

Appendix A, FHWA Cooperating and Participating Agency Letters



U.S. Department
of Transportation
**Federal Highway
Administration**

North Dakota Division

May 14, 2025

4503 Coleman Street, Suite 205
Bismarck, North Dakota 58503
Phone 701-250-4204
Fax 701-250-4395

Ms. Hanna Edens
ND Ecological Services Field Office
US Fish & Wildlife Service
3425 Miriam Avenue
Bismarck, ND 58501

**Re: Invitation to Become a Participating Agency on US 52 Four Lane Project
NDDOT Project No. 4-052(109)101, PCN 24012**

Dear Ms. Edens,

The Federal Highway Administration (FHWA), in cooperation with the North Dakota Department of Transportation (NDDOT), is initiating an environmental assessment (EA) to study the expansion of US Highway 52, located approximately 2.3 miles west of Junction 79th Ave SE to Voltaire. The total length of the study area under consideration is approximately 22 miles. Please refer to the enclosed Project Location Map.

The proposed project would expand US Highway 52 from a two-lane highway to a four-lane highway. The purpose of the proposed project, as currently defined, is to address public safety concerns, accommodate existing and future traffic needs, fulfill legislative obligations, and address social and economic demands within the region.

The US Fish and Wildlife Service (USFWS) has been identified as an agency that may have an interest in the project due to potential impacts to federally listed species and your agency's regulatory responsibilities related to the Endangered Species Act. With this letter, we extend your agency an invitation to become a participating agency with FHWA in the development of the EA, in accordance with the National Environmental Policy Act (NEPA) and the environmental review procedures outlined in 23 U.S.C. § 139. This designation does not imply that your agency supports the proposal.

Pursuant to 23 U.S.C. § 139, originally established under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and amended by the Infrastructure Investment and Jobs Act (IIJA), the roles of cooperating and participating agencies in the environmental review process are clearly defined to promote early coordination and efficient decision-making. Participating agencies are responsible for identifying, as early as practicable, any environmental, cultural, or socioeconomic issues that could substantially delay or prevent the issuance of a permit or other approval required for the project. While they do not have the same level of responsibility as cooperating agencies, participating agencies play an important role in shaping the environmental review by contributing to scoping and providing input on key elements of the analysis. We suggest that your agency's participation in this project include the following, as it relates to your area of expertise:

1. Provide early input on defining the purpose and need, determining the range of alternatives to be considered, and identifying key issues or methodologies to be addressed in the environmental analysis.
2. Participate in coordination meetings, as appropriate.
3. Review and comment on draft environmental documents to ensure that your agency's views and concerns are reflected in the analysis.

Please respond to FHWA in writing with an acceptance or denial of the invitation prior to May 30, 2025. If your agency declines, the response should state your reason for declining the invitation. If your agency declines to serve as a participating agency, the response must include the specific reason for declining and, in accordance with 23 U.S.C. § 139(d)(4), must explicitly state that your agency:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; and
- Does not intend to submit comments on the project.

If you have any questions or would like to discuss in more detail the project or our agencies' respective roles and responsibilities during the preparation of this environmental assessment, please contact Melissa Carson, FHWA Environmental Program Manager at 701.221.9470 or melissa.carson@dot.gov.

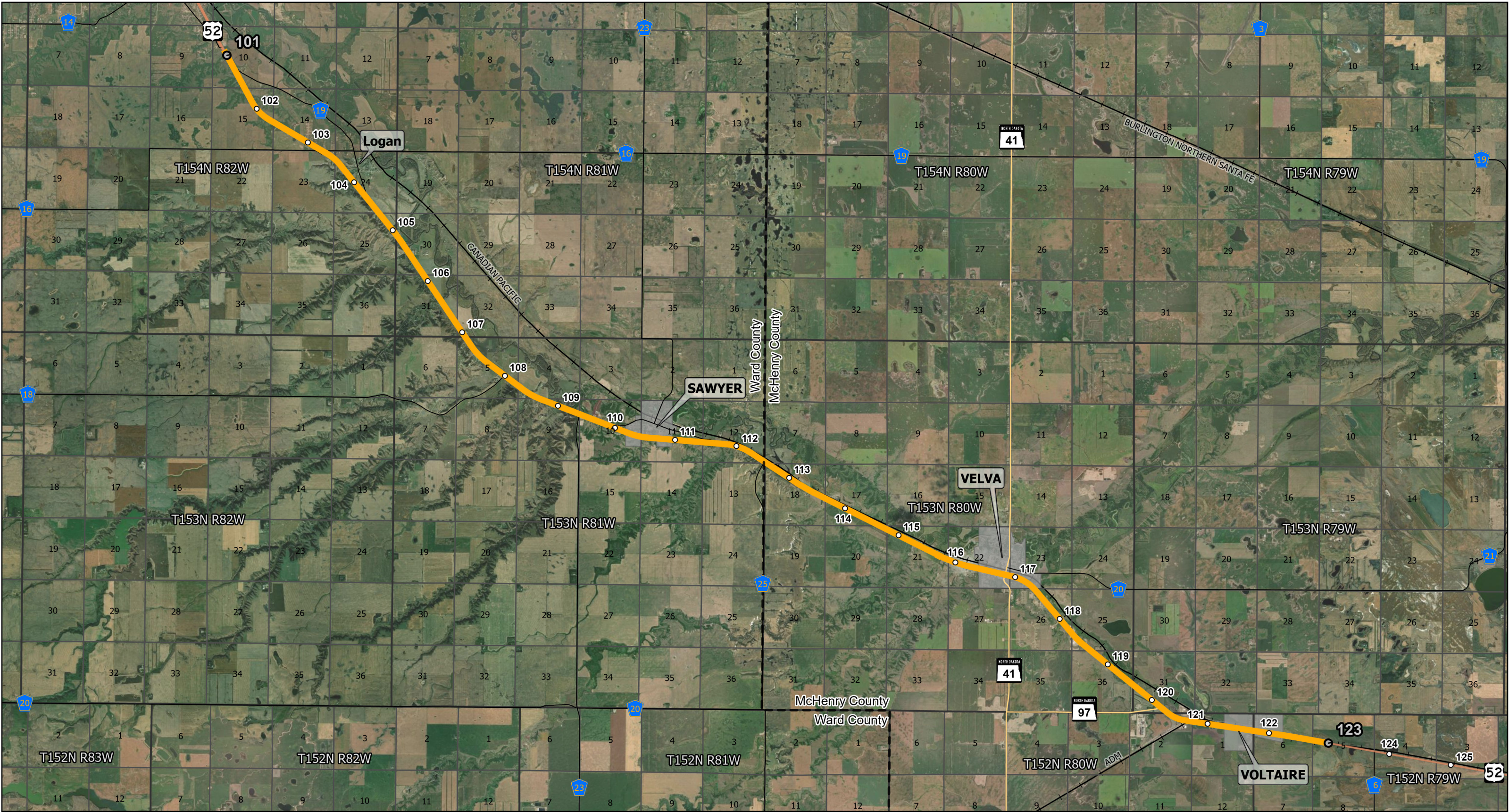
Thank you for your cooperation and interest in this project.

Sincerely,

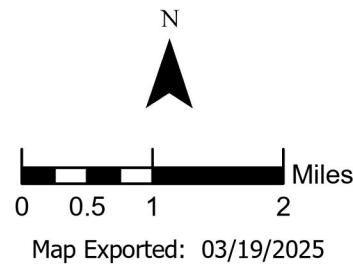
For Wendall L. Meyer
Acting Division Administrator

Enclosure

cc: Patty Winn, NDDOT
Chad Frisinger, NDDOT
Kristen Sperry, FHWA

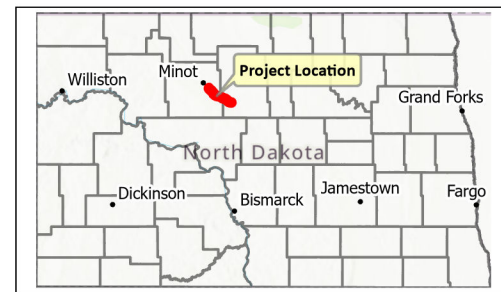


We listen. We solve.™



- Project Corridor
- US 52 Mile Markers
- Project Beginning/End Point
- State Highway
- US Highway
- Railroads
- Township Lines
- Section Lines
- County Boundary
- Corporate Boundaries

US 52 Four Lane
Ward, McHenry County
4-052(109)101, PCN 24012



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U.S. Department
of Transportation
**Federal Highway
Administration**

North Dakota Division

May 14, 2025

4503 Coleman Street, Suite 205
Bismarck, North Dakota 58503
Phone 701-250-4204
Fax 701-250-4395

Mr. Ben Soiseth
ND Regulatory Office
US Army Corps of Engineers
3319 University Dr
Bismarck, ND 58504

**Re: Invitation to Become a Participating Agency on US 52 Four Lane Project
NDDOT Project No. 4-052(109)101, PCN 24012**

Dear Mr. Soiseth,

The Federal Highway Administration (FHWA), in cooperation with the North Dakota Department of Transportation (NDDOT), is initiating an environmental assessment (EA) to study the expansion of US Highway 52, located approximately 2.3 miles west of Junction 79th Ave SE to Voltaire. The total length of the study area under consideration is approximately 22 miles. Please refer to the enclosed Project Location Map.

The proposed project would expand US Highway 52 from a two-lane highway to a four-lane highway. The purpose of the proposed project, as currently defined, is to address public safety concerns, accommodate existing and future traffic needs, fulfill legislative obligations, and address social and economic demands within the region.

The US Army Corps of Engineers (USACE) North Dakota Regulatory Office has been identified as an agency that may have an interest in the project due to potential impacts to jurisdictional waterbodies and your agency's regulatory responsibilities related to Section 404 of the Clean Water Act. With this letter, we extend your agency an invitation to become a participating agency with FHWA in the development of the EA, in accordance with the National Environmental Policy Act (NEPA) and the environmental review procedures outlined in 23 U.S.C. § 139. This designation does not imply that your agency supports the proposal.

Pursuant to 23 U.S.C. § 139, originally established under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and amended by the Infrastructure Investment and Jobs Act (IIJA), the roles of cooperating and participating agencies in the environmental review process are clearly defined to promote early coordination and efficient decision-making. Participating agencies are responsible for identifying, as early as practicable, any environmental, cultural, or socioeconomic issues that could substantially delay or prevent the issuance of a permit or other approval required for the project. While they do not have the same level of responsibility as cooperating agencies, participating agencies play an important role in shaping the environmental review by contributing to scoping and providing input on key elements of the analysis. We suggest that your agency's participation in this project include the following, as it relates to your area of expertise:

1. Provide early input on defining the purpose and need, determining the range of alternatives to be considered, and identifying key issues or methodologies to be addressed in the environmental analysis.
2. Participate in coordination meetings, as appropriate.
3. Review and comment on draft environmental documents to ensure that your agency's views and concerns are reflected in the analysis.

Please respond to FHWA in writing with an acceptance or denial of the invitation prior to May 30, 2025. If your agency declines, the response should state your reason for declining the invitation. If your agency declines to serve as a participating agency, the response must include the specific reason for declining and, in accordance with 23 U.S.C. § 139(d)(4), must explicitly state that your agency:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; and
- Does not intend to submit comments on the project.

If you have any questions or would like to discuss in more detail the project or our agencies' respective roles and responsibilities during the preparation of this environmental assessment, please contact Melissa Carson, FHWA Environmental Program Manager at 701.221.9470 or melissa.carson@dot.gov.

Thank you for your cooperation and interest in this project.

Sincerely,

For Wendall L. Meyer
Acting Division Administrator

Enclosure

cc: Patty Winn, NDDOT
Chad Frisinger, NDDOT
Kristen Sperry, FHWA



U.S. Department
of Transportation
**Federal Highway
Administration**

North Dakota Division

May 14, 2025

4503 Coleman Street, Suite 205
Bismarck, North Dakota 58503
Phone 701-250-4204
Fax 701-250-4395

Mr. John Stavrianopoulos
Upper Great Plains Regional Office
Western Area Power Administration
PO Box 35800
Billings, MT 59107-5800

**Re: Invitation to Become a Cooperating Agency on US 52 Four Lane Project
NDDOT Project No. 4-052(109)101, PCN 24012**

Dear Mr. Stavrianopoulos,

The Federal Highway Administration (FHWA), in cooperation with the North Dakota Department of Transportation (NDDOT), is initiating an environmental assessment (EA) to study the expansion of US Highway 52, located approximately 2.3 miles west of Junction 79th Ave SE to Voltaire. The total length of the study area under consideration is approximately 22 miles. ***Please refer to the enclosed Project Location Map.***

The proposed project would expand US Highway 52 from a two-lane highway to a four-lane highway. The purpose of the proposed project, as currently defined, is to address public safety concerns, accommodate existing and future traffic needs, fulfill legislative obligations, and address social and economic demands within the region.

The Western Area Power Administration (WAPA) has been identified as an agency that may have an interest in the project due to potential impacts to two existing overhead transmission lines owned and operated by WAPA. With this letter, we extend your agency an invitation to become a cooperating agency with FHWA in the development of the EA in accordance with 40 CFR 1501.6 of the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provision of the National Environmental Policy Act. This designation does not imply that your agency supports the proposal.

Pursuant to 23 U.S.C. § 139, originally established under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and amended by the Infrastructure Investment and Jobs Act (IIJA), the roles of cooperating and participating agencies are clearly defined to promote early coordination and efficient decision-making in the environmental review process. Both cooperating and participating agencies are responsible for identifying, as early as practicable, any environmental, cultural, or socioeconomic issues that could substantially delay or prevent the issuance of a permit or other approval required for the project. While participating agencies provide input and review project documents, cooperating agencies have a greater degree of authority, responsibility, and involvement, particularly in developing the environmental analysis and reviewing technical materials relevant to their expertise or jurisdiction. We suggest that your agency's role in the development of the above project should include the following as they relate to your area of expertise:

1. Provide meaningful and early input on defining the purpose and need, determining the range of alternatives to be considered, and the methodologies and level of detail required in the alternatives analysis.
2. Participate in coordination meetings, as appropriate.
3. Timely review and comment on the pre-draft or pre-final environmental documents to reflect the views and concerns of your agency on the adequacy of the document, alternatives considered, and the anticipated impacts and mitigation.

Please respond to FHWA in writing with either an acceptance or denial of this invitation by May 30, 2025. If your agency declines, we request that you include a brief explanation for your decision, consistent with the requirements outlined in 23 U.S.C. § 139.

If you have any questions or would like to discuss in more detail the project or our agencies' respective roles and responsibilities during the preparation of this environmental assessment, please contact Melissa Carson, FHWA Environmental Program Manager at 701.221.9470 or melissa.carson@dot.gov.

Thank you for your cooperation and interest in this project.

Sincerely,

For Wendall L. Meyer
Acting Division Administrator

Enclosure

cc: Patty Winn, NDDOT
Chad Frisinger, NDDOT
Kristen Sperry, FHWA



U.S. Department
of Transportation
**Federal Highway
Administration**

North Dakota Division

May 14, 2025

4503 Coleman Street, Suite 205
Bismarck, North Dakota 58503
Phone 701-250-4204
Fax 701-250-4395

Ms. Michelle Prosser
Project Manager
St. Paul District
US Army Corps of Engineers
332 Minnesota St., Suite E1500
St. Paul, MN 55101

**Re: Invitation to Become a Cooperating Agency on US 52 Four Lane Project
NDDOT Project No. 4-052(109)101, PCN 24012**

Dear Ms. Prosser,

The Federal Highway Administration (FHWA), in cooperation with the North Dakota Department of Transportation (NDDOT), is initiating an environmental assessment (EA) to study the expansion of US Highway 52, located approximately 2.3 miles west of Junction 79th Ave SE to Voltaire. The total length of the study area under consideration is approximately 22 miles. ***Please refer to the enclosed Project Location Map.***

The proposed project would expand US Highway 52 from a two-lane highway to a four-lane highway. The purpose of the proposed project, as currently defined, is to address public safety concerns, accommodate existing and future traffic needs, fulfill legislative obligations, and address social and economic demands within the region.

The US Army Corps of Engineers (USACE) St. Paul District has been identified as an agency that may have an interest in the project due to potential impacts to an existing USACE managed levee around the city of Velva and your agency's Section 408 regulatory responsibilities. With this letter, we extend your agency an invitation to become a cooperating agency with FHWA in the development of the EA in accordance with 40 CFR 1501.6 of the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provision of the National Environmental Policy Act. This designation does not imply that your agency supports the proposal.

Pursuant to 23 U.S.C. § 139, originally established under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and amended by the Infrastructure Investment and Jobs Act (IIJA), the roles of cooperating and participating agencies are clearly defined to promote early coordination and efficient decision-making in the environmental review process. Both cooperating and participating agencies are responsible for identifying, as early as practicable, any environmental, cultural, or socioeconomic issues that could substantially delay or prevent the issuance of a permit or other approval required for the project. While participating agencies provide input and review project documents, cooperating agencies have a greater degree of authority, responsibility, and involvement, particularly in developing the environmental analysis and reviewing technical materials relevant to their expertise or jurisdiction. We suggest that your agency's role in the development of the above project should include the following as they relate to your area of expertise:

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2. Participate in coordination meetings, as appropriate.
3. Timely review and comment on the pre-draft or pre-final environmental documents to reflect the views and concerns of your agency on the adequacy of the document, alternatives considered, and the anticipated impacts and mitigation.

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If you have any questions or would like to discuss in more detail the project or our agencies' respective roles and responsibilities during the preparation of this environmental assessment, please contact Melissa Carson, FHWA Environmental Program Manager at 701.221.9470 or melissa.carson@dot.gov.

Thank you for your cooperation and interest in this project.

Sincerely,

For Wendall L. Meyer
Acting Division Administrator

Enclosure

cc: Patty Winn, NDDOT
Chad Frisinger, NDDOT
Kristen Sperry, FHWA

From: Mike Huffington
Sent: Monday, April 13, 2026 2:06 PM
To: Mikayla Boche; Nikki Olson; Whitney Sauskojus
Cc: Josh Kueber
Subject: FW: US 52 Four Lane - FHWA Invitation to Participate

See USACE Regulatory acceptance email below.



Mike Huffington
Senior Market Leader
3350 38th Ave S • Fargo, ND 58104
Direct: (701) 280-8655 • **Mobile:** (507) 456-7006
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From: Inman, Amber L CIV USARMY CENWO (USA) <Amber.L.Inman@usace.army.mil>
Sent: Thursday, May 29, 2025 7:11 AM
To: Mike Huffington <mike.huffington@ulteig.com>
Cc: Carson, Melissa (FHWA) <melissa.carson@dot.gov>; Nygard, Jeremy S CIV USARMY CENWO (USA) <Jeremy.S.Nygard@usace.army.mil>; Soiseth, Benjamin N CIV USARMY CENWO (USA) <Benjamin.N.Soiseth@usace.army.mil>
Subject: RE: US 52 Four Lane - FHWA Invitation to Participate

External Sender Warning: Proceed with Caution!

Good morning Mike-

Ben Soiseth is out this week; the Corps accepts your invitation to be a participating party in the environmental review process for the US Highway 52 project. Thanks and enjoy the rest of your week!

Respectfully,
Amber Inman
ND Regulatory Project Manager
U.S. Army Corps of Engineers
(701) 989-6428 (office)
(701) 226-2719 (cell)

From: Mike Huffington <mike.huffington@ulteig.com>
Sent: Thursday, May 15, 2025 6:38 AM
To: Soiseth, Benjamin N CIV USARMY CENWO (USA) <Benjamin.N.Soiseth@usace.army.mil>
Cc: Carson, Melissa (FHWA) <melissa.carson@dot.gov>
Subject: [Non-DoD Source] US 52 Four Lane - FHWA Invitation to Participate

Good morning Mr. Soiseth,

Attached is a formal invitation letter from the Federal Highway Administration, inviting the US Army Corps of Engineers – North Dakota Regulatory Office to serve as a participating agency in the environmental review process for the US Highway 52 Four-Lane Expansion Project.

Please don't hesitate to reach out with any questions.

Kindly note that a response to this invitation is requested by **May 30, 2025**.

Sincerely,



Mike Huffington

Senior Market Leader

3350 38th Ave S • Fargo, ND 58104

Direct: [\(701\) 280-8655](tel:7012808655) • **Mobile:** [\(507\) 456-7006](tel:5074567006)

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From: [Mike Huffington](#)
To: [Mikayla Bocher](#); [Nikki Olson](#); [Josh Kueher](#); [Whitney Sauskojus](#)
Subject: FW: [EXTERNAL] US 52 Four Lane - FHWA Invitation to Participate
Date: Wednesday, March 25, 2026 1:40:52 PM
Attachments: [image001.png](#)



Mike Huffington
Senior Market Leader
3350 38th Ave S • Fargo, ND 58104
Direct: [\(701\) 280-8655](tel:(701)280-8655) • **Mobile:** [\(507\) 456-7006](tel:(507)456-7006)
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From: Edens, Hanna K <hanna_edens@fws.gov>
Sent: Monday, June 9, 2025 3:19 PM
To: Mike Huffington <mike.huffington@ulteig.com>
Cc: Carson, Melissa (FHWA) <melissa.carson@dot.gov>
Subject: RE: [EXTERNAL] US 52 Four Lane - FHWA Invitation to Participate

External Sender Warning: Proceed with Caution!

Hey Mike and Melissa,

Thank you for the opportunity to collaborate as a cooperating agency for the US Highway 52 Four-Lane Expansion Project. We are not able to take on the role as a cooperating agency for this project at this time, however, we will continue to engage in consultations for ESA listed species via section 7 consultation. Appreciate your patience with us getting back to you on this.

