5. INTERDEPARTMENTAL COORDINATION

5.1 Overview

SDDOT's Division of Planning and Engineering and Division of Operations coordinate closely with the Environmental Office (EO) throughout the planning, pre-scoping, National Environmental Policy Act (NEPA), engineering design, construction, and post-construction operations and maintenance of transportation projects. These divisions rely on the EO to ensure that all projects comply with applicable local, state, federal, and Tribal laws and regulations.

Throughout the planning and scoping activities, the EO works closely with the Project Development (PD) Program in the Division of Planning and Engineering in the early stages of project development. As projects are brought forward into the Statewide Transportation Improvement Program (STIP), the PD team works to understand all of the possible implications of improving existing or constructing new transportation systems. On a broad scale, early decisions on location and design features may be considered to avoid and/or minimize environmental impacts.

After the STIP is adopted, projects undergo development through multiple stages, including planning, preliminary design, final design, bid letting, construction, and post-construction validation of environmental commitments, as required by various permits. An example of the maintenance of an environmental commitment required post-construction is the proper development and protection of mitigated wetlands after the construction project is completed. The environmental design for individual projects in the approved STIP begins when the Division of Planning and Engineering issues a work authorization for preliminary engineering.

> The **Statewide Transportation Improvement Program** is a four-year program listing projects developed through the coordinated efforts of the SDDOT, Transportation Commission, state and federal agencies, local and tribal governments, metropolitan planning organizations, public agencies, transportation providers, citizens and other interested parties. The program identifies highway and intermodal improvements to preserve, renovate, and enhance South Dakota's transportation system.
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> Information for SDDOT's STIP is available on the SDDOT website at https://dot.sd.gov/projects-studies/planning/stip

5.2 Project Scope and Planning

Transportation Planning Engineers (TPE) begin scoping activities on individual projects early in the project development process according to SDDOT's Road Design Manual, Chapter 2, and the C2C Scoping Guide. Depending on the nature of the project, other SDDOT offices or consultants may be involved in project development. It may be necessary for the TPE to coordinate with the EO on a project-by-project basis. One or more public information meetings may be scheduled to obtain information that will assist in preparing project

scope documents. Draft and/or proposed project scope documents are prepared and distributed within SDDOT.

Using the Approved Scope, the EO coordinates with state, federal, and tribal agencies to identify potential project impacts to the environment and community. The EO prepares the appropriate environmental document based on the project's environmental classification, as discussed previously in this manual.

Four steps constitute scope development:

1. **Draft Scope** combines background information on the roadway segment and begins to build the purpose of and need for the project. Background information for roadway and other project elements will be completed, along with recommendations from the appropriate management systems. Once completed, potential options are listed with pros and cons associated with each option for each need. Typical needs and appropriate improvement types associated with South Dakota highways are listed in the Proposed Project Information tab of the Concept to Contract (C2C) scoping module for each project.
2. **Proposed Scope** identifies the purpose of and need for the project as identified by the author. The Proposed Scope will include the background information, along with proposed improvements to the roadway facility. The improvements will fit the purpose of and need for the project.
3. **Recommended Scope** is the "final draft" version of the scope document submitted for the approval of required department personnel. At this point in the scoping process, all scope review comments received from department personnel, the public, FHWA, and other stakeholders will have been addressed.
4. **Approved Scope** is the final scope document issued by the department. All comments from previous versions of the scope have been addressed and its purpose is to guide the designer. If modifications are needed to the project after the scope has been approved, a scope amendment will be completed.

Once approved, the scope will be sent to all programs within the Division of Planning and Engineering; the appropriate Area and Region Offices; and, on projects with federal oversight, FHWA. The Approved Scope is used during the design of the project.

If an Approved Scope requires revision, an amendment will be issued. Triggers for revision include new information about impacts to the purpose and need, cost, schedule, project limits, or previously unknown environmental considerations. All impacted design offices and the Area, Region, and PD Offices will approve the scope amendment.

5.3 Project Coordination

Once the Approved Scope is received, the design office in charge of the transportation project assigns a Project Manager to lead the project through bid letting. The EO also assigns an Environmental Project Coordinator (EPC). The Project Manager will coordinate as necessary with the EPC to review key

> The Project **Manager** is the point of contact within SDDOT design offices who is assigned to manage the successful completion of plans and specifications for bid letting.

environmental commitments known at this stage of the project, review necessary environmental studies required for environmental compliance, and determine a schedule for all reports and reviews required throughout the preparation of bid documents.

After the project is awarded to a construction Contractor, the Project Engineer assigned to the transportation project will coordinate as necessary with the EPC to ensure a full understanding of the environmental commitments for the project. This may occur in preparation for or during the requisite preconstruction meeting with the Contractor. Any notifications to the EO, State Historic Preservation Officer (SHPO), and Tribal Historic Preservation Officer (THPO) will be identified, including the schedule and timing of each requirement. Examples of the notifications include fish transfers or installation of safety fences at archaeological sites.

