

APPLICATION FILING REQUIREMENTS
NATURAL GAS PIPELINE PROJECTS IN WISCONSIN

PUBLIC SERVICE COMMISSION OF WISCONSIN
WISCONSIN DEPARTMENT OF NATURAL RESOURCES

JANUARY 2015





PUBLIC SERVICE COMMISSION OF WISCONSIN

Application Filing Requirements

Natural Gas Pipeline Construction Projects

January 2015

The filing requirements in this document apply to all natural gas pipeline projects that require a Certificate of Authority (CA) from the Public Service Commission (PSC) pursuant to Wis. Stat. §196.49 and wetland or waterway crossing permits from the Department of Natural Resources (DNR) pursuant to Wis. Stat. § 30.025. For some gas pipeline projects that would involve smaller pipe sizes and construction within existing road rights-of-way, a simplification of these filing requirements may be appropriate. Any simplification of these filing requirements would be determined through the required pre-application consultations between the applicant and the agencies.

Gas-fired power plants usually require a new connection to existing natural gas transmission facilities. The natural gas connection may be built and owned by the power plant developer, a local natural gas utility, or an interstate pipeline company. If the natural gas connection is constructed and owned by a local natural gas utility, a Commission construction certificate may be necessary. If the natural gas connection is constructed by an interstate pipeline company, a federal construction certificate may be necessary. A Certificate of Public Convenience and Necessity (CPCN) application for a generation plant must contain the applicable information in these filing requirements for the natural gas connection. In addition, if the natural gas connection would be built and owned by a state-regulated natural gas utility, any required construction certificate application must be submitted to the PSC at the same time as the power plant CPCN application. It is essential that prospective power plant applicants discuss the associated natural gas line connections and application requirements with PSC and DNR staff prior to filing a CPCN application. CPCN applications without complete natural gas pipeline information will not be deemed complete.

Joint PSC/DNR Pre-Application Consultation Process

An applicant must consult with both the PSC and DNR prior to submitting its application (Wis. Stat. § 30.025(1m) and Wis. Admin. Code § PSC 133.05). This pre-application consultation process is a series of discussions with the staff of these two agencies. Each agency has its own requirements, but the agency reviews are interrelated.

Topics discussed during the pre-application process include:

- PSC and DNR staff contacts
- Applicable portions of the filing requirements for each agency
- Appropriate application formats such as for maps and diagrams
- Specific permits and approvals required for the project

- PSC's and DNR's projected review timelines and important milestones for the project scope
- Alternative routes or locations
- Appropriate type, range, and timing of required field work (habitat assessments, archeological surveys, wetland delineations, biological surveys, etc.)

During the pre-application period, applicants should also solicit additional information from other interested persons through public outreach.

DNR Application Needs

Like the PSC, the DNR requires a complete application for the project review to proceed in a timely manner. The applicant must consult DNR staff to ensure that particular requirements for the DNR project review are met.

Permits and Application Requirements

DNR permits required for the project will be identified during the pre-application process.

Under Wis. Stat. § 30.025, the two agencies must follow a common review timetable, if wetlands or navigable waters are involved. For this reason, a complete application containing both DNR and PSC required information is submitted to both agencies at the same time. Specific DNR permit application requirements can be confirmed by the staff of the DNR Bureau of Energy Transportation and Environmental Analysis (BETEA). The requirements include information and materials needed for analysis of potential impacts to rare species and natural communities, and wetland or waterway construction permits. Applications must include an Endangered Resources (ER) review from the DNR, Bureau of Natural Heritage Conservation (BNHC) or obtain concurrence from DNR for an ER Review completed by a certified individual. The ER Review includes an analysis of the information contained in the Natural Heritage Inventory (NHI) database.

Habitat Assessments and Biological Surveys

Habitat assessments or biological (plant and/or animal) surveys may be required for the DNR portion of the application or at some point in the application process. Natural resources of particular concern include (1) areas that support high quality, rare, or important wetlands, rivers, or natural communities or habitat features (e.g., bat hibernacula or bird rookeries); and (2) areas where state or federal endangered, threatened, or special concern species occur or may occur.

The applicant should meet early in the pre-application process with DNR to determine the type of field work that should be completed. DNR may require fieldwork to be conducted (1) prior to submitting an application, (2) while the application is under review, (3) prior to the start of construction, and (4) post construction. At least two to four months before the beginning of the appropriate field season, DNR will require project information such as the project schedule, major project actions, and current aerial photos of the project area. For most species, the field season begins in the second quarter of the year; however, some rare species may require that field work be conducted earlier or later in the year. DNR will discuss with the applicant the timing and scope of the required studies based on project specifics and the application schedule.

Wetlands and Waterways

The applicant must submit two completed tables for DNR, a Waterway/Wetland Impact Location Table (DNR Table 1) and a Waterway/Wetland Environmental Inventory Table (DNR Table 2). The DNR tables describe each waterway or wetland that would be crossed by the proposed project and must be completed as stipulated by the DNR.

To complete the DNR tables, it is desirable to use the best available information. If field surveys are not possible, the applicant must consult with DNR to determine alternative sources of information which may include a combination of maps, aerial photos, and ground-truthing.

The Wisconsin Wetland Inventory (WWI) wetland classification and unique field ID that are used in the DNR tables must also be included in the attributes tables of the submitted wetland Geographical Information Systems (GIS) files that are part of the project application.

