

Chapter Twenty

SPECIAL ENVIRONMENTAL STUDIES

BUREAU OF LOCAL ROADS AND STREETS MANUAL

Chapter Twenty
SPECIAL ENVIRONMENTAL STUDIES - Federal Funds

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20-1 GENERAL

20-1.01 Introduction

Although the *National Environmental Policy Act* (NEPA) is the major mandate for environmental considerations, there are other laws, executive orders, regulations, agreements, etc., which require special studies, analyses, coordination, and documentation on specific environmental issues. Chapter 20 discusses these special requirements for federally funded projects. Chapter 26 of the *BDE Manual* provides additional information for each of the topics discussed in this Chapter.

As appropriate, impact analyses and related surveys, studies, and coordination made necessary by environmental laws and requirements other than NEPA shall be integrated with the development of environmental information for inclusion in environmental reports or Project Development Reports.

20-1.02 Topics

Special studies include the following:

- Environmental Surveys,
- Section 4(f) Evaluations,
- Section 6(f) Land Conversion Requests,
- OSLAD Land Conversion Requests,
- Historic Preservation Compliance Documentation,
- Noise Analyses,
- Flood Plain Findings,
- Wetlands Analyses,
- Threatened and Endangered Species/Natural Areas Impact Assessments,
- Evaluations of Farmland Conversion Impacts,
- Air Quality Conformity Documentation,
- Air Quality Microscale Analysis, and
- Special Waste.

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20-1.03 Applicability

Many of the special environmental studies discussed in this Chapter are the result of federal requirements. Although the Federally required analyses primarily affect federally funded or regulated projects, some also may apply to State-only (or State and local) funded projects where the projects will affect resources regulated by the federal government. In addition, several of the special analyses discussed are the result of State requirements that also apply to federally funded projects. These State requirements are often more stringent than those at the federal level, and they may potentially affect any federally funded Local Public Agency (LPA) project if the project involves the specific types of resources.

20-2 ENVIRONMENTAL SURVEYS

The environmental survey process initiates the review for cultural, biological, wetland, and special waste resources.

20-2.01 Applicability

Environmental Survey Requests (ESR) for cultural, biological, and wetland resources are required for federal, State, or MFT funded projects, and any locally funded project that requires Department review and approval if any of the following criteria are met:

- involves acquisition of additional right-of-way or easements (temporary or permanent), or construction activities outside the existing right-of-way;
- requires a drainage structure runaround or any in-stream work (The installation of rip-rap on a stream bank is considered in-stream work);
- potentially affects a recognized Illinois Natural Areas Inventory site or Illinois-dedicated Nature Preserve, a wetland, or a location where a State- or federal-listed species is known to occur;
- Involves a historic structure or is within the limits of a historic district.
- If a project does not require additional right-of-way, but does require cultural or biological resource coordination (e.g., a project is located within a historic district or in-stream work), an ESR needs to be submitted to the district.
- Potentially affect a historical district or property listed on the national register of historic places;
- Involve replacement or rehabilitation of a bridge 50 years old or older;
- Involves any excavation on State right-of-way; or
- If there will be new road, bike trail, or sidewalk on new alignment regardless of who owns the right-of-way.

Survey requests for special waste are required regardless of funding source for the following types of local projects:

- When the project plans are prepared by IDOT for a LPA;
- Local project affecting State right-of-way or a road under State jurisdiction;
- Local project acquiring right-of-way in the name of the State; or
- Local project involving temporary or permanent easements in the name of the State;

These types of projects must be coordinated with the district Special Waste Coordinator (SWC).

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20-2.02 Environmental Survey Request

IDOT has developed a web page for environmental surveys. This page has links to the survey request forms and instructions, permitting the LPA or its consultant to transmit the forms electronically to the appropriate district office. The district will automatically be notified of a transmittal and will download the forms into the Project Monitoring Applications (PMA), which is used to track the environmental survey process. The LPA/consultant will submit a printed copy of the completed form with the required number of attachments to the district for processing. These submittals should be made as early as practical in project development.

The forms include the ESR and an Addendum Environmental Survey Request (AESR). The ESR form should only be used for the first submittal of a project. An AESR is only necessary when changes in a project will affect areas outside the limits of the original ESR or if there is a change in project scope that could involve additional resources. The, AESR, will retain the sequence number that was assigned to the original ESR for the project.

The LPA or their consultant is required to fully prepare and send attachments with the ESR form electronically to the district. These attachments include:

1. A general project location map clearly showing the project location within the county,
2. A detailed (close-up) project location map and an ArcGIS shape file clearly delineating the environmental survey request limits of the project,
3. Preliminary plan sheets showing the existing and proposed right-of-way or easement lines (plan sheets showing the area to be surveyed shaded in color is preferred),
4. And photos of the project area and of any bridges, culverts, buildings, or structures of any type within or adjacent to the project area.

Photos of bridges and structures over 50 years old in particular are required, and photos must allow IDOT requirements for photo logs outlined in "Photographing Historic Structures: Guidelines and Photo Logs" which is posted on the IDOT website on the Environmental page. For projects involving State right-of-way, or any of the special waste criteria listed in Section 20-2.01 (Applicability), the attachments should include a figure delineating the portion of the project involving state right-of-way or state jurisdiction and also explain it in text. Also, document this in the text of the PMA.

If an AESR is submitted, the preliminary plan sheets must clearly differentiate between the area that was surveyed in the original ESR, and the area surveyed in the addendum.

20-3 SECTION 4(F) EVALUATIONS

20-3.01 Introduction

A Section 4(f) Evaluation is a Federal requirement that applies only to projects involving funding and an approval or permit from an agency of the US Department of Transportation (USDOT). Section 4(f) applies to any significant publicly owned public park, recreation area, wildlife and waterfowl refuge, or any land from an historic site of national, state, or local significance. These properties and their significance are documented in a Section 4(f) Evaluation during project development, addressing alternatives, measures to minimize any harm, and net benefits that would result from the use of Section 4(f) land.

20-3.02 Legal Authority

49 USC 303, commonly known as Section 4(f) of the *Department of Transportation Act of 1966* (Public Law 89-665), provides that the Secretary of the US Department of Transportation:

. . . may approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge, or land of a historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, recreation area, refuge, or site) only if:

- (1) there is no feasible and prudent alternative to using that land; and*
- (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.*

20-3.03 Applicability

When Section 4(f) lands are involved, the specific applicability to a given action is based on regulatory criteria and interpretations, both by the courts and by agencies of the USDOT. FHWA regulatory criteria for applicability of Section 4(f) are stipulated in 23 CFR 771.135. Information concerning various interpretations that have been made regarding specific types of Section 4(f) resources and project actions is presented in the Section 4(f) Applicability/Q&A in the FHWA Section 4(f) Policy Paper (March 1, 2005). This policy paper and any revisions may be accessed at www.environment.fhwa.dot.gov/projdev/4fpolicy.htm. Where applicability questions arise that are not addressed by the FHWA regulatory criteria and/or interpretations that have been issued, the matter should be discussed with the Central BLRS and the responsible USDOT agency (in most cases the FHWA) as early as practical in the development of the action involved. The final determination of Section 4(f) applicability will be made by the responsible USDOT agency.

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Where there is a question concerning applicability of Section 4(f) to a specific resource involvement, any determination that Section 4(f) does not apply should be appropriately documented (e.g., a reference to a previously issued determination by the FHWA, a copy of a project-specific letter from the FHWA, a copy of meeting minutes, a memorandum to the files documenting discussions of the issue with the FHWA) in the Project Development Report or environmental document, and in the project files. This documentation should include, as appropriate, evidence of the views of the official having jurisdiction over the Section 4(f) resource.

20-3.04 Definitions

1. Section 4(f) Land. Land protected under 49 USC 303 Section 4(f) of the *USDOT Act of 1966*; i.e., any significant publicly owned public park, recreational area, or wildlife and waterfowl refuge; and any land from a historic site of national, State, or local significance as determined by the Federal, State, or local officials having jurisdiction over the park, recreational area, refuge or site. The term "historic site" includes both historic and prehistoric archaeological sites determined important for preservation in place.
2. Section 4(f) Evaluation. This is documentation of a project involving Section 4(f) land, addressing alternatives to use this land and mitigation measures that minimize any harm resulting from the proposed use.
3. Section 4(f) Approval. A finding that there is no feasible and prudent alternative to use other than the proposed Section 4(f) land and that all possible planning to minimize harm to Section 4(f) land is included in the proposed action.
4. Programmatic Section 4(f) Evaluation and Approval. An expedited evaluation and approval process, which addresses particular types of projects that involve the use of Section 4(f) land (e.g., independent walkway or bikeway construction projects). When studies and coordination with the officials having jurisdiction over the 4(f) resource indicate an action will conform to the requirements and conditions of a programmatic evaluation and approval, the processing of an individual Section 4(f) Evaluation document for that action is not required.
5. Use. For Section 4(f), use occurs (a) when land from a Section 4(f) site is permanently incorporated into a transportation project, (b) when there is a temporary occupancy of land that is adverse in terms of the preservationist purposes of Section 4(f), or (c) when the proximity impacts of a transportation project on a Section 4(f) site, without acquisition of land, are so great that the purposes for which the Section 4(f) site exists are substantially "impaired" (normally referred to by courts as a "constructive use"). See 23 CFR 771.135(p) and Section 4(f) Q&A Question #1 for further discussion concerning "use" under Section 4(f).
6. Significance. A publicly owned park, recreation area, or wildlife and waterfowl refuge must be a "significant" resource in order for Section 4(f) to apply. Resources are considered significant unless the official having jurisdiction concludes that the entire site is not significant. The FHWA must make an independent evaluation of significance. For purposes of Section 4(f), historic significance is based on whether a historic site is included on or eligible for inclusion on the National Register of Historic Places. Only those historic sites included on or eligible for inclusion on the National Register are subject to Section 4(f), unless the FHWA determines that the application of Section 4(f) is otherwise appropriate.

20-3.05 Section 4(f) Evaluation**20-3.05(a) Development**

Each Section 4(f) Evaluation includes a draft and final evaluation. A separate Section 4(f) involvement must be prepared for each location within a proposed project where use of Section 4(f) land is involved. The draft evaluation addresses avoidance alternatives, and the final evaluation addresses the selected alternative that involves the use of Section 4(f) land, as appropriate.

The FHWA Division Office has the responsibility for giving Section 4(f) approval. Projects meeting certain criteria may be approved by use of a Programmatic Section 4(f) Evaluation that streamlines the process with the various responsible agencies. Section 20-3.07 describes the Programmatic Section 4(f) Evaluation process.

20-3.05(b) Draft Evaluation Format

For categorical exclusion projects, the Section 4(f) Evaluation is processed as a separate document.

For an EIS or EA, the information should be placed in a special section of the environmental document labeled "Section 4(f) Evaluation." The following format is recommended for the Section 4(f) Draft Evaluation:

- Cover Sheet,*
- Table of Contents,*
- Description of Proposed Action,
- Description of Section 4(f) Property(ies),
- Impacts on the Section 4(f) Property(ies),
- Avoidance Alternatives,
- Measures to Minimize Harm,
- Net Benefits, and
- Section 4(f) Coordination.

* *These parts are needed only where the Section 4(f) Evaluation is prepared as a separate document.*

20-3.05(c) Draft Evaluation Content

The following will apply to the contents of a Section 4(f) Draft Evaluation:

1. Cover Sheet. The suggested format and content for a Section 4(f) Draft Evaluation cover sheet is presented in Figure 20-3A.
2. Table of Contents. The Table of Contents should provide the title and page numbers for each major section and subsection of the Evaluation. Maps, charts, tables, etc., should have separate listings in the Table of Contents.

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3. Proposed Action. Where a separate Section 4(f) evaluation is prepared, describe the proposed project and explain the purpose and need for the project. When more than one alternative is under consideration, discuss each alternative requiring the use of Section 4(f) land.
4. Section 4(f) Property. Describe each Section 4(f) resource that would be used by any alternative under consideration. Provide the following information:
 - a. a detailed map or drawing of sufficient scale to identify the relationship of the alternatives to the Section 4(f) property;
 - b. size (acres (hectares) or ft² (m²)) and location (maps or other exhibits (e.g., photographs, sketches) of the affected Section 4(f) property;
 - c. ownership (e.g., city, county, State) and type of Section 4(f) property (e.g., park, recreation, historic);
 - d. function of, or available activities on, the property (e.g., ball playing, swimming, golfing);
 - e. description and location of all existing and planned facilities (e.g., ball diamonds, tennis courts);
 - f. access (e.g., pedestrian, vehicular) and usage (approximate number of users/visitors, etc.);
 - g. relationship to other similarly used lands in the vicinity;
 - h. applicable clauses affecting the ownership (e.g., lease, easement, covenants, restrictions, conditions (including forfeiture)); and
 - i. unusual characteristics of the Section 4(f) property (e.g., flooding problems, terrain conditions, other features) that either reduce or enhance the value of all or part of the property.
5. Impacts on the Section 4(f) Property. Discuss the impacts on the Section 4(f) property for each alternative (e.g., amount of land to be used, facilities and functions affected, noise, air pollution, visual).
6. Avoidance Alternatives. Identify and evaluate location and design alternatives that would avoid the Section 4(f) property. Generally, this would include alternatives to either side of the property. The design alternatives should be in the immediate area of the property and consider minor alignment shifts, a reduced facility, retaining structures, etc., individually or in combination, as appropriate.
7. Measures to Minimize Harm. Discuss all possible measures that are available to minimize the impacts of the proposed action on the Section 4(f) land.
8. Net Benefits. Discuss how the measures to minimize harm and the mitigation incorporated into the project results in overall enhancement of the Section 4(f) property when compared to the do nothing and avoidance alternative.
9. Coordination. Discuss the results of preliminary coordination with the public official having jurisdiction over the Section 4(f) property and with regional (or local) offices of Department of Interior (DOI) and, as appropriate, the US Department of Agriculture (USDA), the Regional Office of Housing and Urban Development (HUD), and the Forest Supervisor of the affected National Forest. Generally, the coordination should include a discussion of avoidance alternatives, impacts to the property, measures to minimize harm, and net benefits. In addition, the coordination with the public official having jurisdiction should include, where necessary, a discussion of significance and primary use of the property.

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(Route, Termini, City or County, and State)

DRAFT (FINAL) SECTION 4(f) EVALUATION
Submitted Pursuant to 49 USC 303
by the

US Department of Transportation
Federal Highway Administration

and

Illinois Department of Transportation
and
(Local Public Agency)

Date of Approval

For FHWA

The following persons may be contacted for additional information concerning this document:

(Name)

Division Administrator
Federal Highway Administration
3250 Executive Park Drive
Springfield, Illinois 62703-4514
Telephone: 217-492-4640

*(Name, office address, and phone number
of Regional Engineer)*

Include a one-paragraph abstract of the Evaluation indicating project type, length, etc., here.

Comments on this Draft Evaluation are due by *(date)* and should be sent to *(name and office address of Regional Engineer)*.*

**To be used on the Draft Evaluation only.*

**COVER SHEET FORMAT
(Separate Section 4(f) Evaluation)**

Figure 20-3A

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20-3.05(d) Final Evaluation

When the preferred alternative uses Section 4(f) land, a final Section 4(f) Evaluation must be prepared. If the Section 4(f) Evaluation is a separate document, appropriate changes should be made in the Cover Sheet and Table of Contents to reflect that it is a Final Evaluation. In addition to the information in the Section 4(f) Draft Evaluation, the Section 4(f) Final Evaluation should include the following information:

1. Alternatives. A discussion of the basis for concluding that there are no feasible and prudent alternatives to the use of the Section 4(f) land. The supporting information must demonstrate that “*there are unique problems or unusual factors involved in the use of alternatives that avoid these properties or that the cost, social, economic, and environmental impacts, or community disruption resulting from these alternatives reach extraordinary magnitudes*” (23 CFR 771.135(a)(2)). This language should appear in the document together with the supporting information.
2. Planning Actions. A discussion of the basis for concluding that the proposed action includes all possible planning to minimize harm to the Section 4(f) property. When there are no feasible and prudent alternatives that avoid the use of Section 4(f) land, the final Section 4(f) Evaluation must demonstrate that the preferred alternative is a feasible and prudent alternative with the least harm; or provides a net benefit on the Section 4(f) resources after considering mitigation to the Section 4(f) resources.
3. Coordination. A summary of the appropriate formal coordination with the Headquarters Offices of DOI (and/or appropriate agency under that Department) and, as appropriate, the involved offices of USDA and HUD.
4. Comments. Copies of all formal coordination comments and a summary of other relevant Section 4(f) comments received and an analysis and response to any questions raised. Where Section 6(f) land is involved, document the National Park Service’s position on the land transfer.
5. Concluding Statement. Include a concluding statement as follows: “Based upon the above considerations, there is no feasible and prudent alternative to the use of land from the (identify Section 4(f) property) and the proposed action includes all possible planning to minimize harm to the (Section 4(f) property) resulting from such use.”

20-3.06 Coordination and Processing

The Section 4(f) Draft Evaluation must be circulated for review. The Department of Interior (DOI) should receive seven copies of the Section 4(f) Draft Evaluation for coordination. In addition to coordination with DOI, Section 4(f) Draft Evaluations must be coordinated with the officials having jurisdiction over the Section 4(f) property as well as HUD and USDA, where these agencies have an interest in or jurisdiction over the affected Section 4(f) resource (23 CFR 771.135(i)). The point of coordination for HUD is the appropriate Regional Office and for USDA, the Forest Supervisor of the affected National Forest. One copy should be provided to the officials with jurisdiction of the Section 4(f) property and two copies should be submitted to HUD and USDA when coordination is required. The minimum period of time for receipt of comments is 45 days. DOI should also receive seven copies of the Section 4(f) Final Evaluation for information.

Comments received as a result of coordinating the Section 4(f) Evaluation must be given careful consideration. If the selected alternative requires the use of Section 4(f) land, the IDOT District Office and the FHWA Division Office must ensure that the EA/FONSI, the Final EIS, or Section 4(f) Final Evaluation includes sufficient information to fully support Section 4(f) approval.

20-3.07 Programmatic Section 4(f) Evaluations and Approvals

Appendix A of the *BDE Manual* includes the Programmatic Section 4(f) Evaluations for the following:

- historic bridges;
- minor involvements with public parks, recreations lands, and wildlife and waterfowl refuges;
- minor involvements with historic sites;
- independent bikeway or walkway construction projects; and
- projects that have a net benefit ⁽¹⁾.

Note: 1. The Programmatic 4(f) Evaluation for projects that have a net benefit is available at www.environment.fhwa.dot.gov/projdev/4fnetbenefits.htm.

Uses of Section 4(f) land covered by a Programmatic Section 4(f) Evaluation shall be documented and coordinated as specified in the applicable Programmatic Evaluation. Where Section 4(f) approval is given under a Programmatic Evaluation, a copy of the approval documentation should be included in the Project Development Report or environmental report for the action. Figure 20-3B presents the recommended format for the Cover Sheet (and approval documentation) for a Programmatic Section 4(f) Evaluation submittal. The recommended Cover Sheet format includes a paragraph that identifies which Programmatic Section 4(f) Evaluation is being used. This paragraph includes a space for entering the date on which the Programmatic Section 4(f) Evaluation was approved. For use of the Programmatic Section 4(f) Evaluations on minor involvements, the "issued on" date, indicated at the end of each, should be entered as the "approved on" date in the Cover Sheet paragraph. For use of the Programmatic Section 4(f) Evaluation on bikeway/walkway projects, enter May 23, 1977 in the Cover Sheet paragraph; the date that the Programmatic Section 4(f) Evaluation was originally approved and issued.

