

## *Design Memorandum No. 03-2006*

TO:           Engineering Offices and Divisions  
                Districts  
                Consulting Engineers

FROM:       Mark S Gaydos, P.E., Design Engineer  
                /s/

DATE:       February 9, 2006

Design Manual Reference:  Section II-05.05.02  _____ Revision _____ Supplemental
---

SUBJECT:   PROGRAMMATIC SECTION 4(f) AGREEMENT

### **Introduction**

This memorandum provides supplemental information by the introduction of a Programmatic Section 4(f) Agreement. The information should be used in conjunction with the guidelines in Sections II-05.05.02 of the Design Manual.

### **Implementation**

The use of this guidance is to be implemented immediately.

### **Guidance**

As part of Project Development Streamlining efforts, the NDDOT has entered into a Programmatic Section 4(f) Agreement with United States Fish and Wildlife Service and FHWA.

The Programmatic Section 4(f) agreement should be reviewed in its entirety for exact details and approval procedures.

### **Questions**

Any questions regarding the content or implementation of the memorandum should be referred to Ron Henke, Design Division, 701-328-4445.

### **Approved**

\_\_\_\_\_  
/s/  
Francis G. Ziegler, P.E., - Director, Office of Project Development

\_\_\_\_\_  
2/9/06  
Date

**United States Fish and Wildlife Service,**

**Federal Highway Administration,**

**And**

**North Dakota Department of Transportation**

**Programmatic Section 4(f) Agreement**

**October 2005**

**United States Fish and Wildlife Service**

**Federal Highway Administration**  
**and**  
**North Dakota Department of Transportation**  
**Programmatic Section 4(f) Agreement**

/s/

10/18/05

---

Jeffrey K. Towner  
Field Supervisor, Ecological Services  
U.S. Fish and Wildlife Service

---

Date

/s/

10/24/05

---

Lloyd A. Jones  
Refuge Coordinator - Wetland Habitat Office  
U.S. Fish and Wildlife Service

---

Date

/s/

10/24/05

---

Allen R. Radliff, P.E.  
Division Administrator  
Federal Highway Administration

---

Date

/s/

12/1/05

---

David A. Sprynczynatyk, P.E.  
Director  
North Dakota Department of Transportation

---

Date

**Executive Summary**

The purpose of this document is to address minor impacts to wetland and/or grassland easements administered by United States Fish and Wildlife Service (USFWS) as part of the National Wildlife Refuge System. The programmatic 4(f) document will allow the USFWS, Federal Highway Administration (FHWA), and the North Dakota Department of Transportation (NDDOT) to increase the efficiency of the 4(f) documentation and allow for a greater streamlined process of reporting and documenting these impacts. This collaborative effort will also allow minor impacts to occur to easement wetlands and grasslands, with written concurrence from the USFWS, FHWA, and the NDDOT, that may otherwise result in greater impacts to adjacent non-easement wetlands if the 4(f) property is avoided.

The Section 4(f) lands under this Programmatic 4(f) evaluation, addresses only USFWS wetland and grassland easements located adjacent to an existing highway. This document only addresses impacts that do not exceed five acres of impacted easement wetlands for the entire project, or one acre for an individual wetland basin, and impacts to grassland easements that are less than five acres per section will also be covered under this document.

This programmatic 4(f) document is consistent with the approach described in the USDOT Final Nationwide Section 4(f) Evaluation and Approval for Federally-Aided Highway Projects with Minor Involvements with Public Parks, Recreation Lands and Wildlife and Waterfowl Refuges and other relevant authorities.

**Section 4(f) Evaluation and Approval for Federally-Aided Highway Projects with Minor**

**Involvements with United States Fish and Wildlife Service Easements**

This programmatic Section 4(f) evaluation has been prepared for needed highway improvement projects that will impact minor amounts of wetland and/or grassland easement administered by United States Fish and Wildlife Service (USFWS) as part of the National Wildlife Refuge System. This programmatic Section 4(f) evaluation satisfies the requirements of Section 4(f) for all projects that meet the applicability criteria listed below. Individual Section 4(f) evaluations will not be prepared for these projects.

The FHWA Division Administrator is responsible for reviewing each highway improvement project to determine if the proposed construction work meets the criteria and procedures of this programmatic Section 4(f) evaluation. The Division Administrator's determinations will be thorough and will clearly document the items that have been reviewed. The written analysis and determinations will be combined in a single document, placed in the project record and will be made available to the public upon request. This programmatic evaluation will not change the existing procedures for project compliance with the National Environmental Policy Act (NEPA) or with public involvement requirements.

