

7.0 MEASURES TO MITIGATE IMPACTS

The following sections address mitigation measures being considered for the Recommended Alternative and are based on the information available through November 2004. A Project Mitigation Summary “Green Sheet” is included at the end of this section.

7.1 Minimization of Relocation Impacts Resulting from Right-of-Way Acquisition

Compliance with State and Federal Laws - Acquisition and relocation assistance and advisory services will be provided by the Michigan Department of Transportation (MDOT) in accordance and compliance with Act 31, Michigan P.A. 1970; Act 227, Michigan P.A. 1972; the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended; and Act 87, Michigan P.A. 1980, as amended. The MDOT will inform individuals, businesses and non-profit organizations of the impact, if any, of the project on their property. Every effort will be made through relocation assistance to lessen the impact when it occurs.

Residential – The MDOT is required by statute to determine the availability of comparable, decent, safe and sanitary housing for eligible displaced individuals. The MDOT has specific programs to implement the statutory and constitutional requirements of property acquisition and relocation of eligible displaces. Appropriate measures will be taken to ensure that all eligible displaced individuals are advised of the rights, benefits, and courses of action available to them.

Business and Non-Profit Organizations – The MDOT is required by statute to offer relocation assistance to displaced businesses and non-profit organizations. The MDOT has specific programs that will implement the statutory and constitutional requirements of property acquisition and relocation of eligible displaces. Appropriate measures will be taken to ensure that all eligible displaced businesses and non-profit organizations are advised of the rights, benefits, and courses of action available to them. Displaced businesses and organizations will be encouraged to relocate within the same community.

Purchasing Property – The MDOT will pay just compensation for fee purchase or easement use of property required for transportation purposes. “Just compensation” as defined by the courts is the payment of “fair market value” for the property rights acquired plus allowable damages to any remaining property. “Fair market value” is defined as the highest price estimated, in terms of money, the property would bring if offered for sale on the open market by a willing seller, with a reasonable time allowed to find a purchaser, buying with the knowledge of all the uses to which it is adapted and for which it is capable of being used.

Relocation Information – A booklet entitled “Your Rights and Benefits” detailing the relocation assistance program can be obtained from the Michigan Department of Transportation, Real Estate Support Area, P.O. Box 30050, Lansing, Michigan, 48909 or phone (517) 373-2200.

Property Acquisition Information - A booklet entitled “Public Roads & Private Property” detailing the purchase of private property can be obtained from the Michigan Department of Transportation, Real Estate Support Area, P.O. Box 30050, Lansing, Michigan, 48909 or phone (517) 373-2200.

Conceptual Stage Relocation Plan – The conceptual stage relocation plan for this project is attached in Appendix C.

7.2 Environmental Permits

State and federal permits listed in Section 7.2 of the DEIS continue to be required.

7.2.1 State

The one state permit by rule under Public Act Part 31 is the Water Quality Act, Section 405, National Pollutant Discharge Elimination System (NPDES) storm water permit under the Clean Water Act of 1972, as amended.

7.2.2 Federal

There are no federal permits required.

7.3 Soil Erosion and Sedimentation Control

The soil erosion and sedimentation control measures described in the DEIS for the Practical Alternatives are also applicable to the Recommended Alternative. The soil erosion and sediment control plan on file with the Michigan Department of Environmental Quality requires the placement of appropriate control measures and routine inspections of those measures to ensure their continuing effectiveness. The MDOT *Soil Erosion and Sedimentation Control Manual*, 2000, contains guidance relating to the selection and implementation of appropriate erosion control measures for various circumstances and will be used to design the erosion control measures for this project. A Storm Water Pollution Prevention Plan will be prepared for the project. Where dewatering is required, appropriate erosion/sedimentation controls will be implemented.

7.4 Existing Vegetation

Although some tree removal might be necessary, the existing natural and ornamental vegetative cover will be retained wherever possible within the right-of-way. Where the existing groundcover must be removed, replacement vegetation will be established in a timely manner using seed and mulch or sod.

The MDOT is committed to replace vegetation in coordination with adjacent property owners and the city of Detroit. Replacement trees will be placed (with the property owner's approval) on adjacent private property as close to the right-of-way line as possible. Property owners would then assume the responsibility for maintaining the trees.