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*[Project Information
(e.g., FAP number, termini, location)]*

SECTION 4(f) APPROVAL

US Department of Transportation
Federal Highway Administration

The Federal Highway Administration (FHWA) has determined that this project meets all requirements for processing under the nationwide Programmatic Section 4(f) Evaluation for *[historic bridges; bikeways; publicly owned parks, recreational lands, or wildlife and waterfowl refuges; or historic sites]* approved on *[(date)]*. This determination is based on the attached documentation which has been independently evaluated by FHWA and determined to adequately and accurately discuss the Section 4(f) considerations on this project. Accordingly, FHWA gives Section 4(f) approval under the nationwide Section 4(f) Evaluation for *[(AlternativeX)]*, which uses land from *[(resource name)]*.

Date

For Federal Highway Administration

Note: Where brackets are used, select the proper evaluation or fill in the proper information.

**COVER SHEET FORMAT
(Programmatic Section 4(f) Evaluation)**

Figure 20-3B

20-4 SECTION 6(F) REQUESTS**20-4.01 Section 6(f) Land Conversion Request****20-4.01(a) Introduction**

Special procedures must be followed when lands purchased and developed by using Land and Water Conservation (LAWCON) funds will be used for highway purposes. Section 20-4 discusses these procedures. Similar procedures may be required where lands are involved that have been improved or developed with funds under *the Urban Park and Recreation Recovery Act of 1978* § 1010, 16 U.S.C. § 2509 (Pub. L. 95-625, § 1010, 92 Stat. 3538 (1978)) or the *Illinois Open Land Trust Act*, 525 ILCS 33/1 *et seq.* Specific procedural requirements will be addressed on a case-by-case basis.

20-4.01(b) Legal Authority

16 USC 460I-8(f)(3), commonly known as Section 6(f) of the *Land and Water Conservation Fund Act of 1965*, Pub. L. 88-578, §6, 78 Stat. 897 (1964), requires that:

No property acquired or developed with assistance under this section shall, without the approval of the Secretary, be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accordance with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location.

“Secretary” refers to the Secretary of the U.S. Department of Interior. The authority to approve Section 6(f) land conversions has been delegated to the Regional Directors of the National Park Service (NPS).

20-4.01(c) Applicability

Section 6(f) procedures must be followed for all projects, regardless of project type or funding source, which involve the taking of property acquired or developed with LAWCON funds.

20-4.01(d) Procedures

Use the following procedures when processing Section 6(f) land conversion requests:

1. Coordination. Early and ongoing coordination with the official having jurisdiction over the 6(f) land, IDNR, and the NPS Regional Director should be diligently pursued.
2. Report Requirements. When a project proposes use of land in which LAWCON funds have been involved in its purchase or development, Section 6(f) requires the approval of the Secretary of the Interior for the conversion of the land to other than public outdoor recreational use. Section 6(f) does not otherwise require a special report.

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3. Conversion Request. Requests to convert LAWCON-assisted properties in whole or in part to other than public outdoor recreational uses must be submitted through IDNR to the appropriate NPS Field Director in writing. NPS will consider the conversion request if the prerequisites described below have been met. As applicable, the LPA should submit a request for Section 6(f) land conversion approval to the IDNR Division of Grant Administration for submittal to the appropriate NPS Field Director. Formal review periods for conversion requests are not specified in the regulation. IDNR has advised that the typical time frame for NPS response to conversion requests is 60 to 90 days. The conversion request should include information to address each of the following points:
 - Alternatives. All practical alternatives to the proposed conversion have been evaluated.
 - Value. The fair market value of the property to be converted has been established and the property proposed for substitution is of at least equal fair market value as established by an approved appraisal (prepared according to uniform federal appraisal standards), excluding the value of structures or facilities that will not serve a recreational purpose.
 - Replacement Property. The property proposed for replacement is of reasonably equivalent usefulness and location as that being converted. Depending on the situation, and at the discretion of the NPS Field Director, the replacement property need not provide identical recreational experiences or be located at the same site, provided it is in a reasonably equivalent location. Generally, the replacement property should be administered by the same political jurisdiction as the converted property. For additional guidance on replacement property, see Section 26-3 of the *BDE Manual*.
4. Coordination. All necessary coordination with other federal agencies has been satisfactorily accomplished.
5. Environmental Review. The guidelines for environmental evaluation have been satisfactorily completed and considered by NPS during its review of the proposed 6(f) action. Where the proposed conversion arises from another federal action, final review of the LPA's proposal will not occur until the NPS Regional Office is assured that all environmental review requirements related to that other action have been met.
6. State Clearinghouse. If the proposed conversion and substitution constitute significant changes to the original LAWCON project, ensure that the State intergovernmental clearinghouse review procedures have been met.
7. Statewide Comprehensive Outdoor Recreation Plan (SCORP). Ensure the proposed conversion and substitution are consistent with SCORP and/or equivalent recreational plans.

20-5 HISTORIC PRESERVATION COMPLIANCE DOCUMENTATION**20-5.01 Introduction**

In the development of a Federally funded or regulated project, it is necessary to consider the effects of the undertaking on properties included in, or eligible for inclusion in, the National Register of Historic Places. Where these properties will be affected, the Advisory Council on Historic Preservation (ACHP) must be afforded a reasonable opportunity to comment on the undertaking prior to project approval.

20-5.02 Legal Authority

The following legal authority regulates or influences the policies and procedures for Section 106 documentation:

- 16 USC 470f, Section 106 of the *National Historic Preservation Act of 1966*, as amended.
- 16 USC 470h-2, Section 110(f) of the *National Historic Preservation Act of 1966*, as amended.
- Executive Order 11593, Protection and Enhancement of the Cultural Environment.

Appendix C in Part III “Environmental Procedures” of the *BDE Manual* briefly describes each of these.

20-5.03 Applicability

The procedures described in Section 20-5 apply to all Federally funded/regulated highway projects that may result in changes in the character, setting, or use of a historic property.

20-5.04 Policy

In the development of a proposed Federally funded or regulated project, appropriate measures must be taken to evaluate the undertaking’s effect on properties included in, or eligible for inclusion in the National Register of Historic Places. Where these properties will be affected, the Advisory Council on Historic Preservation must be given a reasonable opportunity to comment prior to project approval. Special efforts must be made to minimize harm to any National Historic Landmark that may be directly and adversely affected by a proposed Federally funded or regulated undertaking.

20-5.05 Definitions

The following definitions apply to historic preservation:

1. Area of Potential Effects. The geographic area or areas within which an undertaking may cause changes in the character or use of historic properties, if these properties exist.

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2. Council. The Advisory Council on Historic Preservation or a Council member or employee designated to act for the Council.
3. Historic Property. Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. This term includes, for the purposes of these regulations, artifacts, records, and remains that are related to and located within these properties. The term "eligible for inclusion in the National Register" includes properties formally determined as such by the Secretary of the Interior and all other properties that meet National Register listing criteria.
4. Indian Tribe. The governing body of any Indian tribe, band, nation, or other group that is recognized as an Indian tribe by the Secretary of the Interior and for which the United States holds land in trust or restricted status for that entity or its members.
5. Interested Person. Those organizations and individuals that are concerned with the effects of an undertaking on historic properties.
6. Local Government. A county, township, municipality, or other general purpose political subdivision of a State.
7. National Historic Landmark. A historic property that the Secretary of the Interior has designated as a National Historic Landmark.
8. National Register. The National Register of Historic Places maintained by the Secretary of the Interior.
9. National Register Criteria. The criteria established by the Secretary of the Interior for use in evaluating the eligibility of properties for the National Register.
10. State Historic Preservation Officer (SHPO). The official appointed or designated pursuant to Section 101(b)(1) of the *National Historic Preservation Act* to administer the State historic preservation program or a representative designated to act for the SHPO. The SHPO for Illinois is the Director of the State Historic Preservation Agency, or their designee.
11. Undertaking. Any project, activity, or program that can result in changes in the character or use of historic properties, if any historic properties are located in the area of potential effects. The project, activity, or program must be under the direct or indirect jurisdiction of a Federal agency, or licensed or assisted by a Federal agency. Undertakings include new and continuing projects, activities, or programs and any of their elements not previously considered under Section 106.

20-5.06 Development

The following guidance reflects the assumption that FHWA, in most cases, will be the lead Federal agency for a project subject to the Section 106 requirements. If a different Federal agency is the lead (e.g., USACE for a local- or State-funded project requiring a Section 404 permit), that agency would fulfill the functions indicated for FHWA:

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1. Identification. Identify historic properties in the area of potential effects of a proposed highway undertaking as early as practical in the development of the project. Properties may be identified from listings of the National Register and eligible properties published by the Keeper of the National Register (e.g., in the Federal Register); from local (e.g., county, city) inventories of historic sites; through coordination with the State Historic Preservation Officer (SHPO) or local historic groups; through field investigations (e.g., conducted as part of the IDOT "Integrated Process for Environmental Surveys, Studies, and Associated Preliminary Coordination"); or for a list of historic bridges in Illinois, see IDOT's website.
2. No Sites Identified. If no historic properties are found, provide documentation to the SHPO. Ordinarily, the documentation will consist of the Environmental Survey Request form for the project on which the results of the survey will be indicated. Coordination of this information with the SHPO will be accomplished by BDE. A copy of the response from the SHPO, if any, will be returned to the district. Persons and parties known to be interested in the undertaking and its possible effects on historic properties should be notified of the finding. For some project types, agreements with the SHPO and the Federal Highway Administration permit BDE to issue an "in-house" clearance on historic properties without the need for field surveys or project-specific coordination with the SHPO. For these projects, the Cultural Resources form, from the Project Monitoring application (PMA) with the "Cleared for Design Approval" and "Cleared for Letting" date field completed, constitutes the necessary documentation of Section 106 compliance. A copy of the PMA screen will be sent to the LPA by the district and will be placed in the EA and/or PDR. The agreement also allows that no survey request needs to be submitted on some projects.
3. Potential Sites Identified. If sites, buildings, structures, or objects are identified in the area of potential effects of an undertaking for which the National Register eligibility status has not been determined, appropriate information must be coordinated with the SHPO and, as appropriate, the Keeper of the National Register (in the US Department of Interior) for a determination of eligibility. This coordination ordinarily will be accomplished by BDE. In most cases, the information needed for the eligibility determination will be obtained through the studies conducted in response to the submittal of the Environmental Survey Request form for the undertaking. Where additional information is needed, BDE may request the assistance of the LPA in obtaining specific items of information.
4. Determining Effect. For all historic properties in the area of potential effects of a highway undertaking, the effects of the undertaking must be assessed. This assessment will be based on the Criteria of Effect and Adverse Effect (see Section 26-5 of the *BDE Manual*, developed by the Advisory Council on Historic Preservation (ACHP)).
5. "No Effect" Finding. If it is determined that the undertaking will have no effect on historic properties, BDE will provide documentation of this finding, ordinarily a letter and the results of the Cultural Resources portion of the environmental survey, to the SHPO and to interested persons who have made their concerns known. Unless the SHPO objects within 30 days of receiving this notice, no further actions are required for Section 106 compliance. If the SHPO provides a written response concurring in the no-effect finding, the district will provide a copy to the LPA.

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6. Determining Adverse Effect. If an effect on a historic property is found, or if the SHPO objects to a no-effect finding, the effect must be evaluated under the Criteria of Adverse Effect; see Section 26-5 of the *BDE Manual*. In addition, the public and interested persons must be afforded notice of the opportunity to comment on any project affecting a site on or eligible for the National Register. LPAs may accomplish this notification as part of the announcements for public involvement activities or the public availability of environmental documents for comment, or through publication of a separate notice specifically for that purpose. The announcement or notice should include a statement to the effect that:

In accordance with the National Historic Preservation Act, the views of the public and interested persons are being sought regarding the effect of the project on [list the specific National Register or eligible property(ies) involved] which is included on [or eligible for inclusion on] the National Register of Historic Places.

This published notice will be in addition to any other direct contacts the LPAs may have with the public or interested persons to obtain their views regarding the project's effect on historic resources. Any views received in response to the notification should be considered and documented in the Section 106 compliance information.

7. Finding of No Adverse Effect. If the effect is not considered adverse under the Criteria of Adverse Effect, BDE will coordinate this finding with the SHPO. The following outcomes may occur:
- a. If, within 30 days, the SHPO concurs in the finding, BDE will notify ACHP, via the FHWA, and will provide summary documentation (i.e., the information that was coordinated with the SHPO) to support the finding.
 - b. If the SHPO does not concur in the finding, BDE will submit documentation of the Finding of No Adverse Effect to ACHP, via the FHWA, for a 30 day review period and will notify the SHPO.
 - c. If the ACHP does not object to the Finding of No Adverse Effect within 30 days of receipt of notice, or if ACHP objects but proposes changes that are accepted (by IDOT and FHWA), no further steps are required in the Section 106 process other than to comply with any agreement with the SHPO or ACHP concerning the undertaking.
 - d. If the ACHP objects to the Finding of No Adverse Effect or changes proposed by the ACHP, if any, are not accepted, then the effect will be considered adverse.

The purpose of Section 106 documentation is to provide sufficient information to explain how the Finding of No Adverse Effect was determined. The required documentation is as follows:

- a description of the undertaking including photographs, maps, and drawings, as necessary;
- a description of historic properties that may be affected by the undertaking;
- a description of the efforts used to identify historic properties;
- a statement of how and why the criteria of adverse effect were found inapplicable; and
- the views of the SHPO, affected local governments, Indian tribes, Federal agencies, and the public, if any were provided, and a description of the means employed to solicit those views.

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8. Adverse Effect Finding. If an adverse effect on historic properties is found, BDE will notify the ACHP, via the FHWA (except in cases where the ACHP has objected to a Finding of No Adverse Effect), and will initiate consultation in cooperation with the Central BLRS, the district, and the LPA to seek ways to avoid or reduce the effects on historic properties. The SHPO or IDOT/FHWA may request the ACHP to participate. The ACHP may participate in the consultation without this request. Interested persons will be invited to participate as consulting parties when they so request. Members of the public also shall have an opportunity to receive information and express their views. BDE will provide each of the consulting parties' documentation of the Finding of Adverse Effect.

The required documentation, provided by the LPA, for a finding of "Adverse Effect" is as follows:

- a description of the undertaking including photographs, maps, and drawings, as necessary;
 - a description of the efforts to identify historic properties;
 - a description of the affected historic properties, using materials already compiled during the evaluation of significance, as appropriate; and
 - a description of the undertaking's effects on historic properties.
9. Memorandum of Agreement. If IDOT/FHWA and the SHPO agree upon ways to avoid or reduce adverse effects, or agree to accept these effects, they must execute a Memorandum of Agreement (MOA). Ordinarily, BDE will prepare the MOA in consultation with the LPA, district, Central BLRS, FHWA, and SHPO. When the ACHP participates in the consultation, it will execute the MOA with the LPAs, IDOT/FHWA, and the SHPO. When the ACHP has not participated in consultation, BDE will submit, via the FHWA, the MOA, with appropriate documentation; see Section 26-5 of the *BDE Manual*. As appropriate, IDOT/FHWA, SHPO, and ACHP, if participating, may agree to invite other parties to concur in the Agreement.

When IDOT/FHWA submits an MOA and related documentation to the ACHP, the ACHP will have 30 days from receipt to review it. Before this review period ends, ACHP will:

- accept the MOA, which concludes the Section 106 process;
- advise IDOT/FHWA of changes to the MOA to make it acceptable; subsequent agreements by IDOT/FHWA, the SHPO, and ACHP conclude the Section 106 process; or
- decide to comment on the undertaking, in which case, the ACHP will provide its comments within 60 days of receiving the submittal from IDOT/FHWA, unless IDOT/FHWA agrees otherwise.

When an MOA is submitted for review, the documentation, in addition to that specified in the "Finding of Adverse Effect", will also include a description and evaluation of any proposed mitigation measures or alternatives that were considered to address the undertaking's effects and a summary of the views of the SHPO and any interested persons.

When an MOA becomes final, the undertaking must be implemented according to the terms of the Agreement. This evidences fulfillment of Section 106 responsibilities. Failure to implement the terms of an MOA requires that the undertaking be resubmitted to the ACHP for comment.

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10. Request for Comments. Where IDOT/FHWA and the SHPO cannot agree upon measures to avoid or reduce adverse effects nor agree to accept these effects, BDE will request, via the FHWA, the ACHP's comments and provide documentation for a Request for Comments When There is No Agreement; see Section 26-5 of the *BDE Manual*.

When the ACHP has commented on an undertaking, the comments will be considered by IDOT/FHWA in reaching a final decision on the proposed undertaking. BDE will report, via the FHWA, the decision to the ACHP prior to initiating the undertaking, if possible.
11. Discovery During Construction. Where historic properties are discovered during construction, the Central BLRS should be contacted for guidance concerning the specific actions necessary for compliance.
12. Documentation in Environmental Report. The results of compliance actions under Section 106 will be summarized in the environmental report for the action.

20-5.07 Section 106 Programmatic Agreement for Transportation Enhancement Projects

The Section 106 Programmatic Agreement is an expedited process for transportation enhancement activities funded with Surface Transportation Program (STP) funds that fall within the following categories:

- acquisition of scenic easements and scenic or historic sites;
- scenic or historic highway programs;
- landscaping and other scenic beautification;
- historic preservation;
- rehabilitation and operation of historic transportation buildings, structures, or facilities, including historic railroad facilities and canals;
- preservation of abandoned railway corridors including the conversion and use thereof for pedestrian or bicycle trails;
- control and removal of outdoor advertising;
- archeological planning and research;
- mitigation of water pollution due to highway runoff; and
- facilities for pedestrians and bicycles.

The guidance provided in Section 20-5.06 remains the same with the exception of the "No Effect Finding" and "Finding of No Adverse Effect" procedures. For both steps, BDE will provide a written determination of the finding to the SHPO. The SHPO will provide written concurrence or comments within 15 days. If the district and the SHPO agree on the finding, BDE will document that finding, which will be available for public inspection, and proceed with the activity without further review by the ACHP.

The Section 106 Programmatic Agreement for Enhancement Projects can be obtained through the Central BLRS.

20-5.08 Documentation Requirements

The following discussion stipulates the documentation required for specific findings, agreements, or requests for comments in the Section 106 compliance process. For archaeological resources, BDE ordinarily will prepare the Section 106 compliance documentation, in cooperation with the LPA, Central BLRS, district, and the FHWA. For historic or architectural resources, the LPA ordinarily will prepare the documentation. See Section 20-5.06 for the documentation requirements.

20-5.09 Coordination

Coordination is conducted by BDE to comply with Section 106. Coordination primarily involves the FHWA, SHPO, the Keeper of the National Register, and ACHP. However, in the identification of historic properties and the evaluation of the effects of proposed undertakings on these properties, careful consideration should be given to information and views provided by contacts with:

- interested and affected persons;
- local governments;
- Indian tribes;
- public and private organizations; and
- applicants for or holders of grants, permits, or licenses and owners of affected lands.

