

**BASIN ELECTRIC
POWER COOPERATIVE**

1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA 58503-0564
PHONE: 701-223-0441
FAX: 701-557-5336



June 10, 2013

Darrell Nitschke, Executive Secretary
North Dakota Public Service Commission
600 East Boulevard Avenue, Dept. 408
Bismarck, ND 58505



Re: Case No. PU-13-22
Dakota Gasification Company – Antelope Valley Natural Gas Pipeline

Dear Mr. Nitschke:

Referenced is North Dakota PSC Case No. PU-13-22 (Dakota Gasification Company – Antelope Valley Station Natural Gas Pipeline). The purpose of this submittal is to provide the PSC with recently completed reports and new information/correspondence pertaining to Case No. PU-13-22.

The following are enclosed:

1. **Wetland & Waterbody Survey** prepared by Western Ecosystems Technologies, (WEST) Inc.
2. **Tree and Shrub Inventory** prepared by WEST.
3. **Addendum Survey Report** prepared by Metcalf Archaeological Consultants, (MAC) Inc.
4. **ND SHPO Concurrence Letter.**
5. **AVS-NGP Project Construction Refinement Map.**

The **Wetland & Waterbody Survey** and the **Tree and Shrub Inventory** are self-explanatory. With regard to the **Addendum Survey Report**, MAC found no new cultural resources in the project corridor. A *No Historic Properties Affected* determination was recommended by MAC for the areas that were mapped and documented in the report. The ND SHPO issued a concurrence letter dated June 5, 2013.

Since our April 19, 2013 filing, one additional refinement to the corridor and route is proposed to facilitate the construction of the facility. As depicted on the **AVS-NGP Project Construction Refinement Map**, the route and corridor would be straightened through the use of a Horizontal Direction Drilling (HDD) boring. Since it is a HDD boring, there is no surface expression of this change, and thus would have negligible impact on the environmental analysis for the project. Further, no new exclusion or avoidance areas are affected. The additional Class III cultural resources survey, tree and shrub inventory, and wetland and waterbody survey cover the corridor/route depicted in our April 19 filing, as well as the minor change depicted in this submittal.

21 **PU-13-22** Filed: 6/11/2013 Pages: 18
**Wetland & waterbody survey, tree & shrub
inventory, addendum survey, SHPO letter, map**

Darrell Nitschke
June 10, 2013
Page 2

If you have any questions regarding this letter or the enclosures, please contact me at 701.557.5495.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kevin L. Solie". The signature is fluid and cursive, with the first name "Kevin" being the most prominent part.

Kevin L. Solie
Senior Environmental Coordinator

kls/ds
enclosures

cc: R. Russell Mather
Mitch D. Armstrong
Bonnie M. Fetch



ENVIRONMENTAL & STATISTICAL CONSULTANTS

4007 State Street, Suite 109, Bismarck, ND 58503
Phone: 701-250-1756 ♦ www.west-inc.com ♦ Fax: 701-250-1761

June 7, 2013

Kevin L. Solie
Senior Water Quality/Waste Management Coordinator
Basin Electric Power Cooperative
1717 East Interstate Ave
Bismarck, North Dakota 58503

RE: AVS-NGP Project Wetland and Waterbody Mapping

Dear Mr. Solie,

Western EcoSystems Technology, Inc. (WEST) implemented a wetland and waterbody mapping effort associated with a 3.5 mile long natural gas pipeline at Basin Electric's Antelope Valley Station near Beulah, North Dakota. The mapping was done on May 17, 2013. Qualified WEST wetland professionals walked or otherwise viewed the entire pipeline construction area (approximately 100 foot wide corridor), as well as additional areas associated with string-out work and additional workspace. WEST continued the mapping effort at a minimum of 100 foot corridor even in areas planned for boring. During the mapping, WEST used a sub-meter GPS unit to collect field data to map the edges of wetlands based on vegetation and hydrology parameters and waterbody features based on defined bed/bank, evidence of flow, or standing water.

A total of three wetlands were mapped and a total of three waterbodies were mapped. Dominant vegetation within the wetlands included reed canary grass, cattails, and prairie cordgrass. Potential waterbodies included a concrete lined canal as well as two other drainages. The attached figure shows the locations of these features. All features were located on the north end of the project, which is shown in the figure. A shapefile of these locations will also be provided.