7.5 Threatened and Endangered Species

There are no threatened and endangered species in the I-94 Rehabilitation Project area.

7.6 Noise Barriers

As described in FEIS Section 5.6, three noise barrier locations satisfy both the cost and acoustic components of the MDOT's 1996 noise abatement policy guidelines for feasibility and reasonableness and are proposed for the Recommended Alternative. B3 (northwest quadrant of

the M-10/I-94 interchange), B5 and B7 (southwest quadrant of the I-75/I-94 interchange) are the proposed barrier locations (see Figures 5-11A and B). Noise barrier locations are committed by the MDOT to be re-evaluated prior to final design.

7.7 Aesthetics

Mitigation of impacts to aesthetics and visual resources is proposed as an integral part of the Recommended Alternative. Several actions already have been undertaken; these actions and additional future mitigation commitments are described below. These measures are being undertaken as Context Sensitive Solutions (CSS) in the belief that transportation projects serve the community more effectively when residents are involved in the planning and design process. CSS has been effectively employed throughout the United States for more than ten years.

Aesthetic Mitigation

The discussion of appropriate aesthetic mitigation measures for the I-94 Rehabilitation Project were first initiated in October 2001. At that time, the MDOT held an event entitled “Mitigation Day” that established the framework for community inclusion. Representatives from the MDOT, Federal Highway Administration (FHWA), city of Detroit, and numerous civic and community groups from Detroit and surrounding cities were invited and participated in the event.

Mitigation Day was intended to communicate both the technical and aesthetic issues related to the proposed rehabilitation of I-94 and open dialogue for partnering opportunities with the public, non-governmental, and private-sector organizations. During the Mitigation Day sessions, the MDOT recognized that issues needed to be clearly and simply articulated to establish a basis for feasible ideas. It also was clear that the MDOT and civic groups and individuals might have different goals. Therefore, the central mission for all future community engagement sessions was to establish a common language and set of goals that all parties could understand and support.

Context Sensitive Solutions Workshops. Subsequent to this meeting, two Context Sensitive Solutions (CSS) workshops were held in the project area on February 24 and 26, 2004. The purpose of the meetings was to achieve the following objectives:

- Provide an update to residents and civic leaders on project activities;
- Define and demonstrate how CSS has worked in other communities across the nation;
- Define regional, neighborhood, and individual components of the highway corridor experience;
- Generate interest in creating partnerships for maintaining and building additional amenities associated with the rehabilitation of I-94; and
- Begin to generate ideas and visions that could guide future design decisions.

The sessions were interactive and included a presentation and a 45-minute work session. The focus of the work session was to allow participants to generate large themes or ideas for the entire 6.7-mile corridor. Each work group was to share ideas in three categories: themes, design, and partnerships. After all the groups had reported their ideas, the participants placed stickers on the ideas that were of greatest interest. These results were then reviewed with all workshop participants.

Summary of Findings. The work groups were successful interactive sessions with many ideas being generated and shared. As in their own work groups, participants wanted to avoid unrelated images or designs, or unnecessary distractions to motorists. The challenge is to focus on keeping the corridor vibrant and unique, but at the same time, telling Detroit's story.

The following themes gained strong support during the two workshops:

- Detroit's Great Lakes Connection
- The Terminus of the Underground Railroad
- Detroit – City of Firsts, Historical Transportation
- Detroit – City of Modern Music

Participants would like to see these themes further examined in future workshops. Workshop participants were especially enthusiastic about opportunities for artwork and contributions from local artists to help uniquely define the corridor. Wall patterns, colors, landscaping, statues, and even music played on a dedicated radio station were all specific ideas that gained support in the workshops.

The Michigan Department of Transportation is committed to a process of developing appropriate design themes for the Recommended Alternative consistent with the Department's program of assuring Context Sensitive Solutions. The process will continue based on the findings gained during this phase of the project and be carried forward into subsequent phases of design.