Best,
Hanna

~~~~~  
**Hanna Edens, MSc, AWB®**

Fish and Wildlife Biologist | North Dakota Field Office  
Ecological Services | U.S. Fish and Wildlife Service  
Main Office: (701) 250-4481  
Cell Phone: (701) 954-0312  
Email: [hanna\\_edens@fws.gov](mailto:hanna_edens@fws.gov)

---

**From:** Mike Huffington <[mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com)>  
**Sent:** Thursday, May 15, 2025 6:38 AM  
**To:** Edens, Hanna K <[hanna\\_edens@fws.gov](mailto:hanna_edens@fws.gov)>  
**Cc:** Carson, Melissa (FHWA) <[melissa.carson@dot.gov](mailto:melissa.carson@dot.gov)>  
**Subject:** [EXTERNAL] US 52 Four Lane - FHWA Invitation to Participate



**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Good morning Ms. Edens,

Attached is a formal invitation letter from the Federal Highway Administration, inviting the US Fish and Wildlife Service to serve as a participating agency in the environmental review process for the US Highway 52 Four-Lane Expansion Project.

Please don't hesitate to reach out with any questions.

Kindly note that a response to this invitation is requested by **May 30, 2025**.

Sincerely,



**Mike Huffington**

Senior Market Leader

3350 38th Ave S • Fargo, ND 58104

**Direct:** [\(701\) 280-8655](tel:7012808655) • **Mobile:** [\(507\) 456-7006](tel:5074567006)

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---

**From:** Stavrianopoulos, John <Stavrianopoulos@WAPA.GOV>  
**Sent:** Tuesday, August 5, 2025 3:23 PM  
**To:** Mike Huffington  
**Cc:** Noel, David  
**Subject:** RE: [EXTERNAL] RE: US 52 Four Lane - FHWA Invitation to Participate

**External Sender Warning: Proceed with Caution!**

Hello Mr. Huffington,

Thank you for the reminder.

We are okay with not being a participating agency, and you are free to proceed without us.

Thank you,

**John Stavrianopoulos | Transmission Lines Engineer**  
701-221-4555 | [stavrianopoulos@wapa.gov](mailto:stavrianopoulos@wapa.gov)  
Western Area Power Administration | Upper Great Plains

---

**From:** Mike Huffington <mike.huffington@ulteig.com>  
**Sent:** Tuesday, August 5, 2025 10:14 AM  
**To:** Stavrianopoulos, John <Stavrianopoulos@WAPA.GOV>  
**Subject:** [EXTERNAL] RE: US 52 Four Lane - FHWA Invitation to Participate

**EXTERNAL E-MAIL: Before you click a link or open an attachment... STOP and THINK.**  
**Forward any suspicious e-mail to [spam@wapa.gov](mailto:spam@wapa.gov), or call WITCC at (720) 962-7111.**

Good morning Mr. Stavrianopoulos,

I am just following up regarding my email back in May inviting WAPA to be a participating agency for our ongoing environmental review for the NDDOT four-lane expansion of US Highway 52. I know your agency has undergone a number of personnel changes this year, but we have not yet received a response regarding our invitation, and I wanted to follow up and see if WAPA was still interested in being a participating agency on the project. We are currently in the process of writing the Draft EA and would provide WAPA a copy of the document for review and comment should you elect to be a participating agency.

If you could please respond at your earliest convenience, it would be greatly appreciated.

Sincerely,

 **Mike Huffington**  
Senior Market Leader  
3350 38th Ave S • Fargo, ND 58104  
**Direct:** (701) 280-8655 • **Mobile:** (507) 456-7006  
Employee-Owned | [ulteig.com](http://ulteig.com)

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---

**From:** Mike Huffington  
**Sent:** Thursday, May 15, 2025 6:39 AM  
**To:** Stavrianopoulos, John <[stavrianopoulos@wapa.gov](mailto:stavrianopoulos@wapa.gov)>  
**Cc:** Carson, Melissa (FHWA) <[melissa.carson@dot.gov](mailto:melissa.carson@dot.gov)>  
**Subject:** US 52 Four Lane - FHWA Invitation to Participate

Good morning Mr. Stavrianopoulos,

Attached is a formal invitation letter from the Federal Highway Administration, inviting the Western Area Power Administration to serve as a cooperating agency in the environmental review process for the US Highway 52 Four-Lane Expansion Project.

Please don't hesitate to reach out with any questions.

Kindly note that a response to this invitation is requested by **May 30, 2025**.

Sincerely,



**Mike Huffington**  
Senior Market Leader  
3350 38th Ave S • Fargo, ND 58104  
**Direct:** (701) 280-8655 • **Mobile:** (507) 456-7006  
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**From:** [Mike Huffington](#)  
**To:** [Mikayla Bocher](#); [Nikki Olson](#); [Josh Kueher](#); [Whitney Sauskojus](#)  
**Subject:** FW: US 52 Four Lane - FHWA Invitation to Participate  
**Date:** Wednesday, March 25, 2026 1:41:21 PM  
**Attachments:** [image001.png](#)

---



**Mike Huffington**  
Senior Market Leader  
3350 38th Ave S • Fargo, ND 58104  
**Direct:** [\(701\) 280-8655](#) • **Mobile:** [\(507\) 456-7006](#)  
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---

**From:** Prosser, Michelle E CIV USARMY CEMVP (USA) <[Michelle.E.Prosser@usace.army.mil](mailto:Michelle.E.Prosser@usace.army.mil)>  
**Sent:** Friday, August 8, 2025 2:56 PM  
**To:** Mike Huffington <[mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com)>  
**Subject:** RE: US 52 Four Lane - FHWA Invitation to Participate

**External Sender Warning: Proceed with Caution!**

Hi Mike,

My apologies for not getting back to you sooner.

No, the Corps will not be able to be a cooperating agency on this project. We don't have funding at this time to be able to participate.

Thank you,

Michelle

---

**From:** Mike Huffington <[mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com)>  
**Sent:** Tuesday, August 5, 2025 4:04 PM  
**To:** Prosser, Michelle E CIV USARMY CEMVP (USA) <[Michelle.E.Prosser@usace.army.mil](mailto:Michelle.E.Prosser@usace.army.mil)>  
**Subject:** [Non-DoD Source] RE: US 52 Four Lane - FHWA Invitation to Participate

Good afternoon Ms. Prosser,

I am just following up regarding my email back in May inviting the US Army Corps of Engineers – St. Paul District to be a cooperating agency for our ongoing environmental review for the NDDOT four-lane expansion of US Highway 52. I was going through my records today and realized that I do not believe we have received a response regarding our invitation, and I wanted to follow up and see if your agency was still interested in being a cooperating agency on the project. We are currently in the process of writing the Draft EA and would provide your office a copy of the document for review and comment should you elect to be a cooperating agency.



If you could please respond at your earliest convenience, it would be greatly appreciated.

Sincerely,



**Mike Huffington**

Senior Market Leader

3350 38th Ave S • Fargo, ND 58104

**Direct:** [\(701\) 280-8655](tel:7012808655) • **Mobile:** [\(507\) 456-7006](tel:5074567006)

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**From:** Mike Huffington

**Sent:** Thursday, May 15, 2025 6:39 AM

**To:** Prosser, Michelle E CIV USARMY CEMVP (USA) <[michelle.e.prosser@usace.army.mil](mailto:michelle.e.prosser@usace.army.mil)>

**Cc:** Carson, Melissa (FHWA) <[melissa.carson@dot.gov](mailto:melissa.carson@dot.gov)>

**Subject:** US 52 Four Lane - FHWA Invitation to Participate

Good morning Ms. Prosser,

Attached is a formal invitation letter from the Federal Highway Administration, inviting the US Army Corps of Engineers – St. Paul District to serve as a cooperating agency in the environmental review process for the US Highway 52 Four-Lane Expansion Project.

Please don't hesitate to reach out with any questions.

Kindly note that a response to this invitation is requested by **May 30, 2025**.

Sincerely,



**Mike Huffington**

Senior Market Leader

3350 38th Ave S • Fargo, ND 58104

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# Appendix B, Solicitation of Views Package and Responses

| CTitle      | First    | Last         | Title                                                                                 | Department                          | Agency                                 | Email                                                                              | Address                                               | City        | State | Zip        |
|-------------|----------|--------------|---------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------|-------------|-------|------------|
| Mr.         | Nathan   | Davis        | Executive Director                                                                    |                                     | Indian Affairs Commission              | <a href="mailto:nathan.davis@nd.gov">nathan.davis@nd.gov</a>                       | 600 E. Blvd. Ave.<br>1st Floor, Judicial Wing, Rm 117 | Bismarck    | ND    | 58505-0300 |
| MG          | Alan     | Dohrmann     | Adjutant General                                                                      |                                     | ND National Guard                      | <a href="mailto:alan.s.dohrmann.mil@army.mil">alan.s.dohrmann.mil@army.mil</a>     | PO Box 5511                                           | Bismarck    | ND    | 58506-5511 |
| Mr.         | Justin   | Messner      | Disaster Recovery Chief                                                               | Department of Homeland Security     | ND Department of Emergency Services    | <a href="mailto:jmessner@nd.gov">jmessner@nd.gov</a>                               | PO Box 5511                                           | Bismarck    | ND    | 58506      |
| Mr.         | Buce     | Kreft        | Supervisor                                                                            | Conservation Section                | ND Game & Fish Department              | <a href="mailto:bkreft@nd.gov">bkreft@nd.gov</a>                                   | 100 Bismarck Expressway                               | Bismarck    | ND    | 58501-5095 |
| Mr.         | Cody     | Schulz       | Director                                                                              |                                     | ND Parks & Recreation Dept.            | <a href="mailto:parkrec@nd.gov">parkrec@nd.gov</a>                                 | 1600 E. Century Ave., Suite 3                         | Bismarck    | ND    | 58503-0649 |
|             |          |              | Project Reviews                                                                       |                                     | Department of Water Resources          | <a href="mailto:dwrprojectreview@nd.gov">dwrprojectreview@nd.gov</a>               | 900 E. Blvd. Ave.                                     | Bismarck    | ND    | 58505-0850 |
| Dr.         | Jodi     | Delozier     | Soil Conservation Program Director and Specialist                                     | NDSU Extension                      | Soil Conservation Committee            | <a href="mailto:jodi.delozier@ndsu.edu">jodi.delozier@ndsu.edu</a>                 | NDSU Dept. 7390, PO Box 6050                          | Fargo       | ND    | 58108-6050 |
| Dr.         | Clint    | Boyd         | Senior Paleontologist                                                                 |                                     | ND Geological Survey                   | <a href="mailto:caboyd@nd.gov">caboyd@nd.gov</a>                                   | 600 E. Blvd. Ave.                                     | Bismarck    | ND    | 58505      |
| Mr.         | David    | Glatt        | Director                                                                              |                                     | ND Department of Environmental Quality | <a href="mailto:dglatt@nd.gov">dglatt@nd.gov</a>                                   | 4201 Normandy St.                                     | Bismarck    | ND    | 58503-1324 |
|             |          |              | Project Reviews                                                                       |                                     | Department of Water Resources          | <a href="mailto:dwrprojectreview@nd.gov">dwrprojectreview@nd.gov</a>               | 900 E. Blvd. Ave.                                     | Bismarck    | ND    | 58505-0850 |
| Mr.         | Daniel   | Lewis, P.E.  |                                                                                       | Chief Missile Engineering           | Minot Air Force Base                   | <a href="mailto:daniel.lewis.23@us.af.mil">daniel.lewis.23@us.af.mil</a>           | 445 Peacekeeper Place                                 | Minot AFB   | ND    | 58705      |
| Mr.         | Cy       | Munos        | Cable Affairs Officer                                                                 | 91st Missile Maintenance Squadron   | Minot Air Force Base                   | <a href="mailto:cy.munos@us.af.mil">cy.munos@us.af.mil</a>                         | 300 Minuteman Drive                                   | Minot AFB   | ND    | 58705      |
| Mr.         | Timothy  | LaPointe     | Regional Director                                                                     | Great Plains Regional Office        | Bureau of Indian Affairs               | <a href="mailto:timothy.lapointe@bia.gov">timothy.lapointe@bia.gov</a>             | 115 4th Ave. SE, Suite 400                            | Aberdeen    | SD    | 57401      |
| Mr.         | Marc     | Kress        | North Dakota Maintenance Manager                                                      | Western Area Power Admin.           | US Department of Energy                | <a href="mailto:Kress@wapa.gov">Kress@wapa.gov</a>                                 | PO Box 1173                                           | Bismarck    | ND    | 58502-1173 |
|             |          |              | Manager                                                                               |                                     | US Fish & Wildlife Service             |                                                                                    |                                                       |             |       |            |
|             |          |              | Manager                                                                               |                                     | US Fish & Wildlife Service             |                                                                                    |                                                       |             |       |            |
| Mr.         | Cem      | Onbasi       | Accountant                                                                            |                                     | Jefferson Lines                        | <a href="mailto:Conbasi@jeffersonlines.com">Conbasi@jeffersonlines.com</a>         | 2100 East 26th St                                     | Minneapolis | MN    | 58404      |
| Mr.         | Darrell  | Francis      | Executive Director                                                                    |                                     | Souris Basin Transportation Board Inc. | <a href="mailto:sbtransit@srt.com">sbtransit@srt.com</a>                           | PO Box 2211                                           | Minot       | ND    | 58702      |
| Mr.         | Brian    | Horinka      | Transit Director                                                                      |                                     | Minot, City of                         | <a href="mailto:brian.horinka@minotnd.org">brian.horinka@minotnd.org</a>           | 515 2nd Avenue SW                                     | Minot       | ND    | 58701      |
| Ms.         | Lisa     | Bartlett     | Director                                                                              |                                     | Kenmare Wheels & Meals, Inc.           | <a href="mailto:wandm@restel.net">wandm@restel.net</a>                             | 221 N Central Avenue                                  | Kenmare     | ND    | 58746      |
| Mr.         | Thomas   | Claeys       | State Forester                                                                        |                                     | ND Forest Service                      | <a href="mailto:Thomas.Claeys@ndsu.edu">Thomas.Claeys@ndsu.edu</a>                 | 916 East Interstate Ave., Suite #4                    | Bismarck    | ND    | 58503-1227 |
| Mr.         | Mark     | Johnson      | Executive Director                                                                    |                                     | ND Association of Counties             |                                                                                    | 1661 Capitol Way, PO Box 877                          | Bismarck    | ND    | 58502-0877 |
| Mr.         | Edward   | Murphy       | State Geologist                                                                       |                                     | ND Geological Survey                   | <a href="mailto:emurphy@nd.gov">emurphy@nd.gov</a>                                 | 600 E. Blvd. Ave.                                     | Bismarck    | ND    | 58505-0840 |
| Mr.         | Amundson | Erik         | Regional Administrator                                                                | Regional Office                     | Department of HUD                      | <a href="mailto:erik.amundson@hud.gov">erik.amundson@hud.gov</a>                   | 1670 Broadway, Ste. 200                               | Denver      | CO    | 80202-4813 |
|             |          |              | Director, Federal Insurance & Hazard Mitigation Division                              | Region 8                            | Federal Emergency Mngmt. Agency        |                                                                                    | Bldg 710, Box 25267                                   | Denver      | CO    | 80225      |
| Mr.         | Eric     | Laux         | Chief, Environmental Resources and MO River Recovery Program Plan Formulation Section | Omaha District Attn: CENWO-PM-AC    | US Army Corps of Engineers             |                                                                                    | 1616 Capitol Avenue                                   | Omaha       | NE    | 68102-4901 |
| Ms.         | Mary     | Podoll       | State Conservationist                                                                 | NRCS                                | US Department of Agriculture           | <a href="mailto:mary.podoll@nd.usda.gov">mary.podoll@nd.usda.gov</a>               | PO Box 1458                                           | Bismarck    | ND    | 58502-1458 |
| Mr.         | Alex     | Smith        |                                                                                       | Economic Development Administration | US Department of Commerce              | <a href="mailto:asmith1@eda.gov">asmith1@eda.gov</a>                               | 1244 Speer Blvd., Suite 431                           | Denver      | CO    | 80204      |
| Mr.         | Matt     | Hubner       | NEPA Reviewer: Transportation Lead                                                    | Region 8, EPR-N                     | US Environmental Protection Agency     | <a href="mailto:hubner.matt@epa.gov">hubner.matt@epa.gov</a>                       | 1595 Wynkoop Street                                   | Denver      | CO    | 80202-1129 |
| Ms.         | Judy     | Bloom        | Manager                                                                               | Region 8, EPR-EP                    | US Environmental Protection Agency     |                                                                                    | 1595 Wynkoop Street                                   | Denver      | CO    | 80202-1129 |
| Senator     | Kevin    | Cramer       | US Senator                                                                            |                                     | US Federal Building, Room 228          |                                                                                    | 220 E. Rosser Ave.                                    | Bismarck    | ND    | 58501      |
| Senator     | John     | Hoeven       | US Senator                                                                            |                                     | US Federal Building, Room 312          |                                                                                    | 220 E. Rosser Ave.                                    | Bismarck    | ND    | 58501      |
| Congressman | Kelly    | Armstrong    | Congressman                                                                           |                                     | US Federal Building, Room 228          |                                                                                    | 220 E. Rosser Ave.                                    | Bismarck    | ND    | 58501      |
| Ms.         | Ben      | Soiseth      | Manager                                                                               | ND Regulatory Office                | US Army Corps of Engineers             | <a href="mailto:CENWO-OD-RND@usace.army.mil">CENWO-OD-RND@usace.army.mil</a>       | 3319 University Drive                                 | Bismarck    | ND    | 58504      |
| Mr.         | Joel     | Galloway     | Supervisor                                                                            | Water Resources Division            | US Geological Survey                   | <a href="mailto:jgallowa@usgs.gov">jgallowa@usgs.gov</a>                           | 821 E. Interstate Ave.                                | Bismarck    | ND    | 58501      |
| Advocacy    | Group    | Contact      |                                                                                       |                                     |                                        |                                                                                    |                                                       |             |       |            |
|             |          |              | Assessor                                                                              |                                     | City of Minot                          | <a href="mailto:assessor@minotnd.gov">assessor@minotnd.gov</a>                     | 10 3rd Ave SW                                         | Minot       | ND    | 58701      |
|             | Tom      | Ross         | Mayor                                                                                 |                                     | City of Minot                          | <a href="mailto:mayor@minotnd.gov">mayor@minotnd.gov</a>                           | 10 3rd Ave SW                                         | Minot       | ND    | 58701      |
|             | Dave     | Rodman       | Traffic Foreman                                                                       |                                     | City of Minot                          | <a href="mailto:dave.rodman@minotnd.gov">dave.rodman@minotnd.gov</a>               | PO Box 5006                                           | Minot       | ND    | 58702      |
| PE          | Lance    | Meyer        | City Engineer                                                                         |                                     | City of Minot                          | <a href="mailto:engineer@minotnd.gov">engineer@minotnd.gov</a>                     | PO Box 5006                                           | Minot       | ND    | 58702      |
|             | John     | Klug         | Police Chief                                                                          |                                     | City of Minot                          | <a href="mailto:john.klug@minotnd.gov">john.klug@minotnd.gov</a>                   | PO Box 5006                                           | Minot       | ND    | 58702      |
|             | Elly     | DesLauriers  | Director of Parks                                                                     |                                     | City of Minot                          | <a href="mailto:elly@minotparks.com">elly@minotparks.com</a>                       | PO Box 538                                            | Minot       | ND    | 58702      |
|             | Kelli    | Kronschnabel | Fire Chief                                                                            |                                     | City of Minot                          | <a href="mailto:kelli.kronschnabel@minotnd.gov">kelli.kronschnabel@minotnd.gov</a> | PO Box 5006                                           | Minot       | ND    | 58702      |
|             | Brekka   | Kramer       | President                                                                             | Chamber of Commerce                 | City of Minot                          | <a href="mailto:brekka@minotchamberedc.com">brekka@minotchamberedc.com</a>         | PO Box 940                                            | Minot       | ND    | 58702      |
|             | Brian    | Billingsley  | Director                                                                              | Community and Economic Development  | City of Minot                          | <a href="mailto:brian.billingsley@minotnd.gov">brian.billingsley@minotnd.gov</a>   | PO Box 5006                                           | Minot       | ND    | 58702      |
|             | Perry    | Olson        | President                                                                             | Park Board                          | City of Minot                          | <a href="mailto:perry.olson@minotparks.com">perry.olson@minotparks.com</a>         | PO Box 5006                                           | Minot       | ND    | 58702      |
|             | Doug     | Diedrichsen  | Principal Planner                                                                     | Planning                            | City of Minot                          | <a href="mailto:planner@minotnd.gov">planner@minotnd.gov</a>                       | PO Box 5006                                           | Minot       | ND    | 58702      |
|             | Brian    | Horinka      | Transit Superintendent                                                                | Public Works                        | City of Minot                          | <a href="mailto:minottransit@minotnd.gov">minottransit@minotnd.gov</a>             | PO Box 5006                                           | Minot       | ND    | 58702      |
|             | Kevin    | Braaten      | Superintendent                                                                        | Storm Sewer                         | City of Minot                          | <a href="mailto:pw@minotnd.gov">pw@minotnd.gov</a>                                 | PO Box 5006                                           | Minot       | ND    | 58702      |
|             | Scott    | Faul         | Superintendent                                                                        |                                     | Minot School District                  | <a href="mailto:scott.faul@minot.k12.nd.us">scott.faul@minot.k12.nd.us</a>         | 215 2nd St SE                                         | Minot       | ND    | 58701      |
|             | Tessa    | Lagge        | Auditor                                                                               |                                     | City of Sawyer                         | <a href="mailto:cityofsawyer58781@outlook.com">cityofsawyer58781@outlook.com</a>   | 45 Main St N PO Box 227                               | Sawyer      | ND    | 58781      |
|             | Wayne    | Flores       | Mayor                                                                                 |                                     | City of Sawyer                         | <a href="mailto:wflores0666@gmail.com">wflores0666@gmail.com</a>                   | 45 Main St N PO Box 227                               | Sawyer      | ND    | 58781      |
|             | Mike     | Beeter       | Chairperson                                                                           |                                     | City of Sawyer                         | <a href="mailto:cityofsawyer58781@outlook.com">cityofsawyer58781@outlook.com</a>   | 45 Main St N PO Box 227                               | Sawyer      | ND    | 58781      |
|             | Golden   | Melland      | Council Member                                                                        |                                     | City of Sawyer                         | <a href="mailto:cityofsawyer58781@outlook.com">cityofsawyer58781@outlook.com</a>   | 45 Main St N PO Box 227                               | Sawyer      | ND    | 58781      |
|             | Tom      | Kempf        | Council Member                                                                        |                                     | City of Sawyer                         | <a href="mailto:cityofsawyer58781@outlook.com">cityofsawyer58781@outlook.com</a>   | 45 Main St N PO Box 227                               | Sawyer      | ND    | 58781      |
|             | Susan    | Schmidt      | Council Member                                                                        |                                     | City of Sawyer                         | <a href="mailto:cityofsawyer58781@outlook.com">cityofsawyer58781@outlook.com</a>   | 45 Main St N PO Box 227                               | Sawyer      | ND    | 58781      |
|             | Pat      | Weigel       | Fire Chief                                                                            |                                     | City of Sawyer                         |                                                                                    | 104 Dakota Ave                                        | Sawyer      | ND    | 58781      |
|             | Ken      | Yarbrough    | Superintendent                                                                        | Public Works                        | City of Sawyer                         | <a href="mailto:cityofsawyer58781@outlook.com">cityofsawyer58781@outlook.com</a>   | 45 Main St N PO Box 227                               | Sawyer      | ND    | 58781      |
|             | Wayne    | Trottier     | Superintendent                                                                        |                                     | Sawyer School District                 | <a href="mailto:wayne.trottier@k12.nd.us">wayne.trottier@k12.nd.us</a>             | 25 1st Ave SW                                         | Sawyer      | ND    | 58781      |
|             | Jenny    | Johns        | Auditor                                                                               |                                     | City of Velva                          | <a href="mailto:velvand@srt.com">velvand@srt.com</a>                               | 101 1st St W PO Box 219                               | Velva       | ND    | 58790      |
|             | Mike     | Schreiner    | Commissioner                                                                          | Police/Fire/Finance/Revenue         | City of Velva                          | <a href="mailto:Schreiner.velvacity@gmail.com">Schreiner.velvacity@gmail.com</a>   | 101 1st St W PO Box 219                               | Velva       | ND    | 58790      |
|             | Mary Liz | Davis        | Commissioner                                                                          | Finance/Revenue and Sewage          | City of Velva                          | <a href="mailto:davis.velvacity@gmail.com">davis.velvacity@gmail.com</a>           | 101 1st St W PO Box 219                               | Velva       | ND    | 58790      |
|             | Ben      | Zietz        | Commissioner                                                                          | Water and Sewage                    | City of Velva                          | <a href="mailto:zietz.velvacity@gmail.com">zietz.velvacity@gmail.com</a>           | 101 1st St W PO Box 219                               | Velva       | ND    | 58790      |

| CTitle | First    | Last        | Title                                      | Department                                      | Agency                           | Email                        | Address                         | City        | State | Zip   |
|--------|----------|-------------|--------------------------------------------|-------------------------------------------------|----------------------------------|------------------------------|---------------------------------|-------------|-------|-------|
|        | Gene     | Jenson      | Commissioner                               | Streets/Improvements/Cemetery/Oversight         | City of Velva                    | ndhunter1982@gmail.com       | 101 1st St W PO Box 219         | Velva       | ND    | 58790 |
|        | Dave     | Keller      | Commissioner                               | Streets/Improvements/Wasteworks                 | City of Velva                    |                              | 101 1st St W PO Box 219         | Velva       | ND    | 58790 |
|        | Mike     | Heisler     | President                                  | Park Board                                      | City of Velva                    | velvapark@gmail.com          | 101 1st St W PO Box 219         | Velva       | ND    | 58790 |
|        | Kelly    | Jemtrud     | Superintendent                             | Public Works                                    | City of Velva                    | velvand@srt.com              | 101 1st St W PO Box 219         | Velva       | ND    | 58790 |
|        | Monty    | Mayer       | Superintendent                             |                                                 | Velva School District            | monty.mayer@k12.nd.us        | 101 4th St W                    | Velva       | ND    | 58790 |
|        | Charles  | Schmaltz    | Mayor                                      |                                                 | City of Voltaire                 |                              | PO Box 156                      | Voltaire    | ND    | 58792 |
|        | Darlene  | Carpenter   | Auditor / Superintendent of Schools        |                                                 | McHenry County                   | dcarpenter@nd.gov            | 407 Main Street S. Room 201     | Towner      | ND    | 58788 |
|        | Jeff     | Smette      | Chairman                                   | Park Board                                      | McHenry County                   | jeffrey.smette@ndsu.edu      | 407 Main Street S. Room 201     | Towner      | ND    | 58788 |
|        | Lorinda  | Haman       | Secretary                                  | Water Resource Board                            | McHenry County                   |                              | PO Box 284                      | Towner      | ND    | 58788 |
|        | Kristine | Brodehl     | Board Member Administrator                 | Planning/Zoning Committee                       | McHenry County                   |                              | 407 Main Street S. Room 201     | Towner      | ND    | 58788 |
|        |          |             |                                            | North McHenry County Soil Conservation District | McHenry County                   | northmchenryscd@gmail.com    | 705 Main St S STE #2            | Towner      | ND    | 58788 |
|        |          |             |                                            | South McHenry County Soil Conservation District | McHenry County                   |                              | 500 Central Ave E               | Velva       | ND    | 58790 |
|        | Armann   | Anderson    | Commission Chair / District 1 Commissioner |                                                 | McHenry County                   |                              | 407 Main Street S. Room 201     | Towner      | ND    | 58788 |
|        | Kelsey   | Siegler     | Disaster Management                        | Emergency Management Coordinator                | McHenry County                   | pierceem@nd.gov              | 407 Main Street S. Room 201     | Towner      | ND    | 58788 |
|        | Darlene  | Carpenter   |                                            | Road Department                                 | McHenry County                   | dcarpenter@nd.gov            | 407 Main Street S. Room 201     | Towner      | ND    | 58788 |
|        | Trey     | Skager      | Sheriff                                    |                                                 | McHenry County                   | tcskager@nd.gov              | 407 Main Street S. Room 201     | Towner      | ND    | 58788 |
|        | Marisa   | Haman       | Auditor / Treasurer                        | Finance                                         | Ward County                      | Auditor.Treasurer@wardnd.com | PO Box 5005                     | Minot       | ND    | 58702 |
|        | Shelly   | Weppler     | Chairman                                   | Park Board                                      | Ward County                      |                              | 200 72nd St SE PO Box 5005      | Minot       | ND    | 58702 |
|        | Loren    | Johnson     | Vice Chairman                              | Water Resource Board                            | Ward County                      | loren.johnson@co.ward.nd.us  | PO Box 5005                     | Minot       | ND    | 58702 |
|        | Beth     | Pietsch     | Administrator                              | Planning/Zoning                                 | Ward County                      | planning.zoning@wardnd.com   | PO Box 5005                     | Minot       | ND    | 58702 |
|        | Mark     | Schumaker   | Chairman                                   | Soil Conservation District                      | Ward County                      | wardsoil@srt.com             | 1920 13th St SE                 | Minot       | ND    | 58701 |
|        | John     | Fjeldahl    | Commission Chairman                        |                                                 | Ward County                      | john.fjeldahl@wardnd.com     | 225 SE Third St                 | Minot       | ND    | 58701 |
|        | Kelly    | Haugan      | Director of Emergency Management           |                                                 | Ward County                      | kelly.haugan@wardnd.com      | PO Box 5005                     | Minot       | ND    | 58702 |
|        | Justin   | Vollmer     | Road Superintendent                        | Highway Engineer/Supervisor                     | Ward County                      | juvollmer@wardnd.gov         | 200 72nd St SE PO Box 5005      | Minot       | ND    | 58702 |
|        | Jodi     | Johnson     | Superintendent of Schools                  |                                                 | Ward County                      | jodi.johnson@wardnd.com      | 225 SE Third St                 | Minot       | ND    | 58701 |
|        | Robert   | Roed        | Sheriff                                    |                                                 | Ward County                      |                              | 204 Front St SE                 | Minot       | ND    | 58701 |
|        |          |             |                                            | Office of Economic Analysis                     | Federal Railroad Administration  |                              | 1200 New Jersey Avenue SE       | Washington  | DC    | 20590 |
|        | Dustin   | Offerdahl   | Chairman                                   |                                                 | Minot City Planning Commission   | dustino@gdcd.org             | 10 3rd Ave SW                   | Minot       | ND    | 58701 |
|        | Brady    | Nelson      | District 4 Commissioner                    |                                                 | McHenry County                   |                              | 407 Main Street S. Room 201     | Towner      | ND    | 58788 |
|        | Jim      | Hystad      | Chairman                                   |                                                 | McHenry County Velva Township    |                              | 1920 47th St N                  | Velva       | ND    | 58790 |
|        | Ryan     | Hoff        | Chairman                                   |                                                 | McHenry County Velva Township    |                              | PO Box 69                       | Velva       | ND    | 58790 |
|        | Brian    | Marsh       | Chairman                                   |                                                 | McHenry County Velva Township    |                              | 4700 20th Ave N                 | Velva       | ND    | 58790 |
|        | John     | Ulland      | Chairman                                   |                                                 | McHenry County Velva Township    |                              | 1530 47th St N                  | Velva       | ND    | 58790 |
|        | Larry    | Turner      | Chairman                                   |                                                 | McHenry County Velva Township    |                              | 1522 Hwy 97                     | Velva       | ND    | 58790 |
|        | Gerald   | Holte       | Chairman                                   |                                                 | McHenry County Lebanon Township  |                              | 975 42nd St N                   | Voltaire    | ND    | 58792 |
|        | Kevin    | Colby       | Chairman                                   |                                                 | McHenry County Lebanon Township  |                              | 827 46th St N                   | Voltaire    | ND    | 58792 |
|        | Gaylen   | Duchscherer | Chairman                                   |                                                 | McHenry County Lebanon Township  |                              | 811 47th Pkwy N                 | Voltaire    | ND    | 58792 |
|        | Dwight   | Holmen      | Chairman                                   |                                                 | McHenry County Brown Township    |                              | 3746 Highway 41                 | Velva       | ND    | 58790 |
|        | Tim      | Kvamme      | Chairman                                   |                                                 | McHenry County Voltaire Township |                              | 3681 8th Ave N                  | Voltaire    | ND    | 58792 |
|        | Bruce    | Degenstein  | Chairman                                   |                                                 | McHenry County Voltaire Township |                              | 3681 8th Ave N                  | Voltaire    | ND    | 58792 |
|        | Garth    | Klein       | Chairman                                   |                                                 | Ward County New Prairie Township |                              | 225 Third Street SE             | Minot       | ND    | 58701 |
|        | Todd     | Hustad      | Chairman                                   |                                                 | Ward County SundreTownship       | cari.morey@yahoo.com         | 225 Third Street SE             | Minot       | ND    | 58701 |
|        | Jim      | Johnson     | Chairman                                   |                                                 | Ward County Sawyer Township      | godl_470@yahoo.com           | 225 Third Street SE             | Minot       | ND    | 58701 |
|        |          |             |                                            |                                                 | Archer Daniels Midland (ADM)     |                              | 1388 ND-97                      | Velva       | ND    | 58790 |
|        | James    | Darnell     | Superintendent                             |                                                 | CF Industries                    | jdarnell@cfindustries.com    | 1304 US-52                      | Velva       | ND    | 58790 |
| Mr.    | Brian    | Osborne     | Manager                                    | Public Works - Southern Region                  | Canadian Pacific Railroad        | brian_osborne@cpr.ca         | 120 South 6th Street, Suite 900 | Minneapolis | MN    | 55402 |





We listen. We solve.®

April 10, 2025

PROJECT NO. 4-052(109)101, PCN 24012  
US 52 FOUR LANE FROM APPROXIMATELY 2.3 MILES WEST OF  
JUNCTION OF 79<sup>TH</sup> AVE SE TO VOLTAIRE  
WARD & McHENRY COUNTIES

The North Dakota Department of Transportation, in cooperation with the Federal Highway Administration, is preparing an environmental assessment to study the expansion of US Highway 52, located approximately 2.3 miles west of Junction 79<sup>th</sup> Ave SE to Voltaire. The total length of the study area under consideration is approximately 22 miles. ***Please refer to the enclosed Project Location Map.***

The project is studying the expansion of US Highway 52 from a two-lane highway to a four-lane highway, with two primary alternatives under consideration; divided four-lane highway with a depressed center median and divided four-lane highway with a flush paved center median.

An anticipated construction date has not been identified; however, the 2027 construction season would be the earliest possible start date.

If the project is constructed, it will require permanent and/or temporary right-of-way. The right-of-way required will be in linear strips parallel to the project area.

To ensure that all social, economic, and environmental effects are considered in the development of this project, we are soliciting your views and comments on the proposed project pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, as amended. We are particularly interested in any property which your department may own or have an interest in and which would be adjacent to the proposed roadway improvement. We would also appreciate being made aware of any proposed developments your department may be contemplating in the areas under consideration for the proposed roadway facility. Any information that might help us in our studies would be appreciated.

Information or comments relating to environmental or other matters that you might furnish will be used to aid in preparation of the environmental assessment.

It is requested that any comments or information be forwarded to our office on or before May 10, 2025. If no reply is received by this date, it will be assumed that you have no comment on this project.

If further information is desired regarding the proposed roadway improvement, please contact Mike Huffington at (701) 280-8655 or [mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com).

Page 2  
April 10, 2025

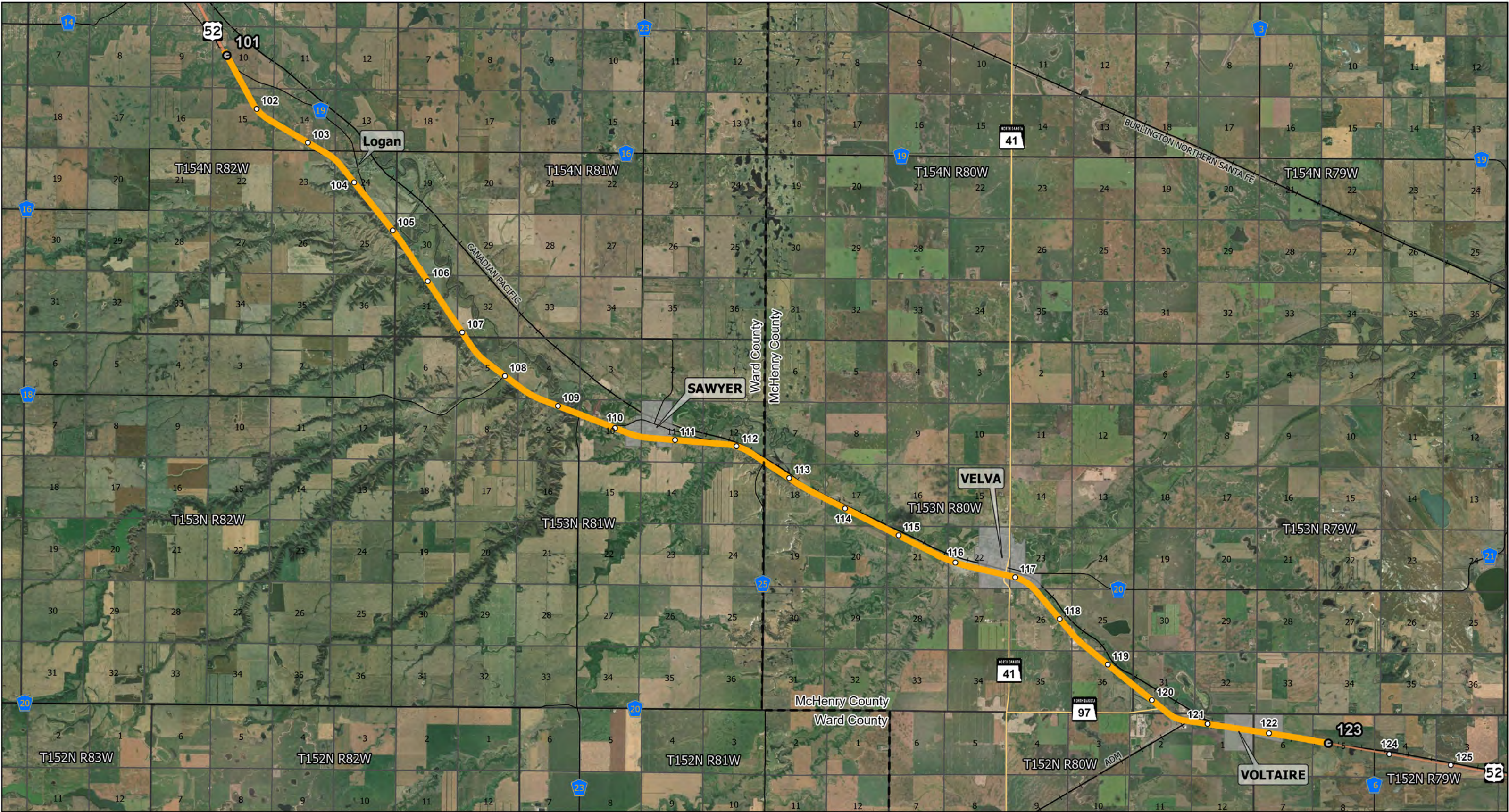
A handwritten signature in blue ink, appearing to read 'MH', is positioned above the printed name.

MIKE HUFFINGTON

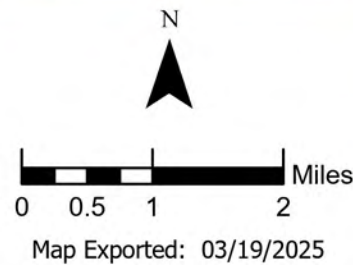
mh/ml

Enclosure





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Map Exported: 03/19/2025

- Project Corridor
- US 52 Mile Markers
- Project Beginning/End Point
- State Highway
- US Highway
- Railroads
- Township Lines
- Section Lines
- County Boundary
- Corporate Boundaries

**US 52 Four Lane**  
Ward, McHenry County  
4-052(109)101, PCN 24012



**NORTH Dakota** | Transportation  
Be Legendary.





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April 10, 2025

Ms. Mary E. Podoll, State Conservationist  
U.S. Department of Agriculture - NRCS  
P.O. Box 1458  
Bismarck, ND 58502-1458

PROJECT NO. 4-052(109)101, PCN 24012  
US 52 FOUR LANE FROM APPROXIMATELY 2.3 MILES WEST OF  
JUNCTION OF 79<sup>TH</sup> AVE SE TO VOLTAIRE  
WARD & McHENRY COUNTIES

The North Dakota Department of Transportation, in cooperation with the Federal Highway Administration, is preparing an environmental assessment to study the expansion of US Highway 52, located approximately 2.3 miles west of Junction 79<sup>th</sup> Ave SE to Voltaire. The total length of the study area under consideration is approximately 22 miles. ***Please refer to the enclosed Project Location Map.***

The project is studying the expansion of US Highway 52 from a two-lane highway to a four-lane highway, with two primary alternatives under consideration; divided four-lane highway with a depressed center median and divided four-lane highway with a flush paved center median.

The proposed project may disturb 10 acres or more per linear mile outside of the existing right-of-way, or 3 acres per existing bridge or interchange outside of the existing right-of-way. Acreage includes both direct and indirect conversion.

An anticipated construction date has not been identified; however, the 2027 construction season would be the earliest possible start date.

To ensure that all social, economic, and environmental effects are considered in the development of this project, we are soliciting your views and comments on the proposed project pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, as amended. We are particularly interested in any property which your department may own or have an interest in and which would be adjacent to the proposed roadway improvement. We would also appreciate being made aware of any proposed developments your department may be contemplating in the areas under consideration for the proposed roadway facility. Any information that might help us in our studies would be appreciated.

Please identify any prime farmland in the area. In addition, we request your comments on any

effect this project will have on prime farmland. If there is prime or unique farmland within the project area, the information you provide will be used to fill out the Site Assessment portion of the Farmland Conversion Impact Rating Sheet for each alternative under consideration, as required by the Farmland Protection Policy Act (FPPA).

The Federal Highway Administration's Guidelines for Implementing the Final Rule of the Farmland Protection Policy Act for Highway Projects states that if all project alternatives receive a site assessment rating of less than 60 (and, therefore, a maximum overall rating of less than 160), the rating sheet does not have to be sent to the NRCS but will be placed in the project file. Under FPPA, projects with scores of less than 160 are given a minimum level of consideration for protection and no further sites would need to be evaluated.

Information or comments relating to environmental or other matters that you might furnish will be used to aid in preparation of the environmental assessment.

It is requested that any comments or information be forwarded to our office on or before May 10, 2025. If no reply is received by this date, it will be assumed that you have no comment on this project.

If further information is desired regarding the proposed roadway improvement, please contact Mike Huffington at (701) 280-8655 or [mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com).



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April 10, 2025

Mr. David Glatt  
Director  
North Dakota Department of Environmental Quality  
4201 Normandy Street  
Bismarck, ND 58503-1324

PROJECT NO. 4-052(109)101, PCN 24012  
US 52 FOUR LANE FROM APPROXIMATELY 2.3 MILES WEST OF  
JUNCTION OF 79<sup>TH</sup> AVE SE TO VOLTAIRE  
WARD & McHENRY COUNTIES

The North Dakota Department of Transportation, in cooperation with the Federal Highway Administration, is preparing an environmental assessment to study the expansion of US Highway 52, located approximately 2.3 miles west of Junction 79<sup>th</sup> Ave SE to Voltaire. The total length of the study area under consideration is approximately 22 miles. ***Please refer to the enclosed Project Location Map.***

The project is studying the expansion of US Highway 52 from a two-lane highway to a four-lane highway, with two primary alternatives under consideration; divided four-lane highway with a depressed center median and divided four-lane highway with a flush paved center median.

An anticipated construction date has not been identified; however, the 2027 construction season would be the earliest possible start date.

If the project is constructed, it will require permanent and/or temporary right-of-way. The right-of-way required will be in linear strips parallel to the project area.

The following tabulation shows the average daily traffic volumes (ADT) once the new facility is completed and the expected ADT in 20 years after completion.

| LOCATION         | ADT Upon Completion of Improvement (2027) | Forecasted ADT (2047) |
|------------------|-------------------------------------------|-----------------------|
| RP 101 to RP 116 | 5,178                                     | 6,650                 |
| RP 109 to RP 116 | 3,926                                     | 5,350                 |
| RP 116 to RP 122 | 2,394                                     | 3,265                 |

We believe that these volumes are not of the magnitude that would result in violation of any Air Quality Standards and the project is consistent with the State Implementation Plan for air quality.

Your concurrence in this determination is requested.

To ensure that all social, economic, and environmental effects are considered in the development of this project, we are soliciting your views and comments on the proposed project pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, as amended. We are particularly interested in any issues pertaining to solid and hazardous waste, municipal wastewater, water quality, and the occurrence of past contamination along the project area.

Information or comments relating to environmental or other matters that you might furnish will be used to aid in preparation of the environmental assessment.

It is requested that any comments or information be forwarded to our office on or before May 10, 2025. If no reply is received by this date, it will be assumed that you have no comment on this project.

If further information is desired regarding the proposed roadway improvement, please contact Mike Huffington at (701) 280-8655 or [mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com).



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April 10, 2025

Department of Water Resources  
C/O Project Review  
North Dakota Department of Water Resources  
900 E. Boulevard Avenue  
Bismarck, ND 58505-0850

PROJECT NO. 4-052(109)101, PCN 24012  
US 52 FOUR LANE FROM APPROXIMATELY 2.3 MILES WEST OF  
JUNCTION OF 79<sup>TH</sup> AVE SE TO VOLTAIRE  
WARD & McHENRY COUNTIES

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The project is studying the expansion of US Highway 52 from a two-lane highway to a four-lane highway, with two primary alternatives under consideration; divided four-lane highway with a depressed center median and divided four-lane highway with a flush paved center median.

An anticipated construction date has not been identified; however, the 2027 construction season would be the earliest possible start date.

If the project is constructed, it will require permanent and/or temporary right-of-way. The right-of-way required will be in linear strips parallel to the project area.

To ensure that all social, economic, and environmental effects are considered in the development of this project, we are soliciting your views and comments on the proposed project pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, as amended. We are particularly interested in any property which your department may own or have an interest in and which would be adjacent to the proposed roadway improvement. We would also appreciate being made aware of any proposed developments your department may be contemplating in the areas under consideration for the proposed roadway facility. Any information that might help us in our studies would be appreciated. Information or comments relating to environmental or other matters that you might furnish will be used to aid in preparation of the environmental assessment.

Please provide information on necessary permits required such as whether the project lies within a floodway or floodplain, lies within "Sovereign Lands", or could affect a dam, dike, or other device. It is requested that any comments or information be forwarded to our office on or before May 10, 2025.

If further information is desired regarding the proposed roadway improvement, please contact Mike Huffington at (701) 280-8655 or [mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com).



MIKE HUFFINGTON

mh/ml

Enclosure





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April 10, 2025

John Takala  
J Clark Salyer Wetland Management District  
US Fish and Wildlife Service  
681 Salyer Road  
Upham, ND 58789  
John\_takala@fws.gov

PROJECT NO. 4-052(109)101, PCN 24012  
US 52 FOUR LANE FROM APPROXIMATELY 2.3 MILES WEST OF  
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If the project is constructed, it will require permanent and/or temporary right-of-way. The right-of-way required will be in linear strips parallel to the project area.

To ensure that all social, economic, and environmental effects are considered in the development of this project, we are soliciting your views and comments on the proposed project pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969, as amended. We are particularly interested in any Service Interest property within a ½ mile of either side of the proposed roadway improvement. Any information that might help us in our studies would be appreciated.

It is requested that any comments or information be forwarded to our office on or before May 10, 2025. If no reply is received by this date, it will be assumed that you have no comment on this project.

If further information is desired regarding the proposed roadway improvement, please contact Mike Huffington at (701) 280-8655 or [mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com).

A handwritten signature in blue ink, appearing to read 'MH', is positioned above the printed name.

MIKE HUFFINGTON

mh/ml

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April 10, 2025

Kyle Flanery  
Northwest ND Wetland Management District  
US Fish and Wildlife Service  
681 Salyer Road  
Upham, ND 58789  
Kyle\_flanery@fws.gov

PROJECT NO. 4-052(109)101, PCN 24012  
US 52 FOUR LANE FROM APPROXIMATELY 2.3 MILES WEST OF  
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It is requested that any comments or information be forwarded to our office on or before April 10, 2025. If no reply is received by this date, it will be assumed that you have no comment on this project.

If further information is desired regarding the proposed roadway improvement, please contact Mike Huffington at (701) 280-8655 or [mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com).

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MIKE HUFFINGTON

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April 10, 2025

## Advocacy Group Contact

PROJECT NO. 4-052(109)101, PCN 24012  
US 52 FOUR LANE FROM APPROXIMATELY 2.3 MILES WEST OF  
JUNCTION OF 79<sup>TH</sup> AVE SE TO VOLTAIRE  
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If the project is constructed, it will require permanent and/or temporary right-of-way. The right-of-way required will be in linear strips parallel to the project area.

The purpose of this letter is to provide advanced notice of upcoming highway projects so you have sufficient time to share the information with your constituents and represent their interests. To ensure that all social, economic, and environmental effects are considered in the development of this project, we are soliciting your views and comments on the proposed project. We would appreciate being made aware of any social impacts we should consider for this proposed project.

Greater advanced notice will also encourage more participation of advocates and their constituents at upcoming Public Meetings. A Public Meeting for this project is tentatively scheduled for Summer 2025.

A follow up notice of the exact date, time, and location of the Public Meeting will be forwarded to you approximately 2 weeks prior to the Public Meeting. Additionally, Public Meetings are also advertised in local newspapers, press releases sent to local media, and new releases posted on the NDDOT website.

Any information or comments relating to social or other matters that might help us in our studies would be appreciated.

It is requested that any comments or information be forwarded to our office on or before May 10, 2025. If no reply is received by this date, it will be assumed that you have no comment on this project at this time.

If further information is desired regarding the proposed roadway improvement, please contact Mike Huffington at (701) 280-8655 or [mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com).



MIKE HUFFINGTON

mh/ml

Enclosure

**From:** North Dakota Department of Transportation <nddot@info.nd.gov>  
**Sent:** Tuesday, March 17, 2026 12:05 PM  
**To:** Van Dorsten, Manda M.; Schmidt, Joyce A.; -Adm-DOT Info; rjbuchholz@nd.gov  
**Subject:** Courtesy Copy: US 52 FOUR LANE FROM APPROXIMATELY 2.3 MILES WEST OF JUNCTION OF 79TH AVE SE TO VOLTAIRE WARD & McHENRY COUNTIES

**This is a courtesy copy of an email bulletin sent by Manda Van Dorsten.**

**This bulletin was sent to the following groups of people:**

Subscribers of Advocacy Group - 4 (Minot District) (8 recipients)

---



April 10, 2025

Advocacy Group Contact

PROJECT NO. 4-052(109)101, PCN 24012  
US 52 FOUR LANE FROM APPROXIMATELY 2.3 MILES WEST OF JUNCTION OF 79TH AVE SE TO VOLTAIRE  
WARD & McHENRY COUNTIES

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MIKE HUFFINGTON

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Enclosure

- [20250327 11x17 Notification Map.pdf](#)
- [Letter 8 - Advocacy Group PCN24012.doc](#)

[Website](#) | [Contact us](#)



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**From:** North Dakota Department of Transportation <nddot@info.nd.gov>  
**Sent:** Tuesday, March 17, 2026 4:05 PM  
**To:** Van Dorsten, Manda M.  
**Subject:** Bulletin Detail Report: US 52 FOUR LANE FROM APPROXIMATELY 2.3 MILES WEST OF JUNCTION OF 79TH AVE SE TO VOLTAIRE WARD & McHENRY COUNTIES

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Report Generated: 03/17/2026 04:05 PM CDT

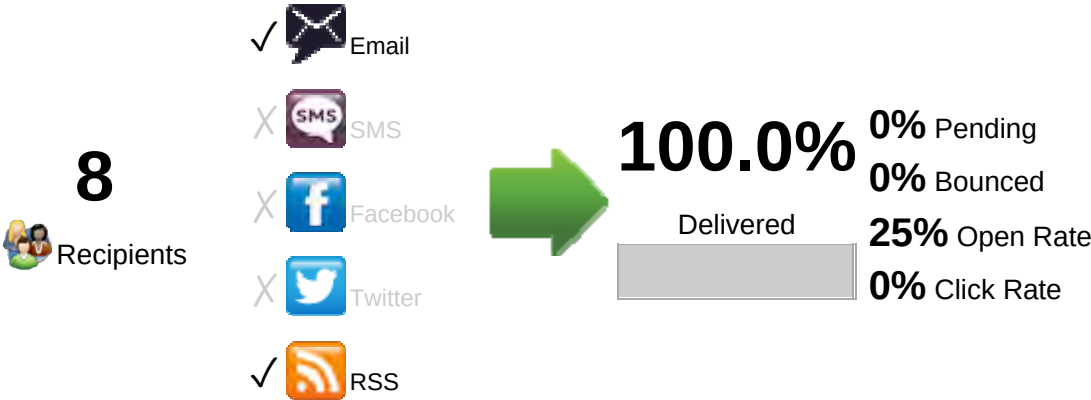
This report automatically generates after a bulletin is sent. [View the Bulletin Detail Report online](#) to see the most recent performance metrics for this bulletin.

**Subject:** US 52 FOUR LANE FROM APPROXIMATELY 2.3 MILES WEST OF JUNCTION OF 79TH AVE SE TO VOLTAIRE WARD & McHENRY COUNTIES

**Sent:** 03/17/2026 12:05 PM CDT

**Sent By:** mvandorsten@nd.gov

**Sent To:** Subscribers of Advocacy Group - 4 (Minot District)



| Email Delivery Stats |         |                      |
|----------------------|---------|----------------------|
|                      | Minutes | Cumulative Attempted |
|                      | 3       | 100%                 |
|                      | 5       | 100%                 |
|                      | 10      | 100%                 |
|                      | 30      | 100%                 |
|                      | 60      | 100%                 |
|                      | 120     | 100%                 |

| Delivery Metrics - Details | Bulletin Analytics          |
|----------------------------|-----------------------------|
| <b>8</b> Total Sent        | <b>3</b> Total Opens        |
| <b>8 (100%)</b> Delivered  | <b>2 (25%)</b> Unique Opens |
| <b>0 (0%)</b> Pending      | <b>0</b> Total Clicks       |
| <b>0 (0%)</b> Bounced      | <b>0 (0%)</b> Unique Clicks |
| <b>0 (0%)</b> Unsubscribed | <b>14</b> # of Links        |

| Delivery and Performance |           |                   |                      |                  |                 |                  |              |
|--------------------------|-----------|-------------------|----------------------|------------------|-----------------|------------------|--------------|
| Channel                  | Progress  | Percent Delivered | Number of Recipients | Number Delivered | Opened / Unique | Bounced / Failed | Unsubscribed |
| Email Bulletin           | Delivered | 100.0%            | 8                    | 8                | 2 / 25.0%       | 0                | 0            |
| SMS Message              | Delivered | 0.0%              | 0                    | 0                | n/a             | 0                | n/a          |

| Bulletin Link Overview                                                                                                                                                |               |              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|
| Link URL                                                                                                                                                              | Unique Clicks | Total Clicks |
| <a href="https://content.govdelivery.com/attachments/NDDOT/2026/03/17/file_attach...">https://content.govdelivery.com/attachments/NDDOT/2026/03/17/file_attach...</a> | 0             | 0            |
| <a href="https://www.facebook.com/nddot">https://www.facebook.com/nddot</a>                                                                                           | 0             | 0            |
| <a href="https://www.linkedin.com/company/north-dakota-department-of-transportati...">https://www.linkedin.com/company/north-dakota-department-of-transportati...</a> | 0             | 0            |
| <a href="https://subscriberhelp.granicus.com/">https://subscriberhelp.granicus.com/</a>                                                                               | 0             | 0            |
| <a href="https://content.govdelivery.com/attachments/NDDOT/2026/03/17/file_attach...">https://content.govdelivery.com/attachments/NDDOT/2026/03/17/file_attach...</a> | 0             | 0            |
| <a href="https://twitter.com/NorthDakotaDOT">https://twitter.com/NorthDakotaDOT</a>                                                                                   | 0             | 0            |
| <a href="https://public.govdelivery.com/accounts/NDDOT/subscriber/one_click_unsub...">https://public.govdelivery.com/accounts/NDDOT/subscriber/one_click_unsub...</a> | 0             | 0            |
| <a href="https://subscriberhelp.govdelivery.com/">https://subscriberhelp.govdelivery.com/</a>                                                                         | 0             | 0            |
| <a href="https://www.instagram.com/northdakotadot/">https://www.instagram.com/northdakotadot/</a>                                                                     | 0             | 0            |
| <a href="https://forms.nd.gov/231086560478865">https://forms.nd.gov/231086560478865</a>                                                                               | 0             | 0            |
| <a href="https://www.youtube.com/user/NDDOTOnline">https://www.youtube.com/user/NDDOTOnline</a>                                                                       | 0             | 0            |
| <a href="http://public.govdelivery.com/accounts/NDDOT/subscribers/new">http://public.govdelivery.com/accounts/NDDOT/subscribers/new</a>                               | 0             | 0            |
| <a href="https://public.govdelivery.com/accounts/NDDOT/subscriber/edit?preference...">https://public.govdelivery.com/accounts/NDDOT/subscriber/edit?preference...</a> | 0             | 0            |
| <a href="https://www.dot.nd.gov/">https://www.dot.nd.gov/</a>                                                                                                         | 0             | 0            |

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3/18/2026 9:41 Account = Bulletin = US 52 FOUR LANE FROM APPROXIMATELY 2.3 MILES WEST OF

| Destination Address                   | Delivery St Failure Me Total Oper Total Click Click Summary                                                                    |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| andubovoy@nd.gov                      | Delivered 1 0                                                                                                                  |
| beeter08@yahoo.com                    | Delivered 1 0                                                                                                                  |
| bhopewell@nd.gov                      | Delivered 1 0                                                                                                                  |
| dofmogard@nd.gov                      | Delivered 4 13 <a href="http://public.https://conhttps://conhttps://form">http://public.https://conhttps://conhttps://form</a> |
| independenceecil@independenceecil.org | Delivered 1 0                                                                                                                  |
| shannonbinstock@ndsupernet.com        | Delivered 0 0                                                                                                                  |
| smhorning@nd.gov                      | Delivered 2 0                                                                                                                  |
| youth@pathfinder-nd.org               | Delivered 0 0                                                                                                                  |



April 18, 2025

Natural Resources  
Conservation Service

Bismarck State Office  
PO Box 1458  
Bismarck, ND  
58502-1458

Voice 701.530.2000  
Fax 855-813-7556

Mike Huffington

Ulteig  
3350 38<sup>th</sup> Ave S  
Fargo, ND 58104

Dear Mr. Huffington:

The Natural Resources Conservation Service (NRCS) has reviewed your letter dated April 10, 2025, concerning 4-052(109)101, PCN 24012, US52 Four Lane from Approximately 2.3 miles west of Junction 79<sup>th</sup> Ave SE to Voltaire in Ward and McHenry Counties, North Dakota.

#### FPPA

NRCS has a major responsibility with the Farmland Protection Policy Act (FPPA) in documenting conversion of farmland (i.e., Prime, Statewide Importance and/or Local Importance) to non-agricultural use when federal funding is used. Extensive prime farmland occurs along the corridor of this proposed project.

This project may fall under the guidance given in Section 310 of the General Manual, Subpart A, 403.4(b)(4) which states; *to avoid new construction by improving existing linear projects such as highways, small acreages (i.e., ten acres or less per linear mile or 3 acres per existing bridge or interchange) may be exempted. Acreage includes both direct and indirect conversions. **This exemption applies to permanent removal of important farmlands from production, not temporary disturbance.*** If your project falls within General Manual guidance Subpart A, 403.4(b)(4), it is exempt from FPPA with no further action required. If the project does not meet the acreage limitations of the General Manual, the Form [CPA-106.pdf \(usda.gov\)](#) will need to be completed. We will also need a list of important farmland acres by soil survey map unit which are outside the current road right-of-way and will be permanently removed from farmland production. This list will ensure an accurate assessment of the relative value for the corridor. The Farmland Conversion Impact Rating calculates relative values using exact project acreage. Web Soil Survey can be used to determine soil map unit acreages:  
<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

If the exemption above does not apply, please keep in mind that NRCS is continuing to monitor Farmland Conversion Impact Ratings (form AD-1006, form NRCS-CPA-106) and are concerned with how some of the forms are being completed, particularly Site Assessment Criteria, which is being scored below 60 points. As a rule, if FPPA applies and the site is in agricultural production (i.e., crop or livestock production), rarely would it be appropriate for it to have a score of less than 60 points.

*Helping People Help the Land*



## Wetlands

The Wetland Conservation Provisions of the 1985 Food Security Act, as amended, provide that if a USDA participant converts a wetland for the purpose, or to have the effect of making agricultural production possible, loss of USDA benefits could occur. You are anticipating construction outside of the right-of-way where wetland impacts may occur that could make production possible. NRCS has developed the following guidelines to help avoid impacts to wetlands and possible loss of USDA benefits for producers. If these guidelines are followed, the impacts to the wetland will be considered minimal allowing USDA participants to continue to receive USDA benefits. Following are the requirements:

- Disturbance to the wetland must be temporary.
- No drainage of wetland is allowed (temporary or permanent).
- Mechanized landscaping necessary for installation is kept to a minimum and preconstruction contours are maintained.
- Temporary side cast material must be placed in such a manner not to be dispersed in the wetland.
- All trenches in a wetland must be backfilled to the original elevation.

Potentially impacted USDA participants that wish to request a certified wetland determination can be directed to the USDA Farm Service Agency (FSA) to request a Highly Erodible Land Conservation (HELC) and Wetland Conservation (WC) Certification (AD-1026) or they may contact Darrick Ystaas, Designated Conservationist, NRCS, Minot, North Dakota at (701) 852-5434 for information about conservation compliance provisions related to the project.

If you have additional questions pertaining to FPPA, please contact Lance Duey, Assistant State Soil Scientist, NRCS, Bismarck, North Dakota, at (701) 530-2109.

Sincerely,

SUSAN

SAMSON LIEBIG

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SUSAN SAMSON LIEBIG  
Date: 2025.04.18  
09:23:57 -05'00'

SUSAN SAMSON-LIEBIG  
Acting State Soil Scientist



We listen. We solve.®

April 15, 2025

CTI Towers Assets II LCC  
3300 PARAMOUNT PARKWAY SUITE 110  
Morrisville, NC 27560

PROJECT NO. 4-052(109)101, PCN 24012  
US 52 - 2.3 MILES WEST OF JUNCTION OF 79<sup>TH</sup> AVE SE TO VOLTAIRE  
WARD & McHENRY COUNTIES

The North Dakota Department of Transportation (NDDOT) is currently studying the expansion of US Highway 52 from a two-lane highway to a four-lane highway, located approximately 2.3 miles west of Junction 79<sup>th</sup> Ave SE to Voltaire. The total length of the study area under consideration is approximately 22 miles. ***Please refer to the enclosed Project Location Map.***

As part of this process, NDDOT staff, or agents working on their behalf, may need to access portions of your property to conduct preliminary surveys and collect field data. Data collection activities may include preliminary topographic survey, aquatic resource delineation, cultural resource survey, and noise measurements. These surveys will generally consist of the following:

- *Preliminary Topographic Survey* – A survey crew will measure the location and elevation of various features including section corners, property corners, highway profile, alignment and right-of-way markers, fences, utilities, culverts, bridges, and signs.
- *Aquatic Resource Delineation* – An environmental scientist and soil scientist will be working in the area and mapping the limits of aquatic resources. This will include creating small hand-dug test holes with a tile spade and/or soil probe and walking boundaries of wetlands to collect GPS data.
- *Cultural Resource Survey* – Archaeologists will be working in the area and identifying previously recorded cultural resource sites or identifying previously unidentified sites. This work may include shovel/auger probes to fully identify previously unrecorded cultural resources.
- *Noise Measurements* – A noise analyst will collect background noise measurements using a sound level meter at select locations, including noise sensitive areas (e.g., residences). Each location will be evaluated for approximately 20 to 60 minutes and may be evaluated multiple times.



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Field survey work for 2025 is anticipated to begin in late April.

In accordance with North Dakota Century Code, the NDDOT and its representatives are legally authorized to enter private property to perform surveys and investigations necessary for public use projects; however, we recognize and respect the importance of private property rights, and we are committed to carrying out all field activities with care and minimal disruption. Additionally, we understand there are times when survey activity on your property may not be ideal. NDDOT is committed to working respectfully with landowners, and we will make every reasonable effort to coordinate our activities in a way that minimizes disruption.

Should you have a tenant on the land either by written or verbal lease agreement, please notify those individuals of the survey work being conducted in the area.

If you have any questions or concerns, please contact the project manager Mike Huffington at 701-280-8655 or [mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com).

TTY users may use Relay North Dakota at 711 or 1-800-366-6888. Language interpretive services are also available.

MIKE HUFFINGTON

mh/no

Enclosure





---

**From:** Haase, Marissa A <marissa\_haase@fws.gov>  
**Sent:** Wednesday, April 23, 2025 10:00 AM  
**To:** Mike Huffington  
**Subject:** project 4-052 Four Lane Ward & McHenry Counties

**External Sender Warning: Proceed with Caution!**

Hey Mike-

I just wanted to touch base about his project that is just starting to get underway. I am new to this whole process and I am going to be learning as this goes. What I do know is that we do have some US Fish and Wildlife easements along the end of that route that fall within the ½ mile project. Are you guys planning to purchase the right a ways? In the past I know we have typically done some exchanges for the right of ways. I was curious if you had a shape file of the proposed plan that we could lay on our easement stuff to see just what will be affected our side? Any questions let me know. Thanks

**Marissa Haase, Ast. Refuge Manager**  
Lostwood National Wildlife Refuge  
Northwest North Dakota Complex

Mobile- 701-641-2564  
Office- 701-848-2722 x: 24



---

**Project no. 4-052(109)101, PCN 24012**

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**From** MUNOS, CY I CIV USAF AFGSC 91 MMXS/MMXSFK <cy.munos@us.af.mil>

**Date** Wed 4/30/2025 1:23 PM

**To** Mike Huffington <mike.huffington@ulteig.com>

## **External Sender Warning: Proceed with Caution!**

Mike,

The Minot AFB has 2 cables that cross HWY 52 within the project area.  
NE qtr of sec 21 TWP 153 Rng 80 (1.75 miles west of Velva)  
NE qtr of sec 2 TWP 152 Rng 80 (1.5 miles west of Voltaire)  
Please keep me in the loop of possible cuts taken in these areas.

Thnaks

//SIGNED//

Cy Munos, CIV, USAF

Cable Affairs Officer, 91 MMXS/MMXSFK

Minot AFB ND

Comm: 701-723-6053

DSN: 453-6053

Work Cell: 701-720-8274

April 30, 2025

Mike Huffington  
Project Manager  
Ulteig  
3350 38th Avenue South  
Fargo, ND 58104

Re: Project Code: 24012, US 52 Four-Lane PCN24012 in McHenry and Ward Counties

Dear Mr. Huffington:

The North Dakota Department of Environmental Quality (Department) has reviewed the information concerning the above-referenced project received at the Department on April 15, 2025, with respect to possible environmental impacts.

1. Necessary measures should be taken to minimize fugitive dust emissions created during construction activities. Any complaints that may arise should be dealt with in an efficient and effective manner.
2. Aggregate to be used for road construction should not contain any erionite. Aggregate sources should be tested for erionite following guidelines found at <https://deq.nd.gov/erionite>. For questions regarding erionite testing, please contact the Asbestos Program at 701-328-5166 or [asbestos@nd.gov](mailto:asbestos@nd.gov).
3. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.
4. Projects disturbing one or more acres are required to have a permit to discharge stormwater runoff until the site is stabilized by the re-establishment of vegetation or other permanent cover. Further information on the stormwater permit may be obtained from the Department's website or by calling the Division of Water Quality at 701-328-5210. Also, cities may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local stormwater management considerations are addressed. Stormwater runoff from the project area discharges to a 303(d) listed water body (Souris River [Assessment Unit ND-

09010003-001-S\_00]) identified as impaired by sediment/siltation. Extra care should be taken to ensure construction activity does not affect the water body.

5. The construction project overlies the Voltair, Karlsruhe, Souris River, and Sondre aquifers and is within the city of Logan's sourcewater protection area. Care should be taken to avoid spills of any materials that may have an adverse effect on groundwater quality. All spills must be immediately reported to this Department and appropriate remedial actions performed.
6. All solid waste materials must be managed and transported in accordance with the state's solid and hazardous waste rules. Appropriate efforts to reduce, reuse and/or recycle waste materials are strongly encouraged. As appropriate, segregation of inert waste from non-inert waste can generally reduce the cost of waste management. Further information on waste management and recycling is available from the Department's Division of Waste Management at 701-328-5166.

The Department owns no land in or adjacent to the proposed improvements, nor does it have any projects scheduled in the area. In addition, we believe the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.

If you have any questions regarding our comments, please feel free to contact this office.

Sincerely,



Karl Rockeman, P.E., Deputy Director  
North Dakota Department of Environmental Quality

KR:ll  
Attach.

## **Construction and Environmental Disturbance Requirements**

The following are the minimum requirements of the North Dakota Department of Environmental Quality (Department) for projects that involve construction and environmental disturbance in or near waters of the State of North Dakota. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect waters of the state. All projects must be constructed to minimize the loss of soil, vegetative cover, and pollutants (chemical or biological) from a site.

### **Soils**

Prevent the erosion and sediment loss using erosion and sediment controls. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, and land resources must be prohibited against compaction, vegetation loss and unnecessary damage.

### **Surface Waters**

All construction must be managed to minimize impacts to aquatic systems. Follow safe storage and handling procedures to prevent the contamination of water from fuel spills, lubricants, and chemicals. Stream bank and stream bed disturbances must be contained to minimize silt movement, nutrient upsurges, plant dislocations, and any physical chemicals, or biological disruption. The use of pesticides or herbicides in or near surface waters is allowed under the Department's pesticide application permit with notification to the Department.

### **Fill Material**

Any fill material placed below the ordinary high-water mark must be free of topsoil, decomposable materials, and persistent synthetic organic compounds, including, but not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill material. All temporary fills must be removed. Debris and solid waste must be properly disposed or recycled. Impacted areas must be restored to near original condition.



**DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS 5TH MISSION SUPPORT GROUP (AFGSC)  
MINOT AIR FORCE BASE NORTH DAKOTA**

May 1, 2025

Mr. Gary Lonning  
Chief of Missile Engineering  
5th Civil Engineer Squadron  
445 Peacekeeper Place  
Minot AFB ND 58705-5006

Mr. Mike Huffington  
Ulteig Engineering Inc.  
419 Riverwood Dr.  
Suite 201  
Bismarck, ND 58504

Dear Mr. Huffington,

Reference to your recent correspondence regarding the environment assessment to study the expansion of US Highway 52.

Thank you for the opportunity to provide input on this project. The proposed work will have an impact on roads used by the 91st Missile Wing to perform its mission. Because of this, we do have some concerns we would like to discuss with you.

The roadway improvement on US Highway 52, located approximately 2.3 miles west of Junction 79<sup>th</sup> Ave SE to Voltaire, is on a mission essential route that is used by the 91st Missile Wing for operations that include a large number of security forces and maintenance vehicles. Frequent and open two-way communication between the US Air Force, the contractor, and your office will help to reduce any work disruptions.

Please keep us notified of upcoming meetings or information sessions so that we can remain a proactive member of this project.

If you would like to discuss these issues further, or any others, please contact Ms. Michelle Beavers at 701-723-3998. We here at Minot AFB understand the challenges that come with large-scale construction, and we will work with your office to address any concerns that arise during and after project completion.

Sincerely,

LONNING.GARY  
.G.1220600730

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Date: 2025.05.01 06:47:22 -05'00'

GARY G. LONNING, GS-13  
Chief, Missile Engineering





May 2, 2025

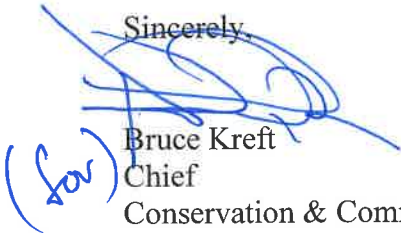
Mike Huffington  
Ulteig  
3350 38<sup>th</sup> Avenue South  
Fargo, ND 58104

RE: Project No. 4-052(109)101, PCN 24012

This project is studying the expansion of US Highway 52 from a two-lane to a four-lane highway located west of Junction 79<sup>th</sup> Ave SE to Voltaire in Ward & McHenry Counties, North Dakota. The North Dakota Game and Fish Department has reviewed this project for wildlife concerns.

The National Wetland Inventory indicates a variety of wetlands within the proposed project corridor. We recommend that any unavoidable destruction or degradation of wetland acres be mitigated in kind, erosion control measures be implemented to minimize sedimentation, and disturbed areas be seeded with suitable native grass and forb species where appropriate.

Sincerely,

  
Bruce Kreft  
Chief

Conservation & Communications Division



mayer@minotnd.gov

www.minotnd.gov

May 14, 2025

Mike Huffington

Ulteig

Via Email

RE: Comment for project 4-052(109)101, PCN 24012

Mike:

The City of Minot fully supports the development of a 4-lane concept for U.S. Highway 52, southeast of Minot.

This stretch of highway runs through challenging, hilly terrain and has long been a source of concern for our residents. Over the years, many have called for a safer, expanded roadway. Unfortunately, several fatal accidents and numerous close calls have reinforced the urgent need for improvements. A well-designed 4-lane highway would significantly reduce these risks and provide peace of mind for travelers.

While two concepts have been identified through preliminary study, the City favors a divided highway option wherever feasible. This design offers the greatest potential for improving safety and long-term traffic flow.

As a regional hub for commerce and industry in north-central North Dakota, Minot's economic activity continues to grow. The expansion of our intermodal center, ongoing oil development, and the strength of our agricultural sector are all contributing to increased truck traffic in the region. A 4-lane highway will be essential in supporting this growth and ensuring efficient, safe transportation for years to come.

Thank you for the opportunity to share our perspective on this important project. If you have any questions or need technical details, please contact our City Engineer, Lance Meyer, at [lance.meyer@minotnd.gov](mailto:lance.meyer@minotnd.gov).



701.857.4750



P.O. Box 5006  
Minot, ND 58702

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Jantzer", with a long horizontal flourish extending to the right.

Mark Jantzer  
Acting Mayor



May 6<sup>th</sup>, 2025

Ulteig  
c/o Mike Huffington  
3350 38<sup>th</sup> Ave South  
Fargo, ND 58104

To Whom it May Concern,

The Ward County Commission received your letter regarding the following project:

PROJECT NO. 4-052(109)101, PCN 24012 US 52 FOUR LANE FROM APPROXIMATELY  
2.3 MILES WEST OF JUNCTION OF 79<sup>TH</sup> AVE SE TO VOLTAIRE WARD & McHENRY  
COUNTIES

The Commission would like to express their full support for this project and recommend the  
option of a divided four-lane highway with a depressed center median.

Sincerely,

John Fjeldahl  
Chairman  
On behalf of the Board of Ward County Commissioners

WCC/mmh

May 9, 2025

Mike Huffington  
Ulteig  
3350 38<sup>th</sup> Ave. South  
Fargo, ND 58104

Re: EA Expansion of US Highway 52 – Ward and McHenry Counties

Dear Mike,

The North Dakota Parks and Recreation Department (NDPRD) has reviewed the above-referenced proposed environmental assessment to study the expansion of US Highway 52, located in Ward and McHenry Counties, North Dakota.

NDPRD's scope of authority and expertise covers properties that NDPRD owns, leases, or manages; properties protected under Section 6(f) of the Land and Water Conservation Fund (LWCF); rare plants; and ecological communities established through the Natural Heritage Program.

The project does not appear to affect properties NDPRD owns, leases, or manages.

The project may affect properties protected under Section 6(f) of the LWCF.

Several LWCF projects has been identified near the proposed project's vicinity. Attached is a map identifying the approximate locations. Properties that have received funding from the LWCF program have a designated 6(f) property boundary that carries restrictions on modifications to the property, including but not limited to utilities or any divesture of land. For additional information regarding LWCF properties, don't hesitate to contact Char Langehaug, ND Parks and Receptions Department's Grants Coordinator, at [clangehaug@nd.gov](mailto:clangehaug@nd.gov) or 701-328- 5364.

A North Dakota Natural Heritage biological conservation database query determines whether any current or historical plant or animal species of concern or other significant ecological communities are known to occur within an approximate one-mile radius of the project area. Based on this review, several natural heritage element occurrences have been documented within or immediately adjacent to the project site. Attached is a map identifying the approximate locations.

We appreciate your commitment to rare plant, animal, and ecological community conservation, management, and inter-agency cooperation. For additional information, contact Natural Resources Division Chief Kathy Duttenhefner at 701-328-5370, 701-220-3377 (cell), or [kgduttenhefner@nd.gov](mailto:kgduttenhefner@nd.gov). Thank you for the opportunity to comment on the proposed project.

Sincerely,



Kathy Duttenhefner, Chief Natural Resources Division

604 E Boulevard Ave Dept. 750 | Bismarck, ND 58505

PHONE: 701-328-5357 | FAX: 701-328-5363 | EMAIL: [parkrec@nd.gov](mailto:parkrec@nd.gov) | WEBSITE: [www.parkrec.nd.gov](http://www.parkrec.nd.gov)



## Land and Water Conservation Fund Projects

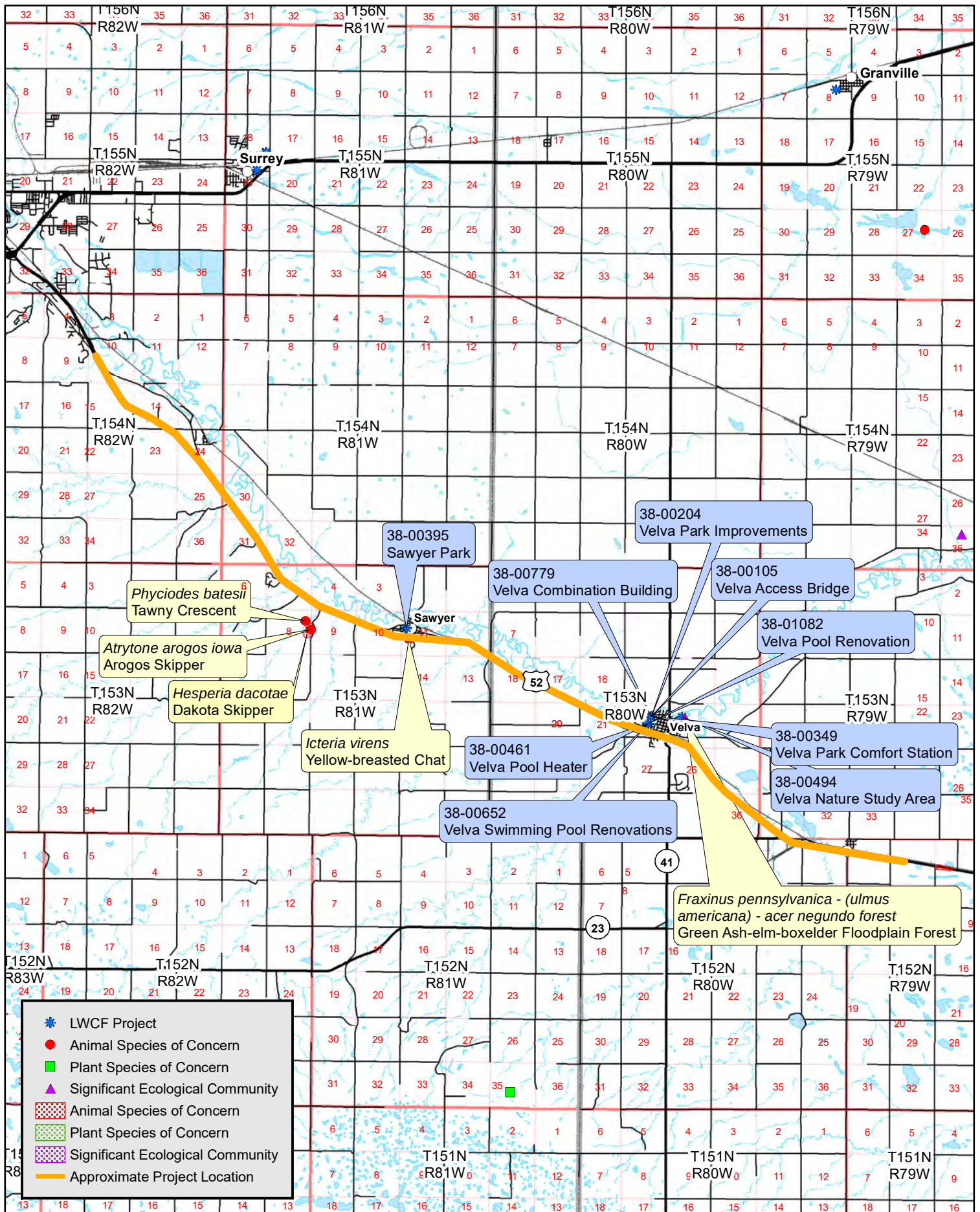
| <b><u>Project Name</u></b>      | <b><u>Project Number</u></b> |
|---------------------------------|------------------------------|
| Sawyer Park                     | 38-00395                     |
| Velva Access Bridge             | 38-00105                     |
| Velva Combination Building      | 38-00779                     |
| Velva Nature Study Area         | 38-00494                     |
| Velva Park Comfort Station      | 38-00349                     |
| Velva Park Improvements         | 38-00204                     |
| Velva Pool Heater               | 38-00461                     |
| Velva Pool Renovation           | 38-01082                     |
| Velva Swimming Pool Renovations | 38-00652                     |

North Dakota Natural Heritage Inventory  
Rare Animal and Plant Species and Significant Ecological Communities

| State Scientific Name                                                   | State Common Name                        | State Rank | Global Rank | Federal Status | Township Range Section                                                                                                                                                       | County  | Last Observation | Estimated Representation Accuracy | Precision |
|-------------------------------------------------------------------------|------------------------------------------|------------|-------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------------------|-----------------------------------|-----------|
| <i>Atrytone arogos iowa</i>                                             | Arogos Skipper                           | SNR        | G3T3        |                | 153N081W - 08; 153N081W - 09                                                                                                                                                 | Ward    | 1991-06-27       |                                   | S         |
| <i>Fraxinus pennsylvanica</i> - (ulmus americana) - acer negundo forest | Green Ash-elm-boxelder Floodplain Forest | S1S2       | GNR         |                | 153N080W - 23                                                                                                                                                                | McHenry | 1984-06-14       |                                   | S         |
| <i>Hesperia dacotae</i>                                                 | Dakota Skipper                           | S2         | G2          | LT             | 153N081W - 08; 153N081W - 09                                                                                                                                                 | Ward    | 1991-06-22       | Medium                            | S         |
| <i>Icteria virens</i>                                                   | Yellow-breasted Chat                     | SU         | G5          |                | 153N081W - 11; 153N081W - 10; 153N081W - 01;<br>153N081W - 12; 153N081W - 09; 153N081W - 02;<br>153N081W - 03; 153N081W - 14; 153N081W - 15;<br>153N081W - 13; 153N081W - 16 | Ward    | 1981-07-31       |                                   | M         |
| <i>Phyciodes batesii</i>                                                | Tawny Crescent                           | S3         | G4          |                | 153N081W - 08                                                                                                                                                                | Ward    | 1991-06-27       |                                   | S         |

# North Dakota Parks and Recreation Department

## North Dakota Natural Heritage Inventory



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**From:** David Ashley <dashley@mouseriverplan.com>  
**Sent:** Friday, May 9, 2025 12:28 PM  
**To:** Mike Huffington  
**Cc:** Ryan Ackerman (ryan.ackerman@ackerman-estvold.com)  
**Subject:** Re: 4-052(109)101,pcn24012

**External Sender Warning: Proceed with Caution!**

My apologies my identifiers did not come through as I'm using a new format.

David Ashley, Chairman  
Souris Joint Board and McHenry County WRD  
701-626-1566

---

**From:** David Ashley  
**Sent:** Friday, May 9, 2025 12:24 PM  
**To:** mike.huffington@ulteig.com  
**Cc:** Ryan Ackerman (ryan.ackerman@ackerman-estvold.com)  
**Subject:** 4-052(109)101,pcn24012

Mr.Huffington,

Regarding the highway 52 project there are at least two areas we need to work with you on. First, we have to make sure that flood protection structures are not negatively impacted, especially the levee at Velva. Second, we should work in concert with any design as it applies to the ongoing Mouse River Flood Protection Project. Thank you for any considerations.



**REGION 8**  
DENVER, CO 80202

May 9, 2025

Ref: 8EJC-NE

Mike Huffington  
Ulteig Engineering  
3350 38th Ave S.  
Fargo, North Dakota 581040

RE: Project Number 4-052(109)101, **PCN 24012**, US 52 Four Lane from Junction 79<sup>th</sup> Ave SE to Voltaire

Dear Mike Huffington:

The U.S. Environmental Protection Agency Region 8 NEPA staff reviewed the April 10, 2025, notice of scoping addressed to EPA and viewed the October 22, 2024, public meeting recording for the North Dakota Department of Transportation (NDDOT's) and Federal Highway Administration (FHWA) proposed four lane expansion of US 52, located approximately 2.3 miles west of junction 79<sup>th</sup> Ave SE to the town of Voltaire, North Dakota (Project). Per your request and in accordance with our responsibilities under Section 102(2)(c) of the National Environmental Policy Act (NEPA), the EPA is providing scoping comments for your consideration.

The EPA's detailed comments are enclosed. Our comments focus the following topics that we recommend NDDOT consider in its NEPA document for the proposed Project: (1) NEPA policy including "purpose and need" and "alternatives"; (2) Clean Water Act Section 404 permitting considerations; (3) aquatic resource impacts and considerations; and (4) air quality impacts and considerations.

The EPA appreciates the opportunity to provide comments at this stage of the NEPA process. If further explanation of our comments is desired, please contact me at (303) 312-6155 or [mccoy.melissa@epa.gov](mailto:mccoy.melissa@epa.gov), or Laura Margason, lead reviewer, at (303) 312-6665 or [margason.laura@epa.gov](mailto:margason.laura@epa.gov).

Sincerely,

**MELISSA  
MCCOY**

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Date: 2025.05.09  
14:24:01 -06'00'

Melissa W. McCoy, Ph.D., J.D.  
NEPA Branch Manager

ENCLOSURE

1. EPA Region 8 Detailed Scoping Comments for the US 52 Project

cc: Melissa Carson,  
Environmental Program Manager, Federal Highway Administration, North Dakota Division



## **EPA Region 8 Detailed Scoping Comments for the US 52 Project**

### **NEPA and Clean Water Act Considerations**

#### Purpose and Need

Based on our review of the available information, it is unclear if NDDOT conducted a planning process to determine the need for this specific Project prior to initiating the NEPA process. The purpose and need statement is one of the most important elements of the project proposal because it provides the framework for the range of alternatives to be analyzed. Therefore, it is important to consider purpose and need in the earliest stages of project development to comply with both the National Environmental Policy Act (NEPA) and the Clean Water Act (CWA) and provide an efficient planning process.

The need for a proposed project is typically the underlying problem to be solved (such as a poor Level of Service [LOS]), and the purpose of the proposed project is typically the objective, or set of objectives, to be met to address the need. We recommend that the NEPA document outline NDDOT's planning process, and any studies conducted for the Project that support the underlying purpose and need for the proposed action. We recommend the purpose and need statement be broad enough to encompass an appropriate range of both "reasonable" (per NEPA) and "practicable" (per CWA Section 404, see below) alternatives. It should be a clear, objective statement of the rationale for the proposed Project, as it provides the basis for identifying alternatives. We recommend that it also describe the short- and long-term transportation needs as well as the reasoning behind, and the information that supports, those needs.

#### Clean Water Act Section 404 Requirements for Purpose and Need

Discharge of dredged or fill material into waters of the United States, including wetlands, is regulated under CWA Section 404. This permit program is administered jointly by the U.S. Army Corps of Engineers (Corps) and the EPA. Please consult with the Corps to determine the applicability of CWA Section 404 permit requirements to wetlands that would be impacted by the Project activities and to ensure all practicable avoidance and minimization of waters of the U.S., including wetlands.

As under NEPA, need and purpose are interdependent terms which frame the alternatives analysis for compliance with the requirements of Section 404 of the CWA and 40 C.F.R. Part 230. The Project's purpose, or objective, should be framed in relation to addressing a need, with the need being the underlying problem or opportunity that the applicant is proposing to meet with the project. An appropriate purpose and need statement allows for an analysis of a range of alternatives with the goal of identifying the least environmentally damaging practicable alternative (LEDPA) consistent with the CWA Section 404(b)(1) Guidelines (40 C.F.R. Part 230). Therefore, the basic project purpose should not be defined in a manner that unduly restricts or precludes other alternatives, nor should it be so broad that a reasonable analysis of alternatives cannot be accomplished (40 C.F.R. § 230.10). The EPA recommends coordinating with the U.S. Army Corps of Engineers (Corps) when developing a purpose and need statement. When evaluating a permit application, the CWA regulations require the Corps to develop its own project purpose statement that considers the applicant's as well as the public's perspective. If the Corps cannot concur with what the applicant has submitted, the Corps is required to

modify it.<sup>1</sup> The use of a project purpose to determine the scope of studies that does not meet the Corps' requirements has the potential to result in the need to prepare additional NEPA documentation to meet CWA Section 404 requirements.

### Range of Alternatives

We recommend that the NEPA document summarize the regulatory requirements and processes utilized to develop the reasonable and practicable alternatives for purposes of NEPA and CWA Section 404. "Reasonable" under NEPA is based on consideration of the project purpose as well as technology, economics, and common sense, rather than what is simply desirable from the standpoint of the applicant. For purposes of CWA Section 404, it is important that the NEPA document include a range of alternatives with the goal of avoiding and minimizing impacts to waters of the U.S. while meeting the purpose and need for the action. Under CWA Section 404(b)(1) Guidelines, the Corps can only issue a CWA Section 404 permit for a discharge of dredged or fill material into waters of the U.S. if it can be demonstrated that the proposed project is the LEDPA with regard to aquatic resource impacts, provided that the LEDPA does not have other significant adverse environmental consequences. Therefore, EPA recommends that NDDOT include all alternatives that have the potential to be the LEDPA within the reasonable range of alternatives evaluated in the NEPA document. In doing so, NDDOT would ensure that other criteria and measures (e.g., impacts to non-aquatic natural resources and the built environment) would not be used to eliminate potential alternatives that are practicable under the 404(b)(1) Guidelines' criteria and may have less damaging impacts to wetlands and other waters of the U.S.

Under the CWA, "practicable" is defined as meaning the alternative is available, and capable of being done after taking into consideration cost, existing technology, and/or logistics in light of the overall project purpose(s) (40 C.F.R. § 230.3(l)). For an alternative to be practicable, it must only be reasonably available or obtainable and may include options beyond the authority of the Corps and the lead agency. Pursuant to the Section 404 requirements, the burden to clearly demonstrate that an alternative is not practicable rests on the applicant. If an alternative is a standard industry norm, then it is likely practicable unless clearly demonstrated otherwise (40 C.F.R. § 230.10). It is also important to note that under the Guidelines, cost is not primarily considered according to what the applicant can afford (its financial standing) or based on whether the cost of one alternative is more or less than other alternatives. Rather, practicability in terms of cost is based on whether the cost of an alternative is within the range of costs for similar projects or industry norms.<sup>2</sup> We recommend documenting the rationale for retaining or eliminating each of the considered alternatives or alternative combinations. The rationale should be consistent with the requirements of the CWA Section 404(b)(1) Guidelines (40 C.F.R. Part 230) and described in additional detail in the preamble to the Guidelines at 45 Fed. Reg. 85336 (Dec. 24, 1980). Meeting the requirements of the 404(b)(1) Guidelines would help ensure a robust analysis and NEPA document that would directly support the Corps' decision-making should an individual permit under CWA Section 404 be sought for the Project.

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<sup>1</sup> See ACOE "Preparing An Alternatives Analysis Under Section 404 of the CWA", pg 2-3, [https://www.swf.usace.army.mil/Portals/47/docs/regulatory/Handouts/Preparing\\_An\\_Alternatives\\_%20Analysis.FINAL.pdf](https://www.swf.usace.army.mil/Portals/47/docs/regulatory/Handouts/Preparing_An_Alternatives_%20Analysis.FINAL.pdf)

<sup>2</sup> See section 3.b. of the following EPA/Corp memo on the Appropriate Level of Analysis Required for Evaluating Compliance with the CWA Section 404(b)(1) Guidelines Alternatives Requirements: <https://www.epa.gov/cwa-404/memorandum-appropriate-level-analysis-required-evaluating-compliance-cwa-section-404b1>.

### Clean Water Act Section 404/401 Permit Coordination

As mentioned above, discharge of dredged or fill material into waters of the U.S., including wetlands, is regulated under CWA Section 404. The EPA notes that in the public meeting recording on October 22, 2024, the presenter discussed that the Project would likely need an individual 404 permit. This permit program is administered jointly by the USACE and EPA. We recommend that the NDDOT consult with the USACE Omaha District during the NEPA process conduct a jurisdictional determination and to make a final determination as to the applicability of CWA Section 404 permit requirements to delineated wetlands that could be impacted by road expansion in the Project area. EPA encourages this coordination as early as possible in the development of the draft NEPA document so that the impacts analysis can be informed by permitting considerations and the NEPA document can provide sufficient, timely information to support decisions in compliance with EPA's CWA Section 404(b)(1) Guidelines, thereby supporting the timely permitting and construction of the proposed Project.

### **Aquatic Resources**

#### Existing Conditions

The EPA recommends that the NEPA Document include a discussion of existing aquatic resource conditions in the project area, to provide the basis for an effective analysis of potentially significant impacts from the proposed Project to hydrology, water quality, habitat, and other water resources in the project area. To describe effects to aquatic resources in the project area, we recommend the NEPA document include the following analyses or descriptions:

- One or more maps and a summary of project area waters and downstream waters, including streams, lakes, springs, and wetlands. It would be helpful if the summary identified high resource value water bodies and their designated beneficial uses (e.g., agriculture, fisheries, drinking water, recreation);
- Watershed conditions, including vegetation cover and composition, soil conditions, and areas not meeting desired future conditions;
- Surface water information, including available water quality data in relation to current North Dakota Water Quality Standards, stream functional assessments, stream channel/stream bank stability conditions, sediment loads, and aquatic life;
- Types, functions, conditions, and acreages of wetlands, riparian areas, and springs;
- Available groundwater information; and
- A map and list of Clean Water Act (CWA) impaired or threatened water body segments within, or downstream of, the planning area, including the designated uses of the water bodies and the specific pollutants of concern potentially affected by on-going activities within or adjacent to the defined Project analysis area.

#### Water Quality Data

Water quality data for the streams and lakes of the project area provide important information for evaluating the potential influence of the Project on adjacent and downstream water quality. Such an evaluation can then guide management for the Project, with the data providing a baseline for future monitoring of impacts. We recommend the NEPA document provide a summary of available information and monitoring data on water quality within the project area and for downstream waters that may be affected by the proposed Project, including parameters such as total phosphorus, total nitrogen, *Escherichia coli* (*E. coli*), fecal coliform, total suspended solids, turbidity, total dissolved

solids, and temperature. It will also be important to include water quality data for parameters listed for impaired water bodies within or downstream of the Project area. Identifying any significant gaps in available data may be helpful in developing a monitoring plan. At a minimum, EPA recommends providing a reference to a publicly accessible technical document or an appendix that contains the requested relevant water quality parameters, and summarizing findings and trends within the NEPA document.