Application Formats

Application Tables

The tables specified in these requirements must be properly filled out. These tables include the three Segment Impact tables, two DNR tables, and mailing lists. All tables must be submitted in Adobe Acrobat (*.pdf) as well as Microsoft Excel spreadsheets.

Some tables include an example worksheet which shows how the table should be completed. Many of the tables have embedded in the worksheet cells, the appropriate format for the data. Shaded cells contain protected embedded formulas that will generate the correct data.

The DNR Waterway/Wetland Impact Location Table is provided as a Microsoft Excel spreadsheet to be completed. A sample DNR Waterway/Wetland Environmental Inventory Table is also provided.

Any submitted mailing list must meet the following format criteria as demonstrated below:

- Submit tables in Microsoft Excel.
- Do not use punctuation marks.
- Only use capital letters for all entries, excluding email addresses.
- Populate the Sort column with the last name of a private property owner or the name of the business or organization for government, groups, etc.
- Comply with current U.S. Postal Service mailing standards.
- Only use the Email column, if addresses are not more than one year out-of-date.
- Mailing list should be able to be cross-referenced with the submitted GIS property shapefile.

Sample Mailing List Table

	A	B	C	D	E	F	G	H
1	attention	name	address	city	state	zip	email	sort
2		ROBERT SMILEY	PO BOX 1452	KENOSHA	WI	zip+4		SMILEY
3		DORIS J & KEN R SMITH	N2457 CTH X	ARENA	WI	zip+4	doris.smith@google.com	SMITH
4	MARY KLEIN CLERK	ALLEN COUNTY	7894 ELM ST STE 74	MILWAUKEE	WI	zip+4	mary.clerk@allen.wi.us	ALLEN COUNTY
5	JOHN FINCH DIR	FRIENDS OF WETLANDS	5885 FANCY DR	WEST BEND	WI	zip+4	jfinch@wetland.r.us	FRIENDS OF WETLANDS
6		ALBERT & RITA MILES TRUST	PO BOX 986	HAYWARD	WI	zip+4		MILES TRUST
7								

Contact PSC staff regarding questions for proper completion or modifications to the Route Segment Impact tables and the mailing lists.

Contact DNR BETEA staff for questions regarding the two DNR tables.

Geographical Information System Submissions

GIS data files must be submitted in the current version of ArcGIS (ESRI ArcGIS 10.X). Geodatabases or individual shape files may be submitted. Data file names should be descriptive of the contents.

Provide the following GIS-related items as part of the application:

- GIS shapefiles or geodatabase that contains all the data used to produce all maps submitted as part of the application.
- A spreadsheet listing all GIS data files, a file description, the source of the data, and the date when the data was collected or published.
- Map files in ESRI ArcView *.mxd format for all GIS maps in the application.
- ESRI ArcReader published map files in *.pmf format for all GIS maps in the application.

All GIS data must include a *.prj file. Wisconsin state agencies use the Wisconsin Transverse Mercator (WTM) projection system.

Photographic and Line Drawing Submissions

- Line drawings must be in AutoCad and may be in either *.dwg or *.dxf format. The preference is *.dwg.
- Any photographic renderings (photo simulations) of proposed facilities on the existing landscape must be submitted in a high-resolution raster format.
- Digital aerial photographic images must be properly georeferenced and must be accompanied by the geographic coordinate and projection system.
- Scanned maps and diagrams that cannot be submitted in any other format must be submitted in *.gif format at a depth of 256 colors or less.

Application Size

Applicants are required to minimize the physical size of their applications by eliminating superfluous information not material to the case.

- Only submit those pages relevant to the information requirement. Do not submit multi-page ordinances, land use plans, etc. unless the entire document would be helpful for context.
- Minimize duplicative information. An appendix is the appropriate location for information that is referred to in several different sections of the application.
- Submit only official correspondence between the applicant and state, local and federal government agencies. PSC staff need to review this correspondence to verify that the applicant has applied for the necessary permits and to ascertain the status of the permit review. Do not include unofficial minutes of meetings, records of telephone conversations, or billings from the PSC or DNR.
- Applications should be printed double-sided. Exceptions to this requirement are maps sized larger than 11 x 17 inches.

Confidential Materials

Organize the application so that all confidential materials are only in Appendices and separated from non-confidential materials. Submit confidential materials in compliance with the confidential materials handling procedures of each agency.

DNR Natural Heritage Inventory (NHI) related information must be submitted confidentially to both agencies.

PSC Electronic Regulatory Filing (ERF) System

The ERF system is the official file for all dockets considered by the Commission. Post to the ERF system all **confidential** and **non-confidential** application materials in the *.pdf format, including all materials provided to DNR. Items submitted in native formats, such as ESRI ArcGIS files, Microsoft Excel tables, Microsoft Word versions, modeling, etc. should be documented in a letter filed on ERF.

Instructions for submitting documents to the ERF system can be found on the PSC web site.

In addition, send to the PSC docket coordinator a CD or DVD containing application materials that must be submitted in their native formats, such as Microsoft Excel tables, ESRI ArcGIS files, etc.

Paper copies of the application will be needed by both the PSC and DNR for review. Questions about the number of paper copies and the format of maps, photos, and diagrams can be answered during consultation meetings or by contacting the PSC case coordinator.

Contact for Questions

Adam Ingwell, PSC, (608) 267-9197 Adam.Ingwell@wisconsin.gov.

Application Filing Requirements Natural Gas Pipeline Construction Projects

A complete application must contain the following information or a showing must be made as to why the information is not applicable. The application's organization should follow the major format and numbering system of these filing requirements.