7.8 Cultural Resources

The FHWA and the SHPO have entered into a Memorandum of Agreement (MOA) regarding the adverse effects on, and mitigation of impacts to, the historic properties described in this section and in FEIS Chapter 6. A copy of the MOA is included in Appendix E. The MOA outlines the mitigation measures that are to be accomplished and stipulates that the MDOT has participated in the consultation between the FHWA and the SHPO. The MOA also states that the MDOT has concurred that the undertaking will be implemented with measures to minimize harm. The MOA has been submitted to the Advisory Council on Historic Preservation. The following is a summary of the MOA for all four properties:

Woodbridge Neighborhood Historic District. Prior to demolition of the house at 5287 Hecla Street, it will be recorded to SHPO standards to create a permanent record of its existence. The documentation would be provided to the SHPO and any appropriate archives as designated by the SHPO. In addition, a Cultural Resources Historic Workshop was held to discuss historic properties and districts in the project corridor. Representatives of the Woodbridge Neighborhood Historic District were contacted and invited to participate. The design of streets and sidewalks in the District will attempt to incorporate comments received during the Workshop and will be finalized during plan preparation. All areas within the District which are disturbed by construction will be landscaped in a manner consistent with the time period for which the District is recognized. The MDOT will consider moving the house at 5287 Hecla Street to vacant land in the immediate area, subject to reaching agreement with the property owner during the right-of-way acquisition process.

I-94/M-10 Interchange. Prior to the initiation of any demolition of the I-94/M-10 interchange, it will be recorded to SHPO standards by a professional historian to preserve a permanent record

of its existence. The documentation would be provided to the SHPO and any appropriate archives as designated by the SHPO. In addition, copies of original plans and other materials relating to the design and construction of the interchange will be compiled and retained by the MDOT and copies provided to the SHPO and any other entities as designated by the SHPO. A small-scale exhibit of the interchange will be produced and the exhibit display schedule will be coordinated with the SHPO.

United Sound Systems Recording Studios. Prior to the initiation of any demolition, the building at 5840 Second Street, which housed the United Sound Systems Recording Studios, will be recorded to SHPO standards. The documentation would be provided by the MDOT to the SHPO and any appropriate archives as designated by the SHPO.

The history of the United Sound Systems Recording Studios is important for its role as one of the first major recording studios in Detroit, production of recordings by prominent African-American musicians of the last century, and role in the evolution of American music. Copies of the resulting history will be provided to the SHPO and any appropriate archives as designated by the SHPO.

Square D/Detroit Fuse and Manufacturing Company Building

Prior to the initiation of any demolition, the Square D/Detroit Fuse and Manufacturing Company Building will be recorded to SHPO standards. The documentation would be provided to the SHPO and any appropriate archives as designated by the SHPO.

The original, three-story Detroit Fuse and Manufacturing Company Building, designed by the architect Albert Kahn, is significant for its historical associations with both Square D and the 1954 strike. As part of the mitigation effort to preserve record of this site, an exhibit will be developed with the SHPO detailing the 1954 Square D strike.

7.9 Groundwater Quality

Sealing water wells and sewer lines for the protection of groundwater quality is required of the contractor by the MDOT specifications. For houses or other structures in urban situations that are relocated or must be razed, sewer lines will be filled with concrete grout at the basement level and water turned off at the street. Abandoned water wells will be filled with cement grout, through a conduit extended to the bottom of the well. The contractor also must meet all local and Michigan Department of Community Health (MDCH) requirements.

For further detail, see DEIS Section 7.9.

7.10 Surface Water Quality

Adequate soil erosion and sedimentation control measures will be implemented for the project during construction. Highway runoff will be diverted into the new underground drainage system and through engineering controls that include catch basins, in-line detention, oil/water separators and filter strips. During design, the feasibility of permanent surface detention areas, in addition to the underground drainage systems control, for roadway runoff will be evaluated. There is space in some of the interchanges (i.e., I-75/I-94, Gratiot, and Conner interchanges).

For further details regarding Water Quality issues, see this FEIS Section 5.9

7.11 Contaminated Properties

Forty-nine sites were identified within the project limits as having the potential for contamination. Fifteen sites were rated LOW, 15 sites were rated MEDIUM, and 19 sites were rated HIGH. See Appendix H for the sites that were rated MEDIUM or HIGH.