#### Potential Impacts to Wetlands

The National Wetland Inventory identifies palustrine wetlands, including riverine and emergent freshwater wetland habitats, in and around the Project area. Based on the public meeting recording, it is estimated that the Project may impact up to 15 acres of wetland resources along the proposed Project highway corridor. Wetlands and riparian areas increase landscape and species diversity, support many species of wildlife and are critical to the protection of water quality and designated beneficial uses of waterbodies. The EPA recommends the draft NEPA document analyze and describe all reasonably foreseeable impacts, both temporary and permanent, that may result from the Project. The context for this analysis should include all past, ongoing, and reasonably foreseeable actions having effects of a nature that overlap with the effects of the Project. Such impacts may be due to loss of hydrology from water diversions/transfers; functional conversion of wetlands (e.g., forested to shrub-scrub); changes to supporting wetland hydrology even if these wetlands are outside of the construction footprint (e.g., snow melt patterns, sheet flow, and groundwater hydrology); and wetland disturbance or loss.

The EPA recommends including the following baseline information in the NEPA document for the assessment of existing conditions and environmental consequences of the proposed Project as they relate to wetlands:

- Include a classification of waters and the geographic extent of waters and any adjacent wetland areas in the Project area;
- Characterize the functional condition of waters and any adjacent wetland areas.
- Identify all protected resources with special designations and waters within state, local, and federal protected lands. Additional steps should be taken to avoid and minimize impacts to these areas;
- Include wildlife species that could reasonably be expected to use waters or associated wetland habitat and sensitive plant taxa that are associated with waters or associated wetland habitat.
- Characterize the hydrologic linkage of the Project area wetlands to any other water bodies and identify any Clean Water Act 303(d) listed impaired water bodies that exist in the Project area;
- Analyze potential direct and indirect, or secondary, impacts, to all wetlands (both jurisdictional and non-jurisdictional) within the geographic scope of potential impacts, including impacts to wetlands from changes in hydrology even if these wetlands are spatially removed from the construction footprint; and
- Identify how each of the following impacts will be avoided or minimized by each alternative, including:
  - Changes in hydrology and sediment transport capacity;
  - Increases in impervious surfaces and the corresponding increases in the volume and velocity of polluted stormwater;

- Decreases in water and aquatic habitat quality from the impairment of floodplain and ecosystem functions including water filtration, groundwater recharge, and flood attenuation; and
- Disruption of hydrological and ecological connectivity; and decreases in biodiversity and ecosystem stability.

We note that the official North Dakota State Transportation website goes into detail about utilizing “wetland mitigation Banks for unavoidable impacts to jurisdictional wetlands.”<sup>3</sup> While this is appropriate mitigation when impacts are deemed unavoidable, EO 11990<sup>4</sup> directs agencies “to the extent permitted by law, shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds 1) that there is no practicable alternative to such construction, and 2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.” Therefore, we recommend evaluating potential alternatives that avoid impacts to all wetlands, not only jurisdictional wetlands. Should avoidance through use of alternative design features not be possible, the EPA recommends the NEPA document further disclose the steps used to address the mitigation sequence for this Project. Disclosure of this process is also important to demonstrate compliance with the CWA Section 404(b)(1) Guidelines if a CWA Section 404 permit will be sought.

If impacts cannot be avoided, we recommend the NEPA document describe how the NDDOT intends “to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands,” as described in Executive Order 11990. Consistent with CWA Section 404(b)(1) Guidelines (see 40 CFR 230.10(d)),<sup>5</sup> we recommend the NEPA document identify and evaluate specific methods to protect impacted wetlands, including a clear list of mitigation requirements and BMPs applicable to construction, operation, and reclamation activities to minimize adverse impacts to these aquatic resources. This list of measures can include, as appropriate, mitigation actions such as: the use of stormwater control measures, marking of perennial seeps, springs and wetlands on maps and on the ground before commencing construction to facilitate their protection, and enhanced monitoring of resource conditions for high value water and riparian resources. To ensure that wetlands are protected to the greatest extent possible, it may be necessary to consider protective design elements where wetlands or riparian area would be adversely impacted.

#### Potential Impacts to Impaired Waterbodies

Based upon the most recent EPA-approved CWA Section 303(d) list for North Dakota (2022)<sup>6</sup> there are impaired streams (e.g., Souris River) located near the proposed project area. These resources are important to evaluate as the proposed activities may further impact systems or portions of systems downstream. We recommend the NDDOT: (1) analyze potential impacts to impaired waterbodies within and/or downstream of the project area, and (2) coordinate with the North Dakota Department of Environmental Quality (NDDEQ) if there are identified potential impacts and exceedances of water quality standards as such impacts are prohibited and would be considered a “significant” impact under NEPA.

<sup>3</sup> <https://www.dot.nd.gov/construction-and-planning/construction-planning/environmental/wetlands>

<sup>4</sup> A copy of Executive Order 11990, “Protection of Wetlands” (April 12, 1977) can be accessed at: <https://www.archives.gov/federal-register/codification/executive-order/11990.html>

<sup>5</sup> <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-H/part-230>

<sup>6</sup> [https://deq.nd.gov/publications/WQ/3\\_WM/TMDL/1\\_IntegratedReports/2020\\_2022\\_Final\\_ND\\_Integrated\\_Report\\_20230824.pdf](https://deq.nd.gov/publications/WQ/3_WM/TMDL/1_IntegratedReports/2020_2022_Final_ND_Integrated_Report_20230824.pdf)



### Floodplain Considerations

Executive Order 11988 “Floodplain Management” links the need to protect lives and property with the need to restore and preserve natural and beneficial floodplain values. Federal agencies are directed to avoid conducting, allowing, or supporting actions on the base floodplain unless the agency finds that the base floodplain is the only practicable alternative location. In response to this EO, the Department of Transportation issued an order (DOT 5650.2) directing agencies to utilize the NEPA process as “the vehicle through which implementation of this policy [EO 11988] is documented”. It further outlines that the NEPA document shall identify the following for all alternatives involving floodplain encroachments: (1) any risk to, or resulting from, the transportation Action; (2) the impacts on natural and beneficial floodplain values; and (3) the degree to which the action provides direct or indirect support for development in the base floodplain. The DOT Order also states that the NEPA analysis include, “sufficient discussion to permit an initial review of the adequacy of methods proposed to minimize harm, and, where practicable, to restore and preserve the natural and beneficial floodplain values affected.”

We recommend the NEPA document include a discussion of and describe how the proposed project was designed with consideration of these policies, including relevant maps of the region. We recommend the NEPA analysis discuss what the adverse impacts of the Project may have on base floodplains, including direct or indirect support for development, and what mitigation is implemented to restore and preserve natural and beneficial floodplain values adversely affected by the Project. We also recommend discussing any predictive precipitation, flooding and/or stormwater risk modeling that was conducted for the Project area.

### Groundwater

Groundwater is an important resource since it provides domestic and public water supply and supports environmental flows and levels in groundwater dependent ecosystems (GDEs). GDEs include wetlands fed by groundwater, terrestrial vegetation and fauna sustained by shallow groundwater, ecosystems in streams, lakes fed by groundwater, and springs. While GDEs occupy a small percentage of landscapes in the West, riparian areas and GDEs provide disproportionately large ecosystem services such as water filtration, wildlife habitat, and flood control. Construction and maintenance practices associated with roads, and heavy equipment use have the potential to impact GDEs by altering surface run-off, infiltration, evapotranspiration, sedimentation, and soil compaction. Additionally, construction and maintenance actions such as equipment fueling and waste practices in temporary work areas have the potential to introduce contaminants to GDEs and shallow aquifers. We recommend the NEPA document include a map of groundwater resources, including GDEs, and a discussion to include the following information (if available): identification of major aquifers; location and extent of groundwater recharge areas; location of existing and potential (i.e., those that can reasonably be used in the future) underground sources of drinking water (USDW); and characterization of source water protection zones for public water systems in proximity of the project (see more information below).

### Public Drinking Water Supply Sources

The proposed construction activities could potentially impact sources of public drinking water. For example, road construction is a major source of sediment. Sediment can adversely impact water quality by increasing turbidity, plugging filters and other treatment systems, and increase cost of water treatment. Suspended sediment can also carry chemical pollutants, such as phosphates, pesticides and

hydrocarbons into surface water and groundwater. The EPA recommends that the NEPA document include a map, appropriate for public dissemination, showing the generalized locations of all source water assessment and protection areas associated with public drinking water supplies. We also recommend that the NEPA document include an assessment of potential Project impacts and benefits, as well as design criteria and mitigation options for protecting these high value drinking water resources from potential Project impacts.

## **Air Quality**

### CAA Conformity vs. NEPA

The EPA understands that the proposed Project may not require transportation conformity given that it is not located in a non-attainment or maintenance area for the NAAQS pollutants and that operation of the proposed project may not lead to regionally significant increases in criteria pollutants that would interfere with attainment of the NAAQS. However, NEPA requires an analysis of all impacts that could potentially be significant, and violations of the NAAQS, which are the focus of CAA requirements, are not the only potentially significant air quality impacts that could occur with this project. Specifically, construction activities proposed as a part of the Project warrant attention in the NEPA document for purposes of disclosure and agency decision-making. Construction impacts to air quality can be short-term and not lead to violations of the NAAQS but still have significant impacts to surrounding communities. Therefore, consideration of potential impacts with respect to existing air quality and sensitive receptors at a more localized scale is an important part of a meaningful analysis. Examples of potential air emissions associated transportation construction activities include air pollutants from diesel- and gasoline-fueled construction and maintenance equipment, emissions from idling equipment, and emissions from vehicles traveling on paved and unpaved roads, including re-entrained dust.

To evaluate the impacts of construction activities to local air quality, we recommend the NEPA document include a description of the construction activities, the types and numbers of emission sources (such as off-road heavy duty diesel construction equipment) associated with each of those activities, the durations of each of those activities, and a quantification of criteria pollutant and HAPS emissions. Reasonable estimates regarding emission sources can be presented based on NDDOT's knowledge of similar projects. For criteria pollutants we recommend coordinating with the North Dakota DEQ's Division of Air Quality (DoAQ) to establish representative design values (background pollutant concentrations) based on the most recent monitoring data that are representative of the Project area. Data are available from the EPA at their design values webpage.<sup>7</sup> Monitoring locations and data can also be accessed by the public through the EPA's outdoor air monitor webpage,<sup>8</sup> as well as through the EPA's Air Quality System (AQS) for AQS users.<sup>9</sup> We recommend the NEPA document provide narrative discussions to explain the numeric design values and NAAQS in plain terms such that the public can understand the overall existing quality of the air as well as any occurring trends.

We recommend the NEPA document then provide an assessment of the potential impacts of these emissions to human health and the environment, with consideration of sensitive receptors in the area surrounding the project (e.g., residents, pedestrians including schoolchildren, and recreationalists). As

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<sup>7</sup> <https://www.epa.gov/air-trends/air-quality-design-values>.

<sup>8</sup> <https://www.epa.gov/outdoor-air-quality-data/interactive-map-air-quality-monitors>.

<sup>9</sup> <https://www.epa.gov/aqs>.

part of such an assessment, we recommend contextualizing these emissions, for example, by comparing them to other typical sources of emissions so that the outputs of these analyses can be translated to more meaningful outcomes that the public can understand.

Additional relevant outcomes that we recommend discussing include:

- Impacts from each of the criteria pollutants (ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, and lead), including with respect to their respective NAAQS; and
- Impacts that could result from exposure to hazardous air pollutants (HAPs) based on relevant health-based risk thresholds for HAPs.

We anticipate NDDOT would utilize (or ensure the construction contractor utilize) Best Management Practices (BMPs) during construction. We recommend the NEPA document discuss these BMPs and any measures to minimize particulate matter and other emissions, including airborne dust and vehicular and machinery exhaust during construction. Since localized impacts from PM<sub>2.5</sub> and PM<sub>10</sub> emissions can occur with road construction projects, we suggest local air monitoring be implemented for regions with larger communities, such as in range of the towns of Logan, Sawyer, Velva, and Voltair, to demonstrate the effectiveness of BMPs in minimizing adverse effects and allow for BMP modifications or the application of mitigation measures should air quality problems be detected. We also recommend the NEPA document identify how and when information regarding construction activities will be conveyed to the public in a timely and meaningful way so that community members can plan, as needed, to avoid areas of impacted air quality. We also recommend including in public announcements, to the extent possible, an approximate time period or phasing schedule for the project's permitting and construction.

May 13, 2025

Mr. Mike Huffington

Ulteig Engineering  
3350 38<sup>th</sup> Avenue South  
Fargo, ND 58104  
Mike.huffington@ulteig.com  
701-280-8655

Dear Mr. Huffington,

This is in response to your request for a review of the environmental impacts associated with the US 52 Four Lane From Approximately 2.3 Miles West Of Junction Of 79<sup>th</sup> Ave SE To Voltaire Project No 4-052 (109) 101, PCN 24012, located in Ward and McHenry Counties, North Dakota.

The proposed project has been reviewed by Department of Water Resources (DWR), and the following comments are provided:

- There is a FEMA National Flood Insurance Program (NFIP) regulatory floodplain identified or mapped where this proposed project is to take place. Impacted areas are designated to be in NFIP Zone AE, with a certified levee. A CLOMR is likely required. The State of North Dakota has no formal NFIP permitting authority, as all NFIP permitting decisions are considered by impacted NFIP participating communities, which is the community with zoning authority for the area in question. Please work directly with the local floodplain administrator of the zoning authority impacted to achieve NFIP and community compliance.
- Initial review indicates the project does not require a conditional or temporary permit for water appropriation. However, if surface water or groundwater will be diverted for construction of any future projects identified in the plan, a water permit will be required per North Dakota Century Code § 61-04-02. Please consult with the DWR Water Appropriation Division if you have any questions at (701) 328-2754 or [appropinfo@nd.gov](mailto:appropinfo@nd.gov).
- The DWR maintains a network of observation wells across the state for monitoring the water levels and quality in glacial and bedrock aquifers. These wells are often installed in road and highway rights-of-way to limit inconvenience to the adjacent landowners. DWR observation wells have a yellow protective casing extending between 1 and 3 feet above ground surface, and their locations are marked with a stake. If an observation well is encountered during project activities and must be removed, please contact the Water Appropriation Division. The DWR hopes to keep all observation wells, but otherwise will ensure the well is properly abandoned.
- The DWR Engineering and Permitting Section reviewed the project location and determined that it likely does not require a surface drain permit unless the project impacts sloughs, ponds, lakes (i.e., wetlands) outside of the roads' right-of-way. For more information on these requirements, please visit the Regulation & Appropriation tab on the DWR's website ([dwr.nd.gov](http://dwr.nd.gov)) or contact the DWR's Regulatory Division at 701-328-4956 or [dwrregpermits@nd.gov](mailto:dwrregpermits@nd.gov).

Thank you for the opportunity to provide review comments. Should you have further questions, please contact me at 701-328-4970 or [kyrkoski@nd.gov](mailto:kyrkoski@nd.gov).

Sincerely,

A handwritten signature in cursive script, reading "Kyle Yrkoski". The signature is written in black ink and is positioned below the word "Sincerely,".

Kyle Yrkoski  
Planner III

KY:mg/1570





**DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS, OMAHA DISTRICT  
NORTH DAKOTA REGULATORY OFFICE  
3319 UNIVERSITY DRIVE  
BISMARCK, ND 58504**

September 5, 2025

**SUBJECT: NWO-2022-00132-BIS – NDDOT US Highway 52 Four-Laning, PCN 24012  
Addendum/Reverification– Approved/Preliminary Jurisdictional Determination**

North Dakota Department of Transportation  
Attn: Mr. Russell Senske  
608 East Boulevard Avenue  
Bismarck, North Dakota 58505

Dear Mr. Senske:

This letter is in response to your request received on August 14, 2025 for a jurisdictional determination reverification for the US Highway 52 from Minot to Voltaire Four-Lane project. The site is located in multiple sections of Townships 152-154 North, Ranges 79-82 West, starting near Latitude 48.174865° North, Longitude -101.204405° West, Ward County and ending near Latitude 48.016825° North, Longitude -100.827324° West, McHenry County, North Dakota. Your request has been assigned the Corps Regulatory File Number referenced above. Please reference this file number on any correspondence to us or to other interested parties when referencing this project or concerning this request.

The U.S. Army Corps of Engineers (Corps) regulates the discharge of dredged and fill material into waters of the United States under Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344) and structures or work in, over, and under navigable waters of the United States under Section 10 of the Rivers and Harbors Act (RHA) (33 U.S.C. 403). The implementing regulations for these Acts are published in the Code of Federal Regulations at 33 CFR parts 330-332.

The enclosed preliminary JD is our written indication that the resources identified as OW1a,b, W1c,d, W4, W5a,c,d,f, OW5b,e, W9a, OW9b, OW11a,b, W11c,d,e, OW12a,b, OW20a,d, W20b,c,e, OW23a-b, W23c, OW24a,b, W25a,b,c, W28a, OW28b, W30, W31a,c,d,f, OW31b,e, W35a,b, W36, W37, W38, W39a,b, W40, W43a,b,c, W47a,b,c,d,e,f, W49a,c, OW49b,d, W51a,c,d,f, OW51b,e, W52, W54, W56a,b,c,d,e OW59a, W59b,c,d, W61a-z,aa, OW61h,j,n,p,s,v, W63a,b, W65, W64, W68a,b, W69, W70, W72a,b,c,d, W75a,b, and W76 may be jurisdictional waters of the United States. Such waters will be treated as jurisdictional for computation of impacts and compensatory mitigation requirements.

Based on our evaluation of the information provided and other available information, we have also determined the following resources are non-jurisdictional: W2, W3, W6, W7a,b,c, W8, W10a,b, W13, W14, W15, W16, W17, W18, W19, W21, W22, W26, W27, W29, W30, W32, OW33a,b, OW34a,b,c, W34d, W41, W42a,b,c, W44, W45, W46, W48, W50, W55, W57, W58, W60, W62, W65, W66, W67, W71, W73, W74, W77, W78, W79a, OW79b, W80. The attached approved jurisdictional determination provides rationale for why these aquatic resources do not meet the definition of waters of the United States. Based on this determination, a Department of

the Army permit is not required for the discharge of dredged or fill material into these aquatic resources. This determination does not eliminate requirements to obtain any other applicable federal, state, tribal, or local permits.

Attached to this letter is the approved jurisdictional determination for your project site. This jurisdictional determination is valid for a 5-year period from the date of this letter, until **September 5, 2030**, unless new information warrants revision of the determination before the expiration date. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR part 331. Enclosed you will find a *Notification of Administrative Appeal Options and Process and Request for Appeal* (NAO-RFA) form. If you request to appeal this determination, you must submit a completed NAO-RFA form to the address listed on the form.

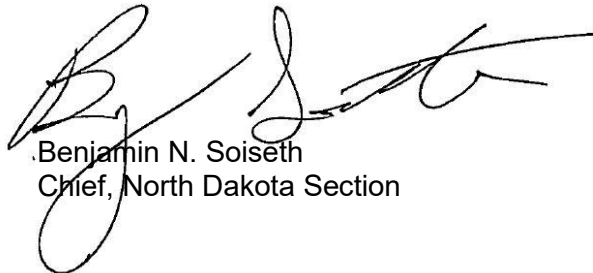
For an NAO-RFA to be accepted by the Corps, the Corps must determine that it is completed, that it meets the criteria for appeal under 33 CFR 331.5, and that it has been received by the Division Office within 60 days of the date of the NAO-RFA. Should you decide to submit an NAO-RFA form, it must be received at the Division Office by **November 3, 2025**. It is not necessary to submit an NAO-RFA form to the Division Office if you do not object to the determination in this letter.

In the event that you disagree with this approved jurisdictional determination, and you have **new information** not considered in the original determination, you may request reconsideration of this determination by contacting this office prior to initiating an appeal. To request this reconsideration based upon new information, you must submit the new information to this office so that it is received within 60 days of the date of the NAO-RFA.

The Corps' Omaha District, Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete our Customer Service Survey found on our website at <https://regulatory.ops.usace.army.mil/customer-service-survey/>. If you do not have Internet access, you may call and request a paper copy of the survey that you can complete and return by mail. Additionally, further information regarding the Omaha District Regulatory Program can be obtained by visiting our website at <https://www.nwo.usace.army.mil/Missions/Regulatory-Program/>.

If you have any questions concerning this jurisdictional determination, please contact Amber Inman by phone at (701) 989-6428 or by email at [Amber.L.Inman@usace.army.mil](mailto:Amber.L.Inman@usace.army.mil) and reference file number **NWO-2022-00132-BIS**.

Sincerely,



Benjamin N. Soiseth  
Chief, North Dakota Section

Enclosures



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS, NWO DISTRICT  
3319 UNIVERSITY DRIVE  
BISMARCK, NORTH DAKOTA 58504

CENWO-ODR-N

September 5, 2025

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Pre-2015 Regulatory Regime Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023),<sup>1</sup> [NWO-2022-00132-BIS, US Highway 52 4-Laning from 2.3 Miles West of Junction 79<sup>th</sup> Avenue SE to Voltaire, PCN 24012 Addendum/Reverification \(associated PJD, see Section 10 for details\)](#)<sup>2</sup>

BACKGROUND. An Approved Jurisdictional Determination (AJD) is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. AJDs are clearly designated appealable actions and will include a basis of JD with the document.<sup>3</sup> AJDs are case-specific and are typically made in response to a request. AJDs are valid for a period of five years unless new information warrants revision of the determination before the expiration date or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.<sup>4</sup> For the purposes of this AJD, we have relied on section 10 of the Rivers and Harbors Act of 1899 (RHA),<sup>5</sup> the Clean Water Act (CWA) implementing regulations published by the Department of the Army in 1986 and amended in 1993 (references 2.a. and 2.b. respectively), the 2008 *Rapanos-Carabell* guidance (reference 2.c.), and other applicable guidance, relevant case law and longstanding practice, (collectively the pre-2015 regulatory regime), and the *Sackett* decision (reference 2.d.) in evaluating jurisdiction.

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. The features addressed in this AJD were evaluated consistent with the definition of “waters of the United States” found in the pre-2015

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<sup>1</sup> While the Supreme Court’s decision in *Sackett* had no effect on some categories of waters covered under the CWA, and no effect on any waters covered under RHA, all categories are included in this Memorandum for Record for efficiency.

<sup>2</sup> When documenting aquatic resources within the review area that are jurisdictional under the Clean Water Act (CWA), use an additional MFR and group the aquatic resources on each MFR based on the TNW, interstate water, or territorial seas that they are connected to. Be sure to provide an identifier to indicate when there are multiple MFRs associated with a single AJD request (i.e., number them 1, 2, 3, etc.).

<sup>3</sup> 33 CFR 331.2.

<sup>4</sup> Regulatory Guidance Letter 05-02.

<sup>5</sup> USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this MFR, jurisdiction under RHA will be referred to as Section 10.

regulatory regime and consistent with the Supreme Court's decision in *Sackett*. This AJD did not rely on the 2023 "Revised Definition of 'Waters of the United States,'" as amended on 8 September 2023 (Amended 2023 Rule) because, as of the date of this decision, the Amended 2023 Rule is not applicable in this state due to litigation.

## 1. SUMMARY OF CONCLUSIONS.

- a. Provide a list of each individual feature within the review area and the jurisdictional status of each one (i.e., identify whether each feature is/is not a water of the United States and/or a navigable water of the United States).
  - i. [Wetland 2, is not a water of the United States, non-jurisdictional wetland](#)
  - ii. [Wetland 3, is not a water of the United States, non-jurisdictional wetland](#)
  - iii. [Wetland 6, is not a water of the United States, non-adjacent wetland](#)
  - iv. [Wetland 7a,b,c, is not a water of the United States, non-adjacent wetland](#)
  - v. [Wetland 8, is not a water of the United States, non-adjacent wetland](#)
  - vi. [Wetland 10a,b, is not a water of the United States, non-adjacent wetland](#)
  - vii. [Wetland 13, is not a water of the United States, non-adjacent wetland](#)
  - viii. [Wetland 14, is not a water of the United States, non-adjacent wetland](#)
  - ix. [Wetland 15, is not a water of the United States, non-adjacent wetland](#)
  - x. [Wetland 16, is not a water of the United States, non-adjacent wetland](#)
  - xi. [Wetland 17, is not a water of the United States, non-adjacent wetland](#)
  - xii. [Wetland 18, is not a water of the United States, non-adjacent wetland](#)
  - xiii. [Wetland 19, is not a water of the United States, non-adjacent wetland](#)
  - xiv. [Wetland 21, is not a water of the United States, non-adjacent wetland](#)
  - xv. [Wetland 22, is not a water of the United States, non-adjacent wetland](#)
  - xvi. [Wetland 26, is not a water of the United States, non-jurisdictional wetland](#)
  - xvii. [Wetland 27, is not a water of the United States, non-jurisdictional wetland](#)
  - xviii. [Wetland 29, is not a water of the United States, non-adjacent wetland](#)
  - xix. [Wetland 30, is not a water of the United States, non-adjacent wetland](#)
  - xx. [Wetland 32, is not a water of the United States, non-jurisdictional wetland](#)
  - xxi. [OW33a,b, is not a water of the United States, intrastate stream/river](#)
  - xxii. [OW34a,b,c, is not a water of the United States, intrastate stream/river](#)
  - xxiii. [Wetland 34d, is not a water of the United States, non-adjacent wetland](#)
  - xxiv. [Wetland 41, is not a water of the United States, non-adjacent wetland](#)
  - xxv. [Wetland 42a-c, is not a water of the United States, non-adjacent wetland](#)
  - xxvi. [Wetland 44, is not a water of the United States, non-adjacent wetland](#)
  - xxvii. [Wetland 45, is not a water of the United States, non-adjacent wetland](#)
  - xxviii. [Wetland 46, is not a water of the United States, non-adjacent wetland](#)
  - xxix. [Wetland 48, is not a water of the United States, non-adjacent wetland](#)
  - xxx. [Wetland 50, is not a water of the United States, non-adjacent wetland](#)

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- xxxi. [Wetland 55, is not a water of the United States, non-jurisdictional wetland](#)
- xxxii. [Wetland 57, is not a water of the United States, non-jurisdictional wetland](#)
- xxxiii. [Wetland 58, is not a water of the United States, non-jurisdictional wetland](#)
- xxxiv. [Wetland 60, is not a water of the United States, non-jurisdictional wetland](#)
- xxxv. [Wetland 62, is not a water of the United States, non-adjacent wetland](#)
- xxxvi. [Wetland 65, is not a water of the United States, non-jurisdictional wetland](#)
- xxxvii. [Wetland 66, is not a water of the United States, non-jurisdictional wetland](#)
- xxxviii. [Wetland 67, is not a water of the United States, non-adjacent wetland](#)
- xxxix. [Wetland 71, is not a water of the United States, non-adjacent wetland](#)
- xl. [Wetland 73, is not a water of the United States, non-adjacent wetland](#)
- xli. [Wetland 74, is not a water of the United States, non-adjacent wetland](#)
- xl.ii. [Wetland 77, is not a water of the United States, non-adjacent wetland](#)
- xl.iii. [Wetland 78, is not a water of the United States, non-adjacent wetland](#)
- xliv. [Wetland 79a, OW79b, is not a water of the United States, non-adjacent wetland](#)
- xliv. [Wetland 80, is not a water of the United States, non-adjacent wetland](#)

## 2. REFERENCES.

- a. Final Rule for Regulatory Programs of the Corps of Engineers, 51 FR 41206 (November 13, 1986).
- b. Clean Water Act Regulatory Programs, 58 FR 45008 (August 25, 1993).
- c. U.S. EPA & U.S. Army Corps of Engineers, Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States* (December 2, 2008)
- d. *Sackett v. EPA*, 598 U.S. 651, 143 S. Ct. 1322 (2023)
- e. 2008 Rapanos Guidance
- f. "Memorandum to the Field Between the U.S. Department of the Army, U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency Concerning the Proper Implementation of 'Continuous Surface Connection' Under the Definition of "Waters of the United States" Under the Clean Water Act" (March 12, 2025)

- 3. REVIEW AREA. [Review area is approximately 1975 acres along US Highway 52, Ward and McHenry Counties in multiple sections of Townships 152-154 North, Ranges 79-82 West, starting near Latitude 48.174865° North, Longitude -](#)



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[101.204405° West and ending near Latitude 48.016825° North, Longitude - 100.827324° West; Boundary map for review area is attached.](#)

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), INTERSTATE WATER, OR THE TERRITORIAL SEAS TO WHICH THE AQUATIC RESOURCE IS CONNECTED. [N/A](#).<sup>6</sup>
5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, INTERSTATE WATER, OR THE TERRITORIAL SEAS [N/A](#).
6. SECTION 10 JURISDICTIONAL WATERS<sup>7</sup>: Describe aquatic resources or other features within the review area determined to be jurisdictional in accordance with Section 10 of the Rivers and Harbors Act of 1899. Include the size of each aquatic resource or other feature within the review area and how it was determined to be jurisdictional in accordance with Section 10. [N/A](#)<sup>8</sup>
7. SECTION 404 JURISDICTIONAL WATERS: Describe the aquatic resources within the review area that were found to meet the definition of waters of the United States in accordance with the pre-2015 regulatory regime and consistent with the Supreme Court's decision in *Sackett*. List each aquatic resource separately, by name, consistent with the naming convention used in section 1, above. Include a rationale for each aquatic resource, supporting that the aquatic resource meets the relevant category of "waters of the United States" in the pre-2015 regulatory regime. The rationale should also include a written description of, or reference to a map in the administrative record that shows, the lateral limits of jurisdiction for each aquatic resource, including how that limit was determined, and incorporate relevant references used. Include the size of each aquatic resource in acres or linear feet and attach and reference related figures as needed.
  - a. TNWs (a)(1): [N/A](#)

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<sup>6</sup> This MFR should not be used to complete a new stand-alone TNW determination. A stand-alone TNW determination for a water that is not subject to Section 9 or 10 of the Rivers and Harbors Act of 1899 (RHA) is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established.

<sup>7</sup> 33 CFR 329.9(a) A waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this part) retains its character as "navigable in law" even though it is not presently used for commerce, or is presently incapable of such use because of changed conditions or the presence of obstructions.

<sup>8</sup> This MFR is not to be used to make a report of findings to support a determination that the water is a navigable water of the United States. The district must follow the procedures outlined in 33 CFR part 329.14 to make a determination that water is a navigable water of the United States subject to Section 10 of the RHA.

- b. Interstate Waters (a)(2): [N/A](#)
- c. Other Waters (a)(3): [N/A](#)
- d. Impoundments (a)(4): [N/A](#)
- e. Tributaries (a)(5): [N/A](#)
- f. The territorial seas (a)(6): [N/A](#)
- g. Adjacent wetlands (a)(7): [N/A](#)

## 8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

- a. Describe aquatic resources and other features within the review area identified as “generally non-jurisdictional” in the preamble to the 1986 regulations (referred to as “preamble waters”).<sup>9</sup> Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA as a preamble water. [N/A](#)
- b. Describe aquatic resources and features within the review area identified as “generally not jurisdictional” in the *Rapanos* guidance. Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA based on the criteria listed in the guidance. [Wetlands 2, 3, 26, 27, 32, 55, 57, 58, 60, 65, and 66 \(1.104-acres total\) were identified as ditch wetlands in the delineation report. After careful analysis and review of Google Earth imagery, flood risk inundation maps, historical imagery, and elevation imagery, wetlands 2, 3, 26, 27, 32, 55, 57, 58, 60, 65, and 66 were determined to be roadside ditch wetlands adjacent to US Highway 52. Wetland 32 was determined to be a railroad ditch wetland adjacent to BNSF railway. None of them are connected to larger wetland complexes or tributary systems outside of the ditches. They are confined within the road ditch. Per the 2008 Rapanos Guidance, ditches \(including roadside ditches\) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water are generally not waters of the U.S. because they are not tributaries. The wetlands in question have formed in low-lying depressions within the roadside ditches; they were excavated wholly in, drain only uplands, and do not carry a relatively permanent flow of water between the subject ditches and the nearest RPW/TNW. No relatively permanent flow of water between the subject ditches and nearest](#)

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<sup>9</sup> 51 FR 41217, November 13, 1986.

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[RPW/TNW was observed within the ditches during review of aerial imagery available on Google Earth \(1995-2023\). Therefore, these resources are not regulated under Section 404 of the Clean Water Act.](#)

- c. Describe aquatic resources and features identified within the review area as waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA. Include the size of the waste treatment system within the review area and describe how it was determined to be a waste treatment system. [N/A](#)
- d. Describe aquatic resources and features within the review area determined to be prior converted cropland in accordance with the 1993 regulations (reference 2.b.). Include the size of the aquatic resource or feature within the review area and describe how it was determined to be prior converted cropland. [N/A](#)
- e. Describe aquatic resources (i.e. lakes and ponds) within the review area, which do not have a nexus to interstate or foreign commerce, and prior to the January 2001 Supreme Court decision in “*SWANCC*,” would have been jurisdictional based solely on the “Migratory Bird Rule.” Include the size of the aquatic resource or feature, and how it was determined to be an “isolated water” in accordance with *SWANCC*. [N/A](#)
- f. Describe aquatic resources and features within the review area that were determined to be non-jurisdictional because they do not meet one or more categories of waters of the United States under the pre-2015 regulatory regime consistent with the Supreme Court’s decision in *Sackett* (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water).

[Wetland 6 \(2.22 acres\) was identified as a natural wetland basin in the report. After a review of imagery, the Corps concurs that this is a natural wetland basin; it was therefore assessed for adjacency to any RPWs or TNWs. Wetland 6 is situated in a farm field on the south side of US Highway 52, and based on the delineation boundaries and aerial imagery, it does not extend into the ditch. This wetland is a typical “pothole” wetland, as it is a depressional wetland contained entirely within a defined basin with no outlets or manmade drainages to potentially connect it to any RPWs/TNWs. As a result of this case specific analysis, wetland 6 is not regulated under Section 404 of the Clean Water Act.](#)

[Wetland 7a,b,c \(0.185-acre\) was delineated as separate segments in the report. Wetland 7a and 7b were identified as natural wetlands, and segment 7c was identified as a created ditch wetland. After careful analysis, it was determined](#)

that segment 7a-c are all one wetland complex with 7c separated by the road to the private residence (Prairie Wind Pet Lodge). Wetland 7a-c does not fit the criteria for “generally not jurisdictional” in the Rapanos Guidance. It was therefore analyzed for adjacency to the nearest RPW. Wetland 7a-c is situated north of CR 16; it is lacking any apparent culverts to connect it to the south side of CR 16 where there are some drainage features approximately 0.25 miles south of the road. Looking east and west along the road ditch, there are no identifiable culverts to maintain discrete continuous surface connections beyond the survey corridor. As a result of this case specific analysis, wetland 7a-c is not regulated under Section 404 of the Clean Water Act

Wetland 8 (0.154-acre) is a natural slope wetland situated on the west side of Highway 52; it does not extend beyond the project boundaries, and it is associated with a drainage feature. According to the delineation, it is separated from wetland 9a by about 112 feet of uplands. Wetland 9a is associated with OW 9b (a relatively permanent tributary to the Souris River). Wetland 9b flows into a culvert under the highway and flows into OW9b on the east side of the highway. Per the 2025 Continuous Surface Connection Memo, because wetland 8 does not physically abut OW 9b or its associated wetland 9a, it does not maintain a continuous surface connection with a jurisdictional water and is therefore not regulated under Section 404 of the Clean Water Act.

Wetland 10a,b (0.316-acre) was delineated as separate segments and identified as a drainage in the report. After a review of imagery, the Corps concurs that this resource is part of a natural drainage system; it was therefore assessed for connections to any RPWs or TNWs. Looking southwest of the project area, 10a continues out of the project within a defined wooded drainage area. However, after reviewing aerial imagery, topography imagery, and flood risk maps, there is no discernible discrete continuous surface connection to the nearest RPW located approximately 0.90 miles south of wetland 10a. Looking north of the project area, wetland 10b continues north out of the project area and down into a valley toward some private residences. There are no discrete continuous surface connections beyond the residences and to a set of culverts observed under CR 19. As a result of this case specific analysis, wetland 10a-b is not regulated under Section 404 of the Clean Water Act.

Wetlands 13, 14, 15, 16, 17, 18, and 19 (0.184-acre total) were all identified as natural slope wetlands in the report. After a review of imagery, the Corps concurs that these resources are part of a natural drainage system; they were therefore assessed for connections to any RPWs or TNWs. Wetlands 13-19 are all similarly situated wetlands within a wooded drainage area southwest of Highway 52. None of them encompass the south road ditch of Highway 52 nor are there

any culverts to potentially connect anything to the north side of Highway 52. Based on imagery and topography, it appears that this drainage continues southwest out of the project area and in between a couple private residences. However, this is a heavily wooded area, and based on Bingmaps streetview, there are no apparent culverts for the drainage to continue south of Dakota Ridge Road South and to the nearest RPW approximately 0.43 miles south of Dakota Ridge Road. As a result of this case specific analysis, wetlands 13-19 are not regulated under Section 404 of the Clean Water Act.

Wetland 21 (2.053-acres) was identified as a natural wetland basin in the report. After a review of imagery, the Corps concurs that this resource is a large natural wetland basin; it was therefore assessed for connections to any RPWs or TNWs. Looking north, there is a culvert that goes under Highway 52 that is approximately 120 feet away from the closest boundary of wetland 21. However, looking at Google Earth streetview imagery, it is apparent that wetland 21 does not encompass any of the road ditch and there is no discernible discrete continuous connection path between the wetland and the culvert. Analyzing south of wetland 21, there is an obvious topography change just south of the wetland that is apparent on Google Earth streetview imagery. This stark change in topography prevents any potential connections south of the project area. As a result of this case specific analysis, wetland 21 is not regulated under Section 404 of the Clean Water Act.

Wetland 22 (0.777-acre) is a natural wetland situated on the northeast side of Highway 52; based on the delineation, it does extend northeast beyond the project boundaries. Wetland 22 was assessed for continuous surface connection to three RPWs. The first RPW (identified as OW20d in the report) is about 0.4 miles northwest of wetland 22; the second RPW (identified as OW23b in the report) is about 0.3 miles southeast of wetland 22; the third RPW is also a traditional navigable water (TNW) known as the Souris River, and it is about 0.43 miles northeast of wetland 22. RPW 1 and RPW 2 are both tributaries to the Souris River. Based on the delineation report, wetland 22 does not extend far enough within the project area to physically abut RPW 1 or RPW 2. Aerial imagery, wetland maps, hydrography maps, flood risk maps, and lidar imagery were all assessed to determine if wetland 22 extends far enough outside the project boundaries to physically abut RPW 3/TNW Souris River. Based on a review of these sources, wetland 22 does not extend to physically abut RPW 3/TNW Souris River. Per the 2025 Continuous Surface Connection Memo, because wetland 22 does not physically abut RPW 1, RPW 2, or RPW 3/TNW Souris River, it does not maintain a continuous surface connection with a jurisdictional water and is therefore not regulated under Section 404 of the Clean Water Act.

Wetland 29 (0.021-acre) was identified as a natural drainage wetland in the report and after a review of imagery, the Corps concurs; it was therefore assessed for connections to any RPWs or TNWs. Wetland 29 is located at the bottom of a drainage with culverts to connect it to the north of Highway 52. Looking south of the wetland, it is apparent with elevation and aerial imagery that the drainage continues for another 600-1000 feet before there is an obvious elevation increase of about 75-80 feet between the wetland and the higher ground south of project area. The topography prevents any continuous connection paths. As a result of this case specific analysis, wetland 29 is not regulated under Section 404 of the Clean Water Act.

Wetland 30 (0.179-acre) is a natural wetland basin situated on the south side of the highway; it does not extend beyond the project boundaries. The closest RPW is about 0.36 miles southeast of wetland 30. Wetland 30 maintains a flowpath to the RPW via a drainage swale. However, based on the report, wetland 30 does not extend beyond the project boundaries to physically abut the RPW. Per the 2025 Continuous Surface Connection Memo, because wetland 30 does not physically abut the RPW, it does not maintain a continuous surface connection with a jurisdictional water and is therefore not regulated under Section 404 of the Clean Water Act.

OW 33a-b (0.062-acre) was identified as an unnamed tributary to the Souris River. After careful analysis and a review of aerial imagery, the Corps concurs that this is a 1st order tributary. OW 33a-b is connected via a culvert underneath a private driveway. Looking upstream of the tributary, there are no TNWs to which it connects; there is an impoundment on the upstream end of the tributary, but it is not a TNW nor does it support any type of interstate or foreign commerce. Looking downstream of the tributary, it is approximately 390 feet south of Highway 52 with a culvert under Highway 52 to maintain connectivity north of the highway. The various sources were analyzed, as north of the highway (at the culvert outlet), the tributary loses all definition (no wracking, bed and bank, scour, or other evidence of an ordinary high-water mark are present). Based on this analysis, the tributary no longer continues to flow into the Souris River due to road construction and associated ditch grading. Additionally, this tributary lacks the appropriate links to interstate commerce sufficient to establish a basis of jurisdiction. As a result of this case specific analysis, OW33a-b is not regulated under Section 404 of the Clean Water Act.

OW 34a,b,c (0.094-acre) and wetland 34d (0.085-acre) are associated with an unnamed tributary that historically flowed into the Souris River. After a careful analysis and review of aerial imagery, wetland maps, hydrography maps, flood



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risk maps, lidar imagery, and historical imagery, the Corps concurs that this is a 1<sup>st</sup> order tributary. OW 34a,b,c flows in from south of the project area and goes to a culvert under the highway. The various sources were analyzed, as north of the highway (at the culvert outlet), the tributary loses all definition (no wracking, bed and bank, scour, or other evidence of an ordinary high-water mark are present). Based on this analysis, the tributary no longer continues to flow into the Souris River due to road construction and associated ditch grading. This tributary also lacks the appropriate links to interstate commerce sufficient to establish a basis of jurisdiction. As a result of this case specific analysis, OW 34a,b,c was determined to be intrastate stream lacking connectivity to a TNW; wetland 34d is also therefore lacking a connection to a downstream TNW. OW 34a,b,c and wetland 34d are not regulated under Section 404 of the Clean Water Act.

Wetland 41 (0.066-acre) is a linear wetland situated within an agricultural drainage ditch on the south side of the highway and about 40 feet south of a culvert positioned under the highway. The closest RPW is the Souris River, which is located on the north side of the highway and approximately 0.25 miles away from wetland 41. Based on the report, wetland 41 does not extend beyond the project boundaries to physically abut any RPWs. Per the 2025 Continuous Surface Connection Memo, because wetland 41 does not physically abut an RPW, it does not maintain a continuous surface connection with a jurisdictional water and is therefore not regulated under Section 404 of the Clean Water Act.

Wetlands 42a,b,c (4.328-acres), 44 (0.102-acre), 45 (0.28-acre), and 46 (0.374-acre) are all natural wetlands that also encompass the ditch on the south side of Highway 52. They are all situated within a half mile stretch. Wetlands 42a,c and 46 extend south beyond the project boundaries. The closest RPW is the Souris River, which is located on the north side of the highway and approximately 0.30 miles away from the wetlands. There are no culverts under the highway to maintain potential connectivity to the Souris River. Per the 2025 Continuous Surface Connection Memo, because wetlands 42a,b,c, 44, 45, and 46 do not physically abut an RPW, they do not maintain continuous surface connections with a jurisdictional water and are therefore not regulated under Section 404 of the Clean Water Act.

Wetland 48 (0.092-acre) was identified as a created ditch wetland in the delineation report. It is situated within the ditch on the north side of the railroad. The closest RPW is Oak Creek (a Souris River tributary), and it is approximately 380 feet southeast of wetland 48. Based on the delineation, wetland 48 does not extend all the way to Oak Creek. Because wetland 48 does not physically abut the RPW, it does not maintain a continuous surface connection with a

jurisdictional water and is therefore not regulated under Section 404 of the Clean Water Act.

Wetland 50 (0.009-acre) was identified as a created ditch wetland in the delineation report. It is situated within the ditch on the south side of the railroad. The closest RPW is Oak Creek, and it is approximately 0.25 miles northwest of wetland 50. Based on the delineation, wetland 50 does not extend all the way to Oak Creek. The Souris River is also about 232 feet north of wetland 50; there is no culvert under the railroad track for wetland 50 to continue north of the tracks to abut the Souris River. Because wetland 50 does not physically abut either of the RPWs, it does not maintain a continuous surface connection with a jurisdictional water and is therefore not regulated under Section 404 of the Clean Water Act.

Wetland 53 (0.345-acre) was identified as a created ditch wetland in the delineation report. It is situated on the southside of the railroad and is associated with a historic Souris River oxbow. The closest RPW is the Souris River immediately north of the railroad and about 560' away from the wetland. Based on the delineation, wetland 53 does not extend all the way to the Souris River. Oak Creek is also about 670' west of wetland 53; wetland 53 does not extend to Oak Creek either. Because wetland 53 does not physically abut either of the RPWs, it does not maintain a continuous surface connection with a jurisdictional water and is therefore not regulated under Section 404 of the Clean Water Act.

Wetland 62 (0.07-acre) is a natural wetland basin situated on the north side of the highway and contained entirely within the project boundaries. It is within 100' of Spring Creek (RPW) and aquatic resources 61a-d. Based on the delineation, wetland 62 does not extend all the way to the Spring Creek. Because wetland 62 does not physically abut either of the RPWs, it does not maintain a continuous surface connection with a jurisdictional water and is therefore not regulated under Section 404 of the Clean Water Act.

Wetland 67 (0.04-acre) was identified as a created ditch wetland in the delineation report. It is situated on the southwest side of the highway and directly north of an abandoned roadbed. The closest RPW is Spring Creek, and it is located directly east of the highway (about 218' from wetland 67). There is no culvert under the highway to maintain the physical abutment requirement for wetland adjacency. Because wetland 67 does not physically abut the RPW, it does not maintain a continuous surface connection with a jurisdictional water and is therefore not regulated under Section 404 of the Clean Water Act.

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Wetland 71 (0.268-acre) was identified as a created ditch wetland in the delineation report. It is situated on the north side of Highway 52 and directly south of the railroad. It is contained entirely within the project boundaries; the closest RPW is Spring Creek (61z) located approximately 272' west of wetland 71. Based on the delineation, wetland 71 does not extend all the way to Spring Creek. Because wetland 71 does not physically abut the RPW, it does not maintain a continuous surface connection with a jurisdictional water and is therefore not regulated under Section 404 of the Clean Water Act.

Wetlands 73 and 74 (0.538-acre total) were identified as ditch wetlands in the report; however, after careful analysis, the Corps determined that these resources are natural wetlands situated between the railway and Highway 52. They were therefore assessed for connections to any RPWs or TNWs. Looking north and south of the wetlands, there are no culverts under the railway or Highway 52 to maintain continuous surface connections outside of the project area. Looking east and west of the resources, no discernible discrete continuous surface connection paths to any RPWs or TNWS could be identified. As a result of this case specific analysis, wetlands 73 and 74 are not regulated under Section 404 of the Clean Water Act.

Wetland 77 (0.027-acre) is a natural wetland basin situated on the west side of Highway 52, and it extends south beyond the project boundaries. A Souris River tributary and RPW is located approximately 0.6 miles south of the wetland, so the landscape was assessed to determine if wetland 77 extends all the way to the RPW. Based on a review of aerial imagery, wetland maps, hydrography maps, flood risk maps, lidar imagery, and historical imagery, wetland 77 does not extend all the way to the RPW south of the project area. Because wetland 77 does not physically abut the RPW, it does not maintain a continuous surface connection with a jurisdictional water and is therefore not regulated under Section 404 of the Clean Water Act.

Wetland 78 (0.019-acre) is a natural wetland situated on the east side of the highway, and it is within 85' of an RPW Souris River tributary (OW9b). It does not extend beyond the project boundaries. Based on the delineation, wetland 78 does not extend all the way to Spring Creek. Because wetland 78 does not physically abut the RPW, it does not maintain a continuous surface connection with a jurisdictional water and is therefore not regulated under Section 404 of the Clean Water Act.

Wetland 79a (0.443-acre), OW79b (0.082-acre), and wetland 80 (0.023-acre) are natural wetlands associated with a 1<sup>st</sup> order tributary identified as OW33a-b in the report. OW79b is also a stock pond. Wetland 79a and OW79b extend beyond the

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project boundaries; wetland 80 is entirely within the project boundaries. As previously discussed, OW33a-b does not flow directly or indirectly into a traditional navigable water (TNW) and was determined to be an intrastate stream that lacks the appropriate links to interstate commerce sufficient to establish a basis of jurisdiction. Based on this analysis, wetlands 79a, 80, and OW79b are also not regulated under Section 404 of the Clean Water, as they do not maintain a continuous surface connection with a jurisdictional water.

9. DATA SOURCES. List sources of data/information used in making determination. Include titles and dates of sources used and ensure that information referenced is available in the administrative record.
  - a. Office evaluation conducted on August 29, 2025
  - b. Field Aquatic Resource Delineation Report for PCN 24012 Project No. 4-052(109)101 US 52 from 2.3 Miles West of Junction 79<sup>th</sup> Avenue SE to Voltaire Ward and McHenry Counties, delineated by Nick Anderson and Jeff Moss of Ulteig Engineers on October 23 and 24, 2023.
  - c. Aquatic Resources Delineation Report Addendum for NWO-2022-00132-BIS, delineated by Ulteig on June 3, 2025.
  - d. Google Earth Pro 1997-2022 Accessed August 29, 2025
  - e. ND Department of Water Resources/FEMA Flood Risk Assessment Map Service <https://ndram.dwr.nd.gov/> Accessed August 29, 2025
  - f. USGS Advanced Map Viewer <https://apps.nationalmap.gov/viewer/> Accessed August 29, 2025
  - g. USFWS NWI Wetlands Mapper <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/> Accessed August 29, 2025
  - h. Sentinel Hub, EO Browser <https://apps.sentinel-hub.com/eo-browser/> Accessed August 29, 2025
10. OTHER SUPPORTING INFORMATION. Aquatic resources OW1a,b, W1c,d, W4, W5a,c,d,f, OW5b,e, W9a, OW9b, OW11a,b, W11c,d,e, OW12a,b, OW20a,d, W20b,c,e, OW23a-b, W23c, OW24a,b, W25a,b,c, W28a, OW28b, W30, W31a,c,d,f, OW31b,e, W35a,b, W36, W37, W38, W39a,b, W40, W43a,b,c, W47a,b,c,d,e,f,

[CENWO-ODR-N](#)

SUBJECT: Pre-2015 Regulatory Regime Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023), [NWO-2022-00132-BIS](#)

[W49a,c, OW49b,d, W51a,c,d,f, OW51b,e, W52, W54, W56a,b,c,d,e OW59a, W59b,c,d, W61a-z,aa, OW61h,j,n,p,s,v, W63a,b, W65, W64, W68a,b, W69, W70, W72a,b,c,d, W75a,b, and W76](#) were omitted from evaluation in this AJD/MFR and instead evaluated in a Preliminary JD under the same USACE file number.

11. NOTE: The structure and format of this MFR were developed in coordination with the EPA and Department of the Army. The MFR's structure and format may be subject to future modification or may be rescinded as needed to implement additional guidance from the agencies; however, the approved jurisdictional determination described herein is a final agency action.

**BACKGROUND INFORMATION****A. REPORT COMPLETION DATE FOR PJD:** September 5, 2025**B. NAME AND ADDRESS OF PERSON REQUESTING PJD:**

Senske, Russell  
 North Dakota Department of Transportation  
 608 East Boulevard Avenue  
 Bismarck, ND 58505

**C. DISTRICT OFFICE, FILE NAME, AND NUMBER:**

NWO, NDDOT; US Hwy 52 Improvements, 4-052(109)101, PCN 24012; Ward, McHenry Counties,  
 NWO-2022-00132-BIS

**D. PROJECT LOCATION AND BACKGROUND INFORMATION:**  
**(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)**

State: ND County/Parish/Borough: Ward County City:  
 Center coordinates of site (lat/long in degree decimal format):  
 Lat.: 48.085005<sup>oN</sup> Long.: -101.028934<sup>oW</sup>  
 Universal Transverse Mercator: 14  
 Name of nearest waterbody: Souris River

**E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

- ☒ Office (Desk) Determination. Date: August 29, 2025  
☐ Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO  
 REGULATORY JURISDICTION.

| Site Number                     | Latitude (decimal degrees) | Longitude (decimal degrees) | Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable) | Type of aquatic resource (i.e., wetland vs. non-wetland waters) | Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404) |
|---------------------------------|----------------------------|-----------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| NWO-2022-00132-BIS,PCN24012_W1c | 48.165992                  | -101.195225                 | 0.045 acres                                                                                  | Wetland                                                         | Section 404                                                                                               |
| NWO-2022-00132-BIS,PCN24012_W1d | 48.165992                  | -101.195225                 | 0.018 acres                                                                                  | Wetland                                                         | Section 404                                                                                               |
| NWO-2022-00132-BIS,PCN24012_4   | 48.159707                  | -101.191989                 | 0.018 acres                                                                                  | Wetland                                                         | Section 404                                                                                               |
| NWO-2022-00132-BIS,PCN24012_5a  | 48.159212                  | -101.187958                 | 0.106 acres                                                                                  | Wetland                                                         | Section 404                                                                                               |
| NWO-2022-00132-BIS,PCN24012_5c  | 48.159212                  | -101.187958                 | 0.131 acres                                                                                  | Wetland                                                         | Section 404                                                                                               |
| NWO-2022-00132-BIS,PCN24012_5d  | 48.159994                  | -101.186391                 | 0.083 acres                                                                                  | Wetland                                                         | Section 404                                                                                               |
| NWO-2022-00132-                 | 48.159994                  | -101.186391                 | 0.089 acres                                                                                  | Wetland                                                         | Section 404                                                                                               |

<sup>1</sup> Districts may establish timeframes for requester to return signed PJD forms. If the requester does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.



# PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM 30-JUN-2024

|                                 |           |             |             |         |             |
|---------------------------------|-----------|-------------|-------------|---------|-------------|
| BIS,PCN24012_5f                 |           |             |             |         |             |
| NWO-2022-00132-BIS,PCN24012_9a  | 48.14854  | -101.164923 | 1.681 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_11c | 48.129869 | -101.140942 | 0.031 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_11d | 48.129687 | -101.140696 | 0.151 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_11e | 48.128634 | -101.140706 | 0.059 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_20b | 48.10298  | -101.112278 | 0.013 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_20c | 48.102907 | -101.111943 | 0.042 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_20e | 48.103382 | -101.11088  | 0.023 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_23c | 48.096709 | -101.097104 | 0.011 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_25a | 48.092323 | -101.08341  | 0.905 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_25b | 48.092456 | -101.083165 | 0.021 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_25c | 48.092934 | -101.083245 | 0.854 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_28a | 48.086163 | -101.058787 | 0.154 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_31a | 48.086217 | -101.031707 | 0.174 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_31c | 48.086265 | -101.03139  | 0.185 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_31d | 48.084753 | -101.029959 | 0.278 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_31f | 48.084759 | -101.029933 | 0.242 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_35a | 48.079201 | -101.009458 | 0.28 acres  | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_35b | 48.07905  | -101.009571 | 0.011 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_36  | 48.076076 | -101.002676 | 0.087 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_37  | 48.075473 | -101.000693 | 0.868 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_38  | 48.075332 | -101.000831 | 0.011 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_39a | 48.074023 | -100.997221 | 0.483 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_39b | 48.074044 | -100.996576 | 0.787 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_40  | 48.069851 | -100.983909 | 1.165 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_43a | 48.069667 | -100.984028 | 2.188 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_43b | 48.06732  | -100.976917 | 0.655 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_43c | 48.069746 | -100.983672 | 0.886 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_47a | 48.065637 | -100.972234 | 0.177 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_47b | 48.064453 | -100.968733 | 1.142 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_47c | 48.064693 | -100.971772 | 0.618 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_47d | 48.065011 | -100.972029 | 0.205 acres | Wetland | Section 404 |
| NWO-2022-00132-BIS,PCN24012_47e | 48.065813 | -100.971687 | 0.421 acres | Wetland | Section 404 |

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# PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM 30-JUN-2024

|                                   |           |             |             |                    |             |
|-----------------------------------|-----------|-------------|-------------|--------------------|-------------|
| NWO-2022-00132-BIS,PCN24012_47f   | 48.064167 | -100.966767 | 0.299 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_49a   | 48.062751 | -100.963545 | 0.033 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_49c   | 48.06274  | -100.963472 | 0.032 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_51a   | 48.058044 | -100.950655 | 0.293 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_51c   | 48.058044 | -100.950655 | 0.317 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_51d   | 48.058942 | -100.94982  | 0.227 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_51f   | 48.058942 | -100.94982  | 0.287 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_52    | 48.057077 | -100.949356 | 0.234 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_54    | 48.057763 | -100.942107 | 0.188 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_56a   | 48.057174 | -100.938382 | 0.042 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_56b   | 48.056498 | -100.936535 | 1.712 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_56c   | 48.056246 | -100.935007 | 0.048 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_56d   | 48.055132 | -100.931599 | 0.887 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_56e   | 48.055056 | -100.931127 | 0.03 acres  | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_59b   | 48.054093 | -100.925131 | 0.676 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_59c   | 48.05469  | -100.923571 | 0.32 acres  | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_59d   | 48.05469  | -100.923571 | 0.471 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61a   | 48.050638 | -100.917717 | 0.342 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61a a | 48.019144 | -100.853681 | 3.908 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61b   | 48.050219 | -100.916854 | 0.327 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61c   | 48.048729 | -100.914951 | 0.013 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61d   | 48.047327 | -100.913508 | 0.927 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61e   | 48.040814 | -100.904815 | 0.06 acres  | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61f   | 48.03959  | -100.903116 | 0.027 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61g   | 48.03467  | -100.894596 | 2.838 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61i   | 48.03467  | -100.894596 | 0.199 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61k   | 48.03467  | -100.894596 | 1.085 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61l   | 48.032587 | -100.892641 | 6.227 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61m   | 48.029584 | -100.88554  | 0.454 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61o   | 48.029584 | -100.88554  | 0.537 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61q   | 48.029584 | -100.88554  | 0.038 acres | Wetland            | Section 404 |
| NWO-2022-00132-                   | 48.027604 | -100.881376 | 0.42 acres  | Wetland            | Section 404 |

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# PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM 30-JUN-2024

|                                   |           |             |             |                    |             |
|-----------------------------------|-----------|-------------|-------------|--------------------|-------------|
| BIS,PCN24012_61r                  |           |             |             |                    |             |
| NWO-2022-00132-BIS,PCN24012_61t   | 48.02497  | -100.877108 | 0.064 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61u   | 48.024606 | -100.877432 | 0.064 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61w   | 48.022595 | -100.872024 | 1.025 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61x   | 48.021919 | -100.871393 | 5.108 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61y   | 48.020132 | -100.856554 | 3.38 acres  | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_61z   | 48.019732 | -100.854587 | 0.486 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_63a   | 48.04347  | -100.910963 | 1.447 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_63b   | 48.043991 | -100.909657 | 0.487 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_64    | 48.03177  | -100.888674 | 0.135 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_68a   | 48.019402 | -100.865004 | 0.613 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_68b   | 48.019321 | -100.864497 | 1.576 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_69    | 48.020852 | -100.860919 | 0.868 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_70    | 48.019107 | -100.858865 | 1.654 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_72a   | 48.017871 | -100.845387 | 0.058 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_72b   | 48.017871 | -100.845387 | 1.885 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_72c   | 48.017871 | -100.845387 | 0.077 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_72d   | 48.019149 | -100.84848  | 0.044 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_75a   | 48.01736  | -100.829286 | 1.305 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_75b   | 48.017708 | -100.829193 | 0.478 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_76    | 48.015959 | -100.828756 | 0.105 acres | Wetland            | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW1a  | 48.166147 | -101.197943 | 0.071 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW1b  | 48.16626  | -101.196081 | 0.11 acres  | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW5b  | 48.15905  | -101.188122 | 0.052 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW5e  | 48.159977 | -101.186663 | 0.062 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW9b  | 48.148347 | -101.161373 | 0.069 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW11a | 48.130435 | -101.140356 | 0.231 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW11b | 48.129086 | -101.140827 | 1.324 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW    | 48.118153 | -101.129798 | 0.114 acres | Non-wetland waters | Section 404 |

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# PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM 30-JUN-2024

|                                       |           |             |             |                    |             |
|---------------------------------------|-----------|-------------|-------------|--------------------|-------------|
| 12a                                   |           |             |             |                    |             |
| NWO-2022-00132-BIS,PCN24012_OW<br>12b | 48.118566 | -101.127812 | 0.048 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>20a | 48.103331 | -101.113482 | 0.908 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>20d | 48.103879 | -101.110824 | 0.241 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>23a | 48.096048 | -101.098087 | 0.181 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>23b | 48.096936 | -101.096694 | 0.113 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>24a | 48.093315 | -101.088832 | 0.539 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>24b | 48.0941   | -101.086359 | 0.4 acres   | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>28b | 48.087149 | -101.058092 | 0.073 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>31b | 48.08585  | -101.03191  | 0.132 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>31e | 48.084421 | -101.029789 | 0.077 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>49b | 48.06278  | -100.963513 | 0.026 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>49d | 48.061924 | -100.963448 | 0.49 acres  | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>51b | 48.057806 | -100.950867 | 0.113 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>51e | 48.058777 | -100.950183 | 0.148 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>59a | 48.053089 | -100.925243 | 0.049 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>61h | 48.033932 | -100.893041 | 0.171 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>61j | 48.032039 | -100.889993 | 0.39 acres  | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>61n | 48.029451 | -100.885305 | 0.16 acres  | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>61p | 48.029395 | -100.884105 | 0.015 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>61s | 48.025227 | -100.877127 | 0.263 acres | Non-wetland waters | Section 404 |
| NWO-2022-00132-BIS,PCN24012_OW<br>61v | 48.024444 | -100.877559 | 0.198 acres | Non-wetland waters | Section 404 |

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PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM 30-JUN-2024

- 1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD or no JD whatsoever, which do not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the USACE has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD or reliance on no JD whatsoever; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of USACE permit authorization based on a PJD or no JD whatsoever constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the USACE will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "may be" waters of the U.S. and/or that there "may be" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

**SUPPORTING DATA. Data reviewed for PJD (*check all that apply*)**

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- X   Maps, plans, plots or plat submitted by or on behalf of the PJD requestor: Aquatic Resource Delineation Report for PCN 24012 Project No. 4-052(109)101 US 52 from 2.3 Miles West of Junction 79th Avenue SE to Voltaire Ward and McHenry Counties, delineated by Nick Anderson and Jeff Moss of Ulteig Engineers on October 23 and 24, 2024; Aquatic Resources Delineation Report Addendum for NWO-2022-00132-BIS, delineated by Ulteig on June 3, 2025.  
Map: \_\_\_\_\_.

<sup>1</sup> Districts may establish timeframes for requester to return signed PJD forms. If the requester does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM 30-JUN-2024

- ☒ Data sheets prepared/submitted by or on behalf of the PJD requestor.  
\_\_\_\_ Office concurs with data sheets/delineation report.  
\_\_\_\_ Office does not concur with data sheets/delineation report. Rationale: \_\_\_\_\_.  
\_\_\_\_ Data sheets prepared by the Corps: \_\_\_\_\_.  
\_\_\_\_ Corps navigable waters' study: \_\_\_\_\_.  
☒ U.S. Geological Survey Hydrologic Atlas: The National Map Advanced Map Viewer.  
\_\_\_\_ USGS NHD data.  
\_\_\_\_ USGS 8 and 12 digit HUC maps.  
\_\_\_\_ U.S. Geological Survey map(s). Cite scale & quad name: \_\_\_\_\_.  
\_\_\_\_ USDA Natural Resources Conservation Service Soil Survey. Citation: \_\_\_\_\_.  
\_\_\_\_ National wetlands inventory map(s). Cite name: \_\_\_\_\_.  
\_\_\_\_ State/Local Wetland Inventory map(s): \_\_\_\_\_.  
☒ FEMA/FIRM maps: ND DWR/FEMA Flood Risk Assessment Map Service  
\_\_\_\_ 100-year Floodplain Elevation is: \_\_\_\_\_. (National Geodetic Vertical Datum of 1929)  
\_\_\_\_ Photographs: \_\_\_\_ Aerial (Name & Date): \_\_\_\_\_.  
\_\_\_\_ or \_\_\_\_ Other (Name & Date): \_\_\_\_\_.  
☒ Previous determination(s). File no. and date of response letter: NWO-2022-00132-BIS, April 24, 2024.  
\_\_\_\_ Other information (please specify): \_\_\_\_\_.

**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the USACE and should not be relied upon for later jurisdictional determinations.**



\_\_\_\_\_  
Signature of Regulatory Staff Member  
Completing PJD



\_\_\_\_\_  
Signature of Person Requesting PJD  
(REQUIRED, unless obtaining the  
signature is impracticable)<sup>1</sup>

<sup>1</sup> Districts may establish timeframes for requester to return signed PJD forms. If the requester does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <b>U.S. Army Corps of Engineers (USACE)</b><br><b>NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND</b><br><b>REQUEST FOR APPEAL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Form Approved -</b><br><b>OMB No. 0710-0003</b><br><b>Expires 2027-10-31</b> |
| For use of this form, see Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, and Section 103 of the Marine Protection, Research, and Sanctuaries Act; the proponent agency is CECW-COR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                 |
| <b>DATA REQUIRED BY THE PRIVACY ACT OF 1974</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                 |
| <b>Authority</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | The authorities for requesting this information are Sections 9, 10, 13, and 14, Rivers and Harbors Act of March 3, 1899; Section 404, Clean Water Act; and Section 103 Marine Protection Research and Sanctuaries Act of 1972.                                                                                                                                                                                                     |                                                                                 |
| <b>Principal Purpose</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | This information serves as notification to affected parties regarding the USACE administrative appeal options and process, as well as to facilitate requests for appeal of USACE decisions with which they disagree.                                                                                                                                                                                                               |                                                                                 |
| <b>Routine Uses</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Routine uses will include: (a) To serve as notification to affected parties of the Corps administrative appeal options and process and to facilitate requests for appeal of Corps decisions with which they disagree. (b) Records may be referred to the Department of Justice for possible criminal prosecution. (c) Records may be referred to other Federal, State, and local agencies for evaluation and enforcement purposes. |                                                                                 |
| <b>Disclosure</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Disclosure of this information is voluntary on your part. However, failure of individual to provide requested information could result in inability to determine all pertinent information regarding a Department of the Army permit matter.                                                                                                                                                                                       |                                                                                 |
| <b>The Agency Disclosure Notice (ADN)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                 |
| The Public reporting burden for this collection of information, 0710-0003, is estimated to average 1 hour per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at <a href="mailto:whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil">whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil</a> . Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. |                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                 |
| <b>PURPOSE:</b> This form is used to facilitate the initiation of the administrative appeals process. The appeals process allows an affected party to pursue an administrative appeal of certain Corps of Engineers decisions with which they disagree.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                 |
| Upon release, this form will also be available on the Corps website <a href="https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/">https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                 |
| Applicant: NDDOT, Attn: Mr. Russell Senske                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | File Number: NWO-2022-00132-BIS                                                                                                                                                                                                                                                                                                                                                                                                    | Date: 2025-09-05                                                                |
| Documents Attached ( <i>select all that apply</i> ):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                    | Form Reference Section:                                                         |
| <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | INITIAL PROFFERED PERMIT ( <i>Standard Permit or Letter of Permission</i> )                                                                                                                                                                                                                                                                                                                                                        | A                                                                               |
| <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PROFFERED PERMIT ( <i>Standard Permit or Letter of Permission</i> )                                                                                                                                                                                                                                                                                                                                                                | B                                                                               |
| <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PERMIT DENIAL WITHOUT PREJUDICE                                                                                                                                                                                                                                                                                                                                                                                                    | C                                                                               |
| <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PERMIT DENIAL WITH PREJUDICE                                                                                                                                                                                                                                                                                                                                                                                                       | D                                                                               |
| <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | APPROVED JURISDICTIONAL DETERMINATION                                                                                                                                                                                                                                                                                                                                                                                              | E                                                                               |
| <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PRELIMINARY JURISDICTIONAL DETERMINATION                                                                                                                                                                                                                                                                                                                                                                                           | F                                                                               |
| <b>SECTION I</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                 |
| The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <a href="https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/appeals/">https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/appeals/</a> or Corps regulations at 33 CFR Part 331.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                 |
| <b>A: INITIAL PROFFERED PERMIT: <i>You may accept or object to the permit</i></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                 |
| ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                 |
| OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                 |

**B: PROFFERED PERMIT:** *You may accept or appeal the permit*

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C. PERMIT DENIAL WITHOUT PREJUDICE:** *Not appealable*

You received a permit denial without prejudice because a required Federal, state, and/or local authorization and/or certification has been denied for activities which also require a Department of the Army permit before final action has been taken on the Army permit application. The permit denial without prejudice is not appealable. There is no prejudice to the right of the applicant to reinstate processing of the Army permit application if subsequent approval is received from the appropriate Federal, state, and/or local agency on a previously denied authorization and/or certification.

**D: PERMIT DENIAL WITH PREJUDICE:** *You may appeal the permit denial*

You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**E: APPROVED JURISDICTIONAL DETERMINATION:** *You may accept or appeal the approved JD or provide new information for reconsideration*

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- **RECONSIDERATION:** You may request that the district engineer reconsider the approved JD by submitting new information or data to the district engineer within 60 days of the date of this notice. The district will determine whether the information submitted qualifies as new information or data that justifies reconsideration of the approved JD. A reconsideration request does not initiate the appeal process. You may submit a request for appeal to the division engineer to preserve your appeal rights while the district is determining whether the submitted information qualifies for a reconsideration.

**F: PRELIMINARY JURISDICTIONAL DETERMINATION:** *Not appealable*

You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also, you may provide new information for further consideration by the Corps to reevaluate the JD.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

|                                                                |                                                       |                                                                                                            |                                                                                                          |
|----------------------------------------------------------------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| If you have questions regarding this decision you may contact: |                                                       | If you have questions regarding the appeal process, or to submit your request for appeal, you may contact: |                                                                                                          |
| Name:                                                          | Amber L. Inman                                        | Name:                                                                                                      | Melinda Larsen, Regulatory Appeals Review Officer                                                        |
| Street Address, City, State:                                   | 3319 University Drive<br>Bismarck, North Dakota 58504 | Street Address, City, State:                                                                               | US Army Corps of Engineers, Northwestern Division<br>1201 NE Lloyd Blvd, Suite 400<br>Portland, OR 97232 |
| Phone:                                                         | (701) 989-6428                                        | Phone:                                                                                                     | (503) 726-6194                                                                                           |
| Email:                                                         | Amber.L.Inman@usace.army.mil                          | Email:                                                                                                     | Melinda.M.Larsen@usace.army.mil                                                                          |

**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

REASONS FOR APPEAL OR OBJECTIONS: *(Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. Use additional pages as necessary. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)*

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation and will have the opportunity to participate in all site investigations.

Email address of appellant and/or agent

Telephone number

Signature of appellant or agent

Date

---

**FW: [EXTERNAL] RE: Highway 52 shape files of protected wetlands**

---

**From** Mike Huffington <mike.huffington@ulteig.com>  
**Date** Mon 11/24/2025 12:39 PM  
**To** Whitney Sauskojus <whitney.sauskojus@ulteig.com>



**Mike Huffington**  
Senior Market Leader  
3350 38th Ave S • Fargo, ND 58104  
**Direct:** [\(701\) 280-8655](tel:(701)280-8655) • **Mobile:** [\(507\) 456-7006](tel:(507)456-7006)  
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---

**From:** Haase, Marissa A <marissa\_haase@fws.gov>  
**Sent:** Thursday, August 7, 2025 1:38 PM  
**To:** Mike Huffington <mike.huffington@ulteig.com>  
**Subject:** RE: [EXTERNAL] RE: Highway 52 shape files of protected wetlands

**External Sender Warning: Proceed with Caution!**



**Haase, Marissa A** reacted to your message:

---

**From:** Mike Huffington <[mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com)>  
**Sent:** Thursday, August 7, 2025 6:31:35 PM  
**To:** Haase, Marissa A <[marissa\\_haase@fws.gov](mailto:marissa_haase@fws.gov)>  
**Cc:** Melin, Jason <[jason\\_melin@fws.gov](mailto:jason_melin@fws.gov)>; Johnson, Nicholas D <[nicholas\\_johnson@fws.gov](mailto:nicholas_johnson@fws.gov)>  
**Subject:** RE: [EXTERNAL] RE: Highway 52 shape files of protected wetlands

Marissa,

That sounds good, we will keep you posted on project developments as we learn more. As requested, I have attached a copy of the letter that was sent to the refuge.

Thanks,



**Mike Huffington**  
Senior Market Leader  
3350 38th Ave S • Fargo, ND 58104  
**Direct:** [\(701\) 280-8655](tel:(701)280-8655) • **Mobile:** [\(507\) 456-7006](tel:(507)456-7006)  
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---

**From:** Haase, Marissa A <[marissa\\_haase@fws.gov](mailto:marissa_haase@fws.gov)>  
**Sent:** Thursday, August 7, 2025 12:02 PM  
**To:** Mike Huffington <[mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com)>  
**Cc:** Melin, Jason <[jason\\_melin@fws.gov](mailto:jason_melin@fws.gov)>; Johnson, Nicholas D <[nicholas\\_johnson@fws.gov](mailto:nicholas_johnson@fws.gov)>  
**Subject:** Re: [EXTERNAL] RE: Highway 52 shape files of protected wetlands

## External Sender Warning: Proceed with Caution!

Hey Mike-

Yes, you would be correct on needing a Special use permit and possible exchange of easement. As you guys get a better idea of your plan and we know what all is going to be effected we can start to get everything rolling. I am learning myself as we go. Just keep me in the loop as things progress and we can work through all the processes. Do you by chance have a copy of the original letter that was sent to the refuge, that you could email me. Thanks

---

**From:** Mike Huffington <[mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com)>  
**Sent:** Thursday, August 7, 2025 11:09 AM  
**To:** Haase, Marissa A <[marissa\\_haase@fws.gov](mailto:marissa_haase@fws.gov)>  
**Cc:** Melin, Jason <[jason\\_melin@fws.gov](mailto:jason_melin@fws.gov)>; Johnson, Nicholas D <[nicholas\\_johnson@fws.gov](mailto:nicholas_johnson@fws.gov)>  
**Subject:** [EXTERNAL] RE: Highway 52 shape files of protected wetlands

|                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.</b></p> |
|--------------------------------------------------------------------------------------------------------------------------------------------|

Good morning Marissa,

Thank you for the shapefile. We will take a look at it and determine which protected wetlands we are likely to be impacting.

The exact mitigation strategy for wetland impacts associated with this project is still up in the air. We are currently going through an effort to try and identify a potential off-site wetland restoration project to mitigate for project impacts, but we likely will not know the final outcome of that effort for a while. We are also in the process of preparing the Draft EA for the project. Within that document, we will likely leave the potential options for achieving compensatory mitigation for wetlands open ended.

Along those lines, is there anything specific within the EA that we should be mentioning or addressing related to these protected wetlands? If I recall correctly, to properly permit impacts to protected wetlands we would need to obtain a special use permit from the USFWS and possibly complete an easement exchange, but it has been several years since I last went through the process. Any additional insight that you can share with regards to the permitting/approval process would be greatly appreciated.

Sincerely,



**Mike Huffington**

Senior Market Leader

3350 38th Ave S • Fargo, ND 58104

**Direct:** [\(701\) 280-8655](tel:(701)280-8655) • **Mobile:** [\(507\) 456-7006](tel:(507)456-7006)

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---

**From:** Haase, Marissa A <[marissa\\_haase@fws.gov](mailto:marissa_haase@fws.gov)>

**Sent:** Wednesday, August 6, 2025 10:57 AM

**To:** Mike Huffington <[mike.huffington@ulteig.com](mailto:mike.huffington@ulteig.com)>

**Cc:** Melin, Jason <[jason\\_melin@fws.gov](mailto:jason_melin@fws.gov)>; Johnson, Nicholas D <[nicholas\\_johnson@fws.gov](mailto:nicholas_johnson@fws.gov)>

**Subject:** Highway 52 shape files of protected wetlands

## **External Sender Warning: Proceed with Caution!**

Hey Mike-

Sorry, I'm just getting back to you its been a hectic week. I have attached shape files of the protected wetlands we have in those sections so you can compare to your map. Sounds like this would be an exchange, do you a wetland bank by chance? Let me know if you would like to chat further. Thanks

**Marissa Haase, Ast. Refuge Manager**

Lostwood National Wildlife Refuge

Northwest North Dakota Complex

Mobile- 701-641-2564

Office- 701-848-2722 x: 24





April 21, 2026

Topic: US 52 Four Lane Project (PCN: 24012)

To Whom it May Concern:

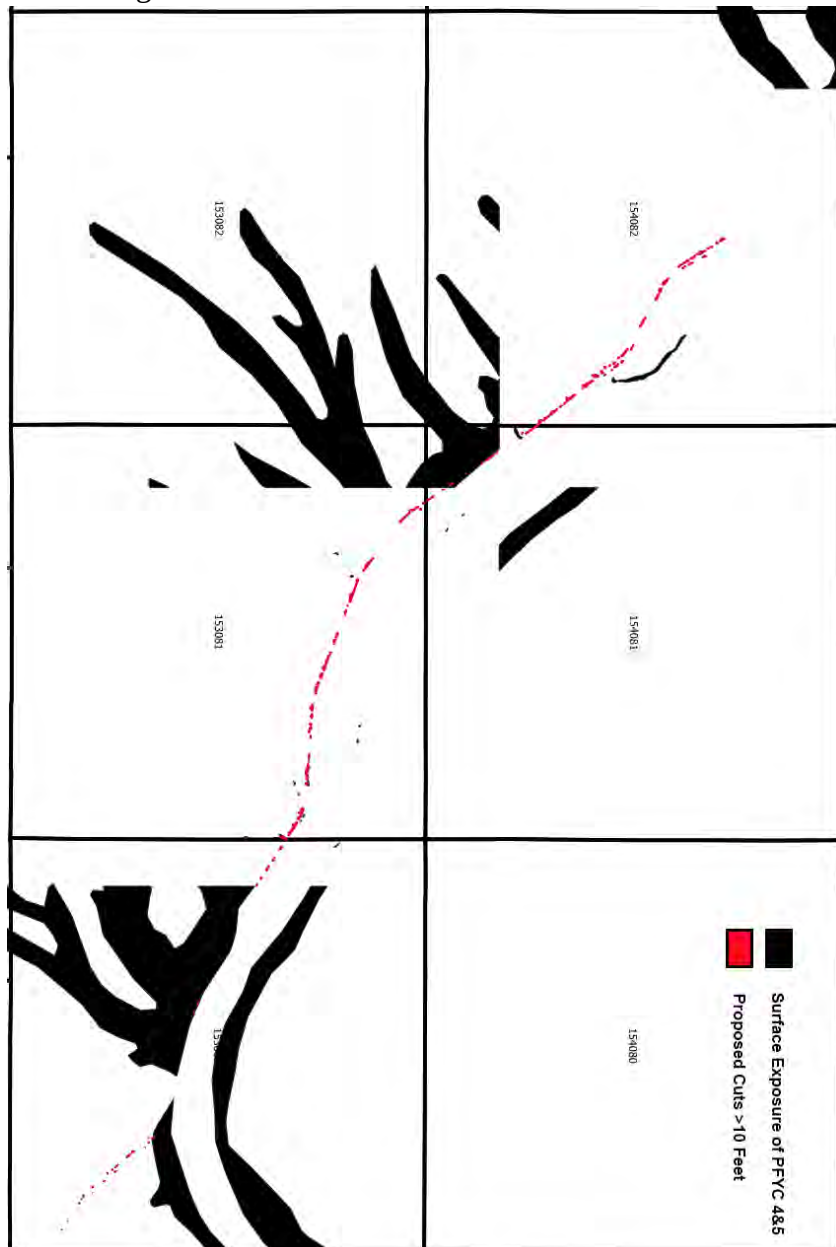
I have reviewed the proposed project corridor for this work and the map of anticipated cuts of 10 feet or deeper within that corridor. When compared to a map of surficial exposure of rock units that score as a 4 or 5 on the Potential Fossil Yield Classification System (highest potential for encountering fossils), there are multiple locations where those cuts will disturb those rocks (See Attached Map). My recommendation is that the project should employ paleontological monitoring at those locations during ground disturbance activities. I am working to refine the areas where paleontological monitoring is necessary and will work together with ND DOT staff and other involved parties to clearly define those locations as planning for the project continues.

If you have any questions, please don't hesitate to contact our office.

Sincerely,

Clint A. Boyd  
Senior Paleontologist  
North Dakota Geological Survey  
caboyd@nd.gov  
(701) 328-8163

**Figure 1.** Map of proposed cuts of greater than 10 feet (red) versus surface exposure of rocks classified as 4 (high) or 5 (very high) on the Potential Fossil Yield Classification system. North is to the right.



Mark F. Bohrer  
ASSISTANT DIRECTOR  
OIL AND GAS DIVISION

Nathan D. Anderson  
DIRECTOR  
DEPT. OF MINERAL RESOURCES

Edward C. Murphy  
STATE GEOLOGIST  
GEOLOGICAL SURVEY

# Appendix C, NDSHPO Documentation

### **SECTION 106 COORDINATION FORM**

The purpose of the Section 106 Coordination Form is to coordinate and ascertain the following Section 106 items:

- determine if the project actions can be exempted from further consultation
- determine the appropriate level of survey effort for identification needs (i.e. Class I, Class III)
- determine the appropriate Area of Potential Effect (APE) in regard to Section 106 for the project actions

#### **PART I. \*TO BE COMPLETED BY PROJECT MANAGER\***

| PCN                               | Project Number                                                                                                                                                                                                          | Bid Ready Date | Section 106 Compliance Date |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------|
| 24012                             | 4-052(109)101                                                                                                                                                                                                           | TBD            | 6/15/2025                   |
| Project Location                  | US 52 - 2.3 Miles West of Junction of 79th Ave SE to Voltaire                                                                                                                                                           |                |                             |
| Work Type and Project Description | Preliminary engineering study including environmental studies for a four-lane divided highway facility concept on US 52. Work to include grading, aggregate base, hot bituminous surfacing, structural and incidentals. |                |                             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>1. Will proposed work activities be conducted outside of the existing roadway foreslopes?</b><br><i>(including any temporary grading, construction access, or staging)</i>                |
| Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>2. Will proposed work activities be conducted outside the existing right of way?</b><br><i>(Temporary or Permanent, including any temporary grading, construction access, or staging)</i> |
| <b>The limits of construction for the project have potential for disturbance up to 700 feet outside of the right of way</b><br><i>(including any temporary grading, construction access, or staging)</i>                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                              |
| Please describe and detail the proposed work, disturbance, and locations:<br><br>Project is studying the expansion of US Highway 52 from a two-lane highway to a four-lane highway with the worst case scenario from a project footprint perspective including the construction of a new two-lane highway adjacent to the existing roadway corridor. Project may disturb undisturbed natural draws, coulees and channels and may include extension or replacement of existing box culverts and structural plate pipes. Disturbance would include both excavation and placement of fill material. |                                                                                                                                                                                              |



**PART II. \*TO BE COMPLETED BY THE NDDOT CULTURAL RESOURCE REPRESENTATIVE – NDDOT, ETS DIVISION\***

☐

**Excepted Project- Is the project exempt from further review and consultation?**

Comments or description:

**If Yes to “Excepted Project” above, no further Section 106 activities are required.**

**If No to “Excepted Project” above, complete the following APE and Identification Efforts that are needed for Section 106 Consultation and Compliance for the project action:**

☐

**Right of way only**

☒

**Right of way plus 700 feet**

☐

**1,200 ft along the roadway in both directions from the center of the bridge, and 300 ft on either side of the centerline.**

☒

**Other- Describe and detail the appropriate APE to be utilized for the project actions:**

Modify the survey area as needed.

**Identification Efforts/Level of Survey- The appropriate Level of Survey based on the submitted information for the project action**

☐

**Class I Survey**

☐

**Class II Survey**

☒

**Class III Survey**

☐

**Architectural Survey**

☒

**Other- Describe and detail the appropriate identification effort for the project actions:**

Emphasis on high probability areas for this Fall.

**Additional Requirements:**

The Project Manager must notify the Cultural Resource Representative if any work or disturbance is found during project development to occur outside the APE defined above.

Based on the description and detail of the information submitted by the Project Manager for the scope of work and activities of the project action, the project will proceed as noted above regarding Section 106 and Cultural Resources.

| NDDOT Cultural Resource Representative | Email         | Date       |
|----------------------------------------|---------------|------------|
| Reilly Lembo                           | rlembo@nd.gov | 10/23/2023 |

Project: 4-052(109)101

PCN: 24012

10/11/2023



### SECTION 106 COORDINATION FORM

The purpose of the Section 106 Coordination Form is to coordinate and ascertain the following Section 106 items:

- determine if the project actions can be exempted from further consultation
- determine the appropriate level of survey effort for identification needs (i.e. Class I, Class III)
- determine the appropriate Area of Potential Effect (APE) in regard to Section 106 for the project actions

#### **PART I. \*TO BE COMPLETED BY PROJECT MANAGER\***

| PCN                                  | Project Number                                                                                                                                                                                                          | Milestone<br>Bid Ready Date | Milestone<br>Section 106<br>Compliance Date |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------|
| 24012                                | 4-052(109)101                                                                                                                                                                                                           | TBD                         | 6/15/2025                                   |
| Project Location                     | US 52 - 2.3 Miles West of Junction of 79th Ave SE to Voltaire                                                                                                                                                           |                             |                                             |
| Work Type and Project<br>Description | Preliminary engineering study including environmental studies for a four-lane divided highway facility concept on US 52. Work to include grading, aggregate base, hot bituminous surfacing, structural and incidentals. |                             |                                             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>1. Will proposed work activities be conducted outside of the existing roadway foreslopes?</b><br><i>(including any temporary grading, construction access, or staging)</i>                |
| Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>2. Will proposed work activities be conducted outside the existing right of way?</b><br><i>(Temporary or Permanent, including any temporary grading, construction access, or staging)</i> |
| <b>The limits of construction for the project have potential for disturbance up to 700 feet outside of the right of way</b><br><i>(including any temporary grading, construction access, or staging)</i>                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                              |
| <input checked="" type="checkbox"/> Project Area Map (project footprint) is attached.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                              |
| <p>Please describe and detail the proposed work, disturbance, and locations:</p> <p>Project is studying the expansion of US Highway 52 from a two-lane highway to a four-lane highway with the worst case scenario from a project footprint perspective including the construction of a new two-lane highway adjacent to the existing roadway corridor. Project may disturb undisturbed natural draws, coulees and channels and may include extension or replacement of existing box culverts and structural plate pipes. Disturbance would include both excavation and placement of fill material.</p> |                                                                                                                                                                                              |



**PART II. \*TO BE COMPLETED BY THE NDDOT CULTURAL RESOURCE REPRESENTATIVE – NDDOT, ETS DIVISION\***

☐ **Excepted Project- Is the project exempt from further review and consultation?**

Comments or description:

**If Yes to "Excepted Project" above, no further Section 106 activities are required.**

**If No to "Excepted Project" above, complete the following APE and Identification Efforts that are needed for Section 106 Consultation and Compliance for the project action:**

☐ **Right of way only**

☐ **Right of way plus 700 feet**

☐ **1,200 ft along the roadway in both directions from the center of the bridge, and 300 ft on either side of the centerline.**

☒ **Other- Describe and detail the appropriate APE to be utilized for the project actions:**

The APE should utilize the blue area on the attached maps.

**Identification Efforts/Level of Survey- The appropriate Level of Survey based on the submitted information for the project action**

☐ **Class I Survey**

☐ **Class II Survey**

☒ **Class III Survey**

☒ **TCS Required**

☐ **Other- Describe and detail the appropriate identification effort for the project actions:**

**Additional Requirements:**

The Project Manager must notify the Cultural Resource Representative if any work or disturbance is found during project development to occur outside the APE defined above.

