
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Will the project have any of the following potential construction effects?

Construction timing commitments?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Clearing or work in a stream	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will any bridge painting occur over watercourses?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the project disturb more than five acres of soil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Temporary degradation of water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Temporary stream diversion or work on an access pad?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Temporary degradation of air quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Temporary delays and detours of traffic?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Temporary impact to businesses such as access and parking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other construction impacts, including noise and vibration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will there be restriction dates for clearing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will there be restriction dates for work in a stream?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Describe any necessary actions and mitigation.

See the **Project Mitigation Summary Green Sheet** at the end of this section of this EA for a list of the impacts and any additional mitigation measures. For a description of the construction method, see the Constructability section on page 32 of **Appendix A**.

Public Involvement and Agency Coordination:
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Describe what actions were taken to identify stakeholders during scoping or at public information meetings or formal public hearings.

MDOT coordinated with local officials including the Niles Historical Society to help identify stakeholders.

Describe the type of public involvement and agency coordination that has occurred.

As part of early coordination, MDOT sent out letters to various federal, state and local agencies, interested local groups, and the tribes located in Michigan. MDOT did receive a few responses regarding the project. The MDOT coordination letter and the responses from the resource agencies can be found in **APPENDIX C**.

Two public information meetings were held one on April 6, 2010 and the other January 26, 2011. The purpose of the meetings was to inform the community about the upcoming bridge project and to seek input from the community. The meetings were held at the Niles City Council chambers. Comments received at the meetings are included in **APPENDIX D**.

Discuss pertinent issues raised by the public and resource agencies. Attach applicable correspondence and responses.

Everyone that commented at the meetings is in favor of replacing the bridge. Most concerns were over sidewalk width for pedestrian movement and safety. MDOT will ensure that the replacement bridge is designed in consultation with the SHPO, nearby property owners, the City of Niles, and the general public. MDOT will hold at least one meeting to assess the community preferences for the aesthetics of the replacement bridge based on engineering requirements and local input.

Effects on Section 4(f)/6(f) Properties:	Yes	No
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Will the proposed action affect Section 4(f) properties?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Will the proposed action affect Section 6(f) properties?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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If yes to either of the above, attach appropriate Section 4(f) and Section 6(f) documentation.

The project will affect the M-139/Main Street Bridge, which is eligible for listing on the National Register of Historic Places. Coordination with the owner of the 4(f)/6(f) property is required as part of the review. To comply with this requirement, MDOT coordinated with the City of Niles and received approval for the temporary impacts to Riverfront Park. Additionally, MDOT coordinated with the Michigan Department of Natural Resources in regard to the temporary 6(f) impacts and received approval. No land conversion is needed for this project. See coordination letters in **Attachment G** of the **Programmatic Section 4(f) Evaluation**. The proposed project will not permanently impact Riverfront Park. There will be a temporary impact to the Riverfront Park Trail and the Riverfront Park boat launch during construction of the new bridge.

Project Planning Considerations:	Yes	No
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Is the project listed in the Regional Transportation Plan (RTP)?

Is the project listed in the Transportation Improvement Program (TIP)?

The proposed project is identified in the 2014 RTP and TIP for the Southwest Michigan Commission, which is the MPO for this region.

Project Cost

What is the anticipated cost for the preferred alternative?

The cost of bridge replacement and the associated road improvement costs are approximately \$5,188,900 for replacing the bridge and \$788,100 for the road improvements for a total of \$5,907,000. These cost estimates are using year 2011 dollars.

Project Mitigation Summary “Green Sheet”
For the Preferred Alternative

June 29, 2012

Environmental Assessment
Programmatic Section 4(f) Evaluation

M-139 (Main Street) Bridge Replacement
Over the St. Joseph River
In the City of Niles
Berrien County, Michigan

This project mitigation summary “Green Sheet” contains the project specific mitigation measures being considered at this time. An updated “Green Sheet” will be prepared and included in the Finding of No Significant Impact (FONSI) for this project. These mitigation items and commitments may be modified during the final design, right-of-way acquisition or construction phases of this project.

