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ENBRIDGE

April 30, 2007

Mr. Patrick Fahn
Chief Engineer, Public Utilities Division
North Dakota Public Service Commission
600 East Blvd.
Bismarck, ND 58505-0480

RE: Enbridge Pipelines (North Dakota) LLC
Case No. PU-06-330
Trenton to Beaver Lodge Pipeline

Dear Mr. Fahn;

The purpose of this letter is to request your approval of the attached "Tree and Shrub Inventory and Replanting Specification" as it pertains to condition 22 of the Findings of Fact, Conclusions of Law and Order in the above-referenced case. Enbridge consulted with the North Dakota State Forester regarding this specification and incorporated the State Forester's recommendations into it (see attached letter and contact report). The specification attached to this letter replaces a similar specification filed with the Commission on February 14, 2007.

If you have questions or require further information, please contact John Muehlhausen of Merjent, Inc., Enbridge's environmental consultant, at (612) 746-3661, or me at (715) 394-1572. Thank you for your continued assistance on this project.

Sincerely,
Enbridge Pipelines (North Dakota) LLC

Kris Benson

Kris Benson
Environmental Analyst II, CHMM

cc: Brent Horton, Enbridge Pipelines (North Dakota) LLC
John Muehlhausen, Merjent, Inc.
Brian Bjella, Fleck, Mather & Strutz, Ltd.
Ty France, Rooney Engineering, Inc.

Attachments

ENBRIDGE PIPELINES (NORTH DAKOTA) LLC
TRENTON TO BEAVER LODGE LINE LOOP

Tree and Shrub Inventory & Replanting Specification
April 26, 2007

1. Enbridge shall limit the width of clear cuts through woody areas to 50 feet or less.

2. During construction, Enbridge will selectively cut and remove trees and shrubs within the construction work area, leaving mature trees and shrubs intact where practical. A minimal amount of tree and shrub removal is anticipated on this project.

3. Where trees or shrubs are cleared in windbreaks and shelterbelts, Enbridge will record the location, number, and species of trees and shrubs cut, regardless of size. After construction, Enbridge will replace cut trees on a 2 to 1 basis with 2-year-old saplings of the same or similar species, and will replace cut shrubs on a 2 to 1 basis with stem cuttings of the same or a similar species.

4. Where trees are cleared in non-windbreak and non-shelterbelt areas, Enbridge will record the location, number, and species of trees cut that are 1 inch diameter at breast height ("dbh")[1] or greater, and will replace cut trees on a 2 to 1 basis with 2-year-old saplings of the same or similar species after construction. Trees that are less than 1-inch dbh will not be replaced.

5. Where shrubs are cleared in non-windbreak and non-shelterbelt areas, Enbridge will cut shrubs flush with the surface of the ground, taking care to leave the naturally occurring seed bank and root stock intact. If soil disturbance is necessary, the native topsoil will be preserved and replaced after construction. Shrubs will be allowed to regenerate naturally where native topsoil is preserved and replaced. Where topsoil is not preserved and replaced, Enbridge will record the location, number, and species of shrubs cut and will replace cut shrubs on a 2 to 1 basis with stem cuttings of the same or a similar species.

6. Trees and shrubs that are considered invasive species or noxious weeds (*e.g.*, *Caragana arborescens*, *Elaeagnus angustifolia*, *Rhamnus cathartica*, *Tamarix chinensis*, *T. parviflora*,

[1] Breast height is defined as 4.5 feet above the ground on the uphill side of the tree in accordance with generally accepted forest mensuration practices.

T. ramosissima, Ulmus pumila) will not be inventoried or replaced unless they are part of a windbreak or shelterbelt. Where they are part of a windbreak or shelterbelt, they will be inventoried and replaced as specified in paragraph 3 above.

7. Trees and shrubs anticipated to be cut will be inventoried before cutting, but only trees and shrubs actually cut will be replaced. If the number of trees or shrubs actually cut differs from the number inventoried, the difference will be noted on the inventory.

8. Tree and shrub replanting will not be conducted within 25 feet of the pipelines so that Enbridge can conduct on-going visual inspections of its right-of-way in accordance with U.S. Department of Transportation safety regulations.

9. Landowners shall be given the option of having replacement trees/shrubs planted off the right-of-way on the landowner's property or waiving that requirement in writing and allowing Enbridge to plant the replacement trees/shrubs at alternative locations.