When an adverse effect on historic properties is involved, these parties must be invited to participate in the Section 106 consultation process, if they request to be so involved.

20-5.10 Historic Bridge Memorandum of Understanding

For information on IDOT's Memorandum of Understanding with the FHWA, see Section 10-1.06.

20-6 NOISE ANALYSES

20-6.01 Introduction

In the development of a Federally funded project, it may be necessary to undertake special technical analyses to identify and evaluate the potential noise impacts that the project will involve. This topic prescribes procedures for these analyses, noise abatement measures and related coordination, and the noise abatement criteria prescribed by Federal regulations.

20-6.02 Complementary Technical Manual

The IDOT Highway Traffic Noise Assessment Manual (Manual) provides technical information and technical procedures associated with the provisions of this topic. The Manual contents will comply with the procedures described herein.

20-6.03 Legal Authority

The following legal authority regulates or influences the policies and procedures for noise analyses:

- 42 USC 4901-4918, commonly known as the *Noise Control Act of 1972* (Public Law 92-574).
- 23 USC 109(h) and (i), which are amendments to the *Federal-aid Highway Act of 1970* (Public Laws 93-87 and 91-605).
- 42 USC 4331 and 4332, which are portions of the *National Environmental Policy Act of 1969* (Public Law 91-190).
- 23 CFR Part 772 "Procedures for Abatement of Highway Traffic Noise and Construction Noise."
- "Highway Traffic Noise: Analysis and Abatement Guidance," by the US Department of Transportation, Federal Highway Administration June 2010, as revised January 2011.

20-6.04 Policy

Special efforts must be made in the development of a project to comply with Federal, State, and local requirements for noise control, to consult with appropriate officials to obtain the views of the affected community regarding noise impacts and abatement measures, and to mitigate highway-related noise impacts, where reasonable and feasible. The reasonableness evaluation for noise abatement will include the solicitation of viewpoints from the benefited receptors.

For detailed information, see the "Highway Traffic Noise Analysis and Abatement — Policy and Guidance," by the US Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch, Washington D.C., June 1995.

20-6.05 Definitions

The following definitions apply to noise analyses:

1. Existing Noise Levels. The worst hourly noise level resulting from the combination of natural and mechanical sources and human activity usually present in a particular area.
2. Facility or Existing Highway. Any road or street on the highway system that falls under the jurisdiction of IDOT, county, road district, or municipality.
3. Noise Barrier. A physical obstruction (i.e. stand alone noise walls, noise berms (earth or other material), and combination berm/wall systems) that is constructed between the highway noise source and the noise sensitive receptor(s) that lowers the noise level at the receptor location.
4. Receptor. A discrete or representative location of a common noise environment(s), for any of the land uses listed in Figure 20-6A.
5. Residence. A dwelling unit. Either a single family residence or each dwelling unit in a multifamily dwelling.
6. Type I Project.
 - The construction of a highway on new location; or,
 - The physical alteration of an existing highway where there is either:
 - *Substantial Horizontal Alteration*. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition in the future build condition; or
 - *Substantial Vertical Alteration*. A project that removes shielding, therefore exposing the line-of-sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor; or,
 - The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a HOV lane, Highway-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane; or,
 - The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane; or,
 - The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or,
 - Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or,
 - The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.
7. Type II Project. A Federal or Federal-aid highway project for noise abatement on an existing highway.
8. Type III Project. A Federal or Federal-aid highway project that does not meet the classifications of a Type I or Type II project. Type III projects do not require a noise analysis.

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9. Undeveloped Lands. Those tracts of land or portions thereof that do not contain improvements or activities devoted to frequent human habitation or use (including low-density recreational use) and for which no such improvements or activities are permitted.
10. Worst Hourly Traffic Noise. The noise level resulting from the highest hourly volume a facility can handle while maintaining stable flow. This traffic volume will be either the design hourly volume or the maximum volume that can be accommodated under Level of Service C (i.e., where high traffic volumes begin to restrict speed and drivers' maneuverability).

20-6.06 Applicability

The noise analysis procedures described in this Section applies to all Type I and Type II projects; see Section 20-6.05 for definitions. If a project is determined to be a Type I project, then the entire project area as defined in the NEPA environmental document is a Type I project. For further information on noise analysis procedures and abatement measures, see Section 26-6 of the *BDE Manual*.

20-6.07 Procedures

The *IDOT Traffic Noise and Vibration Manual* provides technical information and technical procedures associated with the provisions of this topic. Its contents should be considered in complying with these procedures.

20-6.07(a) Analysis and Reporting

The analysis and reporting of noise impacts must be accomplished in accordance with the following:

1. Traffic Noise Analysis. In the development of proposed projects, expected traffic noise impacts must be determined and analyzed, and the overall benefits that can be achieved by noise abatement measures to mitigate these impacts will be determined, giving weight to any adverse social, economic, and environmental effects. The level of analysis may vary from simple calculations for rural and low-volume highways to extensive analysis for high-volume, controlled-access highways in urban areas. Noise abatement criteria are listed in Figure 20-6A.

The traffic noise analysis shall be conducted in the following manner:

- Identify existing activities, developed areas, and undeveloped lands which may be affected by noise from the highway. Land uses shall be characterized based on the activity categories and descriptions listed in Figure 20-6A. Undeveloped lands permitted for development by the date of public knowledge shall be evaluated for traffic noise impacts and noise abatement (if impacts are identified) based on the permitted land use description.

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- Predict the traffic noise levels for each reasonable alternative carried forward under detailed study (including the “no-action” alternative) using the most current version of the FHWA-approved Traffic Noise Model (TNM) which is described in “FHWA Traffic Noise Model” Report No. FHWA-PD-96-010, or any other model determined by the FHWA to be consistent with the methodology of the FHWA TNM. The pavement type in TNM shall be the average pavement type unless a different pavement type has been approved by FHWA.
 - When determining traffic noise impacts, primary consideration shall be given to exterior areas where frequent human use occurs *for Activity Categories A, B, C, and E*. Traffic noise impacts for land uses within Activity Category D shall be predicted for interior areas only if no exterior use areas are identified. See the *IDOT Highway Traffic Noise Assessment Manual* for further guidance.
 - Determine the existing noise levels using field measurements, modeling, or both, using the most current version of the FHWA-approved TNM or any other model determined by the FHWA to be consistent with the methodology of the FHWA TNM. Modeling of existing conditions may not be appropriate when the project involves construction of a new roadway in a new location where there is no existing traffic noise contribution. Predicted noise levels shall be validated through comparison between measured and predicted noise levels. The $L_{eq}(h)$ noise metric shall be used to quantify the measurement of both existing and predicted noise levels.
2. Noise Abatement. See Section 26-6.05(d) of the BDE Manual for noise abatement measures.
3. Construction Noise. The following general steps for addressing construction noise will be performed for all Type I and Type II projects:
- Identify land uses or activities that may be affected by noise from construction of the project. This identification must be performed during the project development studies.
 - Determine the measures recommended for inclusion in the contract plans and specifications to minimize or eliminate adverse construction noise impacts on the community. This determination includes a weighing of the benefits to be achieved and the overall adverse social, economic, and environmental effects and the costs of the abatement measures.
 - Incorporate the recommended abatement measures into the contract plans and specifications.
- See Section 26-6.08 of the BDE Manual for additional guidance on construction noise.
4. Documentation in Reports. Although there may be instances in which a noise analysis is conducted independent of environmental documentation for a highway project (e.g., for Type II noise abatement projects), the analysis typically is conducted concurrently with the development of an EIS, EA, or other environmental report (or Project Development Report, where applicable). It is important that appropriate information from the technical noise study be made a part of the environmental documentation. Therefore, careful planning should be undertaken to ensure that the technical study reaches appropriate milestones in time to incorporate summaries of the noise analysis results into the environmental documentation for circulation and comments, as appropriate. See Section 26-6.09 of the BDE Manual for further guidance.

The technical report should be reviewed by the district or be submitted by the district to the Central BLRS so it can be forwarded to BDE for review.

20-6.07(b) Coordination

Coordination with Metropolitan Planning Organizations (MPOs) and with local officials (within whose jurisdiction the highway project is located) will be undertaken for all Type I projects. The LPA will provide the following information to these organizations:

- approximate generalized future noise levels (for various distances from the highway improvement) for both developed and undeveloped lands or properties in the immediate vicinity of the project, and
- information that may be useful to local communities to protect future land development from becoming incompatible with anticipated highway noise levels.
- Compare the predicted design year build traffic noise levels based on traffic characteristics that yield the worse traffic noise impact for the preferred alternative, or for each alternative under detailed study, with the existing noise levels and with the noise abatement criteria (see Figure 20-6A). This comparison shall also include predicted traffic noise levels for the “no-action” alternative in the design year. Such information shall be used primarily to describe the noise levels of proposed highway improvements in contrast with noise levels likely to be reached in the same area if no highway improvement is undertaken. Noise impacts are defined when the predicted traffic noise levels for the design build year approach (defined by the Department as “within 1 decibel of”) or exceed the Noise Abatement Criteria provided in Figure 20-6A, or when the predicted traffic noise levels for the design year are substantially higher (defined by the Department as “more than 14 decibels greater”) than the existing noise levels.
- Examine and evaluate noise abatement measures (see Section 26.05(d) of the BDE Manual) for existing activities, developed lands, and undeveloped lands for which development is permitted where traffic noise impacts have been identified. Before project plans and specifications are approved, it must be determined that noise abatement measures determined to be feasible and reasonable have been incorporated. Because decisions on noise abatement are prerequisites to determining environmental impacts, and because these impacts influence decisions on adoption of a highway location, it is important that a preliminary determination be made of likely noise abatement measures.
- Design year build noise levels shall be predicted for undeveloped lands for which there will be no development permitted by the date of public knowledge. The results shall be documented in the NEPA environmental documents and noise analysis documents. The information presented may include a prediction of noise contours or a prediction of distances from the highway for which impacts would likely occur. A noise abatement evaluation is not warranted for these undeveloped lands provided that development is not permitted by the date of public knowledge. See Section 26-6.05(e) of the BDE Manual for additional information to be provided to local officials for undeveloped lands.

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Activity Category	L _{eq} (h)	Evaluation Location	Activity Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67	Exterior	Residential.
C	67	Exterior	Active sports areas, amphitheatres, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	---	---	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	---	---	Undeveloped lands that are not permitted.

*Note: The Noise abatement Criteria are noise impact thresholds for considering abatement. (Abatement must be considered when predicted traffic noise levels for the design year approach (i.e., within 1 decibel of) or exceed the noise abatement criteria, or when the predicted traffic noise levels are substantially higher (i.e., more than 14 decibels greater) than the existing noise level.) The Noise Abatement Criteria are **not** attenuated design criteria or targets. The goal of noise abatement measures is to achieve the feasibility noise reduction criteria and the noise reduction design goal. The reductions may or may not result in design year noise levels at or below the Noise Abatement Criteria.*

**NOISE ABATEMENT CRITERIA
(Hourly Sound Level - decibels (dBA))**

Figure 20-6A

20-7 FLOOD PLAIN FINDING (EXECUTIVE ORDER 11988)**20-7.01 Introduction**

In the development of a Federally funded/regulated project, Executive Order 11988 imposes special requirements when the project will entail a significant flood plain encroachment. The following discussion explains the Executive Order 11988 requirements. These are in addition to IDNR Office of Water Resources flood plain permit requirements discussed in Chapter 7 and the special hydraulic analyses associated with determining structure openings and elevations for facilities located in flood plains discussed in Section 10-2.03.

A project that will involve a significant flood plain encroachment, as defined under the Executive Order 11988 requirements, will require the preparation of an EA or EIS.

20-7.02 Legal Authority

The following legal authority regulates or influences the policies and procedures for flood plains:

- Executive Order 11988, Flood Plain Management.
- US Water Resources Council's Flood Plain Management Guidelines for Implementing Executive Order 11988.
- US Department of Transportation Order 5650.2, Protection and Management of Flood Plains.
- Federal Highway Administration regulations on Location and Hydraulic Design of Encroachments on Flood Plains (23 CFR 650A).
- Title 92 IAC 708, implementing Sections 23, 29, and 30 of the *Rivers, Lakes, and Streams Act*, 615 ILCS 5/23, 29a, and 30.

See Appendix C of Part III "Environmental Procedures" of the *BDE Manual* for more information.

20-7.03 Policy

In the development of a Federally funded/regulated project, special efforts must be made to:

- encourage a broad and unified effort to prevent uneconomic, hazardous, or incompatible use and development of flood plains;
- avoid longitudinal encroachments, where practical;
- avoid significant encroachments, where practical;
- minimize impacts of actions that adversely affect base flood plains;
- restore and preserve the natural and beneficial flood plain values that are adversely impacted by LPA actions;
- avoid support of incompatible flood plain development; and
- be consistent with the intent of the Standards and Criteria of the National Flood Insurance Program, where appropriate.

20-7.04 Applicability

The following Sections discuss the procedures that apply to all Federally funded/regulated projects that will entail encroachment or which otherwise will affect base flood plains, except for repairs made with emergency funds during or immediately following a disaster. The assessment of flood plain encroachments should be incorporated into the development and analysis of design alternatives so that flood plain impacts will not be considered in isolation from other social, economic, environmental, and engineering considerations.

20-7.05 Definitions

The following definitions apply to floodplain findings:

1. Action. Any highway construction, reconstruction, rehabilitation, repair, or improvement undertaken for Federally funded/regulated projects.
2. Base Flood. The flood or tide having a 1% chance of being exceeded in any given year.
3. Base Flood Plain. The area subject to flooding by the base flood.
4. Encroachment. An action within the limits of the base flood plain. Generally, any increase in the 100-year-water-surface elevation produced by a longitudinal encroachment on a National Flood Insurance Program (NFIP) flood plain should not exceed the 1 ft (300 mm) allowed by the Federal NFIP standards and must be supported by the design risk assessment.
5. Longitudinal Encroachment. An action that is parallel to the channel and within the limits of the base flood plain.
6. Minimize. To reduce to the smallest practical amount or degree.
7. Natural and Beneficial Flood Plain Values. These include, but are not limited to fish, wildlife, plants, open space, natural beauty, scientific study, outdoor recreation, agriculture, aquaculture, forestry, natural moderation of floods, water quality maintenance, and groundwater recharge.
8. Practical. Capable of being done within reasonable natural, social, or economic constraints.
9. Preserve. To avoid modification to the functions of the natural flood plain environment or to maintain it as closely as practical in its natural state.
10. Regulatory Floodway. The flood plain area that is reserved in an open manner by Federal, State, or local requirements (i.e., unconfined or unobstructed either horizontally or vertically) to provide for the discharge of the base flood so that the cumulative increase in water surface elevation is no more than a designated amount (not to exceed 1 ft (300 mm)) as established by the Federal Emergency Management Agency (FEMA) for Administering the National Flood Insurance Program.
11. Restore. To re-establish a setting or environment in which the functions of the natural and beneficial flood plain values adversely impacted by the highway agency action can again operate.

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12. Risk. The consequences associated with the probability of flooding attributable to an encroachment. It will include the potential for property loss and hazard to life during the service life of the highway.
13. Significant Encroachment. A highway encroachment and any direct support of likely base flood plain development that would involve one or more of the following construction- or flood-related impacts:
 - a significant potential for interruption or termination of a transportation facility which is needed for emergency vehicles or provides a community's only evacuation route,
 - a significant risk, or
 - a significant adverse impact on natural and beneficial flood plain values.
14. Support Base Flood Plain Development. To encourage, allow, serve, or otherwise facilitate additional base flood plain development. Direct support results from an encroachment; indirect support results from an action out of the base flood plain.
15. Transverse Encroachments. The network of the natural surface drainage system does not allow any alternative to transverse encroachments by a highway program. Therefore, it is essential that the design selected for transverse encroachments be supported by analysis of design alternatives with consideration given to capital costs, risk, and other site-specific factors. "Supported" means that the design is either shown to be cost-effective or justified on some other engineering basis. The analysis used to develop this support is referred to as a design risk assessment (see Section 20-7.06(b)). Justification for the structure size selected for design must be documented in a Hydraulic Design Study Report and retained in the project file.

20-7.06 Procedures

The *IDOT Water Quality Manual* provides additional information and procedures to assist in fulfilling the requirements herein. The *IDOT Drainage Manual* discusses hydraulic analyses for flood plain encroachments.

20-7.06(a) Assessment and Documentation of Flood Plain Encroachments

When considering flood plain encroachments, projects are divided into six categories. This Section provides guidance on the appropriate assessment and documentation for the different categories of work. The Central BLRS or FHWA may require additional information on individual projects prior to environmental or design approval.

Assessments of flood plain encroachments may range from inspections resulting in certifying statements, as suggested in Categories 1 and 2, to a lengthy detailed analysis, as suggested in Category 6. Different levels of analysis have been established for different categories of projects depending upon their size, scope, and impact upon the flood plain. Each of the categories is based upon certain assumptions. If these assumptions are not totally accurate, the level of analysis should be modified so that sufficient information is contained to support the conclusions and recommendations.

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A single highway improvement project may involve two or more of the categories listed below. When this occurs, it is necessary to include information in the Project Development Report (PDR) or environmental document to address each of the categories that may be involved. Each drainage structure on the proposed project must be addressed in the report and a determination made on the significance of any encroachments. If a given situation does not fit a category, these guidelines should be used as a basis for developing a reasonable approach to fit that situation.

The categories are the following:

Category 1. Projects that will not involve any work below the 100 year flood elevation. When the 100 year flood elevation is available from existing information without additional detailed analysis and it can be determined that certain projects (e.g., resurfacing, widening and resurfacing, bridge deck repairs) will not involve any work below the 100 year flood elevation, it should be sufficient to state in the PDR:

Although this project involves work within the horizontal limits of the 100 year flood plain, no work is being performed below the 100 year flood elevation and as a result this project does not encroach upon the base flood plain.

Category 2. Projects that do not involve the replacement or modification of any drainage structures. Projects in this Category must be on an existing alignment. They may involve a change in the profile grade elevation of a magnitude normally associated with resurfacing. If a profile change is proposed, an inspection of the flood plain is required to determine if an increase will result in a significant change in damage or risks. It is assumed that there are no known drainage problems within the limits of the project or that other factors were considered to override the need for concurrent drainage improvements. The following information should be included in the PDR:

This project will not involve the replacement or modification of any existing drainage structures or the addition of any new drainage structures. As a result, this project will not affect flood heights or flood plain limits. This project will not result in any new, or increase the adverse effects of any existing, environmental impacts; it will not increase flood risks or damage; and it will not adversely affect existing emergency service or emergency evacuation routes; therefore, it has been determined that this encroachment is not significant.

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Category 3. Projects involving modification to existing drainage structures. Projects within this Category will not involve the replacement of any existing drainage structures or the construction of any new drainage structures. It is intended to apply only to those projects that modify existing structures (e.g., extending crossroad culverts, adding headwalls, extending existing bridge piers). Some projects involving modifications of existing drainage structures will affect flood heights and flood limits; however, these effects should be minimal. Some analysis may be necessary to support statements concerning the insignificance of the modifications. For example, if a number of culverts will be lengthened, a typical calculation addressing the worst-case situation should be included to demonstrate the magnitude of the expected changes in backwater elevations. In addition to calculations relative to changes in capacity of existing structures, an inspection of the flood plains should be made to determine if any expected increases in flood heights could result in a significant damage not expected under current conditions. An example of this might be an existing levee that will be overtopped by even a small increase in flood heights.

