U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration

THE STATE OF SOUTH DAKOTA
Department of Transportation

E.O. 11990 – WETLAND FINDING

85th Street Improvements
Sundowner Avenue to Louise Avenue

Sioux Falls, South Dakota
Lincoln County, South Dakota

Project Numbers:
P 1360(01), PCN 03YF
Sioux Falls CIP Number 515099

This action complies with Executive Order 11990
"Protection of Wetlands"

Approved
FHWA Environmental Engineer

10-23-2017
Date

Approved
SDDOT Environmental Supervisor

10. 23. 2017
Date
This statement sets forth the basis for a finding that:

1) There is no practicable alternative to construction of the proposed 85th Street Improvements project and
2) The proposed action includes all practicable measures to minimize harm to wetlands that may result from such use.

Project effects and impacts on wetlands were determined by following Federal Highway Administration (FHWA) guidance and policies. Coordination with the United States Army Corps of Engineers (USACE) occurred early in the project when the 85th Street corridor was part of a larger project area. The USACE determined there were no jurisdictional wetlands located within the 85th Street corridor. The 85th Street Improvement Environmental Assessment (EA) addresses project effects on non-jurisdictional wetlands in accordance with Executive Order 11990.

Project Description

The project area is located near the southwest edge of Sioux Falls, South Dakota and involves upgrading and connecting 85th Street across I-29 (see EA Figure 1-1). The purpose of this project is to improve local and regional mobility by enhancing the transportation system and improving connectivity. The proposed project would be constructed to accommodate all modes of travel in accordance with the City of Sioux Falls Complete Streets program. The 85th Street project is needed to address System Linkage and Traffic Growth.

Alternatives Considered

The EA includes the evaluation of three build alternatives. The three alternatives were as follows:

- Extension of 85th Street under I-29 on the section line
- Extension of 85th Street over I-29 on the section line
- Extension of 85th Street over I-29 south of the section line

Wetlands are impacted with all three build alternatives. Therefore, regardless of the build alternative wetland impacts would range from 1.65 to 1.7 acres.

The no build alternative does not impact wetlands; however, this alternative would not meet the project purpose and need for system linkage or accommodate future traffic growth. Each of the three build alternatives would impact non-jurisdictional wetlands though the range of impacts was nearly the same ranging from 1.65 and 1.7 acres. After consideration of other potential environmental impacts, constructability, sound design and engineering judgment, safety, and cost, the alternative with the least environmental impacts, including wetlands, as the Extension of 85th Street over I-29 on the section line. Wetland impacts associated with this alternative were determined to be approximately 1.65 acres. This estimate was based on the determination of wetland boundaries via a review of the National Wetlands Inventory maps and delineation of the potential areas by a qualified wetland biologist. The EA presents additional details on project effects and proposed avoidance, minimization, and mitigation measures.
**Determination of Wetlands and Mitigation within the Project**

As part of the alternatives analysis and the preliminary design for the 85th Street Extension project, the following wetland impact sequencing was employed 1) wetland avoidance; 2) wetland impact minimization; and 3) wetland mitigation. The concept for 85th Street was based on connecting the two existing segments of 85th Street on either side of I-29 with the least impact to the existing 85th Street alignment. Therefore, there was a limited corridor for making the appropriate and effective connections and improvements to the roadway. Additionally, it was known in the alternative development stage that wetland areas were located in the study area. Thus, all practical means for avoiding the wetlands in the area were considered from the onset of alternative development. However, the limited corridor that would allow for making the transportation connections limited the feasibility of avoiding the all wetland areas.

All affected wetlands were delineated following the methods of the *USACE 1987 Manual on Identifying Wetlands in the United States* and field typed in accordance with the methods of USFWS “Classification of Wetlands and Deep Water Habitats of the United States” (Cowardin et al. 1979), to provide accurate and up-to-date wetland determinations and impact acreages resulting from the project.

**Mitigation**

Wetlands that cannot be avoided will be appropriately mitigated based on the function and quality to the extent possible. The proposed wetland impact mitigation concept for the proposed 85th Street extension is to purchase units from a wetland mitigation bank such as the Tetonka Wetland Mitigation Bank located in Grand Meadow Township in northwest Minnehaha County. Off-site mitigation is being proposed because the immediate impact area is not conducive for mitigation. This conclusion is based on:

- It is difficult to maintain quality small mitigation sites in or directly adjacent to roadway right-of-way because of all the sediments, salts and typical road runoff.
- Neither the SDDOT nor the city owns any land that is suitable for wetland development in the study area.
- The off-site mitigation will replace the functions lost at the impact locations.
- Off-site mitigation will create additional rural setting wildlife habitat.
- A created on-site wetland would have to be approximately three times the acreage of the impacts to account for replacement ratios and an additional buffer. In this case, an estimated 4.95 acres of wetlands including the buffer would need to be created as mitigation to the impacts associated with the project. Land adjacent to the project corridor will cost approximately $30,000 per acre. Finding less expensive land outside the study area that is better suited for wetland development would entail additional planning and engineering costs.
- Current general compensatory mitigation requirements (33CFR Chapter II 332.2) states, “the environmentally preferable compensatory mitigation may be provided through mitigation banks…” Tetonka is a suitable bank near Sioux Falls.

Mitigation to a wetland mitigation bank such as the Tetonka Wetland Mitigation Bank is the most expedient mitigation process, because mitigating at the bank requires:

- No land acquisition
- No inventory of existing condition of mitigation site
• No wetland planning or engineering
• No wetland construction
• No filing of a deed restriction
• No maintenance for 5 years after construction of the project
• No monitoring for 5 years after construction of the project

The mitigation ratio is 1 to 1 at the bank versus 2 to 1 for creating a new wetland and the wetland bank accepts all responsibility and risk for the wetland establishment.

A Hydrogeomorphic (HGM) assessment was completed on the non-jurisdictional wetlands that will be impacted. The HGM assessment estimated 4.55 functional capacity units (4.55 acres) will need to be purchased to replace the function and quality of the impacted wetlands in the study area. The unique complex of riverine and pothole wetlands at mitigation banks such as the Tetonka bank make it possible to use the HGM assessment to develop a universal mitigation plan for different wetland types in the project watershed.

The estimated wetland impacts are anticipated to be the maximum amount of wetlands impacted by the project. Throughout the design process, avoidance and/or minimization measures will continue to be evaluated to minimize wetland impacts to the extent practicable. The final amount of wetland impacts and required mitigation needed from the wetland mitigation bank will be determined during final design. The mitigation wetlands credits would be purchased prior to awarding the construction contract.

**Coordination**

This project has been and will continue to be coordinated with the following agencies:

• United States Fish and Wildlife Service
• South Dakota Department of Game, Fish, and Parks
• South Dakota Department of Environment and Natural Resources

A Section 404 Permit application, is not required under the Clean Water Act as the USACE determined there are no jurisdictional wetlands within the project area; therefore, no further coordination with the USACE is required.

**Finding**

In accordance with Executive Order 11990, National Environmental Policy Act (NEPA) and the Federal Highway Act it has been determined that:

1) There is no practicable avoidance alternative to such construction, and
2) The proposed action includes all practicable measures to minimize harm to wetlands that may result from such use.

All practical measure to minimize harm have been considered and initiated. Should it become necessary to modify or otherwise revise this finding due to the completion of wetland delineation associated with the project design phases, an updated Wetland Finding will be prepared and circulated for review and concurrence.