**Applicability**

This programmatic Section 4(f) evaluation may be applied by NDDOT and FHWA only to projects meeting the following criteria:

- 1) The proposed project is designed to improve the operational characteristics, safety, and/or physical condition of existing highway facilities on essentially the same alignment. This includes "4R" work (resurfacing, restoration, rehabilitation, and reconstruction), safety improvements, such as shoulder widening and the correction of substandard curves and intersections; traffic operation improvements, such as signalization, channelization, and turning or climbing lanes;

**Design Memorandum 02-2006**

February 9, 2006

Page 6 of 11

bicycle and pedestrian facilities; bridge replacements on essentially the same alignment; and the construction of additional lanes. This programmatic Section 4(f) evaluation does not apply to the construction of a highway on a new location.

- 2) The Section 4(f) lands under this Programmatic 4(f) evaluation, addresses only USFWS wetland and grassland easements located adjacent to an existing highway.
- 3) The amount and location of the land to be impacted shall not impair the use of the remaining Section 4(f) land, in whole or in part, for its intended purpose. This determination is to be made by the FHWA in concurrence with USFWS, and will be documented in relation to the size, use, and/or other characteristics deemed relevant.

The total amount of land to be acquired from any Section 4(f) site shall not exceed five acres of impacted easement wetlands for the entire project or one acre for an individual wetland basin. Impacts to grassland easements that are less than five acres per section will also be covered under this document.

- 4) The proximity impacts of the project on the remaining Section 4(f) land shall not impair the use of such land for its intended purpose. This determination is to be made by the FHWA in concurrence with USFWS over the Section 4(f) lands. For each construction project impacting wetland and/or grassland easements, the USFWS must concur, in writing, with the use of the programmatic 4(f) procedures, the assessment of project impacts, and the proposed plan to replace the impacted 4(f) easements. In some instances the USFWS may conduct a field review to determine if the whole basin will be adversely affected by the planned highway improvement project and require exchange.

**Alternatives**

**Design Memorandum 02-2006**

February 9, 2006

Page 7 of 11

The following alternatives to avoid impacts to wetland and grassland easements administered by the USFWS must be evaluated before applying the programmatic 4(f) procedures:

1. Do nothing.
2. Improve the highway without impacting the adjacent USFWS easement.
3. Build an improved facility on new location, which does not impact the USFWS easement.

This list is intended to be all-inclusive. The programmatic Section 4(f) evaluation does not apply if one of the alternatives listed above is feasible and prudent or if another feasible and prudent alternative is identified. The project record must clearly demonstrate that each of the above alternatives were fully evaluated before the FHWA Division Administrator concludes that the programmatic Section 4(f) evaluation can be applied to the project.

**Findings**

In order for this programmatic Section 4(f) evaluation to be applied to a project, each of the following findings must be supported by the circumstances, studies, and consultations on the project:

1. **Do Nothing Alternative.** The Do Nothing Alternative is not feasible and prudent because it would not correct: (a) existing or projected capacity deficiencies; (b) existing safety hazards; or (c) existing deteriorated conditions and maintenance problems. In addition, the Do Nothing Alternative would constitute a cost or community impact of extraordinary magnitude, or would result in truly unusual or unique problems, when compared with the proposed impact of the Section 4(f) lands.
2. **Improvement without Impacting the Adjacent Section 4(f) Lands.**

It is not feasible and prudent to avoid Section 4(f) lands by roadway design or transportation system management techniques (including, but not limited to, minor alignment shifts, changes in geometric design standards, use of retaining walls and/or other structures, and traffic diversions or other traffic management measures) because implementing such measures would result in: (a) substantial adverse community impacts to adjacent homes, businesses or other improved properties; or (b) substantially increased roadway or structure cost; or (c) unique engineering, traffic, maintenance, or safety problems; or (d) substantial adverse social, economic, or environmental impacts; or (e) the project not meeting identified transportation needs; and (f) the impacts, costs, or problems would be truly unusual or unique, or of extraordinary magnitude when compared with the proposed impacts to Section 4(f) lands. Flexibility in the application of American Association of State Highway and Transportation Officials (AASHTO) geometric standards or NDDOT's "3R" standards, approved by FHWA, should be exercised, as permitted in 23 CFR 625, during the analysis of this alternative. (23 CFR 625 establishes the criteria considerations when designing a project with federal funding. The three primary design criteria considerations that come from this regulation are safety, preservation and extension of the service life of highways, and to reduce highway hazards and the resulting number and severity of accidents on all the Nation's highways.)