Any sites rated MEDIUM and HIGH will be analyzed further prior to the design phase of this project to verify or refute potential contamination concerns. Further assessment will include field screening and the collection of soil and groundwater samples for laboratory analysis, where applicable. If the results of the testing indicate no evidence of soil or groundwater contamination, the rating of the site could be revised downward. Typically, the rating of field-tested sites with no evidence of contamination would be revised to LOW. Because of the nature of the businesses conducted or formerly conducted (e.g., petroleum use or hazardous materials storage, spills or leaking tanks), some sites could remain rated as having a MEDIUM or HIGH potential, even if field testing did not reveal the presence of contamination.

Construction activities and/or demolition for all sites with the potential for the presence of asbestos will be in compliance with the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements and other applicable state or local regulations.

7.12 Disposal of Surplus or Unsuitable Material

Surplus or unsuitable material generated by construction will be disposed of in accordance with specific provisions designed to control possible detrimental impacts of this material. Hazardous materials, such as asbestos, removed from buildings to be demolished will be disposed of in accordance with local and federal laws.

Disposal of solid wastes must comply with all applicable MDEQ regulations. All other elements listed in the DEIS Section 7.12 are valid.

7.13 Maintenance of Traffic Flow During Construction

Disruption of traffic in the construction area will be minimized to the extent possible. There will be a public awareness and information program that will inform local residents and businesses, together with other travelers and trucking companies that use I-94 in the project area, regarding construction schedules, ramp closings, alternative routes, and other matters affecting their travel in and through the area. In addition, efforts will be made to reduce travel through the project area to minimize congestion and improve safety. Such efforts to reduce travel through the project area include additional bus transit service to alleviate congestion in the corridor.

The construction phasing will have the continuous service drives and pedestrian-only facilities built first in the corridor to connect the local community as much as possible prior to the construction beginning on the freeway mainline. The duration of construction for the entire project might last over six years. Any techniques to have the duration be less or minimize the impacts on the community will be utilized. Funding is the biggest construction phasing constraint at this time.

There are three I-94 mainline possibilities to the construction staging:

- Maintain both directions of travel on one side of the freeway with two lanes in each direction;
- Keep one direction of travel on I-94 open and detour traffic to other state facilities in the other direction; and
- Close sections of I-94 in both directions and detour traffic to other state facilities.

The duration of ramp closings will be minimized to the extent practicable, and adjacent ramps will not be closed at the same time. Incentive Penalty Clauses can be included in construction contracts to encourage speedy construction and minimize the duration of impacts. Through traffic that does not elect to use suggested detours will be encouraged to stay on I-94. Traffic management measures such as signage, and temporary barricades will be used on non-arterial local streets to discourage through traffic.

Advance construction of service drives and local street connections will reduce the number of local trips using the I-94 mainline. Informational signage will be erected as far away as the intersections of I-94 and I-69 and as close as the ends of the project to encourage the use of alternative routes. It is expected that these efforts will reduce travel on I-94 in the project area so that the available lanes will be adequate during most times other than the morning and afternoon peak periods.

Other efforts to reduce travel demand through the project area include:

- The MDOT will encourage car pooling: New advertising campaigns, pool development, and planning.
- The MDOT will utilize the agencies existing ITS facilities to inform motorists and redirect to routes outside of the construction zone.
- Prior to construction, the MDOT will identify alternate travel routes. The MDOT will provide an information campaign to inform urban area residents of upcoming construction and describing alternative travel options and routes.
- SMART and DDOT transit agencies should provide project area transit away from the construction activities on parallel streets such as Warren Avenue to provide circulation to local residents within the project area. Special construction mitigation funds should be pursued to assist with this service.
- Once continuous service drives are available, SMART and/or DDOT should provide transit service along service drives for area residents to move along the corridor safe from construction activities and protected from noise and dust.
- SMART and DDOT should pursue adding express bus service from urban and suburban areas with sizable volumes of traffic heading downtown or to major employers to reduce traffic volumes through the construction area. (Some might be done in conjunction with the employers.)