Based on the description and detail of the information submitted by the Project Manager for the scope of work and activities of the project action, the project will proceed as noted above regarding Section 106 and Cultural Resources.

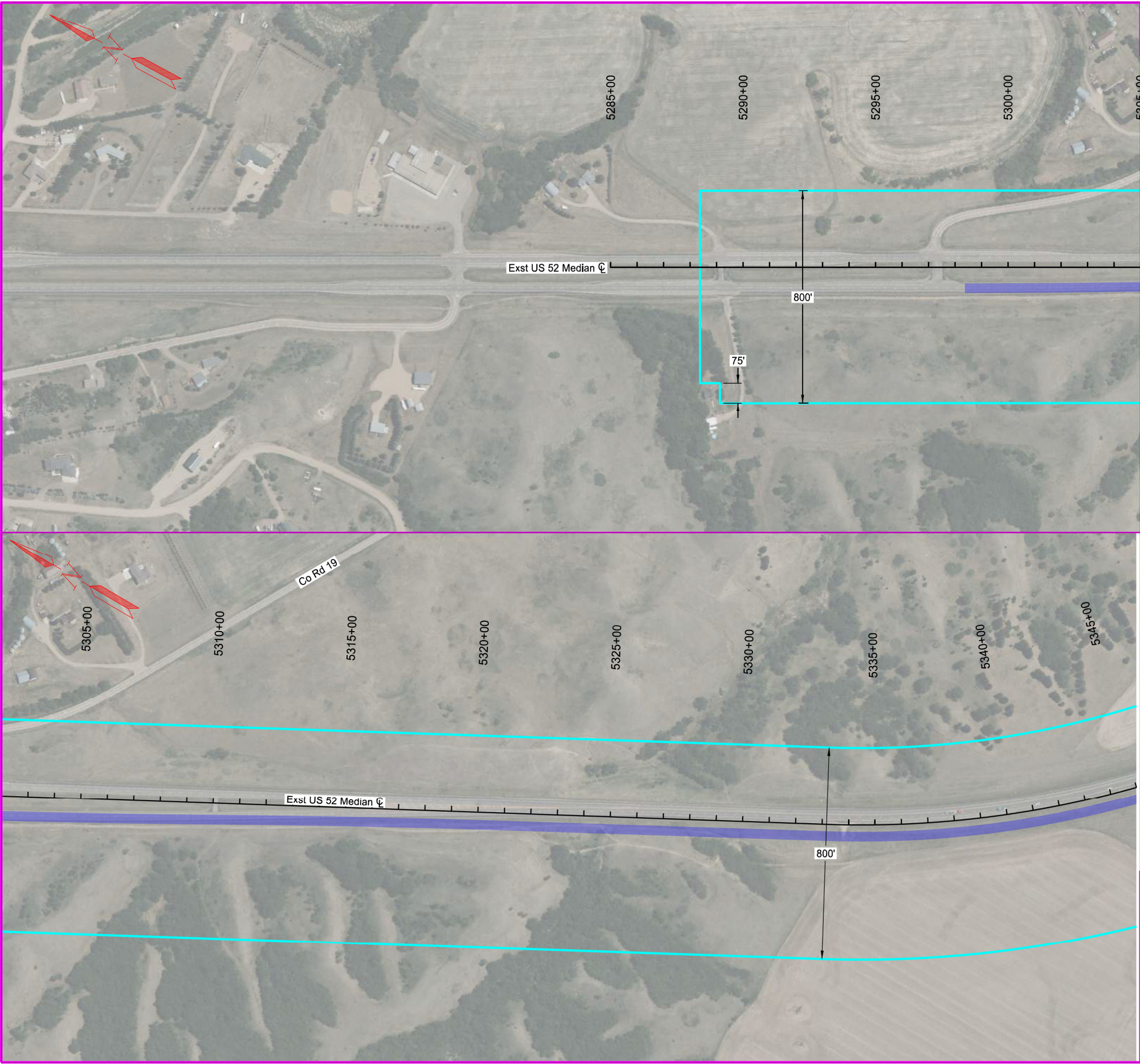
| NDDOT Cultural Resource Representative | Email         | Date       |
|----------------------------------------|---------------|------------|
| <i>Reilly Ras Lembo</i>                | rlembo@nd.gov | 02/12/2024 |

Project: 4-052(109)101

PCN: 24012

02/08/2024





|  |       |               |             |           |
|--|-------|---------------|-------------|-----------|
|  | STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
|  | ND    | 4-052(109)101 |             | 1         |

- LEGEND
- Proposed Roadway
  - Study Area

Study Area Exhibit

US Highway 52 Four Lane

This document is preliminary and not for construction or implementation purposes.





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|--|-------|---------------|-------------|-----------|
|  | STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
|  | ND    | 4-052(109)101 |             | 2         |

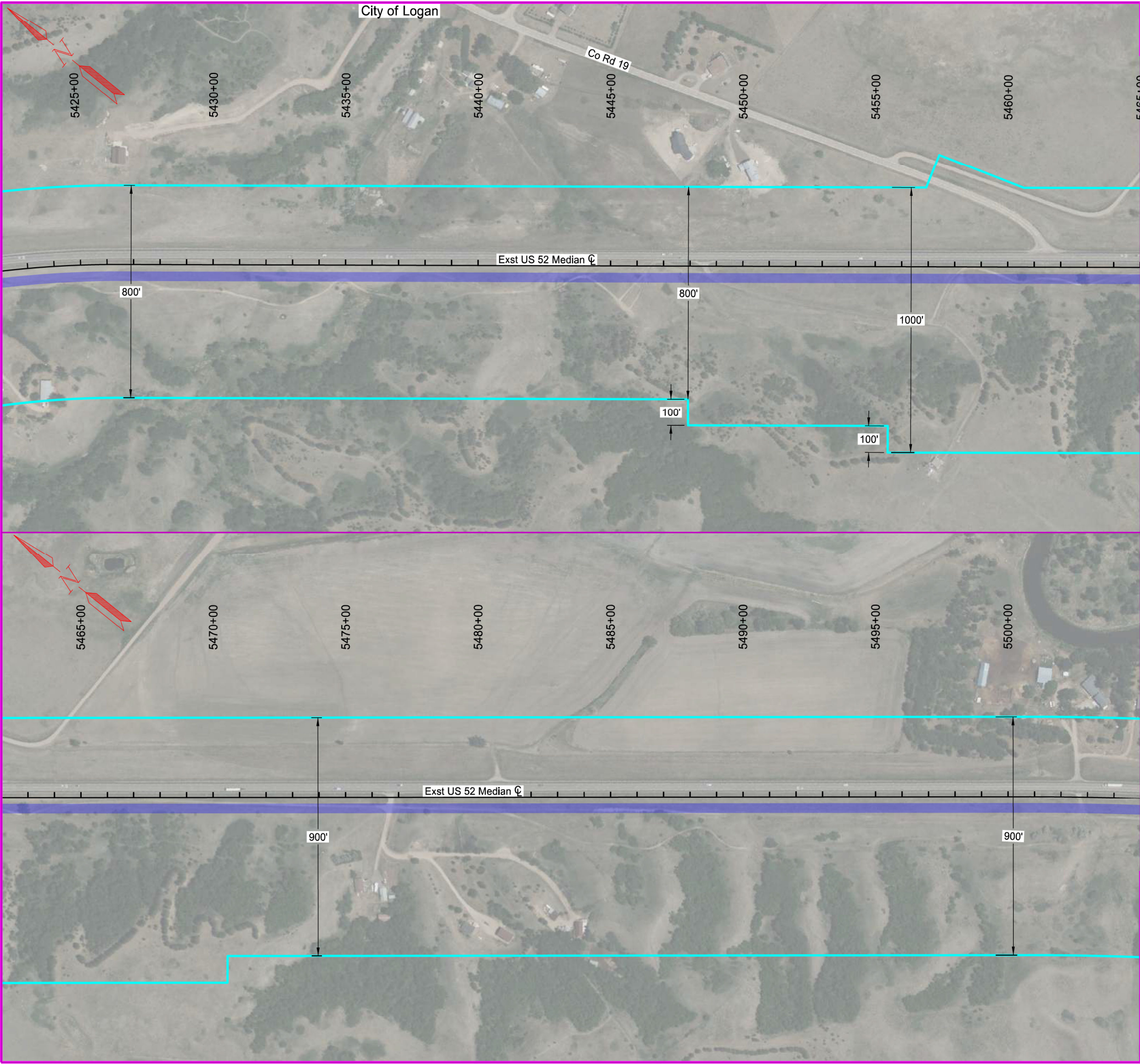
- LEGEND
- Proposed Roadway
  - Study Area

Study Area Exhibit

US Highway 52 Four Lane

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|  | STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
|  | ND    | 4-052(109)101 |             | 3         |

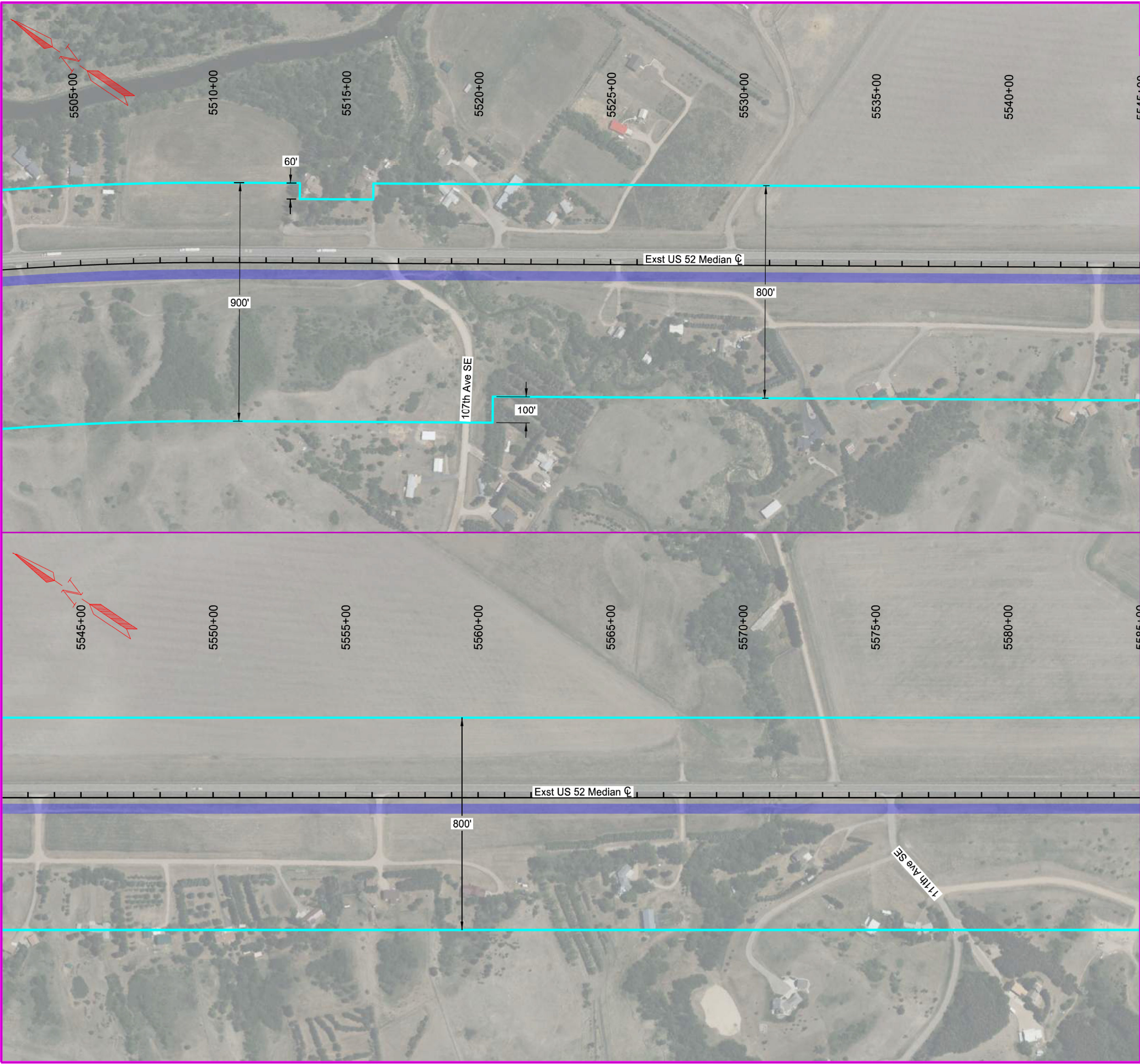
- LEGEND
- Proposed Roadway
  - Study Area

Study Area Exhibit

US Highway 52 Four Lane

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|  | STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
|  | ND    | 4-052(109)101 |             | 4         |

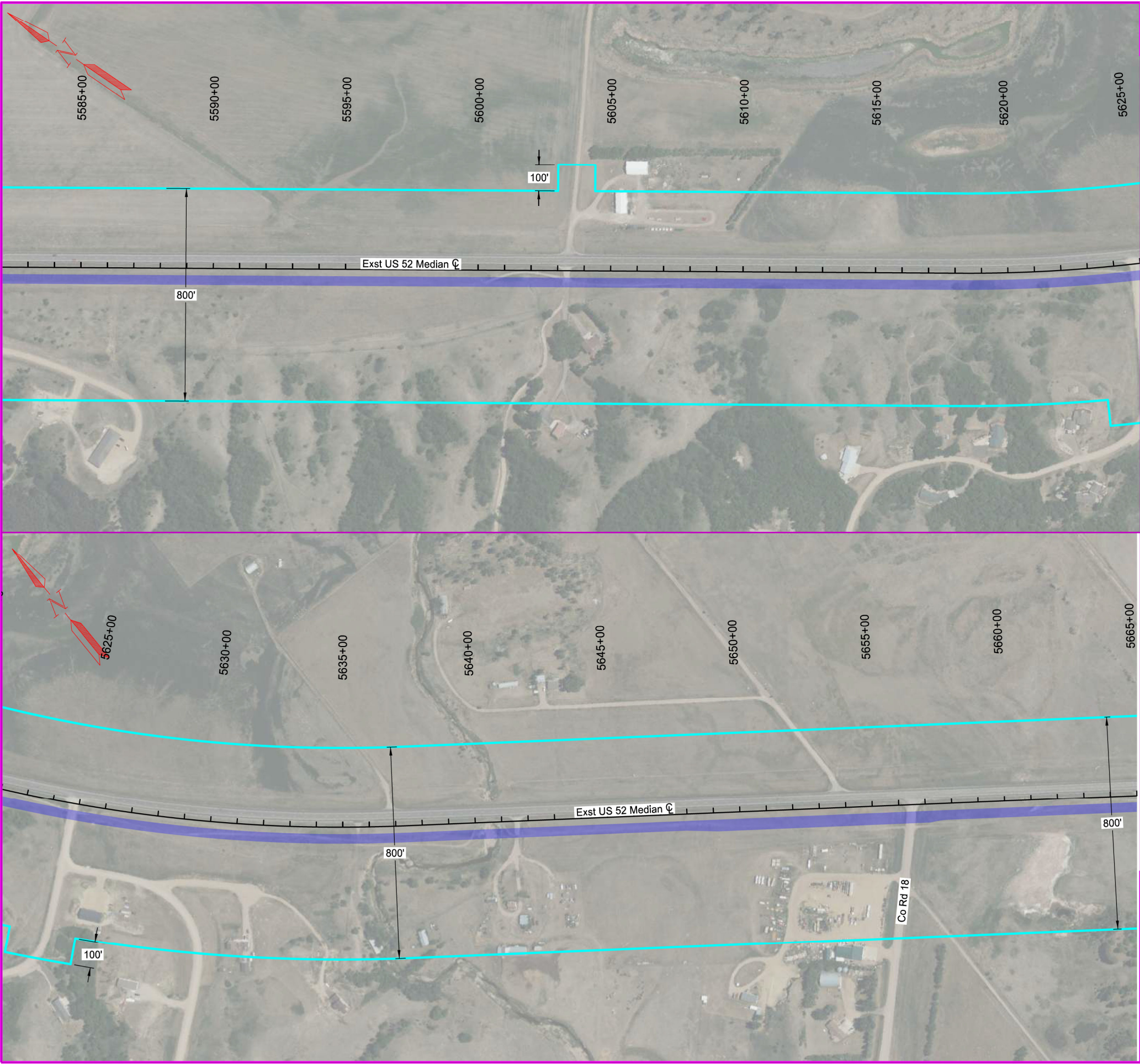
- LEGEND
- Proposed Roadway
  - Study Area

Study Area Exhibit

US Highway 52 Four Lane

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|  | STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
|  | ND    | 4-052(109)101 |             | 5         |

LEGEND

Proposed Roadway

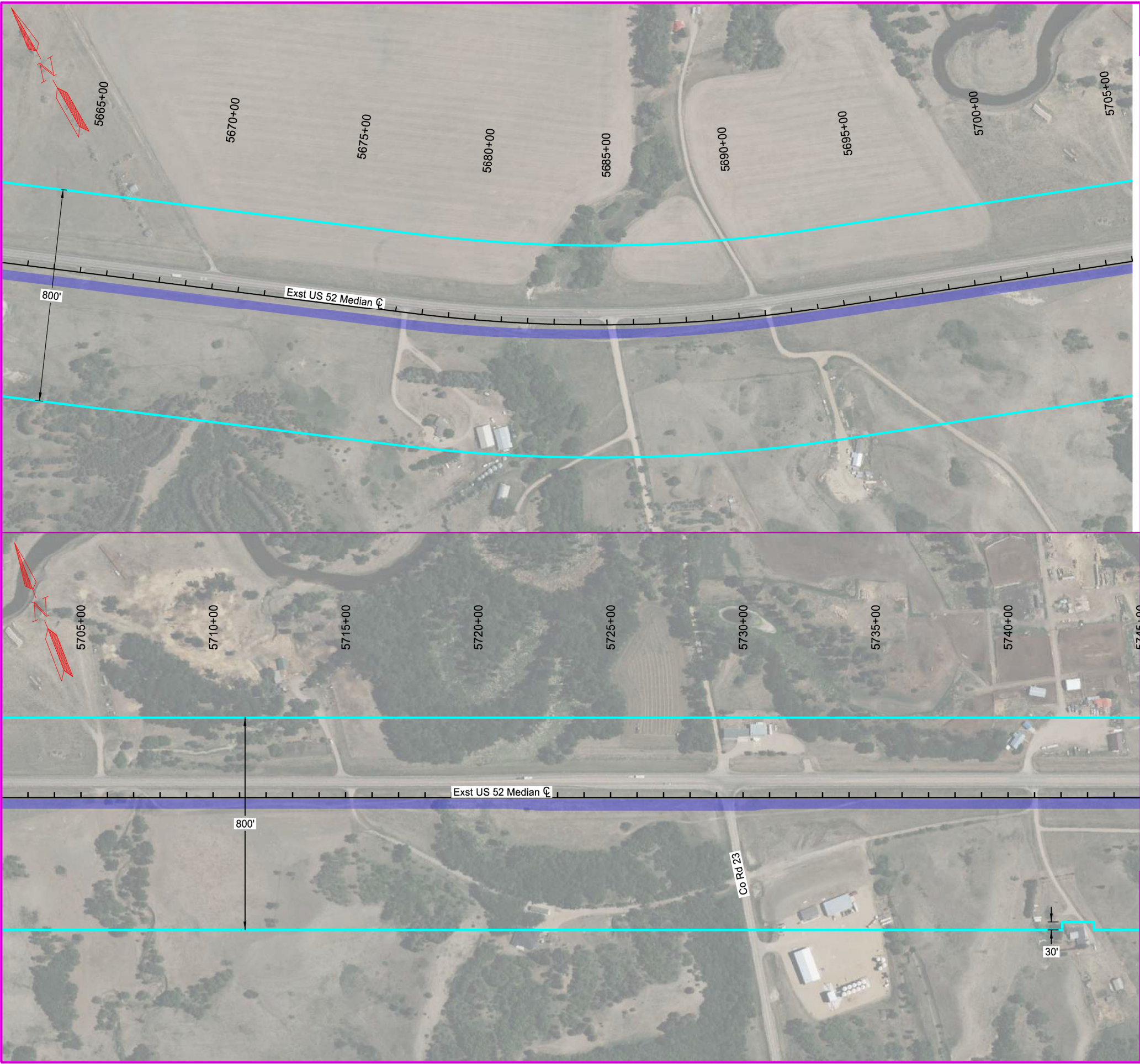
Study Area

Study Area Exhibit

US Highway 52 Four Lane

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|  | STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
|  | ND    | 4-052(109)101 |             | 6         |

LEGEND

Proposed Roadway

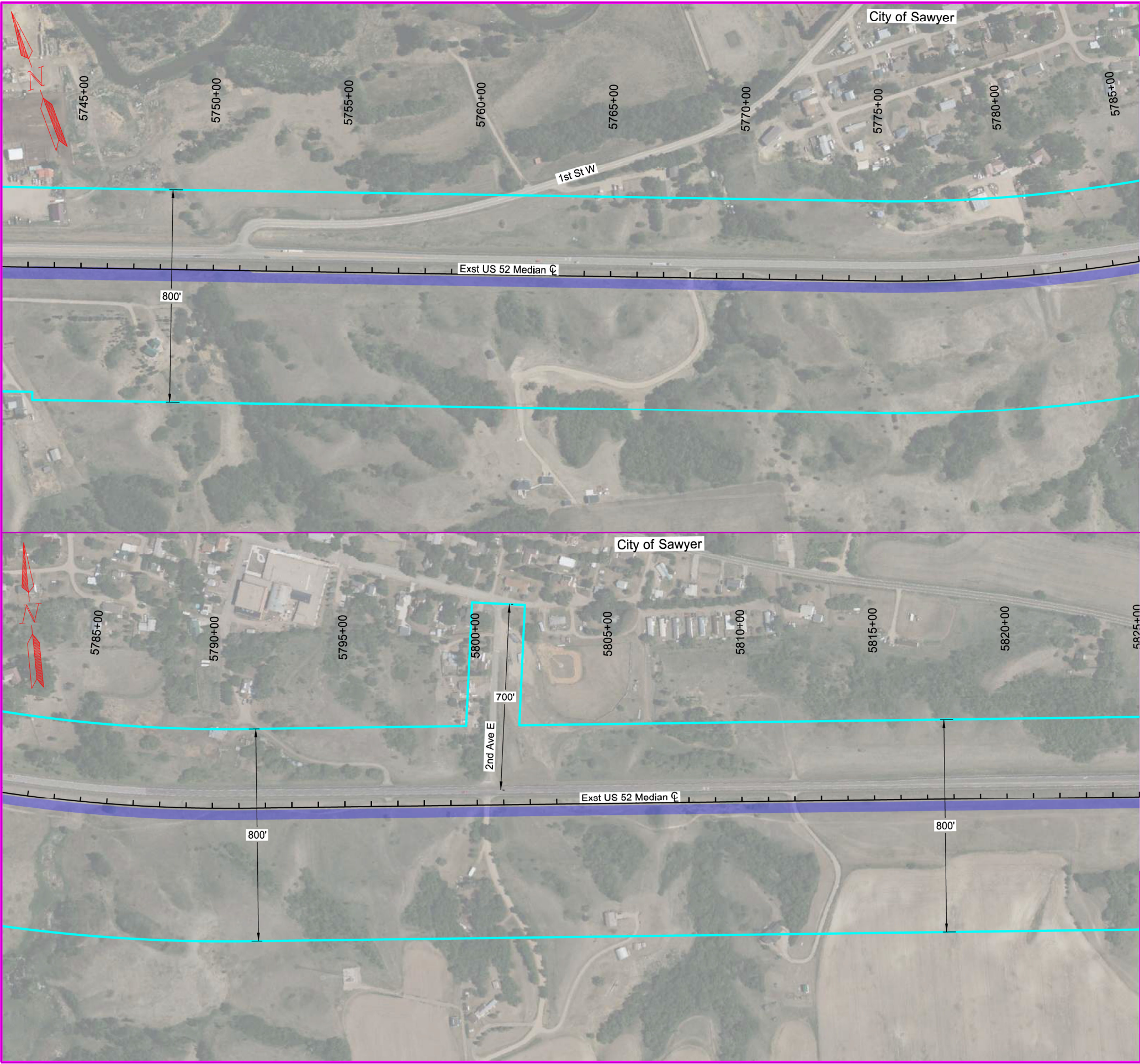
Study Area

Study Area Exhibit

US Highway 52 Four Lane

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|  | STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
|  | ND    | 4-052(109)101 |             | 7         |

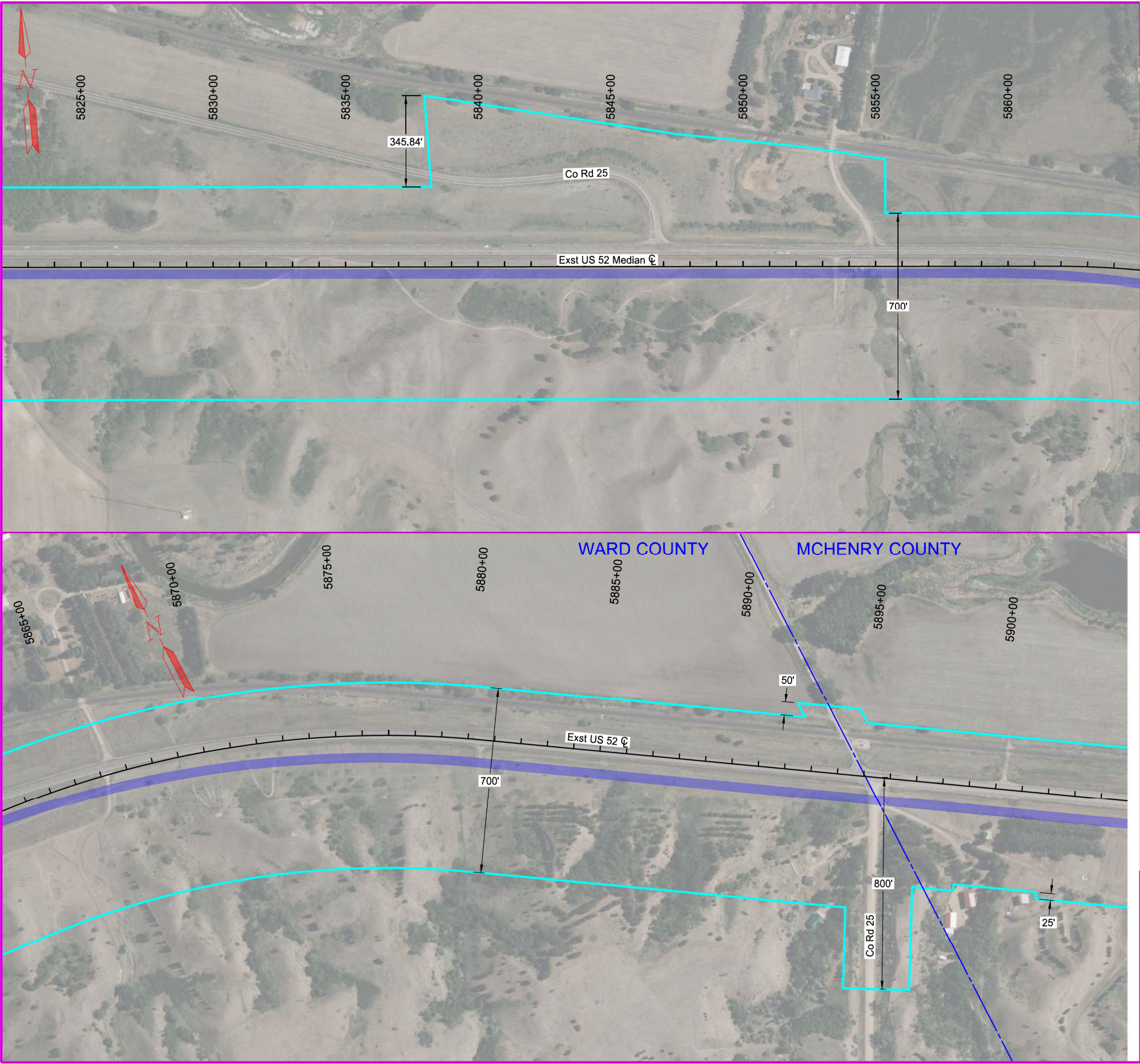
- LEGEND
- Proposed Roadway
  - Study Area

Study Area Exhibit

US Highway 52 Four Lane

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|  | STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
|  | ND    | 4-052(109)101 |             | 8         |

- LEGEND
- Proposed Roadway
  - Study Area

Study Area Exhibit

US Highway 52 Four Lane

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|  | STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
|  | ND    | 4-052(109)101 |             | 9         |

LEGEND

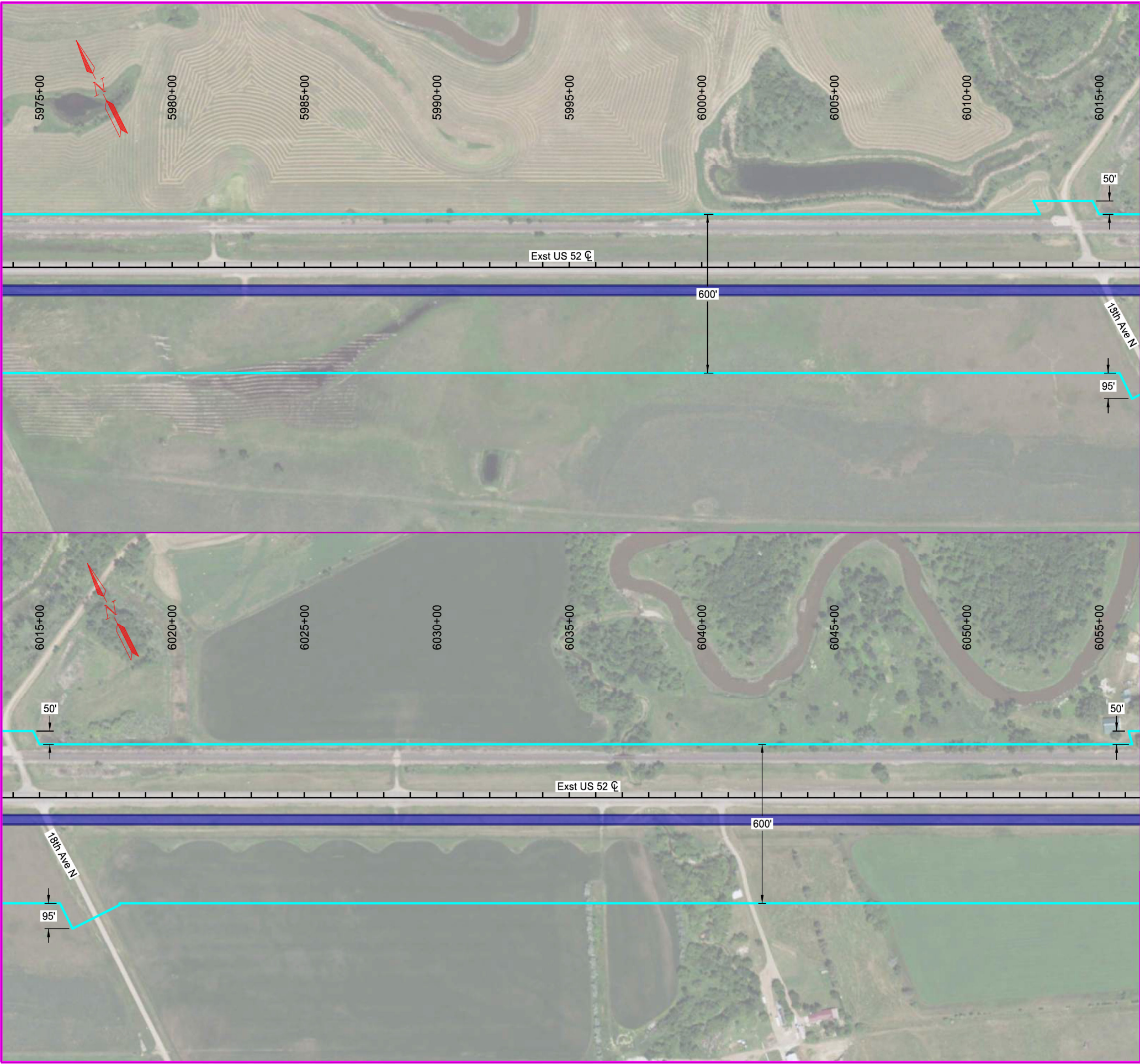
- Proposed Roadway
- Study Area

Study Area Exhibit

US Highway 52 Four Lane

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|                                                                                                               |       |               |                                                                                              |           |
|---------------------------------------------------------------------------------------------------------------|-------|---------------|----------------------------------------------------------------------------------------------|-----------|
|                                                                                                               | STATE | PROJECT NO.   | SECTION NO.                                                                                  | SHEET NO. |
|                                                                                                               | ND    | 4-052(109)101 |                                                                                              | 10        |
| <div><div></div><div>LEGEND</div><div><div></div>Proposed Roadway</div><div><div></div>Study Area</div></div> |       |               |                                                                                              |           |
| Study Area Exhibit                                                                                            |       |               | <div>This document is preliminary and not for construction or implementation purposes.</div> |           |
| US Highway 52 Four Lane                                                                                       |       |               |                                                                                              |           |





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| STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
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LEGEND

Proposed Roadway

Study Area

Study Area Exhibit

US Highway 52 Four Lane

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|  | STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
|  | ND    | 4-052(109)101 |             | 12        |

LEGEND

 Proposed Roadway

 Study Area

Study Area Exhibit

US Highway 52 Four Lane

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|  | STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
|  | ND    | 4-052(109)101 |             | 13        |

**LEGEND**

Proposed Roadway

Study Area

Study Area Exhibit

US Highway 52 Four Lane

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|  | STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
|  | ND    | 4-052(109)101 |             | 14        |

LEGEND

Proposed Roadway

Study Area

Study Area Exhibit

US Highway 52 Four Lane

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|  | STATE | PROJECT NO.   | SECTION NO. | SHEET NO. |
|  | ND    | 4-052(109)101 |             | 15        |

LEGEND

Proposed Roadway

Study Area

Study Area Exhibit

US Highway 52 Four Lane

This document is preliminary and not for construction or implementation purposes.

July 9, 2025

Mr. William Peterson, PhD  
ND State Historic Preservation Officer  
ND Heritage Center  
612 East Boulevard Avenue  
Bismarck, ND 58505-0830

Attn: Lisa Steckler, Project Review Coordinator

### CONSULTATION ON NDDOT PROJECTS, STATE HIGHWAY SYSTEM

We are initiating consultation on the following Project. This letter is intended to give you information on the proposed project and how we intend to proceed to meet our responsibilities under Section 106 of the National Historic Preservation Act of 1966 (as revised 1992). Further, it is intended to solicit your views pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969. We would appreciate your comment on the Project and our planned cultural resource work, and discussion of any concerns you may have regarding historic properties which may be affected by the Project.

|                         |                           |             |                                        |
|-------------------------|---------------------------|-------------|----------------------------------------|
| <b>NDDOT Project #:</b> | 4-052(109)101             | <b>PCN:</b> | <b>24012</b>                           |
| <b>Legal Location:</b>  | Ward and McHenry Counties | T154N R82W  | Sections 10, 14, 15, 23-25             |
|                         |                           | T154N R81W  | Sections 30-32                         |
|                         |                           | T153N R81W  | Sections 4, 5, 9-13                    |
|                         |                           | T153N R80W  | Sections 7, 17, 18, 20, 23, 26, 26, 36 |
|                         |                           | T153N R79W  | Section 31                             |
|                         |                           | T152N R79W  | Section 6                              |
|                         |                           | T152N R80W  | Sections 1, 2                          |

**Project Type:** New construction, widening, re-striping, and extension or replacement of existing box culverts and structural plate pipes.

**Purpose and Need:** The purpose of the project is to expand the existing two-lane highway to a four-lane highway in order to accommodate current and future traffic volumes and address social and economic needs.

**Project Description:** Project would expand approximately 23 miles of US 52 from two lanes to four lanes between 2.3 miles west of Junction 79th Ave SE through the community of Voltaire, North Dakota. The worst case scenario from a project footprint perspective would include the construction of a new two-lane highway adjacent to the existing roadway corridor. The project may disturb undisturbed natural draws, coulees and channels and may include extension or replacement of existing box culverts and structural plate pipes. Disturbance would include both

excavation and placement of fill material.

**Right-of-Way:** Permanent and temporary ROW will be required for the project; however, the exact size and location of ROW needs will depend upon the selected alternative. Based on preliminary design, the amount of permanent ROW needed for the project ranges from 88 to 255 acres, and the amount of temporary ROW needed ranges from 9 to 18 acres. ROW would be acquired in linear strips along the project corridor.

**APE:** The APE is a corridor spanning 1,000 – 600 ft wide and approximately 22.41 miles long. It encompasses the proposed project and ROW previously mentioned.

**Justification:** All project effects will be within the existing ROW as well as any new contiguous ROW which was included in the Class III survey area.

**Proposed Cultural Resource Work:** Evaluative testing and construction monitoring (see attachment)

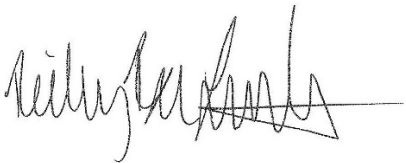
**Justification:** MAC conducted a Class III Cultural Resource Inventory and report (Engel et al 2025; ROI: 2023.ND.103) and South Fork Historical completed an Architectural Inventory and report (Sakariassen 2025) which NDDOT has reviewed and accepted. The Class I Literature Searches revealed that the site distribution is dense. Thirty-two of the previously recorded cultural resources are located within the survey area and were revisited during this inventory. Fifty-one new cultural resources were encountered within the inventory area. See attachment for the list of sites located within the APE.

**Other Consulting Parties:** The TCC is consulted on all NDDOT projects.

**Plan for Public Involvement:** SOV letters were sent to a variety of associated agencies on 4/10/2025. Various commission meetings have been held to discuss the Project.

We are requesting your concurrence with this finding of *No Adverse Effect* for the proposed Project as a whole. If you need further information on the proposed project, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Reilly Lembo', with a horizontal line extending from the end of the signature.

Reilly Lembo, M.S.  
Archaeologist II, NDDOT-ETS(CRS)





August 6, 2025

Reilly Lembo  
ND Department of Transportation  
608 East Boulevard Avenue  
Bismarck, ND 58505-0700

**ND SHPO Ref.: 24-5411 "NDDOT Project 4-052(109)101 PCN 24012 US Highway 52 Expansion Project: A Class III Cultural Resources Inventory in Ward and McHenry Counties, North Dakota – Architectural Sites" & "NDDOT Project 4-052(109)101 PCN 24012 Highway 52 Expansion Project: A Class III Cultural Resource Inventory in Ward and McHenry Counties, North Dakota – Archaeological Sites"**

Dear Reilly,

We have reviewed ND SHPO Ref.: 24-5411 "NDDOT Project 4-052(109)101 PCN 24012 US Highway 52 Expansion Project: A Class III Cultural Resources Inventory in Ward and McHenry Counties, North Dakota – Architectural Sites" & "NDDOT Project 4-052(109)101 PCN 24012 Highway 52 Expansion Project: A Class III Cultural Resource Inventory in Ward and McHenry Counties, North Dakota – Archaeological Sites" as submitted to our office on July 9, 2025. We concur with a determination of "No Adverse Effect" for this project provided avoidance, evaluation, and monitoring completed as described in the reports, and provided it takes place in the location and manner described in the documentation.

Thank you for the opportunity to review this project. If you have any questions please contact Lisa Steckler, Historic Preservation Specialist at (701) 328-3577, e-mail [lsteckler@nd.gov](mailto:lsteckler@nd.gov)

Sincerely,

for William D. Peterson, PhD  
State Historic Preservation Officer  
(North Dakota)

24-5411

January 6, 2026

Mr. William Peterson, PhD  
ND State Historic Preservation Officer  
ND Heritage Center  
612 East Boulevard Avenue  
Bismarck, ND 58505-0830

Attn: Lisa Steckler, Project Review Coordinator

### CONSULTATION ON NDDOT PROJECTS, STATE HIGHWAY SYSTEM

We are initiating consultation on the following Project. This letter is intended to give you information on the proposed project and how we intend to proceed to meet our responsibilities under Section 106 of the National Historic Preservation Act of 1966 (as revised 1992). Further, it is intended to solicit your views pursuant to Section 102(2) (D) (IV) of the National Environmental Policy Act of 1969. We would appreciate your comment on the Project and our planned cultural resource work, and discussion of any concerns you may have regarding historic properties which may be affected by the Project.

|                         |                           |             |                                    |
|-------------------------|---------------------------|-------------|------------------------------------|
| <b>NDDOT Project #:</b> | 4-052(109)101             | <b>PCN:</b> | <b>24012</b>                       |
| <b>Legal Location:</b>  | Ward and McHenry Counties | T154N R82W  | Sections 10, 14, 15, 23-25         |
|                         |                           | T154N R81W  | Sections 30-32                     |
|                         |                           | T153N R81W  | Sections 4, 5, 9-13                |
|                         |                           | T153N R80W  | Sections 7, 17, 18, 20, 23, 26, 36 |
|                         |                           | T153N R79W  | Section 31                         |
|                         |                           | T152N R79W  | Section 6                          |
|                         |                           | T152N R80W  | Sections 1, 2                      |

**Project Type:** New construction, widening, re-striping, and extension or replacement of existing box culverts and structural plate pipes.

**Purpose and Need:** The purpose of the project is to expand the existing two-lane highway to a four-lane highway in order to accommodate current and future traffic volumes and address social and economic needs.

**Project Description:** Project would expand approximately 23 miles of US 52 from two lanes to four lanes between 2.3 miles west of Junction 79<sup>th</sup> Ave SE through the community of Voltaire, North Dakota. The worst-case scenario from a project footprint perspective would include the construction of a new two-lane highway adjacent to the existing roadway corridor. The project may disturb undisturbed natural draws, coulees, and channels, and may include extension or replacement of existing box culverts and structural plate pipes. Disturbance would include both

excavation and placement of fill material.

**Right-of-Way:** Permanent and temporary ROW will be required for the project; however, the exact size and location of ROW needs will depend upon the selected alternative. Based on preliminary design, the amount of permanent ROW needed for the project ranges from 88 to 225 acres, and the amount of temporary ROW needed ranges from 9 to 18 acres. ROW would be acquired in linear strips along the project corridor.

**APE:** The APE is a corridor spanning 1,000-600ft wide and approximately 22.41 miles long. It encompasses the proposed project and ROW previously mentioned. The APE was surveyed under MS#s 020408, 020982, and 020983. These inventories included the geotechnical boring locations, the architectural sites located within the APE, as well as the Class III survey done for the entire corridor.

**Justification:** A Class III survey was conducted for the APE and submitted to NDSHPO on July 9<sup>th</sup>, 2025, and received concurrence on a finding of No Adverse Effect with the stipulation that archaeological testing be conducted on 6 sites. The testing plan was approved by NDSHPO prior to the beginning of the excavation.

**Proposed Cultural Resource Work:** Cultural Monitoring for sites 32WD137, 32WD138, and 32WD139. Additionally, 32WD138 will need to be avoided as it is recommended Eligible for the NRHP.

**Justification:** MAC conducted Evaluative Testing and wrote a report (Snortland et al 2025; ROI: 2023.ND.103 [LK237103])) which NDDOT has reviewed and accepted. Evaluative testing was conducted on six sites and two isolated finds: 32MH483, 32WD134, 32WD137, 32WD138, 32WD139, 32WD394, 32WDx828, and 32WDx829.

As shown in the table below, only one site is recommended as Eligible for the NRHP – 32WD138. This site will require avoidance which will be accomplished by shifting the proposed alignment further to the south. However, a small amount of fill is needed in order to tie the existing driveway to the new road. No excavation or topsoil removal will be taking place. Additionally, a cultural monitor will need to be present for initial dirt work conducted near sites 32WD137, 32WD138, and 32WD139.

| Table X1: Summary of NRHP eligibility and further work recommendations. |                                          |                  |                                        |
|-------------------------------------------------------------------------|------------------------------------------|------------------|----------------------------------------|
| Site Number                                                             | Site Type                                | NRHP Eligibility | Recommendation                         |
| 32MH483                                                                 | Archaeological Cultural Material Scatter | Not Eligible     | No further work or avoidance necessary |
| 32WD134                                                                 | Historical archaeological farmstead      | Not Eligible     | No further work or avoidance necessary |
| 32WD137                                                                 | Archaeological Cultural Material Scatter | Not Eligible     | Monitoring                             |
| 32WD138                                                                 | Archaeological Cultural Material Scatter | Eligible         | Avoidance and monitoring               |
| 32WD139                                                                 | Archaeological Cultural Material Scatter | Not Eligible     | Monitoring                             |
| 32WD394                                                                 | Archaeological Cultural Material Scatter | Not Eligible     | No further work or avoidance necessary |
| 32WDx828                                                                | Archaeological Isolate                   | Not Eligible     | No further work or avoidance necessary |
| 32WDx829                                                                | Archaeological Isolate                   | Not Eligible     | No further work or avoidance necessary |

**Section 4(f) Official with Jurisdiction (OWJ):** Site 32WD138 qualifies for Section 4(f) protection per 23 CFR 774 since the site is a NRHP eligible cultural resource. NDDOT intends to utilize exception 23 CFR 774.13(B)(1) that applies to archaeological sites when the proposed work does not adversely affect the historic qualities of the site. Upon receipt of NDSHPO concurrence with NDDOT's Section 106 "No Adverse Effect" determination and completion of the Section 106 Coordination process, the Section 4(f) exception requirements are fulfilled. NDSHPO concurrence will be reported in the environmental document for fulfillment of the Section 106 and Section 4(f) coordination processes.

**Other Consulting Parties:** The TCC was consulted on this project multiple times including at the most recent TCC meeting in September 2025.

**Plan for Public Involvement:** SOV letters were sent to a variety of associated agencies on 4/10/2025. Various commission meetings have been held to discuss the Project.

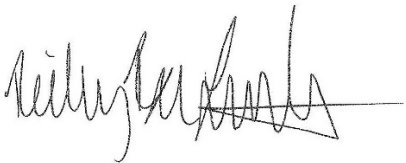
We are requesting your concurrence with this finding of *No Adverse Effect* for the proposed Project as a whole.

Additionally, we are requesting a consensus determination for the eligibility of the tested sites, as follows:

Site 32MH483 – Not Eligible  
Site 32WD134 – Not Eligible  
Site 32WD137 – Not Eligible  
Site 32WD138 – Eligible  
Site 32WD139 – Not Eligible  
Site 32WD394 – Not Eligible  
Site 32WDx828 – Not Eligible  
Site 32WDx829 – Not Eligible

If you need further information on the proposed project, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Reilly Lembo", with a long horizontal flourish extending to the right.

Reilly Lembo, M.S.  
Archaeologist II, NDDOT-ETS(CRS)





January 20, 2026

Reilly Lembo  
ND Department of Transportation  
608 East Boulevard Avenue  
Bismarck, ND 58505-0700

**ND SHPO Ref.: 24-5411 “Testing and Evaluation of Six Sites Along the U.S. Highway 52 Corridor in Ward and McHenry Counties, North Dakota” in portions of [T154N R81W Section 30] [T153N R81W Section 4, 9, 10, 12] [T153N R80W Section 18] MAC 2023.ND.103 LK237103**

We have reviewed ND SHPO Ref.: 24-5411 “Testing and Evaluation of Six Sites Along the U.S. Highway 52 Corridor in Ward and McHenry Counties, North Dakota” in portions of [T154N R81W Section 30] [T153N R81W Section 4, 9, 10, 12] [T153N R80W Section 18] MAC 2023.ND.103 LK237103 as submitted to our office on January 7, 2026, and find the report by J. Signe Snortland, Michael A. Jackson, Damita Engel, Andrew Reinhard and Kimball Banks acceptable. We concur with a determination of “No Adverse Effect” for this project provided it takes place in the location and manner described in the documentation, and provide all stipulations are followed including monitoring, fencing, and avoidance. We look forward to reviewing the monitoring report upon completion.

We further concur with the following determinations:

Site 32MH483 – Not Eligible  
Site 32WD134 – Not Eligible  
Site 32WD137 – Not Eligible  
Site 32WD138 – Eligible  
Site 32WD139 – Not Eligible  
Site 32WD394 – Not Eligible  
Site 32WDx828 – Not Eligible  
Site 32WDx829 – Not Eligible

Thank you for the opportunity to review this project. If you have any questions please contact Lisa Steckler, Historic Preservation Specialist at (701) 328-3577, e-mail [lsteckler@nd.gov](mailto:lsteckler@nd.gov)

Sincerely,

for William D. Peterson, FND  
State Historic Preservation Officer  
(North Dakota)

24-5411

# Appendix D, Section 4(f) Documentation

January 7, 2026

Dale Deibert  
Snowmobile North Dakota  
PO Box 99  
Surrey, ND 58785

Subject: PROJECT NO. 4-052(109)101, PCN 24012, MINOT TO E OF VOLTAIRE  
US Highway 52 - Snowmobile Trail

Dear Mr. Deibert,

The North Dakota Department of Transportation (NDDOT) in cooperation with Federal Highway Administration (FHWA), is proposing a roadway expansion project on US Highway 52. The project extends from near Minot to east of Voltaire in Ward and McHenry Counties. Funding for construction has not yet been identified; therefore, a construction date is not available at this time. The earliest anticipated construction date would be spring 2027.

An existing snowmobile trail (i.e., Sno-Trails Snowmobile Trail) was identified within the proposed project limits between Sawyer and Velva. The snowmobile trail provides a recreation opportunity for individuals in the surrounding area. The snowmobile trail is listed on the Snowmobile North Dakota trail map as occurring within NDDOT right-of-way and it would be impacted by the proposed project.

The two build alternatives under consideration for the project (i.e., Alternative B and Alternative C) propose expanding US Highway 52 from a two lane highway into a four lane highway. Alternative B, a depressed center median, and Alternative C, a flush paved center median, are being analyzed across six segments established along the project corridor (see enclosed Project Segments Map). The snowmobile trail would be impacted by Alternatives B and C in Segments 2, 3, and 4 due to the widening of the roadway along the ditch to the south of US Highway 52 (see enclosed Section 4(f) Properties Map). Completion of the project would result in flat ditch bottoms, where applicable, which would follow a route similar to the existing snowmobile trail. The use of riprap in the ditch is necessary in various locations for the proposed roadway improvements. Final design of the preferred build alternative would ensure the riprap does not block or prevent use of the route by trail users, the trail remains functional, and connectivity is maintained between Sawyer and Velva.

The snowmobile trail is protected under Section 4(f) of the Department of Transportation Act of 1966. Section 4(f) of the Transportation Act prohibits FHWA from authorizing actions that result in a use of Section 4(f) properties including public parks, recreation areas, wildlife refuges, or lands of historic significance, unless there are no prudent and feasible avoidance alternatives, and the action includes all possible planning to minimize harm. However, FHWA has identified various exceptions to the requirement for Section 4(f) approval including the exception found at 23 CFR 774.13 f(3). This exception applies when the use of the Section 4(f) property occurs on trails, paths, bikeways, and sidewalks that occupy a transportation facility right-of-way without limitation to any specific location within that right-of-way, so long as the continuity of the trail, path, bikeway, or sidewalk is maintained.

To apply the exception found at 23 CFR 774.13 f(3), the official(s) with jurisdiction over the Section 4(f) resource (i.e., Snowmobile North Dakota and the snowmobile trail, respectively) must agree that, at this particular location, occupies a transportation facility right-of-way without limitation to any specific location within that right-of-way, and that the continuity of the trail, path, bikeway, or sidewalk will be maintained. Based on the review of the area, design discussions with Snowmobile North Dakota, and the surrounding land use of the trail, this appears to be the case.

#### Request of Concurrence

NDDOT requests concurrence from Snowmobile North Dakota that the identified snowmobile trail occupies a transportation facility right-of-way without limitation to any specific location within the right-of-way and the continuity of the trail, path, bikeway, or sidewalk will be maintained, which therefore would allow FHWA to apply the 23 CFR 774.13 f(3) exception.

Please provide your written concurrence by January 28, 2026. We appreciate your attention and response. If you require any additional information, or have any questions, feel free to call me at 701-328-4818.

A concurrence response can be sent to [colawson@nd.gov](mailto:colawson@nd.gov) or mailed to:

Cory Lawson  
NDDOT Environmental and Transportation Services  
608 E. Boulevard Avenue  
Bismarck, ND 58505-0770

Sincerely,

A handwritten signature in black ink, appearing to read "Cory Lawson" with a stylized flourish at the end.

Cory Lawson  
Environmental Services 1 Section Leader, Environmental Services Leader

cl/ws

Enclosure(s): Project Segments Map, Section 4(f) Properties Map



Motor Vehicle

JAN 28 2026

MM

**Concurrence**

Snowmobile North Dakota has consulted with NDDOT and hereby concurs that the snowmobile trail occupies a transportation facility right-of-way without limitation to any specific location within the right-of-way and the continuity of the trail, path, bikeway, or sidewalk is maintained at the location described and shown in the appended exhibit, which therefore allows NDDOT to apply 23 CFR 774.13 f(3) Exception and proceed with the proposed project as planned.

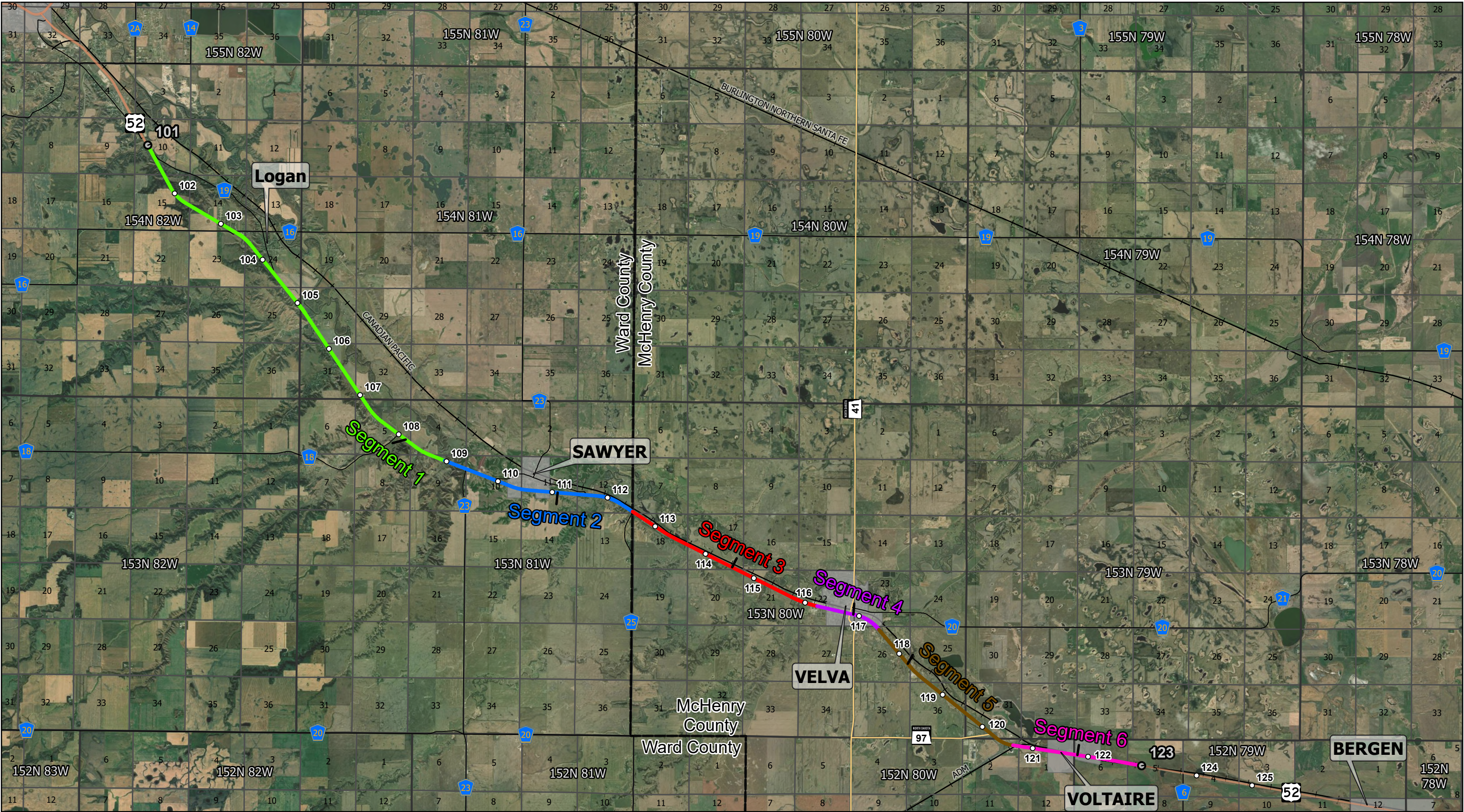
Eyle D. O'Brien

Snowmobile North Dakota

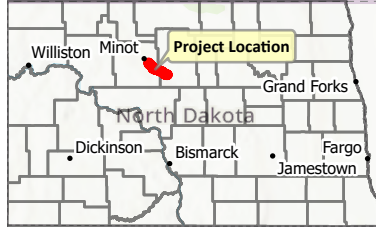
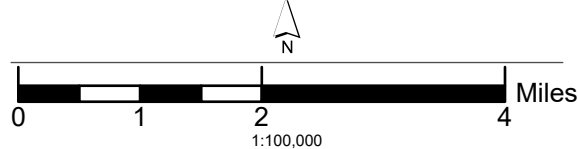
1-23-26

Date





**US 52 Four Lane Project Segments  
Ward and McHenry Counties, ND**



- US 52 Mile Markers
- Beginning/End Point

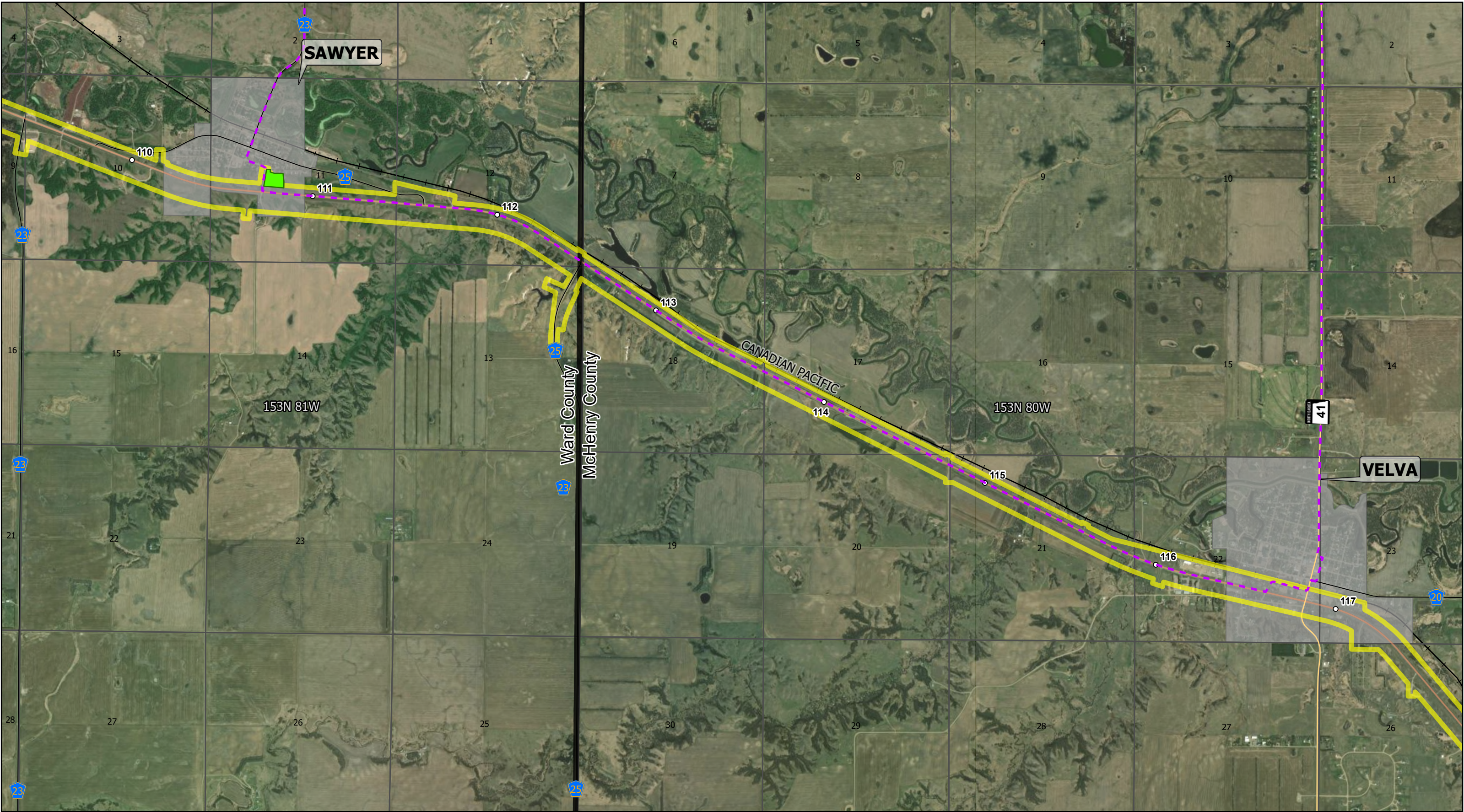
- State Highway
- US Highway
- Railroads
- Township Lines

- Section Lines
- County Boundary
- Corporate Boundaries

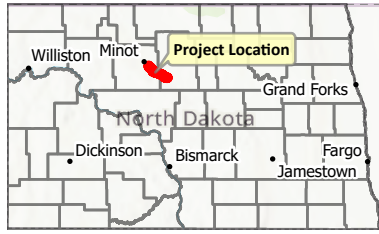
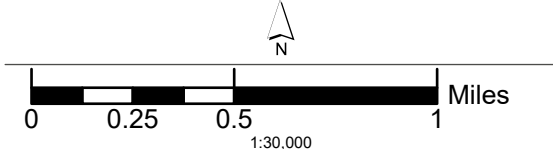
- Project Segments**
- Segment 1
  - Segment 2
  - Segment 3
  - Segment 4

- Segment 5
- Segment 6





**US 52 Four Lane Section 4(f) Properties  
Ward and McHenry Counties, ND**



- US 52 Mile Markers
- State Highway
- US Highway
- Railroads
- Township Lines
- Section Lines
- County Boundary
- Corporate Boundaries
- Study Area

- SnoTrails
- Snowmobile Trail
- Sawyer Baseball Diamond

\\uel.com\storage\GIS\Databases\2023\23\_23600\_US\_52\_4Lane\APR01\US 52 Wetland Maps\_new\_Contract.aprx



January 15, 2026

Heather Ell

Attn: Sawyer Public School District

25 1st Ave SW  
Sawyer, ND 58781

Subject: PROJECT NO. 4-052(109)101, PCN 24012 – US Highway 52 – Minot to East of Voltaire, Sawyer Baseball Diamond

Dear Heather Ell:

The North Dakota Department of Transportation, in cooperation with the Federal Highway Administration (FHWA), is proposing a roadway expansion on US Highway 52 from Reference Point (RP) 101.20 to RP 123.00, totaling approximately 22 miles. The project extends from near Minot to east of Voltaire in Ward and McHenry counties. Funding for construction has not yet been identified; therefore, a construction date is not available at this time. The earliest anticipated construction date would be spring 2027.

The Sawyer Baseball Diamond was identified within the proposed project limits. The baseball diamond provides a recreation opportunity for Sawyer Public School District stakeholders and the public in the surrounding area.

The two build alternatives under consideration for the project (i.e., Alternative B and Alternative C) propose expanding US Highway 52 from a two-lane highway into a four-lane highway. Alternative B, a depressed center median, and Alternative C, a flush paved center median, are being analyzed across six segments established along the project corridor (see enclosed Project Segments Map). The baseball diamond would be temporarily impacted by Alternative B, if selected, in Segment 2 due to roadway improvements to the north of US Highway 52 (see enclosed Sawyer Baseball Diamond Impacts Map). The impacts would be to aid in the constructability of the project, whereby the area may be subject to stockpiling of topsoil, placement of erosion control devices, and movement of construction equipment. Following construction, the area would be restored to pre-construction conditions including regrading and reseeding of any disturbed areas.

The Sawyer Baseball Diamond is protected under Section 4(f) of the Department of Transportation Act of 1966 due to the recreational nature of the facility. Section 4(f) of the Transportation Act prohibits FHWA from authorizing actions that result in a use of Section 4(f) properties, including public parks, recreation areas, wildlife refuges or lands of historic significance, unless there are no prudent and feasible avoidance alternatives and the action includes all possible planning to minimize harm. However, under 23 CFR 774.13, FHWA has identified various exceptions to the requirements for Section 4(f) authorization. One exception, identified in 23 CFR 774.13(d) pertains to temporary occupancies of land that are so minimal as



to not constitute a use based on the following criteria:

1. *Duration (of the occupancy) must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land.*

The project is anticipated to span two construction seasons. The Sawyer Baseball Diamond will be occupied for approximately one construction season (e.g., April to November) during the construction of the project. A temporary construction easement would be required during construction activities; no change in ownership would occur.

2. *Scope of the work must be minor, i.e., both the nature and magnitude of the changes to the Section 4(f) resource are minimal.*

Temporary impacts to the Sawyer Baseball Diamond property would occur during construction of Alternative B, if selected. All proposed work on the property would be restricted to the temporary construction easement. The temporary easement would be approximately 0.27 acres in a linear strip on the south side of the of the property. The remaining 4.87 acres of the property would not be impacted. The area may be subject to temporary stockpiling of topsoil, placement of erosion control devices, and movement of construction equipment. Following construction, the area would be restored to pre-construction conditions including regrading and reseeding of any disturbed areas.

3. *There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis*

No permanent impacts to the Sawyer Baseball Diamond would occur as a result of the project. Temporary impacts to the property within the construction easement would not interfere with any activities, features, or attributes of the property. Access to Sawyer Baseball Diamond would be maintained during construction.

4. *The land being used must be fully restored, i.e., the resource must be returned to a condition which is at least as good as that which existed prior to the project.*

Following construction, the area would be restored to pre-construction conditions including regrading and reseeding of any disturbed areas.

5. *There must be documented agreement of the appropriate Federal, State, or local officials having jurisdiction over the resource regarding the above conditions.*

As requested, with this letter, NDDOT is requesting concurrence from the Sawyer Public School District regarding the outlined conditions. It is our opinion that, due to the temporary and minimal nature of the project impacts, the proposed project is excluded from the requirements of Section 4(f) authorization.

#### Request for Concurrence

NDDOT requests concurrence from Sawyer Public School District that the proposed project meets conditions 1 through 5 above, will not have an "adverse effect" on the Sawyer Baseball Diamond, nor will there be interference with the intended activities, features or attributes of the property on a temporary or permanent basis. The above stated condition 5 is required for FHWA to exclude this project from the requirements of Section 4(f) authorization, allowing the proposed project to proceed as planned.

Please provide your written concurrence by **January 29, 2026**. We would greatly appreciate your immediate attention and response. If you require any additional information, or have any questions, feel free to call me at 701-328-4818.

A concurrence response can be sent to [colawson@nd.gov](mailto:colawson@nd.gov) or mailed to:

Cory Lawson  
NDDOT Environmental and Transportation Services  
608 E. Boulevard Avenue  
Bismarck, ND 58505-0770

Sincerely,



Cory Lawson  
Environmental Services

cl/ws

**Concurrence**

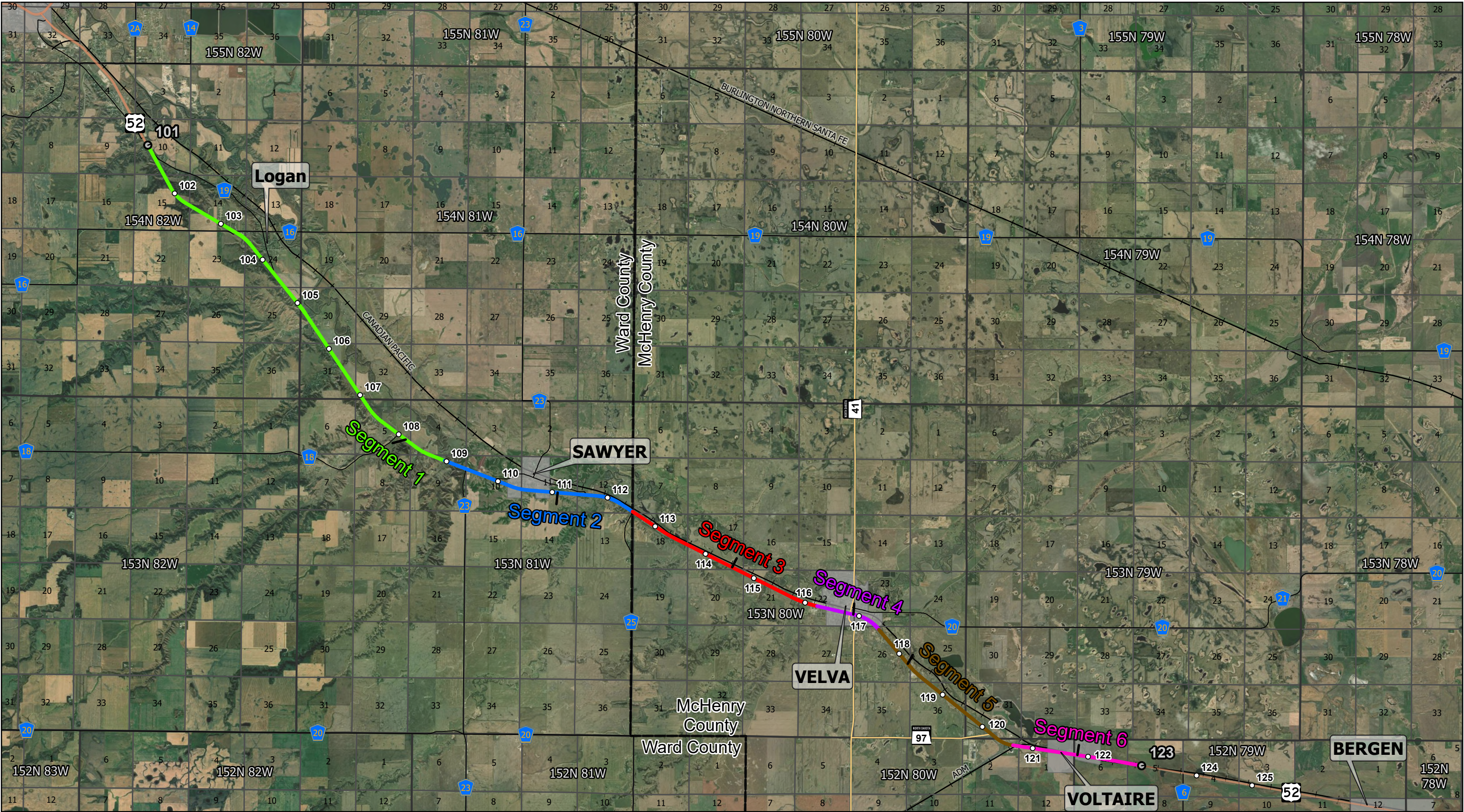
The official(s) having jurisdiction has consulted with NDDOT regarding the impacts to the Sawyer Baseball Diamond and hereby concurs that the proposed project, as described and shown in appended exhibits, would not adversely affect the activities, features and attributes that qualify the property for protection under Section 4(f) of the Transportation Act on either a temporary or permanent basis.

  
Sawyer Public School District  
SCHOOL BOARD PRESIDENT

26 JAN 2026  
Date

Enclosure(s): Project Segments Map, Sawyer Baseball Diamond Impacts Map





US 52 Four Lane Project Segments  
Ward and McHenry Counties, ND

○

US 52 Mile Markers

●

Beginning/End Point

State Highway

US Highway

Railroads

Township Lines

Section Lines

County Boundary

Corporate Boundaries

Segment 1

Segment 2

Segment 3

Segment 4

Segment 5

Segment 6

NORTH DAKOTA

Transportation

Be Legendary.

Page 1 of 1





|                                                                                          |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------|--|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <b>US 52 Four Lane Sawyer Baseball Diamond Impacts<br/>Ward and McHenry Counties, ND</b> |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                          |  | <p>Page 1 of 1</p> |  |  |  |  |  |  |  |  |  |  |  |  |  |



# Appendix E, Prime and Unique Farmland Documentation

## FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

|                                                                                                                                                                        |  |                                                                           |                   |                                                                                                                 |                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------|-------------------|
| <b>PART I (To be completed by Federal Agency)</b>                                                                                                                      |  | 3. Date of Land Evaluation Request<br><b>1/22/26</b>                      |                   | 4. Sheet 1 of <b>6</b>                                                                                          |                   |
| 1. Name of Project <b>US 52 Four Lane</b>                                                                                                                              |  | 5. Federal Agency Involved <b>FHWA</b>                                    |                   |                                                                                                                 |                   |
| 2. Type of Project <b>Highway Expansion</b>                                                                                                                            |  | 6. County and State <b>Ward and McHenry County, ND</b>                    |                   |                                                                                                                 |                   |
| <b>PART II (To be completed by NRCS)</b>                                                                                                                               |  | 1. Date Request Received by NRCS<br>1-22-26                               |                   | 2. Person Completing Form<br>Weiser, Lance                                                                      |                   |
| 3. Does the corridor contain prime, unique statewide or local important farmland?<br>(If no, the FPPA does not apply - Do not complete additional parts of this form). |  | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>       |                   | 4. Acres Irrigated   Average Farm Size<br>  1607                                                                |                   |
| 5. Major Crop(s)<br>wheat, soybeans                                                                                                                                    |  | 6. Farmable Land in Government Jurisdiction<br><b>Acres:1,086,000% 83</b> |                   | 7. Amount of Farmland As Defined in FPPA<br><b>Acres:806,000 %74</b>                                            |                   |
| 8. Name Of Land Evaluation System Used<br>LESA                                                                                                                         |  | 9. Name of Local Site Assessment System<br>LESA                           |                   | 10. Date Land Evaluation Returned by NRCS<br>2-4-26                                                             |                   |
| <b>PART III (To be completed by Federal Agency)</b>                                                                                                                    |  | <b>Alternative Corridor For Segment <u>1</u></b>                          |                   |                                                                                                                 |                   |
|                                                                                                                                                                        |  | <b>Corridor A</b>                                                         | <b>Corridor B</b> | <b>Corridor C</b>                                                                                               | <b>Corridor D</b> |
| A. Total Acres To Be Converted Directly                                                                                                                                |  | <b>6.77</b>                                                               | <b>11.13</b>      |                                                                                                                 |                   |
| B. Total Acres To Be Converted Indirectly, Or To Receive Services                                                                                                      |  |                                                                           |                   |                                                                                                                 |                   |
| C. Total Acres In Corridor                                                                                                                                             |  | <b>6.77</b>                                                               | <b>11.13</b>      |                                                                                                                 |                   |
| <b>PART IV (To be completed by NRCS) Land Evaluation Information</b>                                                                                                   |  |                                                                           |                   |                                                                                                                 |                   |
| A. Total Acres Prime And Unique Farmland                                                                                                                               |  | 6.67                                                                      | 11.08             |                                                                                                                 |                   |
| B. Total Acres Statewide And Local Important Farmland                                                                                                                  |  |                                                                           |                   |                                                                                                                 |                   |
| C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted                                                                                                |  | .001                                                                      | .001              |                                                                                                                 |                   |
| D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value                                                                                     |  | 27                                                                        | 27                |                                                                                                                 |                   |
| <b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b>         |  | 84                                                                        | 85                |                                                                                                                 |                   |
| <b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b>                                       |  | <b>Maximum Points</b>                                                     |                   |                                                                                                                 |                   |
| 1. Area in Nonurban Use                                                                                                                                                |  | 15                                                                        | <b>15</b>         | <b>15</b>                                                                                                       |                   |
| 2. Perimeter in Nonurban Use                                                                                                                                           |  | 10                                                                        | <b>10</b>         | <b>10</b>                                                                                                       |                   |
| 3. Percent Of Corridor Being Farmed                                                                                                                                    |  | 20                                                                        | <b>14</b>         | <b>14</b>                                                                                                       |                   |
| 4. Protection Provided By State And Local Government                                                                                                                   |  | 20                                                                        | <b>20</b>         | <b>20</b>                                                                                                       |                   |
| 5. Size of Present Farm Unit Compared To Average                                                                                                                       |  | 10                                                                        | <b>1</b>          | <b>1</b>                                                                                                        |                   |
| 6. Creation Of Nonfarmable Farmland                                                                                                                                    |  | 25                                                                        | <b>0</b>          | <b>0</b>                                                                                                        |                   |
| 7. Availability Of Farm Support Services                                                                                                                               |  | 5                                                                         | <b>4</b>          | <b>4</b>                                                                                                        |                   |
| 8. On-Farm Investments                                                                                                                                                 |  | 20                                                                        | <b>5</b>          | <b>5</b>                                                                                                        |                   |
| 9. Effects Of Conversion On Farm Support Services                                                                                                                      |  | 25                                                                        | <b>0</b>          | <b>0</b>                                                                                                        |                   |
| 10. Compatibility With Existing Agricultural Use                                                                                                                       |  | 10                                                                        | <b>1</b>          | <b>1</b>                                                                                                        |                   |
| TOTAL CORRIDOR ASSESSMENT POINTS                                                                                                                                       |  | <b>160</b>                                                                | <b>70</b>         | <b>70</b>                                                                                                       |                   |
| <b>PART VII (To be completed by Federal Agency)</b>                                                                                                                    |  |                                                                           |                   |                                                                                                                 |                   |
| Relative Value Of Farmland (From Part V)                                                                                                                               |  | <b>100</b>                                                                | <b>84</b>         | <b>85</b>                                                                                                       |                   |
| Total Corridor Assessment (From Part VI above or a local site assessment)                                                                                              |  | <b>160</b>                                                                | <b>70</b>         | <b>70</b>                                                                                                       |                   |
| <b>TOTAL POINTS (Total of above 2 lines)</b>                                                                                                                           |  | <b>260</b>                                                                | <b>154</b>        | <b>155</b>                                                                                                      |                   |
| 1. Corridor Selected:<br><br><b>TBD</b>                                                                                                                                |  | 2. Total Acres of Farmlands to be Converted by Project:<br><br><b>TBD</b> |                   | 3. Date Of Selection:                                                                                           |                   |
|                                                                                                                                                                        |  |                                                                           |                   | 4. Was A Local Site Assessment Used?<br><br>YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> |                   |
| 5. Reason For Selection:                                                                                                                                               |  |                                                                           |                   |                                                                                                                 |                   |

Signature of Person Completing this Part:

*Whitney Sauskojus*

DATE

**1/22/26**

NOTE: Complete a form for each segment with more than one Alternate Corridor

---

## CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

- (1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points  
90 to 20 percent - 14 to 1 point(s)  
Less than 20 percent - 0 points

- (2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points  
90 to 20 percent - 9 to 1 point(s)  
Less than 20 percent - 0 points

- (3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points  
90 to 20 percent - 19 to 1 point(s)  
Less than 20 percent - 0 points

- (4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points  
Site is not protected - 0 points

- (5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)  
As large or larger - 10 points  
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

- (6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points  
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)  
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

- (7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points  
Some required services are available - 4 to 1 point(s)  
No required services are available - 0 points

- (8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment - 20 points  
Moderate amount of on-farm investment - 19 to 1 point(s)  
No on-farm investment - 0 points

- (9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points  
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)  
No significant reduction in demand for support services if the site is converted - 0 points

- (10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points  
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)  
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

---



**FARMLAND CONVERSION IMPACT RATING  
FOR CORRIDOR TYPE PROJECTS**

|                                                                                                                                                                        |                                                                          |                                                                      |                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------------------------------------|
| <b>PART I (To be completed by Federal Agency)</b>                                                                                                                      |                                                                          | 3. Date of Land Evaluation Request<br><b>1/22/26</b>                 | 4. Sheet 2 of <b>6</b>                           |
| 1. Name of Project <b>US 52 Four Lane</b>                                                                                                                              |                                                                          | 5. Federal Agency Involved <b>FHWA</b>                               |                                                  |
| 2. Type of Project <b>Highway Expansion</b>                                                                                                                            |                                                                          | 6. County and State <b>Ward and McHenry County, ND</b>               |                                                  |
| <b>PART II (To be completed by NRCS)</b>                                                                                                                               |                                                                          | 1. Date Request Received by NRCS<br>1-22-26                          | 2. Person Completing Form<br>Weiser, Lance       |
| 3. Does the corridor contain prime, unique statewide or local important farmland?<br>(If no, the FPPA does not apply - Do not complete additional parts of this form). |                                                                          | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>  | 4. Acres Irrigated   Average Farm Size<br>  1607 |
| 5. Major Crop(s)<br>wheat, soybeans                                                                                                                                    | 6. Farmable Land in Government Jurisdiction<br><b>Acres:1,086,000%83</b> | 7. Amount of Farmland As Defined in FPPA<br><b>Acres:806,000 %74</b> |                                                  |
| 8. Name Of Land Evaluation System Used<br>LESA                                                                                                                         | 9. Name of Local Site Assessment System<br>LESA                          | 10. Date Land Evaluation Returned by NRCS<br>2-4-26                  |                                                  |

| <b>PART III (To be completed by Federal Agency)</b>               | Alternative Corridor For Segment <b>2</b> |             |            |            |
|-------------------------------------------------------------------|-------------------------------------------|-------------|------------|------------|
|                                                                   | Corridor A                                | Corridor B  | Corridor C | Corridor D |
| A. Total Acres To Be Converted Directly                           | <b>3.75</b>                               | <b>1.30</b> |            |            |
| B. Total Acres To Be Converted Indirectly, Or To Receive Services |                                           |             |            |            |
| C. Total Acres In Corridor                                        | <b>3.75</b>                               | <b>1.30</b> |            |            |

|                                                                                    |      |      |  |  |
|------------------------------------------------------------------------------------|------|------|--|--|
| <b>PART IV (To be completed by NRCS) Land Evaluation Information</b>               |      |      |  |  |
| A. Total Acres Prime And Unique Farmland                                           | 3.70 | 1.25 |  |  |
| B. Total Acres Statewide And Local Important Farmland                              |      |      |  |  |
| C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted            | .001 | .001 |  |  |
| D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value | 27   | 0    |  |  |

|                                                                                                                                                                |    |    |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|--|--|
| <b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b> | 87 | 91 |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|--|--|

|                                                                                                                                  |                |           |           |  |
|----------------------------------------------------------------------------------------------------------------------------------|----------------|-----------|-----------|--|
| <b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b> | Maximum Points |           |           |  |
| 1. Area in Nonurban Use                                                                                                          | 15             | <b>14</b> | <b>14</b> |  |
| 2. Perimeter in Nonurban Use                                                                                                     | 10             | <b>7</b>  | <b>7</b>  |  |
| 3. Percent Of Corridor Being Farmed                                                                                              | 20             | <b>5</b>  | <b>5</b>  |  |
| 4. Protection Provided By State And Local Government                                                                             | 20             | <b>20</b> | <b>20</b> |  |
| 5. Size of Present Farm Unit Compared To Average                                                                                 | 10             | <b>1</b>  | <b>1</b>  |  |
| 6. Creation Of Nonfarmable Farmland                                                                                              | 25             | <b>0</b>  | <b>0</b>  |  |
| 7. Availability Of Farm Support Services                                                                                         | 5              | <b>4</b>  | <b>4</b>  |  |
| 8. On-Farm Investments                                                                                                           | 20             | <b>1</b>  | <b>1</b>  |  |
| 9. Effects Of Conversion On Farm Support Services                                                                                | 25             | <b>0</b>  | <b>0</b>  |  |
| 10. Compatibility With Existing Agricultural Use                                                                                 | 10             | <b>1</b>  | <b>1</b>  |  |
| <b>TOTAL CORRIDOR ASSESSMENT POINTS</b>                                                                                          | <b>160</b>     | <b>53</b> | <b>53</b> |  |

|                                                                           |            |            |            |  |
|---------------------------------------------------------------------------|------------|------------|------------|--|
| <b>PART VII (To be completed by Federal Agency)</b>                       |            |            |            |  |
| Relative Value Of Farmland (From Part V)                                  | 100        | <b>87</b>  | <b>91</b>  |  |
| Total Corridor Assessment (From Part VI above or a local site assessment) | 160        | <b>53</b>  | <b>53</b>  |  |
| <b>TOTAL POINTS (Total of above 2 lines)</b>                              | <b>260</b> | <b>140</b> | <b>144</b> |  |

|                                     |                                                                       |                       |                                                                                                             |
|-------------------------------------|-----------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------|
| 1. Corridor Selected:<br><b>TBD</b> | 2. Total Acres of Farmlands to be Converted by Project:<br><b>TBD</b> | 3. Date Of Selection: | 4. Was A Local Site Assessment Used?<br>YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> |
|-------------------------------------|-----------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------|

5. Reason For Selection:

Signature of Person Completing this Part: Whitney Sauskojus DATE **1/22/26**  
NOTE: Complete a form for each segment with more than one Alternate Corridor

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## CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

- (1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points  
90 to 20 percent - 14 to 1 point(s)  
Less than 20 percent - 0 points

- (2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points  
90 to 20 percent - 9 to 1 point(s)  
Less than 20 percent - 0 points

- (3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points  
90 to 20 percent - 19 to 1 point(s)  
Less than 20 percent - 0 points

- (4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points  
Site is not protected - 0 points

- (5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)  
As large or larger - 10 points  
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

- (6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points  
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)  
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

- (7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points  
Some required services are available - 4 to 1 point(s)  
No required services are available - 0 points

- (8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment - 20 points  
Moderate amount of on-farm investment - 19 to 1 point(s)  
No on-farm investment - 0 points

- (9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points  
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)  
No significant reduction in demand for support services if the site is converted - 0 points

- (10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points  
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)  
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

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# FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

|                                                                                                                                                                        |                                                                          |                                                                     |                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>PART I (To be completed by Federal Agency)</b>                                                                                                                      |                                                                          | 3. Date of Land Evaluation Request<br><b>1/22/26</b>                | 4. Sheet 3 of <b>6</b>                                              |
| 1. Name of Project <b>US 52 Four Lane</b>                                                                                                                              |                                                                          | 5. Federal Agency Involved <b>FHWA</b>                              |                                                                     |
| 2. Type of Project <b>Highway Expansion</b>                                                                                                                            |                                                                          | 6. County and State <b>Ward and McHenry County, ND</b>              |                                                                     |
| <b>PART II (To be completed by NRCS)</b>                                                                                                                               |                                                                          | 1. Date Request Received by NRCS<br>1-22-26                         | 2. Person Completing Form<br>Weiser, Lance                          |
| 3. Does the corridor contain prime, unique statewide or local important farmland?<br>(If no, the FPPA does not apply - Do not complete additional parts of this form). |                                                                          | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | 4. Acres Irrigated   Average Farm Size<br>  1387                    |
| 5. Major Crop(s)<br>wheat, soybeans                                                                                                                                    | 6. Farmable Land in Government Jurisdiction<br><b>Acres:1,152,000%94</b> |                                                                     | 7. Amount of Farmland As Defined in FPPA<br><b>Acres:432,000%38</b> |
| 8. Name Of Land Evaluation System Used<br>LESA                                                                                                                         | 9. Name of Local Site Assessment System<br>LESA                          |                                                                     | 10. Date Land Evaluation Returned by NRCS<br>2-4-26                 |

| <b>PART III (To be completed by Federal Agency)</b>               | Alternative Corridor For Segment <b>3</b> |              |            |            |
|-------------------------------------------------------------------|-------------------------------------------|--------------|------------|------------|
|                                                                   | Corridor A                                | Corridor B   | Corridor C | Corridor D |
| A. Total Acres To Be Converted Directly                           | <b>33.53</b>                              | <b>19.24</b> |            |            |
| B. Total Acres To Be Converted Indirectly, Or To Receive Services |                                           |              |            |            |
| C. Total Acres In Corridor                                        | <b>33.53</b>                              | <b>19.24</b> |            |            |

|                                                                                    |       |       |  |  |
|------------------------------------------------------------------------------------|-------|-------|--|--|
| <b>PART IV (To be completed by NRCS) Land Evaluation Information</b>               |       |       |  |  |
| A. Total Acres Prime And Unique Farmland                                           | 33.43 | 19.24 |  |  |
| B. Total Acres Statewide And Local Important Farmland                              |       |       |  |  |
| C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted            | .001  | .001  |  |  |
| D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value | 27    | 27    |  |  |

|                                                                                                                                                                |    |    |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|--|--|
| <b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b> | 86 | 86 |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|--|--|

|                                                                                                                                  |                |           |           |  |  |
|----------------------------------------------------------------------------------------------------------------------------------|----------------|-----------|-----------|--|--|
| <b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b> | Maximum Points |           |           |  |  |
| 1. Area in Nonurban Use                                                                                                          | 15             | <b>15</b> | <b>15</b> |  |  |
| 2. Perimeter in Nonurban Use                                                                                                     | 10             | <b>5</b>  | <b>5</b>  |  |  |
| 3. Percent Of Corridor Being Farmed                                                                                              | 20             | <b>10</b> | <b>5</b>  |  |  |
| 4. Protection Provided By State And Local Government                                                                             | 20             | <b>20</b> | <b>20</b> |  |  |
| 5. Size of Present Farm Unit Compared To Average                                                                                 | 10             | <b>1</b>  | <b>0</b>  |  |  |
| 6. Creation Of Nonfarmable Farmland                                                                                              | 25             | <b>0</b>  | <b>0</b>  |  |  |
| 7. Availability Of Farm Support Services                                                                                         | 5              | <b>4</b>  | <b>4</b>  |  |  |
| 8. On-Farm Investments                                                                                                           | 20             | <b>2</b>  | <b>2</b>  |  |  |
| 9. Effects Of Conversion On Farm Support Services                                                                                | 25             | <b>0</b>  | <b>0</b>  |  |  |
| 10. Compatibility With Existing Agricultural Use                                                                                 | 10             | <b>1</b>  | <b>1</b>  |  |  |
| <b>TOTAL CORRIDOR ASSESSMENT POINTS</b>                                                                                          | <b>160</b>     | <b>58</b> | <b>52</b> |  |  |

|                                                                           |            |            |            |  |  |
|---------------------------------------------------------------------------|------------|------------|------------|--|--|
| <b>PART VII (To be completed by Federal Agency)</b>                       |            |            |            |  |  |
| Relative Value Of Farmland (From Part V)                                  | 100        | <b>86</b>  | <b>86</b>  |  |  |
| Total Corridor Assessment (From Part VI above or a local site assessment) | 160        | <b>58</b>  | <b>52</b>  |  |  |
| <b>TOTAL POINTS (Total of above 2 lines)</b>                              | <b>260</b> | <b>144</b> | <b>138</b> |  |  |

|                                     |                                                                       |                       |                                                                                                             |
|-------------------------------------|-----------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------|
| 1. Corridor Selected:<br><b>TBD</b> | 2. Total Acres of Farmlands to be Converted by Project:<br><b>TBD</b> | 3. Date Of Selection: | 4. Was A Local Site Assessment Used?<br>YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> |
|-------------------------------------|-----------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------|

5. Reason For Selection:

Signature of Person Completing this Part: Whitney Sauskojus DATE **1/22/26**  
NOTE: Complete a form for each segment with more than one Alternate Corridor



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## CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

- (1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points  
90 to 20 percent - 14 to 1 point(s)  
Less than 20 percent - 0 points

- (2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points  
90 to 20 percent - 9 to 1 point(s)  
Less than 20 percent - 0 points

- (3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points  
90 to 20 percent - 19 to 1 point(s)  
Less than 20 percent - 0 points

- (4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points  
Site is not protected - 0 points

- (5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)  
As large or larger - 10 points  
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

- (6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points  
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)  
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

- (7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points  
Some required services are available - 4 to 1 point(s)  
No required services are available - 0 points

- (8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment - 20 points  
Moderate amount of on-farm investment - 19 to 1 point(s)  
No on-farm investment - 0 points

- (9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points  
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)  
No significant reduction in demand for support services if the site is converted - 0 points

- (10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points  
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)  
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

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**FARMLAND CONVERSION IMPACT RATING  
FOR CORRIDOR TYPE PROJECTS**

|                                                                                                                                                                        |                                                                          |                                                                     |                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>PART I (To be completed by Federal Agency)</b>                                                                                                                      |                                                                          | 3. Date of Land Evaluation Request<br><b>1/22/26</b>                | 4. Sheet 4 of <b>6</b>                                              |
| 1. Name of Project <b>US 52 Four Lane</b>                                                                                                                              |                                                                          | 5. Federal Agency Involved <b>FHWA</b>                              |                                                                     |
| 2. Type of Project <b>Highway Expansion</b>                                                                                                                            |                                                                          | 6. County and State <b>Ward and McHenry County, ND</b>              |                                                                     |
| <b>PART II (To be completed by NRCS)</b>                                                                                                                               |                                                                          | 1. Date Request Received by NRCS<br>1-22-26                         | 2. Person Completing Form<br>Weiser, Lance                          |
| 3. Does the corridor contain prime, unique statewide or local important farmland?<br>(If no, the FPPA does not apply - Do not complete additional parts of this form). |                                                                          | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | 4. Acres Irrigated   Average Farm Size<br>  1387                    |
| 5. Major Crop(s)<br>wheat, soybeans                                                                                                                                    | 6. Farmable Land in Government Jurisdiction<br><b>Acres:1,152,000%94</b> |                                                                     | 7. Amount of Farmland As Defined in FPPA<br><b>Acres:432,000%38</b> |
| 8. Name Of Land Evaluation System Used<br>LESA                                                                                                                         | 9. Name of Local Site Assessment System<br>LESA                          |                                                                     | 10. Date Land Evaluation Returned by NRCS<br>2-4-26                 |

| <b>PART III (To be completed by Federal Agency)</b>               | Alternative Corridor For Segment <b>4</b> |             |             |            |
|-------------------------------------------------------------------|-------------------------------------------|-------------|-------------|------------|
|                                                                   | Corridor A                                | Corridor B  | Corridor C  | Corridor D |
| A. Total Acres To Be Converted Directly                           | <b>0.33</b>                               | <b>0.71</b> | <b>0.38</b> |            |
| B. Total Acres To Be Converted Indirectly, Or To Receive Services |                                           |             |             |            |
| C. Total Acres In Corridor                                        | <b>0.33</b>                               | <b>0.71</b> | <b>0.38</b> |            |

|                                                                                    |      |      |      |  |
|------------------------------------------------------------------------------------|------|------|------|--|
| <b>PART IV (To be completed by NRCS) Land Evaluation Information</b>               |      |      |      |  |
| A. Total Acres Prime And Unique Farmland                                           | 0.33 | 0.71 | 0.38 |  |
| B. Total Acres Statewide And Local Important Farmland                              |      |      |      |  |
| C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted            | .001 | .001 | .001 |  |
| D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value | 0    | 0    | 0    |  |

|                                                                                                                                                                  |    |    |    |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|--|
| <b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)89</b> | 89 | 89 | 89 |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|--|

|                                                                                                                                  |                |          |           |          |  |
|----------------------------------------------------------------------------------------------------------------------------------|----------------|----------|-----------|----------|--|
| <b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b> | Maximum Points |          |           |          |  |
| 1. Area in Nonurban Use                                                                                                          | 15             | <b>5</b> | <b>9</b>  | <b>4</b> |  |
| 2. Perimeter in Nonurban Use                                                                                                     | 10             | <b>0</b> | <b>1</b>  | <b>0</b> |  |
| 3. Percent Of Corridor Being Farmed                                                                                              | 20             | <b>0</b> | <b>0</b>  | <b>0</b> |  |
| 4. Protection Provided By State And Local Government                                                                             | 20             | <b>0</b> | <b>0</b>  | <b>0</b> |  |
| 5. Size of Present Farm Unit Compared To Average                                                                                 | 10             | <b>0</b> | <b>0</b>  | <b>0</b> |  |
| 6. Creation Of Nonfarmable Farmland                                                                                              | 25             | <b>0</b> | <b>0</b>  | <b>0</b> |  |
| 7. Availability Of Farm Support Services                                                                                         | 5              | <b>4</b> | <b>4</b>  | <b>4</b> |  |
| 8. On-Farm Investments                                                                                                           | 20             | <b>0</b> | <b>2</b>  | <b>0</b> |  |
| 9. Effects Of Conversion On Farm Support Services                                                                                | 25             | <b>0</b> | <b>0</b>  | <b>0</b> |  |
| 10. Compatibility With Existing Agricultural Use                                                                                 | 10             | <b>0</b> | <b>1</b>  | <b>0</b> |  |
| <b>TOTAL CORRIDOR ASSESSMENT POINTS</b>                                                                                          | <b>160</b>     | <b>9</b> | <b>16</b> | <b>8</b> |  |

|                                                                           |            |           |            |           |  |
|---------------------------------------------------------------------------|------------|-----------|------------|-----------|--|
| <b>PART VII (To be completed by Federal Agency)</b>                       |            |           |            |           |  |
| Relative Value Of Farmland (From Part V)                                  | 100        | <b>89</b> | <b>89</b>  | <b>89</b> |  |
| Total Corridor Assessment (From Part VI above or a local site assessment) | 160        | <b>9</b>  | <b>16</b>  | <b>8</b>  |  |
| <b>TOTAL POINTS (Total of above 2 lines)</b>                              | <b>260</b> | <b>98</b> | <b>105</b> | <b>97</b> |  |

|                                     |                                                                       |                       |                                                                                                             |
|-------------------------------------|-----------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------|
| 1. Corridor Selected:<br><b>TBD</b> | 2. Total Acres of Farmlands to be Converted by Project:<br><b>TBD</b> | 3. Date Of Selection: | 4. Was A Local Site Assessment Used?<br>YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> |
|-------------------------------------|-----------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------|

5. Reason For Selection:

|                                                                              |                        |
|------------------------------------------------------------------------------|------------------------|
| Signature of Person Completing this Part:<br><i>Whitney Sauskojus</i>        | DATE<br><b>1/22/26</b> |
| NOTE: Complete a form for each segment with more than one Alternate Corridor |                        |

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## CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

- (1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points  
90 to 20 percent - 14 to 1 point(s)  
Less than 20 percent - 0 points

- (2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points  
90 to 20 percent - 9 to 1 point(s)  
Less than 20 percent - 0 points

- (3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points  
90 to 20 percent - 19 to 1 point(s)  
Less than 20 percent - 0 points

- (4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points  
Site is not protected - 0 points

- (5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)  
As large or larger - 10 points  
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

- (6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points  
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)  
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

- (7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points  
Some required services are available - 4 to 1 point(s)  
No required services are available - 0 points

- (8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment - 20 points  
Moderate amount of on-farm investment - 19 to 1 point(s)  
No on-farm investment - 0 points

- (9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points  
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)  
No significant reduction in demand for support services if the site is converted - 0 points

- (10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points  
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)  
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

---



# FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

|                                                   |                                                      |                        |
|---------------------------------------------------|------------------------------------------------------|------------------------|
| <b>PART I (To be completed by Federal Agency)</b> | 3. Date of Land Evaluation Request<br><b>1/22/26</b> | 4. Sheet 5 of <b>6</b> |
|---------------------------------------------------|------------------------------------------------------|------------------------|

|                                                |                                                           |
|------------------------------------------------|-----------------------------------------------------------|
| 1. Name of Project<br><b>US 52 Four Lane</b>   | 5. Federal Agency Involved<br><b>FHWA</b>                 |
| 2. Type of Project<br><b>Highway Expansion</b> | 6. County and State<br><b>Ward and McHenry County, ND</b> |

|                                                                                                                                                                        |                                                                          |                                                                     |                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------|
| <b>PART II (To be completed by NRCS)</b>                                                                                                                               |                                                                          | 1. Date Request Received by NRCS<br>1-22-26                         | 2. Person Completing Form<br>Weiser, Lance       |
| 3. Does the corridor contain prime, unique statewide or local important farmland?<br>(If no, the FPPA does not apply - Do not complete additional parts of this form). |                                                                          | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | 4. Acres Irrigated   Average Farm Size<br>  1387 |
| 5. Major Crop(s)<br>wheat, soybeans                                                                                                                                    | 6. Farmable Land in Government Jurisdiction<br><b>Acres:1,152,000%94</b> | 7. Amount of Farmland As Defined in FPPA<br><b>Acres:432,000%38</b> |                                                  |
| 8. Name Of Land Evaluation System Used<br>LESA                                                                                                                         | 9. Name of Local Site Assessment System<br>LESA                          | 10. Date Land Evaluation Returned by NRCS<br>2-4-26                 |                                                  |

|                                                                   |                                                  |                   |                   |                   |
|-------------------------------------------------------------------|--------------------------------------------------|-------------------|-------------------|-------------------|
| <b>PART III (To be completed by Federal Agency)</b>               | <b>Alternative Corridor For Segment <u>5</u></b> |                   |                   |                   |
|                                                                   | <b>Corridor A</b>                                | <b>Corridor B</b> | <b>Corridor C</b> | <b>Corridor D</b> |
| A. Total Acres To Be Converted Directly                           | <b>3.19</b>                                      | <b>0.52</b>       |                   |                   |
| B. Total Acres To Be Converted Indirectly, Or To Receive Services |                                                  |                   |                   |                   |
| C. Total Acres In Corridor                                        | <b>3.19</b>                                      | <b>0.52</b>       |                   |                   |

|                                                                                    |      |      |  |  |
|------------------------------------------------------------------------------------|------|------|--|--|
| <b>PART IV (To be completed by NRCS) Land Evaluation Information</b>               |      |      |  |  |
| A. Total Acres Prime And Unique Farmland                                           | 3.1  | 0.52 |  |  |
| B. Total Acres Statewide And Local Important Farmland                              |      |      |  |  |
| C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted            | .001 | .001 |  |  |
| D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value | 38   | 27   |  |  |

|                                                                                                                                                                |    |    |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|--|--|
| <b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b> | 60 | 69 |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|--|--|

|                                                                                                                                  |                       |           |           |  |  |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------|-----------|--|--|
| <b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b> | <b>Maximum Points</b> |           |           |  |  |
| 1. Area in Nonurban Use                                                                                                          | 15                    | <b>15</b> | <b>15</b> |  |  |
| 2. Perimeter in Nonurban Use                                                                                                     | 10                    | <b>10</b> | <b>10</b> |  |  |
| 3. Percent Of Corridor Being Farmed                                                                                              | 20                    | <b>7</b>  | <b>7</b>  |  |  |
| 4. Protection Provided By State And Local Government                                                                             | 20                    | <b>20</b> | <b>20</b> |  |  |
| 5. Size of Present Farm Unit Compared To Average                                                                                 | 10                    | <b>1</b>  | <b>1</b>  |  |  |
| 6. Creation Of Nonfarmable Farmland                                                                                              | 25                    | <b>0</b>  | <b>0</b>  |  |  |
| 7. Availability Of Farm Support Services                                                                                         | 5                     | <b>4</b>  | <b>4</b>  |  |  |
| 8. On-Farm Investments                                                                                                           | 20                    | <b>3</b>  | <b>3</b>  |  |  |
| 9. Effects Of Conversion On Farm Support Services                                                                                | 25                    | <b>0</b>  | <b>0</b>  |  |  |
| 10. Compatibility With Existing Agricultural Use                                                                                 | 10                    | <b>1</b>  | <b>1</b>  |  |  |
| <b>TOTAL CORRIDOR ASSESSMENT POINTS</b>                                                                                          | <b>160</b>            | <b>61</b> | <b>61</b> |  |  |

|                                                                           |            |            |            |  |  |
|---------------------------------------------------------------------------|------------|------------|------------|--|--|
| <b>PART VII (To be completed by Federal Agency)</b>                       |            |            |            |  |  |
| Relative Value Of Farmland (From Part V)                                  | 100        | <b>60</b>  | <b>69</b>  |  |  |
| Total Corridor Assessment (From Part VI above or a local site assessment) | 160        | <b>61</b>  | <b>61</b>  |  |  |
| <b>TOTAL POINTS (Total of above 2 lines)</b>                              | <b>260</b> | <b>121</b> | <b>130</b> |  |  |

|                                     |                                                                       |                       |                                                                                                             |
|-------------------------------------|-----------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------|
| 1. Corridor Selected:<br><b>TBD</b> | 2. Total Acres of Farmlands to be Converted by Project:<br><b>TBD</b> | 3. Date Of Selection: | 4. Was A Local Site Assessment Used?<br>YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> |
|-------------------------------------|-----------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------|

5. Reason For Selection:

|                                                                       |                        |
|-----------------------------------------------------------------------|------------------------|
| Signature of Person Completing this Part:<br><i>Whitney Sauskojus</i> | DATE<br><b>1/22/26</b> |
|-----------------------------------------------------------------------|------------------------|

NOTE: Complete a form for each segment with more than one Alternate Corridor

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## CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

- (1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points  
90 to 20 percent - 14 to 1 point(s)  
Less than 20 percent - 0 points

- (2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points  
90 to 20 percent - 9 to 1 point(s)  
Less than 20 percent - 0 points

- (3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points  
90 to 20 percent - 19 to 1 point(s)  
Less than 20 percent - 0 points

- (4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points  
Site is not protected - 0 points

- (5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)  
As large or larger - 10 points  
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

- (6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points  
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)  
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

- (7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points  
Some required services are available - 4 to 1 point(s)  
No required services are available - 0 points

- (8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment - 20 points  
Moderate amount of on-farm investment - 19 to 1 point(s)  
No on-farm investment - 0 points

- (9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points  
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)  
No significant reduction in demand for support services if the site is converted - 0 points

- (10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points  
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)  
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

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**FARMLAND CONVERSION IMPACT RATING  
FOR CORRIDOR TYPE PROJECTS**

|                                                                                                                                                                        |                                                                          |                                                                     |                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>PART I (To be completed by Federal Agency)</b>                                                                                                                      |                                                                          | 3. Date of Land Evaluation Request<br><b>1/16/26</b>                | 4. Sheet 6 of <b>6</b>                                              |
| 1. Name of Project <b>US 52 Four Lane</b>                                                                                                                              |                                                                          | 5. Federal Agency Involved <b>FHWA</b>                              |                                                                     |
| 2. Type of Project <b>Highway Expansion</b>                                                                                                                            |                                                                          | 6. County and State <b>Ward and McHenry County, ND</b>              |                                                                     |
| <b>PART II (To be completed by NRCS)</b>                                                                                                                               |                                                                          | 1. Date Request Received by NRCS<br>1-16-26                         | 2. Person Completing Form<br>Weiser, Lance                          |
| 3. Does the corridor contain prime, unique statewide or local important farmland?<br>(If no, the FPPA does not apply - Do not complete additional parts of this form). |                                                                          | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | 4. Acres Irrigated   Average Farm Size<br>  1387                    |
| 5. Major Crop(s)<br>wheat, soybeans                                                                                                                                    | 6. Farmable Land in Government Jurisdiction<br><b>Acres:1,152,000%94</b> |                                                                     | 7. Amount of Farmland As Defined in FPPA<br><b>Acres:432,000%38</b> |
| 8. Name Of Land Evaluation System Used<br>LESA                                                                                                                         | 9. Name of Local Site Assessment System<br>LESA                          |                                                                     | 10. Date Land Evaluation Returned by NRCS<br>2-4-26                 |

| <b>PART III (To be completed by Federal Agency)</b>               | Alternative Corridor For Segment <b>6</b> |             |            |            |
|-------------------------------------------------------------------|-------------------------------------------|-------------|------------|------------|
|                                                                   | Corridor A                                | Corridor B  | Corridor C | Corridor D |
| A. Total Acres To Be Converted Directly                           | <b>0.26</b>                               | <b>0.15</b> |            |            |
| B. Total Acres To Be Converted Indirectly, Or To Receive Services |                                           |             |            |            |
| C. Total Acres In Corridor                                        | <b>0.26</b>                               | <b>0.15</b> |            |            |

|                                                                                    |      |      |  |  |
|------------------------------------------------------------------------------------|------|------|--|--|
| <b>PART IV (To be completed by NRCS) Land Evaluation Information</b>               |      |      |  |  |
| A. Total Acres Prime And Unique Farmland                                           | 0.22 | 0.13 |  |  |
| B. Total Acres Statewide And Local Important Farmland                              |      |      |  |  |
| C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted            | .001 | .001 |  |  |
| D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value | 19   | 19   |  |  |

|                                                                                                                                                                |    |    |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|--|--|
| <b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b> | 72 | 75 |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|--|--|

|                                                                                                                                  |                |           |           |  |  |
|----------------------------------------------------------------------------------------------------------------------------------|----------------|-----------|-----------|--|--|
| <b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b> | Maximum Points |           |           |  |  |
| 1. Area in Nonurban Use                                                                                                          | 15             | <b>15</b> | <b>15</b> |  |  |
| 2. Perimeter in Nonurban Use                                                                                                     | 10             | <b>10</b> | <b>10</b> |  |  |
| 3. Percent Of Corridor Being Farmed                                                                                              | 20             | <b>3</b>  | <b>3</b>  |  |  |
| 4. Protection Provided By State And Local Government                                                                             | 20             | <b>20</b> | <b>20</b> |  |  |
| 5. Size of Present Farm Unit Compared To Average                                                                                 | 10             | <b>1</b>  | <b>1</b>  |  |  |
| 6. Creation Of Nonfarmable Farmland                                                                                              | 25             | <b>0</b>  | <b>0</b>  |  |  |
| 7. Availability Of Farm Support Services                                                                                         | 5              | <b>4</b>  | <b>4</b>  |  |  |
| 8. On-Farm Investments                                                                                                           | 20             | <b>2</b>  | <b>2</b>  |  |  |
| 9. Effects Of Conversion On Farm Support Services                                                                                | 25             | <b>0</b>  | <b>0</b>  |  |  |
| 10. Compatibility With Existing Agricultural Use                                                                                 | 10             | <b>1</b>  | <b>1</b>  |  |  |
| <b>TOTAL CORRIDOR ASSESSMENT POINTS</b>                                                                                          | <b>160</b>     | <b>56</b> | <b>56</b> |  |  |

|                                                                           |            |            |            |  |  |
|---------------------------------------------------------------------------|------------|------------|------------|--|--|
| <b>PART VII (To be completed by Federal Agency)</b>                       |            |            |            |  |  |
| Relative Value Of Farmland (From Part V)                                  | 100        | <b>72</b>  | <b>75</b>  |  |  |
| Total Corridor Assessment (From Part VI above or a local site assessment) | 160        | <b>56</b>  | <b>56</b>  |  |  |
| <b>TOTAL POINTS (Total of above 2 lines)</b>                              | <b>260</b> | <b>128</b> | <b>128</b> |  |  |

|                                     |                                                                       |                       |                                                                                                             |
|-------------------------------------|-----------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------|
| 1. Corridor Selected:<br><b>TBD</b> | 2. Total Acres of Farmlands to be Converted by Project:<br><b>TBD</b> | 3. Date Of Selection: | 4. Was A Local Site Assessment Used?<br>YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> |
|-------------------------------------|-----------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------|

5. Reason For Selection:  
**TBD**

|                                                                       |                        |
|-----------------------------------------------------------------------|------------------------|
| Signature of Person Completing this Part:<br><i>Whitney Sauskojus</i> | DATE<br><b>1/16/26</b> |
|-----------------------------------------------------------------------|------------------------|

NOTE: Complete a form for each segment with more than one Alternate Corridor



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## CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

- (1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points  
90 to 20 percent - 14 to 1 point(s)  
Less than 20 percent - 0 points

- (2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points  
90 to 20 percent - 9 to 1 point(s)  
Less than 20 percent - 0 points

- (3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points  
90 to 20 percent - 19 to 1 point(s)  
Less than 20 percent - 0 points

- (4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points  
Site is not protected - 0 points

- (5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)  
As large or larger - 10 points  
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

- (6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points  
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)  
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

- (7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points  
Some required services are available - 4 to 1 point(s)  
No required services are available - 0 points

- (8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment - 20 points  
Moderate amount of on-farm investment - 19 to 1 point(s)  
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- (9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points  
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)  
No significant reduction in demand for support services if the site is converted - 0 points

- (10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points  
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)  
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

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# Appendix F, USFWS Documentation



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

North Dakota Ecological Services  
3425 Miriam Avenue  
Bismarck, ND 58501



**January 21, 2026**

In Reply Refer To:

Project Code: 2025-0076251

Project Name: U.S. Highway 52 Four-Lane Project

Lindsey Handel, Deputy Division Administrator  
Federal Highway Administration  
4503 Coleman Street, Suite 205  
Bismarck, ND 58503

Dear Ms. Handel:

Thank you for your consultation initiation package dated September 8, 2025, with the final biological assessment (BA) and your request for formal and informal consultation with the U.S. Fish and Wildlife Service (Service) for the transportation project number 4-052(109)101, PCN 24012, involving the expansion of approximately 21.5 miles of U.S. Highway 52 (US 52) from a two-lane highway to a four-lane highway in McHenry County and Ward County, North Dakota (the "Proposed Action").