I. Social and Economic Environment

- a. *Visual Resources* – MDOT will facilitate a “context sensitive design workshop” during the design phase to involve the community and State Historic Preservation Office (SHPO) in determining the aesthetic treatment for the proposed new structure.
- b. *Maintaining Traffic* – Traffic will be detoured during construction. The Broadway/Grant Street bridge located approximately 1000 feet south of the proposed M-139 (Main Street) structure will be used for the detour. The detour is expected to be in place for approximately one year. The Detour will also include Lincoln Street, 5th Street (M-51), and Wayne Street. Coordination with local officials will occur to facilitate emergency service and school bus routes. Access to residences and businesses within the project area will be maintained during construction.
- c. *Parks* – No fee right-of-way (ROW) is required from Riverfront Park located adjacent to the NE quadrant of the structure. The section of existing non-motorized path under the M-139 structure along the east side of the St. Joseph River will be replaced and widened to current standards within MDOT ROW as part of this project. The construction area will be fenced and pedestrian access will be prohibited. The non-motorized path will be signed and detoured during construction. A temporary 30’ by 50’ triangular grading permit will be needed from the park to replace and lengthen the retaining wall adjacent to the non-motorized path. The Contractor shall not use Riverfront Park for construction staging and no vehicles or materials will be stored on park property. Access to Riverfront Park shall be maintained at all times during construction.

There is a City of Niles owned recreational property that contains two boat ramps located on the east side of the St. Joseph River south of the Broadway/Grant Street bridge. The City has indicated they will allow the Contractor to use a portion of this property to assemble and launch a construction barge and crane to be used for the M-139 structure replacement. The Contractor will be allowed to use the launch site to remove the crane and barge when no longer needed. The Contractor will not be allowed to use this City recreational property for a staging yard for this project and no materials or equipment other than the barge and crane will be allowed on this property during construction. Public access to this City of Niles recreational property must be maintained at all times during construction.

II. Natural Environment

- a. *Stream Crossing* – Removal of the existing river piers and construction of the new bridge piers will be done inside enclosed cofferdams. If possible, all work will be done by cranes located at the top of the river banks or from barges in the river. If barges are used, minor dredging may be required to obtain the five foot minimum depth required for barges supporting cranes. Temporary construction pads may be required in the St. Joseph River to allow for cranes to drive pier piles and place beams for the new structure. A Construction Staging Plan that details structure removal and construction phases will be prepared during the design phase. Removal of earth-filled concrete arch structures is often difficult but any bridge debris that falls into the river will be removed within 24 hours. Coordination with permitting agencies will occur during the permit application phase of the project. Soil erosion and sedimentation control measures will be included in the design plans and enforced during construction.
- b. *Floodplains* – The new M-139 structure will be able to pass the 100-year storm event without causing harmful interference. The new bridge will be designed to handle anticipated scour based on FHWA guidelines. Preliminary hydraulic review indicates riprap will be required around both sides of the new piers and extend out from each new abutment. The hydraulic information will be verified in final design once all construction limits and design details are identified.
- c. *Water Quality* – Compliance with MDOT’s MS4 NPDES permit will be required. All storm water outfalls will be properly labeled. All work in the St. Joseph River for removal of existing piers and construction of new piers will be done inside an enclosed cofferdam to isolate the construction activity from the St. Joseph River. Drainage from the new structure will be collected in an enclosed drainage system that will tie into the City of Niles enclosed drainage system at the east end of the bridge. The bridge drainage will then travel thru two enlarged City of Niles catch basins before being allowed to outlet to the St. Joseph River thru an existing pipe in the NE quadrant. The enlarged catch basins will better contain any sand contained in the bridge runoff.
- d. *Wildlife Resources* - The Special Provision for Migratory Birds will be set up on this project to avoid impacts to nesting swallows at the M-139 Structure over the St. Joseph River.

- e. *Threatened/Endangered Species* – A mussel survey will be conducted in the vicinity of the M-139 crossing prior to construction. Any mussels found during the survey will be relocated upstream of the crossing site.