After construction of the transportation project is complete, the Project Engineer will coordinate as necessary with the Area Offices to ensure their understanding of required post-construction maintenance and protection of resources in the project area.

Table 27 summarizes the environmental coordination activities required at each stage of a project. The table describes key decision points that require coordination for compliance with environmental commitments, while keeping the project on schedule.

5.3.1 Pre-Construction

The preconstruction phase of a transportation project includes planning, pre-scoping, NEPA clearance, preliminary design, final design, and bid letting. Planning occurs throughout the development of the Approved Scope and includes coordination with the Environmental Manager or designee. Once the project moves into engineering design, the Project Manager assigned to the project coordinates with the EPC throughout the preliminary design and final design stages.

Environmental Planning Screen

The Environmental Planning Screen is a process that involves planning level studies conducted for specific corridors or projects identified in the Statewide Regional Transportation Plan. This process is conducted before NEPA and preliminary engineering design, before all project construction funding is identified, and before issues are known or solutions have been considered.

During the Environmental Planning Screen process, the Responsible Manager works with the EPC to complete an Environmental Screening Report. The goal of this type of study is to identify potential environmental resources for use in an alternatives analysis process to avoid and minimize impacts to resources during subsequent study phases while developing alternatives that meet purpose and need. If a recommended transportation improvement receives funding, the results of the Environmental Screening Report will be carried forward at that time into project development, additional environmental review (NEPA-level or similar local environmental review process), engineering design, construction, and operations and maintenance.

Table 27. Summary of SDDOT Coordination for Environmental Commitments

	Pre-Construction (Design/ROW)	Construction (Project Engineer)	Post-Construction (Area Offices)
General	Coordinate with EPC to identify and avoid environmental resources.	Comply with plans and specifications. Notify EPC of any changes.	Continue protection of environmental resources.
Wetlands and Other Waters of the U.S.	Avoid and/or minimize impact. If unavoidable, mitigation design, mitigation bank credits, or in-lieu fee.	Protect existing wetland, and construct mitigation wetlands in accordance with plans and specifications. Notify EO of any changes affecting wetlands.	Maintain wetland, according to mitigation plan.
Erosion Control and Storm Water Management	Develop SWPPP, NOI.	Implement SWPPP provisions, NOT, and Form 298.	Maintain permanent erosion control items and remove temporary items once disturbed area is stabilized.
Threatened and Endangered Species	Comply with the ESA. Ensure provision for aquatic organism passage for bridge/culvert design.	Monitor T&E requirements, schedule seining, and submit turbidity reports.	Mitigate deficiencies for constructed bridges/culverts identified during monitoring.
Section 106	Avoid and/or minimize impact, and design mitigation if unavoidable.	Inadvertent discovery reporting.	Protect resources.
Section 4(f)	Avoid; prudent and reasonable avoidance alternatives, overall least harm alternative.	Implement mitigation plan.	Resource specific as described in Section 4(f) approval documents.
Section 6(f)	Avoid; prudent and reasonable avoidance alternatives, overall least harm alternative.	Implement mitigation plan.	N/A

Notes: EO – Environmental Office, EPC – Environmental Project Coordinator, ESA – Endangered Species Act, N/A – Not Applicable, NOI – Notice of Intent, NOT – Notice of Termination, SWPPP – Storm Water Pollution Prevention Plan, T&E – Threatened and Endangered

NEPA/Preliminary Design

During the NEPA/Preliminary Design stage, the Project Manager works with the EPC to find the best approach to protect environmental resources and achieve the project goals. The EPC and Project Manager work collaboratively to understand each other's constraints before finalizing the design. Overall, there are four major environmental efforts in the preliminary design phase—identify environmental resources, avoid environmental resources, minimize environmental resource impacts, and mitigate environmental resources impacts.

Identify Environmental Resources

Through various desktop reviews, the EPC identifies the types of environmental resources in the project area. The EPC coordinates with applicable regulatory agencies to confirm any issues or requirements for a proposed project in regard to identified environmental resources. **Chapters 3 and 4** outline the agency notification process.

Various agencies and governmental organizations may require longer or shorter review cycles to respond to the EPC's request for review comments. For example, the ARC may need up to a year, while other agencies such as SDGFP, Tribes, and the SDDANR are required to respond within 30 days. Tribes may require additional time to respond during Section 106 coordination. Some agencies, such as USFWS, may need more information than the project area to make a determination of potential impact. If the project crosses a stream, a preliminary hydraulic analysis is completed before an initial comment on the proposed project is requested.