Although drivers' personal travel patterns might be disrupted, access to homes and businesses will be maintained. Continuing coordination between the MDOT, the contractor, and local businesses will be conducted to inform businesses owners or managers of construction activity schedules and to inform the contractor of any special needs of the businesses.

7.14 Continuance of Public Utility Service

Water, sanitary sewer, gas, telephone, and electrical transmission lines adjacent to or crossed by the project might require relocation or adjustment. If this should be the case, coordination between the MDOT and affected utility company will take place during design, and relocation will take place prior to construction of the road, if possible. The contractor will coordinate construction activities with the affected utility company.

7.15 Construction Noise Levels and Vibration Impacts

In addition to the measures described in the DEIS Section 7.15, noise abatement measures (including those listed below) will be used to minimize the construction noise levels in all areas outside the construction site boundaries.

- Construct noise barriers as part of the proposed improvements as early as feasible in the construction phase. These barriers would shield nearby residential areas from construction noise and traffic noise.
- Ensure that the construction contractor adheres to all applicable local, state, and federal noise control ordinance requirements.
- Maintain construction equipment in good repair and fit it with manufacturer-recommended mufflers and other noise-reduction devices.
- Enclose or shield stationary construction equipment, such as generators, to block the direct path between the noise source and residences.
- Conduct equipment maintenance activities that exceed noise thresholds off-site or as far from homes as possible.
- Limit the number and duration of idling equipment on-site.
- Schedule truck loading and unloading and other handling operations so as to minimize noise impact to nearby residences.

Due to vibration issues, all buildings within 200 feet of the construction of the service drives, based on the MDOT guidance at the time prior to construction, will be offered a basement survey by the contractor prior to construction beginning to establish a baseline for basements and foundation cracking.

7.16 Control of Air Pollution During Construction

In addition to the measures described in the DEIS in Section 5.14.3.2, the MDOT will require contractors working on the rehabilitation of I-94 to implement the best practices and technology available at the time of construction, such as:

- Use special Clean Fuels (such as PuriNOxTM); and
- Install Emission Control Devices (such as oxidation catalysts).

The *Air Quality Technical Report* (February 2004) recommended mitigation measures to minimize the temporary potential risks during construction. The following preventive and mitigation measures will be implemented to minimize the temporary potential particulate-pollution problems:

Site Preparation

- Minimize land disturbance.
- Use watering trucks to minimize dust.
- Stabilize unpaved areas to prevent dirt from being tracked onto paved roadways and to reduce dust.
- Stabilize the surface of dirt piles if they are not removed immediately.
- Use windbreaks to prevent accidental dust pollution.
- Limit vehicular paths and stabilize these temporary roads.

Construction

- Cover trucks when transferring materials.
- Use dust suppressants on unpaved traveled paths.
- Minimize unnecessary vehicular and machinery activities.
- Minimize the use of neighborhood streets as haul routes and coordinate the time and duration with the community.

Post-Construction

- Re-vegetate any disturbed land not used.
- Remove unused material.
- Remove dirt piles.
- Re-grade and re-vegetate all vehicular paths created during construction to avoid road vehicular activities.

Air pollution from construction equipment exhaust will be limited by the use of filters and/or special fuels.

7.17 Additional Mitigation or Modifications

A project mitigation summary Green Sheet is included at the end of this section. The final mitigation package for the project has been reviewed by representatives on the MDOT study team, in cooperation with concerned state, federal, and local agencies.

An early mitigation concept for Hendrie Street has already been developed in response to city of Detroit comment (see Chapter 8, Letter 7, Response 7-26). The city of Detroit requested the

creation of a street east of Woodward Avenue and parallel to the service drive, in conjunction with the eastbound service drive, for local traffic and to protect Hendrie Street residents. See Figure 7-1.