Please let me know if you have any questions or need further details on this mapping effort.

Sincerely,

Clayton Derby
Senior Manager

AVS Proposed Natural Gas Pipeline

Mapped Water Features

Map Features

- Pipeline Route
- Work Spaces
- Access Roads
- Mapped Wetland Locations
- Mapped Waterbody Locations

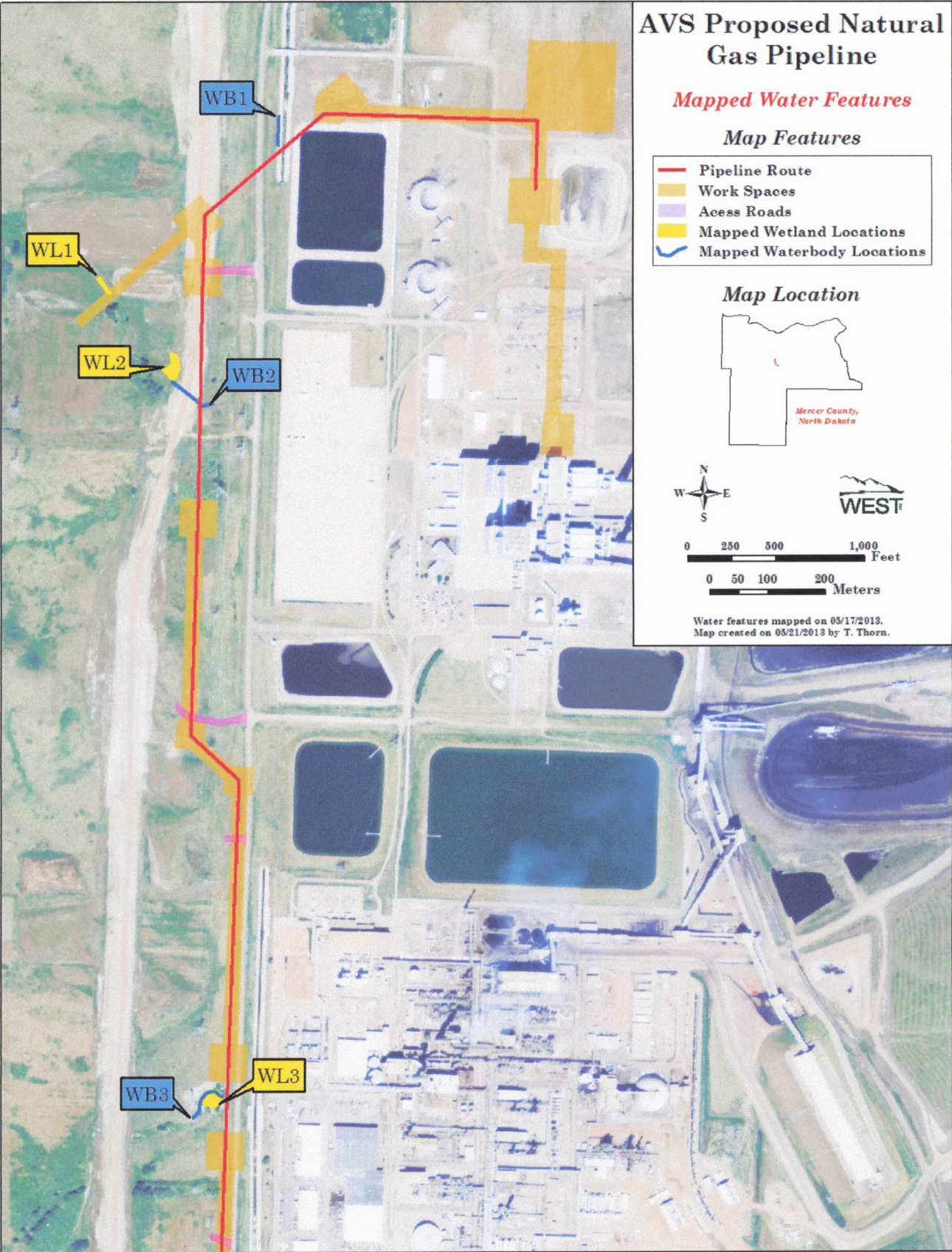
Map Location



0 250 500 1,000 Feet

0 50 100 200 Meters

Water features mapped on 05/17/2013.
Map created on 05/21/2013 by T. Thorn.