The submitted BA analyzed effects of the Proposed Action on the federally threatened Dakota skipper (*Hesperia dacotae*), piping plover (*Charadrius melodus*), rufa red knot (*Calidris canutus rufa*), and the federally endangered northern long-eared bat (*Myotis septentrionalis*), and whooping crane (*Grus americana*). The formal consultation request concerns your determination that the Project **"may affect, is likely to adversely affect"** the federally threatened Dakota skipper (*Hesperia dacotae*). This letter transmits the Service's biological opinion (BO) based on our review of the Proposed Action, as described in the BA.

Based on the Service's analysis within the enclosed BO, it is our determination that the Proposed Action and its associated activities are not likely to jeopardize the continued existence of the Dakota skipper. Up to 2.02 acres of permanent and 2.77 acres of temporary disturbance to suitable habitat, and up to 110.814 acres of permanent and 413.78 acres of temporary disturbance to dispersal/foraging habitat is expected as part of the incidental take for the Proposed Action as long as the specific terms and conditions outlined in the BO are followed.

The informal consultation request concerns your determination of "may affect, but is not likely to adversely affect" for the federally endangered northern long-eared bat (*Myotis septentrionalis*), and whooping crane (*Grus americana*). Based on evaluated potential effects to the species from the Proposed Action, in accordance with Section 7(c) of the Endangered Species Act (ESA), as amended, 16 U.S.C. §§ 1531 et seq., the Service concurs with your determination of **"may affect,**



**but is not likely to adversely affect”** for the endangered northern long-eared bat and whooping crane.

Lastly, the BA indicates determinations of "no effect" for the piping plover and rufa red knot (*Calidris canutus rufa*). There is no requirement under the implementing regulations of the ESA (50 C.F.R. § 402) for action agencies to receive Service concurrence with "no effect" determinations, therefore the responsibility for "no effect" determinations remains with the federal action agency. We recommend the Federal action agency document any "no effect" determinations and retain the documentation in the decisional record for this federal action.

The Proposed Action should be re-analyzed if any of the following occur:

1. New information reveals effects of the action that may affect listed species in a manner or to an extent not previously considered.
2. The identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this consultation.
3. A new species is listed, critical habitat is designated, or a change occurs to the listing status of a species or designated critical habitat that may be affected by this Project.

We appreciate your efforts to ensure the conservation of listed species as part of our joint responsibilities under the ESA. If you have any additional questions or concerns, please contact Hanna Edens at (701) 954-0312 or via email at [hanna\\_edens@fws.gov](mailto:hanna_edens@fws.gov) or myself at (720) 793-6797 or via email at [luke\\_toso@fws.gov](mailto:luke_toso@fws.gov).

Sincerely,

LUKE  
TOSO

Digitally signed  
by LUKE TOSO  
Date: 2026.01.21  
15:04:00 -06'00'

Luke Toso  
Acting Field Supervisor  
North & South Dakota Field Office

CC: Kristin Sperry, Planning Program Manager, Federal Highway Administration, Bismarck, North Dakota

Matt Gangness, Division Director, Environmental & Transportation Services, North Dakota Department of Transportation, Bismarck, North Dakota

Wyatt Mack, Wildlife Biologist, Environmental & Transportation Services, North Dakota Department of Transportation, Bismarck, North Dakota

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## ACRONYMS and ABBREVIATIONS

|                  |       |                                                                            |
|------------------|-------|----------------------------------------------------------------------------|
| 2025 BA          | ----- | Biological Assessment for US 52 Four-Lane Project                          |
| Action Area      | ----- | 1-mile buffer around the Project Boundary                                  |
| BA               | ----- | Biological Assessment                                                      |
| BLM              | ----- | Bureau of Land Management                                                  |
| BMPs             | ----- | Best Management Practices                                                  |
| BO               | ----- | Biological Opinion [“Opinion”]                                             |
| C.F.R.           | ----- | Code of Federal Regulations                                                |
| DASK Model       | ----- | Dakota Skipper Habitat Suitability Model (Barnes et al. 2024)              |
| Dust Zone        | ----- | 300-foot buffer around the Project Boundary                                |
| eDNA             | ----- | Environmental DNA                                                          |
| ESA              | ----- | Endangered Species Act                                                     |
| FR               | ----- | Federal Register                                                           |
| FHWA             | ----- | Federal Highway Administration                                             |
| IPaC             | ----- | Information for Planning and Consultation                                  |
| ND 41            | ----- | North Dakota Highway 41                                                    |
| NDCC             | ----- | North Dakota Century Code                                                  |
| NDDOT            | ----- | North Dakota Department of Transportation                                  |
| NDFO             | ----- | North Dakota Field Office                                                  |
| NDGF             | ----- | North Dakota Game and Fish Department                                      |
| NDNRT            | ----- | North Dakota Natural Resources Trust                                       |
| NLCD             | ----- | National Land Cover Database                                               |
| Proposed Action  | ----- | U.S. Highway 52 Four-Lane Project                                          |
| Project Boundary | ----- | Footprint of the Proposed Action and boundary of on-site field assessments |
| ROW              | ----- | Right of Way                                                               |
| RP               | ----- | Reference Post                                                             |
| RPM              | ----- | Reasonable and Prudent Measures                                            |
| SSA              | ----- | Species Status Assessment                                                  |
| SWPPP            | ----- | Storm Water Pollution Prevention Plan                                      |
| Ulteig           | ----- | Ulteig Engineers Inc.                                                      |
| US 52            | ----- | U.S. Highway 52                                                            |
| U.S.C.           | ----- | United States Code                                                         |
| USFS             | ----- | U.S. Forest Service                                                        |
| USFWS            | ----- | U.S. Fish and Wildlife Service [“Service”]                                 |
| USGS             | ----- | U.S. Geological Survey                                                     |

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## 1.0 INTRODUCTION

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The Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. §§ 1531 et seq.), section 7(b)(3)(A), requires the Secretary, to issue a written opinion detailing how the Federal agency action(s) may affect listed species or critical habitat. Specifically, a written opinion determines whether the action is likely to jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat (regulatory definitions found at 50 C.F.R. § 402.02). The jeopardy determination is made by evaluating the consequences of the proposed Federal action in the context of the species' current range-wide status, considering any cumulative effects, to determine if implementation of the proposed action is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of the species in the wild. The key to making this finding is clearly establishing the role of the action area in the conservation of the species, and how the effects of the proposed action, taken together with cumulative effects, are likely to alter that role and the continued existence (i.e., survival) of the species. Therefore, in accordance with implementing regulations (50 C.F.R. § 402.14), the analytical framework for the jeopardy analysis relies on four components:

- 1) The **Status of the Species**, which evaluates the range-wide condition of the species, the factors responsible for that condition, and the species' survival and recovery needs;
- 2) The **Environmental Baseline**, which evaluates the condition of the species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the species;
- 3) The **Effects of the Action**, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on each species; and
- 4) **Cumulative Effects**, which evaluates the effects of future, non-Federal activities in the action area on the species.

Furthermore, ESA section 7(b)(3)(A) requires the Secretary to suggest reasonable and prudent alternatives for any action that is found likely to jeopardize the continued existence of listed species or result in the adverse modification of designated critical habitat. If the Secretary determines “no jeopardy,” then implementing regulations (50 C.F.R. § 402.14) require the Director to specify “reasonable and prudent measures” (RPMs) and “terms and conditions” necessary or appropriate to minimize the impact of any “incidental take” resulting from the action(s).

This Biological Opinion—referred throughout as ‘BO’ or the ‘Opinion’—addresses related effects to the threatened Dakota skipper (*Hesperia dacotae*) from the proposed project activities. The activities under review are associated with transportation project number 4-052(109)101, PCN 24012, proposed by the Federal Highway Administration (FHWA), in conjunction with the North Dakota Department of Transportation (NDDOT), involving the expansion of approximately 21.5 miles of U.S. Highway 52 (US 52) from a two-lane highway to a four-lane highway in McHenry County and Ward County, North Dakota (the “Proposed Action”). Since it is assumed that potential impacts may adversely affect the Dakota skipper, further analysis was necessary. The FHWA, along with NDDOT, completed a Biological Assessment (BA) for the threatened and endangered species that may be present in the action area; used herein to further inform the Opinion analysis of effects of the Proposed Action on federally protected species pursuant to the ESA.

## 1.1 CONSULTATION HISTORY

July 1, 2024 – NDDOT, in cooperation with the FHWA, contracted Ulteig Engineers Inc. (Ulteig) to complete a Dakota skipper habitat survey and delineate suitable habitat along the U.S. Highway 52 (US 52) Four-Lane Project (the “Proposed Action”).

November 26, 2024 – NDDOT – a designated non-federal representative for FHWA – informally consulted with U.S. Fish and Wildlife Service (“USFWS” or the “Service”), under the FHWA/NDDOT Programmatic Biological Assessment (2025 NDDOT), for the proposed investigative geotechnical soil boring along the Proposed Action. An official species list was generated using the Service’s Information for Planning and Consultation (IPaC) tool [IPaC Code: 2024-0126048]. No proposed geotechnical investigations activities occurred within delineated Dakota Skipper habitat and proposed activities would be conclude prior to the end of winter; the Service concurred with the May Affect, Not Likely to Adversely Affect determination.

January 2025 – NDDOT completed 29 geotechnical soil borings along the Proposed Action.

June 2025 – Following refinement of the project boundary during preliminary engineering design, NDDOT determined additional investigative geotechnical soil boring would be need for the Proposed Action. Therefore, FHWA/NDDOT re-initiated consultation for the Proposed Action.

May 20, 2025 – A kickoff meeting was held between FHWA, NDDOT, Ulteig, and USFWS to start re-initiation of consultation for the Proposed Action.

May 22, 2025 – Ulteig provided FHWA, NDDOT, and USFWS with meeting notes from the project kickoff meeting on May 20, 2025.

June 16, 2025 – NDDOT requested a meeting with USFWS to discuss the draft BA and potential conservation and mitigation measures for the Dakota skipper as it relates to the Proposed Action.

June 25, 2025 – NDDOT met with USFWS to discuss the draft BA and potential conservation and mitigation measures for the Dakota skipper as it relates to the Proposed Action. Following the meeting, NDDOT provided USFWS with the draft BA for review.

July 1, 2025 – USFWS provided NDDOT with comments on the draft BA.

July 2, 2025 – USFWS provided NDDOT with guidance material for Dakota skipper bank site establishment

July 8, 2025 – Ulteig requested the most current data from USFWS for the whooping cranes to aid their effects analysis.

July 16, 2025 – USFWS provided Ulteig with information on where to access publicly available whooping crane datasets and provided a data use agreement for the USFWS incidental whooping crane sightings dataset. Ulteig returned a signed data use agreement and USFWS released the requested information that same day.

August 4, 2025 – NDDOT provided USFWS with an update draft BA for review.

August 6, 2025 – NDDOT and USFWS met to further discuss the draft BA.

September 2, 2025 – A monthly progress meeting for the Proposed Action was held. These meetings are routinely attended by representatives of the FHWA, NDDOT, Ulteig, and USFWS.

September 8, 2025 – FHWA, after review, submitted the final BA and initiated formal consultation.

September 10, 2025 – FHWA and NDDOT were notified at an in-person meeting that USFWS had received the BA and was in the process of reviewing.

September 23, 2025 – The Service issued a letter to the FHWA accepting submission of the BA as complete with indication that a BO is being drafted by USFWS.

October/November/December 2025 – Various emails and chat exchanges between the Service and proponents for BA clarifications, questions, and further data requests.

October 7, 2025 – A monthly progress meeting for the Proposed Action was held.

October 10, 2025 – The *Proposed Action Section* draft from the BO was sent to NDDOT for review.

October 21, 2025 – NDDOT and USFWS met to discuss the provided *Proposed Action Section* and the need for an additional Dakota skipper habitat survey on a portion of the Proposed Action.

October 24, 2025 – NDDOT sent USFWS comments back on the draft *Proposed Action Section*.

November 4, 2025 – A monthly progress meeting for the Proposed Action was held.

December 2, 2025 – A monthly progress meeting for the Proposed Action was held.

December 5, 2025 – The USFWS asked NDDOT/Ulteig to recalculate suitable habitat acreage within the project boundary due to differing calculations in submitted materials. The correct acreage is reflected and used for analysis herein.

January 6, 2026 – A monthly progress meeting for the Proposed Action was held.

January 7, 2026 – Draft BO provided to the Federal action agency for review.

January 12, 2026 – Draft ITS provided to the Federal action agency for review.

January 13, 2026 – Meeting to discuss the draft BO and ITS attended by representatives of the FHWA, NDDOT, Ulteig, and USFWS.

January 14, 2026 – Follow-up meetings between the USFWS, NDDOT, and Ulteig to discuss comments on the BO and ITS. An updated draft of the ITS was sent by USFWS.



January 16, 2026 – Draft BO and ITS comments submitted to the USFWS. A memo was also provided containing updated and supplemental information pertaining to the Proposed Action.

January 21, 2026 – Finalization of BO with signatures.

## 2.0 DESCRIPTION OF THE PROPOSED ACTION

### 2.1 PROJECT OVERVIEW

This Biological Opinion analyzes effects of the proposed expansion of U.S. Highway 52 (US 52) from a two-lane highway into a four-lane highway within McHenry and Ward counties in North Dakota (the “Proposed Action”). This expansion would encompass approximately 21.5 miles of US 52, beginning near Minot, North Dakota at Reference Post (RP) 101.20 (approximately 2.3 miles west of Junction 79th Ave SE) and terminating just east of Voltaire at RP 123.00, spanning the following locations, as also shown on Figure 1 and Figure 2:

- Township 152 North (T152N)
  - Range 79 West (R79W), Sections 5 and 6
  - Range 80 West (R80W), Sections 1 and 2
- Township 153 North (T153N)
  - Range 79 West (R79W), Section 31
  - Range 80 West (R80W), Sections 7, 17, 18, 20, 21, 22, 23, 25, 26, and 36
  - Range 81 West (R81W), Sections 4, 5, 9, 10, 11, 12, and 13
- Township 154 North (T154N)
  - Range 81 West (R81W), Sections 30, 31, and 32
  - Range 82 West (R82W), Sections 4, 9, 10, 14, 15, 23, 24, and 25

The Proposed Action has two primary alternatives under consideration: 1) a divided four-lane highway with a depressed center median and 2) a divided four-lane highway with a flush paved center median. However, during preliminary design it became apparent that a hybrid alternative was best suited to address the needs and various constraints along the project corridor. Therefore, the corridor was split into six (6) segments to analyze distinct alternative options for each segment (Table 1; Figure 2). Additional design or special considerations have been incorporated for Segment 3 and Segment 4 (Table 1; Figure 2), which are further addressed in Section 2.2.4. As preliminary build alternatives are still subject to change, all presented unit estimates herein are representative of the broadest area of potential impact. The potential resulting impacts to federally listed species and their habitat are further address in the *EFFECTS OF THE ACTION* section.

**Table 1: Proposed Action Segment Lengths and Locations – Source: NDDOT 2025 BA**

| County         | Segment | Segment Length (miles) | Begin Location/RP                | End Location/RP                          |
|----------------|---------|------------------------|----------------------------------|------------------------------------------|
| Ward County    | 1       | 7.92                   | Start Location<br>RP 101.20      | Prior to Ward CR 23<br>RP 109.12         |
|                | 2       | 3.39                   | Prior to Ward CR 23<br>RP 109.12 | Ward CR 25/Ward County Line<br>RP 112.51 |
| McHenry County | 3       | 3.16                   | McHenry County Line<br>RP 112.51 | West End of Velva<br>RP 115.67           |
|                | 4       | 1.86                   | West End of Velva<br>RP 115.67   | East End of Velva<br>RP 117.53           |
|                | 5       | 2.68                   | East End of Velva<br>RP 117.53   | ND 97<br>RP 120.21                       |
|                | 6       | 2.31                   | ND 97<br>RP 120.21               | Voltaire/End Location<br>RP 122.52       |

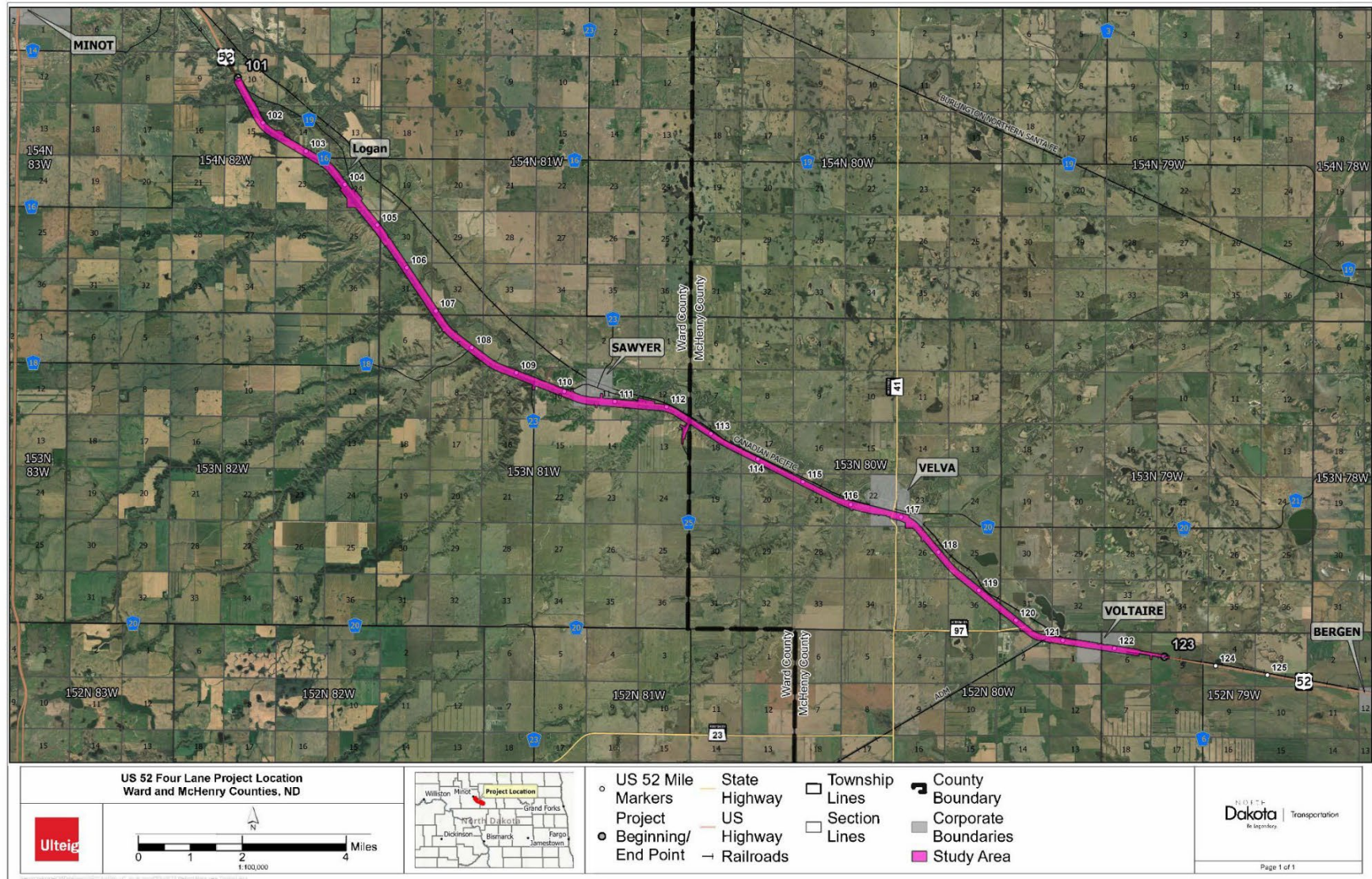


Figure 1: Map of the Proposed Action – Source: NDDOT 2025 BA



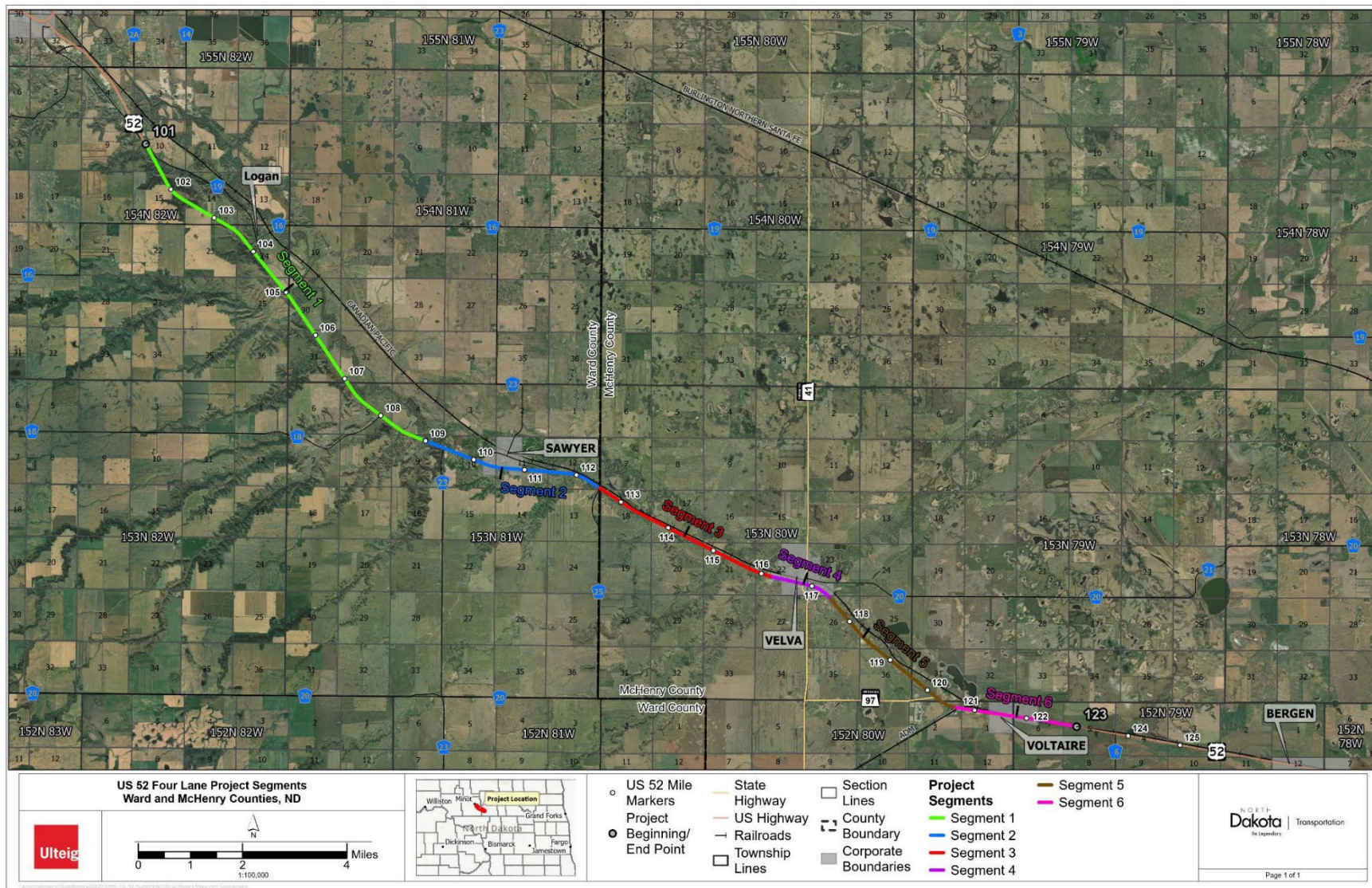


Figure 2: The Proposed Action Segments – Source: NDDOT 2025 BA



## 2.2 SUMMARY OF PROJECT CONSTRUCTION ACTIVITIES

The Proposed Action would be consistent with typical highway construction activities and equipment. The following descriptions of expected construction activities are from information provided during the prior 2024 consultation, project meetings and notes, and the 2025 BA.

### 2.2.1 Geotechnical Investigation

Geotechnical investigations are conducted to assess existing soil stability along the project corridor and aid study and design of the Proposed Action. The drilling rig, a 6-inch drill, is transported to the project via semi carrier, unloaded, and mounted on either a truck or wheeled drill rig, measuring up to 8 feet wide by 28 feet long. The mounted drill rig will then be driven overland, utilizing existing access and roadway as much as possible, to the boring locations. No improvements would be made to access routes. Boring depths range from 30 to 150 feet deep, depending on the terrain. Each bore takes approximately 8 to 10 hours to complete. The boring holes would be backfilled, and the tailing pile would be leveled off once the geotechnical investigation is complete.

### 2.2.2 Site Preparation

Prior to initiation of any ground disturbing activities, a work zone area will be established, traffic control signage will be placed, erosion control devices will be installed, and utility coordination will occur. Temporary lighting may also be placed for utilization during early morning and evening construction. As necessary, right of way (ROW), temporary construction easements, and/or permanent easements would be acquired. Acquisition of up to 188.6 acres of permanent ROW and 43.2 acres of temporary easement would be required for the Proposed Action. The total combined existing ROW, proposed ROW, and temporary easement acreage along the Proposed Action by land use type is outlined in Table 2.

**Table 2: Combined existing ROW, proposed ROW, and temporary easement acreage along the Proposed Action by land use type – Source: BA Memo 2026**

| Land Use Type | Acreage         |
|---------------|-----------------|
| Open Water    | 0               |
| Developed     | 634.7           |
| Barren Land   | 1.92            |
| Woodland      | 17.85           |
| Shrubland     | 0.32            |
| Grassland     | 376.19          |
| Pasture       | 18.83           |
| Cultivated    | 39.64           |
| Wetland       | 25.76           |
| <b>Total</b>  | <b>1,115.21</b> |

### 2.2.3 Utility Relocation

Overhead electrical utility construction can involve the use of various equipment such as but not limited to cranes, augers, digger trucks, bucket trucks, skid steers, backhoe excavators, and bull wheel tensioners. Typically, utility poles are buried a depth equal to 10% of the pole's height, plus 2 feet, though this depth can vary according to utility preference, materials, regulatory requirements, and environmental factors. Diameter of the hole can also vary depending on the type of structure being installed. Bull wheel tensioners, typically trailer mounted, travel down the utility easement providing line tension control during installation. Where splices in the line are necessary, splice devices or specific splice method (e.g., compression, implosive, mechanical, etc.) is used to join the two sections together either from the ground or using bucket trucks to access the splice area.

Underground electrical and communication utilities are typically installed via plow on tracked equipment, backhoe excavator, and/or boring machines. Lines parallel to the roadway are typically installed via tracked equipment that moves along the easement, equipped with a reel holder (to hold the line) and a plow at the rear for installation. A typical backhoe bucket is 2 feet wide, while a plow or trench can vary between 5-8 inches wide. Underground installation of water utilities are typically 10 feet, electrical 4 feet, and fiber 2 feet but this can vary according to utility preference, regulatory requirements, and environmental factors. In areas where ground disturbing activities are prohibited or limited, horizontal directional drilling is typically used, reducing surface disturbance to only the entry and exit holes. Bell holes are typically dug by a backhoe excavator on both sides of the proposed bore. A bore machine is set up on one side of the drill location and drill pipe is drilled below the area to be avoided. Drill depth is based largely on soil conditions, resource being avoided, and/or regulatory requirements. Once the bore hole has been drilled, a casing (i.e., utility line) is attached to the drill pipe and pulled back through the hole. Where splices in the line are necessary, a backhoe excavator is typically used to dig a pit to maintain burial depth of the line and install an above ground control box or manhole to access below-ground equipment.

Overhead and underground utilities are located throughout the project corridor. Approximately 407,890 linear feet (LF) of underground utilities and 70,574 LF of overhead utilities that overlap with the Proposed Action (Table 3; Table 4). The readjustment of overhead utilities would result in the relocation of up to 202 utility poles. All utility poles are currently wood and are expected to be replaced in kind as close to the original location as feasible.

**Table 3: Buried utilities overlapping with the Proposed Action location – Source: BA Memo 2026**

| Electrical<br>(Linear Feet) | Gasline<br>(LF) | Fiber Optic<br>(LF) | Waterline<br>(LF) | Sanitary Sewer<br>(LF) | Total<br>(LF)  |
|-----------------------------|-----------------|---------------------|-------------------|------------------------|----------------|
| 42,200                      | 1,090           | 263,600             | 89,400            | 11,600                 | <b>407,890</b> |

**Table 4: Potential overhead utility shifts from the Proposed Action - Source: NDDOT 2025 BA**

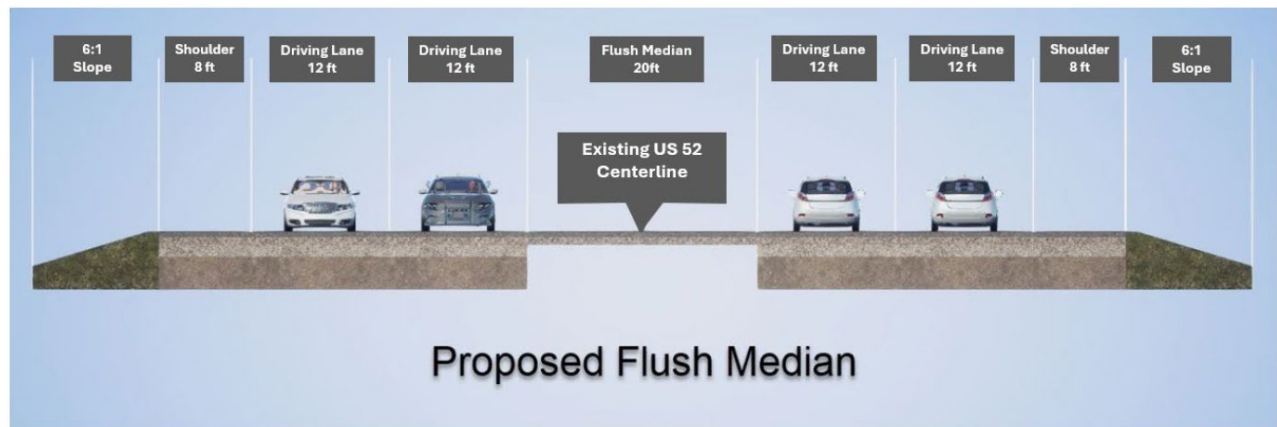
| Owner                                    | Current Build Potentially Impacted                                                                                              | Necessary Shift                                                                                                                           |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Western Area Power Administration (WAPA) | Two overhead utility lines currently crossing US 52.                                                                            | Structures would be shifted; approximately 1,157 LF would be moved.                                                                       |
| Basin Electric                           | Two overhead utility lines currently crossing US 52.                                                                            | Structures would be shifted; approximately 942 LF would be moved.                                                                         |
| Central Power                            | Two overhead utility lines currently crossing US 52. An additional utility line parallel to a portion of US 52.                 | Structures would be shifted; approximately 39,395 LF would be moved. Majority of shift is associated with the portion parallel to US 52.  |
| Otter Tail Power                         | Thirteen (13) overhead utility lines currently crossing US 52. Multiple additional utility lines parallel to portions of US 52. | Structures would be shifted; approximately 29,080 LF would be moved. Majority of shift is associated with the portions parallel to US 52. |

#### 2.2.4 Roadway Construction

The first primary alternative under consideration, a divided four-lane highway with a depressed center median, would consist of 12-foot-wide driving lanes with 8-foot-wide exterior shoulders and 4-foot-wide interior shoulders, and a 52-foot-wide depressed center median (Figure 3). When complete, this alternative would have a 70-mile-per-hour (mph) posted speed limit.

**Figure 3: Alternative 1 – Proposed Depressed Median – Source: NDDOT 2025 BA**

The second primary alternative under consideration, a divided four-lane highway with a paved center median, would consist of 12-foot-wide driving lanes with 8-foot-wide exterior shoulders and a 20-foot-wide flush paved center median (Figure 4). When complete, this alternative would have a 65-mph posted speed limit.



**Figure 4: Alternative 2 – Proposed flush paved median** – Source: NDDOT 2025 BA

For both primary alternatives under consideration, ditches would consist of 6:1 inslopes in the clear zone, breaking to steeper slopes in problematic areas (see Figure 3 & Figure 4). Shoulders and inslopes of the existing roadway would be improved where practicable.

During the preliminary alternative development it became apparent that a hybrid alternative would better address needs and constraints, therefore, the Proposed Action was split into six (6) segments to analyzing distinct alternative options for each segment (Table 1; Figure 2).

Special consideration for Segment 3 were initiated by the Souris River Joint Board, due to the Mouse River Enhanced Flood Protection Project, and will include a grade raise (approximately 6 feet at the highest point) to protect critical infrastructure from future flooding along the Mouse River Corridor.

The flushed pave median option is the sole build alternative for the portion of Segment 4 containing the town of Velva, North Dakota due to urban area constraints; however, other variations to this alternative are being explored (e.g., standard flush median, raised center median). The existing intersection of US 52 and North Dakota Highway 41 (ND 41) in Velva (Figure 2 – Segment 4) has other design option being explored such as adding an eastbound right turn lane, a westbound right turn lane, a southbound right turn lane, an enhanced north/south crosswalk, and a traffic signal. The single at-grade pedestrian crossing, occurring at the existing US 52/ND 41 intersection, has a design consideration for a 10-foot path paralleling US 52 on the north side. Illumination lighting in Velva would be replaced with LED lighting. The chosen build alternative for the urban area (Velva) would have a design speed less than or equal to 50 mph.

Regardless of build alternative, the construction areas will be cleared, grubbed, and topsoil would be stockpiled for later use for reclamation of non-roadway areas. Existing destination lighting along the project corridor would be removed and/or replaced with permanent light emitting diode (LED) lighting. Permanent signage, pavement markings, and traffic control devices would be installed.

Several existing drainage structures and cattle crossings would be improved and/or replaced as necessary and new drainage structures would be installed to maintain drainage patterns throughout the corridor. No bridges would be directly impacted. Best management practices will be used to prevent erosion.



Equipment used for construction activities will be consistent with other roadway projects and may include but is not limited to bulldozers, scrapers, graders, backhoes, trucks, asphalt pavers and conveyors, cranes, milling machines, excavators, and rollers.

Earthwork will include a combination of hauling and placing fill material, such as dirt, in construction areas that require additional fill (i.e., road widening) and removal of materials from cut areas, such as ditch sections. Topsoil will be set aside and then replaced once the fill or cut operations have occurred. Additional topsoil will be imported from a material source for areas where salvaged topsoil is insufficient to cover the disturbed areas. Work on approaches (e.g., field drives, section lines, and private driveways) will include the placement of fill material to widen existing approaches and/or construct new approaches.

Upon completion of the Proposed Action, reclamation would occur on non-roadway areas. This would include implementing erosion control measures, topsoil placement, and seeding of native vegetation. Roadway maintenance of the newly expanded four-lane highway would be conducted as needed, including control of noxious weeds within the roadway ROW via spot spraying and other eradication methods that do not include broadcast spraying. Traffic volumes are anticipated to increase over time; however, the Proposed Action is not expected to contribute to increased volumes, only address rising volumes.

### **2.3 PROPOSED CONSERVATION MEASURES**

Used in context of the ESA, the proposed “conservation measures” represent the actions pledged by the Federal action agency that will be implemented to avoid and/or minimize effects to any federal protected resource that potentially occurs, and further the recovery of the species under review. Since these conservation measures are part of the Proposed Action, their implementation is required under the terms of the consultation (USFWS & NMFS 1998). The listed conservation measures are:

#### **2.3.1 General Environmental Commitments and Conservation Measures:**

In order to minimize and mitigate for impacts to federally protected resources, the FHWA plans to implement the following general conservation measures:

- Ensure all project operators, employees, and contractors are aware of pertinent environmental commitments and conservation measures.
- Mitigation of wetland impacts either onsite, adjacent to the Proposed Action, or at an approved NDDOT mitigation bank.
- Ensure tree removal is limited to that specified in the project’s final plans. Installation of bright colored flagging/fencing prior to any tree removal to ensure contractors stay within clearing limits.
- Control of noxious weeds within NDDOT ROW by maintenance staff via spot spraying and other eradication methods, not including broadcast spraying.
- Handling of waste materials in compliance with state and federal regulations and disposed of in a way that prevents harm to water channels and riparian zones.
- Implementation of Best Management Practices (BMPs) and a Storm Water Pollution Prevention Plan (SWPPP). BMPs may include, but are not limited to, mulching, matting, and

netting; installation of filter fabric fencing; use of sediment traps and ponds; creation of surface water interceptor swales and ditches; and storing of stockpiles away from surface water sources.

- The project engineer will be immediately notified in the event any federally threatened or endangered species is identified within 1 mile of the Proposed Action. All construction activities will cease, a 0.5-mile avoidance area will be established, and immediate coordination with USFWS, FHWA, and NDDOT will occur. Work will not resume within the established avoidance area until the project engineer has confirmed with the previously listed agencies that work may proceed (e.g., species have left the area or approved minimization measures have been implemented).

### 2.3.2 **Federally Protected Species Avoidance and Minimization Measures:**

The FHWA has determined the Proposed Action is not likely to adversely affect the federally endangered whooping crane (*Grus americana*) and northern long-eared bat (*Myotis septentrionalis*). The Service has concurred with this determination for the following reasons:

- Implementation of the *General Environmental Commitments and Conservation Measures* (Section 2.3.1)
- To reduce the risk of flight collisions during the spring and fall whooping crane migration periods, bird diverters will be installed at a 1:1 ratio (per linear foot) on any raised, lowered, and/or moved overhead utility lines that occur within 1 mile of whooping crane stopover habitat. Each utility company would determine the type, number, and placement/spacing of the line markers and may conclude that the placement of line markers is not feasible in certain areas.
- To avoid adverse impacts to the northern long-eared bat, tree removal will not occur during the active season (April 15 – October 31). In the event a tree removal needs to occur during the active season, tree removal outside of pup season (June 1 – August 15) may be allowable in coordination with USFWS.
- Bat use structure assessments are valid for two years; in the event any structure or culvert work is not completed prior to October 23, 2025, additional assessments will be completed prior to construction (within 2 years prior to commencement). If bats are not observed, no further actions will be taken. If bats are observed, further ESA consultation will be required.
- Temporary lighting that is utilized during construction will be directed away from trees during the active season for the northern long-eared bat (April 15 – October 31). Replaced permanent lighting will be designed to be approximately the same intensity as the previous lighting and use downward-facing, full cut-off lens.
- North Dakota does not currently have documented northern long-eared bat roosts or foraging habitat. Evidence of a maternity colony was detected in 2024; however, the potential colony location does not overlap with the Proposed Action (USFWS 2025a; Hanna Edens, *pers. comm.* 2025). In the event they are identified in the future, trees within 0.25 miles of documented roosts or documented foraging habitat, during any time of year, will not be cut down.

Based on this information and further analysis provided by the 2025 BA, the Service expects any potential effect from this Proposed Action on the whooping crane and northern long-eared bat to be insignificant or discountable and are not further addressed in this Opinion.

### 2.3.3 **Dakota Skipper Species-Specific Avoidance and Minimization Measures:**

The FHWA has determined the Proposed Action is likely to adversely affect the Dakota skipper. In order to minimize and mitigate for impacts to this species, the FHWA plans to implement the following species-specific conservation measures in addition to implementation of the *General Environmental Commitments and Conservation Measures* (Section 2.3.1):

- Identified suitable Dakota skipper habitat that will not be directly impacted during construction activities will be fenced and avoided.
- Implementation of standard dust control measures as required under the general construction permit.
- Mitigation for impacts to three suitable Dakota skipper habitat patches due to geotechnical investigative boring (including access routes and bore holes), totaling 0.35 acres, at an onsite/offsite Dakota skipper conservation bank. The bank will be established in accordance with the USFWS *North Dakota Field Office Guidance for Dakota Skipper Conservation Site Establishment*. The exact mitigation ratio would be determined in coordination with USFWS and NDDOT.
- One year of pre-construction Dakota skipper occupancy surveys will be completed for all identified suitable habitat patches (excluding the three (3) patches impacted by geotechnical investigative boring) in accordance with the most current USFWS protocol.
  - If pre-construction occupancy surveys indicate probable absence of the Dakota skipper, no further mitigation would occur.
  - If pre-construction occupancy surveys indicate occupancy of the Dakota skipper, an onsite/offsite Dakota skipper conservation bank would be established in accordance with the USFWS *North Dakota Field Office Guidance for Dakota Skipper Conservation Site Establishment*. The exact mitigation ratio would be determined in coordination with USFWS and NDDOT. Additionally, at least one year of post-construction occupancy survey(s) would occur after vegetation establishment in disturbed areas and within five years following construction.
- Disturbed areas within 250 meters of previously identified suitable Dakota skipper habitat will be reseeded with a seed mix composed of native species and includes grasses and forbs necessary for Dakota skipper lifecycle needs.

## 2.4 **ACTION AREA**

An action area encompasses “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action” (50 C.F.R. § 402.02). Determination of the action area relates to the *action* (“...modifications to the land, water, or air...” 50 C.F.R. § 402.02) proposed by the Federal action agency (USFWS & NMFS 1998); it encompasses the project footprint, additional project components (e.g., staging areas, temporary modifications), and the geographic extent of all stressors associated with the action. Stressors that define the action area may include, but are not limited to produced noise, vibrations, light and other visual disturbances, chemical pollution, silt and dust erosion and deposition, and/or ground disturbing activities.

The action area was defined using a conceptual framework called the “road-effect zone”, which defines the area over which effects extend into the adjacent landscape from the roadway (Forman & Alexander 1998; Forman 2000). Research shows the quality of habitat in the road-effect zone is

generally degraded, but the ecological effect distances can vary from a few feet to a few miles under different circumstances (e.g., road build and traffic characteristics) and adjacent landscape characteristics (e.g., topography, vegetation, hydrology) (Van der Ree et al. 2015; Shanley & Pyare 2011; Forman & Deblinger 2000; Shilling & Weatjen 2012). The intensity and duration of the stressor can vary; for example, roadway construction noise tends to be higher intensity but may last for a limited duration whereas roadway traffic noise tends to be lower intensity but persist over the long term (Van der Ree et al. 2015). Therefore, the relative ecological effects of any given stressor can vary from project to project.

The Proposed Action has various preliminary build alternatives that are subject to change as design progresses (see *DESCRIPTION OF THE PROPOSED ACTION*); therefore, the defined action area is based on the broadest area where impacts may occur. The construction noise road-effect zone (“noise zone”), produced from the use of heavy equipment, is perceived as the stressor with the greatest geographic extent (i.e., forms the defined action area boundary). To determine the geographic extent of the noise zone, specifically the distance at which construction noise would attenuate back to current background levels, the following components are needed:

- 1) The maximum construction noise level: The FHWA collected noise emissions (expressed in terms of A-weighted decibel (dBA)), at a distance of 50 feet, from typical heavy machinery and found the average maximum noise levels to be between 73 and 101 dBA (Knauer et al. 2006; USDOT 2017).
- 2) The current ambient noise level: The EPA examined various environment noise levels and found that rural populations generally have average daytime noise levels less than 50 dBA (EPA 1978). Furthermore, FHWA estimated existing noise with a population of 1000-3000 people per square mile (i.e., encapsulating the largest population extent found in 1 square mile along the Proposed Action) to average 50 dBA (Hanson et al. 2006).
- 3) An assume noise reduction rate as it travels (i.e., ground attenuation): In a free-field environment, noise decreases at a rate of 6 dB per doubling of distance from a point source (Knauer et al. 2006). Vegetation, topography, and atmospheric conditions can all function as further noise energy absorbers. How much energy gets absorbed is dependent on the ground type (e.g., hard (reflective surface like pavement or water) or soft (vegetation-covered ground)). Typically, soft ground type absorption accounts for an additional 1.5 dB (Knauer et al. 2006), so the assumed attenuation rate for the point source noise from the Proposed Action activities is 7.5 dB per doubling of distance.

Using a base-10 log equation, the greatest distance construction noise would travel before attenuating back to background levels is approximately 5,482 ft (~1 mile) (Knauer et al. 2006; WSDOT 2025). Therefore, the Service has determined the action area for the Proposed Action to be a 1-mile buffer around the project footprint (Figure 5). This adequately encompasses all other potential road-effect zones from stressors. While our rational differs, the defined action area is the same as that presented in the 2025 BA.

#### **2.4.1 Dust Road-Effect Zone**

The Service also assess the fugitive dust road-effect zone (“dust zone”) – the extent of which is fully captured by the defined action area (i.e., noise zone). Though some dust is naturally generated, activities associated with construction and roadway traffic can elevate fugitive dust levels above what would naturally occur. Whether activities are on a paved or unpaved surface particulate (i.e., fugitive dust)



emissions into the environment will occur (EPA 2006), though the amount and makeup of these particulates may differ depending on the surface type (paved vs unpaved). Ecological effects from elevated dust could include changes to environmental properties (e.g., soil pH, air quality) and adversely impact vegetation and invertebrates (Van der Ree et al. 2015).

The distance fugitive dust can travel is dependent upon factors such as wind, surrounding vegetation, and particle size (e.g., small, light particles such as clay (< 2 micrometers ( $\mu\text{m}$ )) vs medium to large, heavy particles such as silt (2-50  $\mu\text{m}$ ) and sand (50-2,000  $\mu\text{m}$ ; USDA 1987)). At an average wind speed of 10 mph, studies showed larger particles ( $\geq 100 \mu\text{m}$ ) to be deposited within 20-30 ft (6-9 m) of the source road while medium and small particles deposited outwards of a few hundred feet (EPA 1995). Experimental studies on downwind dust deposits estimate 80% of generated dust deposits within 200 ft of the road edge (McCrea 1990). When tracking similar sized particles, those in sparsely vegetated areas travel further than those in heavily vegetated (e.g., dense forest) areas (EPA 1995).

To define dust migration distances from construction activities, we used studies that examined dust generation from traffic on unpaved roads in North Dakota. While dust generation from traffic may differ slightly from construction, these studies were the best estimates of fugitive dust generation within the scientific literature. Fugitive dust data from North Dakota rural roadway use showed dust to be detectable at 480 ft on low traffic roads (< 3000 vehicles per month; Gedafa et al. 2016). When comparing high traffic rural roadways (i.e., Bakken oil traffic), dust was always detectable at 80 m (~262 ft) but the dust accumulation at that distance increased by 29% compared to low traffic roadways. That is, the travel distance of dusting was similar, but accumulation was greater on high traffic roadways.

Based on these findings, we have determined the dust zone from construction activities to be a 300 ft buffer around the project boundary, which is consistent with the literature and previous effects analyses (78 FR 47590). Though studies have shown detectability and accumulation of fugitive dust outside this buffer, the Service reasons this adequately encompasses the primary dust effects potentially placed on the environment from the Proposed Action.

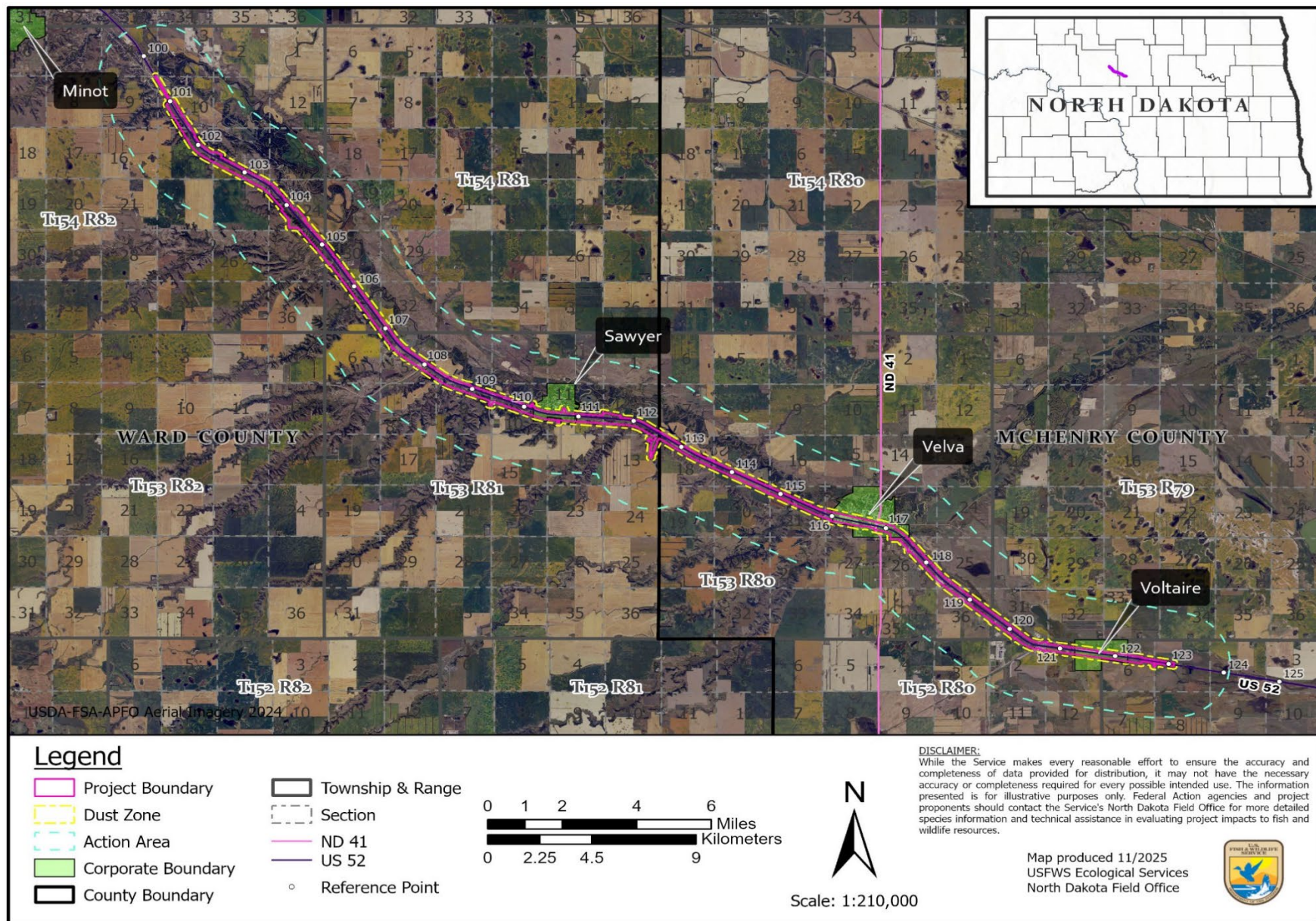


Figure 5: Proposed Action Location Showing Project Boundary, Dust Zone, &amp; Action Area

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### 3.0 STATUS OF THE SPECIES & CRITICAL HABITAT: DAKOTA SKIPPER

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Pursuant to implementing regulations (50 C.F.R. § 402.14 (g)(2)), the Service has a responsibility to “evaluate the current status...of the listed species or critical habitat” during formal consultation. The status of the species is based on an analysis of appropriate information, such as the species’ life history, habitat and distribution, and other data on factors related to its survival and recovery. This analysis considers the effects of past human and natural activities or events that have led to the current status of the species. Pertinent information is gathered from various materials such as listing rules – including critical habitat designations, recovery plans, scientific studies and databases.

#### 3.1 LEGAL STATUS

The Federal Register (FR) notice of a final rule for the Dakota skipper (*Hesperia dacotae*) was published on October 24, 2014, which established the species as threatened species status under the ESA with a 4(d) rule (79 FR 63672). The listing of the Dakota skipper and the 4(d) rule became effective November 24, 2014. The Service designated 19,903 acres (8,054 hectares) of critical habitat for this species on October 1, 2015 (80 FR 59247).

#### 3.2 SPECIES DESCRIPTION

The Dakota skipper (*Hesperia dacotae*) is a member of the “branded” skipper family Hesperiiidae, first described in 1911 from collections taken at Volga, South Dakota, and Grinnell, Iowa (Skinner 1911 in Royer and Marrone 1992). It is a small to medium-sized butterfly with a robust body, narrow angular forewings, and shorter more rounded hind wings, with a wingspan of 2.4-3.2 centimeters (cm) [0.9 to 1.3 inches (in)] and hooked antennae (Royer and Marrone 1992). The dorsal surface of adult male wings ranges in color from tawny orange to brown and with prominent marks on the forewing; the ventral surface is a dusty yellow-orange (Royer and Marrone 1992). The dorsal surface of adult females is darker brown with diffused tawny orange spots and a few diffused white spots restricted to the margin of the forewing; the ventral surface is a dusty gray-brown with a faint white spotband across the middle of the wing (Royer and Marrone 1992). Dakota skipper pupae are reddish-brown, and the larvae are light brown with a black collar and dark brown head (McCabe 1981) with early instars being described as green with a dark head and collar (Dana 2018, pers. comm. in USFWS 2018).



**Figure 6: A) Larva emerging from egg; B) Later stage larva; C) Adult female; D) Adult Male, stigma hidden – Source: USFWS 2018**



### 3.3 SPECIES GENERAL LIFE HISTORY

Dakota skippers undergo four fundamental life stages: egg, larva, pupa, and adult. Dakota skippers are univoltine (having a single flight per year), with an adult flight period that may occur from the middle of June through the end of July (McCabe 1979, 1981; Dana 1991; Royer and Marrone 1992; Skadsen 1997; Swengel and Swengel 1999; Rigney 2013). This flight period varies across the range, and from year-to-year depending on climatic conditions, but within a locality it usually lasts 2 to 4 weeks; the adult lifespan is potentially 3 weeks long, but the average life span is typically between 3 and 10 days (McCabe and Post 1977; McCabe 1979, 1981; Braker 1985; Dana 1991, Swengel and Swengel 1999).

Mating occurs during the Dakota skipper flight period. Adult males can be observed exhibiting perching behavior (sitting on a tall plant) or patrolling in search of mating opportunities (Royer and Marrone 1992; Royer et al. 2014). In Minnesota, perched males were found on flowers growing 0.3-0.5 meters (m) above the grass canopy from which they left to chase any potential mating opportunity (Dana 1991). Each adult female can lay between 180 and 250 eggs throughout the flight period (Dana 1991). Eggs are laid on various broadleaf plants and grasses, where they incubate for approximately 7 to 20 days prior to hatching – a process likely completed before the end of July (Dana 1991, Runquist 2014, pers. comm. *in* 79 FR 63672). Under controlled captive rearing conditions, Dakota skipper eggs hatched after 11 to 16 days with most of the caterpillars hatching on the 13<sup>th</sup> and 14<sup>th</sup> day (Runquist 2014, pers. comm. *in* USFWS 2018).

After hatching, Dakota skipper larvae crawl to the base of grass plants where they form shelters at or below the ground surface (between 0-2 cm deep). The shelters are built with silk, fastened together with plant tissue and are reconstructed 2 or 3 times to accommodate larval growth (Dana 1991). At night, Dakota skipper larvae emerge from constructed shelters to forage and appear to clip blades of grass to bring with them back to their shelters to consume (Dana 1991, Dana 2012 pers. comm. *in* 79 FR 63672; McCabe 1979, 1981; Royer and Marrone 1992).

During their life cycle, Dakota skippers have six or seven larval stages (instars) and overwinter (diapause) in their ground level or subsurface shelters during their fourth or fifth instar (Dana 1991). In the spring, larvae emerge to resume feeding and undergo two additional molts before they pupate. During these last two instars, larvae shift from construction of buried shelters to horizontal shelters at the soil surface (Dana 1991).

### 3.4 SPECIES HABITAT REQUIREMENTS

Dakota skippers have been documented throughout wet-mesic tallgrass prairies and dry-mesic mixed grass prairies (Royer and Marrone 1992; Royer et al. 2008). Adult Dakota skippers need regular access to nectar sources, which provides the necessary water and carbohydrates to support survival and reproduction (Dana 1991). Unlike other skipper species, adult Dakota skippers do not obtain water from mud, pond margins, or other surface water features (Dana 1991). Larval Dakota skippers survival partly relies on the microclimate (i.e., relative humidity and temperature) at the soil surface/subsurface (0-2 cm deep), which makes it an important larval habitat element (USFWS 2018). During spring and winter, Dakota skipper larvae are especially vulnerable to desiccation (drying out) from drought (Royer 2016 per. comm. *in* USFWS 2018) During the summer months larval desiccation can also be a concern if vertical water distribution – movement of shallow groundwater to the soil surface – is not present; and if severe enough, direct adult mortality can occur



due to a lack of nectar sources (USFWS 2018). Over winter, it is thought humidity may be an essential component for larval survival since the larvae cannot take in water during that time (Royer et al. 2008, Dana 2013 pers. comm. in 79 FR 63672).

Dakota skipper larvae require native grasses with dense clusters of erect blades with abundant edible leaf tissue for them to forage and build their shelters (Dana 1991). Dakota skipper larvae feed on several native grass species, such as *Panicum* spp., *Poa* spp., and *Dichanthelium* spp., with little bluestem (*Schizachyrium scoparium*) observed as a frequent food source (Dana 1991, Royer and Marrone 1992). Large leaf blades, leaf hairs, and the distance from larval ground shelters to palatable leaf parts preclude the value of certain native grasses, such as big bluestem (*Andropogon gerardii*) and Indiangrass (*Sorghastrum nutans*), as larval food plants, particularly at younger larval stages (Dana 1991). Morphological unsuitability for shelter building and foraging was shown by a captive rearing study where some Dakota skipper larvae were only given access to certain native and introduced grass species. Two invasive species, Kentucky bluegrass (*Poa pratensis*) and smooth brome (*Bromus inermis*), used as host grasses resulted in reduced survivorship, reduced weight, and delayed pupation (Runquist & Nordmeyer 2018).

In 2008, an extensive categorization of the non-biotic environmental features found in prairies with Dakota skipper populations was completed (Royer et al. 2008). From this study, researchers were able to define Dakota skipper “suitable habitat” – habitat that contains the necessary elements for breeding, feeding, and sheltering behaviors – into two core types: “Type A” and “Type B” (further defined below) (Royer et al. 2008). Other herbaceous habitats that do not meet “suitable habitat” (i.e., Type A or Type B habitat) can be important, such as “dispersal/foraging habitat” – habitat lacking some components necessary for reproduction. Dispersal/foraging habitat usually consists of undeveloped open areas dominated by perennial grass with limited or no barriers to dispersal and tree or shrub cover usually less than 25 percent of the area.

Type A habitat consists of low wet-mesic prairie with little topographic relief that occurs on near-shore glacial lake deposits. These areas can have a high-water table and be subject to intermittent flooding in the spring. However, there is sufficient relief, via depressional wetlands (low topographical areas that allow for surface water collection), extensive flat areas, and convex landforms, to provide necessary non-inundated habitat during the spring larval growth period (Royer et al. 2008). Type A habitat occurs primarily in North Dakota, central and western Manitoba, Canada – specifically the “Interlake” region (between lakes Winnipeg and Manitoba) of central Manitoba (Westwood 2018 per. comm. in USFWS 2018) – and potentially portions of northeastern South Dakota (Skadsen 1997; Royer et al. 2008; USFWS 2018). This core habitat type is typically dominated by bluestem grasses, and has three primary forb species, wood lily (prairie lily; *Lilium philadelphicum*), bluebell bellflower (*Campanula rotundifolia*), and mountain deathcamas (smooth camas; *Zigadenus elegans*), that are always present and blooming during the Dakota skipper flight period (McCabe 1981). Other forbs that are present in this community include Rocky Mountain blazing star (*Liatris ligulistylis*), Canada goldenrod (*Solidago canadensis*), strict blue-eyed grass (*Sisyrinchium montanum*), common goldstar (*Hypoxis hirsuta*), and black-eyed Susan (*Rudbeckia hirta*) (Lenz 1999). Type A habitat will also usually contain small patches of dry-mesic prairie that contains forbs such as, stiff sunflower (*Helianthus pauciflorus*) and candle anemone (*Anemone cylindrica*) (Lenz 1999).

Not only is there some variation in the plant species composition of Type A habitat across the range, but Dakota skipper nectaring preferences also appear to vary. Reported use of the three primary forbs indicative of Type A habitat differed between North Dakota and Manitoba populations. North Dakota populations showed use of bluebell bellflower and mountain deathcamas but McCabe added that “At no stage is the skipper dependent on camas...” (McCabe 1981). Manitoba populations, however, showed no use of bluebell bellflower or wood lily as a nectar source and mountain deathcamas comprised <1% of all nectaring observations (Rigney 2013). Though Dakota skippers have been overwhelmingly observed using native forbs, there has been observations of some nonnative forb use, such as white sweet clover (*Melilotus alba*) in Manitoba (Rigney 2013). For both North Dakota and Manitoba populations, observations of nectaring were more frequently reported for black-eyed Susan than on any other on-site plant species (McCabe 1981; Rigney 2013) indicating its importance as a Type A habitat nectar source across the range. These observations indicate that Dakota skippers appear opportunistic in their foraging, habitats, and appear to nectar on flowers that are blooming during their flight period.

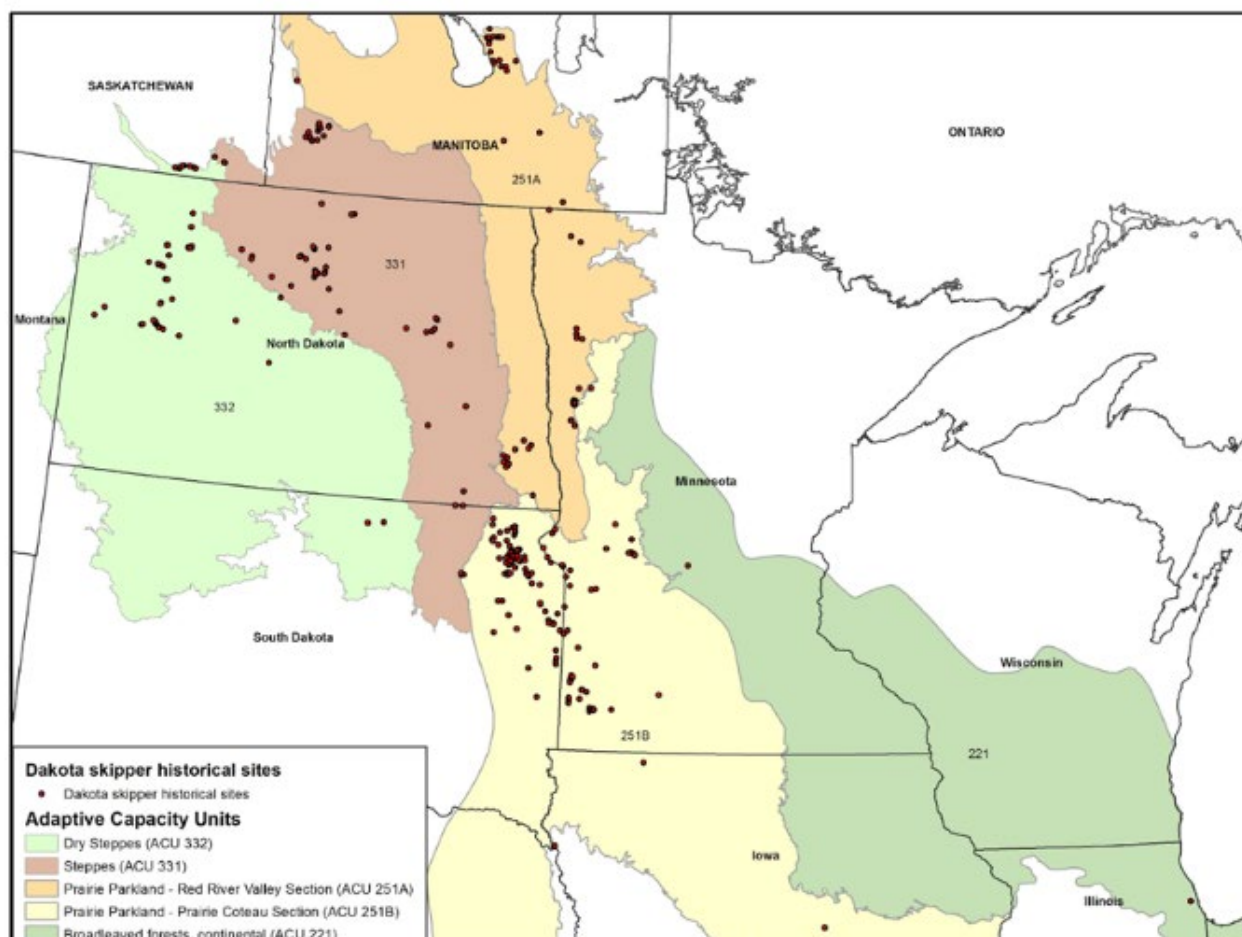
Type B habitat occurs primarily on rolling terrain over gravelly glacial moraine deposits in Minnesota, North Dakota, South Dakota, and western Manitoba (USFWS 2018). Type B habitat is dominated by little bluestem (*Schyzachirum scoparium*), needle or porcupine grasses (*Hesperostipa* spp.), big bluestem, and sideoats grama (*Bouteloua curtipendula*) (Royer et al. 2008); prairie dropseed (*Sporobolus heterolepis*) is also common in the eastern portion of the range (Skadsen 2006). Similar to Type A habitat, wood lily and bluebell bellflower are present, but purple coneflower (*Echinacea angustifolia*) appears to be the most visited forb species used as a nectar source during the adult flight in this core habitat type (McCabe 1981; Dana 1991; Swengel and Swengel 1999). Other Type B habitat forb species include upright prairie coneflower (*Ratibida columnifera*) purple prairie clover (*Dalea purpurea*), white prairie clover (*D. candida*), yellow sundrops (*Calylophus serrulatus*), lambstongue groundsel (*Senecio integerrimus*), groundplum milkvetch (*Astragalus crassicaarpus*), eastern pasqueflower (*Pulsatilla patens*), old man's whiskers (prairie smoke, *Geum triflorum*), western silver aster (*Symphotrichum sericeum*), dotted blazing star (*Liatris punctata*), tall blazing star (*Liatris aspera*), meadow zizia (heartleaf golden alexanders; *Zizia aptera*), blanket flower (*Gaillardia* sp.), prairie sagewort (*Artemisia frigida*), leadplant (*Amorpha canescens*), and prairie milkvetch (*Astragalus laxmannii*) (Dana 1997; Skadsen 2006).

#### **3.4.1 North Dakota Habitat**

In North Dakota, these wet- and dry-mesic prairie habitats (i.e., Type A and Type B) can be found along the rolling terrain of river valleys, glacial lake shores, and the Missouri Coteau typified by bluestem and needle grasses, with typical forbs such as wood lily, bluebell bellflower, coneflowers, and other asters as nectar sources (Royer and Marrone 1992; Royer et al. 2008). Many of the suitable prairie remnants found throughout North Dakota have persisted over time due to the steep topography and unsuitable soils for agriculture use (Royer and Marrone 1992). However, many of these prairie remnants are undergoing invasion from introduced species, such as Kentucky bluegrass and smooth brome, that have unsuitable morphology for adequate larval shelter building (Runquist & Nordmeyer 2018) and displace or extirpate native larval food plants (78 RF 63578).

### 3.5 SPECIES RANGEWIDE DISTRIBUTION

Dakota skippers were historically found in native prairies across five U.S. states (Illinois, Iowa, Minnesota, North Dakota, and South Dakota) and two Canadian provinces (Manitoba and Saskatchewan) (Figure 9). It was speculated that Dakota skipper populations might also occur in far eastern Montana and southeastern Saskatchewan, as habitats similar to those occupied by the species in northwestern North Dakota exists there (Royer and Marrone 1992). After 40 years of searching, the Dakota skipper was subsequently found in Saskatchewan in 2001 (Hooper 2002, pers. comm. *in* 79 FR 63672); no actual records have been found in Montana and Royer (2002, pers. comm. *in* 79 FR 63672) no longer thinks the species has occurred in Montana. The last known occurrence record of the species in Illinois was 1911 and in Iowa was 2000 (USFWS 2018). The species is presumed to be extirpated from Illinois, Iowa, and southeastern Minnesota (79 FR 63672).

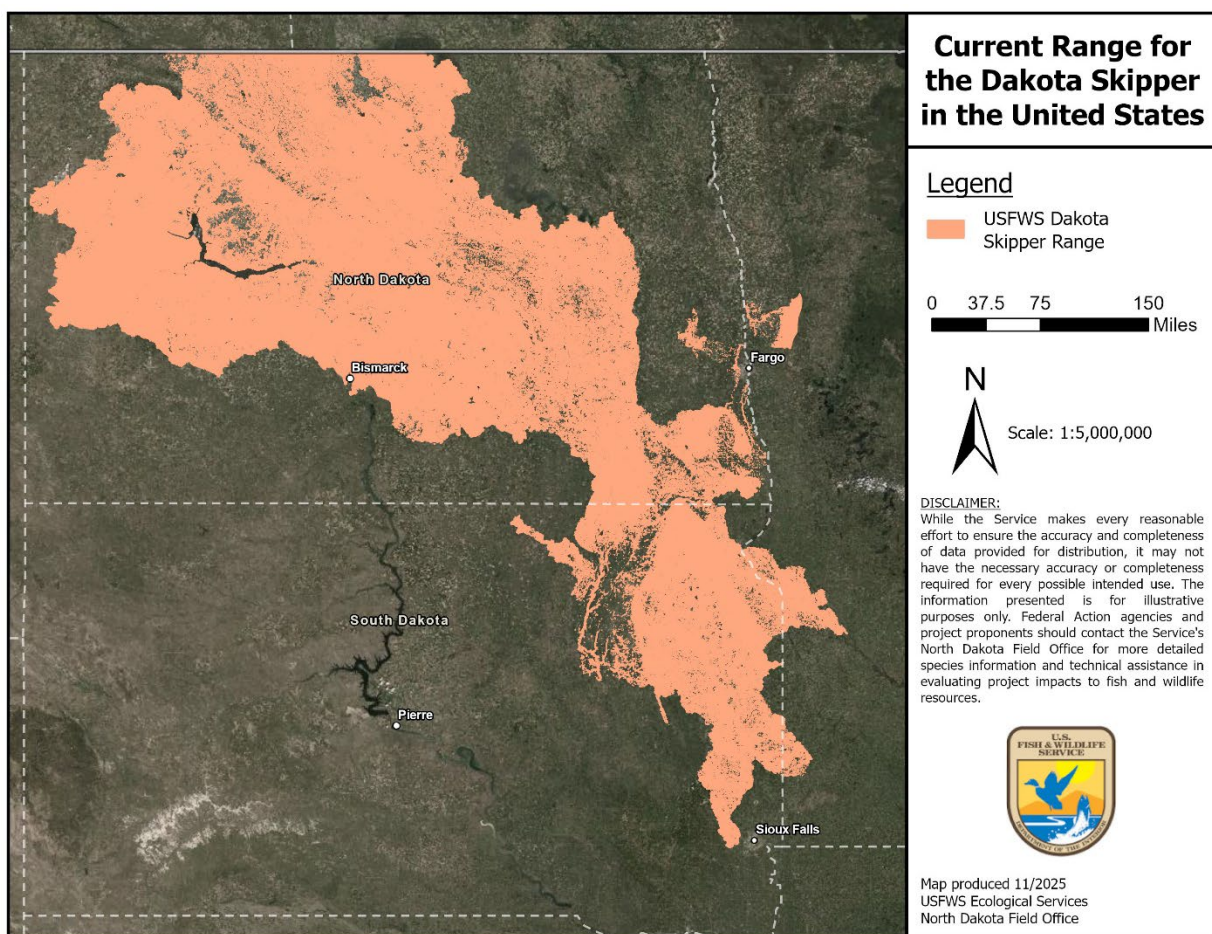


**Figure 7: Adaptive Capacity Units (colored zones) represent the presumed historic distribution of the Dakota Skipper; Dots represent historic Dakota skipper survey sites up to 2017 – Source: USFWS 2018**

The Service's ability to precisely define the species' historic distribution is limited due to widespread conversion of prairie to other land uses before the first reported record of the species. Prior to the 1960s, few records exist. As such, these historically known populations are likely a fragmented remnant of what was once a larger panmictic Dakota skipper population. This presumption, that Dakota skippers formerly had a relatively continuous distribution across the historic range, is supported by an analysis that found small genetic divergence (genetic distance) among sites in

Minnesota and South Dakota, indicating these populations were once connected (Britten and Glasford 2002). Today, the Dakota skipper and its habitat continue to experience declines. Habitat destruction and degradation has and continues to be the main threat, limiting populations to the current, sometimes fragmented, native prairie remnants in three U.S. states (Minnesota, North Dakota, and South Dakota) and two Canadian provinces (McCabe 1981; Royer and Marrone 1992; Schlicht and Saunders 1994; Royer 1997; Schlicht 1997, 1997a; Skadsen 1997, 1999; Swengel and Swengel 1999; 79 FR 63672; USFWS 2018).

To aid ESA consultations in the United States, the Service has defined the current Dakota skipper range using course grassland modeling and Dakota skipper observations (USFWS 2023). The current range consist of approximately 18,550,274 acres across Minnesota, North Dakota, and South Dakota; approximately 14,995,575 acres of the current U.S. range resides in North Dakota (Figure 10).



**Figure 8: Current Dakota Skipper Range in the United States – Source: USFWS 2023**

Though Dakota skippers have a faster, more powerful flight than most butterflies, thanks to a thick, well-muscled thorax (Scott 1986), they are not known to disperse widely due in part to a short adult life span and single annual flight. Experts estimate the Dakota skipper has a mean mobility of 3.5 (standard deviation = 0.7) on a scale of 0 (sedentary) to 10 (highly mobile) (Burke et al. 2011; Fitzsimmons 2012 pers. comm. in 79 FR 63672). In a mark-recapture study, the average adult movement of Dakota skippers was less than 300 m (984 feet [ft]) over a 3-to-7-day period. This is



reduced to less than 200 m (656 ft.) when unsuitable habitat is located between two prairie patches (Dana 1991). Furthermore, Dakota skippers are observed moving along ridges more frequently than across valleys, even less so when those valleys contain other suspected impediments for movement such as roads and crop fields. One researcher did report adult Dakota skipper movement of at least 800 m (2625 ft) between two sites, connected by native vegetation of varying quality interspersed with roads; however, the site they moved into had unusually heavy purple coneflower growth that year (Skadsen 1999; Skadsen 2001 pers. comm. *in* 79 FR 63672). Therefore, it is generally understood that Dakota skippers may be incapable of movements greater than 1 kilometer (km) (3281 ft) between patches of prairie habitat; and, though not inclined to disperse, activity areas likely shift in response to nectar source availability or perceived mating opportunity (Royer and Marrone 1992; McCabe 1979, 1981; Cochrane and Delphey 2002). Thus, species' extirpation from a site is likely permanent unless located within about 1 km of another site that generates a sufficient number of emigrants, or they are artificially reintroduced to a site (79 FR 63672).

To better understand population level status, the Service grouped confirmed Dakota skipper observation records into metapopulations, comprised of subpopulations occupying habitat patches that are on average less than 5 km but no more than 6.5 km from one another (USFWS 2018). At this distance, uncertainties regarding the shape and extent of the habitat patch containing an observation point are addressed (see USFWS 2018 for more details).

Based on all known historical records, at least 145 metapopulations, comprised of approximately 303 subpopulations have existed across the range (USFWS 2018). However, the historical distribution of the Dakota skipper may never be precisely known because "much of the tallgrass prairie was extirpated prior to extensive ecological study" (Steinauer and Collins 1994), such as butterfly surveys, and likely before the species was first described in 1911 (Skinner).

As of 2017, the fragmented Dakota skipper population consists of 75 metapopulations comprised of approximately 157 subpopulations (USFWS 2018). Many of these identified metapopulations (42 out of 75 (56%)) have a less than 0.5 predicted probability of persistence; however, the actual health of these populations may be overstated (USFWS 2018). Subpopulation health can further inform status of the species. Of the 157 subpopulations identified only five (5) have more than a 70% chance of survival, with a vast majority (78%) of subpopulations having less than a 50% chance of survival, over the next 10 years (USFWS 2018).

It's important to note here that since the 2014 ESA listing (79 FR 63672) and publication of the Service's Species Status Assessment (SSA; USFWS 2018), survey efforts have significantly increased, and new Dakota skipper occurrence locations have been documented. The Service does not attempt herein to re-distinguish these larger spatially separated populations (i.e., metapopulation) and their inter-connectivity (i.e., subpopulations) with the survey data acquired post-publication of the Service's SSA (USFWS 2018).

To allow for the incorporation of all data here in the Service's assessment of the species status, all locations with Dakota skippers historic or current occupancy will hereafter be referred to as either a "site", "documented site", or "occurrence site" (i.e., a location in which a survey has occurred and indicated presence of the Dakota skipper at one time, either historically or currently). These sites will then be further distinguished into status classifications such as "present", "unknown", "possibly

extirpated”, or “extirpated” (see 79 FR 63672 p. 63675, *Species Occupancy* section for details on status classification distinctions).

The Service’s Dakota skipper database (USFWS 2025 unpubl. geodatabase) contains 352 historically documented sites across the range of the species. Currently, the Service considers the status for 158 sites to be present; 2 possibly present but inconclusive; 68 sites as unknown; 5 possibly extirpated; and 119 extirpated. Approximately 25 percent (40 of 158) of these sites where the species is considered to be present are located in Canada, mostly within 3 isolated complexes consisting of observations between 2002 and 2012 with no subsequent survey information since 2012 (USFWS 2025 unpubl. geodatabase).

### **3.6 SPECIES NORTH DAKOTA DISTRIBUTION**

At the time of listing (79 FR 63672), the Service’s Dakota skipper database (USFWS 2014 unpubl. geodatabase) indicated North Dakota contained approximately 21% (54 sites distributed among 18 counties) of all known historic locations range wide. Of those sites, the Dakota skipper was considered present at 16 sites in 12 North Dakota counties; possibly extirpated in 3 counties, and presumed extirpated from 4 counties, likely due to heavy grazing, weed control, and other disturbance stressors (Royer 1997; 79 FR 63672). The average encounter frequencies observed across the State in 2014 was 2.67 encounters per hour. This continued a downward trend being lower than the 1996-1997 state-wide surveys (ND State average = 17.39 encounters per hour) and 2012 state-wide surveys (ND State average = 9.36 encounters per hour) using the same methodology (Royer et al. 2014). A majority of sites with presence during this time were in either the Towner-Karlsruhe complex or Sheyenne National Grassland complex.

#### **3.6.1 Towner-Karlsruhe Complex**

The Towner-Karlsruhe complex, found in McHenry County, North Dakota, has been considered a state stronghold for the species with long-standing sites that have been surveyed dating back to the 1970s (Cochrane and Delphey 2002; Royer et al. 2014). Of the 16 identified North Dakota sites with Dakota skipper presence, in the 2014 listing decision, 11 occur in the Towner-Karlsruhe complex (79 FR 63672). These sites are found on a combination of North Dakota state land and privately owned land comprised of Type A habitat linked by native prairie remnants and highway ROW that contains native prairie vegetation (Royer and Marrone 1992; Royer et al. 2008; Royer and Royer 2012). In 1999, it was estimated that about 30% of the Towner-Karlsruhe complex still contained native prairie (Lenz 1999). Though in 2002, none of these sites were described as secure since each is subject to private or state management options that could extirpate Dakota skippers from the site (Cochrane and Delphey 2002). More recent observations indicate that several of the native prairie sites have been invaded, to varying extents, by nonnative species and several are subject to intense grazing or early haying (Royer and Royer 2012, 2012a; Royer et al. 2014). However, a number of other factors suggest a general deterioration in amount and quality of Dakota skipper habitat since the 1990s (Royer and Royer 2012). Factors noted include frequent or continuous grazing pressure history, lack of proper forb dominance, leafy spurge incursion, regular spraying, and improper haying timeframes.

### **3.6.2 Sheyenne National Grasslands**

The Sheyenne National Grasslands complex, in southeastern North Dakota, contains a mix of Type A and Type B habitat. However, this complex has experienced significant invasion from introduced species, particularly from leafy spurge, which has resulted in significant degradation of the native prairie habitat in this region. Other effects, such as grazing pressure and pesticides used to control introduced/non-native plants and grasshoppers, may also have influenced the degradation of native patches. For these reasons, Royer (1997) indicated that extirpation of Dakota skippers from the Sheyenne National Grasslands complex is almost certain to occur.

Between the 1980's and early 2000's, researchers continued to survey for Dakota skippers in the Sheyenne National Grasslands but found the habitat and populations to be diminishing. For example, the McLeod Prairie – considered by McCabe (1979) as one of the best sites for Dakota skippers in North Dakota – has since been significantly modified by leafy spurge invasion, resulting in the Dakota skipper being entirely extirpated from the site (Royer 1997). Furthermore, the Brown Ranch site in Ransom County, North Dakota – once suggested as having the potential to support a metapopulation of Dakota skippers (Orwig 1995) – had its Dakota skipper population in 2003 described as either disappearing or having a bad year; by 2012 Dakota skippers were no longer found on site likely due to the frequent intense grazing rotation and patchy distribution of habitat islands (Spomer 2003; Royer and Royer 2012). The most recent surveys in the Sheyenne National Grasslands complex were conducted in 2022 by the U.S Forest Service (USFS) but no Dakota skippers have been observed in the complex since 2003. As it is now post-three years of negative occupancy surveys at each historic site in the Sheyenne National Grasslands complex, the Service considers the Dakota skipper to be currently extirpated throughout the Sheyenne Grasslands.

### **3.6.3 Post-Listing North Dakota Distribution**

North-central and western North Dakota may play a significant role in the species' long-term conservation, particularly the Bakken region. Since the 2014 listing decision, survey efforts in North Dakota have significantly increased the number of new populations and corresponding sites where the species has been found, most occurring in McKenzie, Mountrail, and Dunn counties. A review of the Service's most recent database shows the Dakota skipper to now be considered present at 102 sites in 13 North Dakota counties, unknown at 12 sites, possibly extirpated at 2 sites, inconclusive at 2 sites, and extirpated at 25 sites (USFWS 2025, unpubl. geodatabase).

Between 2014 and 2022, the amount of North Dakota sites with Dakota skipper presence increased nearly sevenfold (from 16 to 102); though it should also be noted that many other sites, approximately 255, were surveyed that did not detect Dakota skipper presence (USFWS 2025, unpublished. geodatabase). Most of the new observations (86 sites) were found outside the Towner-Karlsruhe and Sheyenne National Grassland complexes, with most occurring in McKenzie and Dunn counties. This increase in observations was likely aided by a combination of efforts from oil and gas companies conducting surveys prior to developments, and the recent modeling efforts that shows locations across the range with habitat that should contain all the constituent elements necessary for Dakota skipper presence (Seidle et al. 2020; Barnes et al. 2024). These new models provide researchers with starting points for surveys in areas that have a high likelihood of detection and continue to be used to aid ongoing survey efforts.

### 3.7 THREATS

In the most recent Species Status Assessment (SSA), the Service reviewed negative impacts that have affected the Dakota skipper either historically, currently, or are likely to in the future (USFWS 2018). Factors identified as negatively impacting the Dakota skipper are collectively referred to as “risk factors”. The risk factors of occupied and historically occupied Dakota skipper sites between 1905 and 2017 were assessed to understand what lead to the species’ current condition (USFWS 2018). It is understood that loss and degradation of the remaining native prairie patches pose the biggest threats to the species’ continued existence. Factors responsible for continued habitat loss, fragmentation, and degradation includes: conversion of native prairie for agriculture or urbanization; ecological succession of native prairie to habitats dominated by brush or trees; impacts from oil and gas development; invasive species; direct and indirect effects of pesticides, including herbicides; flooding; and land management regimes (e.g., grazing, haying, or fire) if done in a fashion that degrades the species’ habitat (USFWS 2021). A thorough analysis of the potential threats impacting the Dakota skipper has been published in the final listing rule and the SSA (79 FR 63672; USFWS 2018).

### 3.8 RECOVERY NEEDS AND EFFORTS

Used in context of the ESA, the terms “conserve,” “conserving,” and “conservation” are those methods and procedures necessary to bring a listed species to a point where the species no longer needs ESA protection (ESA § 3(3)). For purposes of this Opinion, conservation is considered to be synonymous with the species’ survival and recovery needs.

The recovery vision for the Dakota skipper is founded on three ecological principles, “redundancy”, “representation”, and “resiliency,” which are common building blocks used to develop robust conservation strategies (Redford et al. 2011).

- ✓ *Redundancy* is defined as multiple, geographically dispersed populations and habitats across a species' range, such that the loss of one population or one unit of habitat will not result in total loss of the species. It provides a margin of safety for a species and/or its habitat to withstand threats, including unforeseen catastrophes.
- ✓ *Representation* is defined as the retention of genetic, morphological, physiological, behavioral, habitat, or ecological diversity of the species so its adaptive capabilities are conserved.
- ✓ *Resilience* is defined as the ability of the species and/or its habitat to recover from disturbances. In general, species are likely to be more resilient if large populations exist in large blocks of high-quality habitat across the full breadth of environmental variability to which the species is adapted.

Therefore, the best conservation strategies anticipate and protect species by ensuring high quality habitat and healthy populations, distributed throughout the geographic range, can withstand and/or adapt to novel or negative changes in their environment. The way redundancy, representation, and resilience can be achieved for the Dakota skipper is to maintain and actively manage the native grasslands that provide the habitat necessary to complete their life cycle (USFWS 2021). Identified conservation needs include evaluation of reintroduction success and habitat restoration success, genetics research, metapopulation boundary establishment, and identification of habitat most likely to contain undiscovered populations. Specifically, actions to create a resilient population include focusing on grassland restoration efforts for the Dakota



skipper near known extant populations, which if successful, would create a larger footprint of suitable habitat that could be expanded into by extant populations.

Significant conservation efforts are being undertaken in cooperation with the United State Forest Service (USFS), Bureau of Land Management (BLM), North Dakota Game and Fish Department (NDGF) and the North Dakota Natural Resources Trust (NDNRT) to monitor known populations, determine the status of historic populations, and discover new populations. Other significant conservation efforts have included development of the Dakota skipper habitat suitability model, captive rearing at the Minnesota Zoo, reintroduction and augmentation efforts in North Dakota and Minnesota, Environmental DNA research, and habitat restoration efforts.

One of the most significant survey efforts over the last five years has been facilitated through the NDNRT. The NDNRT has annually contracted permitted Dakota skipper surveyors survey for the species including monitoring of known populations; revisiting historic, unconfirmed, or presence only populations; and discovering new populations on school trust lands across the state of North Dakota. This effort has been undertaken in partnership with the Service and has led to the discovery of numerous populations over the last several years.

A recent effort has involved habitat modeling that predicts locations across the range that should encompass all the constituent elements necessary for Dakota skipper presence (Seidle et al. 2020; Barnes et al. 2024). Specifically, the Barnes et al. (2024) range-wide Dakota skipper habitat suitability model modeled broad-scale habitat suitability by relating 2010-2021 occurrence data and pseudo-absences to a variety of environmental predictors for the species using a machine learning approach. Compared to the currently defined USFWS Dakota skipper range (USFWS 2023), this model provides a more precise estimation of the probability that Dakota skippers may be present at a particular site and how habitat at the particular site may be connected to the surrounding landscape. This tool is now widely used for conservation planning purposes as well as predicting relative probability of the species occurrence.

To restore extirpated sites, artificial reintroduction has been pursued. The Minnesota zoo has provided support by successfully breeding captive Dakota skipper from 2014-2025. This effort has resulted in several reintroductions with one occurring in North Dakota and the rest in Minnesota. It is yet to be determined if reintroductions or augmentations have been successful.

In 2022 the Service and USGS underwent an eDNA research study. Field crews collected floral resources in areas where Dakota skippers have been observed and if possible, the exact flowers they were observed nectaring on for eDNA analysis. The Minnesota Zoo also collected plant samples from Dakota skippers reared in a controlled environment to further proof of concept. All samples collected from the controlled environment were observed having the species land on them. The results of this study are still preliminary but show some level of ability to detect the species using eDNA.

Habitat restoration efforts are currently underway. This includes work with the NDNRT, the USFS, the BLM, the National Wildlife Refuge System, oil and gas companies, North Dakota State University, and multiple conservation bankers. Resulting plant community restoration success or Dakota skipper use of restored habitat to any extent is yet to be determined.

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## 4.0 ENVIRONMENTAL BASELINE

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Pursuant to implementing regulations (50 C.F.R. § 402.14 (g)(2)), the Service has a responsibility to “evaluate the...environmental baseline of the listed species or critical habitat” during formal consultation. The environmental baseline “refers to the condition of the listed species or its designated critical habitat in the action area, without the consequences to the listed species or designated critical habitat caused by the proposed action. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. The impacts to listed species or designated critical habitat from Federal agency activities or existing Federal agency facilities that are not within the agency's discretion to modify are part of the environmental baseline.” (50 C.F.R. § 402.02). In other words, this section is an analysis of past and ongoing human and natural factors leading to the status of the species and its habitat (including any designated critical habitat) within the action area, providing a “snapshot” of the species’ health at a specified point in time (USFWS & NMFS 1998). The environmental baseline analysis does not consider the effects of the action under review herein.

### 4.1 LAND USE

The Proposed Action is situated within the Northern Glaciated Plains (Level III ecoregion; Bryce et al. 1996), specifically within the Drift Plains (Level IV ecoregion; Bryce et al. 1996). The Drift Plains are characterized by their subtle rolling topography, where seasonal wetlands are more prominent than semipermanent wetlands. Historically, grasslands in this region were a mix of tallgrass and shortgrass prairie but are now primarily replaced by cropland (Bryce et al. 1996).



**Figure 9: Action Area Landscape Photos** – *Source: NDDOT 2025 BA*

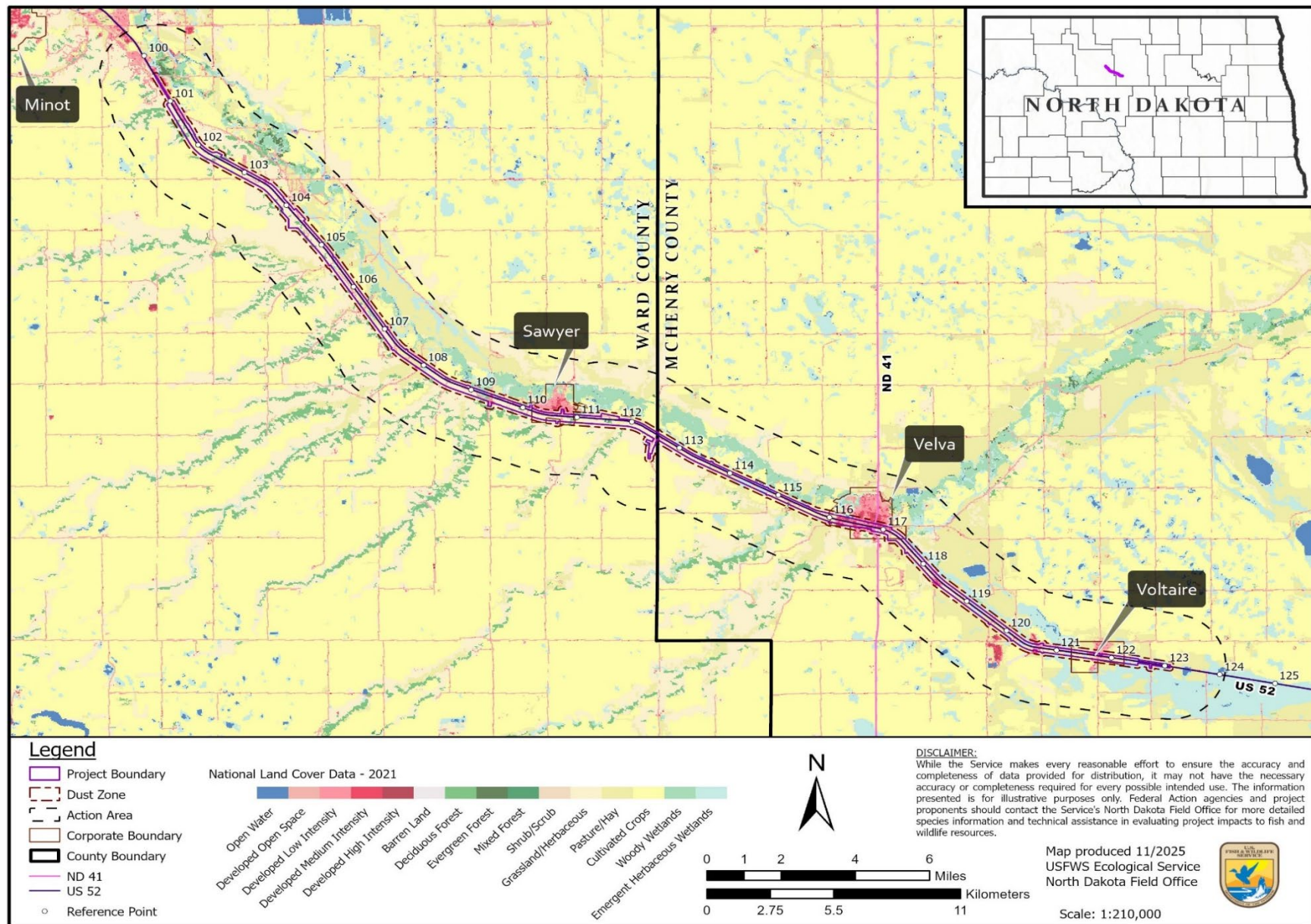
The Proposed Action spans across the McHenry–Ward County line in North Dakota along the US 52 corridor. Land use classification of the Proposed Action’s defined action area, as identified by the U.S. Geological Survey (USGS) National Land Cover Database (NLCD) in 2021, is primarily comprised of cultivated crop, grassland, and pasture (~75% of the total action area) land use types (USGS 2024). The Souris River, a main water feature that runs along the north side of US 52 from RP100 to RP116 – where it breaks away from the Proposed Action corridor to head northward towards Canada (Figure 10), is where a majority of the woodland classified land use area is located. Developed portions of the action area include the unincorporated community of Logan and the

incorporated boundaries of Sawyer, Velva, and Voltaire; US 52, ND 41, and various other county/city roadways. Residential and commercial properties occur throughout the action area as well. Wetlands and other water features are primarily located in the most southeastern portion of the Proposed Action's action area. There is a one named, small open water feature (Potters Lake) in this southeastern portion of the action area; all other water features are unnamed emergent herbaceous wetlands or named features that have transitioned from open water to an emergent herbaceous wetland (Erikson Lake; USGS 2024). Table 5 and Figure 10 quantify and map the land use types within the action area, dust zone, and project boundary.

**Table 5: Existing Land Use within the Action Area, Dust Zone, and Project Boundary – Source: USGS 2024: National Land Cover Data - 2021**

| NLDC Classifier              | Land Use    | Action Area<br>(1 mile buffer) |                    | Dust Zone<br>(300ft buffer) |                    | Project Boundary |                    |
|------------------------------|-------------|--------------------------------|--------------------|-----------------------------|--------------------|------------------|--------------------|
|                              |             | Percentage                     | Approx.<br>Acreage | Percentage                  | Approx.<br>Acreage | Percentage       | Approx.<br>Acreage |
| Open Water                   | Open Water  | 0.58%                          | 196.54             | 0.25%                       | 9.61               | 0%               | 0                  |
| Developed Open Space         | Developed   | 7.75%                          | 2,606.43           | 22.43%                      | 850.95             | 30.48%           | 624.32             |
| Developed Low Intensity      |             |                                |                    |                             |                    |                  |                    |
| Developed Medium Intensity   |             |                                |                    |                             |                    |                  |                    |
| Developed High Intensity     |             |                                |                    |                             |                    |                  |                    |
| Barren Land                  | Barren Land | 0.10%                          | 33.67              | 0.02%                       | 0.66               | 0%               | 0                  |
| Deciduous Forest             | Woodland    | 3.53%                          | 1,186.91           | 3.34%                       | 126.87             | 2.81%            | 57.47              |
| Evergreen Forest             |             |                                |                    |                             |                    |                  |                    |
| Mixed Forest                 |             |                                |                    |                             |                    |                  |                    |
| Shrub/Scrub                  | Shrubland   | 0.05%                          | 16.83              | 0.01%                       | 0.44               | 0.02%            | 0.44               |
| Grassland/Herbaceous         | Grassland   | 20.88%                         | 7,019.57           | 29.73%                      | 1,127.83           | 30.90%           | 632.87             |
| Pasture/Hay                  | Pasture     | 20.20%                         | 6,791.55           | 20.75%                      | 787.19             | 18.99%           | 388.94             |
| Cultivated Crops             | Cultivated  | 33.41%                         | 11,231.80          | 14.37%                      | 545.24             | 10.18%           | 208.40             |
| Woody Wetlands               | Wetlands    | 13.49%                         | 4,534.69           | 9.10%                       | 345.23             | 6.62%            | 135.57             |
| Emergent Herbaceous Wetlands |             |                                |                    |                             |                    |                  |                    |
| Total:                       |             | 100                            | 33,618             | 100                         | 3,794              | 100              | 2,049              |





**Figure 10: Land Use Classifications at the Proposed Action – Source: USGS 2024: National Land Cover Data – 2021**



## 4.2 STATUS OF THE SPECIES IN THE ACTION AREA

### 4.2.1 Landscape Connectivity

The Proposed Action is located among an abundance of patchwork agriculture, prairie pothole wetlands, remanent grasslands, and some development land use features (Figure 10). The Dakota skipper habitat suitability model (DASK Model) indicates where suitable habitat for the Dakota skipper is most likely to occur (Barnes et al. 2024). At the Proposed Action, modeled habitat is primarily contained to the various draws and the upland edges of water features left unconverted to another land use (Figure 12). This modeled habitat is rather contiguous along the Proposed Action corridor. Recent aerial imagery is used to help identify where potential dispersal barriers currently exist on the landscape. To provide real-time conditions of habitat, a qualitative visual assessment for suitable Dakota skipper habitat was completed within the Proposed Action's project boundary.

To assess landscape connectivity of the Proposed Action, the USFWS Dakota skipper range (USFWS 2023) is used in conjunction with on-site delineated Dakota skipper habitat (NDDOT 2025 BA) and the DASK Model (Barnes et al. 2024) to refine the environmental baseline analysis herein. When evaluating landscape connectivity, the Service assumes the maximum dispersal distance for the Dakota skipper to be 1 km (0.62 miles); see SPECIES RANGEWIDE DISTRIBUTION section for more details. In other words, suitable habitat separated by more than 1 km are considered geographically isolated from one another in this analysis.

The Proposed Action's defined action area is roughly 33,618 acres; of that, approximately 23,965 acres overlap with the USFWS Dakota skipper range (Figure 12). Land use classifications indicate approximately 13,811 acres (~41%) of the action area is grassland or pastureland (i.e., the land use classifications most likely to contain suitable habitat for the Dakota skipper) (Table 5, Figure 10; USGS 2024). The DASK Model further refines this assessment indicating approximately 10,084 acres (~30%) of the action area to have a predicted habitat suitability index  $\geq 50\%$  (Table 6, Figure 12; Barnes et al. 2024).

The Proposed Action's dust zone is roughly 3,794 acres; of that, approximately 3,213 acres overlap with the USFWS Dakota skipper range (Figure 12). Land use classifications indicate approximately 1,915 acres (~50%) of the dust zone is grassland or pastureland (Table 5, Figure 10; USGS 2024). The DASK Model further refines this assessment indicating approximately 1,385 acres (~37%) of the dust zone have a predicted habitat suitability index  $\geq 50\%$  (Table 6, Figure 12; Barnes et al. 2024).

The Proposed Action's project boundary (i.e., project footprint) is approximately 2,049 acres, of which roughly 1,779 acres overlap with the USFWS Dakota skipper range (Figure 12). Land use classifications indicate approximately 1,022 acres (~50%) of the project boundary is grassland or pastureland (Table 5, Figure 10; USGS 2024). The DASK Model further refines this assessment indicating approximately 759 acres (~37%) of the project boundary have a predicted habitat suitability index  $\geq 50\%$  (Table 6, Figure 12; Barnes et al. 2024). The project boundary can be further refined in this analysis as the completed qualitative visual assessment provides timely on-site habitat

suitability information (see Section 4.2.2 for more detail). A total of 34.03\* acres of suitable Dakota skipper habitat was delineated on-site. All delineated patches of suitable habitat, except for one (Patch ID 10 [Table 7]; also the only patch located within a corporate boundary), did overlap with areas of the DASK Model that have a predicted habitat suitability index  $\geq 50\%$  (Figure 12).

**Table 6: Probably of Suitable Habitat for the Dakota Skipper within the Action Area, Dust Zone, and Project Boundary – Source: Barnes et al. 2024 – DASK Model**

| Dakota Skipper:<br>Predicted Habitat<br>Suitability Index | Action Area<br>(1 mile Buffer) |                  | Dust Zone<br>(300 ft Buffer) |                 | Project Boundary |                 |
|-----------------------------------------------------------|--------------------------------|------------------|------------------------------|-----------------|------------------|-----------------|
|                                                           | Percentage                     | Approx. Acreage  | Percentage                   | Approx. Acreage | Percentage       | Approx. Acreage |
| 1 – 29 [Low]                                              | 52.8%                          | 17,750.64        | 36.6%                        | 1,387.89        | 33.5%            | 686.41          |
| 30 – 49                                                   | 17.2%                          | 5,783.05         | 26.9%                        | 1,020.89        | 29.4%            | 603.14          |
| 50 – 69                                                   | 14.6%                          | 4,915.82         | 21.1%                        | 800.55          | 22.0%            | 450.19          |
| 70 – 89                                                   | 12.1%                          | 4,066.82         | 13.2%                        | 499.43          | 12.9%            | 265.17          |
| 90 – 99 [High]                                            | 3.3%                           | 1,101.67         | 2.2%                         | 85.24           | 2.2%             | 44.08           |
| <b>Total:</b>                                             | <b>100</b>                     | <b>33,618</b>    | <b>100</b>                   | <b>3,794</b>    | <b>100</b>       | <b>2,049</b>    |
| <b><math>\geq 50\%</math> Probably:</b>                   | <b>30%</b>                     | <b>10,084.31</b> | <b>36.5%</b>                 | <b>1,385.22</b> | <b>37.1%</b>     | <b>759.44</b>   |

#### 4.2.2 Qualitative Visual Habitat Assessment of the Project Boundary

In June of 2024, a qualitative visual habitat assessment identified thirty-six (36) patches, amounting to 31.99\* acres, of suitable Dakota skipper habitat within the project boundary. Some suitable patches did extend beyond the limits of the project boundary; these patches were clipped to the project boundary extant prior to the acreage calculation.

The qualitative visual habitat assessment noted presence and abundance of requisite plant species, woody species, and invasive species. Estimates of plant cover, bare ground, litter, and rock were also visually assessed. Field delineated areas of suitable Dakota skipper habitat typically contained two or more requisite forbs and multiple requisite grass species present.

Throughout the project boundary, delineated areas of suitable habitat were often identified on hilltops between wooded draws or ravines associated with Type B habitat (NDDOT 2025 BA). The most commonly identified requisite species consisted of little bluestem, purple coneflower, prairie sagewart, prairie smoke, groundplum milkvetch, and green needlegrass. A variety of other, non-requisite, native species were identified, including field pussytoes (*Antennaria neglecta*), candle anemone (*Anemone cylindrica*), common yarrow (*Achillea millefolium*), western wallflower (*Erysimum capitatum*) and wild bergamont (*Monarda fistulosa*).

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\*Suitable habitat acreage calculations herein do not match those in the Biological Assessment for the Proposed Action. The Service requested a recalculation due to differing acreage calculations being presented throughout submitted materials. Acreage calculations used herein are the corrected recalculation reflected by the 2026 BA Memo.

All delineated patches of suitable habitat show signs of degraded quality as they contain undesirable species (e.g., Kentucky bluegrass); frequently, undesirable species were identified as a dominant within the suitable habitat patch. Furthermore, these suitable patches were typically surrounded by plant communities made up of undesirable or monoculture species, such as smooth brome (*Bromus inermis*), and evidence of prairie succession was noted along the fringes of the suitable habitat patches, with observed western snowberry (*Symphoricarpos occidentalis*) or silverberry (*Elaeagnus commutate*) encroachment (NDDOT 2025 BA).

Two parcels were inaccessible during the June 2024 qualitative visual habitat assessment – Sections 9 and 10 in Township 153 North (T153N), Range 81 West (R81W) – both were recommended for a future assessment as visual observations from the roadway indicated comparable compositions to the other areas that had been identified as suitable Dakota skipper habitat.

In 2025, refinements were made during the preliminary design that changed the extent of the project boundary, adding approximately 57-acres. In June of 2025, seventeen (17) additional areas – including the inaccessible parcels from the June 2024 qualitative visual habitat assessment – were surveyed using the same methodology as the 2024 assessment. This resulted in three (3) additional delineated patches of suitable Dakota skipper habitat, totaling approximately 2.04 acres. These additional patches all occurred in upland grassland areas consistent with Type B habitat; plant species composition was similar to the previously identified patches in the 2024 survey (NDDOT 2025 BA).

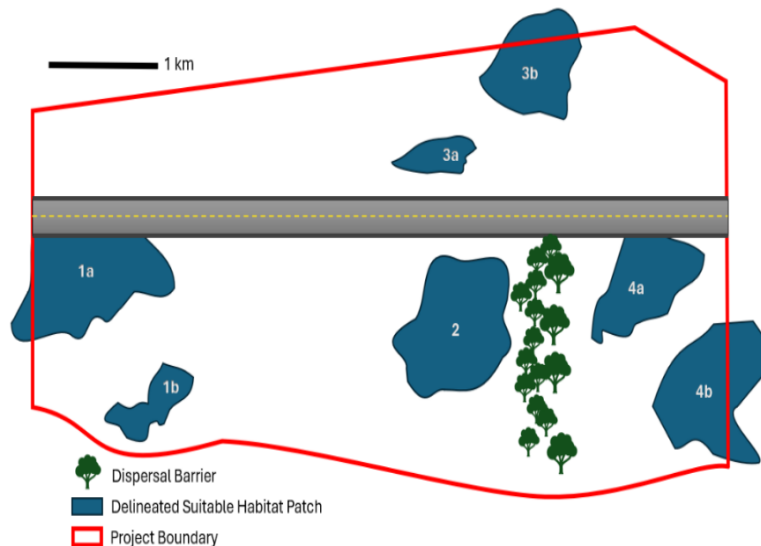
Collectively, thirty-nine (39) patches, amounting to 34.03\* acres of suitable Dakota skipper habitat, were delineated within the defined project boundary (Table 7). All delineated patches, except for 13a and 13b, are located along the southern side of US 52. More details on delineated patch locations are in the attachments provided with the 2025 BA.

**Table 7: Delineated Suitable Dakota Skipper Habitat Patches within the proposed action project boundary – Source: NDDOT 2025 BA**

| County | Segment | Patch ID | Acreage |
|--------|---------|----------|---------|
| Ward   | 1       | 1a       | 0.326   |
|        |         | 1b       | 0.194   |
|        |         | 2a       | 0.264   |
|        |         | 2b       | 0.152   |
|        |         | 2c       | 0.558   |
|        |         | 3        | 2.246   |
|        |         | 4a       | 3.240   |
|        |         | 4b       | 0.662   |
|        |         | 4c       | 0.526   |
|        |         | 5a       | 0.487   |
|        |         | 5b       | 0.611   |
|        |         | 5c       | 0.249   |
|        |         | 5d       | 0.602   |
|        |         | 5e       | 0.155   |
|        |         | 5f       | 0.186   |
|        |         | 5g       | 2.079   |
|        |         | 6a       | 0.342   |
|        |         | 6b       | 1.826   |
|        |         | 7a       | 0.396   |

| County  | Segment | Patch ID | Acreage |
|---------|---------|----------|---------|
| Ward    | 1       | 7b       | 0.515   |
|         | 2       | 8a       | 1.146   |
|         |         | 8b       | 0.482   |
|         |         | 9        | 0.138   |
|         |         | 10       | 0.308   |
|         |         | 11a      | 0.741   |
|         |         | 11b      | 0.593   |
|         |         | 11c      | 1.843   |
|         |         | 11d      | 0.651   |
|         |         | 11e      | 0.926   |
|         |         | 11f      | 0.076   |
|         |         | 11g      | 0.320   |
|         |         | 11h      | 0.577   |
|         |         | 12       | 1.126   |
| McHenry | 5       | 13a      | 0.150   |
|         |         | 13b      | 0.566   |
|         |         | 14a      | 0.517   |
|         |         | 14b      | 3.169   |
|         |         | 14c      | 4.040   |
|         |         | 14d      | 1.045   |
| Total:  |         |          | 34.03   |

Delineated habitat Patch ID (Table 7) represents the dispersal connectivity of these on-site delineated patches (i.e., number corresponds to a patch grouping, letter corresponds to an individual patch within that grouping). The patch grouping is reflective of those individual patches identified along the linear corridor that are not separated by more than 1 km from another patch and/or are not separated by a dispersal barrier (Figure 11). Though adult skippers can traverse areas of disturbance (e.g., roadway corridor) (Skadsen 2001, *pers. comm.*, in 79 FR 63672) most experts agree that Dakota skippers are more likely to avoid these areas (Dana, Royer, and Westwood 2015 *pers. comm.*). As such, Patch ID takes the roadway into account as a dispersal barrier. It should be noted that indicated connectivity of the on-site delineated habitat patches may not fully reflect the landscape extent of connectivity between these habitat patches.



**Figure 11: Visual Representation of On-Site Delineated Patch Connectivity.**



#### 4.2.3 **Number and Distribution of Local Populations**

There is one historic Dakota skipper site within the action area, overlapping with the DASK model south of RP 109. This historic site was surveyed twice in 1991 (Royer) during which four Dakota skippers (Male n=1; Female n=3) were observed; however, it was then indicated that the long-term prognosis for the site was poor due to it being an extremely small private parcel. No surveys for Dakota skippers have occurred at this site since 1991, and the Service has given it a status classification of “possibly extirpated.”

Adjacent to the action area (within 1 km), there is one historic Dakota skipper site found overlapping with the DASK model near RP 124. This historic site was surveyed five times between 1991 and 1998, two years of which resulted in positive Dakota skipper observations (Table 8; Royer 1997; USFWS 2025, unpublished. geodatabase). No surveys for Dakota skippers have occurred at this site since 1998, and the Service has given it a status classification of “extirpated” due to the assumption that habitat is no longer present.

**Table 8: Survey History of Historic Site Adjacent to the Action Area – Source: USFWS 2025, unpublished. geodatabase**

| Survey Year | Results           | Surveyor Notes                                                                                                                                                                       |
|-------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1991        | Not Detected      | Less than an acre of habitat on both sides of the road. Railroad maintenance vehicles destroyed a large segment of the habitat in 1997. Long-term prospects of site are unfavorable. |
| 1996        | Present<br>[n=15] |                                                                                                                                                                                      |
| 1997        | Not Detected      |                                                                                                                                                                                      |
|             | Present<br>[n=1]  |                                                                                                                                                                                      |
| 1998        | Not Detected      |                                                                                                                                                                                      |

All other historic Dakota skipper sites and previously surveyed locations occur greater than 5 miles from the action area boundary and have major connectivity barriers, such as the city of Minot, ND or unsuitable dispersal habitat (i.e. agricultural fields) that would hinder movement of Dakota skippers from those sites to ones located within the action area.

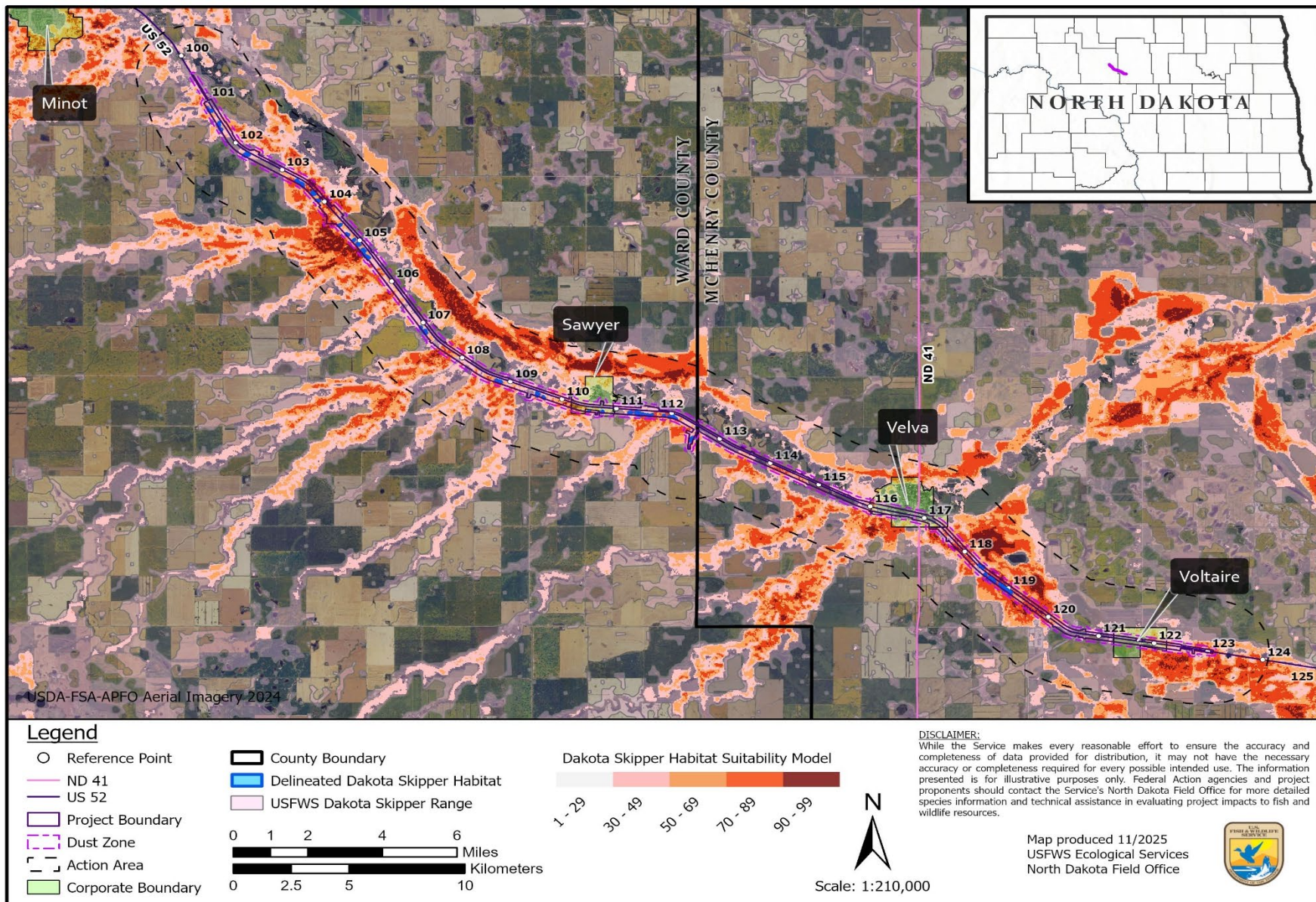
The current distribution of Dakota skippers coincides with the Proposed Action. Dakota skippers may be present within the Action Area. Recent survey efforts for the Proposed Action have, thus far, involved a qualitative visual habitat assessment to identify suitable habitat within the project boundary. While no recent presence/absence surveys for the Dakota skipper have been completed, Dakota skipper occupancy of suitable habitat within the action area can’t be ruled out due to 1) historical knowledge of Dakota skipper presence in and adjacent to the action area and 2) extent of suitable habitat modeled and delineated along the Proposed Action corridor. Therefore, the Federal action agency has chosen to presume on-site delineated suitable habitat patches within the project boundary to be occupied by Dakota skippers.

### 4.3 FACTORS AFFECTING THE SPECIES WITHIN THE ACTION AREA

Stressors affecting the grasslands and associated biota of the action area include habitat loss and fragmentation, habitat degradation from grazing, invasion of non-native plant species, and fire suppression/woody plant expansion. Dakota skippers have been documented to be sensitive to these stressors (79 FR 63672).

#### 4.3.1 Previous Consultations that overlap with the Action Area

- Intra-Service Section 7 Programmatic Consultation on Issuance of Section 10(a)(1)(A) Scientific Take Permits and related activities
  - On May 30, 2018, the Service completed a Biological Opinion on the issuance of section 10(a)(1)(A) recovery permits. Specifically, the Opinion analyzed the effects of gathering scientific information, via the capture and handling of the species, to document occupied habitat and facilitate captive rearing. Incidental take in the form of harm (non-lethal) is expected to occur from netting and associated handling. The Service expects non-lethal injuries to occur to no more than 9 Dakota skippers in any single year and no more than 2,560 Dakota skippers are likely to die during captive rearing each year (USFWS 2018a).
- FHWA/NDDOT Programmatic Consultation for Geotechnical Soil Borings along US Highway 52 – PCN 24012
  - On November 26, 2024, NDDOT completed a programmatic consultation with the Service, under the FHWA/NDDOT Programmatic Biological Assessment, for a preliminary engineering study related to the expansion of US Highway 52 (i.e., the Proposed Action herein) that involved 29 geotechnical boring locations spaced between RP 101.2 to RP 122.52. No geotechnical boring locations impacted suitable habitat for the Dakota skipper and all activities were complete by the end of January 2025. The Service concurred with a *may affect, not likely to adversely affect* determination for the Dakota skipper.



**Figure 12: USFWS Range (USFWS 2023), Dakota Skipper Habitat Suitability Model (1 = Low Suitability; 99 = High Suitability; Barnes et al. 2024), and Delineated Suitable Habitat Patches (2025 BA) at the Proposed Action Location**



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## **5.0 EFFECTS OF THE ACTION**

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Pursuant to ESA section 7 regulation (50 C.F.R. § 402.14 (g)(3)) the Service has a responsibility to “evaluate the effects of the action...on the listed species or critical habitat” during formal consultation. The effects of the action “are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action but that are not part of the action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action.” (50 C.F.R. § 402.02). In other words, this section is a reasonable prediction of the consequences to individuals of a species or critical habitat and the environmental changes brought about by implementation of the proposed action. This section is not an exploration of alternatives to the proposed action.

The Service previously identified and described the activities included as part of the Proposed Action herein (see DESCRIPTION OF THE PROPOSED ACTION). Our analysis of the consequences caused by these activities follows.

### **5.1 EVALUATION OF POTENTIAL STRESSORS**

When evaluating potential stressors on listed species, the Service attempts to describe and characterize the expected number, gender, age/life stage, and populations that are anticipated to be exposed to any given stressor; further described in terms of the timing, duration, frequency, magnitude, and location.

Given the inconspicuous nature of Dakota skippers and specialized experience required to accurately identify and detect this species in the wild, it is impractical for the Service to attempt to quantify the number of individual Dakota skippers that may be injured, killed, or have a response that significantly disrupts normal behavior from the Proposed Action. As a result, this analysis uses suitable habitat as a surrogate for the species due to the tight correlation between suitable habitat and the presence of this species. However, some context of the redundancy, trend, and observed Dakota skipper encounter rates is necessary and appropriate to evaluate impacts from the Proposed Action on the survival and recovery of the species. Additionally, the within- and between-year variability of weather conditions is considered, as this influences the species’ exposure risk—weather affects habitat conditions which then affects the foraging, reproduction, and dispersal ability of the Dakota Skipper.