If generation construction is part of the application, the generation application materials may be presented with the related sections of the larger application or as separate sections, provided the organization of the application remains clear and easy-to-understand. There are separate Application Filing Requirements for power plant construction.

Questions about the applicability of specific information requirements should be discussed with PSC and DNR staff during pre-application consultation.

1.0 Project Overview

- 1.1.** Provide a list of all cities, village, and townships and their respective counties that the proposed project, any associated facilities, and any potential construction activities would cross or potentially impact.
- 1.2.** Describe the proposed project including pipelines and associated equipment or apparatus.
- 1.3.** Identify the connection point to the interstate pipeline system.
- 1.4.** Identify if proposed construction is new construction, changes to an existing facility, or abandonment of a facility.
- 1.5.** Provide the anticipated construction schedule, noting any phases or seasonal or regulatory construction constraints.
- 1.6.** Provide the names and contact information for utility representatives available to answer technical questions concerning the proposed project, cost, rates, etc.
- 1.7.** Identify individuals and mailing addresses for any person with transmission facilities as defined by Wis. Stat. § 182.0175(1)(c) affected by the project and the status of their notification.
- 1.8. Other Agency Correspondence/Permits/Approvals**
 - 1.8.1.** Provide copies of all official correspondence between the applicant and all state, federal, or local government entities as described in the *Introduction, page v*.
 - 1.8.2.** Identify any issues or concerns raised by any state, federal, or local government and how those issues/concerns have been addressed in the application.
 - 1.8.3.** Provide a list of all federal, state, and local permits/approvals that would be required for this project and their status (Wis. Admin. Code § PSC 133.04 (10)).

1.9. Mailing Lists

- 1.9.1. Provide Microsoft Excel mailing lists in an acceptable format and cross-correlatable to GIS parcel data as described in the *Introduction, page iii-iv*.
- 1.9.2. Provide the following mailing lists:
 - 1.9.2.1. Properties from which easements would be required for construction of the proposed project. Include the owners name, the address of the property, and the property owner's address if different from the property's address.
 - 1.9.2.2. Public properties, such as schools or other government-owned land upon which structures or pipelines would be construction through.
 - 1.9.2.3. Chief executive officers of the cities, villages, townships, and counties potentially affected by the project.
 - 1.9.2.4. Regional Planning Commission with jurisdiction over the project area.
 - 1.9.2.5. Applicable state and federal agencies

1.10. Project Maps

Below is a list of the most common items that should be included in application project maps. Route maps should use the best and most recent data available. Maps must clearly portray the project in a format and scale that is unambiguous and easy to understand. Labels and symbology used on the maps must be clearly visible. The range of required maps/illustrations and whether they should be submitted electronically or in paper form will be discussed during the pre-application consultations.

- **Aerial Photographs**
Must be the most recent aerial available, not more than three years old.
- **Project Data**
 - Proposed routes/segments
 - Segment nodes
 - Alternative routes/segments
 - Connection point(s) to the interstate pipeline
 - Portions of the existing natural gas facilities that would be modified by the proposed project
 - Proposed associated facilities including meter stations, regulator stations, above ground valve sites
 - Proposed ROW
 - Required land purchases for associated facilities
 - Temporary and permanent access roads proposed outside of road ROWs
 - Proposed laydown areas
- **Environmental Data**
 - Rivers, lakes, and other waterways
 - Outstanding or Exceptional Waterways, Trout Streams, Wild or Scenic Rivers
 - Field-delineated wetlands and Wisconsin Wetland Inventory wetlands
 - Archeological sites
 - Soils and hydric soils
 - NHI rare species occurrences (confidential)
 - Topographic maps
 - Floodplains and flood-prone areas

- **Parcel Data**
 - Private properties
 - Public properties (symbolized differently than private properties)
 - Tribal properties
 - Political subdivision boundaries
 - Township, range, section
- **Land Use**
 - Existing land cover
 - Zoning
 - Recreation areas and trails
- **Utility/Infrastructure Data**
 - Existing, natural gas, electric, water, or other infrastructure adjacent to or within the proposed easement
 - Applicable infrastructure ROWs (e.g., DOT, pipeline, electric distribution, electric transmission, railroad, trail)
 - Roads, highways, interstates, railroads
- **DNR-required information**

Include information such as locations of possible Chapter 30 activities (e.g., grading, riprap), temporary clear span bridges, pole locations and ROW, Wisconsin Wetland Inventory, wetland/waterway field data (correlatable to DNR tables), etc. (see Section 7.4)

1.11. ESRI ArcGIS Data Files (see Introduction)

- 1.11.1. Use the most recent version of ESRI ArcGIS to support all maps and information submitted as part of the application.
- 1.11.2. Provide a spreadsheet that lists each GIS file (clearly named and organized), a description of the data, data source, and the date when the data was generated or collected for field data.