A statement similar to the following, together with a summary of appropriate analyses required to support conclusions therein, should be included in the PDR:

The modifications to drainage structures included in this project will result in an insignificant change in their capacity to carry floodwater. This change will cause a minimal increase in flood heights and flood limits. These minimal increases will not result in any significant adverse impacts on the natural and beneficial flood plain values; they will not result in any significant change in flood risks or damage; and they do not have significant potential for interruption or termination of emergency service or emergency evacuation routes; therefore, it has been determined that this encroachment is not significant.

Category 4. Projects involving replacement of existing drainage structures on existing alignment. This Category does not include those replacement projects that reduce the effective waterway opening from that which currently exists. In addition, there should be no record of drainage problems and no unresolved drainage complaints from residents in the area. The site should be inspected to determine if there are any existing conditions that would affect the usual design of the replacement structure. If these conditions are satisfied, a discussion similar to the following should be included in the PDR:

The proposed structure will have an effective waterway opening equal to or greater than the existing structure, and backwater surface elevations are not expected to increase. As a result, there will be no significant adverse impacts on natural and beneficial flood plain values; there will be no significant change in flood risks; and there will be no significant increase in potential for interruption or termination of emergency service or emergency evacuation routes; therefore, it has been determined that this encroachment is not significant.

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When downstream flood heights are affected, the area should be inspected to determine if the anticipated increase could result in a significant impact. If no significant impacts are expected, that information should be added to the discussion in Category 4. If significant impacts are expected, the project should follow the guidelines in Category 5.

Category 5: Projects on new alignment and projects with potentially significant increases in 100 year flood water surface elevations. Projects in this Category are expected to require a hydraulic analysis to determine pipe size or waterway opening. If other factors cause consideration of a significant change to the pipe size or waterway opening of an existing structure, an analysis will be necessary to determine the resultant change in flood heights upstream and downstream, when appropriate. In either case, the expected change in water surface elevations must be calculated to first determine the appropriate level of assessment and then to make the assessment.

If the hydraulic analysis results in a finding that flood water surface elevations will not change, the PDR should contain a discussion similar to that suggested in Category 3. If a new alignment is involved, it will be necessary to discuss whether or not it is likely to support incompatible flood plain development. If support is anticipated, alternatives to that support must be discussed. New alignments will also require a determination of whether the roadway will be overtopped more than once every 100 years. If yes, the frequency and its impact should be discussed in the PDR.

If the hydraulic analysis results in a finding that flood water surface elevations will increase either upstream or downstream, the area affected must be inspected to determine the potential for significant increases in flood impacts. The inspection should identify flood receptors that may experience significant adverse impacts as a result of the anticipated increase in flood heights. The impact on those receptors should be assessed and a summary of the types of receptors likely to be affected, and the degree of impact should be included in any PDR. Consultation with natural resource and flood plain management agencies should be initiated when necessary to adequately assess flood impacts. If significant adverse impacts are not predicted, the summary should be followed by a discussion similar to that suggested in the preceding paragraph and a determination that the encroachment is not significant.

If the assessment of impacts results in a prediction of significant adverse impacts on natural and beneficial flood plain values, significant increases in flood risks, or a significant increase in potential for interruption or termination of a transportation facility that is needed for emergency service or emergency evacuation routes, the encroachment should be considered significant and the guidelines in Category 6 followed.

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When new alignments are classified as longitudinal encroachments, they should be analyzed to determine the resultant increase in flood heights, if any. The impact of the increase should be assessed in accordance with the preceding two paragraphs. In addition, the PDR and accompanying environmental documentation should evaluate and discuss alternatives to the longitudinal encroachment on the flood plain.

Category 6: Significant Encroachments. Any proposed project that encroaches on a flood plain, either transversely or longitudinally, and which is predicted to result in a significant adverse impact on natural and beneficial flood plain values, a significant increase in flood risk, or a significant increase in potential for interruption or termination of emergency service or emergency evacuation routes, must be accompanied by a complete hydraulic analysis, a risk analysis, a flood plain study (Section 20-7.06(b)), and a flood plain finding (Section 20-7.06(c)). When it is determined that encroachments are significant, an EIS or EA must be prepared. When significant transverse encroachments are proposed, the accompanying reports must include consideration of alternatives that do not include such encroachments. No significant encroachment will be approved unless there is no practical alternative.

The hydraulic analysis must provide the following information that must be summarized in the PDR:

- a. For a 100-year flood frequency:
 - discharge,
 - backwater, and
 - water surface elevation before and after proposed project.
- b. For the design frequency (if other than 100 years):
 - frequency,
 - discharge,
 - backwater,
 - water surface elevation before and after proposed project, and
 - waterway opening.
- c. The frequency with which the highway is likely to be overtopped in 500 years or less. If over 500 years, it should be so stated. The location of the overtopping should be indicated.

The risk analysis should include an economic comparison of design alternatives using expected total costs (i.e., construction costs plus risk and damage costs) to determine the alternative with the least total expected cost to the public. The comparison includes probable flood-related costs during the service life of the facility for highway operation, maintenance, and repair; for highway-aggravated flood damage to other property; and for additional or interrupted highway travel.

The flood plain study will require an inspection of the flood plain to determine the increase in the number of flood receptors and the increase in the damage to present flood receptors that will result from the expected increase in flood heights. Consultation with natural resource and flood plain management agencies should be initiated where necessary to adequately assess encroachments. Following the inspection and consultation, the flood plains subsection of the appropriate environmental report should be prepared.

When significant encroachments are under consideration, public involvement notices published in the news media must indicate that encroachments are being considered. Identify all encroachments during presentations at public hearings or meetings.

20-7.06(b) Design Risk Assessment

Justification or "support" is achieved through the design risk process. The degree of support is to be commensurate with the sensitivity of each site, and will range from conducting an economic analysis to simply describing the constraint(s) that justifies the design.

An economic analysis is a monetary exercise that determines whether a proposed hydraulic structure is cost-effective by demonstrating that an appropriate balance exists between the capital costs and the risk costs attributable to the encroachment. This method of support should be used to the extent that existing risk is quantifiable. Risk is defined as the consequences associated with the probability of flooding attributable to an encroachment. It includes the potential for property loss and hazard to life during the design life of the highway.

An economic analysis demonstrating the cost-effectiveness of a design should include consideration for both the design frequency and the 100 year frequency. In some cases, even a lower frequency occurrence may have significant risk costs.

There are many projects where the optimum design is controlled by obvious economic, environmental, or physical constraints. In these situations, a description of the constraint with a statement explaining how the constraint justifies the design will be sufficient support for the design risk assessment. Some examples of constraints include:

- rehabilitation of existing structure (including superstructure replacement, deck replacement or repairs, widenings, and culvert extensions);
- extensive development adjacent to the flood plain;
- reservoir and dam crossing;
- channel stability problems;
- supercritical flow;
- roadway overtopping;
- minimum opening that spans the channel;
- smallest standard bridge design that does not exceed acceptable backwater;
- major ice or debris problems;
- flood control projects;

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- topography (e.g., deep ravine);
- geometrics (e.g., navigation clearances);
- foundation problems;
- multiple-use structure (e.g., combination stream and grade separation structure, cattle pass); and
- environmental commitments (e.g., threat to endangered species, encroachment on historic sites, parks, recreation areas, wildlife and waterfowl refuges).

20-7.06(c) Flood Plain Studies

Special technical studies assessing the effect of any encroachment and determining the practicability of alternatives to significant encroachments and longitudinal encroachments, when applicable should be undertaken for all projects. The following should be considered when preparing these studies:

1. NFIP Maps. Use National Flood Insurance Program (NFIP) maps, if available, and other information developed by IDOT and/or local, State, or Federal water resources and flood plain management agencies to determine whether a highway location alternative will include an encroachment.
2. EO 11988. The intent of Executive Order 11988 can be satisfied for many actions without documenting the exact flood plain limits. The required determination of encroachments can be accomplished without detailed study.
3. Alternatives. Flood plain studies include evaluation and discussion of the practicability of alternatives to any longitudinal encroachments or to any significant encroachments or any support of incompatible flood plain development.
4. Scope of Discussion. Flood plain studies include a discussion of the following items, commensurate with the significance of the risk or environmental impact, for all alternatives containing encroachments, and for those actions that would support base flood plain development:
 - the risks (e.g., flooding risk) associated with implementation of the action;
 - the impacts on natural and beneficial flood plain values;
 - the support of probable incompatible flood plain development;
 - the measures to minimize flood plain impacts associated with the action; and
 - the measures to restore and preserve the natural and beneficial flood plain values impacted by the action.
5. Documentation. Summarize the flood plain studies in the project's Environmental Impact Statement (EIS), Environmental Assessment (EA), or Project Development Report. No documentation is needed for a Group I Categorical Exclusion.

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20-7.06(d) Flood Plain Finding

A proposed action that includes a significant encroachment will not be approved unless the FHWA finds that the proposed significant encroachment is the only practical alternative. This finding is included in the recommendation for a FONSI or in a special subsection entitled "Only Practical Alternative Finding" within the Final EIS. This finding must be supported by the following information:

- a reference to Executive Order 11988 and 23 CFR 650, Subpart A;
- the reasons why the proposed action must be located in the flood plain;
- the alternatives considered and why they were not practical; and
- a statement indicating whether the action conforms to applicable State or local flood plain protection standards.

This finding must be included in the environmental report and forwarded to the appropriate State and local clearinghouses. The clearinghouse copies may be included in the appendix of the regular design stage contact.

20-7.06(e) Coordination

Local, State, and Federal water resources and flood plain management agencies, including the IDNR Office of Water Resources (OWR), should be consulted to determine if the proposed highway action is consistent with existing watershed and flood plain management programs, and to obtain current information on development and proposed actions in the affected watersheds.

20-8 WETLAND ANALYSES AND FINDINGS**20-8.01 Legal Authority**

Federal Executive Order 11990 applies special requirements for addressing the impacts of Federal projects on wetlands. Wetlands also are subject to regulation under the *Clean Water Act* (33 USC 1251-1376) as a part of the Section 404 permit process and the Section 401 Water Quality Certification requirements (33 CFR Parts 320 through 330). In addition, the Illinois *Interagency Wetland Policy Act of 1989* (20 ILCS 830) and the implementing rules for the Act (17 IAC 1090) address State policy for wetlands.

20-8.02 General

For Federal, State, and Motor Fuel Tax (MFT) funded projects and any locally funded project that requires IDOT review and approval, the submission of the Environmental Survey Request (ESR) will initiate the identification and delineation process for wetlands by BDE at no cost to the LPA. The results will be sent to the LPA upon completion of the delineation by BDE. After the wetlands have been delineated in the project vicinity, the LPA will be required to prepare the Wetland Impact Evaluation form in accordance with Section 20-8.05. The LPA also has the option of having the delineation performed by a consultant pre-qualified by the Department. In all cases, at the time of submission of the ESR, it should be noted on the ESR whether the LPA or BDE will be responsible for performing the delineation.

20-8.03 Definitions**20-8.03(a) Definitions**

The following definitions apply:

1. Adverse Impact. Any land management activity, construction, or related activity that directly or indirectly reduces the size of a wetland or impairs a wetland's functional value or impairs a wetland's functional value or the hydrologic characteristics of a wetland
2. Compensation Ratios. This refers to replacement area, quantified wetland functions, or dollar value when compared to the wetland area that is adversely impacted. The procedure for computing wetland compensation requirements is to multiply the appropriate wetland compensation ratio by the unit of compensation.
3. Floristic Quality Index. An index derived from floristic inventory data that is considered in determining mitigation ratios for wetland compensation, in accordance with the provisions of 17 Ill. Adm. Code 1090. The FQI is calculated and identified on the INHS wetland delineations. In general, an index score below 10 suggests a site of low natural quality; below 5, a highly disturbed site. An FQI value of 20 or more suggests that a site has evidence of native character and may be considered an environmental asset.
4. Hydrologic Unit. The drainage basin of a river or a stream as identified in Figure 20-8A
5. Mitigation Bank. A site where wetlands and/or natural habitats are restored, created, enhanced, or preserved, expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar type resources.

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6. National Wetlands Inventory. A mapping program administered by the US Fish and Wildlife Service (USFWS) for identifying the locations of wetlands and deepwater habitats. Quadrangle-based maps are available for Illinois that include Riverine (streams), Lacustrine (lakes), and Palustrine (wetland) systems.
7. Off-Site. A wetland compensation area located within the same Hydrologic Unit boundary, but more than 1 mile (1.6 kilometers) from the proposed project limits for which the wetland compensation is required.
8. On-Site. When a wetland compensation area is located within the same Hydrologic Unit boundary, as shown in Figure 20-8A, and within 1 mile (1.6 kilometer) of the proposed project limits for which the wetland compensation is required.
9. Out-of-Basin. When a wetland compensation area is located outside the Hydrologic Unit boundary that includes the site of the proposed project for which the wetland compensation is required.
10. Programmatic Review Actions. Programmatic review actions involve impacts to wetlands where construction is within the existing right-of-way or in new right-of-way that is contiguous to the existing right-of-way. For projects that qualify as programmatic review actions, project-specific coordination with IDNR for wetland compliance will generally not be required. In these cases, BDE will determine replacement ratios, approve any compensation plans, and coordinate with IDNR, as necessary. The LPA is responsible for maintaining complete files on all actions processed under this programmatic procedure. These files will be made available for audit upon request.
11. Replacement Area. The area of wetland compensation that is required. It is computed by multiplying the wetland area that is adversely impacted by the appropriate compensation ratio.
12. Significant Alteration. An adverse wetland impact that does not meet the criteria to be defined as a programmatic action and that causes either:
 - the alteration of pre-existing hydrology or soils of 0.5 acre (0.2 hectare) or less of a wetland for more than 12 months. This includes, but is not limited to, the placement of dredge or fill material into a wetland, the drainage of a wetland, filling in of a wetland through sedimentation, etc. or
 - the removal or loss of more than 0.5 acre (0.2 hectare) but less than 2 acres (0.8 hectare) of wetland vegetation but that does not alter the pre-existing hydrology of the wetland for a period of more than 12 months (a temporary impact).
13. Standard Review Action. Involves projects with unavoidable adverse wetlands impacts that do not qualify as programmatic review actions. Coordination will be required with IDNR on a project-by-project basis.
14. Value. A unit of measure (i.e., acres (hectares), wetland functions, or dollars) that is multiplied by the appropriate wetland compensation ratio to determine the amount of wetland compensation required.

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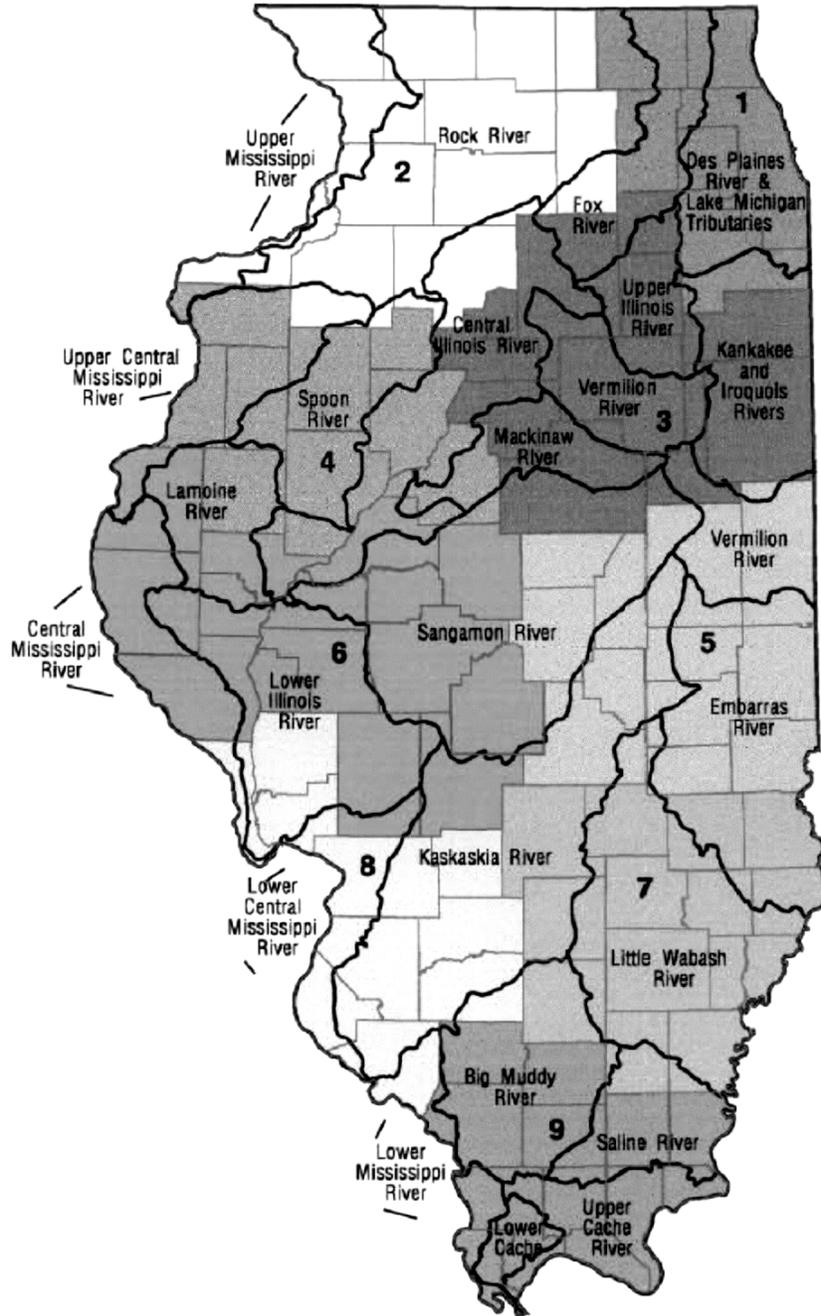
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15. Wetlands. Those areas that are inundated or saturated by surface or groundwater at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. For purposes of the *Interagency Wetland Policy Act of 1989*, the term includes areas that are restored or created as the result of mitigation or planned construction projects and that function as a wetland even when all three wetland parameters (i.e., hydric soils, inundation or saturation by surface or groundwater, and prevalence of hydrophytic vegetation) are not present.
16. Wetlands Classification. A system for designating wetlands and deepwater habitats as to type, based on vegetation and other pertinent characteristics. The Cowardin classification of wetlands and deepwater habitats is used on the National Wetland Inventory maps. Sites depicted as palustrine on these maps may be jurisdictional wetlands. On-site wetland determinations are required to confirm the jurisdictional status of the site. Classes of palustrine wetlands include emergent, scrub-shrub, and forested.
17. Wetland Compensation Plan. A plan developed for each individual construction affecting wetlands that details how compensation will be provided for unavoidable adverse impacts.
18. Wetland Creation. The establishment of a wetland where a wetland does not currently exist.
19. Wetland Delineation. Determining the boundary of a wetland area. The determination is based on the presence of three criteria:
 - a prevalence of hydrophytic vegetation,
 - hydric soils, and
 - wetland hydrology.