Project stressors include activities that modify or remove native prairie, leading to Dakota skipper habitat loss, fragmentation, and/or degradation. Also discussed are stressors that could impact an individual Dakota skipper such as auditory, visual, and/or physical components caused by moving construction equipment and vehicle traffic throughout the life of the Proposed Action. Following a review of intended activities, the Service has identified six (6) general categories (Section 5.1.1 – 5.1.6) of potential stressors associated with the Proposed Action. The intended activities and stressors are further broken down via an Impact-Exposure-Response-Effect analysis (Table 9).



### ***5.1.1      Acoustic Stressors***

The Proposed Action is expected to expose Dakota skippers to both above-ambient continuous and impulsive sound pressures of variable intensity and timing. Above-ambient sound levels are expected during all phases of development from the increased use of equipment and vehicles, including a range of small to heavy construction equipment, light-duty vehicles, ATVs, and other mechanical tools (e.g., chainsaws, mowers).

Though it can be rather difficult to clearly define an insect ear, around 85% of all adult butterflies and large moth species (i.e., lepidoptera) have some type of auditory organ (Minet & Surlykke 2012). For example, adult butterfly species in the Satyrini group have a unique inflated wing vein that contributes to hearing (Sun et al. 2018). At the larval life stage, many lepidoptera species detect airborne vibrations through specialized hairs on their bodies (Minet & Sutlykke 2012). Detailed larva stage hearing studies appear to be limited to one species, the cabbage moth (*Mamestra brassicae*); however, the larval hearing capability of this one species may not be representative of all others (Taylor & Yack 2019).

The Service was unable to locate literature concerning Dakota skippers' ability to detect and response to acoustic stressors. However, several experts assert that sound is highly unlikely to impact the species or cause a response (Dana, Royer, and Westwood 2015 pers. comm.). While the species may be capable of sensing vibrations from other flying insects for the purposes of mate seeking (Dana 2015 pers. comm.), the Service found no evidence suggesting that noise generated from the construction activities herein would elicit a disruptive (positive or negative) behavioral response or injurious physiological impairment to adults or larvae of the species. Furthermore, the likelihood of detecting a measurable biological response from generated noise on an individual Dakota skipper is expected to be extremely low. Therefore, direct and indirect effects to Dakota skippers from exposure to above ambient noise levels generated by the Proposed Action are considered discountable.

### ***5.1.2      Visual Stressors***

The Proposed Action would involve visual stressors from the physical presence of humans, moving vehicles and equipment on the land surface, lighting, and various other development activities that may be disruptive to the Dakota skipper. This section only analyses the visual stressors of the associated activities and does not include an assessment of any potentially associated physical injury or mortality as those are discussed in the next section. Visual stressors would occur during all phases of the Proposed Action.

Visual stressors are expected to have no effect on the immobile egg stage and the larval stage of the Dakota skipper. Though Dakota skipper larvae likely have visual capability similar to other lepidoptera, they remain in ground surface shelters during the day and emerge at night to forage. Visual stressors from the Proposed Action would primarily occur during the day, therefore, visual stressor to eggs and larvae are considered discountable.

Visual stressors during the adult life stage, typically occurring June 10 – July 25 in North Dakota, may affect the Dakota skipper. The Service was unable to locate literature concerning the actual sight capabilities of an adult Dakota skipper; however, it has been noted that skipper butterflies (Lepidoptera: Hesperidae) generally exhibit a fast startle reflex to camera flashes (Sourakov 2009).

Therefore, the Service assumes that an adult Dakota skipper likely has visual capabilities and startle responses to visual stressors similar to that noted for other skipper butterflies.

During pre-construction activities, there would be visual stressors from low intensity human presence and activity, such as surveyors and biologists completing staking and/or surveys on foot or by ATV over the course of a few days. It should be noted that the Service has already assessed surveying activities for the species via the Intra-Service Section 7 Programmatic Consultation on Issuance of Section 10(a)(1)(A) Scientific Take Permits and related activities and incorporate this analysis by reference. Visual stressors from moderate intensity human presence and activities would occur during the pre-construction phase from utility relocations. Visual stressors from high intensity human presence and activities would occur during the construction phase of the Proposed Action.

Regardless of intensity, any human presence and associated activities occurring within action area have the potential to visually disrupt adult Dakota skippers as they move about naturally within and between their habitat patches. This disruption could cause adult Dakota skipper individuals to more frequently move from resting/nectaring locations, resulting in energy expensive flight path changes or a flee responses. Visual stressors continuing over longer periods (i.e. days to weeks) may result in deleterious chronic effects like increased susceptibility to fatigue and disease from the increased energy expenditure. Continued disturbance could also potentially lead to a "stress" response such as avoidance or lower use of suitable habitat. However, measuring this type of response is likely not feasible nor is it considered biologically meaningful at the individual scale. Furthermore, the likelihood of detecting a measurable effect at the population level is expected to be extremely low. Therefore, direct and indirect effects to Dakota skippers from exposure to visual stressors during construction of the Proposed Action are considered insignificant.

Artificial lighting is expected to occur during construction and continue post-construction from general traffic usage. Light pollution associated with artificial lighting could theoretically attract adult Dakota skippers or alter their reproductive behavior during the flight period. However, Dakota skipper experts Dana and Royer agreed that artificial lighting likely does not pose a threat to the species, so the Service considers this to be discountable.

Following completion of the Proposed Action, adult Dakota skipper individuals in adjacent habitats are unlikely to be affected in their daily movements by nearby visual stressors. Post-construction visual stressors would primarily occur within or directly adjacent to the existing roadway where it would be highly unlikely for a Dakota skipper to be present. Adult skippers can traverse areas of disturbance (e.g., roadway corridor) (Skadsen 2001, *pers. comm.*, in 79 FR 63672) or could potentially be pushed by wind (or other natural processes) across areas of non-suitable habitat, but most experts agree that Dakota skippers are more likely to avoid these areas (Dana, Royer, and Westwood 2015 *pers. comm.*), as they prefer resting/nectaring in undisturbed areas. These visual stressors are also already present from general operation of the existing roadway. As the Proposed Action is not expected to increase general usage outside of what would naturally take place and we are unable to meaningfully measure the effect, the Service considers the post-construction visual stressor effects to be insignificant.

### 5.1.3 Physical Injury

The Proposed Action involves activities that could result in physical injury to Dakota skippers. Physical injuries are expected to coincide with all Dakota skipper life stages and include, but are not limited to, crushing or damaging any parts of the egg, larva, pupa, and/or adult that would reduce fitness and/or lead to mortality. The potential for physical injury occurs during all phases of the Proposed Action from light to heavy duty construction equipment, vehicles, ATVs, and walking within and through areas occupied by Dakota skippers.

The physical presence of humans and associated activities that do not involve machinery (e.g., walking site visits and surveys) within suitable habitat could cause physical injury to eggs, larvae, pupae, and/or adult Dakota skippers. Prior to construction, one year of pre-construction Dakota skipper occupancy surveys will be conducted within all project boundary delineated suitable habitat patches in accordance with the most current Service protocol. Additionally, at least one year of post-construction occupancy surveys will occur following vegetation re-establishment in disturbed areas and within five years following completion of the Proposed Action. The Service has already assessed occupancy surveying activities for the species via the Intra-Service Section 7 Programmatic Consultation on Issuance of Section 10(a)(1)(A) Scientific Take Permits and Related Actions (USFWS 2018a) and, therefore, this analysis is included by reference.

Mechanized activities that could result in physical injury to the Dakota skipper are 1) movement of equipment through suitable habitat any time of year and/or adjacent grassland habitat during the adult flight period and 2) removal of suitable habitat and/or adjacent grassland topsoil. Topsoil/vegetation removal or equipment traveling through suitable habitat would impact developing eggs, larvae, pupae and/or adult Dakota skippers via crushing or striking while in cover or ground shelters, nectaring, resting, loafing, mating, or depositing eggs. Vegetation removal and/or equipment traveling through adjacent grasslands during the adult flight period could crush/strike foraging or dispersing adults.

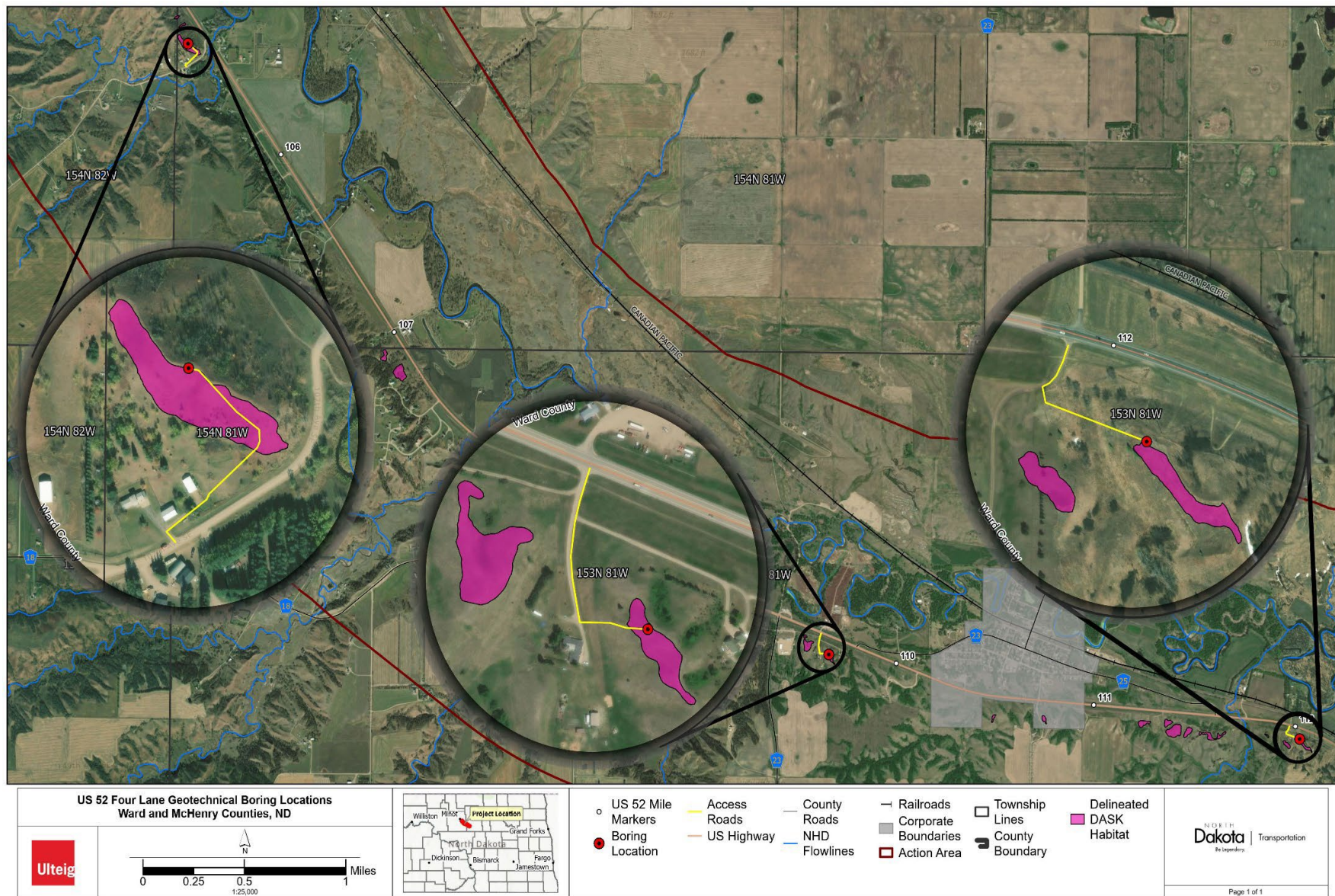
Pre-construction mechanized activities include geotechnical investigations. Every effort was made by the Federal action agency to find the best possible routes and locations for geotechnical access and boring to avoid and minimize impacts to the Dakota skipper. Three geotechnical sites have equipment traveling through or boring locations within or immediately adjacent to delineated suitable Dakota skipper habitat (Figure 13). Though a temporary disturbance, these geotechnical investigations could physically injure Dakota skippers via crushing or destroying overwintering larvae that occupy the traversed or bored locations of suitable habitat. As the number of Dakota skipper individuals cannot be quantified, acreage of suitable habitat has been used as a surrogate for the species presence. The Federal action agency, in collaboration with the Service, determined that 0.35 acres of delineated suitable habitat would be impacted by these three geotechnical investigations. This acreage determination was made from calculating the length of the drive in and back out by the width of the rig (traversing suitable habitat impact) and the length of the rig as a radius around a bore hole location (boring location impact). Thus, the Service expects all Dakota skipper larvae assumed to occupy the impacted 0.35 acres of delineated suitable habitat would be physically injured, via crushing, and permanently lost from the population. The Federal action agency has committed to mitigating the 0.35 acres impacted at an onsite/offsite Dakota skipper conservation bank that has been established in accordance with the USFWS North Dakota Field Office's *Guidance for Dakota Skipper Conservation Site Establishment* document (Section 2.3.3).

The other mechanized pre-construction activity that could result in physical injury to the Dakota skipper is utility relocation. As specific utility relocation routes are not yet known the Federal action agency assessed maximum risk to identified suitable habitat routes. Based on this analysis it is estimated up to 8,623 linear feet (LF) of underground fiber optic (7,553 LF) and electric (1,070 LF) would be routed through identified suitable Dakota skipper habitat. To account for the broadest area of potential impact from underground utility relocation, the Service assumes underground utilities will be installed via backhoe excavator (i.e., a 2-foot-wide removal of habitat for installation). It is expected that up to 0.40 acres of suitable habitat could be temporarily removed from underground utilities installation. As a result, any eggs, larvae, and/or pupae within suitable habitat or adult Dakota skippers using suitable or adjacent grassland habitat, if done during the flight season, will be permanently lost from the population.

The phases of the Proposed Action that have the highest expected magnitude and intensity of physical injury are those involving earthwork, during which construction equipment will be used for the removal of topsoil and vegetation. Site preparation for the Proposed Action would involve grading and clearing the construction area for conversion to the transportation corridor. Such activities will destroy any eggs, larvae, and/or pupae within suitable habitat or adult Dakota skippers using suitable or adjacent grassland habitat, if done during the flight season. As the number of Dakota skipper individuals cannot be quantified, acreage is used as a surrogate. The Federal action agency has determined that 4.04 acres of delineated suitable habitat fall within the grading limits. All other delineated suitable habitat will not be directly impacted and would be fenced and avoided during construction of the Proposed Action (see Section 2.3.3). Thus, the Service expects all Dakota skipper eggs, larvae, and pupae that presumably occupy the 4.04 acres of delineated suitable habitat to be destroyed during construction of the Proposed Action and permanently lost from the population. The Federal action agency has agreed to mitigation for any destroyed suitable habitat that was determined by pre-construction occupancy surveys to be occupied by Dakota skippers at an onsite/offsite Dakota skipper conservation bank that has been established in accordance with the USFWS North Dakota Field Office's *Guidance for Dakota Skipper Conservation Site Establishment* document (Section 2.3.3).

Adult Dakota skippers could be struck by vehicles or other mechanized equipment during any phase of the Proposed Action when it overlaps with the adult flight period (June 10 – July 25). This impact is most likely to occur in areas where native prairie is adjacent to existing roadways or in off-road areas where mechanized equipment is traveling or being used to complete the Proposed Action. The greatest frequency and intensity of mechanized equipment occurs during the construction phase which creates a higher potential of being struck. As discussed above, 4.04 acres of suitable habitat will be impacted by the proposed activities; all other delineated suitable habitat will be fenced and avoided per the Federal action agencies conservation measure commitments (Section 2.3.3). All other mechanized equipment activity increases would occur within adjacent grassland habitat. The likelihood of being able to accurately measure a strike effect from the increased frequency and intensity of mechanized equipment within the adjacent grassland habitat is extremely low and therefore considered by the Service to be insignificant.





**Figure 13: Geotechnical Boring Locations that Impact Delineated Suitable Dakota Skipper Habitat – Source: 2025 BA**

As Dakota skippers likely avoid unsuitable areas (Dana, Royer, and Westwood 2015 *pers. comm.* from), physical injury/mortality from being struck by mechanized equipment in these areas during construction is unlikely. Post-construction, adult Dakota skippers crossing the roadway could be exposed to physical injury or mortality from being struck by vehicles, but the Service does not expect the level of impact over the long-term to effect survival of populations in the surrounding area. Furthermore, the potential for general traffic vehicle strikes during the flight season is already present and the Proposed Action is not expected to contribute to increasing traffic volumes. Thus, the Service considers physical injury impacts within unsuitable areas to be discountable.

#### **5.1.4 Habitat Loss: Removal and Fragmentation**

Direct habitat loss is the most significant threat to the Dakota skipper (79 FR 63672). This threat is highly detrimental to their survival because Dakota skippers are obligate residents of native prairie (see SPECIES HABITAT REQUIREMENTS). Indirectly, habitat loss can further impact Dakota skipper survival via fragmentation, which increases dispersal barriers on the landscape. When fragmentation occurs at a scale where it becomes a barrier to dispersal, (meta) population sustainability is lost. If population isolation occurs, those populations become highly vulnerable (due to low resilience) to stochastic events and extirpation. Thus, barriers to dispersal can set in motion a lethal sequence that begins with population fragmentation, transitions to isolation, and culmination in a net reduction in Dakota skipper abundance, population stability and reproduction, and the overall area of occupancy within the range.

The Proposed Action is expected to result in permanent and temporary habitat loss (direct consequence). Habitat loss activities include the removal of suitable and/or adjacent grassland habitat vegetation either temporarily (i.e., to be reseeded) or permanently (i.e., not reseeded or conversion to developed transportation corridor). Habitat loss from the Proposed Action is expected to decrease Dakota skipper fitness and survival as suitable habitat and ample (~50% of the total project boundary acreage, see Table 5) roadside grassland/pasture habitat (i.e., dispersal/foraging habitat; Figure 14) exists within the project boundary. Though these roadside grassland remnants may not all be suitable for reproductive use, they can support Dakota skipper populations by providing foraging resources and dispersal corridors between larger reproductively suitable prairie remnant patches found along the Proposed Action corridor. Therefore, a roadway improvement project such as the Proposed Action could decrease available dispersal/foraging habitat leading to further fragmentation of extant populations (indirect consequence; 79 FR 63672).

Temporary and permanent suitable habitat loss from Proposed Action activities will occur during the pre-construction, specifically geotechnical investigation and utility relocation, and construction phases. Suitable habitat loss during pre-construction includes the permanent removal of less than 0.0001 acres from the geotechnical investigation and temporary removal of up to 0.40 acres from underground utility relocations. Suitable habitat removed from geotechnical investigation will be replaced with bentonite backfill making this a permanent impact. Approximately 8,623 linear feet (LF) of fiber optic (7,553 LF) and electric (1,070 LF) may be relocated within suitable habitat. To account for the broadest area of potential impact from underground utility relocation, the Service assumes underground utilities will be installed via backhoe excavator (i.e., a 2-foot-wide removal of habitat for installation).

During the construction phase, 4.04 acres of suitable habitat will be removed. Post-construction, the 4.04 acres will be reseeded by the Federal action agency with a seed mix high in native grasses and forbs. In the event not all reseeded areas establish within 5 year post-construction, the Federal action agency has proposed that 50 percent be considered a permanent impact and 50 percent be considered a temporary impact. As such, the construction phase of the Proposed Action is expected to permanently impact up to 2.02 acres and temporarily impact up to 2.02 acres of suitable Dakota skipper habitat.

Temporary and permanent dispersal habitat loss from Proposed Action activities will occur during the pre-construction, specifically utility relocation, and construction phases. During the pre-construction phase, approximately 407,890 LF of underground utilities and 70,574 LF of overhead utilities need to be relocated. The readjustment of overhead utilities would result in the relocation of up to 202 utility poles. Again, to account for the broadest area of potential impact, the Service assumes underground utilities will be installed via backhoe excavator (i.e., a 2-foot-wide removal of habitat for installation) and overhead utilities structures remove a 1-foot-diameter area of vegetation for pole installation. Again, though some areas may overlap with NCLD land use types that are unsuitable for Dakota skippers, it is conservatively presumed that these installations overlap with grassland/pastureland habitat types (USGS 2024; Figure 14). It is expected that 18.73 acres of dispersal habitat will be temporarily removed from underground utility relocation and 0.004 acres of dispersal habitat will be permanently removed from overhead utility pole relocation.

Dispersal habitat loss from the construction phase of the Proposed Action includes up to 110.81 acres of permanent removal (i.e., converted to paved roadway) and up to 395.02 acres temporary removal. The Federal action agency has committed to reseed any temporarily removed areas that fall within 250m of on-site delineated suitable habitat with a seed mix composed of native species and includes grasses and forbs necessary for Dakota skipper lifecycle needs, which in the long-term could result in increased habitat quality compared to baseline conditions.

Removal of adjacent grassland habitat (i.e., adult dispersal/foraging habitat) could indirectly effect Dakota skippers by decreasing available foraging resources and creating new dispersal barriers or further fragmentation of suitable habitat. For those areas where vegetation/topsoil removal is only temporary (i.e., habitat would be restored via reseeded following completion of Proposed Action activities) impacts from habitat loss would be felt until habitat is reestablished. For those areas where vegetation/topsoil removal is permanent, the Service expects that Dakota skipper populations utilizing habitats within the project boundary would become isolated if the permanent habitat loss spatially separate occupied sites (i.e., create a dispersal barrier) greater than 1 km—the furthest dispersal distance Dakota skippers are presumed to be capable of (see SPECIES RANGEWIDE DISTRIBUTION section).

#### **5.1.5 Habitat Degradation**

For a prairie obligate species like the Dakota skipper, development has been documented to reduce the capability of adjacent habitat that supports the critical life history processes (breeding, feeding, and sheltering) of the species. Direct habitat degradation is expected via vegetation trampling from both equipment and foot traffic; while indirect consequences are expected from undesirable plant species encroachment and microclimate modifications (i.e., hydrological adjustments or increased dust) associated with the Proposed Action.

Vegetation trampling is a direct consequence that is expected to occur predominantly during the pre-construction (e.g., surveys/data gathering, utility relocation, geotechnical investigation) and construction phases. A significant amount of foot traffic and off-road motorized vehicle use is required to address the planning and siting needs of the Proposed Action. While not continuous, pulses of activities are expected to modify the plant communities in those locations where activities have been concentrated enough to stunt growth, uproot plants, and create localized soil disturbance.

Vegetation trampling will occur in identified suitable habitat at three geotechnical investigation sites (Figure 13). Every effort was made by the Federal action agency to find the best possible routes and locations for geotechnical access and boring to avoid and minimize impacts to the Dakota skipper. A total of 0.35 acres of delineated suitable habitat would be impacted by these three geotechnical investigations (see Section 5.1.3 for more details). The Federal action agency has committed to fencing and avoiding all other identified suitable habitat areas within the project boundary that are not going to be directly impacted (see Section 2.3.3).

All other vegetation trampling impacts are expected to only occur in dispersal/foraging habitat. These impacts will likely reduce the number of available resources on the landscape for the species overall. During the pre-construction phase, 202 overhead utility poles will be relocated, and each pole is expected to have a 3-foot-diameter area of vegetation trampling impact. It is expected that up to 0.03 acres of Dakota skipper dispersal habitat will be impacted from the relocation of 202 overhead utility poles. Vegetation trampling impacts that could degrade dispersal habitat are also expected during other pre-construction activities and throughout the construction phase of the Proposed Action. However, the greatest extent of these impacts has likely already been captured by the HABITAT LOSS: REMOVAL AND FRAGMENTATION section calculations.

Anticipated increase in noxious and otherwise invasive plant species (i.e., undesirable plant species) would subject habitat to an additional stressor that would reduce its capability of supporting Dakota skippers. Undesirable species could out compete native forbs that are food sources for the Dakota skipper (Royer and Marrone 1992). Studies have found that presence and abundance of undesirable species does increase near development compared to undisturbed control sites, and development that leads to increased vehicle traffic offers more opportunities for the transport and dispersal of undesirable species (Bergquist et al. 2007; Preston 2015). Following construction, decreases in the native plant species are expected, leading to the reduction of available suitable habitat, loss of forage sources, increased growth of cool season grasses, and decreased forb density (Cochrane and Delphey 2002).



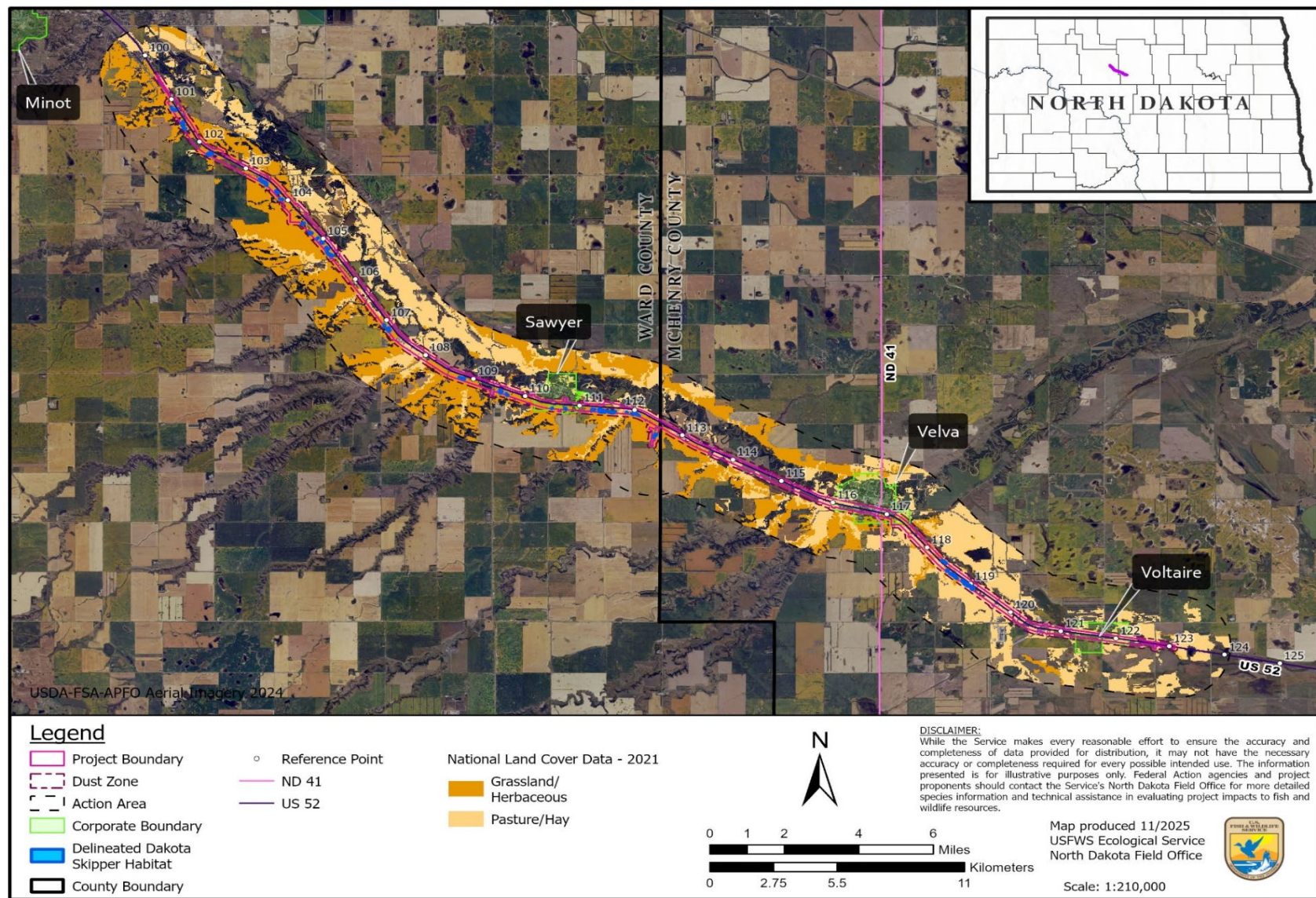


Figure 14: Grassland/Herbaceous Land Use Classification at the Proposed Action – Source: USGS 2024: National Land Cover Data - 2021

The Service recognizes that undesirable species (e.g., Kentucky bluegrass and smooth brome) have already been identified in delineated suitable habitat patches and surrounding habitats within the project boundary (NDDOT 2025 BA). It is likely that construction activities associated with the Proposed Action could provide a vector for undesirable species to spread further or newly introduced into native grassland habitat and for transport opportunities to continue following completion of the Proposed Action. Unmitigated, this could likely result in rapid changes (within five years) to the vegetative structure, species composition, and overall ground cover and, within 10 years post construction, radiate outwards up to 120 m from the road (Preston 2015). This would incrementally decrease the overall carrying capacity of suitable habitat adjacent to the Proposed Action, thus lowering the reproductive capability or individual fitness of Dakota skippers inhabiting these areas. These habitat changes are expected to be permanent in the absence of weed control and habitat enhancement measures.

The Federal action agency has committed to noxious weed control and to reseed any disturbed areas that fall within 250m of on-site delineated suitable habitat as a component of the Proposed Action and thus is expected to ameliorate the threat of undesirable species. It should also be noted that NDDOT is regulated by North Dakota Century Code (N.D.C.C.) which states “each person shall do all things necessary and proper to control the spread of noxious weeds” (N.D.C.C. § 4.1-47-02). By adhering to N.D.C.C. and following a designed noxious weed control plan, unwanted plant species would be controlled by methods that will not impair stages of the Dakota skipper life cycle. Therefore, the Service concludes that effects from undesirable plant species encroachment is discountable.

Microclimate modification discussed here includes effects from fugitive dust and hydrological changes. Fugitive dust is expected to occur during construction and post-construction from general traffic use post construction, though the accumulation amount will vary between the phases. Localized hydrological changes from construction of the Proposed Action, such as new drainage structure alignments, are expected post-construction.

Fugitive dust that settles upon vegetation has been shown to reduce photosynthesis, interfere with stomata function (the exchange rate or efficacy of carbon dioxide and oxygen), increase incidences of plant pests and disease, increase PH (>10.0), increase leaf surface temperature, introduce contaminants (further discussed in the next section), and reduce leaf surface thus lowering primary production (Thompson et al 1984; Farmer 1993; Sharifi et al. 1997; Lewis 2013; Gedafa 2013). This is likely to result in altering the edaphic conditions and microclimate (temperature and humidity).

The Service has determined the dust zone for the Proposed Action to be a 300ft buffer off the project boundary (see Section 2.4.1). It is assumed that fugitive dust deposits at a rate that has an inverse relationship to the distance from the dust source (i.e., larger quantities of dust accumulate nearer to the source). Thus, habitat closer to dust sources are likely experiencing greater accumulations of fugitive dust than those further away. Based upon prevailing wind directions in North Dakota, we expect fugitive dust would be predominantly distributed in a southward, southeasterly, and eastward direction (Enz 2003), however dust can migrate in any direction within the action area as the wind direction can vary.

The reproductive phases of the Dakota skipper have narrow tolerances for temperature and humidity at or near the soil surface (between soil surface and 2 cm depth: mean soil surface summer temperatures from 17.8 to 20.5 °C (64.0 to 68.9 °F), mean near soil surface dew point ranging from 13.9 to 16.8 °C (57.0 to 62.2 °F), and mean near soil surface relative humidity between 72.5 and 85.1 percent) (Royer et al. 2008). Of particular concern are the potentially lethal consequences to eggs, pupae, larvae, and plants from the increased PH associated with fugitive dust settling in areas important for Dakota skipper life cycle support.

It is reasonable to infer changes to the vegetative structure, species composition, and ground cover are likely to affect the necessary, narrow range microclimatic conditions near the soil surface (McCabe 1981) where Dakota skippers reside during almost their entire life span. However, we found no way to assess the magnitude of change in either the microclimate or overall vegetative composition that would likely occur in the 120 m buffer (Preston 2015) encompassing construction, making it even more difficult to predict how the species may respond to such vegetative changes later in time. Furthermore, the Proposed Action does occur along an existing roadway, so the overall degradation experienced by habitat from fugitive dust may increase temporarily while construction activities are underway but in the long-term these adjacent habitats are not expected to be incrementally reduced in quality further than what is already being experienced. The Federal action agency has committed to implement dust control measures as required under their general construction permit (Section 2.3.1). Therefore, the Service concludes fugitive dust effects from the Proposed Action to be discountable, with the implementation of dust control measures during the construction phase; and insignificant post-construction when the roadway is operating.

Final design of the Proposed Action, such as drainage structure alignments, could alter the current localized hydrologic conditions within the project boundary. Dakota skippers are especially vulnerable to 1) desiccation at the larval stage – if vertical water distribution is not present, and 2) mortality – if inundation is severe enough to alter vegetation (Section 3.4). However, any potential localized hydrologic changes from the Proposed Action are expected to only occur immediately adjacent to the roadway and would not change the overall hydrologic flows within the action area. Therefore, potential localized hydrologic changes from the Proposed Action are considered by the Service to be discountable as they are not expected to result in degradation of suitable habitat.

#### **5.1.6 Contaminants**

There are several chemical contaminants involved at different phases that could be introduced from construction activities such as equipment refueling, fugitive dust from construction activities, and the control of undesirable plant species. Contaminants pose the greatest threat of exposure to the Dakota skipper during the construction phase. The potential for a fluid release associated with excavators or other construction equipment is greatest during the construction phase as equipment is most mobile within the project boundary. Equipment refueling would be required on site on a daily basis during several stages of development. Refueling of vehicles would take place at designated fuel sites with spill prevention planning in place, reducing the potential for impacts to the species from spills.

Fugitive dust can contain heavy metals or other toxins. The Proposed Action does occur along an existing roadway, so while fugitive dust may increase temporarily while construction activities are underway, adjacent habitats are not expected to be incrementally reduced in quality further than what

is already being experienced from fugitive dust exposure. The Federal action agency has committed to implementing standard dust control measure (Section 2.3.1).

Exposure to toxic chemicals that would be expected to lead to injury or death is possible. Undesirable plant species control activities would be done regularly as a part of general ROW maintenance. Areas identified with undesirable plant species would be spot treated with backpack or ATV mounted sprayers. Because Dakota skippers are not generally associated with vegetation infused with a dominance of undesirable species, direct exposure to herbicides is not expected.

Both habitat destruction and degradation would be a possible impact from contamination events, through the reduction of available habitat on the landscape, fragmentation of existing contiguous habitat, and the destruction of small remnant fragments altogether. While possible, a large spill event of sufficient magnitude that results in direct exposure are historically rare (based upon reporting frequency). With a spill prevention plan in place, dust control measures, and lack of association between Dakota skippers and undesirable plants to be sprayed, the effects to the Dakota skipper from contaminants is expected to be insignificant or discountable.



**Table 9: Proposed Action Impact-Exposure-Response-Effect Analysis for the Dakota Skipper.**

|                  | ACTIVITY                   | TASK(S)                                                                                           | TOOLS<br>EQUIPMENT<br>METHOD                                                             | BIOLOGICAL IMPACT    |                    |   |                                                                                                                                          | CONSEQUENCE                |                                                                                                              |                                                                                                                                                                                                                                    |
|------------------|----------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------|--------------------|---|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  |                            |                                                                                                   |                                                                                          | IMPACT<br>“STRESSOR” | EXPOSURE TO IMPACT |   |                                                                                                                                          | RESPONSE                   | EFFECT                                                                                                       |                                                                                                                                                                                                                                    |
|                  |                            |                                                                                                   |                                                                                          |                      | Y                  | N | EXPLANATION                                                                                                                              | LIKELY RESPONSE            | LIKELY EFFECT                                                                                                | DEGREE OF EFFECT                                                                                                                                                                                                                   |
| PRE-CONSTRUCTION | Geotechnical Investigation | Transportation of a drill rig to bore holes between 30 to 150 feet deep to assess soil stability. | Heavy to light-weight trucks and trailers, drilling rig, bentonite backfill, hand tools. | Acoustic             | X                  |   | Noise produced from activities in and adjacent to identified suitable habitat.                                                           | None.                      | None.                                                                                                        | The Service found no evidence suggesting generated noise from construction activities would elicit a disruptive (positive or negative) behavioral response or injurious physiological impairment to any life stage of the species. |
|                  |                            |                                                                                                   |                                                                                          | Visual               |                    | X | Activity would occur when larvae are overwintering in ground level/subsurface shelters.                                                  | None. Species in diapause. | None.                                                                                                        | None.                                                                                                                                                                                                                              |
|                  |                            |                                                                                                   |                                                                                          | Physical Injury      | X                  |   | Equipment is driven through identified suitable habitat. Bore hole locations within or directly adjacent to identified suitable habitat. | None. Species in diapause. | Physical injury to overwintering larvae from crushing that leads to mortality.                               | Permanent loss of those individuals from the population. Up to 0.35 acres of direct temporary impact to suitable habitat.                                                                                                          |
|                  |                            |                                                                                                   |                                                                                          | Habitat Loss         | X                  |   | Destruction of suitable habitat at bore hole location. Bentonite as backfill.                                                            | None. Species in diapause. | Reduced feeding, breeding and sheltering resources for all life stages via habitat destruction at bore hole. | Insignificant, permanent removal of less than 0.0001 acres of suitable habitat. Biological effects can’t be meaningfully measured.                                                                                                 |
|                  |                            |                                                                                                   |                                                                                          | Habitat Degradation  | X                  |   | Vegetation trampling via equipment driving through suitable habitat.                                                                     | None. Species in diapause. | Altered feeding, breeding and sheltering resources for all life stages via vegetation trampling.             | Up to 0.35 acres of direct temporary disturbance to suitable habitat.                                                                                                                                                              |
|                  |                            |                                                                                                   |                                                                                          | Contaminates         | X                  |   | From equipment fuel and use of bentonite as backfill.                                                                                    | None.                      | None.                                                                                                        | Discountable, conservation measure commitments make effects extremely unlikely to occur.                                                                                                                                           |

|                  | ACTIVITY                                                                                               | TASK(S)                                                                                                                                                                                                                                                                                                                    | TOOLS<br>EQUIPMENT<br>METHOD                                                                   | BIOLOGICAL IMPACT                                                                                                                                                                                                                                           |                                           |   |                                                                                                                                                                                            | CONSEQUENCE                                                                   |                                                                                                                                  |                                                                                                                                                                                                                           |  |
|------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                  |                                                                                                        |                                                                                                                                                                                                                                                                                                                            |                                                                                                | IMPACT<br>“STRESSOR”                                                                                                                                                                                                                                        | EXPOSURE TO IMPACT                        |   |                                                                                                                                                                                            | RESPONSE                                                                      | EFFECT                                                                                                                           |                                                                                                                                                                                                                           |  |
|                  |                                                                                                        |                                                                                                                                                                                                                                                                                                                            |                                                                                                |                                                                                                                                                                                                                                                             | Y                                         | N | EXPLANATION                                                                                                                                                                                | LIKELY RESPONSE                                                               | LIKELY EFFECT                                                                                                                    | DEGREE OF EFFECT                                                                                                                                                                                                          |  |
|                  | Field Surveys                                                                                          | Dakota Skipper<br>Habitat and<br>Occupancy<br>Surveys                                                                                                                                                                                                                                                                      | Nets<br>Cameras<br>Walking                                                                     | Requires a federally permitted surveyor. The Service has already assessed surveying activities for the species via the Intra-Service Section 7 Programmatic Consultation on Issuance of Section 10(a)(1)(A) Scientific Take Permits and related activities. |                                           |   |                                                                                                                                                                                            |                                                                               |                                                                                                                                  |                                                                                                                                                                                                                           |  |
| PRE-CONSTRUCTION | Other Surveys<br>&<br>Project/Site<br>Preparation<br>Other Surveys<br>&<br>Project/Site<br>Preparation | Site visits for<br>various ground,<br>aerial, biological,<br>noise, cultural<br>resource, wetland<br>delineation,<br>utility locates.<br><br>Installation of<br>traffic control<br>signage, erosion<br>control devices,<br>temporary<br>lighting,<br>avoidance areas.<br><br>Staging areas,<br>including fueling<br>sites. | Walking<br><br>ATVs<br><br>Heavy to light-<br>weight trucks<br>and trailers.<br><br>Hand tools | Acoustic                                                                                                                                                                                                                                                    | See “Geotechnical Investigation” Activity |   |                                                                                                                                                                                            |                                                                               |                                                                                                                                  |                                                                                                                                                                                                                           |  |
|                  |                                                                                                        |                                                                                                                                                                                                                                                                                                                            |                                                                                                | Visual                                                                                                                                                                                                                                                      | X                                         |   | From low intensity human<br>presence/activity, machinery,<br>and artificial lighting during<br>the adult flight period.                                                                    | Flight path change response.<br>Flee response.<br>Attraction to light source. | Increased energy<br>expenditure or a stress<br>response.                                                                         | Insignificant, magnitude/<br>intensity, duration and<br>frequency of disruption is<br>unlikely to be biologically<br>meaningful.<br><br>Discountable, artificial<br>lighting effects are<br>unlikely.                     |  |
|                  |                                                                                                        |                                                                                                                                                                                                                                                                                                                            |                                                                                                | Physical Injury                                                                                                                                                                                                                                             | X                                         |   | From low intensity human<br>presence, activity, and<br>machinery use. Activities<br>would not occur within<br>identified suitable habitat.                                                 | None, any physical injury<br>leads to mortality.                              | Mortality from crushing<br>and/or damaging any<br>parts of egg, larva, pupa,<br>and/or striking adults.<br>[Dependent on timing] | Insignificant,<br>conservation measure<br>commitment that<br>identified suitable habitat<br>will be fenced and<br>avoided. Extremely low<br>likelihood of being able to<br>accurately measure the<br>biological response. |  |
|                  |                                                                                                        |                                                                                                                                                                                                                                                                                                                            |                                                                                                | Habitat Loss                                                                                                                                                                                                                                                |                                           | X | Vegetation removal is not<br>expected as part of this<br>activity.                                                                                                                         | Relocate.                                                                     | None.                                                                                                                            | None.                                                                                                                                                                                                                     |  |
|                  |                                                                                                        |                                                                                                                                                                                                                                                                                                                            |                                                                                                | Habitat<br>Degradation                                                                                                                                                                                                                                      | X                                         |   | Temporary pulses of<br>vegetation trampling from<br>low intensity foot traffic and<br>off-road motorized vehicles.<br>Activities would not occur<br>within identified suitable<br>habitat. | Relocate.                                                                     | Altered feeding,<br>breeding, sheltering<br>resources from localized<br>disturbance.<br>Reduced fitness and<br>survivorship.     | Insignificant, unable to<br>meaningful measure<br>effect.                                                                                                                                                                 |  |
|                  |                                                                                                        |                                                                                                                                                                                                                                                                                                                            |                                                                                                | Contaminates                                                                                                                                                                                                                                                | X                                         |   | From equipment fuel and<br>fugitive dust.                                                                                                                                                  | None.                                                                         | None.                                                                                                                            | Discountable,<br>conservation measure<br>commitments make<br>effects extremely unlikely<br>to occur.                                                                                                                      |  |

|                  | ACTIVITY              | TASK(S)                                                                                                             | TOOLS<br>EQUIPMENT<br>METHOD                                                                                                                                                                                       | BIOLOGICAL IMPACT    |                                           |   |                                                                                                                                     | CONSEQUENCE                                                                   |                                                                                                                                  |                                                                                                                                                                                                                                                                                  |  |
|------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                  |                       |                                                                                                                     |                                                                                                                                                                                                                    | IMPACT<br>“STRESSOR” | EXPOSURE TO IMPACT                        |   |                                                                                                                                     | RESPONSE                                                                      | EFFECT                                                                                                                           |                                                                                                                                                                                                                                                                                  |  |
|                  |                       |                                                                                                                     |                                                                                                                                                                                                                    |                      | Y                                         | N | EXPLANATION                                                                                                                         | LIKELY RESPONSE                                                               | LIKELY EFFECT                                                                                                                    | DEGREE OF EFFECT                                                                                                                                                                                                                                                                 |  |
| PRE-CONSTRUCTION | Utility<br>Relocation | Relocation of<br>overhead and<br>underground<br>utilities.<br><br>Types include<br>electrical, water,<br>and fiber. | Cranes, augers,<br>digger trucks,<br>bucket trucks,<br>skid steers,<br>backhoe<br>excavators,<br>boring<br>machines, bull<br>wheel<br>tensioners<br>among other<br>heavy to light<br>weight trucks<br>and trailers | Acoustic             | See “Geotechnical Investigation” Activity |   |                                                                                                                                     |                                                                               |                                                                                                                                  |                                                                                                                                                                                                                                                                                  |  |
|                  |                       |                                                                                                                     |                                                                                                                                                                                                                    | Visual               | X                                         |   | From moderate intensity<br>human presence/activity,<br>machinery use, and artificial<br>lighting during the adult<br>flight period. | Flight path change response.<br>Flee response.<br>Attraction to light source. | Increased energy<br>expenditure or a stress<br>response.                                                                         | Insignificant, unable to<br>meaningful measure<br>effect.<br><br>Discountable, artificial<br>lighting effects are<br>unlikely.                                                                                                                                                   |  |
|                  |                       |                                                                                                                     |                                                                                                                                                                                                                    | Physical Injury      | X                                         |   | From moderate intensity<br>human presence/activity and<br>machinery use.                                                            | None, any physical injury<br>leads to mortality.                              | Mortality from crushing<br>and/or damaging any<br>parts of egg, larva, pupa,<br>and/or striking adults.<br>[Dependent on timing] | Permanent loss of those<br>individuals from the<br>population. Up to 0.40<br>acres of direct temporary<br>removal of suitable<br>habitat for underground<br>installation.<br><br>Effects in adjacent<br>grassland habitat are<br>insignificant, unable to<br>accurately measure. |  |
|                  |                       |                                                                                                                     |                                                                                                                                                                                                                    | Habitat Loss         | X                                         |   | From removal and<br>installation of utilities<br>located within the project<br>boundary.                                            | Relocate.                                                                     | Reduced foraging and<br>dispersal resources.                                                                                     | Up to 0.40 acres of<br>suitable habitat<br>temporarily removed for<br>underground installation.<br><br>Up to 0.004 acres of<br>dispersal habitat<br>permanently removed and<br>up to 18.76 acres of<br>dispersal habitat<br>temporarily removed.                                 |  |

|                  | ACTIVITY              | TASK(S)                                                                                                             | TOOLS<br>EQUIPMENT<br>METHOD                                                                                                                                                                                       | BIOLOGICAL IMPACT      |                    |   | CONSEQUENCE                                                                                        |                             |                                                                                      |                                                                                                                                                                                                                                                                                                   |
|------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------|---|----------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  |                       |                                                                                                                     |                                                                                                                                                                                                                    | IMPACT<br>“STRESSOR”   | EXPOSURE TO IMPACT |   | RESPONSE                                                                                           | EFFECT                      |                                                                                      |                                                                                                                                                                                                                                                                                                   |
|                  |                       |                                                                                                                     |                                                                                                                                                                                                                    |                        | Y                  | N | EXPLANATION                                                                                        | LIKELY RESPONSE             | LIKELY EFFECT                                                                        | DEGREE OF EFFECT                                                                                                                                                                                                                                                                                  |
| PRE-CONSTRUCTION | Utility<br>Relocation | Relocation of<br>overhead and<br>underground<br>utilities.<br><br>Types include<br>electrical, water,<br>and fiber. | Cranes, augers,<br>digger trucks,<br>bucket trucks,<br>skid steers,<br>backhoe<br>excavators,<br>boring<br>machines, bull<br>wheel<br>tensioners<br>among other<br>heavy to light<br>weight trucks<br>and trailers | Habitat<br>Degradation | X                  |   | Vegetation trampling from<br>foot traffic, off-road<br>motorized vehicles, and<br>heavy equipment. | Relocate.                   | Altered feeding,<br>breeding, sheltering<br>resources from localized<br>disturbance. | Overall reduction of<br>available resources on the<br>landscape. Insignificant,<br>unable to meaningfully<br>measure effect.<br><br>Fugitive dust effects<br>insignificant, unable to<br>accurately measure effect.                                                                               |
|                  |                       |                                                                                                                     |                                                                                                                                                                                                                    | Contaminates           | X                  |   | From equipment fuel, spills,<br>and fugitive dust.                                                 | Flee response.<br>Relocate. | Mortality. Altered<br>feeding, breeding,<br>sheltering resources.                    | Discountable, spills are<br>unlikely to occur, and<br>companies likely have<br>some type of spill<br>prevention plan in place.<br><br>Insignificant, fugitive dust<br>accumulation size is<br>minimal and would be<br>unable to meaningfully<br>measure the biological<br>response to the effect. |



|              | ACTIVITY                | TASK(S)                                                                                                                                                                                                                                                                       | TOOLS<br>EQUIPMENT<br>METHOD                                                                                                                                                                                                   | BIOLOGICAL IMPACT    |                                           |   |                                                                                                                                                          | CONSEQUENCE                                                                   |                                                                                                                                  |                                                                                                                                                                                                                                                                                          |  |
|--------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------------------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|              |                         |                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                | IMPACT<br>“STRESSOR” | EXPOSURE TO IMPACT                        |   |                                                                                                                                                          | RESPONSE                                                                      | EFFECT                                                                                                                           |                                                                                                                                                                                                                                                                                          |  |
|              |                         |                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                |                      | Y                                         | N | EXPLANATION                                                                                                                                              | LIKELY RESPONSE                                                               | LIKELY EFFECT                                                                                                                    | DEGREE OF EFFECT                                                                                                                                                                                                                                                                         |  |
| CONSTRUCTION | Roadway<br>Construction | Clearing,<br>grubbing, and<br>topsoil<br>stockpiling for<br>reclamation.<br><br>New, improved,<br>and/or replaced<br>drainage<br>structures.<br><br>Permanent<br>signage,<br>pavement<br>markings, and<br>traffic control<br>devices,<br>including<br>lighting,<br>installed. | Bulldozers,<br>scrapers,<br>graders,<br>backhoes,<br>trucks, asphalt<br>pavers and<br>conveyors,<br>cranes, milling<br>machines,<br>excavators,<br>rollers, among<br>other heavy to<br>light weight<br>trucks and<br>trailers. | Acoustic             | See “Geotechnical Investigation” Activity |   |                                                                                                                                                          |                                                                               |                                                                                                                                  |                                                                                                                                                                                                                                                                                          |  |
|              |                         |                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                | Visual               | X                                         |   | From high intensity human<br>presence/activity, machinery<br>use, and artificial lighting<br>during the adult flight period.                             | Flight path change response.<br>Flee response.<br>Attraction to light source. | Increased energy<br>expenditure or a stress<br>response.                                                                         | Insignificant, unable to<br>meaningful measure<br>effect.<br><br>Discountable, artificial<br>lighting effects are<br>unlikely.                                                                                                                                                           |  |
|              |                         |                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                | Physical Injury      | X                                         |   | From high intensity human<br>presence/activity and<br>machinery use.                                                                                     | None, any physical injury<br>leads to mortality.                              | Mortality from crushing<br>and/or damaging any<br>parts of egg, larva, pupa,<br>and/or striking adults.<br>[Dependent on timing] | Permanent loss of<br>individuals from the<br>population. Up to 4.04<br>acres of suitable habitat<br>removed either<br>temporarily or<br>permanently.<br><br>Effects in adjacent<br>grassland habitat are<br>insignificant, unable to<br>accurately measure.                              |  |
|              |                         |                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                | Habitat Loss         | X                                         |   | From clearing vegetation and<br>topsoil within identified<br>suitable habitat and adjacent<br>grassland habitats both<br>permanently and<br>temporarily. | Relocate.                                                                     | Removal of feeding,<br>breeding, sheltering<br>resources permanently<br>and temporarily.<br>Reduced fitness and<br>survivorship. | Up to 2.02 acres of<br>suitable habitat<br>permanently removed and<br>up to 2.02 acres of<br>suitable habitat<br>temporarily removed.<br><br>Up to 110.81 acres of<br>dispersal habitat<br>permanently removed and<br>up to 395.02 acres of<br>dispersal habitat<br>temporarily removed. |  |

|                   | ACTIVITY                | TASK(S)                                                                                                                                                 | TOOLS<br>EQUIPMENT<br>METHOD                                                                                                                                                                                                   | BIOLOGICAL IMPACT                                                                                                         |                                           |                                                                                                            |                                                                                                                                                                                                                                                                                                    | CONSEQUENCE                                   |                                                                                                                                                                               |                                                                                                                                                                                                                                                 |
|-------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |                         |                                                                                                                                                         |                                                                                                                                                                                                                                | IMPACT<br>“STRESSOR”                                                                                                      | EXPOSURE TO IMPACT                        |                                                                                                            |                                                                                                                                                                                                                                                                                                    | RESPONSE                                      | EFFECT                                                                                                                                                                        |                                                                                                                                                                                                                                                 |
|                   |                         |                                                                                                                                                         |                                                                                                                                                                                                                                |                                                                                                                           | Y                                         | N                                                                                                          | EXPLANATION                                                                                                                                                                                                                                                                                        | LIKELY RESPONSE                               | LIKELY EFFECT                                                                                                                                                                 | DEGREE OF EFFECT                                                                                                                                                                                                                                |
| CONSTRUCTION      | Roadway<br>Construction | Clearing,<br>grubbing, and<br>topsoil<br>stockpiling for<br>reclamation.                                                                                | Bulldozers,<br>scrapers,<br>graders,<br>backhoes,<br>trucks, asphalt<br>pavers and<br>conveyors,<br>cranes, milling<br>machines,<br>excavators,<br>rollers, among<br>other heavy to<br>light weight<br>trucks and<br>trailers. | Habitat<br>Degradation                                                                                                    | X                                         |                                                                                                            | From high intensity human<br>presence/activity and<br>machinery use. Vegetation<br>trampling from foot traffic,<br>off-road motorized vehicles,<br>and heavy equipment.<br>Localized microclimate<br>modification from<br>hydrologic changes and<br>fugitive dust from<br>construction activities. | Relocate.                                     | Altered feeding,<br>breeding, sheltering<br>resources from localized<br>disturbance and<br>microclimate<br>modification.                                                      | Overall reduction of<br>available resources on the<br>landscape. Conservation<br>measure commitment to<br>reseed disturbed habitat<br>within 250 m of identified<br>suitable habitat.<br>Insignificant, unable to<br>accurately measure effect. |
|                   |                         | Discountable, localized<br>hydrological changes<br>from construction<br>activities are not expected<br>to result in degradation of<br>suitable habitat. |                                                                                                                                                                                                                                |                                                                                                                           |                                           |                                                                                                            |                                                                                                                                                                                                                                                                                                    |                                               |                                                                                                                                                                               |                                                                                                                                                                                                                                                 |
|                   |                         |                                                                                                                                                         |                                                                                                                                                                                                                                | Permanent<br>signage,<br>pavement<br>markings, and<br>traffic control<br>devices,<br>including<br>lighting,<br>installed. | Contaminates                              | See “Other Surveys & Project Preparation” Activity                                                         |                                                                                                                                                                                                                                                                                                    |                                               |                                                                                                                                                                               |                                                                                                                                                                                                                                                 |
| POST-CONSTRUCTION | Operation of<br>Roadway | Reclamation of<br>disturbed non-<br>roadway areas.                                                                                                      | Walking<br><br>ATVs                                                                                                                                                                                                            | Acoustic                                                                                                                  | See “Geotechnical Investigation” Activity |                                                                                                            |                                                                                                                                                                                                                                                                                                    |                                               |                                                                                                                                                                               |                                                                                                                                                                                                                                                 |
|                   |                         | Visual                                                                                                                                                  |                                                                                                                                                                                                                                | X                                                                                                                         |                                           | From general traffic usage of<br>the roadway and artificial<br>lighting during the adult<br>flight period. | Avoidance of the roadway.<br>Attraction to artificial light<br>sources.                                                                                                                                                                                                                            | None because stressor<br>was already present. | Insignificant, magnitude/<br>intensity, duration and<br>frequency of disruption<br>remains similar to what<br>was already present.<br>Unable to meaningful<br>measure effect. |                                                                                                                                                                                                                                                 |
|                   |                         |                                                                                                                                                         | General traffic<br>and roadway<br>usage.                                                                                                                                                                                       |                                                                                                                           |                                           |                                                                                                            |                                                                                                                                                                                                                                                                                                    |                                               | Hand tools                                                                                                                                                                    | Discountable, artificial<br>lighting effects are<br>unlikely.                                                                                                                                                                                   |

|                   | ACTIVITY             | TASK(S)                                                                                                           | TOOLS<br>EQUIPMENT<br>METHOD                                                            | BIOLOGICAL IMPACT    |                    |   |                                                                 | CONSEQUENCE                                   |                                                             |                                                                                                                                                                                                                                                                                                               |
|-------------------|----------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------|--------------------|---|-----------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   |                      |                                                                                                                   |                                                                                         | IMPACT<br>“STRESSOR” | EXPOSURE TO IMPACT |   |                                                                 | RESPONSE                                      | EFFECT                                                      |                                                                                                                                                                                                                                                                                                               |
|                   |                      |                                                                                                                   |                                                                                         |                      | Y                  | N | EXPLANATION                                                     | LIKELY RESPONSE                               | LIKELY EFFECT                                               | DEGREE OF EFFECT                                                                                                                                                                                                                                                                                              |
| POST-CONSTRUCTION | Operation of Roadway | Reclamation of disturbed non-roadway areas.<br><br>Roadway maintenance.<br><br>General traffic and roadway usage. | Walking<br><br>ATVs<br><br>Heavy to light-weight trucks and trailers.<br><br>Hand tools | Physical Injury      | X                  |   | Adult Dakota skippers being struck by vehicle traffic.          | None, any physical injury leads to mortality. | Mortality from vehicle strikes.                             | Discountable, movement across roadway is extremely unlikely.                                                                                                                                                                                                                                                  |
|                   |                      |                                                                                                                   |                                                                                         | Habitat Loss         |                    | X | Vegetation removal is not expected as part of this activity.    | None.                                         | None.                                                       | None.                                                                                                                                                                                                                                                                                                         |
|                   |                      |                                                                                                                   |                                                                                         | Habitat Degradation  | X                  |   | Opportunities for introduction of undesirable plant species.    | Relocate.                                     | Altered feeding, breeding, sheltering resources.            | Discountable, conservation measure commitments make effects extremely unlikely to occur.                                                                                                                                                                                                                      |
|                   |                      |                                                                                                                   |                                                                                         | Contaminates         | X                  |   | Vehicle accidents or spills. Undesirable plant species control. | Flee response. Relocate.                      | Mortality. Altered feeding, breeding, sheltering resources. | Discountable, accidents are unlikely to occur.<br><br>Insignificant, size of impact is small, and we are unable to meaningfully measure the biological response to the effect.<br><br>Undesirable species control is discountable, conservation measure commitments make effects extremely unlikely to occur. |

## **5.2 SUMMARY OF ADVERSE EFFECTS TO THE DAKOTA SKIPPER**

Dakota skippers are expected to experience direct and indirect effects from implementation of the Proposed Action as currently proposed due to the species' dependency on high quality native mixed grassland communities. Most direct adverse effects are expected to occur during the pre-construction and construction phases of the Proposed Action (Table 9). Up to 2.02 acres of direct permanent impact and up to 2.77 acres of direct temporary impact to identified suitable habitat that could support all Dakota skipper life stages; and up to 110.814 acres of direct permanent impact and 413.78 acres of direct temporary impact to dispersal/foraging habitat that could support the adult life stage are expected from the Proposed Action. This will reduce the amount of feeding, breeding, and sheltering resources available to the species, leading to reduced fitness or mortality of individuals occupying these areas. These direct impacts also increase the risk of physical injury from activities within suitable habitat and, during the adult flight period, activities occurring in adjacent grassland habitat could crush or strike adult Dakota skippers.

Other less detrimental effects to the species could result from anthropogenic presence, habitat fragmentation, exposure to contaminants, and habitat degradation. Anthropogenic presence has the potential to alter Dakota skipper behavior. Habitat fragmentation has the potential to cause isolation of Dakota skipper populations. Habitat degradation will mainly occur in the form of decrease in plant species diversity and increase of invasive species ultimately decreasing the habitats potential to support the full Dakota skipper life cycle.

Each stressor has the potential to reduce the carrying capacity of the species and its habitat in the action area. The Service anticipate the essential behaviors of breeding, feeding, and sheltering of the species will be significantly impaired due from the Proposed Action activities and it is reasonable to anticipate the abundance of the species will be reduced in the action area (due to direct mortality of adults, larvae, pupae, and/or eggs).

## **5.3 CUMULATIVE EFFECTS**

Cumulative effects consider the effects of future state, tribal, local, or private actions that are reasonably certain to occur within the action area of the proposed action subject to consultation (50 C.F.R. § 402.02). "Reasonably certain to occur" is a rigorous standard that is not based on speculation or mere possibility that effects to the species may occur (73 FR 76272). If no information exists, is speculative or not credible, then effects are not reasonably certain to occur and are disregarded (73 FR 76272). Furthermore, the definition of "cumulative effects" applies only to Section 7 analyses and should not be confused with the broader use of the term in the National Environmental Policy Act or other environmental laws. Future Federal actions that are unrelated to the Proposed Action are not considered in this section because they require separate consultation pursuant to Section 7 of the ESA (USFWS & NMFS 1998). The Service is aware of an additional action that met the ESA definition of cumulative effects within the action area.

The Mouse River Enhanced Flood Protection Project, initiated by the Souris River Joint Board. The grade raise (approximately 6 feet at the highest point) of US 52 west of Velva, North Dakota is included as part of the Proposed Action design to aid the flood project and protect critical infrastructure from future flooding.



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## 6.0 CONCLUSION

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The Service defines “jeopardize the continued existence of” as “to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species” (50 C.F.R. § 402.02).

Recovery calls for improvement in the status of listed species to the point at which listing is no longer appropriate under the criteria identified in section 4(a)(1) of the ESA (50 C.F.R. § 402.02).

After reviewing the current status of the species, the environmental baseline for the action area, and the effects of the Proposed Action it is the Service's biological opinion that the widening of US 52 from a two-lane to a four-lane highway, as proposed, is not likely to jeopardize the continued existence of the Dakota skipper.

From a suitable habitat perspective, the DASK Model shows there to be approximately 10,084 acres of suitable habitat with a  $\geq 50\%$  probably in the action area (Barnes et al. 2024; Table 6). The Proposed Action would directly impact up to 2.02 acres permanently and 2.77 acres temporarily of suitable habitat that could support all Dakota skipper life stages; and up to 110.814 acres permanently and 413.78 acres temporarily of dispersal habitat that could otherwise be used by the Dakota skipper. This reduction in overall habitat would not result in a significant measurable effect that would jeopardize the continued existence of the species given the magnitude of potentially suitable habitat within the action area.

As previously noted, the delineated suitable habitat patches for the Dakota skipper are found along an existing roadway and as such are already experiencing some of the related stressors identified in this analysis. Additionally, the federal action agency has agreed to 1) mitigate the 0.35 acres of suitable habitat impacted by the geotechnical investigation, 2) complete occupancy surveys and mitigate impacted suitable habitat that had Dakota skipper occupancy pre-construction, and 3) reseed any disturbed area within 250 m of suitable habitat with a mix that would promote the Dakota skipper life cycle.

Critical habitat is designated for this species; however, this action does not affect any critical habitat. No destruction or adverse modification of critical habitat is anticipated.

The Service reached this/these conclusion(s) because:

- A. Adverse impacts (including those that conform to incidental take) are likely to be small in magnitude, temporary (meaning not continuous, recurring, or chronic), short-term and geographically local with respect to each local population being addressed.
- B. The amount or extent of incidental take of listed species is likely to be low and is not likely to have adverse population-level impacts to the affected listed species.

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## 7.0 INCIDENTAL TAKE STATEMENT

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Section 9 of the ESA and Federal Regulations pursuant to section 4(d) of the ESA prohibit *take* of endangered and threatened species, respectively, without special exemption. *Take* is defined as to harass, *harm*, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. *Harm* is further defined by the Service as an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering (50 C.F.R. § 17.3). *Incidental take* is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of Section 7(b)(4) and Section 7(o)(2), take that is incidental to and not intended as part of the agency action is not considered to be prohibited take under the ESA provided that such take is in compliance with the terms and conditions of this Incidental Take Statement (ITS).

The measures described below are non-discretionary and must be undertaken by the Federal action agency [FHWA] so that they become binding conditions of any grant or permit issued to a state agency, local entity, or others, as appropriate, for the exemption in Section 7(o)(2) to apply. The Federal action agency has a continuing duty to regulate the activity covered by this incidental take statement. If the Federal action agency 1) fails to assume and implement the terms and conditions or 2) fails to require a state agency, local entity, and/or others to adhere to the terms and conditions of the ITS through enforceable terms that are added to the permit or grant document, the protective coverage of Section 7(o)(2) may lapse. To monitor the impact of incidental take, the Federal action agency and any state agency, local entity, or others involved with the Proposed Action must report the progress of the action and its impact on the species to the Service as specified in the ITS (50 C.F.R. § 402.14(i)(3)).

### 7.1 AMOUNT OR EXTENT OF TAKE

The Service anticipates the incidental take of Dakota skippers will be difficult to detect or quantify for the following reasons:

- The presence of individual Dakota skippers is extremely difficult to confirm due to the species' obscure life cycle, thus incidental take of individuals is too difficult to monitor effectively, and
- The incidental take of eggs, larvae, pupae, or adults (flight stage) will be difficult to track and quantify given the diminutive size and obscurity of individuals, thus the total amount of injury or mortality will be highly uncertain.

However, take of this species from the Proposed Action can be approximated by quantifying the spatial extent (acres) of the habitat traversed, destroyed, and/or modified. Using the extent and location of Dakota skipper suitable habitat as a surrogate indicator of the amount or extent of take that will occur in the form of harm, the Service expects the incidental take of up to 2.02 acres permanently and 2.77 acres temporarily of Dakota skipper suitable habitat and up to 110.814 acres permanently and 413.78 acres temporarily of dispersal habitat. Direct take is anticipated to occur during the pre-construction and construction phases of the Proposed Action.

The Service also expects indirect effects to occur to Dakota skippers from habitat alteration. Dakota skippers are expected to be harmed at these locations due to anthropogenic presence, habitat degradation, habitat fragmentation, physical impact or increase predation. These stressors will diminish the likelihood of individual survival for Dakota skippers at all life stages around the proposed action.

| Expected Incidental Take                                          |                          |                          |                          |                          |
|-------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Impact Factor                                                     | Suitable Habitat         |                          | Dispersal Habitat        |                          |
|                                                                   | Permanent Impact (acres) | Temporary Impact (acres) | Permanent Impact (acres) | Temporary Impact (acres) |
| Grading Limits                                                    | 2.02                     | 2.02                     | 0*                       | 0*                       |
| Construction activities within existing and proposed ROW/easement | 0                        | 0                        | 0                        | 395.02                   |
| Paved roadway footprint                                           | 0                        | 0                        | 110.81                   | 0                        |
| Overhead utility poles                                            | 0                        | 0                        | 0.004                    | 0.03                     |
| Underground utility installation                                  | 0                        | 0.40                     | 0                        | 18.73                    |
| Geotechnical investigation                                        | < 0.0001                 | 0.35                     | 0                        | 0                        |
| <b>Total:</b>                                                     | <b>2.02</b>              | <b>2.02</b>              | <b>110.814</b>           | <b>413.78</b>            |

*\*All impacts to dispersal habitat from grading limits overlap with impacts from construction activities within existing and proposed ROW/easement or paved roadway footprint.*

## 7.2 EFFECT OF THE TAKE

In the accompanying BO, the Service has determined that this level of anticipated take is not likely to appreciably reduce the survival of the Dakota Skipper. Therefore, the Service concludes the action is not likely to result in jeopardy to the species.

## 7.3 REASONABLE AND PRUDENT MEASURES

The reasonable and prudent measures (RPM), and implementing terms and conditions, minimize the effects of incidental take that might otherwise result from the action. RPMs have been developed based on information presented in the Biological Assessment for the Proposed Action, and life history for the species. RPMs are non-discretionary and must be implemented so that they become binding conditions of the permit for the exemption in Section 7(o)(2) of the ESA to apply. Pursuant to 50 C.F.R. § 402.14(I)(1)(iii) and 402.14(I)(3), the Service believes the following RPMs are necessary and appropriate to minimize take of Dakota skippers.

1. Ensure all project personnel understand where clearly marked delineated suitable habitat is located and prior to the start of soil/vegetation disturbance activities.
2. Provide the Service with an annual report following any year Dakota skipper occupancy surveys are completed that details the survey findings.

3. Design and implement a monitoring plan to ensure that the anticipated amount or extent of incidental take is not exceeded.
4. Offsets to impacted suitable habitat committed to by the Federal action agency in Section 2.3 of the Biological Opinion can be addressed by either purchasing credits from a Service approved Dakota skipper bank, by establishing their own offsite or onsite mitigation site in accordance with the most recent Service guidance for Dakota skipper conservation bank establishment, or an alternative plan that is approved by the FWS. Should the Federal action agency establish their own onsite/offsite mitigation site, they must provide the Service with an initial reclamation plan for approval and a monitoring plan that includes a mitigation schedule, benchmarks, and long-term management planning. The Federal action agency must also provide an initial report on the reclamation (site prep and seeding) effort followed by annual reports that detail site establishment and management for the 5 years following the initial reclamation effort.

#### **7.4 TERMS AND CONDITIONS**

In order to be exempt from the prohibitions of section 9 of the ESA, the Federal action agency must comply with the following terms and conditions, which implement the reasonable and prudent measures (RPMs) described above and outline required reporting/monitoring requirements. These terms and conditions are non-discretionary.

##### **To implement RPM 1:**

- 1) The Federal action agency shall ensure any project proponent, construction company, or crew personnel are educated on Dakota skipper habitat, including its location and activity restrictions.
- 2) Delineated suitable habitat identified during the habitat surveys shall be clearly marked prior to the start of soil/vegetation disturbance activities.
- 3) The Federal action agency shall require the project proponent to preemptively layout the spoil pile locations, fueling, and/or staging areas to avoid, to the maximum extent practicable, the destruction of occupied, assumed occupied or potential Dakota skipper habitat identified in the project area.