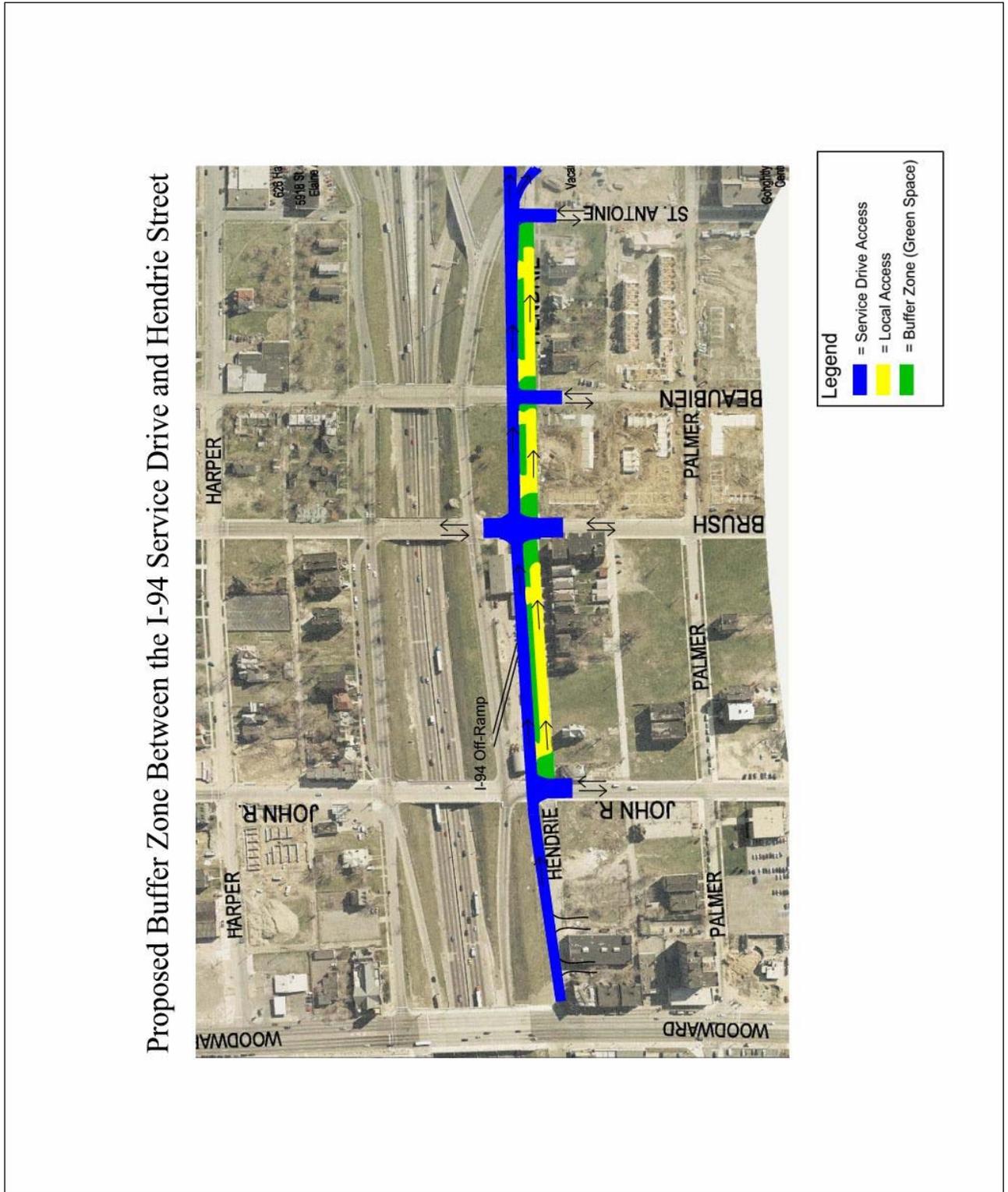
Some changes in the early mitigation concepts discussed in this document might be required when design begins or when in-depth soil borings are made and analyzed. These mitigation concepts will be implemented to the extent possible. Where changes are necessary, they will be designed and reviewed in the field before permits are applied for and construction begins. Changes also might be necessary during the construction phase, but they will reflect the early mitigation intent.

- In addition to the listed mitigation measures, the Context Sensitive Solutions workshops with the public will continue during the design phases of the project. During design of the Recommended Alternative, measures to discourage non-local traffic in individual neighborhoods would be evaluated in coordination with the city of Detroit staff and the neighborhood residents. Among measures to be considered would be speed humps or right-in only or right-out only turns from service drives to local connecting streets. A construction phasing plan will be developed. A construction traffic management plan, created in close coordination with local jurisdictions, will assist in being sensitive to the concerns of the community. A variety of other measures will be performed to minimize temporary construction impacts.