**Basin Electric Power Cooperative
Antelope Valley Station Natural Gas Pipeline Project
Tree and Shrub Inventory**

Prepared for:

Basin Electric Power Cooperative
1717 East Interstate Ave
Bismarck, North Dakota 58503

Prepared by:

Clayton Derby and Terri Thorn
Western EcoSystems Technology, Inc.
4007 State Street, Suite 109
Bismarck, North Dakota

June 7, 2013



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INTRODUCTION

Basin Electric Power Cooperative (Basin Electric) is constructing the Antelope Valley Station Natural Gas Pipeline (AVS NGP) Project near their Antelope Valley Station in Mercer County, North Dakota. The pipeline is approximately 3.5 miles long and will deliver natural gas to the Antelope Valley Station to be used in starting the coal fired powerplant.

In the course of construction, trees and shrubs may be removed, cut, grubbed or otherwise destroyed. Basin Electric contracted with Western EcoSystems Technologies (WEST) to inventory these trees and shrubs so that mitigation can occur according to the Public Service Commission's Tree and Shrub Mitigation Specifications.

The purpose of this report is to provide the results of the tree and shrub inventory that occurred on May 17, 2013.

STUDY AREA

The AVS NGP project runs along the southern and western side of the Antelope Valley Station before entering the station on the north side (Figure 1). The area is largely within previously disturbed lands from the adjacent Coteau Coal Mine or from construction of the Antelope Valley Station.

The inventory was completed within the pipeline construction area (approximately 100 foot wide corridor), as well as additional areas associated with string-out work and additional workspace. WEST continued the mapping effort at a minimum of 100 foot corridor even in areas planned for boring.

METHODS

Trees and shrubs were inventoried by WEST botanists on foot on May 17, 2013. The area inventoried for shrubs included the entire survey corridor as described above in Study Area. Tree/shrub locations of individuals or clusters, species, and number of individuals were recorded using a sub-meter GPS unit.

RESULTS

A total of 157 individual trees and shrubs were counted within the inventory boundary (Table 1). It is recognized that this inventory area represents an area larger than will be impacted by construction (e.g., bore areas are included, wide survey corridor than construction, etc). The number of trees and shrubs to be impacted by construction should be more closely determined through an overlay of the actual construction area on the shapefile of trees and shrubs or a direct count of the project after construction.

Table 1. Results of tree and shrub inventory by common name and number of individual plants for the AVS NGP Project.

Tree or Shrub Common Name	Number of Individuals
Chokecherry	4
Snowberry	10
Wild Plum	14
Silver Buffaloberry	1
Chinese Elm	80
Green Ash	40
Skunkbush	3
Boxelder	5
Total	157