To accurately delineate a wetland, a person must have the ability to identify vascular plants to the species level (plant taxonomy), be able to identify soil types, and have at least a general knowledge of wetland hydrology.
20. Wetland Impact Evaluation (WIE) Form. An IDOT form that must be completed and submitted to the district for processing when it is determined that a project would impact wetlands.

Drainage Basins for the Evaluation of Wetland Resources Displayed with County Boundaries and IDOT Districts



HYDROLOGIC UNITS – WETLAND ACTION PLAN

Figure 20-8A

20-8.04 Identification and Delineation of Wetlands

For Federally, State, and MFT funded and any locally funded project that requires Department review and approval, the submittal of the Environmental Survey Request (ESR) with the biological box checked will initiate the identification and delineation process for wetlands by BDE at no cost to the local agency. If BDE (in consultation with IDNR) determines wetlands are present within 250 feet from the project location, they will task the Illinois Natural History Survey (INHS) to perform the wetland delineations. After INHS completes the wetland delineations, they will prepare a report. If the information clearly indicates that no wetlands are present in or near the project vicinity, BDE will provide a sign-off indicating that further action under the wetland requirements will not be necessary, unless the scope or location of the project changes and it would potentially affect location beyond the area previously reviewed for wetlands. If the wetland report shows that any wetland sites have an adverse wetland impact by the project, the local agency will be required to prepare a Wetland Impact Evaluation (WIE) Form.

20-8.05 Wetland Impact Evaluation (WIE)

When preparing a WIE form, the local agency should consider the following, while giving due consideration to safety and appropriate design standards:

- First Priority. Avoid the adverse wetland impacts.
- Second Priority. Minimize the adverse wetland impacts.
- Third Priority. Compensate for unavoidable adverse wetland impacts.

The WIE form, which can be found on IDOT's website for environmental surveys, will document all information regarding any potential wetland impacts including alternatives for avoiding and minimizing adverse impacts. The WIE will include the following:

- Information either stating there will be no wetland sites impacted, or identifying the wetland site(s) impacted,
- A summary of why there are no practicable alternatives to the use of wetlands,
- The type of wetland mitigation being proposed (i.e. wetland bank, on-site),
- The wetland impacts and amount of mitigation required for each site. This includes the type of wetlands, the type of work and the acres of impact,
- Plan sheets clearly showing the impacts to the wetland site(s) must be included with the WIE form.

Submit the WIE and attached plan sheets electronically to the district. The district will forward the necessary documents to the Central BLRS for submittal to BDE. From the information contained in the WIE form, BDE will determine the amount of wetland compensation, generally based on the compensation ratios in Figure 20-8B.

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Adverse Impact	On-Site	Off-Site	Out-of-Basin
Minimal Alteration	1.0:1*	1.5:1	2.0:1
	1.5:1**		
Significant Alteration	1.5:1	2.0:1	3.0:1
Destruction	2.5:1	4.0:1	5.5:1

* The 1.0:1 ratio applies to all other types of wetland vegetation, substrate, or wetland type except those wetlands that have woody vegetation.

** The 1.5:1 ratio applies if the vegetation of the adversely impacted wetland is woody.

WETLAND COMPENSATION RATIOS

Figure 20-8B

According to 17 Ill. Admin. Code 1090.50(c)(8), the compensation ratio used to determine the amount of wetland compensation required is always 5.5:1 if the adversely impacted wetland has one or more of the following situations present:

- the presence of a State or federally listed endangered and threatened species,
- the presence of essential habitat of a State or federally listed endangered and threatened species,
- the presence of an Illinois Natural Inventory (INAI) Site, maintained and updated by IDNR, and/or
- a wetland that is comprised of a plant community that receives a floristic quality native index score of 20 or more and/or a native mean coefficient of conservatism of 4.0 or greater using the procedure described in the publication *Plants of the Chicago Region*.

20-8.06 Wetland Compensation Plan Development

After the amount of anticipated unavoidable adverse impacts has been established for a project, the compensation process can begin.

The preferred mitigation for adverse wetland impacts of less than 0.1 acre (0.04 hectare) is wetland banking for compensation in a larger compensation site or sites with the approval of BDE only if the project is outside of wetland bank area. See Section 20-8.11 for wetland banking. If wetland banking is not practiced, BDE may allow wetland accumulations in certain cases.

For impacts equal to or greater than 0.1 acre (0.04 hectare), opportunities for on-site compensation may be considered. Options that are off-site, but in-basin, must be considered before out-of-basin alternatives are proposed if wetland banking is not proposed. The local agency is encouraged to purchase credits from an approved wetland mitigation bank rather than restoring or creating wetlands on or near the development site. A wetlands mitigation bank is a wetland area that has been restored, created, enhanced, or (in exceptional circumstances) preserved, which is then set aside to compensate for future conversions of wetlands for development activities. Use of wetland banks or other approved sources of pre-existing wetland credits may be proposed provided this sequencing requirement is satisfied.

A wetland compensation plan must be developed when some form of compensation is provided. Additional information can be found in the *BDE Manual*.

1. Pre-existing Wetland Credits. If all of the wetland compensation is from a wetland bank or an approved source of preexisting compensation credits, the Wetland Compensation Plan will contain the following information:
 - project name, number, location, and description,
 - name and address of responsible agency,
 - types, amounts, and locations of affected wetlands, including any drainage basins and watercourses involved,
 - description of alternatives that would provide avoidance or minimization of adverse impacts to the wetland and, as applicable, the reasons for their rejection,
 - reasons for proposing use of an approved wetland compensation account or other source of pre-existing wetland credits, and
 - description of applicable compensation ratios, the amount and type of compensation credit to be provided, and the source of the credits, including location, current balances, and any pending changes.
2. Restoration, Enhancement, and/or Creation of Wetlands. If compensation will be provided through wetlands restoration, enhancement, and/or creation, the local agency should take the lead in locating a suitable compensation site, giving appropriate consideration to the effect of the applicable compensation ratios on the amount of compensation needed.

After the local agency has identified one or more potential compensation sites, it should submit information concerning the sites to the district for an assessment of the suitability of the site by BDE. An agency or applicant may request approval to use existing public lands for wetland compensation projects. IDNR will have the final approval on the use of existing public lands for this purpose. Once a site has been determined to be suitable for compensation, a Compensation Plan will be prepared by the local agency.

20-8.07 Conceptual Compensation Plan for the Creation of Wetlands

The local agency will first develop a Conceptual Compensation Plan, if they propose to create a wetland. The conceptual plan should contain enough information to enable BDE and IDNR to concur in the proposed approach and the project's location prior to proceeding with its implementation. The Conceptual Plan includes:

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- project name and number, location, and description,
- name and address of the responsible agency,
- summary statement and date of surveys,
- name, work address, email address, and phone numbers of persons conducting surveys,
- types and amounts of affected wetland, including drainage basins and watercourses involved,
- description of alternatives considered that would avoid or minimize the adverse impacts to the wetland and, as applicable, the reasons for their rejection,
- description of the precise location of the proposed wetland replacement site (including a map, legal description, the distance from the impacted wetland, current land use, current vegetation, biological, hydrological, and soil characteristics),
- description of the proposed wetland compensation, including a clear statement of goals,
- description of wetland to be created, restored, acquired, compensation ratios to be applied, any research funding proposed in lieu of a component of the total compensation and, if use of pre-existing wetland credits is proposed as a component of the total compensation, the source of the credits, including current balances and pending changes,
- general description of the work (e.g., grading, planting, alteration of hydrology) proposed to establish compensation sites, and
- the names of the entities to assume long-term responsibility for compensation sites to be established.

The project environmental documentation should summarize the Conceptual Compensation Plan as concurred by BDE and IDNR.

20-8.08 Compensation Design Plan for the Creation of Wetlands

Once approval is given for the Wetland Compensation Plan, the local agency will prepare a detailed construction plan reflecting the proposed work for the creation of a new wetland. The local agency will provide BDE the opportunity to review the preliminary plans. BDE will have 2 weeks to comment.

The Compensation Design Plan will include the following items:

- a detailed site plan that includes the plant materials and methods to establish those plant materials, proposed contours of the wetland and surrounding buffer to be established, source of water, anticipated hydro-period of the proposed wetland and any water control structures, the watershed draining into the proposed wetland, and the relationship of the site to surrounding land uses,
- the operation, management, and maintenance plan for the site, including procedures to restrict further adverse impacts to the site (e.g., the use of buffer areas, restricting future construction within the wetland compensation area),

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- a monitoring plan that evaluates the success and/or failure of the wetland establishment effort, including the use of measures to correct identified deficiencies or problems, and
- the anticipated starting and ending dates of the wetland compensation plan.

Projects should not proceed to letting until the compensation plan has been approved. Approval of the compensation plan is valid for 2 years.

20-8.08(a) Compensation Plan Implementation

The following procedures apply:

1. Use of Pre-existing Wetland Credits. Once the compensation plan has been approved, the local agency should proceed with acquiring or accomplishing the necessary accounting for the application of credits on the project. The credits must be provided/secured before the associated adverse wetland impacts occur.
2. Wetlands Creation. During the construction phase of the wetland compensation areas, the local agency will notify BDE when grading is complete before landscaping and again once landscaping is complete. BDE is to be notified when the inspection of the plant material is scheduled so that they may be present. At the end of the construction phase, the local agency will provide BDE a copy of the grading and planting plans of record.

20-8.09 Monitoring of Wetland Compensation Area

Monitoring and reporting procedures for wetland compensation areas will be as stated in the Wetland Compensation Plan. If BDE is monitoring the wetland compensation area, BDE will write and process the annual wetland monitoring report and send a copy of the report to the local agency. If BDE is not monitoring the wetland compensation area, 2 copies of the annual wetland monitoring report must be sent to the district by the local agency for transmittal to BDE.

20-8.10 Transfer of Wetland Compensation Area

When a local agency can transfer management responsibility for wetland compensation area without impacting the project operation, a written request will be submitted through IDOT to IDNR for approval. The request will contain information identifying the proposed recipient of the lands and an outline of the terms of the transfer agreement.

20-8.11 Wetland Banking

The Department's preferred method of wetland compensation involves the use of pre-existing wetland credits from a commercial or Department-owned wetland mitigation bank site. This preference may be met when the project is within the service area of a bank site. Information on Department-owned wetland mitigation bank sites and service areas may be accessed at the Department's Environment webpage. The local agency will be required to purchase the credits from the wetland mitigation bank at either their own cost or as part of the project cost.

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20-9 THREATENED AND ENDANGERED SPECIES/NATURAL AREA IMPACT ASSESSMENTS

20-9.01 Introduction

In the development of a project, special studies and coordination are required when the action may affect Federally listed threatened or endangered species (T&E Species). This Section addresses the reporting and processing requirements for these actions. This applies to all Federal, State, and Motor Fuel Tax (MFT) funded projects and any locally funded project that requires IDOT review and approval.

20-9.02 Legal Authority

The *Federal Endangered Species Act* (50 CFR 402) is the legal authority that regulates or influences the policies and procedures for threatened and endangered species.

20-9.03 Policy

In the development of a project, an assessment shall be made on the likely impacts on species of plants or animals listed as threatened or endangered. Every effort will be made to minimize the likelihood of jeopardizing the continued existence of listed threatened or endangered species, or the destruction or adverse modification of a Natural Area, or an area of habitat that has been designated as a critical habitat or essential habitat. See Section 20-9.04 for the definition of critical and essential habitat.

20-9.04 Definitions

The following definitions apply:

1. Biological Assessment. Information on listed and proposed species and designated and proposed critical habitat that may be present in the action area and the evaluation of potential effects of the action on these species and habitat.
2. Biological Opinion. The document that states the opinion of the US Fish and Wildlife Service (USFWS) on whether or not an action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.
3. Critical Habitat. An area designated by the USFWS as critical habitat.
4. Destruction or Adverse Modification. A direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of listed species. Alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.
5. Essential Habitat. The habitat necessary to prevent the depletion of a threatened and/or endangered species.

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6. Formal Consultation. A process between the USFWS and the Federal agency responsible for a proposed action that commences with the Federal agency's written request for consultation and concludes with the USFWS issuance of a biological opinion.
7. Jeopardize the Continued Existence. To engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.
8. Listed Species. Any species of fish, wildlife, or plant that has been determined to be endangered or threatened pursuant to the *Federal Endangered Species Act*.
9. Proposed Species. Any species of fish, wildlife, or plant that is proposed to be listed under Section 4 of the *Federal Endangered Species Act*.

20-9.05 Federal T&E Species Requirements

20-9.05(a) Applicability

The preparation of a Biological Assessment is required for any Federally funded/regulated "major construction activity" where listed species or critical habitat may be present in the action area. A Biological Assessment also may be appropriate for other actions where listed species or critical habitat may be present and it is unclear whether they may be affected. If they may be affected, formal consultation is required.

20-9.05(b) Processing Procedures

As a part of the environmental survey and coordination process for a proposed undertaking, BDE will evaluate affected habitat in the action area and, as appropriate, will either:

- request from the USFWS information concerning any listed or proposed species, or designated or proposed critical habitat, that may be present in the action area; or
- provide the USFWS with written notification of species and critical habitat that has been determined, on the basis of surveys or available information, to be potentially present in the action area.

In response to the contact from BDE, the USFWS will:

- provide information regarding listed or proposed species or designated or proposed critical habitat that may be present in the action area, and a list of candidate species* that may be present in the action area;
- concur with or revise the information provided by BDE; or

* Candidate species refers to any species being considered by the USFWS for listing as endangered or threatened but not yet formally proposed or listed. Candidate species are accorded no protection under the *Endangered Species Act*. Notification concerning each species is intended to alert agencies of potential proposals or listings. These species should be identified in the environmental report for a proposed undertaking. Also, close contact should be maintained with BDE on the disposition of the candidate species during the environmental processing of a project.

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- where a list is not provided, advise whether, based on the best scientific and commercial data available, any listed or proposed species or designated or proposed critical habitat may be present in the action area.

If, as a result of the coordination with the USFWS, a determination is made that no listed species or critical habitat may be present, a Biological Assessment is not required. In these cases, further consultation with the USFWS on listed species or critical habitat also is not required. If it is determined that only candidate species or proposed critical habitat may be present, a Biological Assessment is not required unless the proposed listing and/or designation become final before the action is completed.

If the coordination with the USFWS results in a determination that listed species or critical habitat may be present, a Biological Assessment should be prepared. Where candidate species or proposed critical habitat also may be present, they should be addressed in the Biological Assessment.

The *IDOT Ecological and Natural Resources Manual* provides additional information and procedures to assist in fulfilling the requirements herein.

See Section 26-9 of the *BDE Manual* for details concerning the preparation of a biological assessment.

20-9.05(c) Processing of the Biological Assessment

The Biological Assessment will be coordinated with the FHWA and transmitted by BDE to the USFWS for review. The USFWS will respond in writing within 30 days on whether it concurs with the findings of the Biological Assessment.

If the Biological Assessment indicates the action is not likely to jeopardize the continued existence of proposed species or result in the destruction or adverse modification of proposed critical habitat and USFWS concurs, a conference is not required. If it is determined that the action is likely to jeopardize the continued existence of proposed species or result in the destruction or modification of proposed critical habitat, a conference is required.

If the Biological Assessment indicates there are no listed species or critical habitat present that are likely to be adversely affected by the action and the USFWS concurs, formal consultation is not required. If listed species or critical habitat are present and it is determined they are likely to be adversely affected by the action, formal consultation is required.

If required, a written request will be made by BDE to the USFWS to initiate formal consultation.

Formal consultation will be directed toward further analysis of the species and/or critical habitat involved and alternatives to the proposed action. The purpose of these analyses is to allow the USFWS to develop its opinion concerning whether the action is likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of critical habitat.

Formal consultation will be concluded within 90 days after its initiation unless a longer period is mutually agreed to. Within 45 days after concluding formal consultation, the USFWS will provide its Biological Opinion concluding that:

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- the action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a “jeopardy” biological opinion); or
- the action is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a “no-jeopardy” biological opinion).

If a “jeopardy” biological opinion is issued, the USFWS must be notified of the final decision on the action (i.e., whether the action will be modified and, if so, how).

If the final decision on the action will involve a likelihood of jeopardizing the continued existence of a listed species or resulting in the destruction or adverse modification of critical habitat, the action may not proceed (under Federal approvals or with Federal funds) unless, and until, an exemption from the requirements of Section 7(a)(2) of the *Endangered Species Act* (which directs Federal agencies to “ensure” that their actions are not likely to “jeopardize” listed species or destroy or adversely modify critical habitat) is obtained.

20-9.06 State T&E Species Requirements

20-9.06(a) Applicability

The pre-screening procedures discussed in Section 20-9.06(b) are applicable to all projects requiring submittal of an Environmental Survey Request pursuant to the criteria in Section 20-2. The procedures in the remainder of this Section are applicable to all projects.

20-9.06(b) Review for State-listed Threatened and Endangered Species and Illinois Natural Areas Inventory Sites

For all projects meeting the applicability criteria in Section 20-2.01, BDE will determine if the projects may have an adverse effect on a state-listed T&E Species, or a site listed on the Illinois Natural Areas Inventory (INAI), which include Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, and registered Land and Water Reserves. BDE may cause biological surveys to be conducted to assist in their determination of affect. BDE will develop measures to avoid, minimize or mitigate potential adverse effects to T&E species or INAI sites.

20-9.06(c) Consultation

BDE will submit to the IDNR Ecological Compliance Assessment Tool (EcoCAT) website a consultation requests for proposed actions that may have an adverse effect, that are adjacent to a Nature Preserve or Land and Water Reserve, or that entail excavation outside of an existing right-of-way and are within one mile of a Nature Preserve or Land and Water Reserve. The IDNR will review the EcoCAT reports within 30 days of receipt. After review, IDNR will either:

1. Terminate consultation because adverse affects are unlikely; or
2. Request additional information and /or request a biological survey.

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BDE will submit any measures to avoid, to minimize, or to mitigate potential adverse effect to T&E species or INAI sites to the IDNR for concurrence. The IDNR will review mitigation measures submitted by IDOT and coordinate with appropriate IDNR staff to determine whether further analysis or recommendations are required. Within 90 days of receipt of IDOT-proposed mitigation measures, IDNR will either:

1. Recommend additional measures to avoid or minimize adverse effects; or
2. Concur with proposed mitigation measures and terminate consultation.

Both IDOT and IDNR have 45 days to resolve any differences that may remain. If a resolution is not reached within this time, both agencies may agree to:

1. terminate consultation;
2. elevate the issue within each agency; or
3. continue negotiations.

20-9.06(d) Expiration

If the project involves other resource concerns requiring further review, BDE will re-screen the project against the Illinois Natural Heritage Database prior to any final action confirming satisfactory disposition of the other resource issues. The BDE review or the IDNR consultation is valid for 3 years from the initial date on the BDE review, date on the EcoCAT submittal or from the date of final confirmation from IDNR on resolution of other resource concerns, if applicable. Before a project is advertised for a bid letting, the BDE review must be renewed if more than 3 years have elapsed since the last update on the screen or the project scope has changed. If the 3-year time period has elapsed, the LPA should request to update the BDE review by sending a copy of the original BDE review with appropriate attachments (i.e. topographic and/or GIS maps) to the district. The district will process the request similar to the procedures of an Environmental Survey Request. A copy of the renewed BDE review will be sent to the LPA through the district. See Chapter 18 for further guidance on the general principles of coordination with IDNR.