**Alternatives on New Location.** It is not feasible and prudent to avoid Section 4(f) lands by constructing on new alignment because (a) the new location would not solve existing transportation, safety, or maintenance problems; or (b) would result in substantial adverse social, economic, or environmental impacts (including such impacts as extensive severing of productive farmlands, displacement of a substantial number of families or businesses, serious disruption of established patterns, substantial damage to non-easement wetlands or other sensitive natural areas, or greater impacts to other Section 4(f) lands or (c) the new location would substantially increase costs or engineering difficulties (such as an inability to achieve minimum design standards, or to meet the requirements of various permitting agencies such as those involved with navigation, pollution, and



the environment); and (d) such problems, impacts, costs, or difficulties would be truly unusual or unique, or of extraordinary magnitude when compared with the proposed impact of Section 4(f) lands. Flexibility in the application of AASHTO geometric standards should be exercised, as permitted in 23 CFR 625, during the analysis of this alternative.

### **Measures to Minimize Harm**

This programmatic Section 4(f) evaluation and approval may be used only for projects where the FHWA Division Administrator, in accordance with this evaluation, ensures that the proposed action includes all possible planning to minimize harm. This has occurred when the officials having jurisdiction over the Section 4(f) property have agreed, in writing, with the assessment of impacts resulting from the impact of the Section 4(f) property and with the proposed property exchange to make the National Wildlife Refuge System whole. The exchange shall include:

1. Replacement grasslands and wetlands providing similar habitat values in accordance with the Memorandum of Understanding between NDDOT and USFWS for the exchange of wetland and grassland easements impacted by transportation projects.
2. The exchange of easement interests will be based on an equal economic or fair market value basis as required by federal law.
3. Incorporation of design features to avoid/minimize habitat impacts (e.g., reduction in right-of-way width, modifications to the roadway section, retaining walls, curb and gutter sections, and minor alignment shifts); and habitat features (e.g., construction of new, or enhancement of existing wetlands or other special habitat types); where necessary to reduce or minimize impacts to the Section 4(f) property. Such features should be designed in a manner that will not adversely affect the safety of the highway facility. Flexibility in the application of AASHTO geometric standards should be exercised, as permitted in 23 CFR 625, during such design. -

4. Such additional or alternative replacement measures as may be determined necessary based on consultation with the USFWS.

### **Coordination**

Each project will require coordination in the early stages of project development with USFWS officials having jurisdiction over the Section 4(f) lands. NDDOT will provide a description of the planned highway improvement project and solicit comments from the USFWS, Ecological Services - Field Supervisor to initiate the coordination process. USFWS will review and comment in writing on each project, including a description of grassland and wetland easements in the project area that may be affected by the proposed highway improvement project. The Field Supervisor will provide a copy of the comment letter to the National Wildlife Refuge System Project Leader with jurisdiction for the affected easement. NDDOT will determine if the proposed highway construction activity will impact easements outside of the existing road right-of-way and coordinate with the Project Leader with jurisdiction to determine impacts to the National Wildlife Refuge System and appropriate replacement measures. Copies of the final written analysis and determinations required under this programmatic Section 4(f) evaluation shall be provided to the officials having jurisdiction over the involved Section 4(f) area and to other parties upon request.

### **Approval Procedure**

This programmatic Section 4(f) approval applies only after the FHWA Division Administrator has:

1. Determined that the project meets the applicability criteria set forth above;

**Design Memorandum 02-2006**

February 9, 2006

Page 11 of 11

2. Determined that all of the alternatives set forth in the Findings Section have been fully evaluated;
3. Determined that the findings in this document (which conclude that there are no feasible and prudent alternatives to avoid a USFWS easement) are clearly applicable to the project;
4. Determined that the project complies with the Measures to Minimize Harm section of this document;
5. Determined that the coordination called for in this programmatic evaluation has been successfully completed;
6. Assured that the measures to minimize harm will be incorporated in the project; and
7. Documented the project file clearly identifying the basis for the above determinations and assurances.