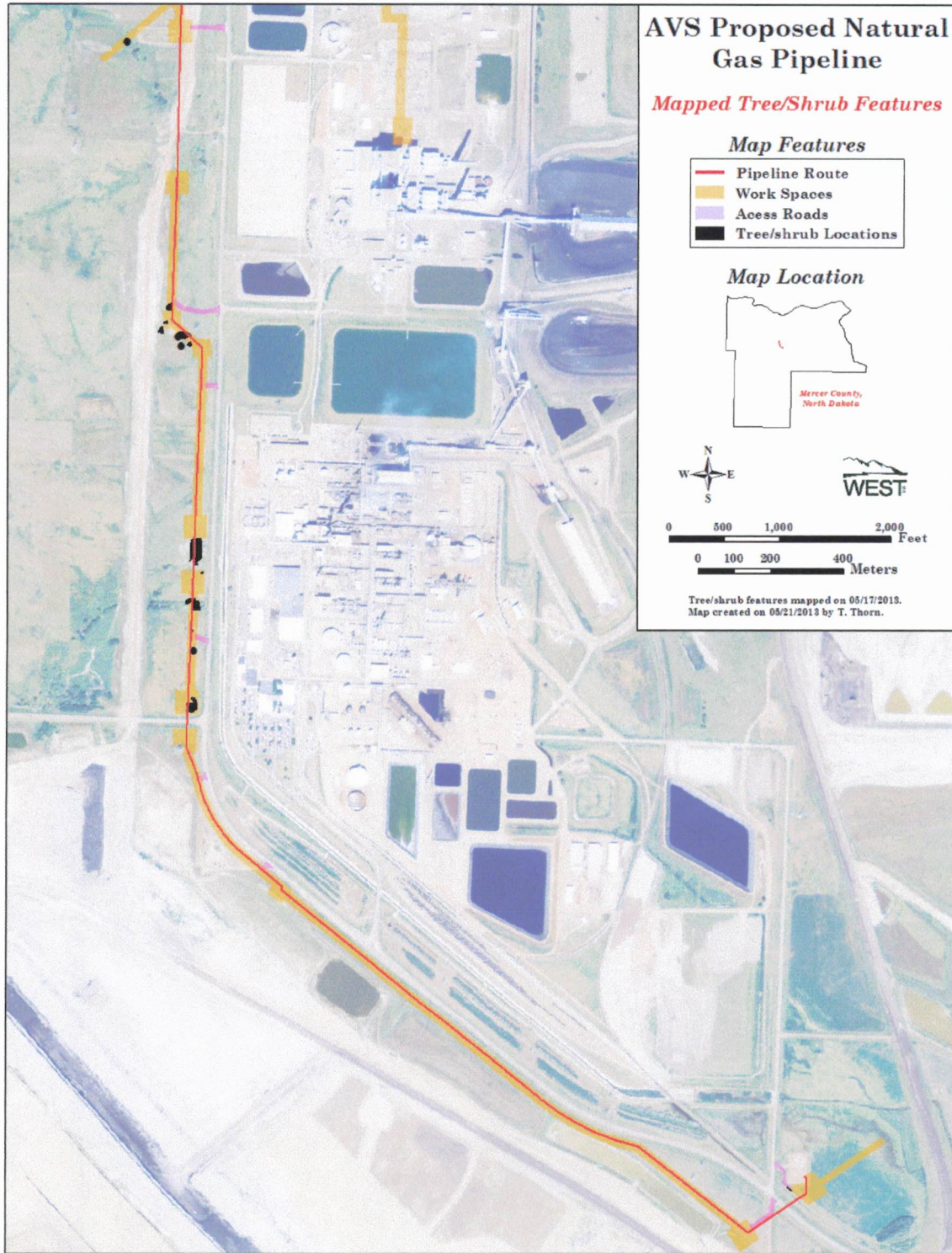


Figure 1. AVS NGP Project area and tree and shrub locations.



**STATE
HISTORICAL
SOCIETY
OF NORTH DAKOTA**

Jack Dalrymple
Governor of North Dakota

June 5, 2013

North Dakota
State Historical Board

Mr. Kevin Solie
Senior Water Quality/Waste Management Coordinator
Basin Electric Power Cooperative
1717 East Interstate Avenue
Bismarck, ND 58503-0564

Gereld Gerntholz
Valley City - President

Calvin Grinnell
New Town - Vice President

A. Ruric Todd III
Jamestown - Secretary

NDSHPO REF.: 13-0372A PSC "Basin Electric Power Cooperative's AVS Natural Gas Pipeline - Addendum 1: A Class III Cultural Resource Inventory in Mercer County, North Dakota" in portions of [T145N R88W Sections 13 14, 23 - 26 and T145N R87W Section 30] Mercer County, North Dakota

Albert I. Berger
Grand Forks

Diane K. Larson
Bismarck

Dear Mr. Solie:

Chester E. Nelson, Jr.
Bismarck

Margaret Puetz
Bismarck

We reviewed NDSHPO REF.: 13-0372A PSC "Basin Electric Power Cooperative's AVS Natural Gas Pipeline - Addendum 1: A Class III Cultural Resource Inventory in Mercer County, North Dakota," and found the report acceptable. If consulted by a federal agency, we would concur with a "No Historic Properties Affected" determination, provided the project remains as described and mapped in the above-captioned report, and "No Significant Sites Affected" at the state level.

Sara Otte Coleman
Director
Tourism Division

Kelly Schmidt
State Treasurer

Thank you for the opportunity to review this project. If you have questions please contact Susan Quinnell at squinnell@nd.gov or (701) 328-3576.