##### **To implement RPM 2:**

- 1) A Service permitted Dakota skipper surveyor shall be contracted to conduct occupancy surveys, using the most recent Service protocol, within the suitable habitat identified during botanical surveys.
- 2) Occupancy survey results shall be provided to the Ecological Services, North Dakota Field Office by January 1 each year completed. The submission shall consist of a written document and include all collected spatial data, preferably as shapefiles.

##### **To implement RPM 3:**

- 1) The Federal action agency shall provide an annual report and shapefile to the Service showing the actual disturbance of the Proposed Action, in relation to those activities that are expected to result in incidental take of the Dakota skipper. This report should include:
  - a. The actual amount of delineated suitable habitat that was removed, either permanently or temporarily.
  - b. The actual amount of delineated suitable habitat that was traversed by mechanized



- equipment but not necessarily removed (vegetation trampling).
- c. The actual amount of adjacent grassland or pastureland habitat that was removed, either permanently or temporarily.
  - a) Any notable degradation of delineated suitable habitat from fugitive dust, contaminants, introduction of undesirable plant species, or other stressor impact as a result of the Proposed Action.
- 2) If, the level of incidental take is exceeded, such incidental take represents new information requiring re-initiation of consultation and review of the RPMs provided. The Federal action agency must immediately provide an explanation for the causes of the take and review with the Service the need for possible modification of the RPMs.
  - 3) The Federal action agency will ensure all conservation measures addressed in the description of the proposed action are formally adopted and implemented.

#### To implement RPM 4:

- 1) Offsets to impacted suitable habitat, committed to by the Federal action agency in Section 2.3 of the Biological Opinion, can be addressed by either purchasing banking credits from a Service approved Dakota skipper bank or by establishing their own onsite or offsite mitigation site in accordance with the most recent Service guidance for Dakota skipper conservation bank establishment, or through an alternative plan approved by the FWS.
- 2) Should the Federal action agency choose to purchase banking credits from a Service approved Dakota skipper bank the ratio for the number of mitigation credits to be purchased for each acre of Dakota skipper suitable habitat impacted by the Proposed Action is:

| Credit Purchase Ratios for Suitable Habitat Impacts |                       |                    |
|-----------------------------------------------------|-----------------------|--------------------|
| Habitat Impacted                                    | Impact Type           |                    |
|                                                     | Temporary             | Permanent          |
| Suitable Habitat                                    | 1.25 credits : 1 acre | 2 credits : 1 acre |

- 3) Should the Federal action agency choose to establish their own onsite or offsite mitigation site, the agency will:
  - a. Use the following mitigation ratios. These ratios assume mitigation would occur after the impact and represent the number of acres needed at a mitigation site to offset for each acre of Dakota skipper suitable habitat impacted by the Proposed Action. These ratios consider the temporal delay of vegetation establishment and the sites proximity to existing Dakota skipper populations.

| Mitigation Ratios for Suitable Habitat Impacts    |                                                   |                                                   |                                                   |
|---------------------------------------------------|---------------------------------------------------|---------------------------------------------------|---------------------------------------------------|
| For Permanent Impacts                             |                                                   | For Temporary Impacts                             |                                                   |
| Site <1 km from a known Dakota skipper population | Site >1 km from a known Dakota skipper population | Site <1 km from a known Dakota skipper population | Site >1 km from a known Dakota skipper population |
| 3.5 acres : 1 acre                                | 4.5 acres : 1 acre                                | 2.5 acres : 1 acre                                | 3.25 acres : 1 acre                               |

- b. Ensure the mitigation site occurs in an area that has > 50 acres of grassland habitat and has proper protections from commercial pesticide/herbicide application.

- c. Provide the Service with a reclamation plan for approval prior to any mitigation activities.
- d. Provide the Service with a monitoring plan that includes a mitigation schedule, benchmarks, and plans for long-term management of the site.
- e. Provide the Service with an initial report on the reclamation (site prep and seeding) effort followed by annual reports that detail site establishment and management for the 5 years following reclamation.

**Additional Terms and Conditions:**

- 1) The Service is to be notified within three (3) working days upon locating any dead, injured, or sick endangered or threatened species specimen (see 50 C.F.R. § 402.14(I)(1)(v)). Initial notification must be made to the nearest U.S. Fish and Wildlife Service Office of Law Enforcement. Notification must include the date, time, precise location of the injured animal or carcass, and any other pertinent information. Care should be taken in handling sick or injured specimens to preserve biological materials in the best possible state for later analysis of cause of death, if that occurs. In conjunction with the care of sick or injured endangered or threatened species or preservation of biological materials from a dead animal, the finder has the responsibility to ensure that evidence associated with the specimen is not unnecessarily disturbed. Contact the U.S. Fish and Wildlife Service Office of Law Enforcement at (701) 255-0593, or the Ecological Services, North Dakota Field Office at (701) 250-4481.

**7.5 CONSERVATION RECOMMENDATIONS**

Conservation recommendations are suggestions of the Service regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information (50 C.F.R. § 402.02). Section 7(a)(1) of the ESA directs the Federal action agency to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery programs, or to develop information. The Service suggests the following Conservation Recommendations:

- Maintain a 250-meter buffer between project activities and suitable habitat and a 500-meter buffer between project activities and known occupied suitable habitat and/or designated critical habitat during the flight period (June 10 – July 25).
- Off-set adverse effects to the Dakota skipper from the Proposed Action through preservation, restoration, or mitigation for impacts to grassland habitat. The Federal action agency should address how intended off-sets would restore, preserve, or mitigate habitat impacts.
  - Preservation should focus on maintaining and securing the currently available grassland habitat from adverse effects.
  - Restoration should focus on restoring all disturbed areas to increase the overall available grassland habitat for Dakota skipper populations within the action area.

- Seed mixes used for reseeding should contain a high number of native grass and forb species that will promote the Dakota skipper life cycle. The preferred grass to forb ratio for seeding is 60:40.
- Mitigation should focus on habitat enhancement and protection in perpetuity. Priority should be given to sites near extant Dakota skipper populations.
- Mitigation ratios for grassland habitat disturbances, either permanently or temporarily, recommended by the Service are:

| Mitigation Ratios for Grassland Impacts (Dispersal/Foraging Habitat) |                                                    |                                                    |                                                    |
|----------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|
| For Permanent Impacts                                                |                                                    | For Temporary Impacts                              |                                                    |
| Site < 1 km from a known Dakota skipper population                   | Site > 1 km from a known Dakota skipper population | Site < 1 km from a known Dakota skipper population | Site > 1 km from a known Dakota skipper population |
| 2 acres : 1 acre                                                     | 2.6 acres : 1 acre                                 | 1 acre : 1 acre                                    | 1.3 acres : 1 acre                                 |

- Mitigation site monitoring is recommended to ensure any efforts made to improve/increase Dakota skipper habitat within the action area are having the desired effect.
- To assist in meeting your [the Federal action agency] responsibilities under Section 7(a)(1) of the ESA, we recommend that you work proactively with the Service and others on Dakota skipper recovery actions. This includes identifying and remedying potential threats to Dakota skipper recovery.
- We encourage the Federal action agency and project proponents to seek technical assistance from the Service throughout the entirety of the Proposed Action.
- Consult experts and utilize the most up to date peer-reviewed research to make informed decisions when amending adaptive management into any mitigation plans.
- Promote restoration and enhancement projects for Dakota skippers and other pollinator species.

## 7.6 REINITIATION NOTICE

This concludes formal consultation on your September 2025, request for consultation. As provided in 50 C.F.R. § 402.16, re-initiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: 1) the amount or extent of incidental take is exceeded (2.02 acres permanently and 2.77 acres temporarily of suitable habitat and up to 110.814 acres permanently and 413.78 acres temporarily of dispersal habitat); 2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this BO; 3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this BO; or 4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending re-initiation.

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## 8.0 LITERATURE CITED

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# Appendix G, Wetland Documentation

| Wetland Impact Table |                       |              |                 |                                |                         |       |                                |       |                     |       |       |                     |         |                     |         |            |         |
|----------------------|-----------------------|--------------|-----------------|--------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|---------------------|---------|---------------------|---------|------------|---------|
| Wetland Number       | Location              | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands¹ | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                     |         |                     |         |            |         |
|                      |                       |              |                 |                                | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank    |         | 11990 Bank          |         | USFWS Bank |         |
|                      |                       |              |                 |                                | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location            | Acre(s) | Location            | Acre(s) | Location   | Acre(s) |
| Alternative B1       |                       |              |                 |                                |                         |       |                                |       |                     |       |       |                     |         |                     |         |            |         |
| 1c                   | Sec 15 T-154-N R-82-W | Ditch        | Natural         | Y                              | 0.001                   |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 1d                   | Sec 15 T-154-N R-82-W | Ditch        | Natural         | Y                              | 0.012                   | 0.001 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.001   |            |         |
| 2                    | Sec 15 T-154-N R-82-W | Ditch        | Created         | N                              |                         | 0.020 |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 3                    | Sec 15 T-154-N R-82-W | Ditch        | Created         | N                              |                         | 0.014 |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 4                    | Sec 15 T-154-N R-82-W | Drainage     | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 5a                   | Sec 15 T-154-N R-82-W | Drainage     | Natural         | Y                              | 0.016                   | 0.041 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.041   |                     |         |            |         |
| 5c                   | Sec 15 T-154-N R-82-W | Drainage     | Natural         | Y                              | 0.027                   | 0.041 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.041   |                     |         |            |         |
| 5d                   | Sec 14 T-154-N R-82-W | Drainage     | Natural         | Y                              | 0.001                   | 0.041 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.041   |                     |         |            |         |
| 5f                   | Sec 14 T-154-N R-82-W | Drainage     | Natural         | Y                              | 0.002                   | 0.024 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.024   |                     |         |            |         |
| 6                    | Sec 14 T-154-N R-82-W | Basin        | Natural         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 7a                   | Sec 14 T-154-N R-82-W | Basin        | Natural         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 7b                   | Sec 14 T-154-N R-82-W | Basin        | Natural         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 7c                   | Sec 14 T-154-N R-82-W | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 8                    | Sec 24 T-154-N R-82-W | Drainage     | Natural         | N                              | 0.034                   | 0.014 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.014   |            |         |
| 78                   | Sec 24 T-154-N R-82-W | Slope        | Natural         | N                              | 0.006                   | 0.008 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.008   |            |         |
| 9a                   | Sec 24 T-154-N R-82-W | Drainage     | Natural         | Y                              | 0.056                   | 0.432 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.432   |                     |         |            |         |
| 10a                  | Sec 24 T-154-N R-82-W | Drainage     | Natural         | N                              | 0.037                   | 0.145 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.145   |            |         |

| Wetland Impact Table |                             |              |                 |                                |                         |       |                                |       |                     |       |       |                  |         |                        |         |            |         |
|----------------------|-----------------------------|--------------|-----------------|--------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|------------------|---------|------------------------|---------|------------|---------|
| Wetland Number       | Location                    | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands¹ | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                  |         |                        |         |            |         |
|                      |                             |              |                 |                                | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank |         | 11990 Bank             |         | USFWS Bank |         |
|                      |                             |              |                 |                                | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location         | Acre(s) | Location               | Acre(s) | Location   | Acre(s) |
| 10b                  | Sec 24<br>T-154-N<br>R-82-W | Drainage     | Natural         | N                              | 0.009                   | 0.041 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.041   |            |         |
| 77                   | Sec 24<br>T-154-N<br>R-82-W | Basin        | Natural         | N                              |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 11c                  | Sec 30<br>T-154-N<br>R-81-W | Riverine     | Natural         | Y                              |                         | 0.031 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.031   |            |         |
| 11d                  | Sec 30<br>T-154-N<br>R-81-W | Riverine     | Natural         | Y                              | 0.092                   | 0.060 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.06    |            |         |
| 11e                  | Sec 30<br>T-154-N<br>R-81-W | Riverine     | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 13                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                              |                         | 0.038 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.038   |            |         |
| 14                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                              |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 15                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                              |                         | 0.019 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.019   |            |         |
| 16                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                              |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 17                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                              |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 18                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                              |                         | 0.039 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.039   |            |         |
| 19                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                              |                         | 0.031 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.031   |            |         |
| 20b                  | Sec 5<br>T-153-N<br>R-81-W  | Basin        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 20c                  | Sec 5<br>T-153-N<br>R-81-W  | Fringe       | Created         | Y                              | 0.035                   |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 20e                  | Sec 5<br>T-153-N<br>R-81-W  | Ditch        | Created         | Y                              | 0.008                   | 0.008 |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 21                   | Sec 5<br>T-153-N<br>R-81-W  | Basin        | Natural         | N                              | 0.156                   |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 22                   | Sec 5<br>T-153-N<br>R-81-W  | Basin        | Natural         | N                              | 0.002                   |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 23c                  | Sec 4<br>T-153-N<br>R-81-W  | Drainage     | Natural         | Y                              | 0.011                   |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |



| Wetland Impact Table |                       |              |                 |                                |                         |       |                                |       |                     |       |       |                     |         |                     |         |            |         |
|----------------------|-----------------------|--------------|-----------------|--------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|---------------------|---------|---------------------|---------|------------|---------|
| Wetland Number       | Location              | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands¹ | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                     |         |                     |         |            |         |
|                      |                       |              |                 |                                | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank    |         | 11990 Bank          |         | USFWS Bank |         |
|                      |                       |              |                 |                                | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location            | Acre(s) | Location            | Acre(s) | Location   | Acre(s) |
| Alternative B2       |                       |              |                 |                                |                         |       |                                |       |                     |       |       |                     |         |                     |         |            |         |
| 25a                  | Sec 9 T-153-N R-81-W  | Drainage     | Natural         | Y                              | 0.103                   | 0.359 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.359   |                     |         |            |         |
| 25b                  | Sec 9 T-153-N R-81-W  | Ditch        | Created         | Y                              |                         | 0.015 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.015   |                     |         |            |         |
| 25c                  | Sec 9 T-153-N R-81-W  | Drainage     | Natural         | Y                              | 0.152                   | 0.160 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.16    |                     |         |            |         |
| 26                   | Sec 10 T-153-N R-81-W | Ditch        | Created         | N                              |                         | 0.331 |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 27                   | Sec 10 T-153-N R-81-W | Ditch        | Created         | N                              |                         | 0.012 |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 28a                  | Sec 10 T-153-N R-81-W | Drainage     | Natural         | Y                              | 0.032                   | 0.123 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.123   |                     |         |            |         |
| 29                   | Sec 11 T-153-N R-81-W | Drainage     | Natural         | N                              |                         | 0.021 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.021   |            |         |
| 30                   | Sec 11 T-153-N R-81-W | Basin        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 31a                  | Sec 12 T-153-N R-81-W | Riverine     | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 31c                  | Sec 12 T-153-N R-81-W | Riverine     | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 31d                  | Sec 12 T-153-N R-81-W | Riverine     | Natural         | Y                              | 0.007                   | 0.015 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.015   |            |         |
| 31f                  | Sec 12 T-153-N R-81-W | Riverine     | Natural         | Y                              | 0.019                   | 0.038 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.038   |            |         |
| 32                   | Sec 12 T-153-N R-81-W | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 79a                  | Sec 13 T-153-N R-81-W | Basin        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 80                   | Sec 13 T-153-N R-81-W | Slope        | Natural         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| Alternative B3       |                       |              |                 |                                |                         |       |                                |       |                     |       |       |                     |         |                     |         |            |         |
| 34d                  | Sec 13 T-153-N R-80-W | Drainage     | Natural         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 35a                  | Sec 18 T-153-N R-80-W | Drainage     | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |

| Wetland Impact Table |                       |              |                 |                                |                         |       |                                |       |                     |       |       |                     |         |                     |         |            |         |
|----------------------|-----------------------|--------------|-----------------|--------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|---------------------|---------|---------------------|---------|------------|---------|
| Wetland Number       | Location              | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands¹ | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                     |         |                     |         |            |         |
|                      |                       |              |                 |                                | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank    |         | 11990 Bank          |         | USFWS Bank |         |
|                      |                       |              |                 |                                | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location            | Acre(s) | Location            | Acre(s) | Location   | Acre(s) |
| 35b                  | Sec 18 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 36                   | Sec 18 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 37                   | Sec 18 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 38                   | Sec 18 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 39a                  | Sec 18 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 39b                  | Sec 18 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 40                   | Sec 17 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 41                   | Sec 17 T-153-N R-80-W | Ditch        | Created         | N                              | 0.004                   | 0.022 |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 42a                  | Sec 17 T-153-N R-80-W | Basin        | Natural         | N                              | 0.081                   | 0.820 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.82    |            |         |
| 42b                  | Sec 17 T-153-N R-80-W | Ditch        | Created         | N                              |                         | 1.503 |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 42c                  | Sec 17 T-153-N R-80-W | Basin        | Natural         | N                              | 0.046                   | 0.429 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.429   |            |         |
| 43a                  | Sec 17 T-153-N R-80-W | Ditch        | Created         | Y                              | 0.240                   | 0.125 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.125   |                     |         |            |         |
| 43b                  | Sec 17 T-153-N R-80-W | Ditch        | Created         | Y                              | 0.025                   | 0.043 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.043   |                     |         |            |         |
| 43c                  | Sec 17 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 44                   | Sec 17 T-153-N R-80-W | Basin        | Natural         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 45                   | Sec 17 T-153-N R-80-W | Basin        | Natural         | N                              | 0.035                   | 0.224 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.224   |            |         |
| 46                   | Sec 17 T-153-N R-80-W | Basin        | Natural         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 47a                  | Sec 20 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |

| Wetland Impact Table |                            |              |                 |                                |                         |       |                                |       |                     |       |       |                     |         |            |         |            |         |
|----------------------|----------------------------|--------------|-----------------|--------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|---------------------|---------|------------|---------|------------|---------|
| Wetland Number       | Location                   | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands¹ | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                     |         |            |         |            |         |
|                      |                            |              |                 |                                | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank    |         | 11990 Bank |         | USFWS Bank |         |
|                      |                            |              |                 |                                | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location            | Acre(s) | Location   | Acre(s) | Location   | Acre(s) |
| 47b                  | Sec 21 T-153-N R-80-W      | Ditch        | Created         | Y                              | 0.197                   | 0.078 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.078   |            |         |            |         |
| 47c                  | Sec 21 T-153-N R-80-W      | Ditch        | Created         | Y                              | 0.003                   | 0.589 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.589   |            |         |            |         |
| 47d                  | Sec 21 T-153-N R-80-W      | Ditch        | Created         | Y                              | 0.018                   | 0.106 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.106   |            |         |            |         |
| 47e                  | Sec 21 T-153-N R-80-W      | Basin        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 47f                  | Sec 21 T-153-N R-80-W      | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 48                   | Sec 21 T-153-N R-80-W      | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 49a                  | Sec 21 T-153-N R-80-W      | Riverine     | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 49c                  | Sec 21 T-153-N R-80-W      | Riverine     | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 50                   | Sec 21 T-153-N R-80-W      | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 51a                  | Sec 21 T-153-N R-80-W      | Drainage     | Natural         | Y                              | 0.007                   | 0.042 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.042   |            |         |            |         |
| 51c                  | Sec 21 T-153-N R-80-W      | Drainage     | Natural         | Y                              | 0.010                   | 0.081 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.081   |            |         |            |         |
| 51d                  | Sec 21 & 22 T-153-N R-80-W | Drainage     | Natural         | Y                              | 0.008                   | 0.042 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.042   |            |         |            |         |
| 51f                  | Sec 21 & 22 T-153-N R-80-W | Drainage     | Natural         | Y                              | 0.007                   | 0.158 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.158   |            |         |            |         |
| 52                   | Sec 22 T-153-N R-80-W      | Basin        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 53                   | Sec 22 T-153-N R-80-W      | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 54                   | Sec 22 T-153-N R-80-W      | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| No Alternative B4    |                            |              |                 |                                |                         |       |                                |       |                     |       |       |                     |         |            |         |            |         |
| 55                   | Sec 22 T-153-N R-80-W      | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |

| Wetland Impact Table |                       |              |                 |                                |                         |       |                                |       |                     |       |       |                     |         |            |         |            |         |
|----------------------|-----------------------|--------------|-----------------|--------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|---------------------|---------|------------|---------|------------|---------|
| Wetland Number       | Location              | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands¹ | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                     |         |            |         |            |         |
|                      |                       |              |                 |                                | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank    |         | 11990 Bank |         | USFWS Bank |         |
|                      |                       |              |                 |                                | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location            | Acre(s) | Location   | Acre(s) | Location   | Acre(s) |
| 56a                  | Sec 22 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 56b                  | Sec 22 T-153-N R-80-W | Drainage     | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 56c                  | Sec 22 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 56d                  | Sec 22 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 56e                  | Sec 22 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 57                   | Sec 22 T-153-N R-80-W | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 58                   | Sec 22 T-153-N R-80-W | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 59b                  | Sec 23 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 59c                  | Sec 23 T-153-N R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 59d                  | Sec 23 T-153-N R-80-W | Basin        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 60                   | Sec 23 T-153-N R-80-W | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 61a                  | Sec 26 T-153-N R-80-W | Slope        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| Alternative B5       |                       |              |                 |                                |                         |       |                                |       |                     |       |       |                     |         |            |         |            |         |
| 61b                  | Sec 26 T-153-N R-80-W | Slope        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 61c                  | Sec 26 T-153-N R-80-W | Drainage     | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 61d                  | Sec 26 T-153-N R-80-W | Drainage     | Natural         | Y                              | 0.123                   | 0.512 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.512   |            |         |            |         |
| 61e                  | Sec 25 T-153-N R-80-W | Slope        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 61f                  | Sec 25 T-153-N R-80-W | Slope        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |



| Wetland Impact Table |                       |              |                 |                                |                         |       |                                |       |                     |       |       |                     |         |                     |         |                     |         |
|----------------------|-----------------------|--------------|-----------------|--------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|---------------------|---------|---------------------|---------|---------------------|---------|
| Wetland Number       | Location              | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands¹ | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                     |         |                     |         |                     |         |
|                      |                       |              |                 |                                | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank    |         | 11990 Bank          |         | USFWS Bank          |         |
|                      |                       |              |                 |                                | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location            | Acre(s) | Location            | Acre(s) | Location            | Acre(s) |
| 61g                  | Sec 36 T-153-N R-80-W | Drainage     | Natural         | Y                              | 0.195                   | 1.329 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 1.329   |                     |         |                     |         |
| 61i                  | Sec 36 T-153-N R-80-W | Drainage     | Natural         | Y                              | 0.012                   | 0.001 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.001   |                     |         |                     |         |
| 61k                  | Sec 36 T-153-N R-80-W | Drainage     | Natural         | Y                              | 0.051                   | 0.652 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.652   |                     |         |                     |         |
| 61l                  | Sec 36 T-153-N R-80-W | Drainage     | Natural         | Y                              | 0.163                   | 0.173 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.173   |                     |         |                     |         |
| 61m                  | Sec 36 T-153-N R-80-W | Drainage     | Natural         | Y                              | 0.036                   | 0.093 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.093   |                     |         |                     |         |
| 61o                  | Sec 36 T-153-N R-80-W | Drainage     | Natural         | Y                              | 0.062                   | 0.114 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.114   |                     |         |                     |         |
| 61q                  | Sec 31 T-153-N R-79-W | Drainage     | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |
| 61r                  | Sec 31 T-153-N R-79-W | Drainage     | Natural         | Y                              | 0.043                   | 0.132 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.132   |                     |         |                     |         |
| 61t                  | Sec 31 T-153-N R-79-W | Drainage     | Natural         | Y                              |                         | 0.064 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.064   |                     |         |                     |         |
| 61u                  | Sec 31 T-153-N R-79-W | Drainage     | Natural         | Y                              | 0.005                   | 0.045 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.045   |                     |         |                     |         |
| 61w                  | Sec 31 T-153-N R-79-W | Drainage     | Natural         | Y                              | 0.079                   | 0.096 | 0.107                          | 0.050 | Y                   | Y     | Y     | Mitigation Bank TBD | 0.096   |                     |         | Mitigation Bank TBD | 0.050   |
| 61x                  | Sec 2 T-152-N R-80-W  | Drainage     | Natural         | Y                              | 0.313                   | 0.992 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.992   |                     |         |                     |         |
| 62                   | Sec 26 T-153-N R-80-W | Slope        | Natural         | N                              | 0.019                   | 0.025 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.025   |                     |         |
| 63a                  | Sec 26 T-153-N R-80-W | Drainage     | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |
| 63b                  | Sec 26 T-153-N R-80-W | Slope        | Natural         | Y                              | 0.037                   | 0.334 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.334   |                     |         |                     |         |
| 64                   | Sec 36 T-153-N R-80-W | Basin        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |
| 65                   | Sec 31 T-153-N R-79-W | Ditch        | Created         | N                              | 0.013                   | 0.012 |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |
| 66                   | Sec 31 T-153-N R-79-W | Ditch        | Created         | N                              |                         | 0.028 |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |

| Wetland Impact Table |                             |              |                 |                                |                         |       |                                |       |                     |       |       |                        |         |                        |         |                        |         |
|----------------------|-----------------------------|--------------|-----------------|--------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|------------------------|---------|------------------------|---------|------------------------|---------|
| Wetland Number       | Location                    | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands¹ | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                        |         |                        |         |                        |         |
|                      |                             |              |                 |                                | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank       |         | 11990 Bank             |         | USFWS Bank             |         |
|                      |                             |              |                 |                                | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location               | Acre(s) | Location               | Acre(s) | Location               | Acre(s) |
| 67                   | Sec 31<br>T-153-N<br>R-79-W | Ditch        | Created         | N                              | 0.006                   | 0.017 |                                |       | N                   | N     | N     |                        |         |                        |         |                        |         |
| Alternative B6       |                             |              |                 |                                |                         |       |                                |       |                     |       |       |                        |         |                        |         |                        |         |
| 61y                  | Sec 1<br>T-152-N<br>R-80-W  | Drainage     | Natural         | Y                              | 0.151                   | 0.615 | 0.151                          | 0.135 | Y                   | Y     | Y     | Mitigation Bank<br>TBD | 0.615   |                        |         | Mitigation Bank<br>TBD | 0.135   |
| 61z                  | Sec 1<br>T-152-N<br>R-80-W  | Drainage     | Natural         | Y                              | 0.044                   | 0.207 | 0.044                          | 0.102 | Y                   | Y     | Y     | Mitigation Bank<br>TBD | 0.207   |                        |         | Mitigation Bank<br>TBD | 0.102   |
| 61aa                 | Sec 1<br>T-152-N<br>R-80-W  | Drainage     | Natural         | Y                              | 0.197                   | 0.939 | 0.197                          | 0.343 | Y                   | Y     | Y     | Mitigation Bank<br>TBD | 0.939   |                        |         | Mitigation Bank<br>TBD | 0.343   |
| 68a                  | Sec 2<br>T-152-N<br>R-80-W  | Basin        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |                        |         |
| 68b                  | Sec 1<br>T-152-N<br>R-80-W  | Basin        | Natural         | Y                              | 0.006                   | 0.002 |                                | 0.013 | Y                   | N     | Y     |                        |         | Mitigation Bank<br>TBD | 0.002   | Mitigation Bank<br>TBD | 0.013   |
| 69                   | Sec 1<br>T-152-N<br>R-80-W  | Basin        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |                        |         |
| 70                   | Sec 1<br>T-152-N<br>R-80-W  | Basin        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |                        |         |
| 71                   | Sec 1<br>T-152-N<br>R-80-W  | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |                        |         |
| 72a                  | Sec 1<br>T-152-N<br>R-80-W  | Ditch        | Created         | Y                              |                         | 0.058 |                                |       | N                   | Y     | N     | Mitigation Bank<br>TBD | 0.058   |                        |         |                        |         |
| 72b                  | Sec 1<br>T-152-N<br>R-80-W  | Drainage     | Natural         | Y                              | 0.016                   | 0.098 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.098   |                        |         |                        |         |
| 72c                  | Sec 1<br>T-152-N<br>R-80-W  | Ditch        | Created         | Y                              |                         | 0.077 |                                |       | N                   | Y     | N     | Mitigation Bank<br>TBD | 0.077   |                        |         |                        |         |
| 72d                  | Sec 1<br>T-152-N<br>R-80-W  | Ditch        | Created         | Y                              | 0.007                   | 0.034 |                                |       | N                   | Y     | N     | Mitigation Bank<br>TBD | 0.034   |                        |         |                        |         |
| 73                   | Sec 6<br>T-152-N<br>R-79-W  | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |                        |         |
| 74                   | Sec 6<br>T-152-N<br>R-79-W  | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |                        |         |
| 75a                  | Sec 6<br>T-152-N<br>R-79-W  | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |                        |         |
| 75b                  | Sec 6<br>T-152-N<br>R-79-W  | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |                        |         |

| Wetland Impact Table |                        |              |                 |                                |                         |        |                                |       |                     |       |       |                  |         |            |         |            |         |
|----------------------|------------------------|--------------|-----------------|--------------------------------|-------------------------|--------|--------------------------------|-------|---------------------|-------|-------|------------------|---------|------------|---------|------------|---------|
| Wetland Number       | Location               | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands¹ | Wetland Impact          |        |                                |       | Wetland Mitigation  |       |       |                  |         |            |         |            |         |
|                      |                        |              |                 |                                | Wetland Impacts Acre(s) |        | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank |         | 11990 Bank |         | USFWS Bank |         |
|                      |                        |              |                 |                                | Temp.                   | Perm.  | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location         | Acre(s) | Location   | Acre(s) | Location   | Acre(s) |
| 76                   | Sec 6 T-152-N R-79-W   | Basin        | Natural         | Y                              |                         |        |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 34-PL                | Sec 6, T152N, R79W     | Basin        | Natural         | Y                              |                         |        |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 35-PL                | Sec 6, T152N, R79W     | Basin        | Natural         | N                              |                         |        |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 36-PL                | Sec 5 & 6, T152N, R79W | Basin        | Natural         | N                              | 0.024                   |        |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 37-PL                | Sec 5 & 6, T152N, R79W | Basin        | Natural         | Y                              |                         |        |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 38a-PL               | Sec 5, T152N, R79W     | Basin        | Natural         | Y                              |                         |        |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 38b-PL               | Sec 5, T152N, R79W     | Basin        | Natural         | Y                              |                         |        |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 38c-PL               | Sec 5, T152N, R79W     | Basin        | Natural         | Y                              | 0.044                   |        |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 38d-PL               | Sec 5, T152N, R79W     | Ditch        | Created         | Y                              |                         |        |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| Totals               |                        |              |                 |                                | 3.145                   | 13.033 | 0.499                          | 0.643 |                     |       |       |                  | 9.065   |            |         | 2.001      | 0.643   |

| Other Waters and Streams Impact Table |                             |        |         |                                      |                         |                                    |                 |                    |                        |       |       |                             |         |                               |         |                                 |                                          |
|---------------------------------------|-----------------------------|--------|---------|--------------------------------------|-------------------------|------------------------------------|-----------------|--------------------|------------------------|-------|-------|-----------------------------|---------|-------------------------------|---------|---------------------------------|------------------------------------------|
| Number                                | Location                    | Type   | Feature | USACE<br>Jurisdictional <sup>1</sup> | Impacts to Other Waters |                                    |                 |                    | Other Water Mitigation |       |       |                             |         |                               |         |                                 |                                          |
|                                       |                             |        |         |                                      |                         |                                    |                 |                    | Mitigation Proposed    |       |       | USACE Mitigation Bank       |         | Onsite Mitigation Method      |         | Onsite Constructed Location     |                                          |
|                                       |                             |        |         |                                      | Temp.                   | Perm. (total<br>Loss + no<br>Loss) | Perm.<br>(Loss) | Perm. (No<br>Loss) | EO 11990               | USACE | USFWS | Location                    | Acre(s) | Mitigation<br>Location; ratio | Acre(s) | Onsite<br>Constructed<br>Site # | Onsite<br>Constructed<br>Size<br>Acre(s) |
| Alternative B1                        |                             |        |         |                                      |                         |                                    |                 |                    |                        |       |       |                             |         |                               |         |                                 |                                          |
| OW-1a                                 | Sec 15<br>T-154-N<br>R-82-W | Stream | Natural | Y                                    | 0.001                   | 0.014                              | 0.011           | 0.003              | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.022   |                               |         |                                 |                                          |
| OW-1b                                 | Sec 15<br>T-154-N<br>R-82-W | Stream | Natural | Y                                    | 0.006                   | 0.097                              | 0.097           |                    | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.194   |                               |         |                                 |                                          |
| OW-5b                                 | Sec 15<br>T-154-N<br>R-82-W | Stream | Natural | Y                                    | 0.002                   | 0.020                              | 0.012           | 0.008              | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.024   |                               |         |                                 |                                          |
| OW-5e                                 | Sec 15<br>T-154-N<br>R-82-W | Stream | Natural | Y                                    | 0.001                   | 0.015                              | 0.015           |                    | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.030   |                               |         |                                 |                                          |
| OW-9b                                 | Sec 24<br>T-154-N<br>R-82-W | Stream | Natural | Y                                    | 0.005                   | 0.038                              | 0.033           | 0.005              | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.066   |                               |         |                                 |                                          |
| OW-11a                                | Sec 30<br>T-154-N<br>R-81-W | Stream | Natural | Y                                    | 0.020                   | 0.059                              | 0.029           | 0.030              | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.058   |                               |         |                                 |                                          |
| OW-11b                                | Sec 30<br>T-154-N<br>R-81-W | Stream | Natural | Y                                    | 0.161                   | 0.145                              | 0.145           |                    | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.290   |                               |         |                                 |                                          |
| OW-12a                                | Sec 31<br>T-154-N<br>R-81-W | Stream | Natural | Y                                    | 0.004                   | 0.026                              | 0.015           | 0.011              | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.030   |                               |         |                                 |                                          |
| OW-12b                                | Sec 31<br>T-154-N<br>R-81-W | Stream | Natural | Y                                    | 0.003                   | 0.013                              | 0.010           | 0.003              | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.020   |                               |         |                                 |                                          |
| OW-20a                                | Sec 5<br>T-153-N<br>R-81-W  | Stream | Natural | Y                                    | 0.088                   | 0.511                              | 0.343           | 0.168              | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.686   |                               |         |                                 |                                          |
| OW-20d                                | Sec 5<br>T-153-N<br>R-81-W  | Stream | Natural | Y                                    | 0.025                   | 0.016                              | 0.013           | 0.003              | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.026   |                               |         |                                 |                                          |
| OW-23a                                | Sec 4<br>T-153-N<br>R-81-W  | Stream | Natural | Y                                    | 0.004                   | 0.067                              | 0.054           | 0.013              | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.108   |                               |         |                                 |                                          |
| OW-23b                                | Sec 4<br>T-153-N<br>R-81-W  | Stream | Natural | Y                                    | 0.004                   | 0.033                              | 0.006           | 0.027              | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.012   |                               |         |                                 |                                          |
| OW-24a                                | Sec 9<br>T-153-N<br>R-81-W  | Stream | Natural | Y                                    | 0.061                   | 0.145                              | 0.119           | 0.026              | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.238   |                               |         |                                 |                                          |
| OW-24b                                | Sec 9<br>T-153-N<br>R-81-W  | Stream | Natural | Y                                    | 0.060                   | 0.033                              | 0.032           | 0.001              | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.064   |                               |         |                                 |                                          |
| Alternative B2                        |                             |        |         |                                      |                         |                                    |                 |                    |                        |       |       |                             |         |                               |         |                                 |                                          |
| OW-28b                                | Sec 10<br>T-153-N<br>R-81-W | Stream | Natural | Y                                    | 0.008                   | 0.043                              | 0.043           |                    | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.086   |                               |         |                                 |                                          |
| OW-31b                                | Sec 12<br>T-153-N<br>R-81-W | Stream | Natural | Y                                    |                         |                                    |                 |                    | N                      | N     | N     |                             |         |                               |         |                                 |                                          |



| Other Waters and Streams Impact Table |                                                              |        |         |                       |                         |                              |              |                 |                        |       |       |                             |         |                            |         |                             |                                 |
|---------------------------------------|--------------------------------------------------------------|--------|---------|-----------------------|-------------------------|------------------------------|--------------|-----------------|------------------------|-------|-------|-----------------------------|---------|----------------------------|---------|-----------------------------|---------------------------------|
| Number                                | Location                                                     | Type   | Feature | USACE Jurisdictional¹ | Impacts to Other Waters |                              |              |                 | Other Water Mitigation |       |       |                             |         |                            |         |                             |                                 |
|                                       |                                                              |        |         |                       | Acres                   |                              |              |                 | Mitigation Proposed    |       |       | USACE Mitigation Bank       |         | Onsite Mitigation Method   |         | Onsite Constructed Location |                                 |
|                                       |                                                              |        |         |                       | Temp.                   | Perm. (total Loss + no Loss) | Perm. (Loss) | Perm. (No Loss) | EO 11990               | USACE | USFWS | Location                    | Acre(s) | Mitigation Location; ratio | Acre(s) | Onsite Constructed Site #   | Onsite Constructed Size Acre(s) |
| OW-31e                                | Sec 12<br>T-153-N<br>R-81-W                                  | Stream | Natural | Y                     | 0.003                   | 0.015                        | 0.010        | 0.005           | N                      | N     | N     |                             |         |                            |         |                             |                                 |
| OW-33a                                | Sec 13<br>T-153-N<br>R-81-W                                  | Stream | Natural | N                     |                         |                              |              |                 | N                      | N     | N     |                             |         |                            |         |                             |                                 |
| OW-33b                                | Sec 13<br>T-153-N<br>R-81-W                                  | Stream | Natural | N                     |                         |                              |              |                 | N                      | N     | N     |                             |         |                            |         |                             |                                 |
| OW-79b                                | Sec 13<br>T-153-N<br>R-81-W                                  | Pond   | Natural | N                     |                         |                              |              |                 | N                      | N     | N     |                             |         |                            |         |                             |                                 |
| Alternative B3                        |                                                              |        |         |                       |                         |                              |              |                 |                        |       |       |                             |         |                            |         |                             |                                 |
| OW-34a                                | Sec 18<br>T-153-N<br>R-80-W                                  | Stream | Natural | N                     |                         |                              |              |                 | N                      | N     | N     |                             |         |                            |         |                             |                                 |
| OW-34b                                | Sec 18<br>T-153-N<br>R-80-W                                  | Stream | Natural | N                     | 0.001                   | 0.007                        | 0.007        |                 | N                      | N     | N     |                             |         |                            |         |                             |                                 |
| OW-34c                                | Sec 18<br>T-153-N<br>R-80-W                                  | Stream | Natural | N                     |                         | 0.012                        | 0.012        |                 | N                      | N     | N     |                             |         |                            |         |                             |                                 |
| OW-49b                                | Sec 21<br>T-153-N<br>R-80-W                                  | Stream | Natural | Y                     |                         |                              |              |                 | N                      | N     | N     |                             |         |                            |         |                             |                                 |
| OW-49d                                | Sec 21<br>T-153-N<br>R-80-W                                  | Stream | Natural | Y                     | 0.029                   | 0.138                        | 0.138        |                 | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.276   |                            |         |                             |                                 |
| OW-51b                                | Sec 21<br>T-153-N<br>R-80-W                                  | Stream | Natural | Y                     | 0.004                   | 0.020                        | 0.020        |                 | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.04    |                            |         |                             |                                 |
| OW-51e                                | Sec 21&22<br>T-153-N<br>R-80-W                               | Stream | Natural | Y                     | 0.007                   | 0.071                        | 0.071        |                 | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.142   |                            |         |                             |                                 |
| No Alternative B4                     |                                                              |        |         |                       |                         |                              |              |                 |                        |       |       |                             |         |                            |         |                             |                                 |
| OW-59a                                | Sec 23<br>T-153-N<br>R-80-W                                  | Stream | Natural | Y                     |                         |                              |              |                 | N                      | N     | N     |                             |         |                            |         |                             |                                 |
| Alternative B5                        |                                                              |        |         |                       |                         |                              |              |                 |                        |       |       |                             |         |                            |         |                             |                                 |
| OW-61h                                | Sec 36<br>T-153-N<br>R-80-W                                  | Stream | Natural | Y                     | 0.010                   | 0.013                        | 0.013        |                 | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.026   |                            |         |                             |                                 |
| OW-61j                                | Sec 36<br>T-153-N<br>R-80-W                                  | Stream | Created | Y                     | 0.006                   | 0.313                        | 0.313        |                 | N                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.626   |                            |         |                             |                                 |
| OW-61n                                | Sec 36<br>T-153-N<br>R-80-W<br>& Sec 31<br>T-153-N<br>R-79-W | Stream | Natural | Y                     | 0.005                   | 0.044                        | 0.044        |                 | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.088   |                            |         |                             |                                 |

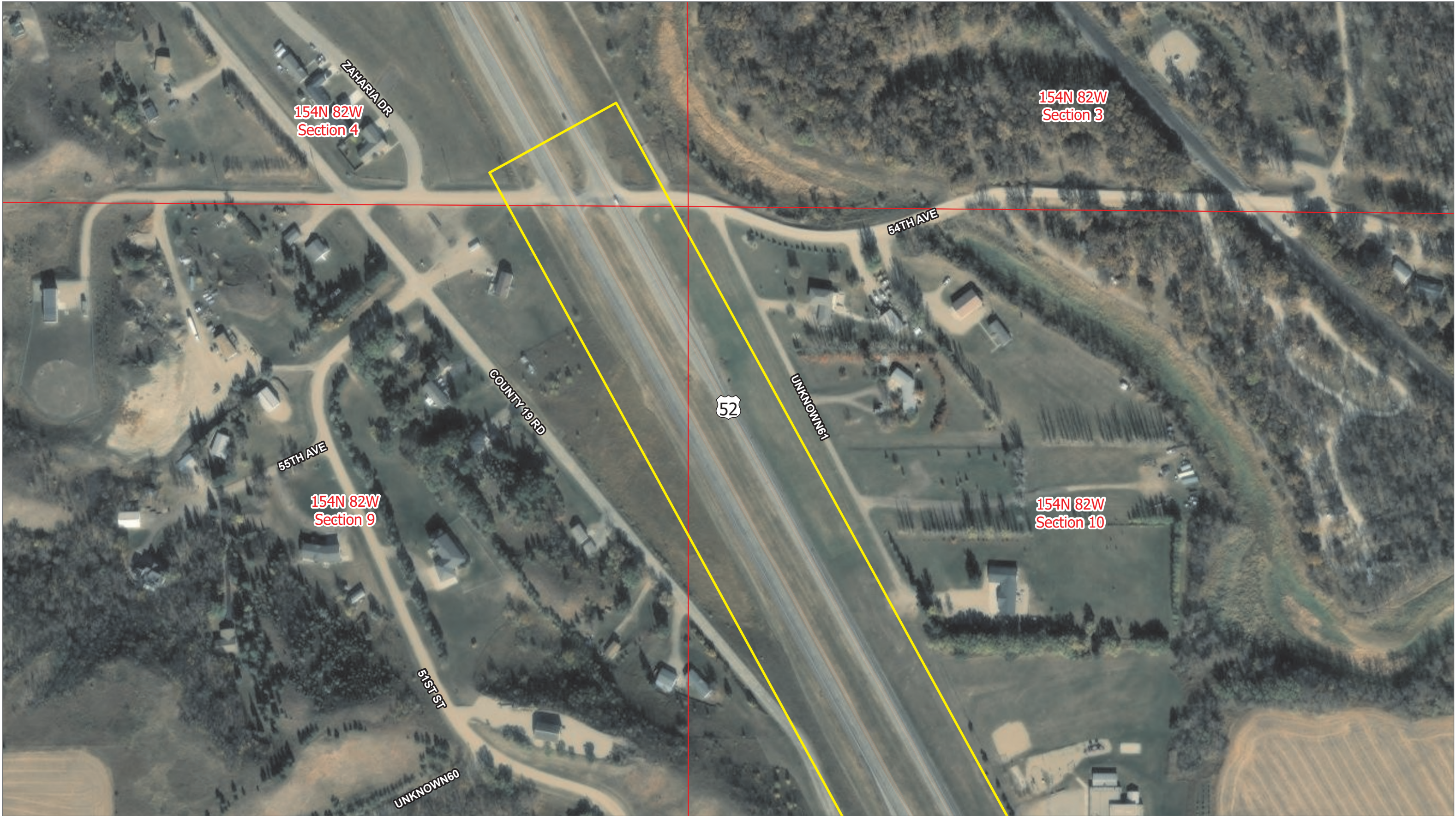
| Other Waters and Streams Impact Table |                             |        |         |                                      |                         |                                    |                 |                    |                        |       |       |                             |         |                               |         |                                 |                                          |
|---------------------------------------|-----------------------------|--------|---------|--------------------------------------|-------------------------|------------------------------------|-----------------|--------------------|------------------------|-------|-------|-----------------------------|---------|-------------------------------|---------|---------------------------------|------------------------------------------|
| Number                                | Location                    | Type   | Feature | USACE<br>Jurisdictional <sup>1</sup> | Impacts to Other Waters |                                    |                 |                    | Other Water Mitigation |       |       |                             |         |                               |         |                                 |                                          |
|                                       |                             |        |         |                                      | Acres                   |                                    |                 |                    | Mitigation Proposed    |       |       | USACE Mitigation Bank       |         | Onsite Mitigation Method      |         | Onsite Constructed Location     |                                          |
|                                       |                             |        |         |                                      | Temp.                   | Perm. (total<br>Loss + no<br>Loss) | Perm.<br>(Loss) | Perm. (No<br>Loss) | EO 11990               | USACE | USFWS | Location                    | Acre(s) | Mitigation<br>Location; ratio | Acre(s) | Onsite<br>Constructed<br>Site # | Onsite<br>Constructed<br>Size<br>Acre(s) |
| OW-61p                                | Sec 31<br>T-153-N<br>R-79-W | Stream | Natural | Y                                    |                         |                                    |                 |                    | N                      | N     | N     |                             |         |                               |         |                                 |                                          |
| OW-61s                                | Sec 31<br>T-153-N<br>R-79-W | Stream | Natural | Y                                    | 0.021                   | 0.064                              | 0.064           |                    | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.128   |                               |         |                                 |                                          |
| OW-61v                                | Sec 31<br>T-153-N<br>R-79-W | Stream | Natural | Y                                    | 0.010                   | 0.008                              | 0.008           |                    | Y                      | Y     | N     | Mitigation Bank<br>TBD; 2:1 | 0.016   |                               |         |                                 |                                          |
| Totals                                |                             |        |         |                                      | 0.549                   | 1.980                              | 1.677           | 0                  |                        |       |       |                             | 3.296   |                               | 0.000   |                                 | 0.000                                    |

<sup>1</sup> A wetland Jurisdictional Determination was issued by the USACE on 9/5/25: NWO-2022-00132-BIS

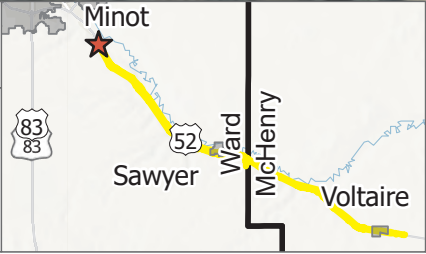
| Impact Summary Table             |               |                                              |                  |
|----------------------------------|---------------|----------------------------------------------|------------------|
| Permanent Impact Summary         |               | Temporary Impacts and additional information |                  |
| Wetland Type                     | Total (Acres) | Wetland Type                                 | Total (Acres/Lf) |
| Natural/JD (Fill/Drain)          | 8.087         | Temporary JD                                 | 2.673            |
| Natural/Non-JD (Fill/Drain)      | 1.854         | Non-JD Temporary                             | 0.472            |
| Artificial/JD (Fill/Drain)       | 1.133         |                                              |                  |
| Artificial /Non-JD (Fill/Drain)) | 1.959         | Permanent OW                                 | 1.980            |
| Total                            | 13.033        | Temporary OW                                 | 0.549            |

| Mitigation Summary Table |                     |                     |                |                 |                    |                          |                    |
|--------------------------|---------------------|---------------------|----------------|-----------------|--------------------|--------------------------|--------------------|
|                          | Location            | Ditch Shift Acre(s) | Onsite Acre(s) | Offsite Acre(s) | 11990 Bank Acre(s) | USACE/11990 Bank Acre(s) | USFWS Bank Acre(s) |
| USACE Only               | Mitigation Bank TBD |                     |                |                 |                    | 1.751                    |                    |
| EO 11990 Only            | Mitigation Bank TBD |                     |                |                 | 2.001              |                          |                    |
| USACE/11990              | Mitigation Bank TBD |                     |                |                 |                    | 10.610                   |                    |
| USFWS                    | Mitigation Bank TBD |                     |                |                 |                    |                          | 0.643              |
|                          | Total               | 0.000               | 0.000          | 0.000           | 2.001              | 12.361                   | 0.643              |





**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



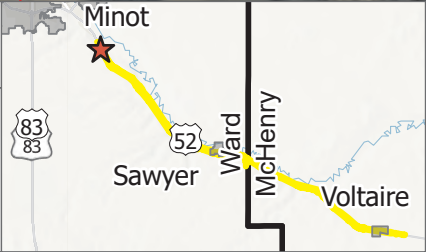
- Mile Marker
- US Highway
- PLSS Sections
- Study Area

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PCN: 24012  
DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson  
SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker  
FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025  
BACKGROUND: 2024 NAIP  
DATA SOURCES: Ulteig, NDGIS & NDDOT





**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



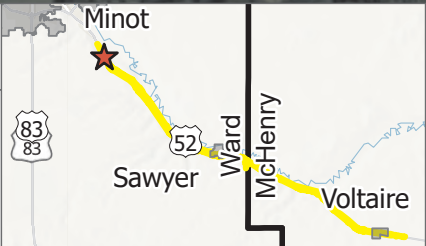
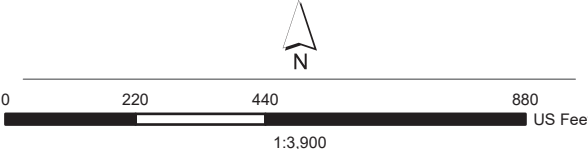
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



- Mile Marker
- Segment 1
- Study Area
- Grading Limit
- US Highway
- PLSS Sections
- Asphalt

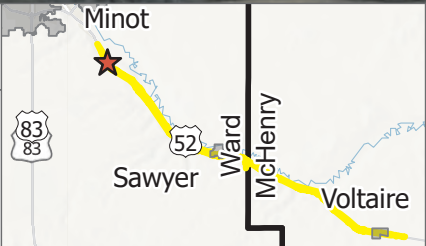
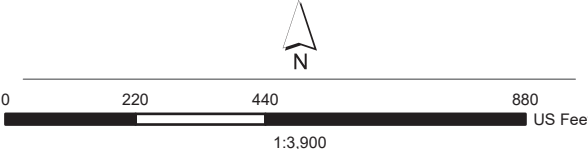
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



- Mile Marker
- US Highway
- Segment 1
- PLSS Sections
- Other Water
- ▨ Wetland
- Study Area
- Asphalt
- Grading Limit

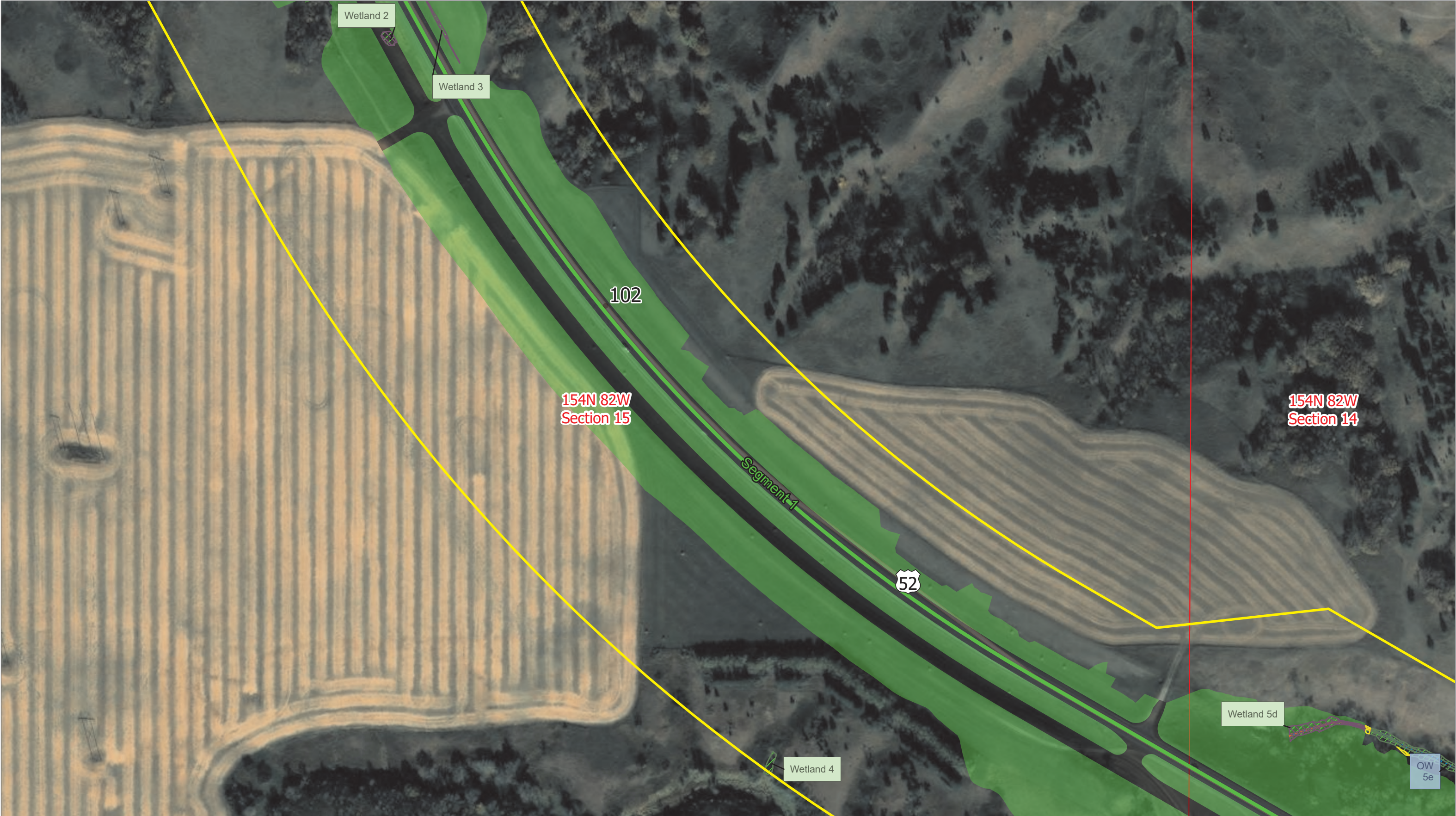
**Wetland  
Impacts-Ward**

- ▨ Other Water Impact Permanent
- ▨ Other Water Impact Temporary
- ▨ Wetland Impact Permanent
- ▨ Wetland Impact Temporary

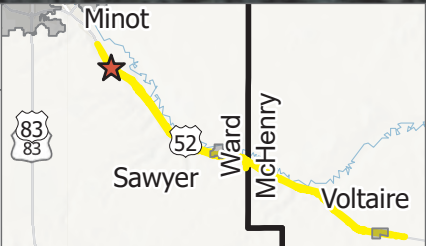
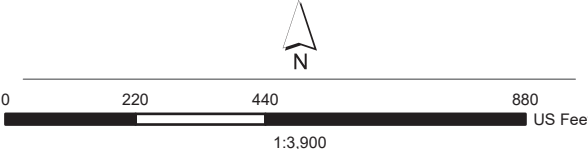
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Ward County, North Dakota**



- Mile Marker
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- PLSS Sections
- Other Water

- Wetland
- Study Area
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- Grading Limit

**Wetland  
Impacts-Ward**

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- Other Water Impact Temporary
- Wetland Impact Permanent
- Wetland Impact Temporary

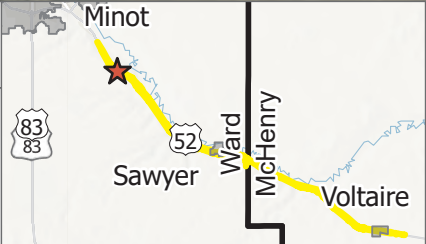
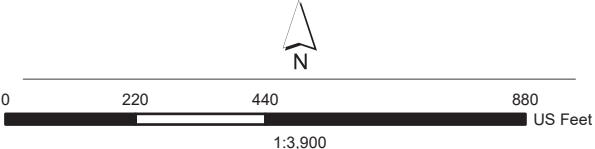
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Ward County, North Dakota**



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Impacts-Ward**

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- ▨ Wetland Impact Temporary

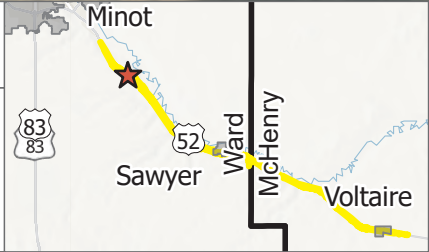
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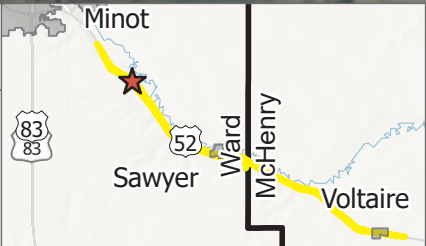
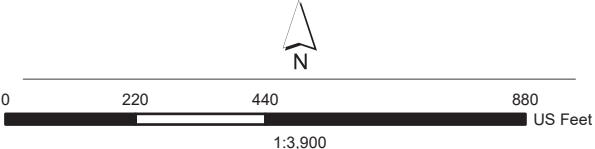
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| ● Mile Marker | — Segment 1     | ▨ Wetland    | ■ Asphalt       |
| — US Highway  | ▭ PLSS Sections | ▭ Study Area | ■ Grading Limit |

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Ward County, North Dakota**



- Mile Marker
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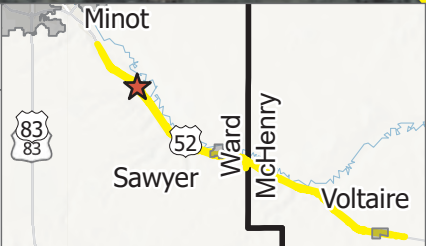
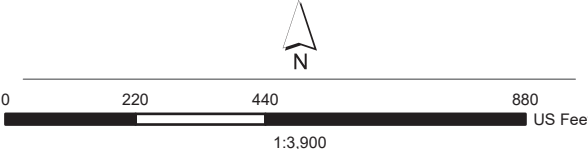
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Ward County, North Dakota**



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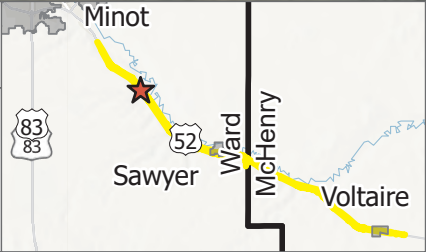
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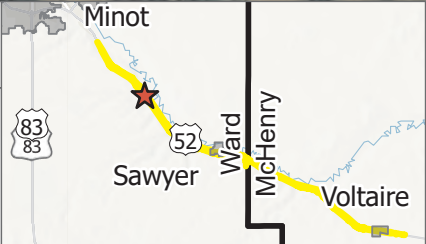
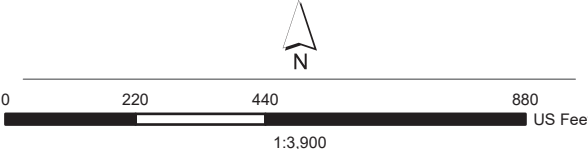
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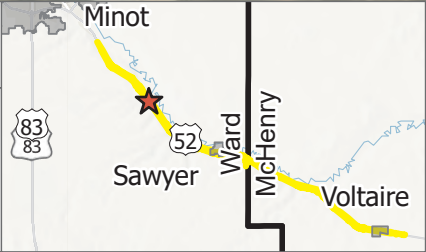
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DATA SOURCES: Ulteig, NDGIS & NDDOT







**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



- Mile Marker
- US Highway
- Segment 1
- PLSS Sections
- Other Water

- Wetland
- Study Area
- Asphalt
- Grading Limit

- Wetland  
Impacts-Ward**
- Other Water Impact Permanent

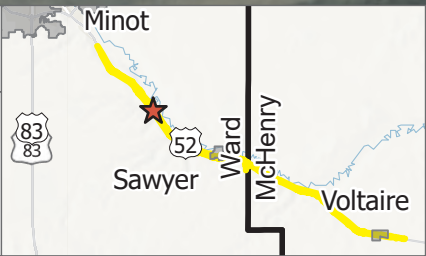
- Other Water Impact Temporary
- Wetland Impact Permanent
- Wetland Impact Temporary

MAP CREATED BY: Bryan Erickson  
DATE: 2/6/2026 1:26 PM  
PROJECT: 4-052(109)101  
PCN: 24012  
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



- Mile Marker
- US Highway
- Segment 1
- PLSS Sections
- Other Water

- Wetland
- Study Area
- Asphalt
- Grading Limit

**Wetland  
Impacts-Ward**

- Other Water Impact Permanent

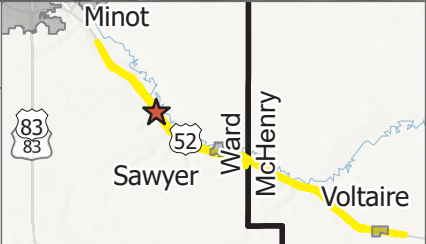
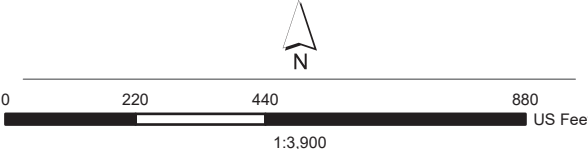
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



- Mile Marker
- Segment 1
- ▭ Study Area
- ▭ Grading Limit
- US Highway
- ▭ PLSS Sections
- ▭ Asphalt

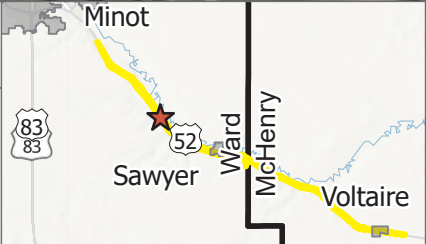
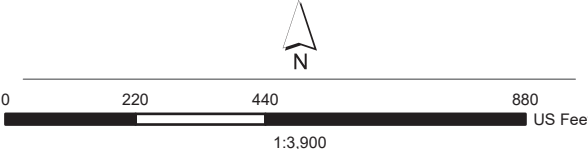
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



- |               |               |                                 |                                    |
|---------------|---------------|---------------------------------|------------------------------------|
| ● Mile Marker | Other Water   | <b>Wetland<br/>Impacts-Ward</b> | Other Water<br>Impact<br>Temporary |
| US Highway    | Study Area    |                                 | Other Water<br>Impact<br>Permanent |
| Segment 1     | Asphalt       |                                 |                                    |
| PLSS Sections | Grading Limit |                                 |                                    |

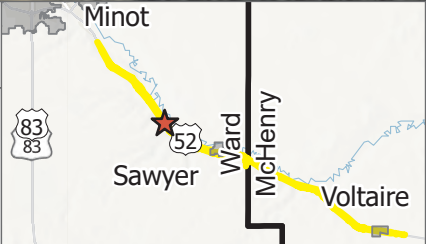
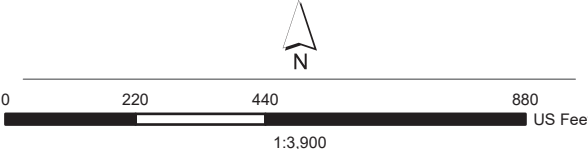
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



- Mile Marker
- Segment 1
- ▭ Study Area
- ▭ Grading Limit
- US Highway
- ▭ PLSS Sections
- ▭ Asphalt

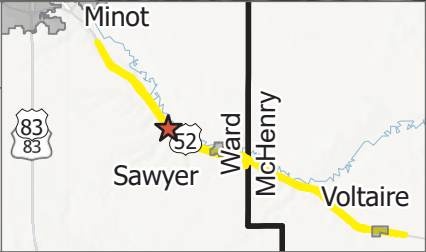
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



- |               |                 |                 |
|---------------|-----------------|-----------------|
| ● Mile Marker | ▭ PLSS Sections | ▭ Asphalt       |
| ▭ US Highway  | ▭ Wetland       | ▭ Grading Limit |
| ▭ Segment 1   | ▭ Study Area    |                 |

**Wetland  
Impacts-Ward**

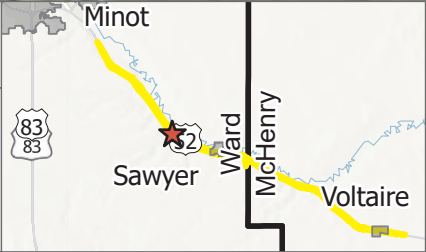
▨ Wetland Impact  
Permanent

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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



- Mile Marker
- US Highway
- Segment 1
- PLSS Sections
- ▨ Other Water

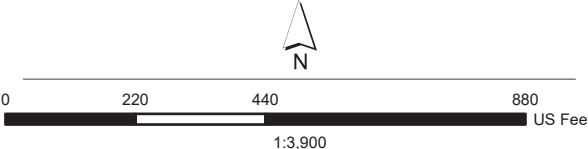
- ▨ Wetland
- ▨ Study Area
- ▨ Asphalt
- ▨ Grading Limit

**Wetland  
Impacts-Ward**

- ▨ Other Water Impact Permanent

- ▨ Other Water Impact Temporary
- ▨ Wetland Impact Permanent
- ▨ Wetland Impact Temporary

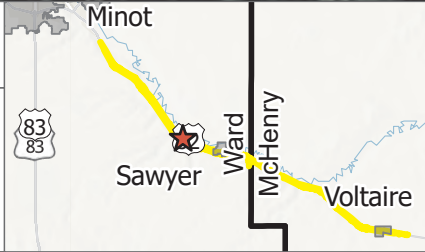
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



- Mile Marker
- US Highway
- Segment 1
- PLSS Sections
- Other Water

- ▨ Wetland
- Study Area
- Asphalt
- Grading Limit

- Wetland  
Impacts-Ward**
- ▨ Other Water  
Impact  
Permanent

- ▨ Wetland Impact  
Temporary

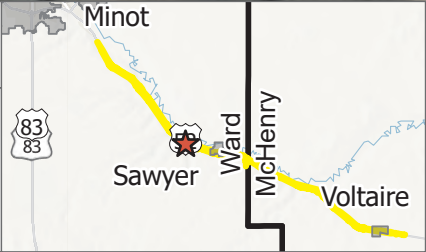
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**NORTH  
Dakota** | Transportation  
Be Legendary.





**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



- Mile Marker
- US Highway
- Segment 1
- PLSS Sections
- Other Water

- Wetland
- Study Area
- Asphalt
- Grading Limit

- Wetland  
Impacts-Ward**
- Other Water  
Impact  
Permanent

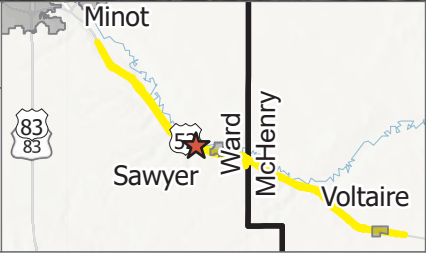
- Other Water  
Impact  
Temporary
- Wetland Impact  
Temporary

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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



- Mile Marker
- US Highway
- Segment 1
- Segment 2
- PLSS Sections
- Other Water
- Wetland
- Study Area
- Asphalt
- Grading Limit

**Wetland  
Impacts-Ward**

- Other Water Impact Permanent
- Other Water Impact Temporary
- Wetland Impact Permanent
- Wetland Impact Temporary

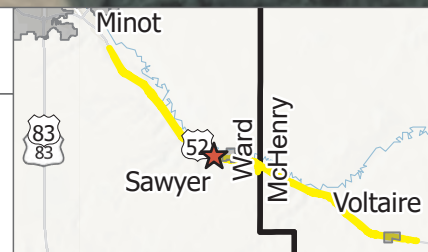
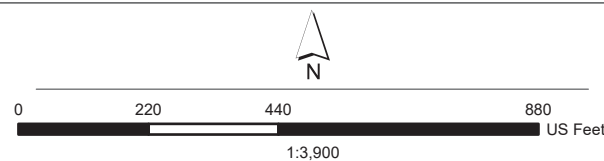
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**NORTH Dakota** | Transportation  
Be Legendary.





**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**Ward County, North Dakota**



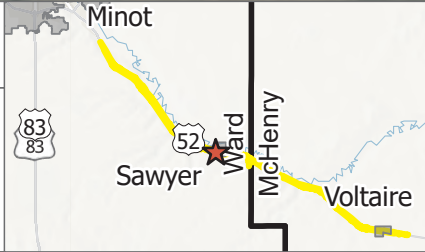
-  Mile Marker   
  Segment 2   
  Study Area   
  Grading Limit  
 US Highway   
  PLSS Sections   
  Asphalt

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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**Ward County, North Dakota**



- Mile Marker
- US Highway
- Segment 2
- PLSS Sections
- Other Water

- Wetland
- Study Area
- Asphalt
- Grading Limit

- Wetland Impacts-Ward**
- Other Water Impact Permanent

- Other Water Impact Temporary
- Wetland Impact Permanent
- Wetland Impact Temporary

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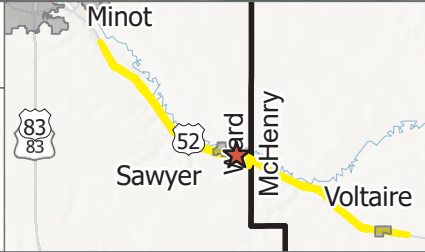


|                                                                                     |                                      |  |                                                                                                                                                                                                 |                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                |                    |
|-------------------------------------------------------------------------------------|--------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN</b><br>Ward County, North Dakota |                                      |  | <ul style="list-style-type: none"><li>Mile Marker</li><li>US Highway</li><li>Segment 2</li><li>PLSS Sections</li><li>Wetland</li><li>Study Area</li><li>Asphalt</li><li>Grading Limit</li></ul> | <b>Wetland Impacts-Ward</b> <ul style="list-style-type: none"><li>Wetland Impact Permanent</li></ul> | MAP CREATED BY: Bryan Erickson<br>DATE: 2/6/2026 1:26 PM<br>PROJECT: 4-052(109)101<br>PCN: 24012<br>DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson<br>SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker<br>FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025<br>BACKGROUND: 2024 NAIP<br>DATA SOURCES: Ulteig, NDGIS & NDDOT | <br>Transportation |
|                                                                                     | <br>0 220 440 880 US Feet<br>1:3,900 |  |                                                                                                                                                                                                 |                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                |                    |





**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
Ward County, North Dakota**



- Mile Marker
- US Highway
- Segment 2
- PLSS Sections
- ▨ Other Water

- ▨ Wetland
- ▨ Study Area
- ▨ Asphalt
- ▨ Grading Limit

- Wetland  
Impacts-Ward**
- ▨ Other Water  
Impact  
Permanent

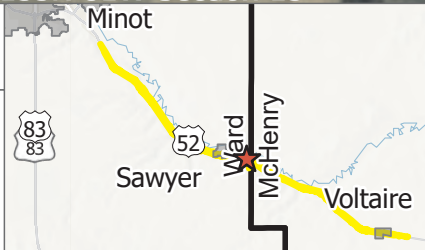
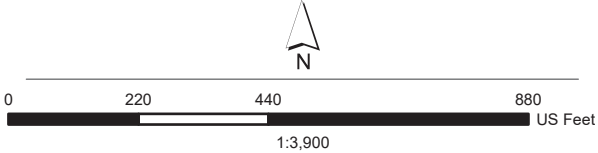
- ▨ Other Water  
Impact  
Temporary
- ▨ Wetland Impact  
Permanent
- ▨ Wetland Impact  
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**Ward & McHenry County, North Dakota**

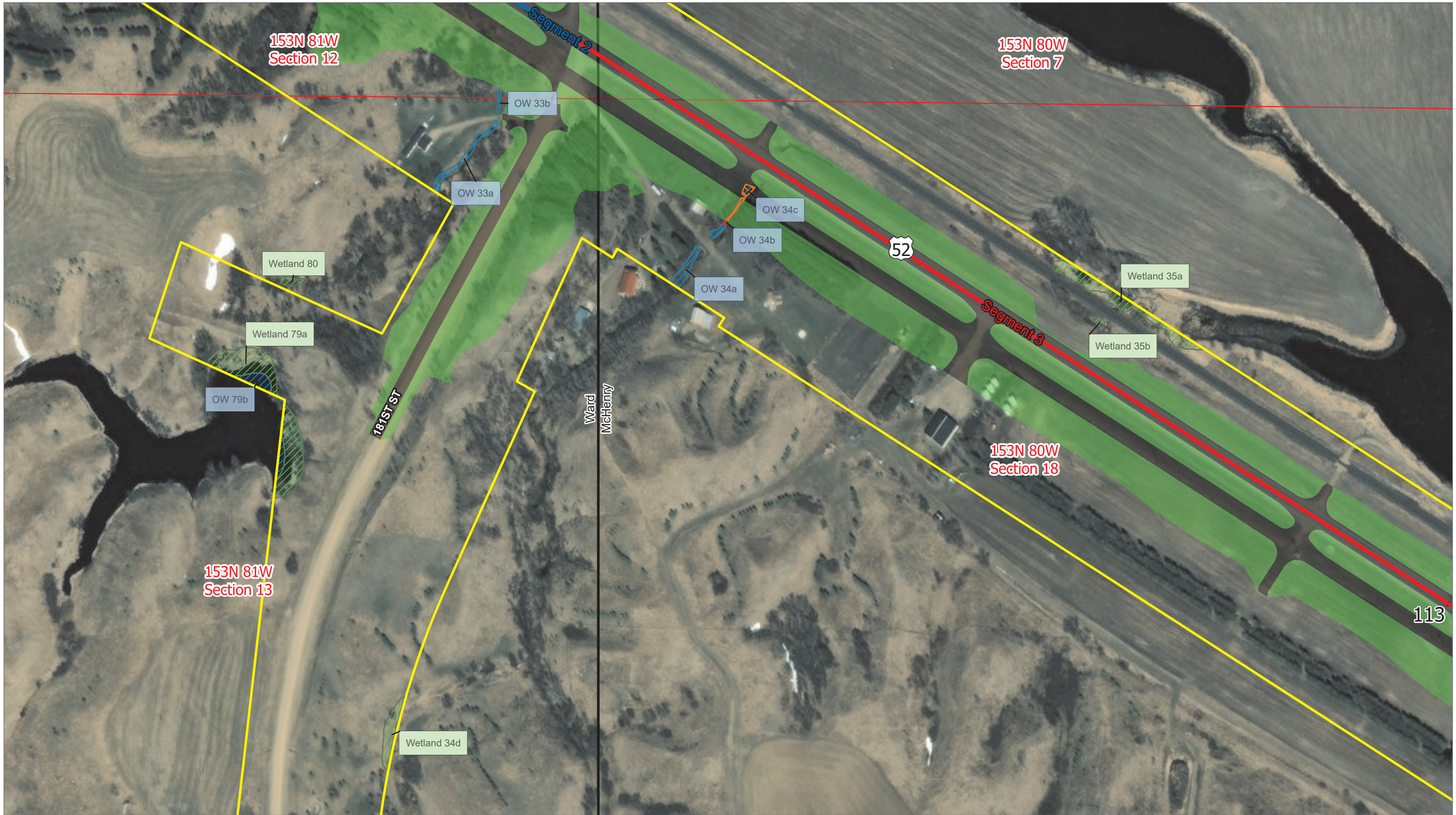


- |               |                 |              |                 |
|---------------|-----------------|--------------|-----------------|
| ● Mile Marker | — Segment 3     | ▨ Wetland    | ■ Grading Limit |
| — US Highway  | □ PLSS Sections | ■ Study Area |                 |
| — Segment 2   | ▨ Other Water   | ■ Asphalt    |                 |

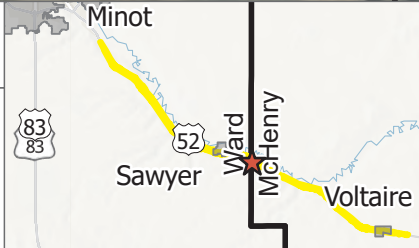
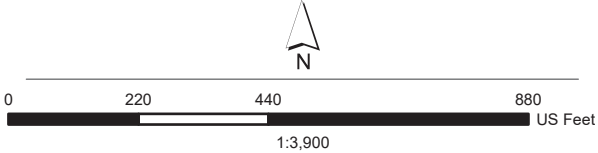
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**Ward & McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 2
- Segment 3
- PLSS Sections
- ▨ Other Water
- ▨ Wetland
- ▨ Study Area
- ▨ Asphalt
- ▨ Grading Limit

**Wetland  
Impacts-  
McHenry**

- ▨ Other Water  
Impact  
Permanent

- ▨ Other Water  
Impact  
Temporary

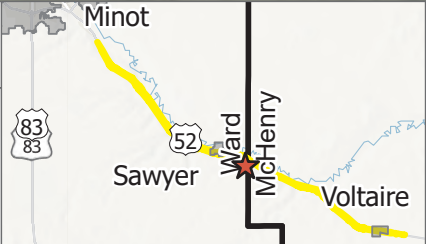
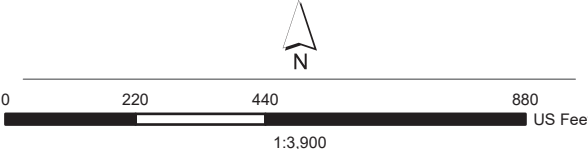
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**Ward & McHenry County, North Dakota**



- Mile Marker
- ▨ Other Water
- ▨ Study Area
- ▨ PLSS Sections
- ▨ Wetland

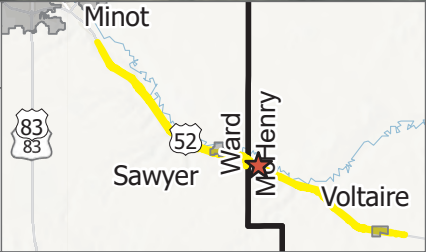
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**McHenry County, North Dakota**



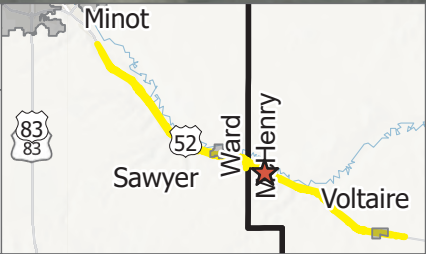
- Mile Marker
- US Highway
- Segment 3
- PLSS Sections
- Wetland
- Study Area
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 3
- PLSS Sections
- ▨ Wetland
- Study Area
- Asphalt
- Grading Limit
- ▨ Wetland Impact Permanent
- ▨ Wetland Impact Temporary

**Wetland  
Impacts-  
McHenry**

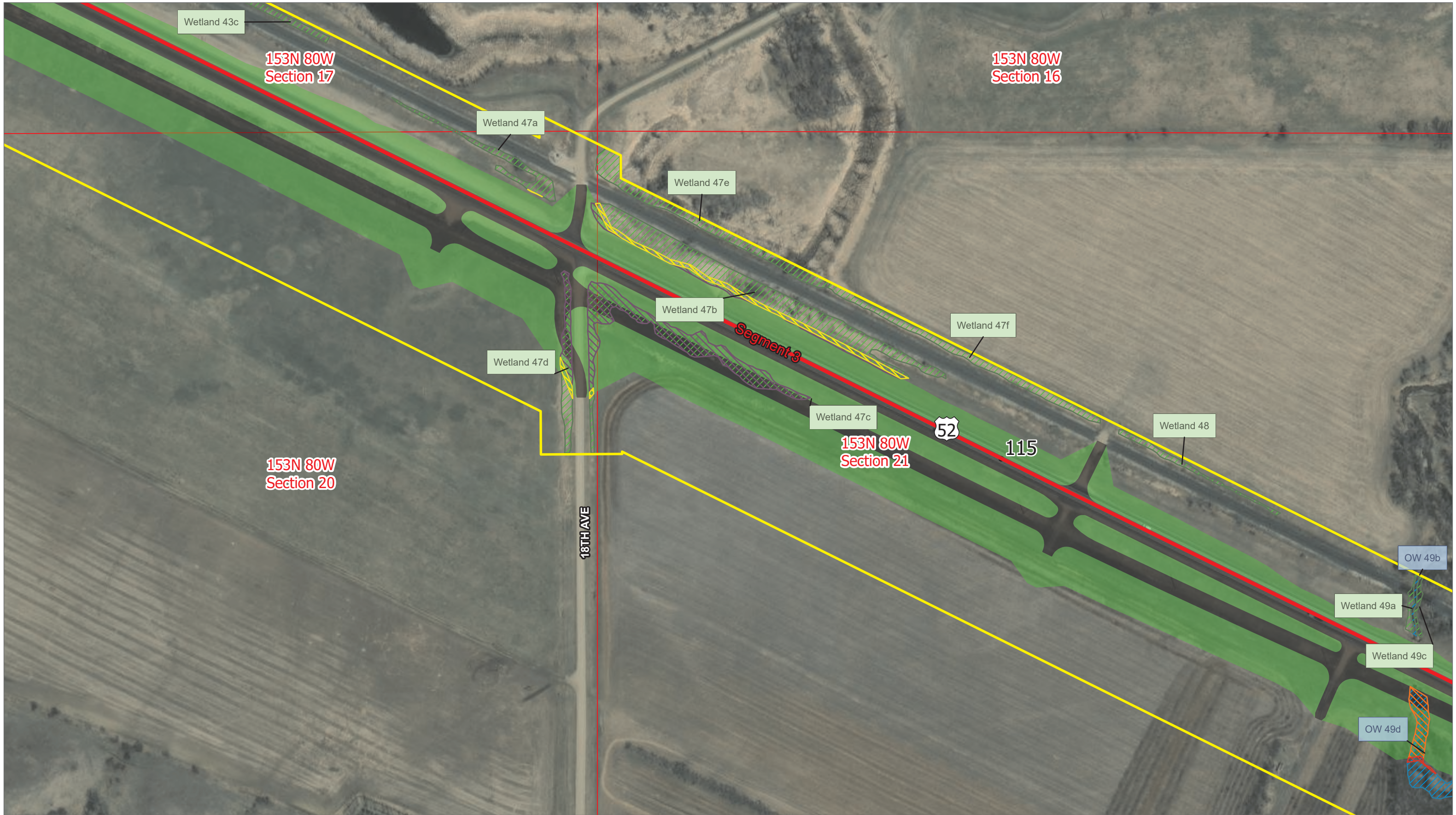
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**NORTH  
Dakota** | Transportation  
Be Legendary.

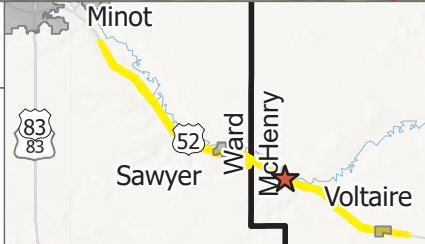
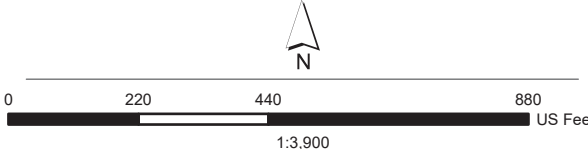








**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 3
- PLSS Sections
- Other Water

- Wetland
- Study Area
- Asphalt
- Grading Limit

**Wetland**  
**Impacts-**  
**McHenry**

- Other Water Impact Permanent

- Other Water Impact Temporary
- Wetland Impact Permanent
- Wetland Impact Temporary

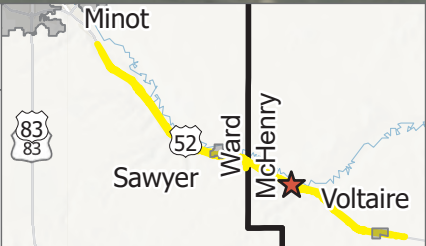
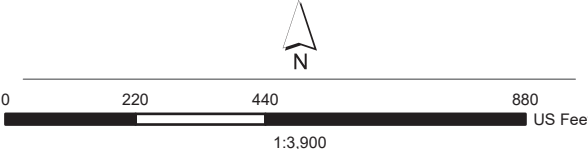
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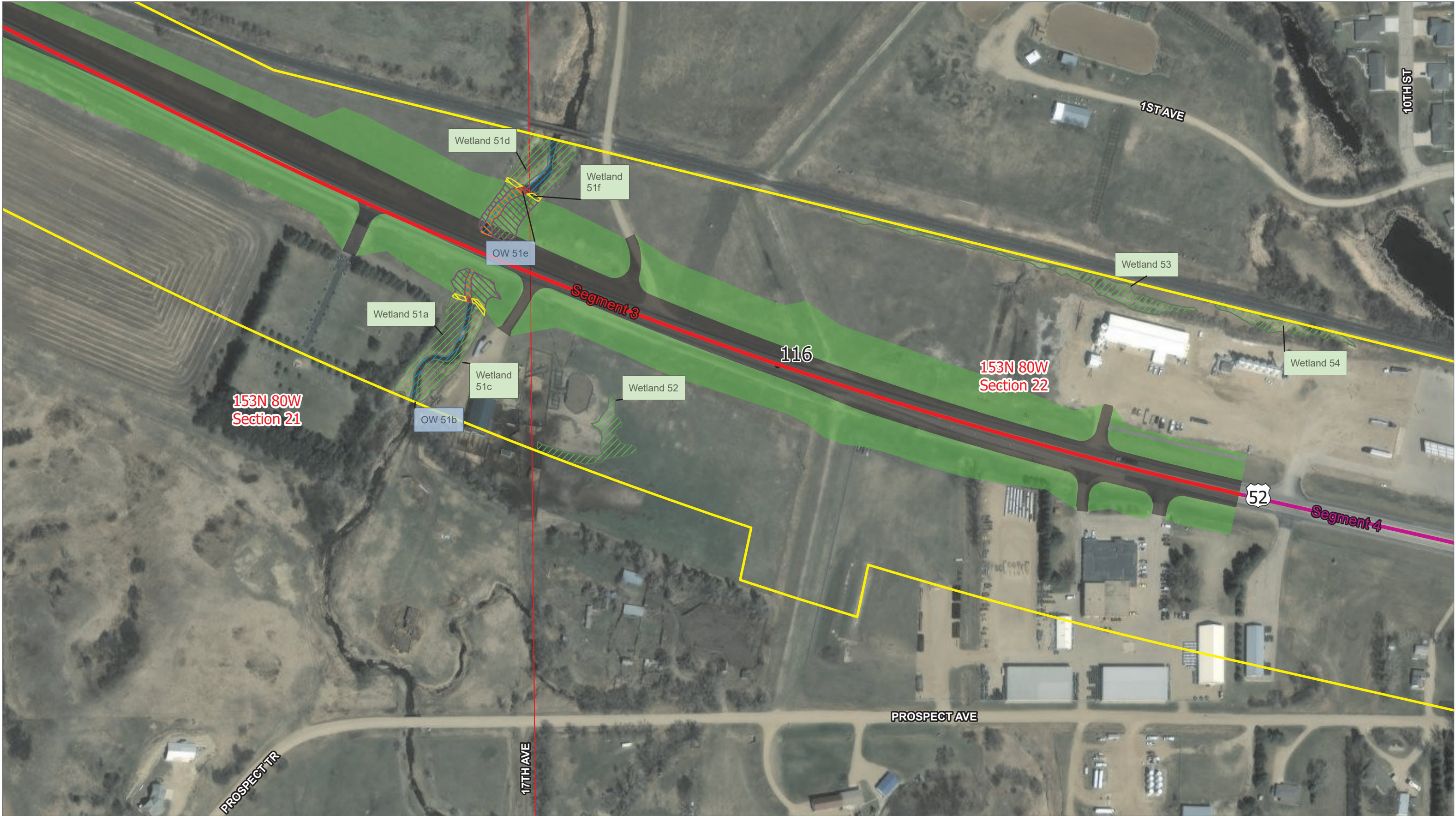
WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
McHenry County, North Dakota



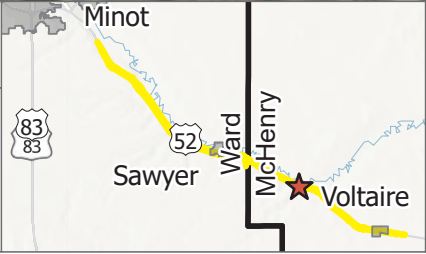
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|---------------|---------------|-----------------------------------------|------------------------------------|
| ● Mile Marker | Wetland       | <b>Wetland<br/>Impacts-<br/>McHenry</b> | Other Water<br>Impact<br>Temporary |
| US Highway    | Study Area    |                                         | Other Water<br>Impact<br>Permanent |
| Segment 3     | Asphalt       |                                         |                                    |
| PLSS Sections | Grading Limit |                                         |                                    |
| Other Water   |               |                                         |                                    |

MAP CREATED BY: Bryan Erickson  
DATE: 2/6/2026 1:26 PM  
PROJECT: 4-052(109)101  
PCN: 24012  
DELINEATORs: Jeff Moss, Mike Huffington, Nick Anderson  
SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker  
FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025  
BACKGROUND: 2024 NAIP  
DATA SOURCES: Ulteig, NDGIS & NDDOT





**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 3
- Segment 4
- PLSS Sections
- Other Water

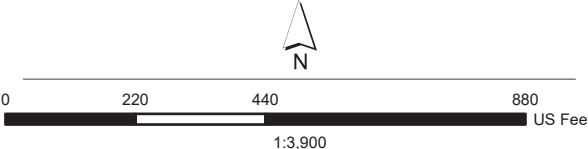
- Wetland
- Study Area
- Asphalt
- Grading Limit
- Shared-Use Path

**Wetland Impacts-McHenry**

- Other Water Impact Permanent

- Other Water Impact Temporary
- Wetland Impact Permanent
- Wetland Impact Temporary

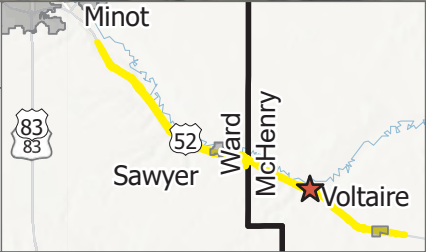
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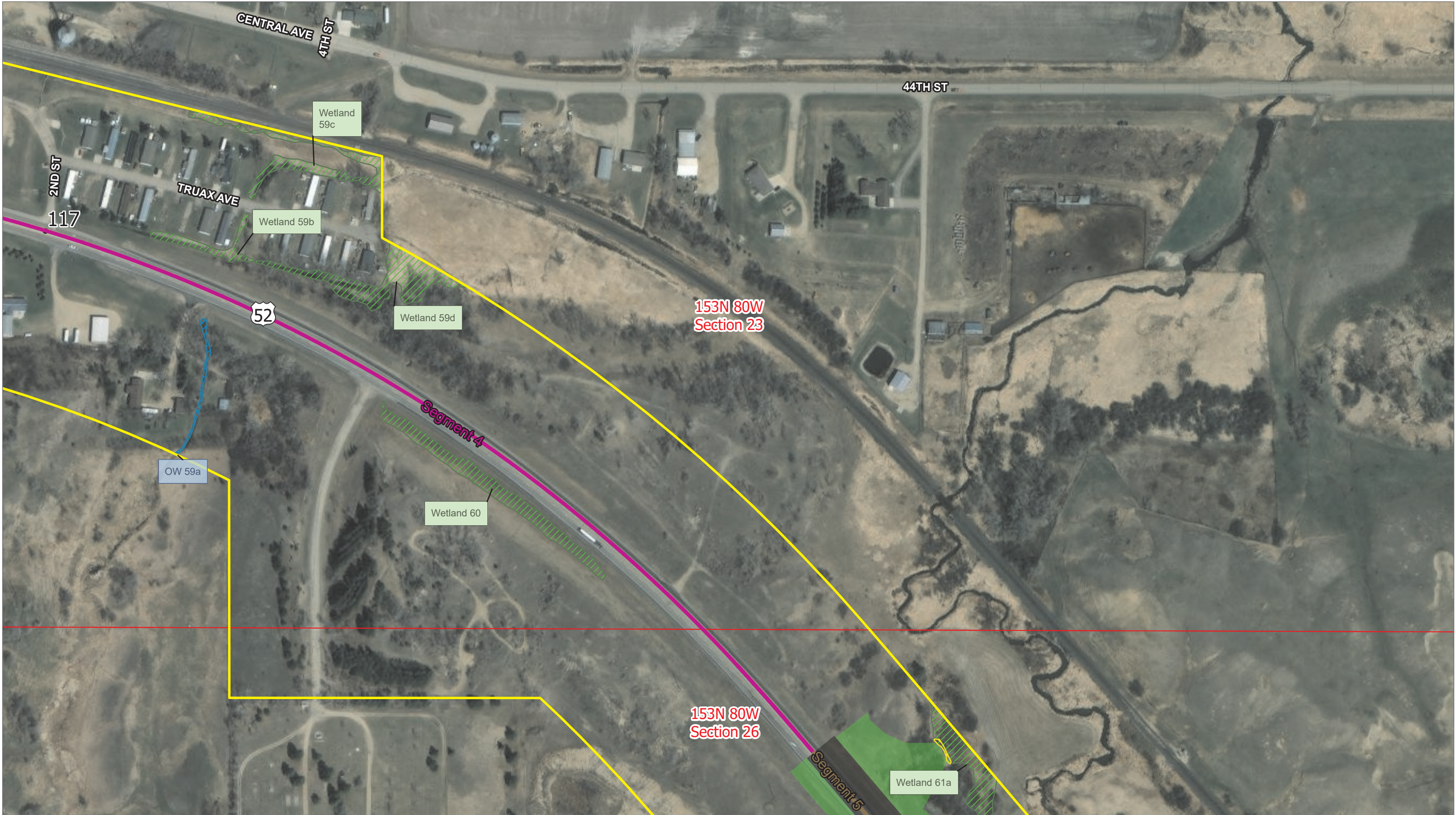
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McHenry County, North Dakota**



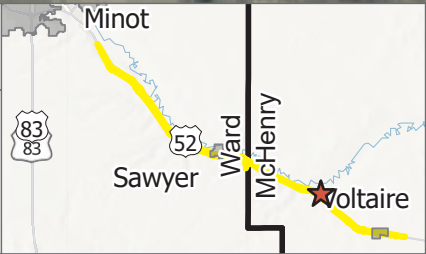
- Mile Marker
- US Highway
- Segment 4
- PLSS Sections
- Wetland
- Study Area

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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**McHenry County, North Dakota**



- |               |                 |                 |
|---------------|-----------------|-----------------|
| ● Mile Marker | □ PLSS Sections | ■ Asphalt       |
| — US Highway  | ▨ Other Water   | ■ Grading Limit |
| — Segment 4   | ▨ Wetland       |                 |
| — Segment 5   | ▨ Study Area    |                 |

**Wetland**  
**Impacts-**  
**McHenry**

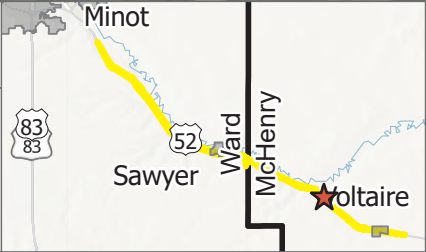
▨ Wetland Impact  
Temporary

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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 4
- Segment 5
- PLSS Sections

- ▨ Wetland
- Study Area
- Asphalt
- Grading Limit

- Wetland**  
**Impacts-**  
**McHenry**
- ▨ Wetland Impact Permanent

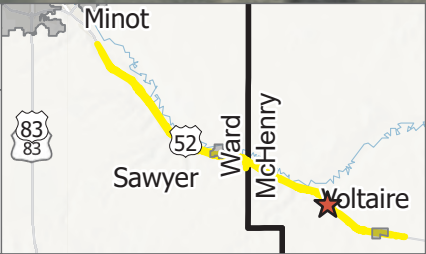
- ▨ Wetland Impact Temporary

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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 5
- PLSS Sections
- ▨ Wetland
- Study Area
- Asphalt
- Grading Limit
- ▨ Wetland Impact Permanent
- ▨ Wetland Impact Temporary

**Wetland**  
**Impacts-**  
**McHenry**

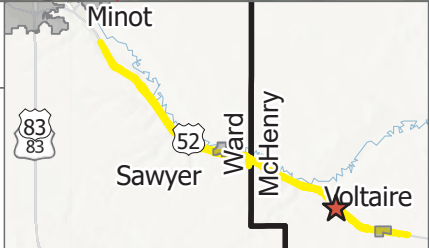
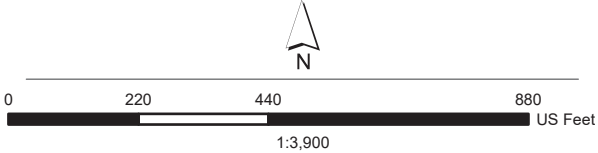
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**NORTH Dakota** | Transportation  
Be Legendary.





**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**McHenry County, North Dakota**



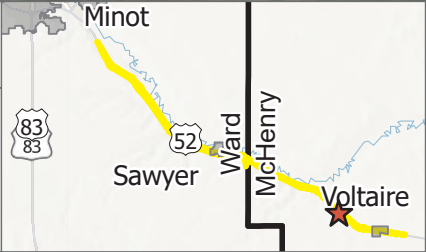
- |               |                 |              |                 |
|---------------|-----------------|--------------|-----------------|
| ● Mile Marker | — Segment 5     | ▨ Wetland    | ■ Asphalt       |
| — US Highway  | ▨ PLSS Sections | ▨ Study Area | ■ Grading Limit |

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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 5
- PLSS Sections
- Other Water

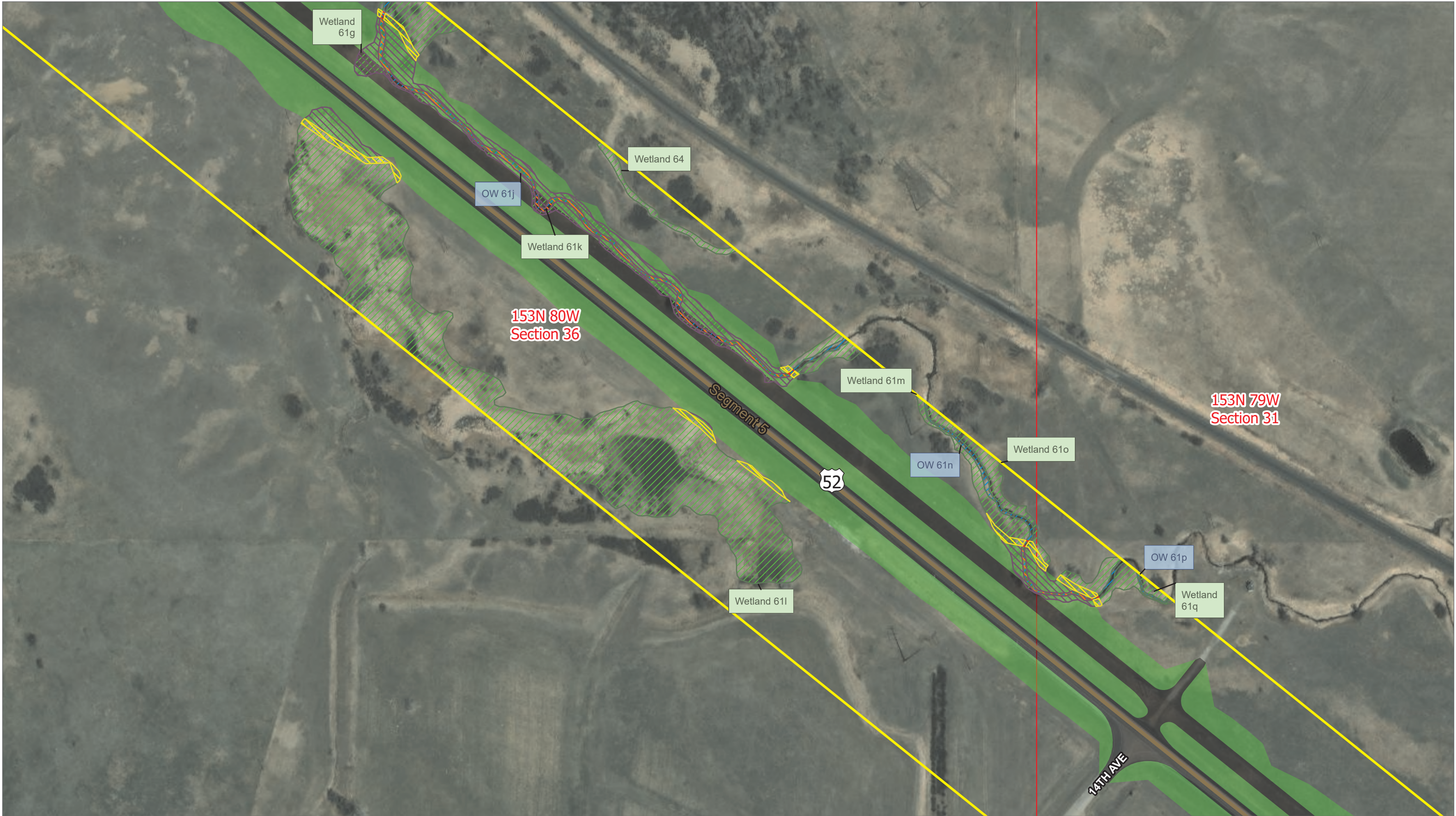
- ▨ Wetland
- Study Area
- Asphalt
- Grading Limit

**Wetland  
Impacts-  
McHenry**

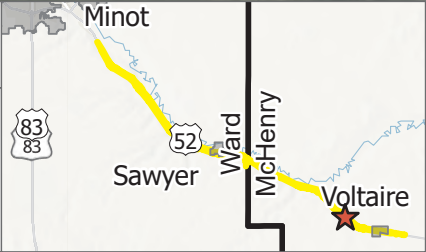
- ▨ Other Water Impact Permanent
- ▨ Other Water Impact Temporary
- ▨ Wetland Impact Permanent
- ▨ Wetland Impact Temporary

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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 5
- PLSS Sections
- Other Water
- Wetland
- Study Area
- Asphalt
- Grading Limit

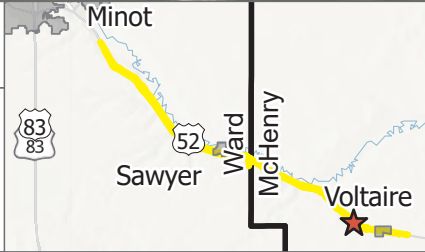
- Wetland Impacts- McHenry**
- Other Water Impact Permanent
  - Other Water Impact Temporary
  - Wetland Impact Permanent
  - Wetland Impact Temporary

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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 5
- PLSS Sections
- Other Water

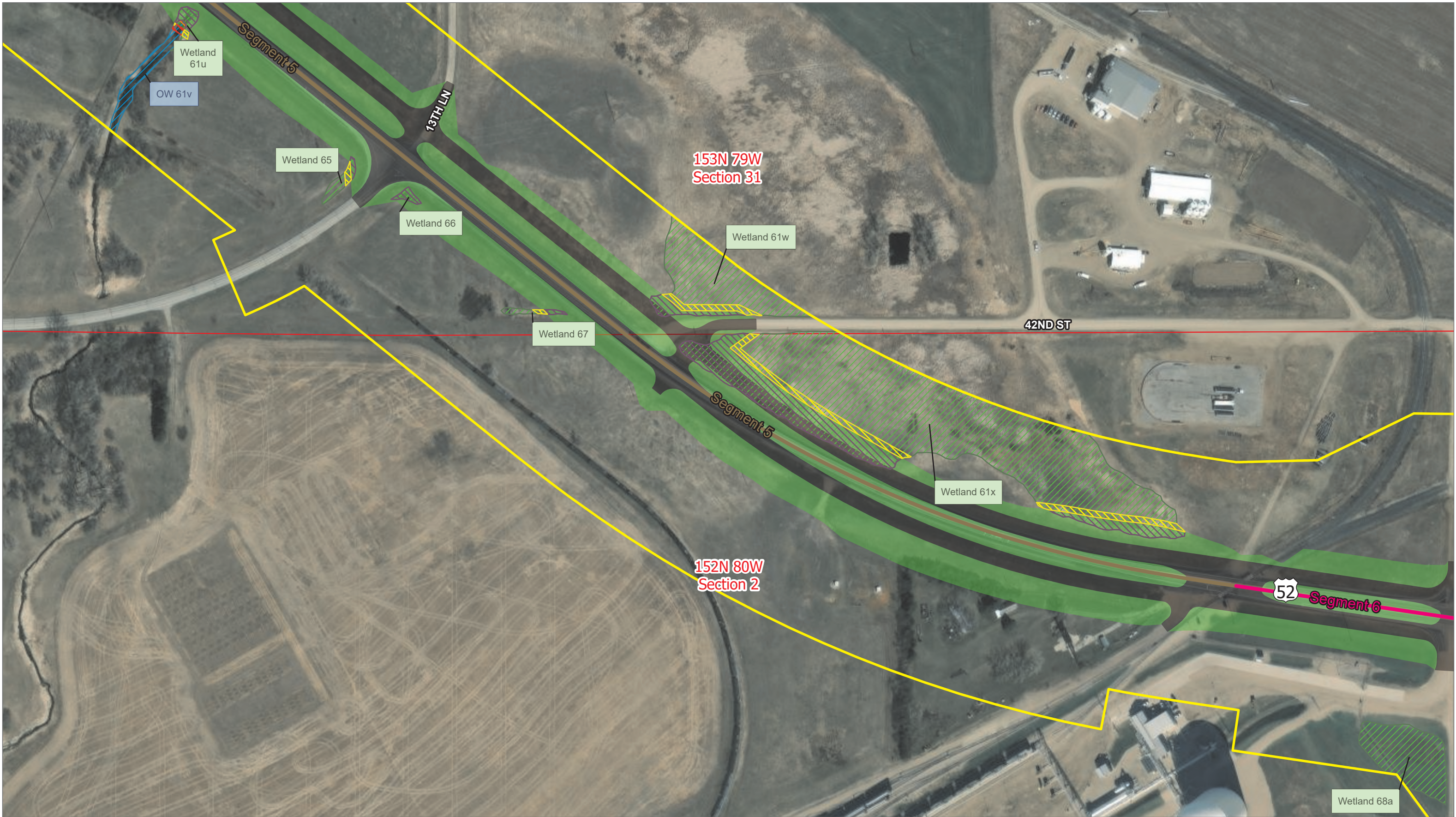
- ▨ Wetland
- ▨ Study Area
- ▨ Asphalt
- ▨ Grading Limit

- Wetland  
Impacts-  
McHenry**
- ▨ Other Water  
Impact  
Permanent

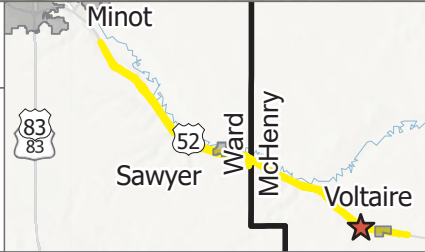
- ▨ Other Water  
Impact  
Temporary
- ▨ Wetland Impact  
Permanent
- ▨ Wetland Impact  
Temporary

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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 5
- Segment 6
- PLSS Sections
- ▨ Other Water
- ▨ Wetland
- ▨ Study Area
- ▨ Asphalt
- ▨ Grading Limit

- Wetland Impacts-McHenry**
- ▨ Other Water Impact Permanent
  - ▨ Other Water Impact Temporary
  - ▨ Wetland Impact Permanent
  - ▨ Wetland Impact Temporary

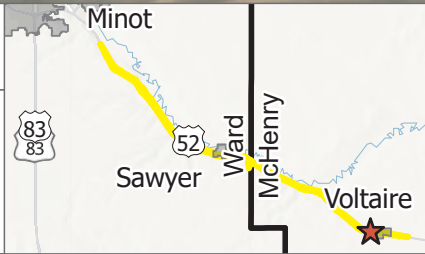
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**NORTH Dakota** | Transportation  
Be Legendary.





**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**McHenry County, North Dakota**

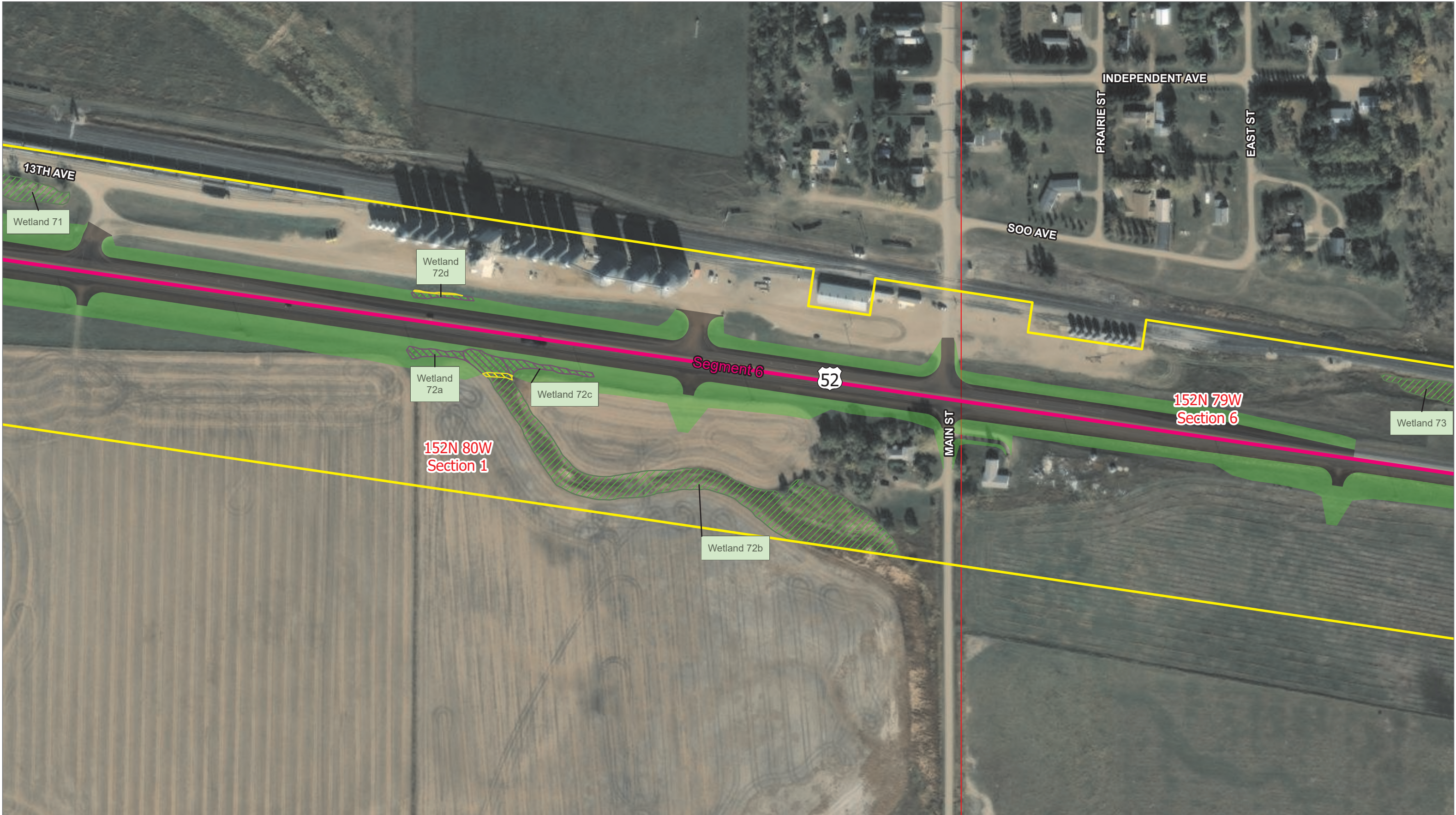


- Mile Marker
- US Highway
- Segment 6
- PLSS Sections
- ▨ Wetland
- Study Area
- Asphalt
- Grading Limit
- ▨ Wetland Impact Temporary
- ▨ Wetland Impact Permanent

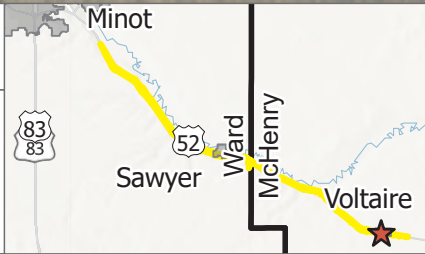
**Wetland  
Impacts-  
McHenry**

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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN**  
**McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 6
- PLSS Sections
- ▨ Wetland
- Study Area
- Asphalt
- Grading Limit
- ▨ Wetland Impact Temporary
- ▨ Wetland Impact Permanent

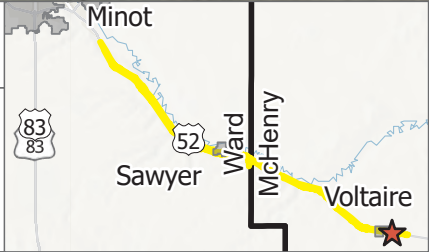
**Wetland**  
**Impacts-**  
**McHenry**

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**McHenry County, North Dakota**



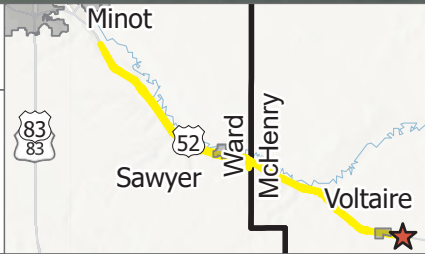
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- US Highway
- Segment 6
- PLSS Sections
- Wetland
- Study Area
- Asphalt
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**WETLAND IMPACTS: ALTERNATIVE B DEPRESSED MEDIAN  
McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 6
- PLSS Sections
- ▨ Wetland
- Study Area
- Asphalt
- Grading Limit
- ▨ Wetland Impact Temporary
- ▨ Wetland Impact Permanent

**Wetland  
Impacts-  
McHenry**

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| Wetland Impact Table |                             |              |                 |                                            |                         |       |                                |       |                     |       |       |                        |         |                        |         |            |         |
|----------------------|-----------------------------|--------------|-----------------|--------------------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|------------------------|---------|------------------------|---------|------------|---------|
| Wetland Number       | Location                    | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands <sup>1</sup> | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                        |         |                        |         |            |         |
|                      |                             |              |                 |                                            | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank       |         | 11990 Bank             |         | USFWS Bank |         |
|                      |                             |              |                 |                                            | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location               | Acre(s) | Location               | Acre(s) | Location   | Acre(s) |
| Alternative C1       |                             |              |                 |                                            |                         |       |                                |       |                     |       |       |                        |         |                        |         |            |         |
| 1c                   | Sec 15<br>T-154-N<br>R-82-W | Ditch        | Natural         | Y                                          | 0.001                   |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 1d                   | Sec 15<br>T-154-N<br>R-82-W | Ditch        | Natural         | Y                                          | 0.004                   | 0.002 |                                |       | Y                   | N     | N     |                        |         | Mitigation Bank<br>TBD | 0.002   |            |         |
| 2                    | Sec 15<br>T-154-N<br>R-82-W | Ditch        | Created         | N                                          |                         | 0.020 |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 3                    | Sec 15<br>T-154-N<br>R-82-W | Ditch        | Created         | N                                          |                         | 0.014 |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 4                    | Sec 15<br>T-154-N<br>R-82-W | Drainage     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 5a                   | Sec 15<br>T-154-N<br>R-82-W | Drainage     | Natural         | Y                                          | 0.020                   | 0.011 |                                |       | Y                   | N     | N     |                        |         | Mitigation Bank<br>TBD | 0.011   |            |         |
| 5c                   | Sec 15<br>T-154-N<br>R-82-W | Drainage     | Natural         | Y                                          | 0.004                   | 0.016 |                                |       | Y                   | N     | N     |                        |         | Mitigation Bank<br>TBD | 0.016   |            |         |
| 5d                   | Sec 14<br>T-154-N<br>R-82-W | Drainage     | Natural         | Y                                          | 0.001                   | 0.038 |                                |       | Y                   | N     | N     |                        |         | Mitigation Bank<br>TBD | 0.038   |            |         |
| 5f                   | Sec 14<br>T-154-N<br>R-82-W | Drainage     | Natural         | Y                                          |                         | 0.021 |                                |       | Y                   | N     | N     |                        |         | Mitigation Bank<br>TBD | 0.021   |            |         |
| 6                    | Sec 14<br>T-154-N<br>R-82-W | Basin        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 7a                   | Sec 14<br>T-154-N<br>R-82-W | Basin        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 7b                   | Sec 14<br>T-154-N<br>R-82-W | Basin        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 7c                   | Sec 14<br>T-154-N<br>R-82-W | Ditch        | Created         | N                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 8                    | Sec 24<br>T-154-N<br>R-82-W | Drainage     | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 78                   | Sec 24<br>T-154-N<br>R-82-W | Slope        | Natural         | N                                          |                         | 0.019 |                                |       | Y                   | N     | N     |                        |         | Mitigation Bank<br>TBD | 0.019   |            |         |
| 9a                   | Sec 24<br>T-154-N<br>R-82-W | Drainage     | Natural         | Y                                          | 0.094                   | 0.252 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.252   |                        |         |            |         |
| 10a                  | Sec 24<br>T-154-N<br>R-82-W | Drainage     | Natural         | N                                          | 0.077                   | 0.078 |                                |       | Y                   | N     | N     |                        |         | Mitigation Bank<br>TBD | 0.078   |            |         |



| Wetland Impact Table |                             |              |                 |                                            |                         |       |                                |       |                     |       |       |                  |         |                        |         |            |         |
|----------------------|-----------------------------|--------------|-----------------|--------------------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|------------------|---------|------------------------|---------|------------|---------|
| Wetland Number       | Location                    | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands <sup>1</sup> | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                  |         |                        |         |            |         |
|                      |                             |              |                 |                                            | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank |         | 11990 Bank             |         | USFWS Bank |         |
|                      |                             |              |                 |                                            | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location         | Acre(s) | Location               | Acre(s) | Location   | Acre(s) |
| 10b                  | Sec 24<br>T-154-N<br>R-82-W | Drainage     | Natural         | N                                          | 0.010                   | 0.064 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.064   |            |         |
| 77                   | Sec 24<br>T-154-N<br>R-82-W | Basin        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 11c                  | Sec 30<br>T-154-N<br>R-81-W | Riverine     | Natural         | Y                                          | 0.014                   | 0.018 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.018   |            |         |
| 11d                  | Sec 30<br>T-154-N<br>R-81-W | Riverine     | Natural         | Y                                          | 0.078                   | 0.024 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.024   |            |         |
| 11e                  | Sec 30<br>T-154-N<br>R-81-W | Riverine     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 13                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                                          |                         | 0.038 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.038   |            |         |
| 14                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 15                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                                          |                         | 0.019 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.019   |            |         |
| 16                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 17                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 18                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                                          |                         | 0.039 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.039   |            |         |
| 19                   | Sec 5<br>T-153-N<br>R-81-W  | Slope        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 20b                  | Sec 5<br>T-153-N<br>R-81-W  | Basin        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 20c                  | Sec 5<br>T-153-N<br>R-81-W  | Fringe       | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 20e                  | Sec 5<br>T-153-N<br>R-81-W  | Ditch        | Created         | Y                                          |                         | 0.015 |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 21                   | Sec 5<br>T-153-N<br>R-81-W  | Basin        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 22                   | Sec 5<br>T-153-N<br>R-81-W  | Basin        | Natural         | N                                          | 0.135                   |       |                                |       | N                   | N     | N     |                  |         |                        |         |            |         |
| 23c                  | Sec 4<br>T-153-N<br>R-81-W  | Drainage     | Natural         | Y                                          |                         | 0.011 |                                |       | Y                   | N     | N     |                  |         | Mitigation Bank<br>TBD | 0.011   |            |         |

| Wetland Impact Table |                             |              |                 |                                            |                         |       |                                |       |                     |       |       |                        |         |                        |         |            |         |
|----------------------|-----------------------------|--------------|-----------------|--------------------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|------------------------|---------|------------------------|---------|------------|---------|
| Wetland Number       | Location                    | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands <sup>1</sup> | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                        |         |                        |         |            |         |
|                      |                             |              |                 |                                            | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank       |         | 11990 Bank             |         | USFWS Bank |         |
|                      |                             |              |                 |                                            | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location               | Acre(s) | Location               | Acre(s) | Location   | Acre(s) |
| Alternative C2       |                             |              |                 |                                            |                         |       |                                |       |                     |       |       |                        |         |                        |         |            |         |
| 25a                  | Sec 9<br>T-153-N<br>R-81-W  | Drainage     | Natural         | Y                                          | 0.133                   | 0.200 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.2     |                        |         |            |         |
| 25b                  | Sec 9<br>T-153-N<br>R-81-W  | Ditch        | Created         | Y                                          |                         | 0.015 |                                |       | N                   | Y     | N     | Mitigation Bank<br>TBD | 0.015   |                        |         |            |         |