20-9.07 Coordination of Federal/State Requirements

Where a species involved with an action is listed at both the Federal and State level, the Biological Assessment (Federal) and Detailed Action Report (State) prepared for the action will be processed concurrently with the USFWS and IDNR, as practical. Although processing may be concurrent and the results of consultation may be considered by either agency, the Federal and State requirements are independent; both must be satisfied when species are on both the Federal and State lists.

20-10 EVALUATIONS OF FARMLAND CONVERSION IMPACTS**20-10.01 Introduction**

In the development of a project, consideration must be given to the impacts that the action will cause in the conversion of farmland to non-farm uses. Under certain circumstances, coordination must be initiated with the US Department of Agriculture, Natural Resources Conservation Service (NRCS) and/or the Illinois Department of Agriculture (IDOA) to evaluate the impacts on farmland and obtain the views of those agencies on alternatives to the proposed action. This Section discusses the criteria and procedures for accomplishing the necessary coordination with NRCS and IDOA. Coordination is discussed in Section 10-1.08.

20-10.02 Legal Authority

The following legal authority regulates or influences the policies and procedures on farmland conversions:

- 7 USC 4201-4209, *Farmland Protection Policy Act of 1981* (Public Law 97-98).
- 7 CFR 658, Farmland Protection Policy.

See Appendix C of Part III “Environmental Procedures” of the *BDE Manual*, for more information.

20-10.03 Policy

In the development of a project, an evaluation is made of the action’s effects on conversion of farmland to non-farm use. Coordination between NRCS and/or IDOA, as appropriate, is necessary to obtain their views on any anticipated farmland conversion. This evaluation and coordination with NRCS and IDOA is accomplished in conformance with Federal and State statutes, regulations, Executive Orders, and IDOT agreements concerning farmland. Consideration is given to alternatives that could reduce adverse impacts to farmland. Proposed actions are developed to be compatible with State and local governments and private programs and policies to protect farmland.

20-10.04 Definitions

The following definitions apply:

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1. Farmland. Prime or unique farmlands, as defined in Section 1540(c)(1) of the *Farmland Protection Policy Act*, or farmland that is determined by the appropriate State or unit of local government agency or agencies with concurrence of the Secretary of Agriculture to be farmland of Statewide or local importance. "Farmland" does not include land already in or committed to urban development or water storage. Farmland "already in" urban development or water storage includes all land with a density of 30 structures per 40 acre (16 per ha) area. Farmland already in urban development also includes lands identified as "urbanized area" (UA) on the Census Bureau Map, or as urban area mapped with a "tint overprint" on the USGS topographical maps, or as "urban-built-up" on the USDA Important Farmland Maps. Areas shown as white on the USDA Important Farmland maps are not "farmland" and, therefore, are not subject to the *Act*. Farmland "committed to urban development or water storage" includes all land that receives a combined score of 160 points or less from the land evaluation and site assessment criteria.
2. Site. The location that would be converted by the proposed action.

20-10.05 Federal Requirements

20-10.05(a) Applicability

A project that requires additional right-of-way outside any corporate limits must be coordinated with NRCS unless any one of the following applies:

1. There are no federal funds involved in the project.
2. None of the land to be acquired is prime farmland or farmland of Statewide or local importance.
3. The land to be acquired is in urban development (i.e., has a minimum current density of 30 structures (permanently affixed to the ground) per 40 acre (16 ha) tract).
4. The project is exclusively for widening and resurfacing and does not involve borrow areas, mitigation sites, or new alignment in which the right-of-way diverges from and is not contiguous to the existing right-of-way.
5. The project is nonlinear (e.g., bridge or intersection improvements) and requires acquisition of no more than 10 acres (4 ha) of land. This threshold applies to nonlinear projects other than new rest areas and new truck weigh stations. All new rest area and truck weigh station projects must be coordinated with NRCS, regardless of the amount of acquisition involved. When the areas of right-of-way for the project approach the 10 acre (4 ha) threshold for coordination and the project will likely involve additional acquisition for borrow or mitigation, the project should be coordinated with NRCS. Anticipated sites for borrow and mitigation should be indicated if known.
6. The project is linear; requires acquisition of no more than 3 acres of land per project mile (0.75 ha of land per project kilometer) (area of acquisition divided by project length), and does not involve alternative alignment(s) in which the right-of-way diverges from, and is not contiguous to, the existing right-of-way. When the amount of right-of-way to be acquired approaches the 3 acres per project mile (0.75 ha per project kilometer) threshold for coordination and the project will likely involve additional acquisition for borrow or mitigation, the project should be coordinated with NRCS. Anticipated sites for borrow and mitigation should be indicated if known.

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The categories of projects addressed by these items have been programmatically addressed in consultations with NRCS, and a general Form AD-1006 (see Section 20-10.05(c)) has been prepared for these actions. Further project-specific review by NRCS on these projects ordinarily will not be necessary. See Section 20-10.05(b) for further discussion of requirements for these types of actions.

If there is a question on whether any of the above conditions are met, contact the Central BLRS for a determination of applicability.

20-10.05(b) Procedures

The following will apply:

1. NRCS Coordination. For all projects requiring coordination with NRCS according to the criteria in Section 20-10.05(a), contact with NRCS should be made as early in the project development process as practical. The initial contact should be made with the State Office of the NRCS in Champaign. Form AD-1006 must be forwarded to the NRCS Office as part of the coordination process as soon as sufficient information is available. Coordination may be initiated prior to completion of the forms, as appropriate.
2. Minor Impacts. Where a project appears to be covered by Items 5 and 6 in Section 20-10.05(a), care should be taken to ensure that the project does not involve more than minor impacts on farmland and that there are no unusual circumstances that would make the criteria described inapplicable to the project. If more than minor impacts on farmland are involved or if unusual circumstances are present, coordination should be initiated with NRCS as discussed in Item 1 above.

If such impacts/circumstances are not involved, include documentation in the project file indicating the applicability of the criterion in Section 20-10.05(a) as the basis for not coordinating with NRCS. Also, include a copy of the general Form AD-1006 for these projects in the file. An appropriate paragraph similar to the following should be included in the Project Development Report or environmental report, as appropriate:

The impact of this project on farmland conversion has been evaluated in accordance with the requirements of the US Natural Resources Conservation Service (NRCS). The project will convert 3 acres or less of farmland per mile (0.75 ha or less of farmland per kilometer) and the conversion will not result in more than minor impacts. Accordingly, the project conforms to the general Form AD-1006 prepared by NRCS. Therefore, further coordination with NRCS on this project will not be necessary.

20-10.05(c) Form AD-1006

The following will apply:

1. The LPA should complete Parts I and III of Form AD-1006 and submit it to the State NRCS office when information is submitted to IDOA in accordance with State farmland protection requirements; see Section 10-1.08. NRCS will complete Parts II, IV, and V and will then send the Form to IDOA for completion of the Site Assessment portions of the Form. When completed, IDOA will return the form to the LPA.

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2. Form AD-1006 is the primary means of coordination with NRCS. It may, however, be supplemented with other information. It is recommended that a copy of the information sent to IDOA (see Section 20-10.06) be sent to NRCS with Form AD-1006. The additional information will help to expedite the review and minimize turnaround time. An informational copy of the completed AD-1006 form should be provided to IDOA when it is submitted to NRCS.
3. On new construction and reconstruction projects, early contacts with the local field offices and the Statewide office of NRCS are recommended. This will notify NRCS of the project and allow early comments while maximum flexibility still exists. Form AD-1006 may follow after the project development has determined the impacts. In this manner, substantive comments are discovered early and the potential for major changes in the later stages of project development will be reduced.

AD-1006 forms should not be sent to NRCS county field offices. AD-1006 forms for single and multi-county projects should be sent to the State NRCS office. See IDOT's website for the appropriate address.

20-10.05(d) Siting Requirements

Sites or alternatives with the highest combined scores, determined on Form AD-1006, should be regarded as most suitable for protection from conversion to non-farm use, and sites/alternatives with the lowest scores as least suitable for protection. Sites or alternatives receiving total scores of 175 or fewer points require only minimal consideration for protection from conversion, and no additional sites/alternatives need be evaluated. Sites or alternatives with scores of 176 to 225 points are in the moderate range for consideration of protection from conversion. At least one build alternative should be considered for these projects. Sites or alternatives receiving scores over 225 points should receive the highest priority for protection from conversion to non-farm uses. For these sites or alternatives, give consideration to other alternatives (e.g., rehabilitation of existing facilities, alignments that use lesser amounts of farmland).

The *Federal Farmland Protection Policy Act* (FPPA) regulations provide that:

If, after consideration of the adverse effects and suggested alternatives, the applicant wants to proceed with the conversion, the Federal agency may not, on the basis of the Act or these regulations, refuse to provide the requested assistance.

Therefore, alternatives that adversely affect agriculture may be recommended, but only after full consideration of adverse effects and less damaging alternatives. The coordination with NRCS will ensure the adequacy of that consideration. The results of coordination with NRCS should be summarized in the environmental report or Project Development Report for the action.

20-10.05(e) Notification of Selected Alternative

NRCS requires that, when a Federally funded project has one or more alternatives that require acquisition of farmland subject to the FPPA and is not otherwise exempted from the requirement to submit Form AD-1006, the project agency should provide NRCS a copy of Form AD-1006 indicating the project alternative selected for implementation. Upon receiving design approval for projects, the LPA will inform the State NRCS office which alternative was selected for implementation. The LPA should use a copy of the previously coordinated Form AD-1006 for providing this notification. The LPA should complete the parts of the Form entitled "Site Selected" (enter appropriate site identification letter from the AD-1006) and "Date of Selection" (use design approval date) and should then send 1 copy to the State NRCS office. To aid NRCS in its record keeping, note on the top of the Form that it is a "Final Decision Notification."

20-10.06 State Requirements

The results of the evaluations of farmland conversion impacts, mitigation measures, and associated coordination with IDOA should be summarized in the project's environmental report or Project Development Report, as appropriate. The results of coordination with IDOA should also be summarized in the environmental report or Project Development Report for the action.

See Section 10-1.08 for detailed information on the State's requirements for the evaluations of farmland conversions.

20-10.07 Relationship of Federal and State Requirements

Requirements for coordination with the NRCS, although similar to those for the Illinois Department of Agriculture (IDOA), are separate and distinct. Coordination with IDOA does not preclude the need to coordinate with NRCS. Projects that require coordination with NRCS will normally also require coordination with IDOA.

20-11 AIR QUALITY CONFORMITY DOCUMENTATION

20-11.01 Background

Section 176(c)(4) of the *Clean Air Act* Amendments of 1990 requires that transportation plans, programs, and projects that are funded or approved under Title 23 USC must conform to State or Federal air implementation plans. The implementation plans describe how air quality standards will be achieved. Conformity to an implementation plan is defined in the *Clean Air Act* as conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards. Federal activities may not cause or contribute to new violations of air quality standards, exacerbate existing violations, or interfere with the timely reduction of emissions as reflected in the State implementation plan. The implementing regulations for determining conformity of transportation projects (40 CFR Part 93, "Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Funded or Approved Under Title 23 USC or the *Federal Transit Act*") also impose requirements upon "regionally significant projects" in non-attainment areas regardless of whether those projects involve Federal funding or approvals.

Non-attainment areas are those areas of the country where air pollution levels persistently exceed the national ambient air quality standards.

"Regionally significant projects" means transportation projects (other than exempted projects) that are on facilities which serve regional transportation needs (e.g., access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls and sports complexes, transportation terminals), and would normally be included in the modeling of a metropolitan area's transportation network, including, at a minimum, all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel.

Illinois includes non-attainment areas in which standards are being exceeded for one or more of the air pollutants that the US Environmental Protection Agency (USEPA) has defined as "criteria pollutants" (e.g., Ozone (O₃), Carbon Monoxide (CO), Nitrogen Dioxide (NO₂)). The Illinois Environmental Protection Agency's (ILEPA) website (www.epa.state.il.us) has a complete list of non-attainment areas in Illinois under the Air Section.

20-11.02 Applicability

The following procedures are applicable to all highway projects funded or approved by the FHWA under Title 23 USC and to "regionally significant projects" in non-attainment areas, regardless of whether these projects are Federally funded or approved under Title 23.

20-11.03 Procedures**20-11.03(a) Determining Project Involvement with Designated Non-attainment Areas**

In the preparation of environmental documentation for projects subject to these procedures, districts should review the most recent information from the Central Office of Planning and Programming regarding those areas of Illinois that have been designated as non-attainment for one or more of the criteria pollutants. If the proposed improvement is partially or completely within a designated non-attainment area it will be subject to the conformity requirements unless the type of work involved is exempted; see Section 20-11.03(c). USEPA rules do not currently require conformity determinations for projects outside of non-attainment areas (i.e., within attainment areas).

20-11.03(b) Determining Project Exemption from Conformity Requirements

The USEPA conformity rules for transportation projects exempt the project types listed below from the requirement for a conformity determination. The determination of whether a particular action is exempt from the conformity requirement, in most cases, is made during the development of the Transportation Improvement Program (TIP) prior to the initiation of project planning. Note that a particular project of a type listed is not exempt if the Metropolitan Planning Organization (MPO), in consultation with other agencies, EPA, and the FHWA, concurs that it has potentially adverse emissions impacts for any reason.

20-11.03(c) Exempt Projects

The following describes the types of projects considered exempt from air quality conformity documentation:

1. Safety. The following safety projects are exempt:
 - railroad/highway crossing;
 - hazard elimination program;
 - safer non-Federal-aid system roads;
 - shoulder improvements;
 - increasing sight distance;
 - safety improvement program;
 - traffic control devices and operating assistance other than signalization projects;
 - railroad/highway crossing warning devices;
 - guardrails, median barriers, crash cushions;
 - pavement resurfacing and/or rehabilitation;
 - pavement marking demonstration;
 - emergency relief;
 - fencing;
 - skid treatments;
 - safety roadside rest areas;
 - adding medians;
 - truck-climbing lanes outside urbanized areas;

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- lighting improvements;
 - widening narrow pavements or reconstructing bridges with no additional travel lanes; and
 - emergency truck pullovers.
2. Air Quality. Bicycle and pedestrian facility projects are exempt.
3. Other. The following are also considered exempt:
- specific activities that do not involve or lead directly to construction (e.g., planning and technical studies, Federal-aid systems revisions, planning activities conducted pursuant to 23 USC and 49 USC);
 - engineering to assess social, economic, and environmental effects of a proposed action or alternatives to that action;
 - noise attenuation;
 - advance land acquisitions (23 CFR Part 712 or 23 CFR Part 771);
 - acquisition of scenic easements;
 - plantings, landscaping, etc.;
 - sign removal;
 - directional and informational signs;
 - transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities); and/or
 - repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational, or capacity changes.
4. Regional Emissions Analyses. The following projects are exempt from regional emissions analyses:
- intersection channelization projects;
 - intersection signalization projects at individual intersections;
 - interchange reconfiguration projects;
 - changes in vertical and horizontal alignments; and
 - truck size and weight inspection stations;

20-11.03(d) Determining Highway Project Conformity

The project conforms with the requirements of the *Clean Air Act* if the district confirms that the following statements are applicable to the action:

- The project was included in a conforming transportation plan and TIP.
- The project design concept and scope have not changed significantly from what was reflected in the conformity analysis for the plan and TIP.
- The project will comply with PM₁₀ control measures in the State Implementation Plan. PM₁₀ refers to particular matter measured in the ambient air with an aerodynamic diameter less than or equal to a nominal 10 micrometers.

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Other criteria and procedures will apply for determining conformity of projects within CO or PM₁₀ non-attainment areas. Districts should contact the Central BLRS for further guidance regarding these projects as the need arises.

To determine conformity for projects in non-attainment areas or maintenance areas outside of locations served by Metropolitan Planning Organizations (MPOs), the district should contact the Central BLRS and the Central Office of Planning and Programming to initiate a regional emissions analysis.

Projects must be found to conform before they are adopted, accepted, approved, or funded. Conformity must be redetermined if none of the following major steps has occurred within 3 years of the conformity determination — NEPA process completion; start of final design; acquisition of a significant portion of the right-of-way; or approval of the plans, specifications, and estimates. A new conformity determination also will be required if there is a significant change in project design concept and scope or if a supplemental environmental document for air quality purposes is initiated.

For further information on Project Conformity, see Section 26-11 of the *BDE Manual*.

20-11.03(e) Documentation

The environmental documentation for all projects subject to these procedures must include a statement regarding the status of the project with regard to the *Clean Air Act* conformity regulations (i.e., indicating that the project is outside of any designated non-attainment area or maintenance area; that the project is of a type exempted from conformity requirements; or that the project has been determined to satisfy the conformity regulations). Section 26-11 of the *BDE Manual* provides example air quality conformity document statements for the following situations:

- projects outside of non-attainment areas or maintenance areas,
- exempt projects,
- projects within a portion of a non-attainment area or maintenance area for which the Chicago Area Transportation Study (CATS) is the MPO,
- projects within a non-attainment area or maintenance area served by a MPO other than CATS,
- projects within a non-attainment or maintenance area not served by a MPO, and
- “regionally significant” non-Federal projects within a non-attainment area or maintenance area.

20-11.04 Microscale Analysis

If the screening analysis indicates the project “fails” (i.e., that it has potential for contributing to a violation of the NAAQS for CO), or if the project does not fit the assumptions for use of the screening analysis, a detailed air quality analysis is required. The worst-case location and calculated 8 hour results of this analysis should be described, following the guidance in the *IDOT Air Quality Manual*. The latest USEPA Mobile model should be used for emissions factors. Comparison of these results to the National Ambient Air Quality Standards (NAAQS) for CO shall determine whether the project supports the maintenance of the CO NAAQS in Illinois. Analysis results below the 8 hour CO NAAQS (less than 9 ppm) will indicate no impacts present to the local atmospheric conditions that are necessary to protect the public health and welfare. Analysis results above the 8 hour CO NAAQS will indicate impacts present, which will require mitigation measures to be discussed with the FHWA, USEPA, and IEPA. Any mitigation measures should be described in the EA or EIS.

A determination must be made as to whether the highway project is located wholly or partially in a portion of the State classified by the USEPA as a non-attainment area or maintenance area for any of the six criteria pollutants (40 CFR Part 81). This determination should be made and documented in accordance with the procedures in Section 26-11 of the *BDE Manual*.

Version 2.0 of the Illinois Carbon Monoxide (CO) Screen for Intersection Modeling (COSIM) includes a pre-screen feature that replaces the 16,000 ADT criterion previously used for screening highway projects for CO microscale analysis purposes.

See BDE Procedure Memorandum 37-03 for more details on this type of analysis.