Alvin A. Jaeger
Secretary of State

Sincerely,

Mark Zimmerman
Director
Parks and Recreation
Department

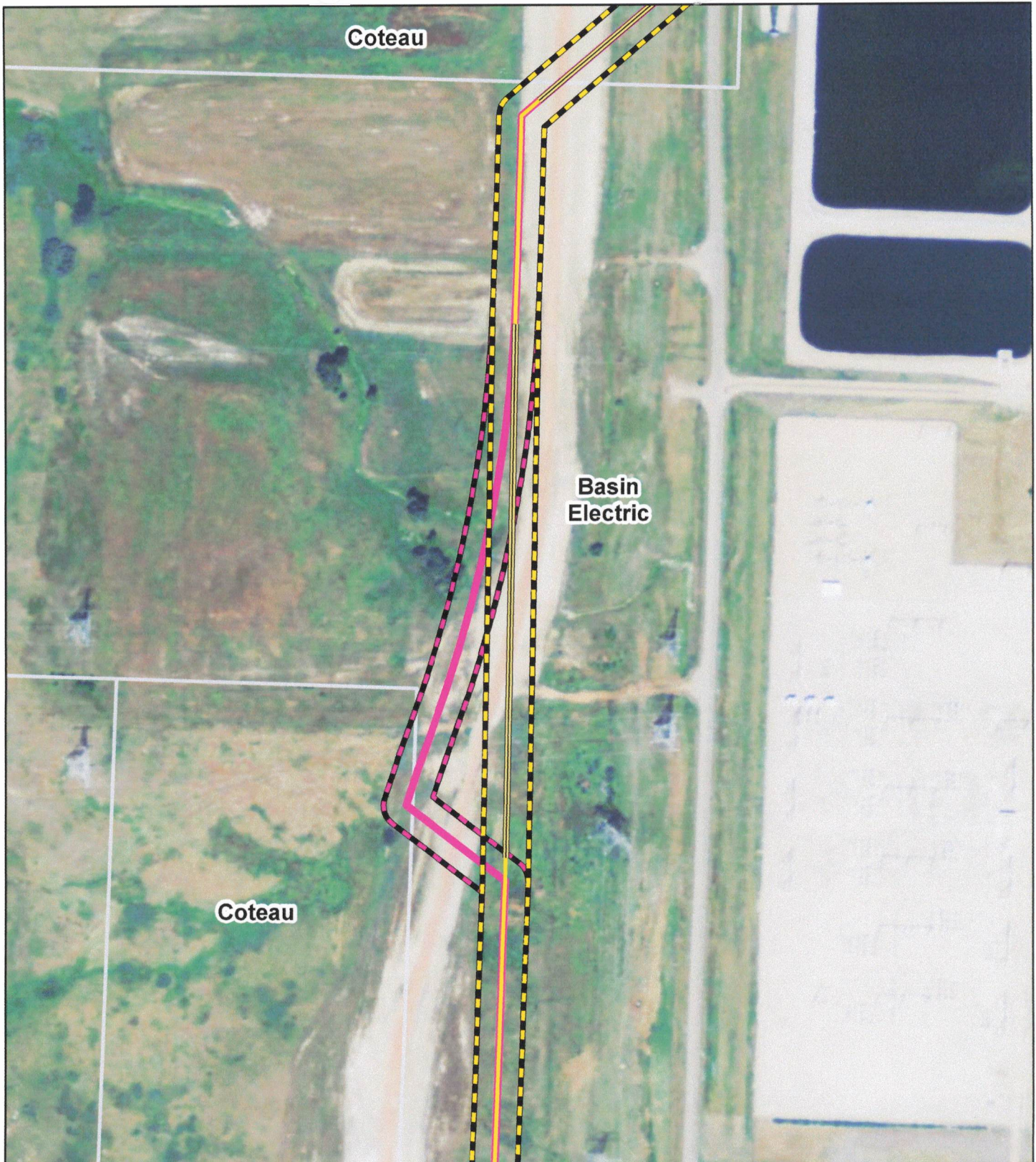
Grant Levi
Acting Director
Department of Transportation

Merlan E. Paaverud, Jr.
State Historic Preservation Officer (North Dakota)

Merlan E. Paaverud, Jr.
Director

C: MAC, Bismarck

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Map Features

-  Bored Segments
-  Proposed Pipeline
-  Proposed Pipeline Corridor
-  April 2013 Pipeline
-  April 2013 Corridor
-  Surface Ownership

**AVS-NGP Project
Construction Refinement**



Date: 6/7/2013