2.0 Project/Route Alternatives and Need Analysis

- 2.1.** Describe any major system level alternatives, such as connecting to a different interstate pipeline system and explain why these alternative were not selected.
- 2.2.** Provide information supporting the purpose and necessity of the project with supporting data.
- 2.3.** Describe how the proposed project relates to any future projects the applicant is considering in the area.
- 2.4.** Provide an explanation of how the project is consistent with future overall projects.
- 2.5.** Provide an analysis of the ability of energy conservation and efficiency to reduce, alter, or eliminate the need for this project. Analysis should include:
 - 2.5.1.** A description of the energy conservation and efficiency services available to customers in the project area.
 - 2.5.2.** An indication of the amount of additional energy efficiency and demand response, not already included in the forecast, needed to reduce, alter, or eliminate the need for this project.
 - 2.5.3.** A discussion of the feasibility of achieving the level of energy efficiency and demand response identified in Section 2.5.2.
- 2.6.** Provide an analysis that examines the proposed project's cost-effectiveness, technical feasibility and environmental soundness in meeting the energy demand with respect to the following energy priorities (Wis. Stat. §§ 1.12(4) and 196.025(1)(ar)):
 - 2.6.1.** Noncombustible renewable energy resources
 - 2.6.2.** Combustible renewable energy resources
- 2.7.** Describe the factors considered when evaluating possible routes and locations for the natural gas line and its associated facilities.
- 2.8.** Identify possible route corridors (including existing line corridors in the area and major land use boundaries) that were considered and explain why those corridors were not chosen.
- 2.9.** Alternate Route Issues/Concerns
 - 2.9.1.** Describe contacts or consultations held with government entities, landowners, and other interested parties prior to application submittal regarding alternate project routes.
 - 2.9.2.** Identify any issues and concerns raised.
 - 2.9.3.** Describe how the issues and concerns were addressed in the selection of the proposed routes.

3.0 Project Costs

- 3.1.** Provide the estimated cost of the project by major plant categories or functions. Explanations of the plant accounts are included in the PSC's Uniform System of Accounts. Engineering, legal construction, inspection, and administrative costs should be included in the above stated plant accounts.
- 3.2.** Provide the estimated annual operating costs of the project by major expense categories and function.
- 3.3.** Include a description and cost of any property being replaced or retired as a result of the proposed project.
- 3.4.** Provide an economic evaluation of the proposed project, including any evaluation of customer contributions under the applicant's service extension rules.
- 3.5.** Provide the proposed method of financing.
- 3.6.** Describe the effect of the proposed project on applicant's cost of operation and its effect on the quality, reliability, and quantity of service.

4.0 Detailed Information

- 4.1. Provide a general description of the proposed route and project area including the percentage of the route that will be constructed within road ROWs.
- 4.2. For each segment of the route, describe the proposed project and all associated equipment or apparatus, including details about the following:
 - 4.2.1. Pipeline – size, material, and operating pressure
 - 4.2.2. New ROW required (width and length)
 - 4.2.3. Valve locations
 - 4.2.4. Meter stations, regulator stations, gate, stations, and odorizing equipment, if any
 - 4.2.5. All other proposed facilities
 - 4.2.6. Temporary construction access roads where existing ROW easements or roads is not sufficient (width, length, location, etc.)
- 4.3. For each associated facilities (meter stations, regulator stations, above ground valve sites, etc.), provide the following details:
 - 4.3.1. The location and dimensions
 - 4.3.2. Size of the land purchase required and orientation of the facilities within the parcel
 - 4.3.3. Construction procedures
 - 4.3.4. Current land use and zoning
- 4.4. Identify and describe the location, footprint, and existing land use of staging areas and any additional temporary workspaces required.
- 4.5. If the proposed project is associated with a generation plant project, provide the following information:
 - 4.5.1. The builder and owner of gas system connection
 - 4.5.2. The source of the gas supply (interstate pipeline connection). Rate conditions under which service is to be taken.
 - 4.5.3. A discussion of the gas service availability to other property owners along the route.
 - 4.5.4. A flow diagram of provider's system showing how the power plant at maximum gas flow rate would affect system pressures.
 - 4.5.5. A description of any change to the interstate pipeline system needed to supply the proposed power plant (i.e., if the interstate pipeline must be upgraded to supply project, that must be detailed as well).
- 4.6. **Impact Tables**

Complete the Route Summary and Segment Impact Tables (Tables 1-3) in the Microsoft Excel spreadsheets provided. For each table indicate the type and date of source material and the methods used to determine the table inputs.

 - 4.6.1. Table 1: General Route Impacts. The length of segments of the proposed routes and the requirements for new and shared ROW.
 - 4.6.2. Table 2: Land Cover.
 - 4.6.3. Table 3: Federal, State, Local and tribal Lands Excluding Road ROWs.

- 4.7. For route segments that would be located within or cross Wisconsin Department of Transportation (WisDOT) ROWs, provide documentation that the proposed route is generally acceptable to WisDOT.
- 4.8. For route segments that would corridor share with town or county roads, state whether the municipality has been notified of the proposed facilities and describe the potential temporary and permanent impacts to the road.
- 4.9. For route segments that would share or cross ROW with railroads, provide the following information:
 - 4.9.1. Owner(s) of the railroad
 - 4.9.2. Whether the railroad is active or abandoned
 - 4.9.3. Whether the owner of the railroad agrees to corridor sharing.
- 4.10. **Construction Impacts**
 - 4.10.1. Discuss the proposed construction sequence for all proposed facilities.
 - 4.10.2. Provide a general description of project construction methods including machinery to be used, size of trench, and width/dimensions of construction disturbance zone.
 - 4.10.3. Describe the construction disturbance zone and whether all work would be conducted inside the proposed ROW. Identify those areas where construction disturbance would occur outside of the proposed ROW.
 - 4.10.4. Describe any special construction methods that would be used in/around agricultural lands, forest lands, surface waters, or wetlands.
 - 4.10.5. If construction methods other than open trench are proposed at any locations, indicate on the maps or air photos the locations where the alternative methods would be employed and describe the alternative construction methods in detail.
- 4.11. **Off-ROW Access Roads**
 - 4.11.1. Identify those areas along the proposed routes where off-ROW access roads may be required.
 - 4.11.2. For each access road, provide the dimensions (length and width) and construction method.
 - 4.11.3. Discuss the reasons for the necessity for off-ROW access roads.
 - 4.11.4. Provide quantitative land cover information and estimated distances for the off-ROW access roads similar to the information provided in PSC Impact Tables
 - 4.11.5. If the off-ROW access roads would be modified post-construction, provide details.