III. Cultural Environment

- a. *Historic Resource* – Prior to any construction activities, the historic M-139 (Old US-12BR)/Main Street structure will be documented in text and graphics to record its place in history. The design of the replacement bridge will draw from SHPO and community input and will complement the setting and community values and vision. MDOT will provide an interpretive sign, located near the replacement bridge, to explain the history of the crossing at the St. Joseph River. MDOT will salvage the existing bridge plaque to be re-used on the new bridge with associated interpretation or donated to a local institution. If owner permission is obtained, MDOT will provide National Register nominations for the two National Register-eligible homes in the southwest quadrant of the bridge. Specific details of the historic structure mitigation commitments are listed in the signed Memorandum of Agreement (MOA) found in Attachment D of the Programmatic Section 4(f) Evaluation of this EA.

IV. Hazardous/Contaminated Materials

- a. *Project Contamination* – A Project Area Contamination Survey (PACS) and Phase II Environmental Site Assessment were performed for this project. Concentrations of mercury above MDEQ cleanup criteria were detected at the east and west abutments. Concentrations of lead above MDEQ cleanup criteria were detected in river bottom sediment around the east pier and between the east pier and the east abutment. A concentration of selenium above MDEQ cleanup criteria was detected at the west bridge abutment. Potential areas of concern have been identified and additional review (and testing if required) will occur during the design phase when slope-stake lines and construction limits are determined.
- b. *Contamination Mitigation* – All areas of contamination will be identified in the plans and an estimated quantity of non-hazardous contaminated media will be included in the project proposal for the appropriate handling and disposal of contaminated soil at the bridge abutments and dredged/excavated sediment at the east pier and east abutment. Conditions stipulated in the “Special Provision for Non-Hazardous Contaminated Material Handling and Disposal” must be met during construction; including laboratory testing to solicit landfill approval, temporary storage requirements, and restrictions for reusing contaminated media as fill. Proper measures must be taken to contain disturbed soil and sediment. Soil erosion and sedimentation controls based on best management practices (BMP’s) such as cofferdams and turbidity curtains will minimize sediment disturbance and control sediment loss in the river. All contaminated media which includes dredged sediment will be properly handled and disposed of in accordance with state and federal regulations.

- c. *Contamination Exposure* – A Workers Health and Safety Plan will be prepared for this project.

V. Construction

Based upon the construction method chosen by the Contractor, modifications and/or additional mitigation measures may be required.

- a. *Construction Permits* – Permits under Act 451, Part 31 (Water Quality and Floodplains), and Part 301, (Inland Lakes and Streams) are required from the MDEQ for this project. Coverage under the National Pollutant Discharge Elimination System (NPDES), which is administered by the MDEQ, is also required. Coordination will occur with owners/operators of dams located both upstream and downstream of the proposed M-139 structure over the St. Joseph River in design and during construction to address any water level changes.
- b. *Construction Restriction Dates* – No work will occur in the St. Joseph River channel from May 1 through June 30 to protect juvenile and spawning life stages and habitats of warmwater fish species in the St. Joseph River. Any work in the water that is necessary during this seasonal time restriction must be performed inside an enclosed cofferdam installed prior to May 1. It is possible that changes to these restriction dates may occur during the environmental permitting process. Dates issued by the MDEQ in the final environmental permit will supersede dates listed in this Environmental Assessment.
- c. *De-Watering* – Water from de-watering of cofferdams used for work in the St. Joseph River will be treated prior to discharge.
- d. *Construction Noise* - Construction noise will be minimized by measures such as requiring that construction equipment have mufflers, that portable compressors meet federal noise-level standards for that equipment, and that all portable equipment be placed away from or shielded from sensitive noise receptors. Since the bridge replacement will occur with a detour route, no work outside of normal daylight construction is anticipated. MDOT will monitor the contractor to ensure they are in compliance with the city of Niles Noise Ordinance Policy (work prohibited from sundown until 7:00 a.m. the following day) or any variances granted the contractor by the Niles City Administer.
- e. *Construction Vibration* - Basement/foundation video-taping prior to construction will be offered to structures within 150 feet of any construction activity in areas where vibration effects could occur, where pavement and the bridge will be removed or where piling and/or steel sheeting is planned. These areas will be identified during the design phase and would include the two historic buildings and stone wall in the southwest quadrant of the existing bridge. The sections of Main Street and St. Joseph Street in the vicinity of the two historic buildings and stone wall will have the sub-base compacted by rolling instead of vibratory equipment. Monitoring will occur before, during and after the construction phase.