For instance, transportation and land-use mitigation will include:

- Posting advance notice of temporary street closures, changes in transit service, and parking availability;
- Providing regular updates to the general public, community facilities, targeted stakeholders, and special interest groups;
- Scheduling traffic lane closures during off-peak hours to minimize delays during periods of higher traffic volumes as much as possible;
- Designating the project “Fast Track” with incentives for early completion and disincentives (penalties) for late completion for contractors to complete the job according to an expected schedule; and
- Developing a multimedia public information program.

Figure 7-1: Proposed Buffer Zone between the I 94 Service Drive and Hendrie Street



I-94 Rehabilitation Project
Final Environmental Impact Statement
Wayne County, Michigan

Mitigation Summary “Green Sheet”
for the Recommended Alternative

1. Cultural Environment

- a. United Sound Systems Recording Studios Building will be recorded to SHPO standards before the building is adversely affected. The MDOT will fund a historical context and survey, in coordination with the SHPO, of music-related sites in the Detroit area. The MDOT will fund the research and production of a documentary film, in cooperation with the SHPO, which will document the history of United Sound Studios. (FEIS Section 6)
- b. The Woodbridge Historic District house at 5287 Hecla Street will be recorded to SHPO standards before the building is adversely affected. The MDOT will prepare a marketing plan in conjunction with the SHPO to market the house at 5287 Hecla Street for removal from its current location and relocate it to another site. Should attempts to relocate fail, the MDOT will demolish the building. (FEIS Section 6)
- c. MDOT shall ensure that any vacant land within the Woodbridge District boundaries impacted by the Recommended Alternative will be landscaped in accordance with a landscape plan designed in consultation with and approved by the SHPO, a representative staff member from the Detroit Historic District Commission and the property owners. (FEIS Section 6)
- d. The Square D/Detroit Fuse and Manufacturing Company Building will be recorded to SHPO standards before the building is adversely affected. A physical and/or internet-based exhibit will be developed with the SHPO, and coordinated with the MDOT, on the 1954 Square D strike. (FEIS Section 6)
- e. The I-94/M-10 interchange will be recorded to the SHPO standards by a professional historian to preserve a permanent record of its existence. A small-scale exhibit of the interchange will be produced and the exhibit display schedule will be coordinated with the SHPO. (FEIS Section 6)
- f. Copies of the original I-94/M-10 interchange plans and other materials relating to the design and construction of the interchange will be compiled and retained by the MDOT and copies provided to the SHPO and any appropriate archives as directed by the SHPO. (FEIS Sections 6.5.2 & 7.8)

2. Social and Economic Environment

- a. The four industrial and 12 commercial properties that would be displaced as a result of the Recommended Alternative would be acquired in conformance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Federal Law 91-646). Local businesses will be contacted by the MDOT and appropriate mitigation will be developed to assist with viability and businesses during and after construction. (FEIS Sections 5.1.2 and 7.1)
- b. A process of Context Sensitive Design solutions will be undertaken by the MDOT to develop appropriate design themes begun in the Context Sensitive Solutions Workshops held in February 2004. (FEIS Section 7.7)
- c. Six of the existing eight pedestrian-only bridges will be reconstructed in the Recommended Alternative to span over both the freeway and the continuous service drives to provide safer crossings for all residents. (FEIS Section 5.1.2.4)
- d. Provide three state-of-the-art noise barriers at the locations listed below that satisfied both the cost and acoustic components of the MDOT's 1996 noise abatement policy guidelines for feasibility and reasonableness. The three locations are Barrier 3 (B3-northwest quadrant of the M-10/I-94 interchange), and Barriers 5 and 7 (B5 and B7-southwest quadrant of the I-75/I-94 interchange). Noise barrier locations will be reevaluated during final design. (FEIS Figures 5-11A and B)
- e. State-of-the-art retaining walls to absorb sound will be constructed as appropriate throughout the corridor to improve aesthetics and further decrease neighborhood noise levels. (FEIS Section 4.3)
- f. The Recommended Alternative will provide a minimum of six-foot wide sidewalks along one side of the service drives, through the interchanges, and on all reconstructed bridges and cross streets. Service drives would be continuous with sidewalks that include appropriate crosswalks. (FEIS Section 2.5.6 and FEIS Section 5.15.2)
- g. To minimize impacts, all service drives will be designed to match and continue along the existing service drives adjacent to the residential/commercial areas wherever feasible.
- h. An early mitigation concept for Hendrie Street has already been developed in response to city of Detroit comment (see Chapter 8, Letter 7, Response 7-26). The city of Detroit requested the creation of a street east of Woodward Avenue and parallel to the service drive, in conjunction with the eastbound service drive, for local traffic and to protect Hendrie Street residents. See Figure 7-1.