5.0 Community Impacts

5.1. Communication with Potentially Affected Public

- 5.1.1. List all attempts made to communicate with and provide information to the public.
- 5.1.2. Provide a description of public information meetings and who was invited.
- 5.1.3. Submit copies of the public outreach mailings and handouts.
- 5.1.4. Provide electronic copies of written public comments (e.g., letters, emails, forms, etc.) submitted prior to filing the application with the PSC

5.2. Construction Impacts to Property Owners

- 5.2.1. Provide details on methods for mitigating inconveniences caused by construction to home owners and businesses along the route. Include issues related to temporary and permanent impacts of noise, dust, curbs, sidewalks, and landscape vegetation that may be affected.
- 5.2.2. Provide details on safety procedures, methods and timing of notification during construction and duration of construction as it affects individual property owners.

5.3. Potential Impacts to Agricultural Lands

For agricultural lands that may be impacted by any aspect of the proposed project, describe the following:

- 5.3.1. Type of farming: pasture, row crops, or other type (e.g., orchards, tree plantations, cranberry bogs, etc.).
- 5.3.2. Any agricultural practices that may be affected by the project, such as irrigations systems, windbreaks, organic farming practices, and drain tiles.
- 5.3.3. Identify the number and size of parcels enrolled in farmland preservation programs that may be affected by the proposed project.
- 5.3.4. Specific details for mitigating or minimizing construction impacts in and around agricultural lands.
- 5.3.5. Whether a DATCP Agricultural Impact Statement would be required.

6.0 Natural Resource Impacts

6.1. For forested lands that may be impacted by any aspect of the proposed project, describe the type of woodlands, dominant species, age, ownership (e.g., private, county forest), enrolled in a forestry program (e.g., Managed Forest Law, Forest Crop Law), and use (e.g., recreation, timber).

6.2. Identify any conservation easements that would be impacted by any aspect of the proposed project.

6.3. Identify any flood-sensitive facilities that would be located in designated flood plains or flood-prone areas.

6.4. Wetlands

See Section 7.0 for additional DNR requirements for impacts to wetlands and DNR tables.

6.4.1. For each route segment, provide the total number of proposed wetland crossings, the wetland type (Wisconsin Wetland Inventory classification), and the detail the construction activities that would occur in close proximity to the wetland.

6.4.2. Identify any wetlands potentially impacted by the proposed project that are in or adjacent to an area of special natural resource interest or high-quality wetlands as defined by DNR.

6.4.3. For wetlands that would be open trenched, provide the length and width of the trench.

6.4.4. Provide the methods to be used for avoiding, minimizing, and mitigating construction impacts in and near wetlands.

6.5. Waterbodies/Waterways

See Section 7.0 for additional DNR requirements for impacts to wetlands and DNR tables.

6.5.1. For each route segment and proposed associated facilities, provide the total number of waterbody or waterway crossings.

6.5.2. Identify any locations of construction activities that would occur below the ordinary high-water mark (OHWM) of a waterbody or waterway.

6.5.3. For each proposed waterbody and waterway crossing, identify the need and method for constructing the crossing.

6.5.4. Provide the methods to be used for avoiding, minimizing, and finally mitigating construction impacts in and near waterbodies and waterways.

6.5.5. Identify any waters in the project area that are classified as follows and the site-specific methods that would be used to mitigate potential impacts to these waterways:

6.5.5.1. Outstanding or Exceptional Resource Waters

6.5.5.2. Trout Streams

6.5.5.3. Wild or Scenic Rivers.

6.6. Construction Methods through Wetlands and Waterways

Describe construction methods and potential impacts for constructing through and near wetlands and waterways.

6.6.1. For each type of construction method provide the machinery to be used, the size of the trench, the dimensions of the construction disturbance zone, the length of the crossing, and the dimensions of any temporary work space requirements.