10. Enbridge shall inspect tree replacements once a year for three years, on the anniversary of the plantings, and send a report on or shortly before October 1 of each year to the PSC documenting work completed and condition of woodlands planting.

11. At the conclusion of the project, Enbridge will file with the PSC documentation identifying the number and variety of trees removed, as well as the number, type, location and date of the replacement plantings.

12. Enbridge understands that the Commission may order additional plantings if survival rates are less than 75%. However, the North Dakota Game and Fish Department recommended a 2 to 1 replanting basis in order to achieve no net loss of woody habitat while allowing for up to 50 percent sapling mortality. Enbridge respectfully requests a variance from the Commissions Order such that Commission may order additional plantings additional plantings if survival rates are less than 50%. A 50% survival rate would result in no net loss of woody habitat and would be consistent with the intent of the North Dakota Game and Fish Department recommendation.

NORTH DAKOTA FOREST SERVICE

"To care for, protect and improve forest and natural resources to enhance the quality of life for present and future generations."

March 29, 2007

Patrick Fahn -Utility Analyst
Public Service Commission
600 E. Boulevard Ave. Dept. 408
Bismarck, ND 58505-0480

Dear Patrick,

Thank you for the opportunity to review the proposal by Enbridge ND regarding tree mitigation resulting from the Enbridge Pipeline. Their process for determining the number of trees within a disturbed site is very similar to the one used by the ND Department of Transportation within the Tree Mitigation Program. I am including a copy of the tree count activity criteria and requirements as outlined in NDDOT Design Memorandum No. 05-2005 with this letter. This memorandum is on the Internet if you are interested in acquiring an official copy.

While evaluating the tree and shrub planting guidelines provided by Enbridge ND, we determined that there are a few shortcomings associated with their process. The most significant is that it seems to focus on the value of trees as a timber source. In this scenario, only larger trees would have significance for wood products. This type of focus is inappropriate in North Dakota where the value of trees lies more in their contribution to environmental conservation. For instance, the value of windbreaks, water quality improvement practices, planting to control snow distribution and other practices that are critical in our state, do not fit into a traditional interpretation of forestry. These practices are significantly influenced by smaller diameter trees and shrubs and have a greater impact with a large number of trees and/or shrubs per acre. By limiting tree count to plants that are at least three (3) inches in diameter at breast height, this resource will not be considered. A one (1) inch minimum may be more inclusive.

Lastly, we have some concerns with complete elimination of Russian olive, Caragana and Siberian elm from the mitigation assessment. We understand that the ND Department of Agriculture has listed these species as invasive and do not refute that natural regeneration of these trees should not be considered. Our concern lies with conservation practices such as windbreaks within which these species were recommended for planting by resource professionals. These plantings involve an investment of money, time and effort by a landowner. We believe that these resources should be evaluated for mitigation.

Sincerely,

Larry A. Kotchman
State Forester

Enclosure -

State Forester **Molberg Forestry Center** **307 First Street East** **Bottineau, ND 58318-1100**
Tel: (701) 228-5422 • Fax: (701) 228-5448 • E-mail: forest@nd.gov • www.nd.gov/forest

NDDOT Design Memorandum No. 05-2005

SUBJECT: Wetland and Tree Review Guidance

Tree Count Activity Criteria and Requirements

I. Tree Count

The Tree Count (tree count) activity is to ensure that all projects are reviewed for potential tree impacts. When a project will result in the removal and destruction of trees, those trees which meet certain criteria will be counted and mitigated by the NDDOT.

II. Tasks

1. Environmental Document Statement

The environmental document author is responsible for obtaining a preliminary determination as to whether or not the project will result in the loss of trees. If so, a Design Memorandum 05-2005 statement should be included in the environmental document stating such and that the trees will be mitigated at the following applicable ratio:

A. Trees that are mitigated in a rural location will be mitigated at a 2:1 ratio.
B. Trees which are mitigated in an urban landscaping setting will be mitigated at 1:1 ratio.
C. Trees that are mitigated at an established tree bank will be mitigated at a 1:1 ratio.

2. Tree Count Criteria

Trees will be counted, and the loss of those trees will be mitigated, when they meet the following criteria:

A. Deciduous trees; if the diameter of the tree is 3 inches or more when measured 24 inches above the ground, and the tree is 15 feet or more in height.
B. Evergreen trees; if the tree is 5 feet or more in height.

If it is impractical or impossible to count each individual tree, the following methodology may be used:

A. Choose a representative area(s).
B. Measure the area(s) in whatever unit is most practical (square footage, acreage, etc.).
C. Count the number of trees in the area.
D. Use this as a representative number of trees for all other areas which are similar in characteristics to the area(s). Use the appropriate ratio of number of trees to the size of the area.