3. Natural Environment

- a. Improve water quality by reconstructing the existing drainage system and adding pollution control measures, such as protecting all stormwater inlets and adding oil/water separators at new pump stations. (FEIS Section 5.9.3)

4. Hazardous/Contaminated Materials

- a. If further investigation indicates that soils have been impacted, requirements for handling impacted soils and worker safety measures will be developed and incorporated into final construction plans. (FEIS Section 5.8.2)
- b. Any sites rated MEDIUM and HIGH will be analyzed further prior to the design phase of this project to verify or refute potential contamination concerns. Further assessment will include field screening and the collection of soil and groundwater samples for laboratory analysis, where applicable. (FEIS Section 7.11)
- c. If contaminated soils are present in the M-10/I-94 and I-75/I-94 interchange areas where multi-level interchanges are planned, consideration should be given to structure foundations that do not involve excavation or drilling to depths where contaminated soils may exist. (FEIS Section 5.8.2)

5. Construction

- a. Service drives and bridges carrying local streets over I-94 east of I-75 will be constructed in advance to provide local access while the mainline is under construction. (DEIS Section 5.14.1)
- b. Disruption of traffic in the construction area will be minimized to the extent possible. There will be a public awareness and information program that will inform local residents and businesses, together with other travelers and trucking companies that use I-94 in the project area, regarding construction schedules, ramp closings, alternative routes, and other matters affecting their travel in and through the area. Efforts to reduce travel through the project area to minimize congestion and improve safety during construction may include funding for additional bus transit service. (FEIS Sections 5.14.1 and 7.13)
- c. The MDOT and the appropriate agencies would cooperatively develop an emergency response plan during construction to maintain emergency services within the project corridor. (DEIS Section 5.14.2.2 and referenced in FEIS Section 5.14.2)
- d. The duration of ramp closings will be minimized to the extent practicable and adjacent ramps will not be closed at the same time. (FEIS Section 7.13)
- e. Incentives will be included in construction contracts to encourage speedy construction and minimize the duration of impacts. (FEIS Section 7.13)
- f. Access to homes and businesses will be maintained at all times. (FEIS Section 7.13)
- g. Basement surveys will be offered in areas where vibration impacts could occur. Structures within 200 feet from construction operations such as bridge/pavement removal or piling/steel sheeting installation will be reviewed. These areas will be identified during final design. Vibration impacts are not anticipated at this time. (FEIS Section 5.7.3)
- h. Air pollution from construction equipment exhaust will be limited by the use the state-of-the-art best management practices at the time of construction per state

and federal standards. (FEIS Section 7.16)

- i. Noise abatement measures (including those listed below) will be used to minimize the construction noise levels in all areas outside the construction site boundaries. (FEIS Section 7.15)
- j. Construct noise barriers as part of the proposed improvements as early as feasible in the construction phase. These barriers would shield nearby residential areas from construction noise and traffic noise. (FEIS Section 5.5)
- k. Ensure that the construction contractor adheres to all applicable local, state, and federal noise control ordinance requirements. (FEIS Section 5.5)
- l. Enclose or shield stationary construction equipment, such as generators, to block the direct path between the noise source and residences. (FEIS Section 5.5)
- m. Schedule truck loading and unloading and other handling operations so as to minimize noise impact to nearby residences. (FEIS Section 5.5)