- 6.6.2. Jack and Bore and Directional Drill Operations
 - 6.6.2.1. Identify the location of all jack and bore or directional drilling operations.
 - 6.6.2.2. Discuss the purpose of the proposed construction method at each location.
 - 6.6.2.3. Describe the construction method in detail.
 - 6.6.2.4. Provide the temporary construction needs and limitations such as boring pits, staging areas, frac-outs, timing, weather, etc.
- 6.7. Rare Species and Natural Communities (see Section 8.0)**
 - 6.7.1. Document communication with DNR and USFWS, as applicable.
 - 6.7.2. Document compliance with DNR and USFWS direction, as applicable.
 - 6.7.3. For each route and location of associated facilities, discuss concerns and potential impacts to rare species as identified in the Endangered Resources Review and any field studies.
 - 6.7.3.1. For any DNR-identified follow-up actions that must be taken to comply with endangered species law, discuss how each action or rare species identified would affect the proposed project and the specific segment.
 - 6.7.3.2. For any DNR-identified recommended actions to help conserve Wisconsin's rare species and high-quality natural communities, discuss which actions would be incorporated into the proposed project.
- 6.8. Invasive Species (Uplands and Wetlands)**
 - 6.8.1. Describe areas where invasive species or disease-causing organisms have been observed or are a concern for the construction of the project main and associated facilities (e.g., invasive plants, oak wilt, emerald ash borer, etc.).
 - 6.8.2. Identify areas where invasive species are dominant at sites of proposed construction activities.
 - 6.8.3. Describe mitigation methods that would be used to avoid the spread of invasive plants or disease-causing organisms and comply with Wis. Admin. Code ch. NR 40, such as cleaning of machinery, surveys, etc.
- 6.9. Archeological and Historic Resources**
 - 6.9.1. List each county, town, range, section and ¼, ¼ section in which any construction would occur, or identify where this information can be determined from application materials.
 - 6.9.2. Provide a copy of the results of a Wisconsin Historic Preservation Database (WHPD) cultural resources search for the entire project construction area, whether it is completed in-house or by a consulting archaeologist. In the search results, list each archeological, historical, or sacred resource from the WHPD that would be found in areas of project-related construction, by State Site number, Burial Site number (if any), and Name. Submit this information to the PSC Historic Preservation Officer under separate cover and do not enter it into the ERF. Reference the review in the application.
 - 6.9.3. For each archeological or historical resource identified, describe without showing the specific location of the resource how the proposed project might affect the resource and how the project could be modified to reduce or eliminate any potential effect on the resource.

6.10. Restoration of Disturbed Areas

Provide a re-vegetation and site restoration plan which discusses the following items:

- 6.10.1. Type of re-vegetation proposed for impacted areas.
- 6.10.2. Vegetative monitoring criteria (number of post-construction years or percent cover achieved) and methods.
- 6.10.3. Invasive species monitoring and management.
- 6.10.4. Proposed landscaping at any associated facilities.

7.0 DNR Permits and Approvals for Impacts to Waterways and Wetlands

Submit the appropriate waterway and wetland permit application materials for all proposed project construction that may impact a waterway or wetland. DNR permit materials can be found at <http://dnr.wi.gov/topic/sectors/energy.html>. Permits may also be required by the U.S. Army Corps of Engineers. Application materials will also include the following items.

7.1. DNR Tables for Wetland and Waterways

For each route, complete a DNR Waterway/Wetland Impact Location Table and a Waterway/Wetland Environmental Inventory Table (DNR Tables 1 and 2) in the directional order that the wetlands and waterways would be encountered.

7.2. Wetland Practicable Alternatives Analysis (Wis. Admin. Code Ch. NR 103)

- 7.2.1. Describe how wetlands were factored into the corridor and route selection process.
- 7.2.2. Describe how the location of proposed routes and design of the pipeline avoids and minimizes wetland impacts including consideration for placing structures outside wetlands. Explain how proposed access routes will avoid or minimize wetland impacts.
- 7.2.3. For proposed construction that will impact wetlands, detail why project alternatives are not practicable after taking into consideration cost, available technology, and logistics in light of overall project purpose.
- 7.2.4. If wetland impacts cannot be avoided, describe all temporary and permanent impacts, as well as the construction and restoration methods that would be used to minimize wetland impacts.

7.3. Wetland Delineations

Identify all wetlands on a map in accordance with the U.S. Army Corps of Engineers' January 1987 Technical Report Y-87-1 entitled, "Corps of Engineers Wetland Delineation Manual" and relevant guidance documents. Wetland delineation reports should not be submitted as part of the printed application but in electronic format only.

In lieu of field-delineating wetlands, it is acceptable to identify wetland boundaries by utilizing a more conservative approach including the use of remote sensing tools. These wetland determinations can then be refined with simple field surveys to determine the general upland/wetland boundaries.

Remote sensing of wetland boundaries should include wet and potentially wet areas identified from existing mapping resources, including: Wisconsin Wetland Inventory, NRCS Soil Survey, USGS Topographic Maps, and available USDA FSA Slides.

These wetland boundary determinations can be refined with field verification by taking into account topography and vegetation. If vegetation is lacking, hydrology indicators¹ such as inundation, saturation in upper 12 inches, watermarks, drift lines, sediment deposits, drainage patterns, and water-stained leaves should be used to define the general edge of the wetland.

¹ A more complete list of hydrology indicators can be found in the Corps of Engineers Wetland Delineation Manual, Report Y-87-1, 1987, Appendix B, Routine Wetland Determination form.

7.4. Mapping Wetland and Waterway Crossings

For segments in or adjacent to wetlands or waterways provide maps with the following information:

- 7.4.1. Recent aerial photo.
- 7.4.2. Proposed main or facility.
- 7.4.3. ROW or construction area.
- 7.4.4. Waterways.
- 7.4.5. Wisconsin Wetland Inventory.
- 7.4.6. Delineated wetlands.
- 7.4.7. Hydric soils.
- 7.4.8. Any proposed temporary bridge locations.
- 7.4.9. Locations for other Chapter 30 activities such as grading or riprap.

8.0 Endangered, Threatened, Special Concern Species and Natural Communities

Pre-application meetings with DNR staff are required to determine the information necessary to be included in the application. DNR staff will indicate the type, scope, and timing of required field work relative to the application process. In the *Introduction, pages ii-iii* of this document, additional details about performing habitat assessments and how to file results of DNR-required field surveys is provided. More information can be found on the DNR website: <http://dnr.wi.gov/topic/endangeredresources/laws.html>.