3. Tree Count Transmittal

The project designer will be responsible for forwarding the actual tree count data to the EES in those projects where there is a potential for tree impacts. As early as possible in the design process the designer should coordinate with the district office to have a tree count done of those trees which will be lost due to construction based on the final design of the project. Once the information is obtained by the designer it should immediately be forwarded to the EES for documentation and mitigation of losses.

RIGHT OF WAY ACQUISITION PROCEDURES FOR LOCAL

PUBLIC AGENCY FEDERAL AID PROJECTS

Prepared by

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION BISMARCK, NORTH DAKOTA

Website: http://www.discovernd.com/dot

DIRECTOR David A. Sprynczynatyk, P.E.

DESIGN DIVISION Mark S. Gaydos, P.E.

LOCAL GOVERNMENT Dave Leftwich

SPECIAL APPRAISAL CONSIDERATIONS

Appraisals prepared for eminent domain purposes occasionally encounter problems or special considerations relating to trees, fences, severance damages, and/or uneconomic remnants. The following policies have been established to address these considerations:

Trees

Tree valuation is influenced by many factors including project location, supply and demand, the condition and variety of tree impacted, and other factors that may be pertinent. Trees in one particular location may have little or no contributory value, yet the same tree variety may offer significant contributory value in another location. The appraiser should research various market sources to obtain evidence that supports contributory value estimates of trees, shrubs, or other on-site improvements. Sources may include discussions with area buyers and sellers, contacts with the North Dakota Forest Service, local extension agencies, owners of local greenhouses, etc. Reference materials such as the Guide for Plant Appraisal (published by the International Society of Arboriculture) or other similar publications may be considered. Value estimates for trees, shrubs, plants, etc. should be consistent with market conditions found in the project area and need to be clearly and fully explained. (Page 18)

NDDOT Design Manual

WETLAND DELINEATION PROCEDURES AND MITIGATION, TREE REPLACEMENT, ENDANGER SPECIES, AND PERMIT INFORMATION

Trees

The Design Division is responsible for determining if trees will be impacted by the project. If they are, they need to be replaced through the NEPA process. Trees are replaced on a 2:1 basis. We currently have two tree banks for mitigation - one in Richland County (Hamilton Wills WMA) and one at Noonan.

The Design Division works with the State Game and Fish and private landowners to develop contracts and easements for planting trees.

Design works with the Soil Conservation Districts to get the trees planted.

If the tees are on private land, Design will contract with the Soil Conservation District to maintain the plantings.

If the plantings are on property owned by the State Game and Fish, they will maintain the plantings.

Merjent

Contact Report

Date:
April 25, 3007

To:
Larry Kotchman

Company:
North Dakota State Forester

Phone Number:
(701) 228-5422

From:
John Muehlhausen

Company:
Merjent, Inc.

Phone Number:
(612) 746-3661

Subject:
Enbridge Pipelines (North Dakota) LLC
Trenton to Beaver Lodge Line Loop
Tree & Shrub Planting

I called Larry Kotchman, the North Dakota State Forester, to discuss his letter to the PSC regarding the above-referenced project. I explained that Enbridge would be adopting his recommendation for a more inclusive one-inch diameter tree measurement. I explained that Enbridge originally proposed a three-inch diameter tree measurement because it was similar to what the State requires of itself. I also explained that Enbridge was not so terribly concerned with the diameter used for tree counts, just that one is established. Setting a threshold for tree counting would provide a mutual understanding between the Enbridge, the construction contractor, the PSC, and other regulators on what would be replanted, and would minimize confusion after-the-fact. Mr. Kotchman stated that he understood that a threshold needs to be set somewhere.

Next, I asked Mr. Kotchman for clarification regarding mitigation for the removal of invasive species in shelterbelts. I stated that a landowner's investment of money, time, and effort for planting these species would be mitigated by payment of damages by Enbridge. Mr. Kotchman explained that some replanting may still be advisable to restore the function of the shelterbelt. I clarified that Enbridge would always need to maintain a tree-free corridor over the pipeline through shelterbelts to accommodate safety inspections. Mr. Kotchman understood, but thought that tree replanting, including replanting with some species on the invasive list, could be beneficial if done appropriately in areas outside the permanently cleared corridor. I indicated that Enbridge would propose to do so based on his input.