Evaluate Options to Avoid Environmental Resources

After environmental resources have been identified, the EPC will work with the Project Manager/Designer to determine if impacts to the environmental resources can be avoided. Most regulatory agencies responsible for a resource require SDDOT and FHWA to demonstrate whether or not a resource can be avoided to accomplish the project goals before approvals are granted. Examples include avoidance of wetlands, critical habitat for threatened and endangered species, Section 4(f), and Section 6(f) properties. Section 4(f) considerations may be the most stringent, requiring an alternative to be selected if a project cannot avoid a 4(f) property.

If environmental resources cannot be avoided, plans to minimize and mitigate the impacts of a transportation project must be developed as part of the project design.

Minimize and Mitigate Environmental Impacts

Once it is determined that an environmental impact cannot be avoided, the Project Manager/Designer and EPC coordinate to minimize any potential impacts. This work may require additional consultation with agencies, Tribes, or stakeholders.

Final Design

As final plans are developed, any documentation required for approval by FHWA, USFWS, and other regulatory agencies for the mitigation plans must be developed as part of plans and specifications. Examples include the SWPPP for erosion control for the protection of water quality, a Section 404 wetlands permit, and protection of archeological and paleontological resources. All environmental requirements are set forth in Section A Environmental Commitment Notes in the plan set. The EO will review the Final Plan set prior to inclusion in the plans, specifications, and estimated cost.

5.3.2 Construction

The Project Engineer assigned to oversee the construction of the transportation project will coordinate as necessary with the EPC to fully understand the requirements in the Section A Environmental Commitment Notes for each environmental resource. The Project Engineer will contact the EPC at any time throughout the construction project to clarify requirements to ensure the proper implementation of all measures designed to protect resources and mitigate impacts to them. The first important step for compliance with the environmental requirements noted in Section A occurs during the Contractor-led preconstruction meeting. Once construction is underway, the Project Engineer continues to monitor field activities to ensure all environmental requirements are met.

Preconstruction Meeting

Preconstruction meetings are the responsibility of the Contractor in collaboration with SDDOT. The Contractor must file the following forms before scheduling the preconstruction meeting:

- DOT-270 Authorization Form for the Preconstruction Meeting
- DOT-271 Preconstruction Meeting Outline
- DOT-272 Contractor's Submittal List

DOT-272 details all of the necessary documentation to ensure that the Contractor addresses and meets the environmental commitments. The form and its associated environmental submittals are prepared prior to and submitted at the preconstruction meeting.

Examples of information included in DOT-272 are provided below:

- Temporary permit to use public waters for highway construction purposes
- Temporary discharge permit
- Storm water discharge General Permit
- Mining permit
- Construction plan for work in Topeka shiner streams
- Fish transfer at locations designated as Topeka shiner streams
- Asphalt or concrete plant operating permit
- Measures to protect sites identified for avoidance

- Notice of work on known contaminated material
- Notice of protection of archaeological sites
- SWPPP, including an NOI and an NOT
- Air quality construction permits
- Amendment approval under General Permit for storm water discharges
- Archaeological clearances
- Threatened and endangered species review
- Wetland location determination, Section 404 of the CWA

Field Construction Activities

The plans and specifications for the transportation project set forth the requirements for SDDOT to ensure environmental commitments. However, at any time, the Project Engineer may consult with the EPC for the proper implementation of the measures. The Project Engineer must contact the EO for concurrence on any change order that modifies the plans and specifications, including project limits. Additional studies and evaluations may be required if the change order has the potential to further affect environmental resources.

Other construction activities requiring coordination with the EPC include:

- Fish Seining—Wildlife Biologist conducts fish seining, if necessary. A minimum notice of 48 hours must be given to the SDDOT EO.
- Fish Passage—Wildlife Biologist confirms successful fish passage (work plans for diversion channels).
- Turbidity Monitoring—Wildlife Biologist tracks turbidity by receiving Form 283 Stream Turbidity Inspection Form.
- Storm Water—Storm water coordinator receives a weekly DOT-298 Storm Water, Erosion, and Sediment Control Inspection Report Form.
- Wetlands—Wetlands coordinator confirms construction of wetland mitigation areas.
- The EPC consults with the ARC, SHPO, or THPO on inadvertent discoveries of archeological, paleontological, or cultural resources.

5.3.3 Post-construction

The Area Offices are responsible for post-construction maintenance of environmental commitments that require monitoring and protection post-construction. Examples include the proper maintenance of mitigated wetlands in accordance with the Section 404 permit, inspection of the efficacy of BMPs, especially immediately after the construction project is complete, and the perpetual protection of any cultural resources. Area Offices will consult with the EO if there are questions about the condition of an environmental resource and proper maintenance activities for the resource.