Endangered Resource (ER) Reviews may be done by either requesting a review from the Utility and Energy Reviewer in the DNR Bureau of Natural Heritage Conservation (BNHC) or by submitting a proposed ER review completed by a certified individual to the Utility and Energy Reviewer for concurrence. Please note that NHI-related information (i.e., the names and locations of endangered, threatened, special concern species, natural communities, and habitat features) are considered confidential. Submit information in both a redacted (non-confidential) and confidential version.

- 8.1.** Submit a DNR-ER review for all route segments and associated facilities.
- 8.2.** Submit maps and/or data files showing NHI occurrences.
- 8.3.** Submit results from habitat or natural community assessments and biological surveys for the proposed routes segments that WNDR has requested to be included in the application. Results from additional surveys conducted during the review of the application, prior to the start of construction, and/or post-construction must be submitted as they are completed.

DNR Guidance Information (not a PSC requirement)

This and the following three checklists serve as guidance in the completion of the DNR Erosion Control, Material Management, and Dewatering Plans necessary to meet the requirements of Chapter 30 and NR 216 Permits. These are not requirements for a PSC CPCN or CA.

DNR Guidance for Erosion Control Plans

WNDR may require if appropriate, a description of erosion control measures to be utilized. If the project will involve land disturbance in excess of 1 acre, the applicant's request for permits under Wis. Stat § 30.025 must include a request for a Construction Site Erosion Control and Storm Water Discharge Permit from DNR. This permit may also authorize construction site pit and trench dewatering wastewater discharges to surface waters or seepage systems.

Also if the project will involve land disturbance in excess of 1 acre, the applicant will be required to submit a Construction Site Notice of Intent (NOI) form and to develop an Erosion Control and Storm Water Management Plan describing the best management practices that will be used on-site for erosion control. The DNR-approved erosion and sediment control technical standard and NOI form are available on the DNR Storm Water Program web-site at: <http://dnr.wi.gov/topic/stormwater/>.

Applicants may opt to refer to that company's state agency-approved Standard Erosion Control Plan to meet most of these requirements, though some form of supplemental information on project-specific elements may be required.

- **Erosion Control Methods and Materials**

The types of erosion control methods that will be used during project construction to protect disturbed areas. Include where applicable:

- ✓ Soil and slope stabilization.
- ✓ Seeding and mulching.
- ✓ Matting, tracking pads, silt fences, stockpile protection.
- ✓ Dewatering-related erosion control.
- ✓ Channel protection.
- ✓ Any other appropriate erosion control measures.
- ✓ Details and typical section drawings of all the erosion control methods utilized.

- **Erosion Control Measure Site Plan**

Include a site plan view and typical drawings illustrating:

- ✓ Construction site boundary.
- ✓ The location of all erosion control measures.
- ✓ Location of stockpiled soil.
- ✓ Vehicle and equipment access sites.
- ✓ Areas of disturbance.
- ✓ The drainage area configuration.
- ✓ Surface water diversion measures.
- ✓ Topography.
- ✓ Existing floodplains and wetlands.
- ✓ Location of trees and unique vegetation.

- **Sequence of Erosion Control Measures**

List and give a detailed description of the sequence of erosion control measures that will occur (i.e., placed, relocated, and replaced) during all phases of construction including:

- ✓ Clearing and grubbing.
- ✓ Material installation.
- ✓ Channel construction.
- ✓ Revegetation processes.
- ✓ Seeding and mulching/matting.

- **Off-site Diversion Methods**

- ✓ Identify off-site contributions of water affecting project construction sites.
- ✓ Methods of controlling off-site water contributions.
- ✓ Site plan indicating where the off-site water is originating from and locations of diversion measures on-site.

- **Provisions for Inspection and Maintenance**

Document the provisions for:

- ✓ The regular inspection of all erosion control efforts including the identity of who will perform the inspections, when the inspections would occur, and any special circumstances initiating an inspection.
- ✓ The regular maintenance of all erosion control efforts including the identity of who will be responsible for the maintenance and a list of potential corrective actions if the site is not maintained according to the provisions.

DNR Guidance for Materials Management Plans

Describe materials management methodology. Applicants may opt to refer to the company's standard Materials Management Plan to meet most of these requirements, though some form of supplemental information on project-specific elements may be required. The following checklist serves as guidance in the completion of a Materials Management Plan. The Materials Management Plan should contain information on all of the following components, where applicable.

- **Access Point Locations**
 - ✓ List the locations that will be used to gain access to the work site.
 - ✓ Include a plan view of all access points.

- **Haul Routes**
 - ✓ Indicate how and where hauled materials will be routed, including inbound and outbound materials, clean fill materials, contaminated materials, and any other materials.
 - ✓ Alternate locations, if necessary.
 - ✓ Include a haul route diagram indicating haul route locations.

- **Stockpile Areas**
 - ✓ List and describe material to be stockpiled, the location where material will be stockpiled on-site, and the measures to be taken to protect stockpiled areas.
 - ✓ Provide a plan view diagram of stockpile area locations.

- **Equipment Staging Areas**
 - ✓ Identify where equipment will be stored on-site.
 - ✓ Include a plan view of equipment storage areas on-site.
 - ✓ Identify where spill control and kits will be stored on-site.

- **Field Screening Protocol for Contaminant Testing**

If contaminated materials (i.e., soil) are encountered on-site, specify:

 - ✓ The procedure for screening materials.
 - ✓ The location where materials be tested.
 - ✓ The protocols that will be followed.
 - ✓ Whether construction work will be impacted.