20-11.05 Construction Related Particular Matter

The following text should be added in the Air Quality section of the ECAD, EA, EIS, or Project Development Report:

Demolition and construction activities may result in short-term increases in fugitive dust and equipment-related particulate emissions in and around the project area. Equipment related particulate emissions may be minimized if the equipment is well maintained. The potential air quality impacts will be short-term, occurring only while demolition and construction work is in progress and local conditions are appropriate.

The potential for fugitive dust emissions typically is associated with building demolition, ground clearing, site preparation, grading, stockpiling of materials, on-site management of equipment, and transportation of materials. The potential is greatest during dry periods, periods of intense construction activity, and during high wind conditions.

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The Department's Standard Specifications for Road and Bridge Construction include provisions on dust control. Under these provisions, dust and airborne dirt generated by construction activities will be controlled through dust control procedures or a specific dust control plan, when warranted. The contractor and the Department will meet to review the nature and extent of dust generating activities and will cooperatively develop specific types of dust control techniques appropriate to the specific situation. Techniques that may warrant consideration include measures such as minimizing track-out of soil onto nearby publicly traveled roads, reducing speed on unpaved roads, covering haul vehicles, and applying chemical dust suppressants or water to exposed surfaces, particularly those on which construction vehicles travel. With the application of appropriate measures to limit dust emissions during construction, this project will not cause any significant, short-term particulate matter air quality impacts.

See BDE Procedure Memorandum 42-04.

20-11.06 Mobile Source Air Toxics (MSATs)

The FHWA has developed a tiered approach for analyzing MSATs in NEPA documents. Depending on the specific project circumstances, FHWA has identified three levels of analysis:

- No analysis for projects with no potential for meaningful MSAT effects;
- Qualitative analysis for projects with low potential MSAT effects; or
- Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

Documentation of MSAT Evaluation will be included in the PDR, ECAD, EA, or EIS. MSAT level of documentation should be discussed at a coordination meeting and the meeting minutes should document FHWA's recommendation. Guidance is found in USDOT's *Interim Guidance on Air Toxic Analysis in NEPA Documents*.

20-11.06(a) MSAT Required Analysis

1. Exempt Projects or Projects with No Meaningful Potential MSAT Effects. The types of projects included in this category are:
 - Projects qualifying as a categorical exclusion under 23 CFR 771.117 (c). See BLRS Manual Section 19-1.04(b) for examples of actions that would typically qualify as Group I Actions listed in 23 CFR 771.117 (c);
 - Projects exempt under the Clean Air Act conformity rule under 40 CFR 93.126. See BLRS Manual Section 20-11.03(c)(1-3) for exempt project types; or
 - Other projects with no meaningful impacts on traffic volumes or vehicle mix

For project types qualifying as a categorical exclusion (Group I), under 23 CFR 771.117 (c), or for projects that are exempt under the Clean Air Act conformity rule under 40 CFR 93.126, include the following certifying paragraph in the Phase I Engineering Report:

Mobile Source Air Toxics

This project is of a type qualifying as a categorical exclusion (Group I) under 23 CFR 771.117(c), or exempt under the Clean Air Act conformity rule under 40 CFR 93.116, and as such, a Mobile Source Air Toxics analysis is not required.

For project types with no meaningful impacts on traffic volumes or vehicle mix such as found in 23 CFR 771.117(d) (See BLRS Manual Section 19-1.04(c)), or 40 CFR 93.127 (See BLRS Manual Section 20-11.03(c)(4)), include the following text in the Phase I Engineering Report and associated Environmental Document:

Mobile Source Air Toxics

This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions relative to the no-build alternative. As such, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special Mobile Source Air Toxic concerns. Consequently, this effort is exempt from analysis for MSATs.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSATs to decline significantly over the next 20 years. Even after accounting for a 64 percent increase in VMT, FHWA predicts MSATs will decline in the range of 57 to 87 percent, from 2000 to 2020, based on regulations now in effect, even with a projected 64 percent increase in VMT. This will both reduce the background level of MSATs as well as the possibility of even minor MSAT emissions from this project.

2. Projects with Low Potential MSAT Effects. The types of projects included in this category are those that serve to improve operations of highway, transit or freight without adding substantial new capacity or without creating a facility that is likely to meaningfully increase emissions. This category covers a broad range of projects.

Any projects not meeting the threshold criteria for higher potential effects set forth in subsection (3) below and not meeting the criteria above should be included in this category. Examples of these types of projects are minor widening projects and new interchanges, such as those that replace a signalized intersection on a surface street or where design year traffic is not projected to exceed the 140,000 AADT criterion.

For project types that have a low potential for MSAT effects, a qualitative assessment of emissions projections should be conducted. Four types of project documentation are offered in BDE Procedure Memorandum 52-06.

In addition to the qualitative assessment, the NEPA document for this category of projects must include a discussion of information that is incomplete or unavailable for a project specific assessment of MSAT impacts, in compliance with CEQ regulations 40 CFR 1502.22 (b). Recommended prototype language for this discussion is included in BDE Procedure Memorandum 52-06.

3. Projects with Low Potential MSAT Effects. This category includes projects that have the potential for meaningful differences among project alternatives. To fall into this category, projects must:

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- Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of diesel particulate matter in a single location; or
- Create new or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the AADT is projected to exceed 140,000 by the design year; and,
- Be proposed to be located in proximity to populated areas or in rural areas, in proximity to concentrations of vulnerable populations (i.e., schools, nursing homes, hospitals).

Projects falling within this category should be more rigorously assessed for impacts. If a project falls into this category, the LPA should contact the District for assistance in developing a specific approach for assessing impacts.

20-11.06(b) MSAT Mitigation Strategies

Lessening the effects of mobile source air toxics should be considered for projects with substantial construction-related MSAT emissions that are likely to occur over an extended building period, and for post-construction scenarios where the NEPA analysis indicates potentially meaningful MSAT levels. Such mitigation efforts should be evaluated based on the circumstances associated with individual projects, and they may not be appropriate in all cases. However, there are a number of available mitigation strategies and solutions for countering the effects of MSAT emissions.

20-11.06(c) Mitigating for Construction MSAT Emissions

Construction activity may generate a temporary increase in MSAT emissions. Project-level assessments that render a decision to pursue construction emission mitigation will benefit from a number of technologies and operational practices that should help lower short-term MSATs. In addition, the SAFETEA-LU has emphasized a host of diesel retrofit technologies in the law's CMAQ provisions - technologies that are designed to lessen a number of MSATs.¹

Construction mitigation includes strategies that reduce engine activity or reduce emissions per unit of operating time. Operational agreements that reduce or redirect work or shift times to avoid community exposures can have positive benefits when sites are near vulnerable populations. For example, agreements that stress work activity outside normal hours of an adjacent school campus would be operations-oriented mitigation. Also on the construction emissions front, technological adjustments to equipment, such as off-road dump trucks and bulldozers, could be appropriate strategies. These technological fixes could include particulate matter traps, oxidation catalysts, and other devices that provide an after-treatment of exhaust emissions. The use of clean fuels, such as ultra-low sulfur diesel, also can be a very cost beneficial strategy.

The EPA has listed a number of approved diesel retrofit technologies; many of these can be deployed as emissions mitigation measures for equipment used in construction. This listing can be found at: www.epa.gov/otaq/retrofit/retroverifiedlist.htm

20-11.06(d) Post-Construction Mitigation for Projects with Potentially Significant MSAT Levels

Longer-term MSAT emissions can be more difficult to control, as variables such as daily traffic and vehicle mix are elusive. Operational strategies that focus on speed limit enforcement or traffic management policies may help reduce MSAT emissions even beyond the benefits of fleet turnover. Well traveled highways with high proportions of heavy-duty diesel truck activity may benefit from active Intelligent Transportation System programs, such as traffic management centers or incident management systems. Similarly, anti-idling strategies, such as truck-stop electrification can complement projects that focus on new or increased freight activity.

The initial decision to pursue MSAT emissions mitigation strategies should be in consultation with BDE's Air Quality Specialist.

20-12 SPECIAL WASTE PROCEDURES**20-12.01 Definitions**

1. Adjoining Property. Any real property or properties of which the border is contiguous with that of the subject property (project limits), or that would be contiguous with that of the property but for a street, road, or other public thoroughfare separating them.
2. Agriculture Property. Any real property for which the present or post-remediation use is growing agricultural crops for food or feed, either as harvested crops, cover crops, or as pasture. This definition includes but is not limited to, properties used for confinement or grazing of livestock or poultry and for forestry operations. Excluded from this definition are farm residences, farm outbuildings, and agrochemical facilities.
3. Conservation Property. Any real property for which the present or post-remediation use is primarily for wildlife habitat.
4. Excavation. For the purposes of this section, excavation is the digging or grading of any soil or fill material, including in-stream work and underground utility works such as installation of fiber optic cabling, with the exception of aggregate fills which are not considered a soil or fill material of concern. The following types of maintenance projects are not considered excavation when the excavated material is left on, or incorporated within, the IDOT or LPA ROW:
 - a. bridge maintenance
 - b. ditch cleaning
 - c. working within the sub-base or pavement
 - d. removal and replacement of shoulders, curb and gutter, or curb ramps
5. Industrial/Commercial Property. Any real property not meeting the definition of residential property, conservation property, or agriculture property. For the purposes of special waste screening, the term also includes real property used historically or previously for industrial, commercial, or retail purposes.
6. Leaking Underground Storage Tank (LUST). An underground storage tank where the contents have leaked into the environment.
7. Preliminary Environmental Site Assessment (PESA). A detailed evaluation of available records dealing with site history, including a field visit to the site to visually inspect and investigate conditions.
8. PESA Validation. The re-evaluation of the project area to check for the possibility of new reported releases and determine if land uses have changed within the project area. This process reflects the realization that special wastes and other regulated substance contamination often may be introduced (through illegal disposal, migration from off-site, or generation from new land uses) into areas previously evaluated for contamination. The re-evaluation should consider any changes in the proposed action, the affected environment, and anticipated special waste/regulated substance involvement.
9. Preliminary Site Investigation (PSI). A preliminary investigation of the site, including sampling, testing, and analysis of soil or groundwater, as necessary, and an estimate of the cost of cleanup by parcel, if possible, for the Department's project.

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10. Project Monitoring Application (PMA). The electronic database used by BDE to manage Environmental Survey Requests (ESR). Each project in PMA is assigned a unique BDE sequence number and is also referenced to a construction job number and contract number when available. The database is accessible to designated IDOT Central Office personnel and district environmental personnel.
11. Recognized Environmental Condition (REC). The presence or likely presence of any regulated substances on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any regulated substances into structures on the property or into the ground, groundwater, or surface water of the property. The term includes regulated substances even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment, and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.
12. Residential Property. Any real property used for habitation by individuals, or where children have the opportunity for exposure to contaminants through soil ingestion or inhalation at educational facilities, health care facilities, childcare facilities, or outdoor recreational areas.
13. Resource Conservation and Recovery Act (RCRA). This Act governs the management of hazardous wastes. The process for identifying a hazardous waste involves many steps. There is no single, comprehensive list of hazardous wastes that is regularly updated. To be considered a hazardous waste, a material first must be classified as a solid waste (40 CFR 261.2 "Definition of Solid Waste"). EPA defines solid waste as garbage, refuse, sludge, or other discarded material (including solids, semisolids, liquids and contained gaseous materials). If a waste is considered solid waste, it must then be evaluated to determine if it is a hazardous waste (40 CFR 262.11 "Hazardous Waste Determination"). EPA defines wastes as hazardous if they are specifically named on one of four lists of hazardous wastes included in Subpart D of 40 CFR 261 "Lists of Hazardous Wastes" (see 40 CFR 261.30 through 261.35) or if they exhibit any of the four characteristics discussed in Subpart C of 40 CFR 261 "Characteristics of Hazardous Waste" (see 40 CFR 261.20 through 261.24).
14. Site Reconnaissance. A visit to the project site and adjoining properties during which observations are made. The objective of site reconnaissance is to obtain information indicating the possible presence of environmental conditions within the minimum search distances listed in BDE Manual Chapter 27-3, Figure 27-3.B. Environmental conditions include situations that may negatively affect the property including the presence of, for example, illegal dumping, unknown containers and vessels, waste associated with 'crack' and methamphetamine houses (e.g., discarded hazardous material on the outside of a property), battery piles, paint spills, abandoned transformers, surface staining, and vegetative damage. This level of inspection generally does not require the investigator to enter onto a property and may be done from the existing ROW. During the site reconnaissance, observations are documented and photographic evidence is obtained to assist in completing the Environmental Survey Request (ESR).
15. Special Waste. Special waste means any of the following:
 - a. potentially infectious medical waste;

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- b. hazardous waste, as determined in conformance with RCRA hazardous waste determination requirements set forth in 35 Ill. Admin. Code 722.111, including a residue from burning or processing hazardous waste in a boiler or industrial furnace unless the residue has been tested in accordance with 35 Ill. Admin. Code 726.212 and proven to be non-hazardous;
- c. industrial process waste or pollution control waste, except:
 - any such waste certified by its generator, pursuant to Section 22.48 of the Illinois Environmental Protection Act, not to be any of the following:
 - + a liquid, as determined using the paint filter test set forth in subdivision (3)(A) of subsection (m) of 35 Ill. Admin. Code 811.107;
 - + regulated asbestos-containing waste materials, as defined in 40 CFR 61.141, under the National Emission Standards for Hazardous Air Pollutants;
 - + polychlorinated biphenyls (PCBs) regulated pursuant to 40 CFR 761;
 - + an industrial process waste or pollution control waste subject to the waste analysis and recordkeeping requirements of 35 Ill. Admin. Code 728.107 under the land disposal restrictions of 35 Ill. Admin. Code 728; and
 - + a waste material generated by processing recyclable metals by shredding and required to be managed as a special waste under Section 22.29 of the Illinois Environmental Protection Act.
 - any empty portable device or container, including but not limited to a drum where a special waste has been stored, transported, treated, disposed of, or otherwise handled, provided that the generator has certified that the device or container is empty and does not contain a liquid, as determined using the paint filter test set forth in subdivision (3)(A) of subsection (m) of 35 Ill. Admin. Code 811.107. For purposes of this definition, "empty portable device or container" means a device or container where removal of special waste, except for a residue not to exceed one inch (25 mm) in thickness, has been accomplished by a practice commonly employed to remove materials of that type. An inner liner used to prevent contact between the special waste and the container shall be removed and managed as a special waste; or
 - as may otherwise be determined under Section 2.9 of the Illinois Environmental Protection Act.

Special waste does not mean fluorescent and high-intensity discharge lamps as defined in subsection (a) of Section 22.23a of the Illinois Environmental Protection Act, waste that is managed in accordance with the universal waste requirements set forth in Title 35 of the Illinois Administrative Code, Subtitle G, Chapter I, Subchapter c, Part 733, or waste that is subject to rules adopted pursuant to subsection (c)(2) of Section 22.23a of the Illinois Environmental Protection Act. (415 ILCS 5/3.475)

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16. Special Waste Coordinator (SWC). The district IDOT person primarily responsible for screening projects for the possible presence of waste using the processes described in this chapter. The individual is additionally responsible for coordinating and preparing the Environmental Survey Request (ESR) for DOH projects and the state portion of local projects involving state right of way or when project plans are prepared by IDOT for the Local Public Agency (LPA). Screening of projects for special waste should be conducted by those with environmental experience and expertise, typically the District Environmental Coordinator.
17. Survey Target Date. The date established by the district by which the completed survey report (e.g., the PESA) is desired. This target date is used by BDE for internal scheduling purposes for all the requested environmental surveys and does not necessarily represent the completion date of the respective survey(s). The size, length, and complexity of the proposed project, along with seasonal field conditions and minimum timing required by policy, should be considered when establishing the date.
18. Underground Storage Tank (UST). Any single tank or combination of tanks (including underground pipes connected to the tank(s)) used to contain an accumulation of regulated substances, and that has 10% or more of its volume (including the volume of associated underground pipes) beneath the surface of the ground. The term does not include any of the following facilities or associated pipes:
 - a. farm or residential tank with a capacity of 1100 gallons or less, used for storing motor fuel for noncommercial purposes;
 - b. septic tank;
 - c. pipeline facility (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968 or the Hazardous Liquid Pipeline Safety Act of 1979 (both codified in 49 USC 60101, et seq.), or that is an intrastate pipeline facility regulated under State laws as provided in either of the aforementioned statutes, and that is determined by the Secretary of Energy to be connected to a pipeline or to be operated or intended to be capable of operating at pipeline pressure or as an integral part of a pipeline;
 - d. surface impoundment, pit, pond, or lagoon;
 - e. storm water or waste water collection system;
 - f. flow-through process tank;
 - g. liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or
 - h. storage tank situated in an underground area (e.g., basement, cellar, mine working, drift, shaft, tunnel) if the storage tank is situated upon or above the surface of the floor.

The term also means an underground storage tank used exclusively to store heating oil for consumptive use on the premises where stored and that serves other than a farm or residential unit (415 ILCS 5/57.2).

20-12.02 Applicability

These procedures apply to all LPA projects using Federal, State and MFT funded projects, or any LPA project affecting State property.

20-12.02(a) Applicability for Special Waste Affecting State Property

Early in project development, the LPA must determine who will hold title to the acquired property, who will prepare plans, and who owns and manages the existing right-of-way. Specifically, if any portion of the local project involves any of the following situations, regardless of funding source, then the project is additionally subject to review by Chapter 27-3 (Special Waste Procedures) of the BDE Manual:

- Project plans are prepared by IDOT for a LPA;
- Title is held or will be held in the name of the State;
- Work involves acquiring temporary or permanent easements in the name of the State;
- Work (including excavation) affects State ROW or a road under state jurisdiction; or
- Work requires acquiring right-of-way in the name of the State.

In these cases, the LPA must contact the District BLRS who will communicate with the District Special Waste Coordinator (SWC) early in the planning process and co-coordinate the special waste review. Involvement of the Department in these types of projects acknowledges that BLRS and BDE must coordinate efforts in order to deliver timely and comprehensive environmental review.

20-12.03 Special Waste Screening

The LPA must screen all projects on the local highway system in order to determine whether they require further documentation for special waste contamination on sites otherwise potentially impacted by regulated substances. Follow the Special Waste Assessment (SWA) Screening Criteria shown on Figure 20-12A. The screening process applies criteria for determining a project's potential involvement with special waste and other regulated substances and leads to a determination whether or not further action is necessary.

The LPA must also determine when a project involves any of the bulleted items listed in Section 20-12.02(a) (Applicability for Special Waste Affecting State Property), and if so, these projects must also follow BDE Manual Chapter 27-3 and require co-ordination with the District SWC, as described below in more detail.

20-12.03(a) Special Waste Screening on State Property

For a project where the plans are prepared by IDOT on behalf of a LPA [bullet #1 in Section 20-12.02(a)], the entire project must follow BDE Chapter 27-3 procedures and IDOT will be responsible for the preparation of the PESA and a Preliminary Site Investigation (PSI), if necessary. For a project involving any one of the other bulleted items, the portion(s) of the project involving the State must follow BDE Chapter 27-3 procedures; the remaining portions of the project must follow BLRS Chapter 20 procedures. The coordination of these projects lies with the LPA and their District BLRS coordinator. The district SWC and BDE provide guidance to ensure that Chapter 27 is followed for the state-affected portion of the project.