- **Contaminated Materials**

If contaminated materials are known to exist on-site, list and describe:

 - ✓ The type of contaminant(s) known to exist on-site.
 - ✓ The location of the contaminant(s).
 - ✓ The media in which the contaminant is located within (i.e., soil, water, etc.).
 - ✓ The estimated concentration of the contaminant(s).
 - ✓ The estimated volumes of the contaminant(s).

- **Excavation Methods**
List and describe:
 - ✓ The materials that will be excavated.
 - ✓ The location of the excavated materials.
 - ✓ The way in which the materials will be excavated and removed.
 - ✓ How the excavated materials will be exported from site.
 - ✓ The location where excavated materials will be exported to.

- **Dewatering of Excavated Materials**
If free water is found present in excavated materials, list and describe:
 - ✓ The methods that would be used to correct the situation (i.e., how will water be removed).
 - ✓ Identify where these methods will take place on-site.

- **In-channel and Upland Excavated Materials**
 - ✓ Estimate the total volume of dredged materials (cubic yards) that will be excavated from beds and banks of waterways and wetlands.
 - ✓ Estimate the volume of upland materials (cubic yards) to be excavated from areas outside of waterway(s) and wetland(s).

- **Re-used In-Channel and Upland Excavated Materials**
 - ✓ Estimate the total volume.
 - ✓ Identify the location where dredged materials will be used on either project plans or provide off-site address, property owner, and site map (drawn to scale).
 - ✓ Describe the purpose of dredged materials (i.e., grading, trench backfill, etc.).

- **Reuse of Upland Materials**
 - ✓ Estimate the total volume.
 - ✓ Identify the location where dredged materials will be used on either project plans or provide off-site address, property owner, and site map (drawn to scale).
 - ✓ Describe the purpose of dredged materials (i.e., grading, trench backfill, etc.).

- **Off-site Disposal Plans for Contaminated Materials and Non-contaminated Materials**
 - ✓ Estimate the cubic yards of dredged materials and the cubic yards of upland material that will be disposed.
 - ✓ Detail disposal site information for both dredged materials and upland materials including material to be disposed, type of disposal site (such as disposal facility, landfill, etc.), disposal site name, disposal site location.

DNR Guidance for Dewatering Plans

Provide details for dewatering work areas, including excavation for structure foundations or poles. Applicants may opt to refer to the company's standard Dewatering Plan to meet most of these requirements, though some form of supplemental information on project-specific elements may be required. The following checklist serves as guidance in the completion of the Dewatering Plan. Consider the following items in the Dewatering Plan.

- **Dewatering/Diversion of Flow**

Provide detailed plans for the dewatering/diversion of flow/standing water removal. Include typical dewatering/diversion measure plans.

- ✓ Provide specifications for the dewatering/diversion of flow/ standing water removal.
- ✓ Specify the methods to be employed to dewater/divert flow/treat water, if applicable.
- ✓ Detail the methods that will be employed
- ✓ Specify where the methods will be employed.
- ✓ Detail the proposed methods, capacities, and capabilities.

- **Downstream Impact Minimization**

List and describe methods of minimizing downstream impacts during high flow conditions.

- **Analysis of Possible System Overload Scenarios**

Provide the following information if the stream is overloaded.

- ✓ Estimate the volume of system overload (i.e., what rainfall overloads the system).
- ✓ Estimate frequency of system overload (i.e., how often will the system be overloaded)
- ✓ Specify actions that would be taken if stream is overloaded.

- **Impacts of System Overload on Construction Activities and Water Quality**

If the system overloads, list and describe:

- ✓ The anticipated number of lost work days.
- ✓ The possible water quality impacts.
- ✓ The methods that would be used to deter adverse changes in water quality.

- **Water Discharge Locations**

Provide the following:

- ✓ Where water will be discharged.
- ✓ How water will be discharged.
- ✓ A site map indicating discharge locations.

- **Details of a Back-up System**

If a back-up system becomes necessary, indicate:

- ✓ The type of back-up system that will be used (include backup and standby equipment/power supply)
- ✓ The conditions when the system will be needed.
- ✓ How the back-up system will operate.
- ✓ Where the back-up system will be located.

- **High Flow Plan**

When flooding is likely to occur, list and describe the following:

- ✓ How the water will be removed from the site.
- ✓ Methods of water removal (e.g. pumping).
- ✓ Methods of minimizing water contamination (e.g. treatment methods).
- ✓ Protocols for evacuating materials from the flood conveyance channel including:
 - A list of materials that would require evacuation during high flow periods.
 - How the materials will be evacuated from the flood conveyance channel.
 - The location where the materials will be temporarily placed on-site.
 - How materials will be transported.
 - The methods for protecting the materials.
 - A site map indicating the location of temporary placement.
- ✓ Protocols for evacuating machinery from the flood conveyance channel including:
 - The type of machinery that would require evacuation during high flow periods.
 - How the machinery will be evacuated from the flood conveyance channel.
 - Where the machinery will be temporarily placed on-site.
 - A site map indicating possible locations of temporary machinery placement.

- **Contaminated Water**

List and describe what measures will be taken if contaminated water is found on site including:

- ✓ Methods of isolating the contaminated water.
- ✓ Methods of analyzing the contaminated water.
- ✓ Where the water will be tested.
- ✓ Methods of removing contaminated water from site.
- ✓ How the water will be treated and disposed.