Follow these steps when the project involves any one of the five bulleted situations in Section 20-12.02(a):

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- Fully complete the ESR and check the Special Waste box.
- Clearly identify the portion(s) of the project where ISGS should complete the PESA for BDE; show this area on a figure, explain in text, and include with the ESR submittal.
- The District will alert the District (Highways) SWC who is responsible for ensuring that BDE Manual Chapter 27 is followed for the portion of the project affecting State jurisdiction.

The district BLRS will forward the special waste portion of the ESR to the district SWC for special waste screening according to BDE Manual Section 27-3.02. The PESA effort will be divided between BDE and LPA on a case-by-case basis by the District SWC and BDE using the information supplied with the ESR. In most cases, BDE will complete a PESA on the state road portion of the project, and the LPA/consultant will complete a PESA on the non-state road portion(s) of the project. If the project does not involve any of the five bulleted criteria in Section 20-12.02(a), do not check the special waste box or complete the special waste screen on the ESR.

The district SWC will ensure that the special waste box is checked on the Project Monitoring Application (PMA) and will review the state portion of the project using the information provided by the LPA. The SWC will ensure the LPA has provided the necessary information on the special waste screen on the ESR and place it in the Project Monitoring Application (PMA) for subsequent processing by BDE. For certain projects that meet Level I or Level II screening criteria, the district SWC may sign-off on the special waste and a PESA is not required. All other projects with the special waste box checked in the PMA will require a PESA.

BDE will send a request for a PESA to the Illinois State Geological Survey (ISGS). The target date for the completion of the PESA report is a minimum 6 months from the date ISGS is alerted of the PESA request. Upon receipt of the final PESA report, the district notifies the LPA of the findings and awaits a PESA Response. The district coordinates the PESA Response with the district SWC. If a PSI is necessary, BDE will contact the Statewide Special Waste Investigation Consultant and request a work plan and estimated budget for the PSI. See BDE Manual Section 27-3.05 (Preliminary Site Investigation) for the PSI procedures. In any case, a PSI by BDE will be conducted only on the state road portion of the project. The LPA/consultant is responsible for conducting a PSI on the non-state portion(s) of the project.

In summary, a local project involving any of the five bulleted criteria must follow BDE Chapter 27-3 for the portion of the project that involves State highway, or in the case when IDOT is preparing the plans for the LPA, the entire project must follow BDE Chapter 27. The State portion of the project must be coordinated with the district SWC and managed through PMA.

20-12.03(b) Special Waste Screening on non-State Property

Taking title (or lesser interest) to property containing special waste, or moving contaminated soil off-site, exposes the LPA to potential liability for associated investigation and cleanup costs. To limit liability, projects must be screened/assessed for special waste or other regulated substances as described in the following sections and as flowcharted in Figure 20-12A. Successfully following the screening process and appropriately documenting the results limit the LPA's potential environmental liability.

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1. General Screening Information. The LPA conducting the screening shall complete the applicable portion of the ESR form, sign and date the form, and send an electronic (or paper copy) of the signed and dated form to the District BLRS. The district shall ensure the form is retained in the project file and included in the environmental documentation for the project to support the finding that further investigations are not warranted.

For purposes of the screening process, the project and project area shall include the area encompassing the current right of way or easements (temporary or permanent) plus the outer most limits of the proposed right of way or easements. Furthermore, the minimum search distance when conducting the screening is measured from the outermost edges of the project area.
2. Level I Screening. The LPA shall screen projects to determine if special waste investigations are necessary. That is, the LPA may sign-off the project and not undertake further action to identify and assess special wastes or other regulated substance contamination if the project does not:
 - a. involve acquisition of additional right-of-way or easements (temporary or permanent);
 - b. cross or otherwise involve a railroad's right-of-way other than a single rail rural right-of-way with no maintenance facilities; or
 - c. involve excavation (see definition of excavation) or subsurface utility relocation.
3. Level II Screening. Projects that don't pass Level I screening due to situations 2a and 2c may be further screened by the LPA to determine if a PESA will be necessary or if the project is still eligible for a LPA sign-off. Projects that involve situation 2b are ineligible for LPA sign-off and must go through the PESA process.

To be eligible for LPA Level II sign-off, the following must be met:
 - there are no conditions or database occurrence within the minimum search distances shown in BDE Manual Chapter 27, Figure 27-3.B;
 - a site reconnaissance was conducted and no concerns were identified, and;
 - the ESR form was thoroughly completed and processed through CBLRS.
If application of the Level II screening leads to a determination that further action is required, a PESA will be necessary.

20-12.04 Preliminary Environmental Site Assessment (PESA)

The purpose of a PESA is to determine the environmental condition of a site prior to the acquisition of right-of-way, easements (temporary or permanent), or improvements to existing right-of-way or easements.

The LPA or a consultant will prepare a PESA using the processes described in *A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Infrastructure Projects, Second edition, January 2012.*

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20-12.04(a) PESA Findings

The following procedures apply:

1. No "Recognized Environmental Condition" (REC) Finding. If the final PESA report indicates that the property(ies) investigated within the project limits have no RECs (other than de minimis), the LPA shall document this finding in the PDR or environmental document for the project. The documentation should include a copy of the final PESA report's risk finding. The LPA need not take any further action regarding property(ies) that do not contain any REC unless a re-evaluation for special wastes becomes necessary or a previously unidentified property is encountered. No further action is necessary regarding sites potentially impacted with regulated substances unless a reevaluation for special wastes become necessary under the Validation of Special Waste Assessment Results, see Section 20-12.07, or if a previously unidentified site is encountered. If another site is encountered, work affecting the site should immediately cease until the LPA has assessed the situation and determined an appropriate course of action.
2. "Recognized Environmental Condition" (REC) Finding. If the PESA results in a determination that the project has a REC(s), further investigation is required. For special waste or other sites potentially impacted with regulated substances, determine conditions for reducing the risk to an acceptable level through means of avoidance.
 - a. Avoidance of Contaminated Site Possible. If it is determined that the project can avoid the site containing the REC(s), indicate it in the environmental document or Project Development Report. Avoidance of the site may be a horizontal or vertical change in alignment so that the LPA does not acquire the contaminated site, or a part that is contaminated or impacts it during construction. No further action is necessary regarding sites potentially impacted with regulated substances unless a re-evaluation for special wastes becomes necessary under the Validation of Special Waste Assessment Results, see Section 20-12.08, or if a previously unidentified site is encountered during construction. If another site is encountered, work affecting the site should immediately cease until the LPA has assessed the situation and determined an appropriate course of action.
 - b. Avoidance of Contaminated Site Not Possible. If it is determined that the project cannot avoid the site containing the REC(s), prepare a Preliminary Site Investigation (PSI) with a consultant or LPA personnel. The PSI will determine the nature and extent of contamination (i.e., above or below the clean-up objectives).

20-12.05 Preliminary Site Investigation (PSI)

20-12.05(a) PSI Work Plan

Prior to initiating the PSI, the LPA or it's consultant will prepare a PSI Work Plan that presents the scope of work and cost estimate for the potential waste sites affected by the project. At a minimum, the Work Plan should include the following information:

- Introduction
 - REC site background (referenced from PESA)
- Scope of Work (field investigation, drilling and laboratory subcontractor)

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- Health and safety
- General sampling approach
- Soil Sampling methodology
- Groundwater sampling methodology
- Sample handling, decontamination & investigation-derived waste
- Analytical methodology and procedures
- Geotechnical and analytical contractors
- Scope of Work (PSI Report)
- Project Organization, Schedule and Cost Estimate

The work plan should also include supporting tables and figures and appendices as necessary including excerpts and maps from the pertinent sections of the PESA.

20-12.05(b) PSI and Report

The purpose of the typical PSI is to assess environmental conditions within the existing and proposed right-of-way (ROW) or easements, to determine environmental impacts to soil and groundwater and/or sediment in the project area, and to evaluate how these impacts may affect proposed construction activities and/or land acquisition. The scope of the proposed investigation typically includes the following objectives:

- Determine the nature and extent of soil contamination within the ROW and at any proposed acquisition properties associated with the project area. If groundwater is encountered during the investigation, determine environmental impacts to the uppermost unit of groundwater.
- Based on the results of the soil and groundwater chemical analysis, prepare a site investigation report with finding, conclusions, and recommendations which include the remediation scope of work. The remediation scope of work should include an estimate of contaminated soil excavation quantities and an estimated cost for remediation. If groundwater is impacted and sufficient data on the extent and source of contamination are available, remedial alternatives will also be provided to implement cleanup. If necessary, a supplemental site characterization will be proposed to better determine the nature and extent of contamination.
- Evaluate the potential for contaminant migration to surrounding properties within the project area and present recommendations for reducing or eliminating such migration, if necessary, when the potential for migration is determined to be high.

The PSI report should include the following information:

- Introduction
- Site background
- Field investigation procedures and sampling rationale
- Field Investigation results
 - Analytical results
 - Comparison of analytical results t with regulatory standards
- Conclusions and recommendations

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- Prevention of contaminant migration
- Comparison of concentrations to TACO
- References

The report should also include supporting tables and figures and appendices as necessary including PESA excerpts, boring logs, summary of analytical results, laboratory data packages, site photographs, and uncontaminated soil certification forms. The figures should show the areas impacted by special waste or regulated substances. The report should include cost estimates to excavate, transport, and dispose of the contaminated material, and a special provision for managing the contamination including pay items and quantities.

Send a copy of the PSI to the IEPA if a LUST or Site Remediation Program (SRP) site is investigated and results exceed Tiered Approach to Corrective Action Objectives (TACO) levels. Send a copy of the PSI to the Office of State Fire Marshall (OSFM) if the site investigated is on the UST list and exceed TACO levels.

20-12.06 Relationship of Special Waste Process Results to Design Approval

Categorical exclusion concurrence and design approval for Federally funded projects may be given upon request of the LPA when results of the special waste process support one of the following determinations:

1. Application of the SWA screening criteria resulted in a finding that the project has no potential for involving special waste sites or other sites impacted with regulated substances.
2. The PESA has resulted in a finding that the project has no RECs for involvement with special waste sites or other sites impacted with regulated substances.
3. The PESA has resulted in a finding that the project has REC(s) for involvement with special wastes sites or other sites impacted with regulated substances and the LPA has determined that it can avoid the site. The request for design approval must include in the environmental documentation or PDR the LPA's determination that the site can be avoided. The information regarding the avoidance determination must be included in the commitment file for the project to ensure follow-through in subsequent stages of project development and implementation.
4. The PESA resulted in a finding that the project has REC(s) for involvement with special waste sites or other sites impacted with regulated substances, and the LPA cannot avoid the site and:
 - the nature and extent of the involvement is known;
 - the cost of addressing the site is known, based on the results of the PSI or subsequent studies or assessments, as needed;
 - the LPA has determined that the above cost is acceptable; and
 - the areas of contamination will be managed and disposed of in accordance with all applicable State and Federal regulations.

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The request for design approval must include documentation of the LPA's determination that the cost and effort involved in addressing the site is acceptable. When the proposed project is on existing alignment or involves only a single alignment alternative, the LPA may request design approval prior to receiving the results of the PSI. Prior to initiation of the PSI, the LPA should re-screen the project to evaluate whether anything has changed in the project area that would affect the results of the PESA and should update the PESA as necessary. If design approval has been given and federal funds will be used to purchase ROW, the PSI and subsequent studies must be completed prior to the acquisition of any parcels that contains a REC(s).

If the identified contaminated area is located on property that is held or will be acquired in the name of the State or if contract plans will be prepared by IDOT, the LPA may submit a request to the district for design approval before the special waste procedures are completed provided that the special waste screen on the PMA shows the project is cleared for design approval. The district will coordinate the request with the district SWC. The waiver request will be submitted to the Central BLRS.

If the identified contaminated area is located on property that is held or will be acquired in the name of the LPA, the LPA may submit a request to the district for design approval before the special waste procedures are completed if one of the determinations stated above apply. The request will be given via a special waste waiver. The waiver request will be submitted to Central BLRS.

20-12.07 Relationship of Special Waste Process Results to Contract Letting

Anytime design approval is requested before a PSI has been completed a commitment stating that the PSI will be completed before the project is included on a letting must be included in the PDR or environmental document. The LPA will be required to complete the PSI, when applicable, and ensure all commitments in the Project Development Report, Design Report, or environmental document regarding the monitoring and management of regulated substances are included in the contract documents prior to letting. The LPA will provide the district with written notification that all required special waste studies has been completed.

20-12.08 Validity of Special Waste Assessment Results

If significant changes in land use, or more than 180 days and less than 3 years have elapsed since the last examination of a project for special waste/regulated substance contamination (i.e., LPA screening/sign-off or PESA), the LPA must validate the examination results before proceeding with arrangements for further special waste/regulated substance investigations before submitting the Project Development Report or environmental document for approval, if required, or before initiating land acquisition. The validation review should include a site reconnaissance and a check of the databases; see Section 20-12.08, for new reported releases and new land uses of potential concern. If changes are identified, a PESA should be conducted to evaluate the new reported release(s) and/or new potential land use concern(s).

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If 3 years or more have elapsed since the last examination for special waste/regulated substance contamination, LPA screening and sign-off or completion of a PESA, the entire project should be re-evaluated as a new action, that is, a new PESA should be performed, prior to proceeding with arrangements for further special waste/regulated substance investigations, before submitting for approval, or before initiating land acquisition. If a project was initially screened and cleared by the LPA and no PESA was completed, the re-evaluation after 3 years may again consist of LPA screening using the Level 2 screening tool, and clearance provided no changes have occurred in the project area that would alter the findings upon which the original clearance was based.

If a PSI was conducted for a project and 5 years or more have elapsed since it was completed, the entire project should be evaluated for regulated substances as a new action and a new PESA must be conducted prior to proceeding with the aforementioned project actions. In any case, a valid PESA is required and must be current up until the time of project letting. Completion of a PSI does not negate the need for an up-to-date PESA.

When validation of the results of special waste/regulated substance evaluations is necessary, the review should consider any changes in the proposed action, the affected environment, anticipated special waste/regulated substance involvement, and proposed measures for addressing the special waste/regulated substance.

20-12.09 Resources

The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) list can be found on the EPA website. The Environmental Protection Agency's current list of Leaking Underground Storage Tanks (LUST) can be found on the Illinois EPA website. The list of LUST sites is an unconfirmed list and should not be used as a final determination regarding whether releases have occurred at sites on the list. BDE Manual Chapter 27, Figure 27-3.B contains a listing of all the databases required for a Level II screening.

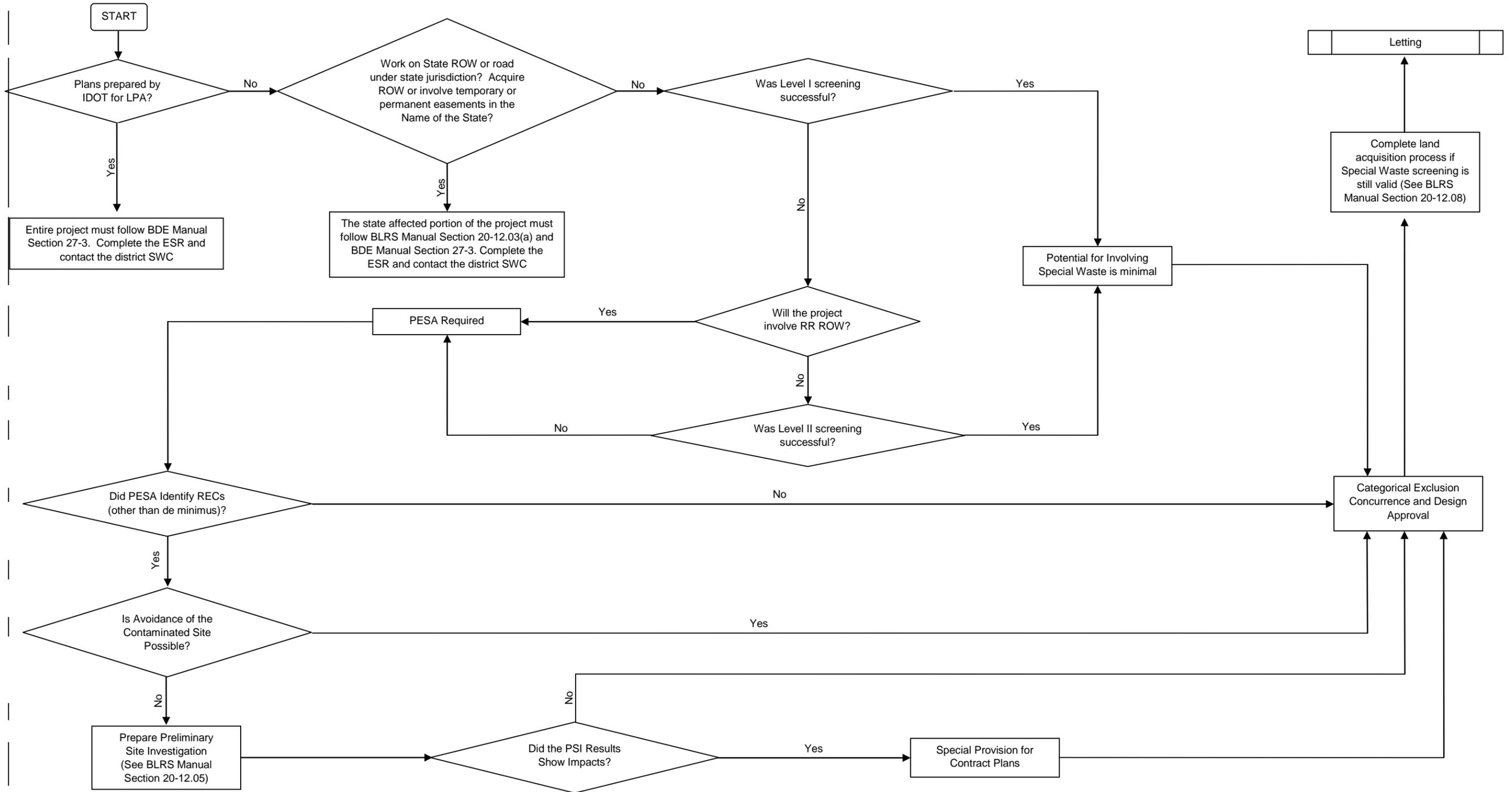
If a project involves a property on which the existence of an UST is suspected and does not appear on the list, contact the State Fire Marshal's office to check the most current registrations. The *Standard Specifications for Road and Bridge Construction* also contains guidance on proper procedures for UST removal.

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20-13 REFERENCES

1. 23 CFR 771, "Environmental Impact and Related Procedures."
2. FHWA Technical Advisory T6640.8A, "Guidance for Preparing and Processing Environmental and Section 4(f) Documents."
3. Section 4(f) Background/Questions and Answers, 49 USC 303.
4. Executive Order 11988, "Flood Plain Management."
5. Executive Order 11990, "Protection of Wetlands."
6. *Federal Endangered Species Act*, 50 CFR 402.
7. *Farmland Protection Act of 1981*, 7 USC-4201-4209.
8. "Farmland Protection Policy," 7 CFR 658.
9. Part III "Environmental Procedures," *Illinois Bureau of Design and Environment Manual*, IDOT.
10. *A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Infrastructure Projects, Second edition, January 2012, Open File Series 2012-1.*

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