| 25c                  | Sec 9<br>T-153-N<br>R-81-W  | Drainage     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 26                   | Sec 10<br>T-153-N<br>R-81-W | Ditch        | Created         | N                                          |                         | 0.332 |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 27                   | Sec 10<br>T-153-N<br>R-81-W | Ditch        | Created         | N                                          | 0.012                   |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 28a                  | Sec 10<br>T-153-N<br>R-81-W | Drainage     | Natural         | Y                                          | 0.034                   | 0.101 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.101   |                        |         |            |         |
| 29                   | Sec 11<br>T-153-N<br>R-81-W | Drainage     | Natural         | N                                          |                         | 0.021 |                                |       | Y                   | N     | N     |                        |         | Mitigation Bank<br>TBD | 0.021   |            |         |
| 30                   | Sec 11<br>T-153-N<br>R-81-W | Basin        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 31a                  | Sec 12<br>T-153-N<br>R-81-W | Riverine     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 31c                  | Sec 12<br>T-153-N<br>R-81-W | Riverine     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 31d                  | Sec 12<br>T-153-N<br>R-81-W | Riverine     | Natural         | Y                                          | 0.008                   | 0.009 |                                |       | Y                   | N     | N     |                        |         | Mitigation Bank<br>TBD | 0.009   |            |         |
| 31f                  | Sec 12<br>T-153-N<br>R-81-W | Riverine     | Natural         | Y                                          | 0.021                   | 0.024 |                                |       | Y                   | N     | N     |                        |         | Mitigation Bank<br>TBD | 0.024   |            |         |
| 32                   | Sec 12<br>T-153-N<br>R-81-W | Ditch        | Created         | N                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 79a                  | Sec 13<br>T-153-N<br>R-81-W | Basin        | Created         | N                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 80                   | Sec 13<br>T-153-N<br>R-81-W | Slope        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| Alternative C3       |                             |              |                 |                                            |                         |       |                                |       |                     |       |       |                        |         |                        |         |            |         |
| 34d                  | Sec 13<br>T-153-N<br>R-80-W | Drainage     | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |
| 35a                  | Sec 18<br>T-153-N<br>R-80-W | Drainage     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |                        |         |            |         |



| Wetland Impact Table |                       |              |                 |                                            |                         |       |                                |       |                     |       |       |                     |         |                     |         |            |         |
|----------------------|-----------------------|--------------|-----------------|--------------------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|---------------------|---------|---------------------|---------|------------|---------|
| Wetland Number       | Location              | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands <sup>1</sup> | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                     |         |                     |         |            |         |
|                      |                       |              |                 |                                            | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank    |         | 11990 Bank          |         | USFWS Bank |         |
|                      |                       |              |                 |                                            | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location            | Acre(s) | Location            | Acre(s) | Location   | Acre(s) |
| 35b                  | Sec 18 T-153-N R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 36                   | Sec 18 T-153-N R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 37                   | Sec 18 T-153-N R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 38                   | Sec 18 T-153-N R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 39a                  | Sec 18 T-153-N R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 39b                  | Sec 18 T-153-N R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 40                   | Sec 17 T-153-N R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 41                   | Sec 17 T-153-N R-80-W | Ditch        | Created         | N                                          | 0.003                   | 0.002 |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 42a                  | Sec 17 T-153-N R-80-W | Basin        | Natural         | N                                          | 0.079                   | 0.469 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.469   |            |         |
| 42b                  | Sec 17 T-153-N R-80-W | Ditch        | Created         | N                                          |                         | 1.503 |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 42c                  | Sec 17 T-153-N R-80-W | Basin        | Natural         | N                                          | 0.053                   | 0.211 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.211   |            |         |
| 43a                  | Sec 17 T-153-N R-80-W | Ditch        | Created         | Y                                          | 0.229                   | 0.170 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.17    |                     |         |            |         |
| 43b                  | Sec 17 T-153-N R-80-W | Ditch        | Created         | Y                                          | 0.025                   | 0.045 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.045   |                     |         |            |         |
| 43c                  | Sec 17 T-153-N R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 44                   | Sec 17 T-153-N R-80-W | Basin        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 45                   | Sec 17 T-153-N R-80-W | Basin        | Natural         | N                                          | 0.049                   | 0.088 |                                |       | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.088   |            |         |
| 46                   | Sec 17 T-153-N R-80-W | Basin        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |
| 47a                  | Sec 20 T-153-N R-80-W | Ditch        | Created         | Y                                          | 0.006                   |       |                                |       | N                   | N     | N     |                     |         |                     |         |            |         |

| Wetland Impact Table           |                            |              |                 |                                            |                         |       |                                |       |                     |       |       |                     |         |            |         |            |         |
|--------------------------------|----------------------------|--------------|-----------------|--------------------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|---------------------|---------|------------|---------|------------|---------|
| Wetland Number                 | Location                   | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands <sup>1</sup> | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                     |         |            |         |            |         |
|                                |                            |              |                 |                                            | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank    |         | 11990 Bank |         | USFWS Bank |         |
|                                |                            |              |                 |                                            | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location            | Acre(s) | Location   | Acre(s) | Location   | Acre(s) |
| 47b                            | Sec 21 T-153-N R-80-W      | Ditch        | Created         | Y                                          | 0.204                   | 0.153 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.153   |            |         |            |         |
| 47c                            | Sec 21 T-153-N R-80-W      | Ditch        | Created         | Y                                          | 0.004                   | 0.568 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.568   |            |         |            |         |
| 47d                            | Sec 21 T-153-N R-80-W      | Ditch        | Created         | Y                                          | 0.008                   | 0.075 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.075   |            |         |            |         |
| 47e                            | Sec 21 T-153-N R-80-W      | Basin        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 47f                            | Sec 21 T-153-N R-80-W      | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 48                             | Sec 21 T-153-N R-80-W      | Ditch        | Created         | N                                          |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 49a                            | Sec 21 T-153-N R-80-W      | Riverine     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 49c                            | Sec 21 T-153-N R-80-W      | Riverine     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 50                             | Sec 21 T-153-N R-80-W      | Ditch        | Created         | N                                          |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 51a                            | Sec 21 T-153-N R-80-W      | Drainage     | Natural         | Y                                          | 0.007                   | 0.042 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.042   |            |         |            |         |
| 51c                            | Sec 21 T-153-N R-80-W      | Drainage     | Natural         | Y                                          | 0.009                   | 0.079 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.079   |            |         |            |         |
| 51d                            | Sec 21 & 22 T-153-N R-80-W | Drainage     | Natural         | Y                                          | 0.008                   | 0.042 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.042   |            |         |            |         |
| 51f                            | Sec 21 & 22 T-153-N R-80-W | Drainage     | Natural         | Y                                          | 0.009                   | 0.155 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.155   |            |         |            |         |
| 52                             | Sec 22 T-153-N R-80-W      | Basin        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 53                             | Sec 22 T-153-N R-80-W      | Ditch        | Created         | N                                          |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 54                             | Sec 22 T-153-N R-80-W      | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| Alternative C4 with Option V-1 |                            |              |                 |                                            |                         |       |                                |       |                     |       |       |                     |         |            |         |            |         |
| 55                             | Sec 22 T-153-N R-80-W      | Ditch        | Created         | N                                          | 0.001                   | 0.001 |                                |       | N                   | N     | N     |                     |         |            |         |            |         |



| Wetland Impact Table |                             |              |                 |                                            |                         |       |                                |       |                     |       |       |                        |         |            |         |            |         |
|----------------------|-----------------------------|--------------|-----------------|--------------------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|------------------------|---------|------------|---------|------------|---------|
| Wetland Number       | Location                    | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands <sup>1</sup> | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                        |         |            |         |            |         |
|                      |                             |              |                 |                                            | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank       |         | 11990 Bank |         | USFWS Bank |         |
|                      |                             |              |                 |                                            | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location               | Acre(s) | Location   | Acre(s) | Location   | Acre(s) |
| 56a                  | Sec 22<br>T-153-N<br>R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 56b                  | Sec 22<br>T-153-N<br>R-80-W | Drainage     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 56c                  | Sec 22<br>T-153-N<br>R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 56d                  | Sec 22<br>T-153-N<br>R-80-W | Ditch        | Created         | Y                                          | 0.116                   | 0.293 |                                |       | N                   | Y     | N     | Mitigation Bank<br>TBD | 0.293   |            |         |            |         |
| 56e                  | Sec 22<br>T-153-N<br>R-80-W | Ditch        | Created         | Y                                          |                         | 0.030 |                                |       | N                   | Y     | N     | Mitigation Bank<br>TBD | 0.030   |            |         |            |         |
| 57                   | Sec 22<br>T-153-N<br>R-80-W | Ditch        | Created         | N                                          | 0.006                   | 0.006 |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 58                   | Sec 22<br>T-153-N<br>R-80-W | Ditch        | Created         | N                                          | 0.008                   | 0.007 |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 59b                  | Sec 23<br>T-153-N<br>R-80-W | Ditch        | Created         | Y                                          | 0.049                   | 0.131 |                                |       | N                   | Y     | N     | Mitigation Bank<br>TBD | 0.131   |            |         |            |         |
| 59c                  | Sec 23<br>T-153-N<br>R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 59d                  | Sec 23<br>T-153-N<br>R-80-W | Basin        | Natural         | Y                                          | 0.033                   | 0.084 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.084   |            |         |            |         |
| 60                   | Sec 23<br>T-153-N<br>R-80-W | Ditch        | Created         | N                                          | 0.020                   | 0.468 |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 61a                  | Sec 26<br>T-153-N<br>R-80-W | Slope        | Natural         | Y                                          | 0.011                   |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| Alternative C5       |                             |              |                 |                                            |                         |       |                                |       |                     |       |       |                        |         |            |         |            |         |
| 61b                  | Sec 26<br>T-153-N<br>R-80-W | Slope        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 61c                  | Sec 26<br>T-153-N<br>R-80-W | Drainage     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 61d                  | Sec 26<br>T-153-N<br>R-80-W | Drainage     | Natural         | Y                                          | 0.067                   | 0.231 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.231   |            |         |            |         |
| 61e                  | Sec 25<br>T-153-N<br>R-80-W | Slope        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 61f                  | Sec 25<br>T-153-N<br>R-80-W | Slope        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |

| Wetland Impact Table |                             |              |                 |                                            |                         |       |                                |       |                     |       |       |                        |         |            |         |            |         |
|----------------------|-----------------------------|--------------|-----------------|--------------------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|------------------------|---------|------------|---------|------------|---------|
| Wetland Number       | Location                    | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands <sup>1</sup> | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                        |         |            |         |            |         |
|                      |                             |              |                 |                                            | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank       |         | 11990 Bank |         | USFWS Bank |         |
|                      |                             |              |                 |                                            | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location               | Acre(s) | Location   | Acre(s) | Location   | Acre(s) |
| 61g                  | Sec 36<br>T-153-N<br>R-80-W | Drainage     | Natural         | Y                                          | 0.178                   | 0.286 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.286   |            |         |            |         |
| 61i                  | Sec 36<br>T-153-N<br>R-80-W | Drainage     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 61k                  | Sec 36<br>T-153-N<br>R-80-W | Drainage     | Natural         | Y                                          | 0.016                   | 0.005 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.005   |            |         |            |         |
| 61l                  | Sec 36<br>T-153-N<br>R-80-W | Drainage     | Natural         | Y                                          | 0.151                   | 0.375 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.375   |            |         |            |         |
| 61m                  | Sec 36<br>T-153-N<br>R-80-W | Drainage     | Natural         | Y                                          | 0.010                   | 0.027 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.027   |            |         |            |         |
| 61o                  | Sec 36<br>T-153-N<br>R-80-W | Drainage     | Natural         | Y                                          | 0.019                   | 0.054 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.054   |            |         |            |         |
| 61q                  | Sec 36<br>T-153-N<br>R-80-W | Drainage     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 61r                  | Sec 31<br>T-153-N<br>R-79-W | Drainage     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 61t                  | Sec 31<br>T-153-N<br>R-79-W | Drainage     | Natural         | Y                                          | 0.008                   | 0.049 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.049   |            |         |            |         |
| 61u                  | Sec 31<br>T-153-N<br>R-79-W | Drainage     | Natural         | Y                                          | 0.003                   | 0.057 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.057   |            |         |            |         |
| 61w                  | Sec 31<br>T-153-N<br>R-79-W | Drainage     | Natural         | Y                                          | 0.009                   |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 61x                  | Sec 2<br>T-152-N<br>R-80-W  | Drainage     | Natural         | Y                                          | 0.186                   | 0.315 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.315   |            |         |            |         |
| 62                   | Sec 26<br>T-153-N<br>R-80-W | Slope        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 63a                  | Sec 26<br>T-153-N<br>R-80-W | Drainage     | Natural         | Y                                          | 0.039                   | 0.099 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.099   |            |         |            |         |
| 63b                  | Sec 26<br>T-153-N<br>R-80-W | Slope        | Natural         | Y                                          | 0.033                   | 0.092 |                                |       | Y                   | Y     | N     | Mitigation Bank<br>TBD | 0.092   |            |         |            |         |
| 64                   | Sec 36<br>T-153-N<br>R-80-W | Basin        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                        |         |            |         |            |         |
| 65                   | Sec 31<br>T-153-N<br>R-79-W | Ditch        | Created         | N                                          | 0.008                   | 0.031 |                                |       | N                   | N     | N     |                        |         |            |         |            |         |



| Wetland Impact Table |                       |              |                 |                                            |                         |       |                                |       |                     |       |       |                     |         |                     |         |                     |         |
|----------------------|-----------------------|--------------|-----------------|--------------------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|---------------------|---------|---------------------|---------|---------------------|---------|
| Wetland Number       | Location              | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands <sup>1</sup> | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                     |         |                     |         |                     |         |
|                      |                       |              |                 |                                            | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank    |         | 11990 Bank          |         | USFWS Bank          |         |
|                      |                       |              |                 |                                            | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location            | Acre(s) | Location            | Acre(s) | Location            | Acre(s) |
| 66                   | Sec 31 T-153-N R-79-W | Ditch        | Created         | N                                          |                         | 0.028 |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |
| 67                   | Sec 31 T-153-N R-79-W | Ditch        | Created         | N                                          | 0.009                   | 0.017 |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |
| Alternative C6       |                       |              |                 |                                            |                         |       |                                |       |                     |       |       |                     |         |                     |         |                     |         |
| 61y                  | Sec 1 T-152-N R-80-W  | Drainage     | Natural         | Y                                          | 0.099                   | 0.451 | 0.020                          | 0.373 | Y                   | Y     | N     | Mitigation Bank TBD | 0.451   |                     |         | Mitigation Bank TBD | 0.373   |
| 61z                  | Sec 1 T-152-N R-80-W  | Drainage     | Natural         | Y                                          | 0.029                   | 0.169 | 0.029                          | 0.110 | Y                   | Y     | N     | Mitigation Bank TBD | 0.169   |                     |         | Mitigation Bank TBD | 0.110   |
| 61aa                 | Sec 1 T-152-N R-80-W  | Drainage     | Natural         | Y                                          | 0.137                   | 0.748 | 0.069                          | 0.407 | Y                   | Y     | N     | Mitigation Bank TBD | 0.748   |                     |         | Mitigation Bank TBD | 0.407   |
| 68a                  | Sec 2 T-152-N R-80-W  | Basin        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |
| 68b                  | Sec 1 T-152-N R-80-W  | Basin        | Natural         | Y                                          | 0.004                   | 0.003 | 0.019                          | 0.004 | Y                   | N     | N     |                     |         | Mitigation Bank TBD | 0.003   | Mitigation Bank TBD | 0.004   |
| 69                   | Sec 1 T-152-N R-80-W  | Basin        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |
| 70                   | Sec 1 T-152-N R-80-W  | Basin        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |
| 71                   | Sec 1 T-152-N R-80-W  | Ditch        | Created         | N                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |
| 72a                  | Sec 1 T-152-N R-80-W  | Ditch        | Created         | Y                                          |                         | 0.058 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.058   |                     |         |                     |         |
| 72b                  | Sec 1 T-152-N R-80-W  | Drainage     | Natural         | Y                                          | 0.016                   | 0.098 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.098   |                     |         |                     |         |
| 72c                  | Sec 1 T-152-N R-80-W  | Ditch        | Created         | Y                                          |                         | 0.077 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.077   |                     |         |                     |         |
| 72d                  | Sec 1 T-152-N R-80-W  | Ditch        | Created         | Y                                          | 0.007                   | 0.037 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.037   |                     |         |                     |         |
| 73                   | Sec 6 T-152-N R-79-W  | Ditch        | Created         | N                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |
| 74                   | Sec 6 T-152-N R-79-W  | Ditch        | Created         | N                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |
| 75a                  | Sec 6 T-152-N R-79-W  | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |                     |         |                     |         |

| Wetland Impact Table |                         |              |                 |                                            |                         |       |                                |       |                     |       |       |                  |         |            |         |            |         |
|----------------------|-------------------------|--------------|-----------------|--------------------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|------------------|---------|------------|---------|------------|---------|
| Wetland Number       | Location                | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands <sup>1</sup> | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                  |         |            |         |            |         |
|                      |                         |              |                 |                                            | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank |         | 11990 Bank |         | USFWS Bank |         |
|                      |                         |              |                 |                                            | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location         | Acre(s) | Location   | Acre(s) | Location   | Acre(s) |
| 75b                  | Sec 6 T-152-N R-79-W    | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 76                   | Sec 6 T-152-N R-79-W    | Basin        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 34-PL                | Sec. 6, T152N, R79W     | Basin        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 35-PL                | Sec. 6, T152N, R79W     | Basin        | Natural         | N                                          |                         |       |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 36-PL                | Sec. 5 & 6, T152N, R79W | Basin        | Natural         | N                                          | 0.024                   |       |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 37-PL                | Sec. 5 & 6, T152N, R79W | Basin        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 38a-PL               | Sec. 5, T152N, R79W     | Basin        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 38b-PL               | Sec. 5, T152N, R79W     | Basin        | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 38c-PL               | Sec. 5, T152N, R79W     | Basin        | Natural         | Y                                          | 0.044                   |       |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
| 38d-PL               | Sec. 5, T152N, R79W     | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                  |         |            |         |            |         |
|                      |                         |              |                 | Totals                                     | 2.679                   | 9.330 | 0.137                          | 0.894 |                     |       |       |                  | 5.663   |            | 1.223   |            | 0.894   |



| Other Waters and Streams Impact Table |                       |        |         |                       |                         |                              |              |                 |                        |       |       |                          |         |                            |         |                             |                                 |
|---------------------------------------|-----------------------|--------|---------|-----------------------|-------------------------|------------------------------|--------------|-----------------|------------------------|-------|-------|--------------------------|---------|----------------------------|---------|-----------------------------|---------------------------------|
| Number                                | Location              | Type   | Feature | USACE Jurisdictional¹ | Impacts to Other Waters |                              |              |                 | Other Water Mitigation |       |       |                          |         |                            |         |                             |                                 |
|                                       |                       |        |         |                       |                         |                              |              |                 | Mitigation Proposed    |       |       | USACE Mitigation Bank    |         | Onsite Mitigation Method   |         | Onsite Constructed Location |                                 |
|                                       |                       |        |         |                       | Temp.                   | Perm. (total Loss + no Loss) | Perm. (Loss) | Perm. (No Loss) | EO 11990               | USACE | USFWS | Location                 | Acre(s) | Mitigation Location; ratio | Acre(s) | Onsite Constructed Site #   | Onsite Constructed Size Acre(s) |
| Alternative C1                        |                       |        |         |                       |                         |                              |              |                 |                        |       |       |                          |         |                            |         |                             |                                 |
| OW-1a                                 | Sec 15 T-154-N R-82-W | Stream | Natural | Y                     | 0.002                   | 0.010                        | 0.005        | 0.005           | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.01    |                            |         |                             |                                 |
| OW-1b                                 | Sec 15 T-154-N R-82-W | Stream | Natural | Y                     | 0.002                   | 0.099                        | 0.099        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.198   |                            |         |                             |                                 |
| OW-5b                                 | Sec 15 T-154-N R-82-W | Stream | Natural | Y                     | 0.002                   | 0.004                        | 0.004        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.008   |                            |         |                             |                                 |
| OW-5e                                 | Sec 15 T-154-N R-82-W | Stream | Natural | Y                     | 0.001                   | 0.013                        | 0.013        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.026   |                            |         |                             |                                 |
| OW-9b                                 | Sec 24 T-154-N R-82-W | Stream | Natural | Y                     | 0.009                   | 0.040                        | 0.040        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.08    |                            |         |                             |                                 |
| OW-11a                                | Sec 30 T-154-N R-81-W | Stream | Natural | Y                     | 0.021                   | 0.106                        | 0.088        | 0.018           | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.176   |                            |         |                             |                                 |
| OW-11b                                | Sec 30 T-154-N R-81-W | Stream | Natural | Y                     | 0.032                   | 0.124                        | 0.106        | 0.018           | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.212   |                            |         |                             |                                 |
| OW-12a                                | Sec 31 T-154-N R-81-W | Stream | Natural | Y                     | 0.005                   | 0.010                        | 0.010        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.02    |                            |         |                             |                                 |
| OW-12b                                | Sec 31 T-154-N R-81-W | Stream | Natural | Y                     | 0.003                   | 0.020                        | 0.015        | 0.005           | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.03    |                            |         |                             |                                 |
| OW-20a                                | Sec 5 T-153-N R-81-W  | Stream | Natural | Y                     | 0.153                   | 0.295                        | 0.081        | 0.214           | Y                      | Y     | N     | Mitigation Onsite        | 0.514   |                            |         |                             |                                 |
| OW-20d                                | Sec 5 T-153-N R-81-W  | Stream | Natural | Y                     | 0.028                   | 0.109                        | 0.092        | 0.017           | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.184   |                            |         |                             |                                 |
| OW-23a                                | Sec 4 T-153-N R-81-W  | Stream | Natural | Y                     | 0.005                   | 0.051                        | 0.033        | 0.018           | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.066   |                            |         |                             |                                 |
| OW-23b                                | Sec 4 T-153-N R-81-W  | Stream | Natural | Y                     | 0.006                   | 0.037                        | 0.037        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.074   |                            |         |                             |                                 |
| OW-24a                                | Sec 9 T-153-N R-81-W  | Stream | Natural | Y                     | 0.039                   | 0.078                        | 0.078        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.156   |                            |         |                             |                                 |
| OW-24b                                | Sec 9 T-153-N R-81-W  | Stream | Natural | Y                     | 0.011                   | 0.016                        | 0.016        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.032   |                            |         |                             |                                 |
| Alternative C2                        |                       |        |         |                       |                         |                              |              |                 |                        |       |       |                          |         |                            |         |                             |                                 |
| OW-28b                                | Sec 10 T-153-N R-81-W | Stream | Natural | Y                     | 0.005                   | 0.054                        | 0.054        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.108   |                            |         |                             |                                 |

| Other Waters and Streams Impact Table |                                               |        |         |                       |                         |                              |              |                 |                        |       |       |                          |         |                            |         |                             |                                 |
|---------------------------------------|-----------------------------------------------|--------|---------|-----------------------|-------------------------|------------------------------|--------------|-----------------|------------------------|-------|-------|--------------------------|---------|----------------------------|---------|-----------------------------|---------------------------------|
| Number                                | Location                                      | Type   | Feature | USACE Jurisdictional¹ | Impacts to Other Waters |                              |              |                 | Other Water Mitigation |       |       |                          |         |                            |         |                             |                                 |
|                                       |                                               |        |         |                       | Acres                   |                              |              |                 | Mitigation Proposed    |       |       | USACE Mitigation Bank    |         | Onsite Mitigation Method   |         | Onsite Constructed Location |                                 |
|                                       |                                               |        |         |                       | Temp.                   | Perm. (total Loss + no Loss) | Perm. (Loss) | Perm. (No Loss) | EO 11990               | USACE | USFWS | Location                 | Acre(s) | Mitigation Location; ratio | Acre(s) | Onsite Constructed Site #   | Onsite Constructed Size Acre(s) |
| OW-31b                                | Sec 12 T-153-N R-81-W                         | Stream | Natural | Y                     |                         |                              |              |                 | N                      | N     | N     |                          |         |                            |         |                             |                                 |
| OW-31e                                | Sec 12 T-153-N R-81-W                         | Stream | Natural | N                     | 0.002                   | 0.011                        | 0.006        | 0.005           | N                      | N     | N     |                          |         |                            |         |                             |                                 |
| OW-33a                                | Sec 13 T-153-N R-81-W                         | Stream | Natural | N                     |                         |                              |              |                 | N                      | N     | N     |                          |         |                            |         |                             |                                 |
| OW-33b                                | Sec 13 T-153-N R-81-W                         | Stream | Natural | N                     |                         |                              |              |                 | N                      | N     | N     |                          |         |                            |         |                             |                                 |
| OW-79b                                | Sec 13 T-153-N R-81-W                         | Pond   | Natural | N                     |                         |                              |              |                 | N                      | N     | N     |                          |         |                            |         |                             |                                 |
| Alternative C3                        |                                               |        |         |                       |                         |                              |              |                 |                        |       |       |                          |         |                            |         |                             |                                 |
| OW-34a                                | Sec 18 T-153-N R-80-W                         | Stream | Natural | N                     |                         |                              |              |                 | N                      | N     | N     |                          |         |                            |         |                             |                                 |
| OW-34b                                | Sec 18 T-153-N R-80-W                         | Stream | Natural | N                     | 0.001                   | 0.003                        | 0.003        |                 | N                      | N     | N     |                          |         |                            |         |                             |                                 |
| OW-34c                                | Sec 18 T-153-N R-80-W                         | Stream | Natural | N                     | 0.000                   | 0.012                        | 0.012        |                 | N                      | N     | N     |                          |         |                            |         |                             |                                 |
| OW-49b                                | Sec 21 T-153-N R-80-W                         | Stream | Natural | Y                     |                         |                              |              |                 | N                      | N     | N     |                          |         |                            |         |                             |                                 |
| OW-49d                                | Sec 21 T-153-N R-80-W                         | Stream | Natural | Y                     | 0.035                   | 0.133                        | 0.133        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.266   |                            |         |                             |                                 |
| OW-51b                                | Sec 21 T-153-N R-80-W                         | Stream | Natural | Y                     | 0.004                   | 0.020                        | 0.020        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.04    |                            |         |                             |                                 |
| OW-51e                                | Sec 21 & 22 T-153-N R-80-W                    | Stream | Natural | Y                     | 0.006                   | 0.068                        | 0.068        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.136   |                            |         |                             |                                 |
| Alternative C4 with Option V-1        |                                               |        |         |                       |                         |                              |              |                 |                        |       |       |                          |         |                            |         |                             |                                 |
| OW-59a                                | Sec 23 T-153-N R-80-W                         | Stream | Natural | Y                     | 0.003                   | 0.006                        | 0.006        |                 | N                      | N     | N     |                          |         |                            |         |                             |                                 |
| Alternative C5                        |                                               |        |         |                       |                         |                              |              |                 |                        |       |       |                          |         |                            |         |                             |                                 |
| OW-61h                                | Sec 36 T-153-N R-80-W                         | Stream | Natural | Y                     |                         |                              |              |                 | N                      | N     | N     |                          |         |                            |         |                             |                                 |
| OW-61j                                | Sec 36 T-153-N R-80-W                         | Stream | Created | Y                     | 0.035                   | 0.020                        | 0.020        |                 | N                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.04    |                            |         |                             |                                 |
| OW-61n                                | Sec 36 T-153-N R-80-W & Sec 31 T-153-N R-79-W | Stream | Natural | Y                     | 0.004                   | 0.019                        | 0.019        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.038   |                            |         |                             |                                 |



| Other Waters and Streams Impact Table |                       |        |         |                                   |                         |                              |              |                 |                        |       |       |                          |         |                            |         |                             |                                 |
|---------------------------------------|-----------------------|--------|---------|-----------------------------------|-------------------------|------------------------------|--------------|-----------------|------------------------|-------|-------|--------------------------|---------|----------------------------|---------|-----------------------------|---------------------------------|
| Number                                | Location              | Type   | Feature | USACE Jurisdictional <sup>1</sup> | Impacts to Other Waters |                              |              |                 | Other Water Mitigation |       |       |                          |         |                            |         |                             |                                 |
|                                       |                       |        |         |                                   | Acres                   |                              |              |                 | Mitigation Proposed    |       |       | USACE Mitigation Bank    |         | Onsite Mitigation Method   |         | Onsite Constructed Location |                                 |
|                                       |                       |        |         |                                   | Temp.                   | Perm. (total Loss + no Loss) | Perm. (Loss) | Perm. (No Loss) | EO 11990               | USACE | USFWS | Location                 | Acre(s) | Mitigation Location; ratio | Acre(s) | Onsite Constructed Site #   | Onsite Constructed Size Acre(s) |
| OW-61p                                | Sec 31 T-153-N R-79-W | Stream | Natural | Y                                 |                         |                              |              |                 | N                      | N     | N     |                          |         |                            |         |                             |                                 |
| OW-61s                                | Sec 31 T-153-N R-79-W | Stream | Natural | Y                                 | 0.005                   | 0.005                        | 0.005        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.01    |                            |         |                             |                                 |
| OW-61v                                | Sec 31 T-153-N R-79-W | Stream | Natural | Y                                 | 0.007                   | 0.028                        | 0.028        |                 | Y                      | Y     | N     | Mitigation Bank TBD; 2:1 | 0.056   |                            |         |                             |                                 |
|                                       |                       |        |         | Totals                            | 0.426                   | 1.391                        | 1.091        |                 |                        |       |       |                          | 2.480   |                            | 0.000   |                             | 0.000                           |

<sup>1</sup> A wetland Jurisdictional Determination was issued by the USACE on 9/5/25: NWO-2022-00132-BIS

| Impact Summary Table             |               |                                              |                  |
|----------------------------------|---------------|----------------------------------------------|------------------|
| Permanent Impact Summary         |               | Temporary Impacts and additional information |                  |
| Wetland Type                     | Total (Acres) | Wetland Type                                 | Total (Acres/Lf) |
| Natural/JD (Fill/Drain)          | 4.188         | Temporary JD                                 | 2.185            |
| Natural/Non-JD (Fill/Drain)      | 1.046         | Non-JD Temporary                             | 0.494            |
| Artificial/JD (Fill/Drain)       | 1.667         |                                              |                  |
| Artificial /Non-JD (Fill/Drain)) | 2.429         | Permanent OW                                 | 1.391            |
| Total                            | 9.330         | Temporary OW                                 | 0.426            |

| Mitigation Summary Table |                     |                     |                |                 |                    |                          |                    |
|--------------------------|---------------------|---------------------|----------------|-----------------|--------------------|--------------------------|--------------------|
|                          | Location            | Ditch Shift Acre(s) | Onsite Acre(s) | Offsite Acre(s) | 11990 Bank Acre(s) | USACE/11990 Bank Acre(s) | USFWS Bank Acre(s) |
| USACE Only               | Mitigation Bank TBD |                     |                |                 |                    | 1.692                    |                    |
| EO 11990 Only            | Mitigation Bank TBD |                     |                |                 | 1.223              |                          |                    |
| USACE/11990              | Mitigation Bank TBD |                     |                |                 |                    | 6.451                    |                    |
| USFWS                    | Mitigation Bank TBD |                     |                |                 |                    |                          | 0.894              |
|                          | Total               | 0.000               | 0.000          | 0.000           | 1.223              | 8.143                    | 0.894              |

| Wetland Impact Table              |                             |              |                 |                                |                         |       |                                |       |                     |       |       |                     |         |            |         |            |         |
|-----------------------------------|-----------------------------|--------------|-----------------|--------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|---------------------|---------|------------|---------|------------|---------|
| Wetland Number                    | Location                    | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands¹ | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                     |         |            |         |            |         |
|                                   |                             |              |                 |                                | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank    |         | 11990 Bank |         | USFWS Bank |         |
|                                   |                             |              |                 |                                | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location            | Acre(s) | Location   | Acre(s) | Location   | Acre(s) |
| Option V-1 without Alternative C4 |                             |              |                 |                                |                         |       |                                |       |                     |       |       |                     |         |            |         |            |         |
| 55                                | Sec 22<br>T-153-N<br>R-80-W | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 56a                               | Sec 22<br>T-153-N<br>R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 56b                               | Sec 22<br>T-153-N<br>R-80-W | Drainage     | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 56c                               | Sec 22<br>T-153-N<br>R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 56d                               | Sec 22<br>T-153-N<br>R-80-W | Ditch        | Created         | Y                              | 0.116                   | 0.293 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.293   |            |         |            |         |
| 56e                               | Sec 22<br>T-153-N<br>R-80-W | Ditch        | Created         | Y                              |                         | 0.030 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.030   |            |         |            |         |
| 57                                | Sec 22<br>T-153-N<br>R-80-W | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 58                                | Sec 22<br>T-153-N<br>R-80-W | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 59b                               | Sec 23<br>T-153-N<br>R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 59c                               | Sec 23<br>T-153-N<br>R-80-W | Ditch        | Created         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 59d                               | Sec 23<br>T-153-N<br>R-80-W | Basin        | Natural         | Y                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 60                                | Sec 23<br>T-153-N<br>R-80-W | Ditch        | Created         | N                              |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
|                                   |                             |              |                 | Totals                         | 0.116                   | 0.323 | 0.000                          | 0.000 |                     |       |       |                     | 0.323   |            | 0.000   |            | 0.000   |



| Other Waters and Streams Impact Table |                             |        |         |                       |                         |                              |              |                 |                        |       |       |                       |         |                            |         |                             |                                 |
|---------------------------------------|-----------------------------|--------|---------|-----------------------|-------------------------|------------------------------|--------------|-----------------|------------------------|-------|-------|-----------------------|---------|----------------------------|---------|-----------------------------|---------------------------------|
| Number                                | Location                    | Type   | Feature | USACE Jurisdictional¹ | Impacts to Other Waters |                              |              |                 | Other Water Mitigation |       |       |                       |         |                            |         |                             |                                 |
|                                       |                             |        |         |                       |                         |                              |              |                 | Mitigation Proposed    |       |       | USACE Mitigation Bank |         | Onsite Mitigation Method   |         | Onsite Constructed Location |                                 |
|                                       |                             |        |         |                       | Temp.                   | Perm. (total Loss + no Loss) | Perm. (Loss) | Perm. (No Loss) | EO 11990               | USACE | USFWS | Location              | Acre(s) | Mitigation Location; ratio | Acre(s) | Onsite Constructed Site #   | Onsite Constructed Size Acre(s) |
| Option V-1 without Alternative C4     |                             |        |         |                       |                         |                              |              |                 |                        |       |       |                       |         |                            |         |                             |                                 |
| OW-59a                                | Sec 23<br>T-153-N<br>R-80-W | Stream | Natural | Y                     |                         |                              |              |                 | N                      | N     | N     |                       |         |                            |         |                             |                                 |
| Totals                                |                             |        |         |                       | 0.000                   | 0.000                        | 0.000        |                 |                        |       |       |                       | 0.000   |                            | 0.000   |                             | 0.000                           |

<sup>1</sup> A wetland Jurisdictional Determination was issued by the USACE on 9/5/25: NWO-2022-00132-BIS

| Impact Summary Table             |               |                                              |                  |
|----------------------------------|---------------|----------------------------------------------|------------------|
| Permanent Impact Summary         |               | Temporary Impacts and additional information |                  |
| Wetland Type                     | Total (Acres) | Wetland Type                                 | Total (Acres/Lf) |
| Natural/JD (Fill/Drain)          | 0.000         | Temporary JD                                 | 0.116            |
| Natural/Non-JD (Fill/Drain)      | 0.000         | Non-JD Temporary                             | 0.000            |
| Artificial/JD (Fill/Drain)       | 0.323         |                                              |                  |
| Artificial /Non-JD (Fill/Drain)) | 0.000         | Permanent OW                                 | 0.000            |
| Total                            | 0.323         | Temporary OW                                 | 0.000            |

| Mitigation Summary Table |                     |                     |                |                 |                    |                          |                    |
|--------------------------|---------------------|---------------------|----------------|-----------------|--------------------|--------------------------|--------------------|
|                          | Location            | Ditch Shift Acre(s) | Onsite Acre(s) | Offsite Acre(s) | 11990 Bank Acre(s) | USACE/11990 Bank Acre(s) | USFWS Bank Acre(s) |
| USACE Only               | Mitigation Bank TBD |                     |                |                 |                    | 0.323                    |                    |
| EO 11990 Only            |                     |                     |                |                 |                    |                          |                    |
| USACE/11990              |                     |                     |                |                 |                    |                          |                    |
| USFWS                    |                     |                     |                |                 |                    |                          |                    |
|                          | Total               | 0.000               | 0.000          | 0.000           | 0.000              | 0.323                    | 0.000              |

| Wetland Impact Table              |                       |              |                 |                                            |                         |       |                                |       |                     |       |       |                     |         |            |         |            |         |
|-----------------------------------|-----------------------|--------------|-----------------|--------------------------------------------|-------------------------|-------|--------------------------------|-------|---------------------|-------|-------|---------------------|---------|------------|---------|------------|---------|
| Wetland Number                    | Location              | Wetland Type | Wetland Feature | USACE Jurisdictional Wetlands <sup>1</sup> | Wetland Impact          |       |                                |       | Wetland Mitigation  |       |       |                     |         |            |         |            |         |
|                                   |                       |              |                 |                                            | Wetland Impacts Acre(s) |       | USFWS Easement Impacts Acre(s) |       | Mitigation Proposed |       |       | USACE/11990 Bank    |         | 11990 Bank |         | USFWS Bank |         |
|                                   |                       |              |                 |                                            | Temp.                   | Perm. | Temp.                          | Perm. | EO 11990            | USACE | USFWS | Location            | Acre(s) | Location   | Acre(s) | Location   | Acre(s) |
| Alternative C4 without Option V-1 |                       |              |                 |                                            |                         |       |                                |       |                     |       |       |                     |         |            |         |            |         |
| 55                                | Sec 22 T-153-N R-80-W | Ditch        | Created         | N                                          | 0.001                   | 0.001 |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 56a                               | Sec 22 T-153-N R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 56b                               | Sec 22 T-153-N R-80-W | Drainage     | Natural         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 56c                               | Sec 22 T-153-N R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 56d                               | Sec 22 T-153-N R-80-W | Ditch        | Created         | Y                                          | 0.072                   | 0.048 |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 56e                               | Sec 22 T-153-N R-80-W | Ditch        | Created         | Y                                          | 0.009                   | 0.021 |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 57                                | Sec 22 T-153-N R-80-W | Ditch        | Created         | N                                          | 0.006                   | 0.006 |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 58                                | Sec 22 T-153-N R-80-W | Ditch        | Created         | N                                          | 0.008                   | 0.007 |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 59b                               | Sec 23 T-153-N R-80-W | Ditch        | Created         | Y                                          | 0.049                   | 0.131 |                                |       | N                   | Y     | N     | Mitigation Bank TBD | 0.131   |            |         |            |         |
| 59c                               | Sec 23 T-153-N R-80-W | Ditch        | Created         | Y                                          |                         |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 59d                               | Sec 23 T-153-N R-80-W | Basin        | Natural         | Y                                          | 0.033                   | 0.084 |                                |       | Y                   | Y     | N     | Mitigation Bank TBD | 0.084   |            |         |            |         |
| 60                                | Sec 23 T-153-N R-80-W | Ditch        | Created         | N                                          | 0.020                   | 0.468 |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
| 61a                               | Sec 26 T-153-N R-80-W | Slope        | Natural         | Y                                          | 0.011                   |       |                                |       | N                   | N     | N     |                     |         |            |         |            |         |
|                                   |                       |              |                 | Totals                                     | 0.209                   | 0.766 | 0.000                          | 0.000 |                     |       |       |                     | 0.215   |            | 0.000   |            | 0.000   |



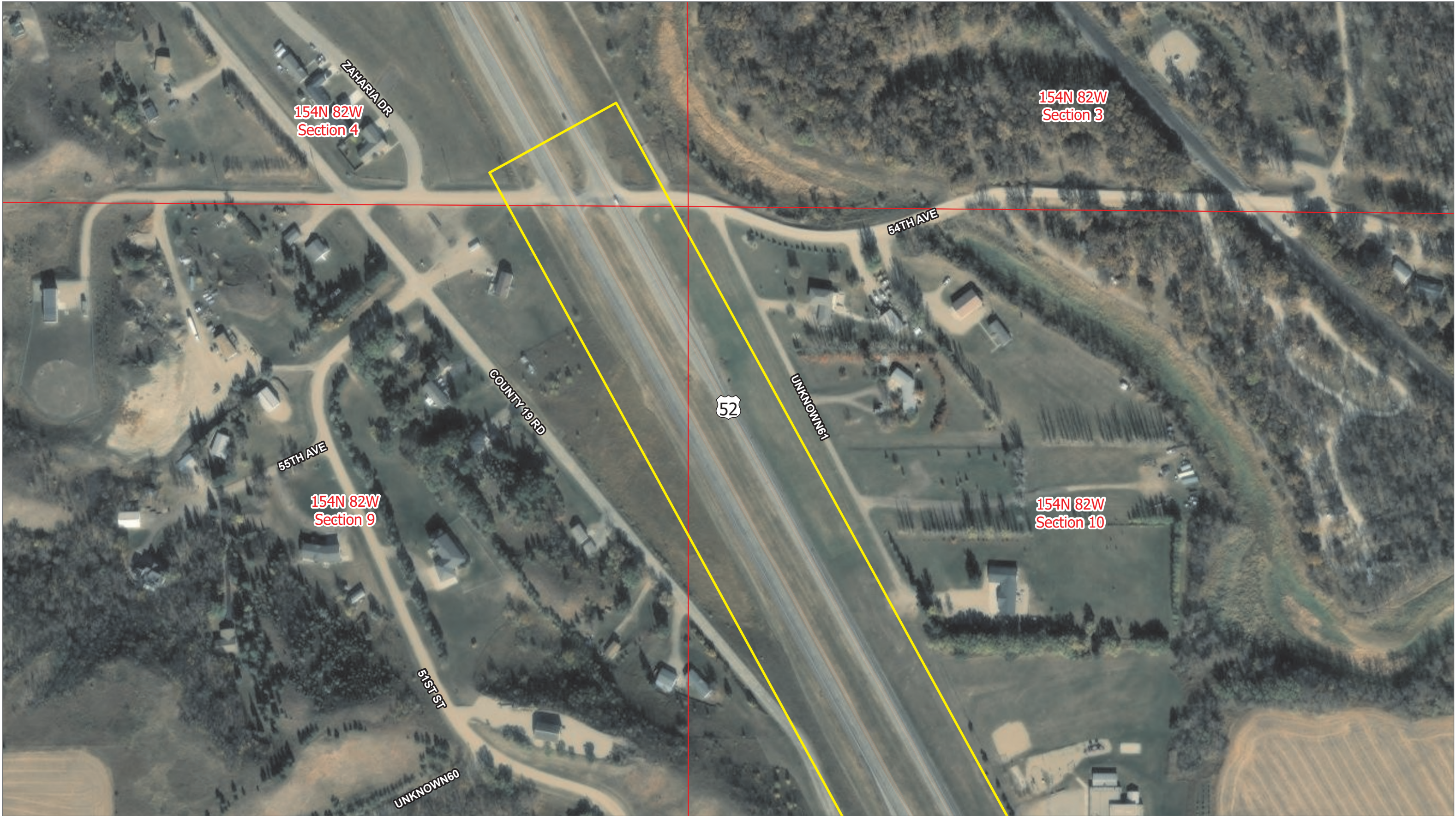
| Other Waters and Streams Impact Table |                             |        |         |                                      |                         |                                    |                 |                    |                        |       |       |                       |         |                               |         |                                 |                                          |
|---------------------------------------|-----------------------------|--------|---------|--------------------------------------|-------------------------|------------------------------------|-----------------|--------------------|------------------------|-------|-------|-----------------------|---------|-------------------------------|---------|---------------------------------|------------------------------------------|
| Number                                | Location                    | Type   | Feature | USACE<br>Jurisdictional <sup>1</sup> | Impacts to Other Waters |                                    |                 |                    | Other Water Mitigation |       |       |                       |         |                               |         |                                 |                                          |
|                                       |                             |        |         |                                      |                         |                                    |                 |                    | Mitigation Proposed    |       |       | USACE Mitigation Bank |         | Onsite Mitigation Method      |         | Onsite Constructed Location     |                                          |
|                                       |                             |        |         |                                      | Temp.                   | Perm. (total<br>Loss + no<br>Loss) | Perm.<br>(Loss) | Perm.<br>(No Loss) | EO 11990               | USACE | USFWS | Location              | Acre(s) | Mitigation<br>Location; ratio | Acre(s) | Onsite<br>Constructed<br>Site # | Onsite<br>Constructed<br>Size<br>Acre(s) |
| Alternative C4 without Option V-1     |                             |        |         |                                      |                         |                                    |                 |                    |                        |       |       |                       |         |                               |         |                                 |                                          |
| OW-59a                                | Sec 23<br>T-153-N<br>R-80-W | Stream | Natural | Y                                    | 0.003                   | 0.006                              | 0.006           |                    | N                      | N     | N     |                       |         |                               |         |                                 |                                          |
|                                       |                             |        |         | Totals                               | 0.003                   | 0.006                              | 0.006           |                    |                        |       |       | 0.000                 |         | 0.000                         |         | 0.000                           |                                          |

<sup>1</sup> A wetland Jurisdictional Determination was issued by the USACE on 9/5/25: NWO-2022-00132-BIS

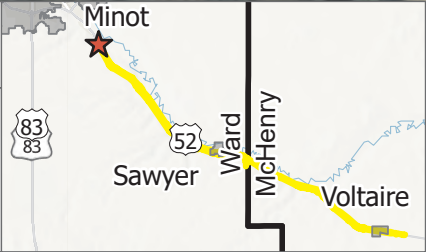
| Impact Summary Table             |               |                                              |                  |
|----------------------------------|---------------|----------------------------------------------|------------------|
| Permanent Impact Summary         |               | Temporary Impacts and additional information |                  |
| Wetland Type                     | Total (Acres) | Wetland Type                                 | Total (Acres/Lf) |
| Natural/JD (Fill/Drain)          | 0.084         | Temporary JD                                 | 0.174            |
| Natural/Non-JD (Fill/Drain)      | 0.000         | Non-JD Temporary                             | 0.035            |
| Artificial/JD (Fill/Drain)       | 0.200         |                                              |                  |
| Artificial /Non-JD (Fill/Drain)) | 0.482         | Permanent OW                                 | 0.006            |
| Total                            | 0.766         | Temporary OW                                 | 0.003            |

| Mitigation Summary Table |                     |                     |                |                 |                    |                          |                    |
|--------------------------|---------------------|---------------------|----------------|-----------------|--------------------|--------------------------|--------------------|
|                          | Location            | Ditch Shift Acre(s) | Onsite Acre(s) | Offsite Acre(s) | 11990 Bank Acre(s) | USACE/11990 Bank Acre(s) | USFWS Bank Acre(s) |
| USACE Only               | Mitigation Bank TBD |                     |                |                 |                    | 0.131                    |                    |
| EO 11990 Only            |                     |                     |                |                 |                    |                          |                    |
| USACE/11990              | Mitigation Bank TBD |                     |                |                 |                    | 0.084                    |                    |
| USFWS                    |                     |                     |                |                 |                    |                          |                    |
|                          | Total               | 0.000               | 0.000          | 0.000           | 0.000              | 0.215                    | 0.000              |





**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**Ward County, North Dakota**



US Highway PLSS Sections Study Area

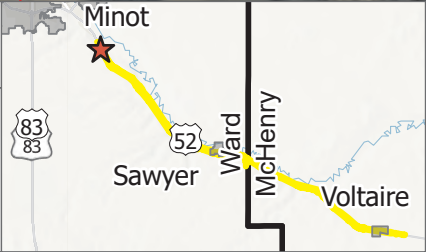
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DATE: 2/6/2026 8:53 AM  
PROJECT: 4-052(109)101  
PCN: 24012  
DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson  
SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker  
FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025  
BACKGROUND: 2024 NAIP  
DATA SOURCES: Ulteig, NDIS & NDDOT

**NORTH Dakota** | Transportation  
Be Legendary.





**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**Ward County, North Dakota**



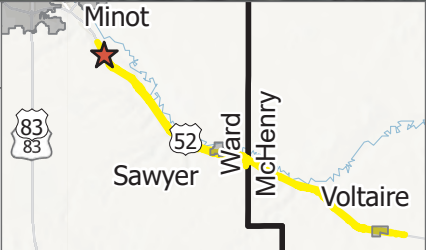
- Mile Marker
- Segment 1
- Study Area
- US Highway
- PLSS Sections

MAP CREATED BY: Bryan Erickson  
DATE: 2/6/2026 8:53 AM  
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WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN  
Ward County, North Dakota



- US Highway
- Segment 1
- PLSS Sections
- Study Area
- Asphalt
- Grading Limit

MAP CREATED BY: Bryan Erickson  
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US Highway

Segment 1

PLSS Sections

Study Area

Other Water

Wetland

Asphalt

Grading Limit

Wetland Impacts-Ward

Other Water Impact Permanent

Other Water Impact Temporary

Wetland Impact Permanent

Wetland Impact Temporary

MAP CREATED BY: Bryan Erickson

DATE: 2/6/2026 8:53 AM

PROJECT: 4-052(109)101

PCN: 24012

DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson

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BACKGROUND: 2024 NAIP

DATA SOURCES: Ulteig, NDGIS & NDDOT

WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN

Ward County, North Dakota

Ulteig

0

220

440

880

US Feet

1:3,900

Minot

Sawyer

Ward

McHenry

Voltaire

83

83

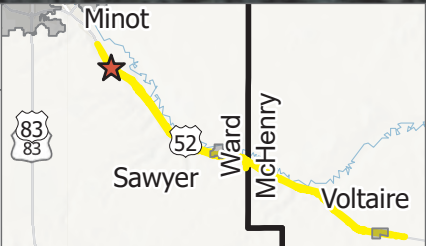
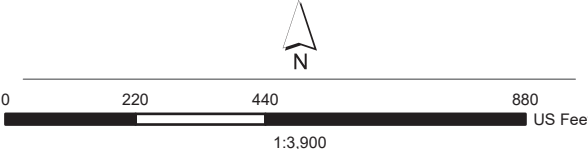
52

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**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**Ward County, North Dakota**



|               |             |                             |                          |
|---------------|-------------|-----------------------------|--------------------------|
| ● Mile Marker | Study Area  | Grading Limit               | Wetland Impact Temporary |
| US Highway    | Other Water | <b>Wetland Impacts-Ward</b> |                          |
| Segment 1     | Wetland     | Wetland Impact Permanent    |                          |
| PLSS Sections | Asphalt     |                             |                          |

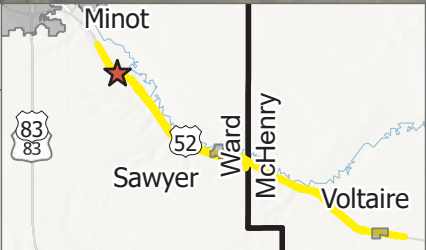
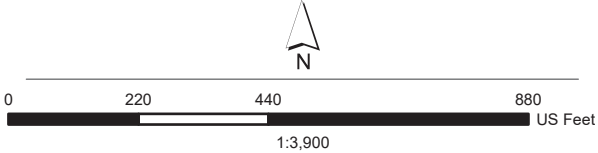
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PROJECT: 4-052(109)101  
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**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**Ward County, North Dakota**



- |               |               |
|---------------|---------------|
| US Highway    | Other Water   |
| Segment 1     | Wetland       |
| PLSS Sections | Asphalt       |
| Study Area    | Grading Limit |

- Wetland Impacts-Ward**
- |                              |
|------------------------------|
| Other Water Impact Temporary |
|------------------------------|

- |                          |
|--------------------------|
| Wetland Impact Permanent |
| Wetland Impact Temporary |

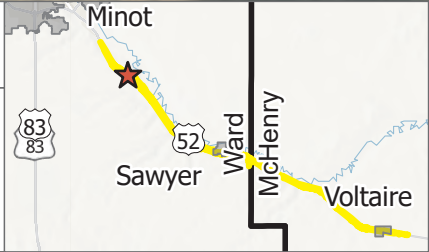
MAP CREATED BY: Bryan Erickson  
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**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**Ward County, North Dakota**



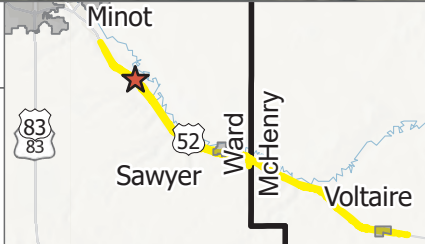
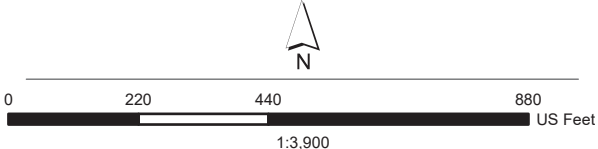
- Mile Marker
- Segment 1
- Study Area
- Asphalt
- US Highway
- PLSS Sections
- ▨ Wetland
- Grading Limit

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**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**Ward County, North Dakota**



- |               |               |
|---------------|---------------|
| US Highway    | Other Water   |
| Segment 1     | Wetland       |
| PLSS Sections | Asphalt       |
| Study Area    | Grading Limit |

- Wetland**  
**Impacts-Ward**
- |                              |
|------------------------------|
| Other Water Impact Permanent |
|------------------------------|

- |                              |
|------------------------------|
| Other Water Impact Temporary |
| Wetland Impact Permanent     |

MAP CREATED BY: Bryan Erickson  
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**NORTH Dakota** | Transportation  
Be Legendary.





WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN

Ward County, North Dakota

Ulteig

0220440880

US Feet

1:3,900

Minot

Sawyer

Ward

McHenry

Voltaire

83

83

52

Mile Marker

US Highway

Segment 1

PLSS Sections

Study Area

Other Water

Wetland

Asphalt

Grading Limit

Wetland Impacts-Ward

Other Water Impact Permanent

Other Water Impact Temporary

Wetland Impact Permanent

Wetland Impact Temporary

MAP CREATED BY: Bryan Erickson

DATE: 2/6/2026 8:53 AM

PROJECT: 4-052(109)101

PCN: 24012

DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson

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BACKGROUND: 2024 NAIP

DATA SOURCES: Ulteig, NDGIS & NDDOT

NORTH Dakota

Be Legendary.

Transportation

Page 9 of 47

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|                                                                                        |                                                   |  |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                   |                   |
|----------------------------------------------------------------------------------------|---------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| <b>WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN</b><br><b>Ward County, North Dakota</b> |                                                   |  | <ul style="list-style-type: none"><li> US Highway</li><li> Segment 1</li><li> PLSS Sections</li><li> Study Area</li><li> Wetland</li><li> Asphalt</li><li> Grading Limit</li></ul> | <p>MAP CREATED BY: Bryan Erickson<br/>DATE: 2/6/2026 8:53 AM<br/>PROJECT: 4-052(109)101<br/>PCN: 24012<br/>DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson<br/>SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker<br/>FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025<br/>BACKGROUND: 2024 NAIP<br/>DATA SOURCES: Ulteig, NDGIS &amp; NDDOT</p> | <br>Be Legendary. |
|                                                                                        | <div><br/>0 220 440 880 US Feet<br/>1:3,900</div> |  |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                   |                   |



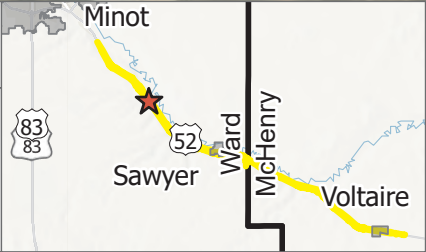


|                                                                                        |  |  |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                  |  |
|----------------------------------------------------------------------------------------|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN</b><br><b>Ward County, North Dakota</b> |  |  | <ul style="list-style-type: none"><li>● Mile Marker</li><li>— US Highway</li><li>— Segment 1</li><li>□ PLSS Sections</li><li>□ Study Area</li><li>■ Asphalt</li><li>■ Grading Limit</li></ul> | <p>MAP CREATED BY: Bryan Erickson<br/>DATE: 2/6/2026 8:53 AM<br/>PROJECT: 4-052(109)101<br/>PCN: 24012<br/>DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson<br/>SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker<br/>FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025<br/>BACKGROUND: 2024 NAIP<br/>DATA SOURCES: Ulteig, NDIS &amp; NDDOT</p> |  |
|                                                                                        |  |  |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                  |  |





**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**Ward County, North Dakota**



- US Highway
- Segment 1
- PLSS Sections
- Study Area
- Other Water

- Wetland
- Asphalt
- Grading Limit

- Wetland Impacts-Ward**
- Other Water Impact Permanent

- Other Water Impact Temporary
- Wetland Impact Permanent
- Wetland Impact Temporary

MAP CREATED BY: Bryan Erickson  
DATE: 2/6/2026 8:53 AM  
PROJECT: 4-052(109)101  
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DATA SOURCES: Ulteig, NDGIS & NDDOT





|                                                                                 |  |                      |  |                                                                                                                                                                                                 |  |                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                               |  |
|---------------------------------------------------------------------------------|--|----------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------|--|
| <b>WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN</b><br>Ward County, North Dakota |  |                      |  | <ul style="list-style-type: none"><li>US Highway</li><li>Segment 1</li><li>PLSS Sections</li><li>Study Area</li><li>Other Water</li><li>Wetland</li><li>Asphalt</li><li>Grading Limit</li></ul> |  | <b>Wetland Impacts-Ward</b> <ul style="list-style-type: none"><li>Other Water Impact Permanent</li><li>Other Water Impact Temporary</li><li>Wetland Impact Temporary</li></ul> |  | <p>MAP CREATED BY: Bryan Erickson<br/>DATE: 2/6/2026 8:53 AM<br/>PROJECT: 4-052(109)101<br/>PCN: 24012<br/>DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson<br/>SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker<br/>FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025<br/>BACKGROUND: 2024 NAIP<br/>DATA SOURCES: Ulteig, NDGIS &amp; NDDOT</p> |  | <p><b>NORTH Dakota</b>   Transportation<br/>Be Legendary.</p> |  |
|                                                                                 |  | <p>Page 13 of 47</p> |  |                                                                                                                                                                                                 |  |                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                               |  |



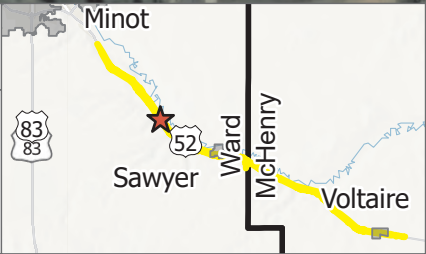


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|----------------------------------------------------------------------------------------|--|--|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| <b>WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN</b><br><b>Ward County, North Dakota</b> |  |  | <ul style="list-style-type: none"><li>Mile Marker</li><li>US Highway</li></ul> | <ul style="list-style-type: none"><li>Segment 1</li><li>PLSS Sections</li></ul> | <ul style="list-style-type: none"><li>Study Area</li><li>Asphalt</li></ul> | <ul style="list-style-type: none"><li>Grading Limit</li></ul> | <p>MAP CREATED BY: Bryan Erickson<br/>DATE: 2/6/2026 8:53 AM<br/>PROJECT: 4-052(109)101<br/>PCN: 24012<br/>DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson<br/>SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker<br/>FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025<br/>BACKGROUND: 2024 NAIP<br/>DATA SOURCES: Ulteig, NDGIS &amp; NDDOT</p> | <p><b>NORTH Dakota</b>   Transportation<br/><small>Be Legendary.</small></p> |
|                                                                                        |  |  |                                                                                |                                                                                 |                                                                            |                                                               |                                                                                                                                                                                                                                                                                                                                                                                   |                                                                              |





**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN  
Ward County, North Dakota**



- US Highway
- Segment 1
- PLSS Sections
- Study Area

- Other Water
- Asphalt
- Grading Limit

- Wetland  
Impacts-Ward**
- Other Water  
Impact  
Permanent

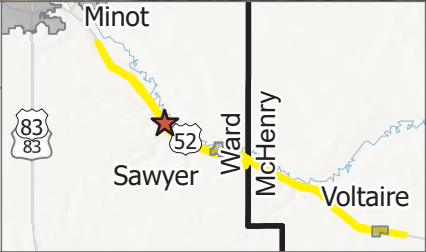
- Other Water  
Impact  
Temporary

MAP CREATED BY: Bryan Erickson  
DATE: 2/6/2026 8:53 AM  
PROJECT: 4-052(109)101  
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DATA SOURCES: Ulteig, NDGIS & NDDOT





**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**Ward County, North Dakota**



- Mile Marker
- Segment 1
- Study Area
- Grading Limit
- US Highway
- PLSS Sections
- Asphalt

MAP CREATED BY: Bryan Erickson  
DATE: 2/6/2026 8:53 AM  
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|                                                                                 |  |  |  |                                                                                                    |                                                                                            |                                                               |                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                |                    |
|---------------------------------------------------------------------------------|--|--|--|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN</b><br>Ward County, North Dakota |  |  |  | <ul style="list-style-type: none"><li>US Highway</li><li>Segment 1</li><li>PLSS Sections</li></ul> | <ul style="list-style-type: none"><li>Study Area</li><li>Wetland</li><li>Asphalt</li></ul> | <ul style="list-style-type: none"><li>Grading Limit</li></ul> | <b>Wetland Impacts-Ward</b> <ul style="list-style-type: none"><li>Wetland Impact Permanent</li></ul> | MAP CREATED BY: Bryan Erickson<br>DATE: 2/6/2026 8:53 AM<br>PROJECT: 4-052(109)101<br>PCN: 24012<br>DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson<br>SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker<br>FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025<br>BACKGROUND: 2024 NAIP<br>DATA SOURCES: Ulteig, NDGIS & NDDOT | <br>Transportation |
|                                                                                 |  |  |  |                                                                                                    |                                                                                            |                                                               |                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                | Page 17 of 47      |





WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN

Ward County, North Dakota

0

220

440

880

US Feet

1:3,900

Minot

Sawyer

Ward

McHenry

Voltaire

83

83

52

● Mile Marker

— US Highway

— Segment 1

□ PLSS Sections

□ Study Area

Other Water

Wetland

Asphalt

Grading Limit

Other Water Impact Permanent

Other Water Impact Temporary

Wetland Impact Permanent

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PROJECT: 4-052(109)101

PCN: 24012

DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson

SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker

FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025

BACKGROUND: 2024 NAIP

DATA SOURCES: Ulteig, NDGIS & NDDOT

NORTH

Dakota

Be Legendary.

Transportation

Page 18 of 47





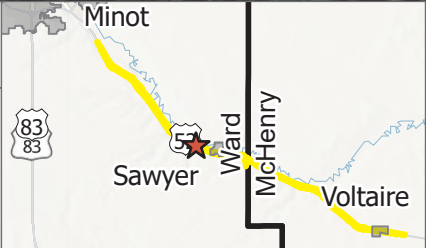
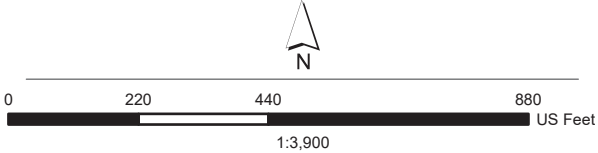








**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**Ward County, North Dakota**



- Mile Marker
- US Highway
- Segment 1
- Segment 2
- PLSS Sections
- Study Area
- Other Water
- Wetland
- Asphalt
- Grading Limit

**Wetland**  
**Impacts-Ward**

- Other Water Impact Permanent

- Other Water Impact Temporary
- Wetland Impact Permanent
- Wetland Impact Temporary

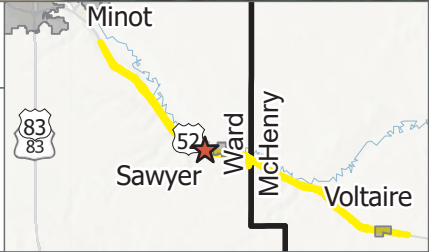
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**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN  
Ward County, North Dakota**



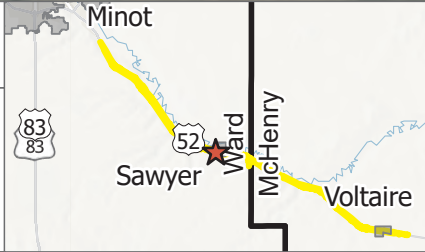
- |            |               |               |
|------------|---------------|---------------|
| US Highway | PLSS Sections | Asphalt       |
| Segment 2  | Study Area    | Grading Limit |

MAP CREATED BY: Bryan Erickson  
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**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**Ward County, North Dakota**



- Mile Marker
- US Highway
- Segment 2
- PLSS Sections
- Study Area

- ▨ Other Water
- ▨ Wetland
- Asphalt
- Grading Limit

- Wetland Impacts-Ward**
- ▨ Other Water Impact Permanent

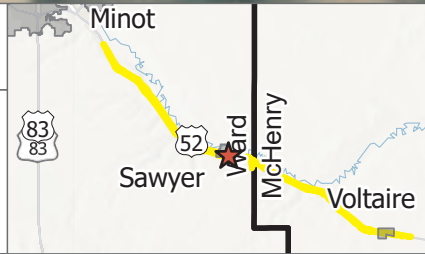
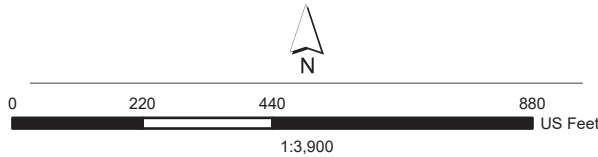
- ▨ Other Water Impact Temporary
- ▨ Wetland Impact Permanent
- ▨ Wetland Impact Temporary

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**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**Ward County, North Dakota**



- Mile Marker
- US Highway
- Segment 2

- PLSS Sections
- Study Area
- Wetland

- Asphalt
- Grading Limit

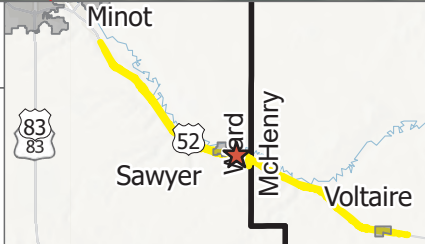
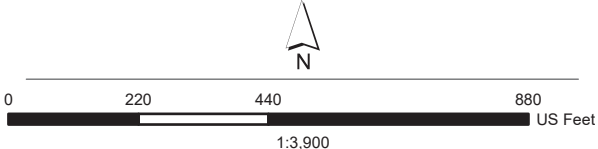
- Wetland**  
**Impacts-Ward**
- Wetland Impact Permanent

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**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**Ward County, North Dakota**



- US Highway
- Segment 2
- PLSS Sections
- Study Area
- Other Water

- Wetland
- Asphalt
- Grading Limit

**Wetland**  
**Impacts-Ward**

- Other Water Impact Permanent

- Other Water Impact Temporary
- Wetland Impact Permanent
- Wetland Impact Temporary

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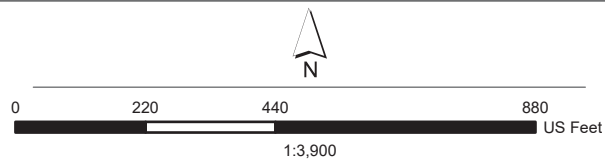


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|-------------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN</b><br>Ward & McHenry County, North Dakota |  |  | <ul style="list-style-type: none"><li>Mile Marker</li><li>US Highway</li><li>Segment 2</li><li>Segment 3</li><li>PLSS Sections</li><li>Study Area</li><li>Other Water</li><li>Wetland</li><li>Asphalt</li><li>Grading Limit</li></ul> | <p>MAP CREATED BY: Bryan Erickson<br/>DATE: 2/6/2026 8:53 AM<br/>PROJECT: 4-052(109)101<br/>PCN: 24012<br/>DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson<br/>SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker<br/>FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025<br/>BACKGROUND: 2024 NAIP<br/>DATA SOURCES: Ulteig, NDGIS &amp; NDDOT</p> |  |
|                                                                                           |  |  |                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                   |  |





**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**Ward & McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 2
- Segment 3
- PLSS Sections
- Study Area
- Other Water
- Wetland
- Asphalt
- Grading Limit

**Wetland  
Impacts-  
McHenry**

- Other Water  
Impact  
Permanent

- Other Water  
Impact  
Temporary

MAP CREATED BY: Bryan Erickson  
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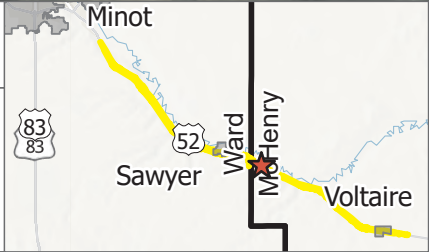


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|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN</b><br><b>Ward &amp; McHenry County, North Dakota</b> |                                                                                   |  | <div>PLSS Sections</div> <div>Study Area</div> <div>Other Water</div> <div>Wetland</div> | <div>MAP CREATED BY: Bryan Erickson</div> <div>DATE: 2/6/2026 8:53 AM</div> <div>PROJECT: 4-052(109)101</div> <div>PCN: 24012</div> <div>DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson</div> <div>SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker</div> <div>FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025</div> <div>BACKGROUND: 2024 NAIP</div> <div>DATA SOURCES: Ulteig, NDGIS &amp; NDDOT</div> | <div><div>NORTH Dakota</div><div>Be Legendary.</div></div> <div>Transportation</div> |
|                                                                                                      | <div><div>N</div><div>0220440880</div><div>US Feet</div></div> <div>1:3,900</div> |  |                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                      |





**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**McHenry County, North Dakota**



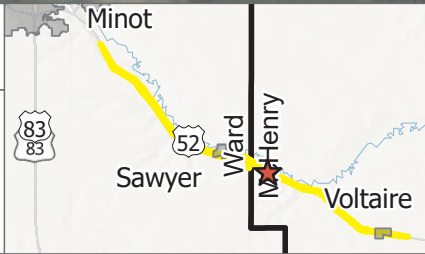
- Mile Marker
- US Highway
- Segment 3
- PLSS Sections
- Study Area
- ▨ Wetland
- Asphalt
- Grading Limit

MAP CREATED BY: Bryan Erickson  
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BACKGROUND: 2024 NAIP  
DATA SOURCES: Ulteig, NDIS & NDDOT





**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN  
McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 3
- PLSS Sections

- Study Area
- ▨ Wetland
- Asphalt
- Grading Limit

- Wetland  
Impacts-  
McHenry**
- ▨ Wetland Impact  
Permanent

- ▨ Wetland Impact  
Temporary

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DATA SOURCES: Ulteig, NDGIS & NDDOT







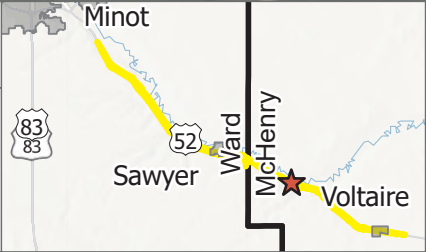


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|------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN</b><br>McHenry County, North Dakota |  |                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                |
|                                                                                    |  | <ul style="list-style-type: none"><li>Mile Marker</li><li>US Highway</li><li>Segment 3</li><li>PLSS Sections</li><li>Study Area</li></ul>                                                                                                                                                                                                                                         | <ul style="list-style-type: none"><li>Other Water</li><li>Wetland</li><li>Asphalt</li><li>Grading Limit</li></ul>                              |
|                                                                                    |  | <b>Wetland Impacts-McHenry</b> <ul style="list-style-type: none"><li>Other Water Impact Permanent</li></ul>                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"><li>Other Water Impact Temporary</li><li>Wetland Impact Permanent</li><li>Wetland Impact Temporary</li></ul> |
|                                                                                    |  | <p>MAP CREATED BY: Bryan Erickson<br/>DATE: 2/6/2026 8:53 AM<br/>PROJECT: 4-052(109)101<br/>PCN: 24012<br/>DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson<br/>SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker<br/>FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025<br/>BACKGROUND: 2024 NAIP<br/>DATA SOURCES: Ulteig, NDGIS &amp; NDDOT</p> |                                                                                                                                                |
|                                                                                    |  | Page 32 of 47                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                |





**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**McHenry County, North Dakota**



- US Highway
- Segment 3
- PLSS Sections
- Study Area

- Other Water
- Wetland
- Asphalt
- Grading Limit

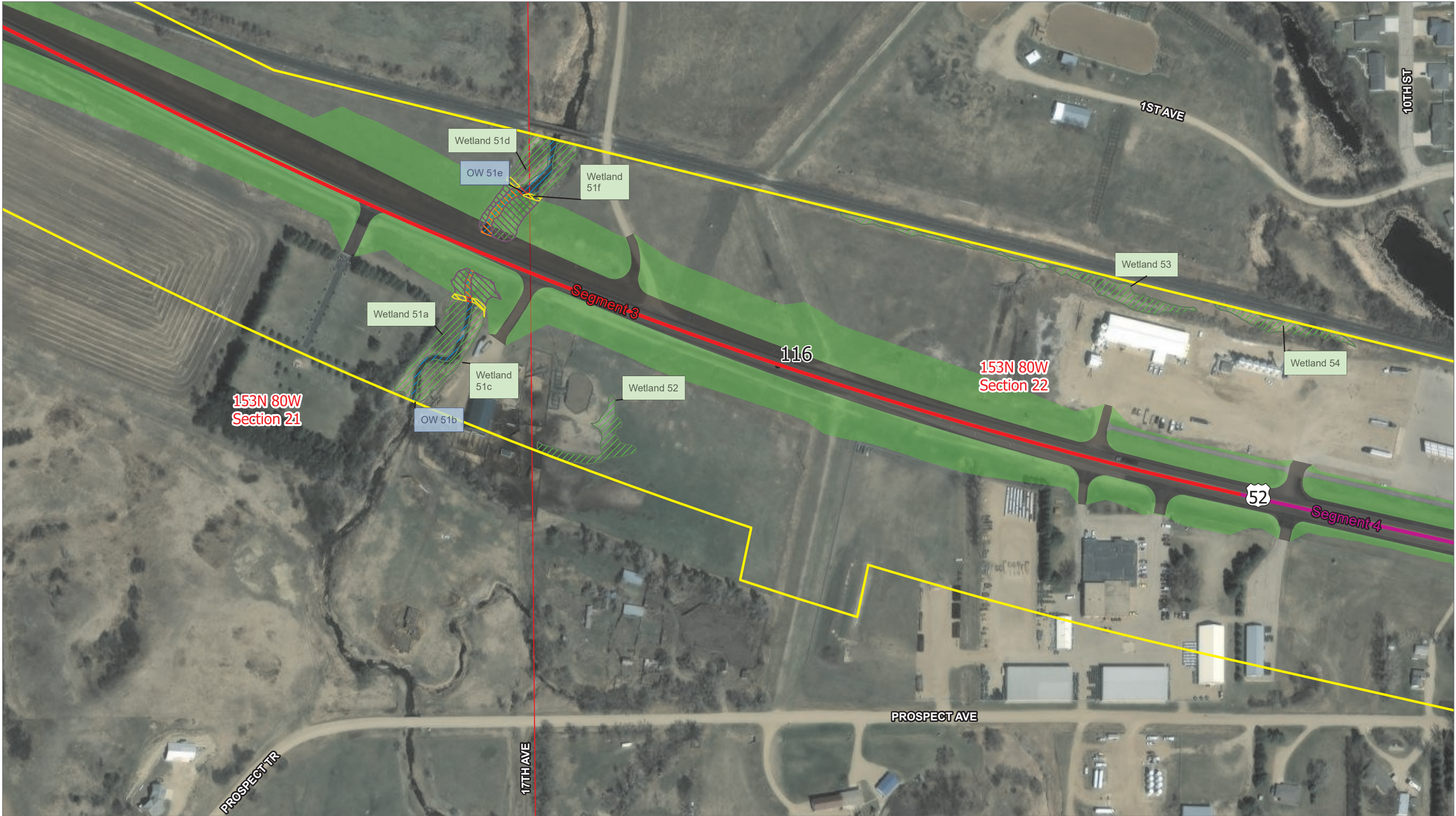
**Wetland**  
**Impacts-**  
**McHenry**

- Other Water Impact Permanent

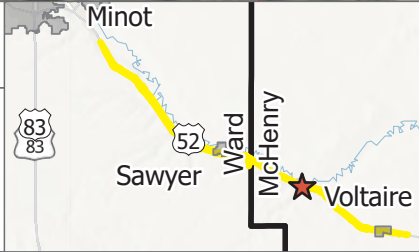
- Other Water Impact Temporary

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**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 3
- Segment 4
- PLSS Sections
- Study Area

- Other Water
- Wetland
- Asphalt
- Grading Limit
- Shared-Use Path

- Wetland Impacts-McHenry**
- Other Water Impact Permanent

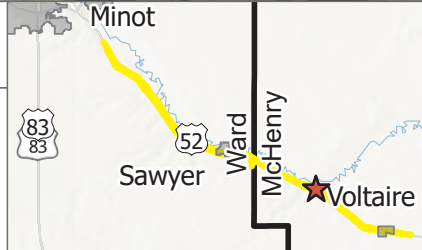
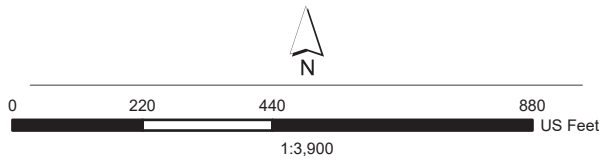
- Other Water Impact Temporary
- Wetland Impact Permanent
- Wetland Impact Temporary

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BACKGROUND: 2024 NAIP  
DATA SOURCES: Ulteig, NDGIS & NDDOT





**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**McHenry County, North Dakota**



- US Highway
- Segment 4
- PLSS Sections
- Study Area

- Wetland
- Asphalt
- Grading Limit
- Shared-Use Path

**Wetland**  
**Impacts-**  
**McHenry**

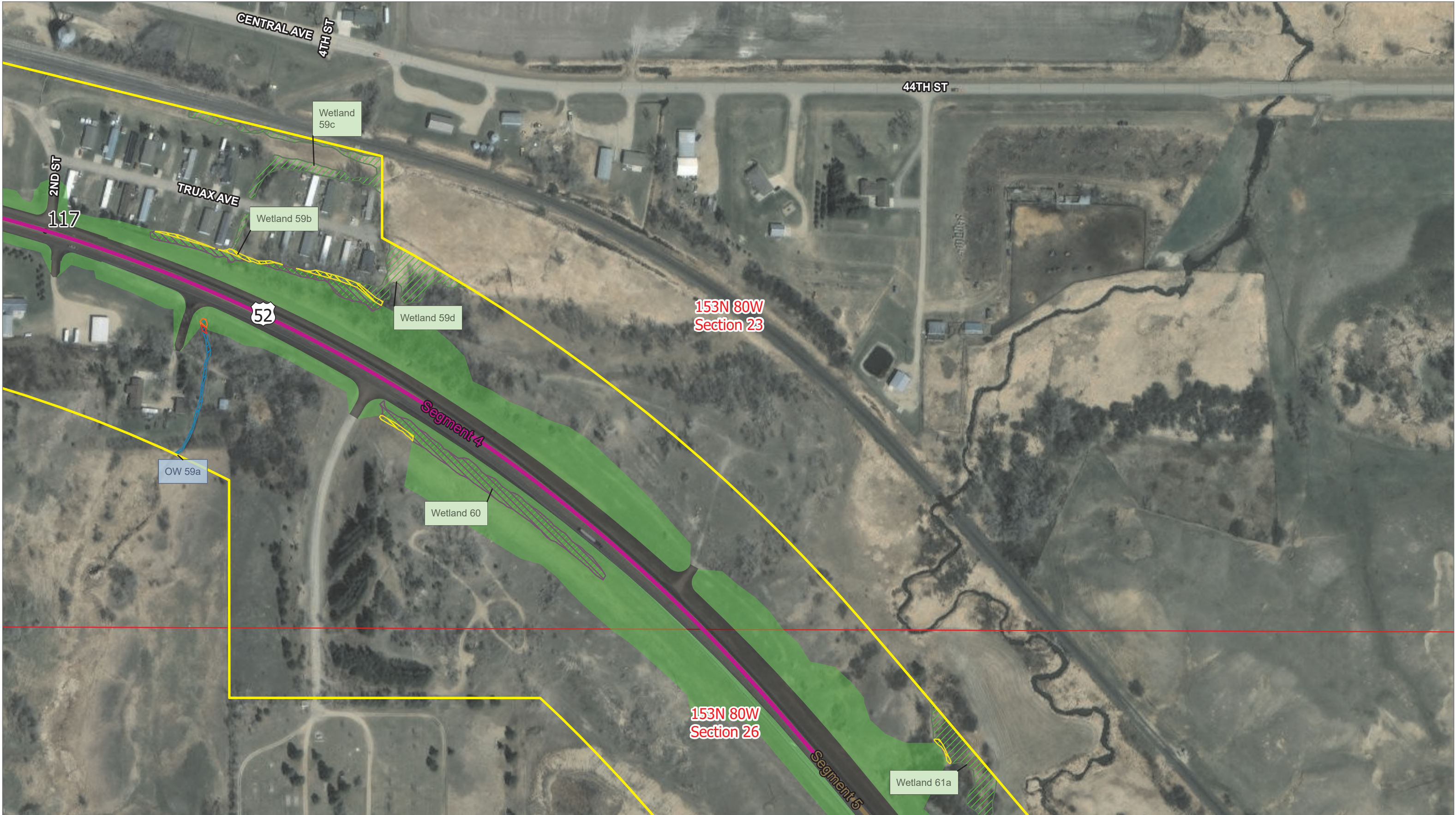
- Wetland Impact Permanent

- Wetland Impact Temporary

MAP CREATED BY: Bryan Erickson  
DATE: 2/6/2026 8:53 AM  
PROJECT: 4-052(109)101  
PCN: 24012  
DELINTEATORS: Jeff Moss, Mike Huffington, Nick Anderson  
SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker  
FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025  
BACKGROUND: 2024 NAIP  
DATA SOURCES: Ulteig, NDGIS & NDDOT

**NORTH Dakota** | Transportation  
Be Legendary.





WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN

McHenry County, North Dakota

0220440880

US Feet

1:3,900

Minot

Ward

McHenry

Sawyer

Voltaire

83

83

52

● Mile Marker

— US Highway

— Segment 4

— Segment 5

□ PLSS Sections

□ Study Area

▨ Other Water

▨ Wetland

■ Asphalt

■ Grading Limit

Wetland Impacts-McHenry

▨ Other Water Impact Permanent

▨ Other Water Impact Temporary

▨ Wetland Impact Permanent

▨ Wetland Impact Temporary

MAP CREATED BY: Bryan Erickson

DATE: 2/6/2026 8:53 AM

PROJECT: 4-052(109)101

PCN: 24012

DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson

SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker

FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025

BACKGROUND: 2024 NAIP

DATA SOURCES: Ulteig, NDGIS & NDDOT

NORTH

Dakota

Be Legendary.

Transportation

Page 36 of 47

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|                                                                                           |             |                          |  |                                                                                                                      |                                                                                                                  |                                                                                                         |                                                                          |                                                                                                                                                                                                                                                                                                                                                                |                                     |
|-------------------------------------------------------------------------------------------|-------------|--------------------------|--|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN</b><br><b>McHenry County, North Dakota</b> |             |                          |  | <ul style="list-style-type: none"><li>US Highway</li><li>Segment 4</li><li>Segment 5</li><li>PLSS Sections</li></ul> | <ul style="list-style-type: none"><li>Study Area</li><li>Wetland</li><li>Asphalt</li><li>Grading Limit</li></ul> | <b>Wetland Impacts-McHenry</b> <ul style="list-style-type: none"><li>Wetland Impact Permanent</li></ul> | <ul style="list-style-type: none"><li>Wetland Impact Temporary</li></ul> | MAP CREATED BY: Bryan Erickson<br>DATE: 2/6/2026 8:53 AM<br>PROJECT: 4-052(109)101<br>PCN: 24012<br>DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson<br>SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker<br>FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025<br>BACKGROUND: 2024 NAIP<br>DATA SOURCES: Ulteig, NDGIS & NDDOT | <br>Transportation<br>Be Legendary. |
|                                                                                           | <br>1:3,900 | <div>Page 37 of 47</div> |  |                                                                                                                      |                                                                                                                  |                                                                                                         |                                                                          |                                                                                                                                                                                                                                                                                                                                                                |                                     |



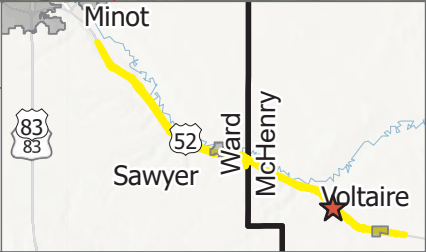


|                                                                                           |  |  |                                                                                                                                |                                                                                                                          |                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                   |                      |
|-------------------------------------------------------------------------------------------|--|--|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <b>WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN</b><br><b>McHenry County, North Dakota</b> |  |  | <ul style="list-style-type: none"><li>● Mile Marker</li><li>— US Highway</li><li>— Segment 5</li><li>□ PLSS Sections</li></ul> | <ul style="list-style-type: none"><li>□ Study Area</li><li>▨ Wetland</li><li>■ Asphalt</li><li>■ Grading Limit</li></ul> | <b>Wetland Impacts- McHenry</b> <ul style="list-style-type: none"><li>▨ Wetland Impact Temporary</li><li>▨ Wetland Impact Permanent</li></ul> | <p>MAP CREATED BY: Bryan Erickson<br/>DATE: 2/6/2026 8:53 AM<br/>PROJECT: 4-052(109)101<br/>PCN: 24012<br/>DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson<br/>SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker<br/>FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025<br/>BACKGROUND: 2024 NAIP<br/>DATA SOURCES: Ulteig, NDGIS &amp; NDDOT</p> | <br>Transportation   |
|                                                                                           |  |  |                                                                                                                                |                                                                                                                          |                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                   | <p>Page 38 of 47</p> |





**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**McHenry County, North Dakota**



- |            |               |         |               |
|------------|---------------|---------|---------------|
| US Highway | PLSS Sections | Wetland | Grading Limit |
| Segment 5  | Study Area    | Asphalt |               |

MAP CREATED BY: Bryan Erickson  
DATE: 2/6/2026 8:53 AM  
PROJECT: 4-052(109)101  
PCN: 24012  
DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson  
SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker  
FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025  
BACKGROUND: 2024 NAIP  
DATA SOURCES: Ulteig, NDGIS & NDDOT



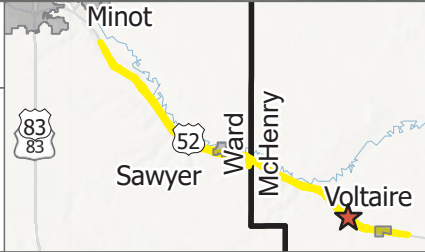


|                                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                |
|-------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN</b><br><b>McHenry County, North Dakota</b> |  |                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                |
|                                                                                           |  | <ul style="list-style-type: none"><li>Mile Marker</li><li>US Highway</li><li>Segment 5</li><li>PLSS Sections</li><li>Study Area</li></ul>                                                                                                                                                                                                                                         | <ul style="list-style-type: none"><li>Other Water</li><li>Wetland</li><li>Asphalt</li><li>Grading Limit</li></ul>                              |
|                                                                                           |  | <b>Wetland Impacts-McHenry</b> <ul style="list-style-type: none"><li>Other Water Impact Permanent</li></ul>                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"><li>Other Water Impact Temporary</li><li>Wetland Impact Permanent</li><li>Wetland Impact Temporary</li></ul> |
|                                                                                           |  | <p>MAP CREATED BY: Bryan Erickson<br/>DATE: 2/6/2026 8:53 AM<br/>PROJECT: 4-052(109)101<br/>PCN: 24012<br/>DELINEATORS: Jeff Moss, Mike Huffington, Nick Anderson<br/>SOIL SCIENTISTS: Perry Sullivan, Hal Weiser, Dave Breker<br/>FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025<br/>BACKGROUND: 2024 NAIP<br/>DATA SOURCES: Ulteig, NDGIS &amp; NDDOT</p> |                                                                                                                                                |
|                                                                                           |  | Page 40 of 47                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                |





**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**McHenry County, North Dakota**



- US Highway
- Segment 5
- PLSS Sections
- Study Area
- Other Water

- Wetland
- Asphalt
- Grading Limit

**Wetland**  
**Impacts-**  
**McHenry**

- Other Water  
Impact  
Permanent

- Other Water  
Impact  
Temporary

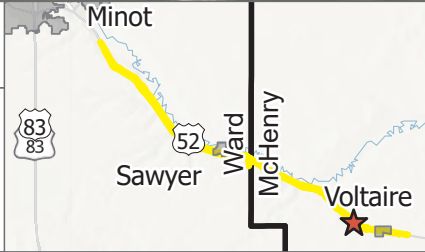
- Wetland Impact  
Permanent
- Wetland Impact  
Temporary

MAP CREATED BY: Bryan Erickson  
DATE: 2/6/2026 8:53 AM  
PROJECT: 4-052(109)101  
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**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 5
- PLSS Sections
- Study Area

- Other Water
- Wetland
- Asphalt
- Grading Limit

- Wetland Impacts-McHenry**
- Other Water Impact Permanent

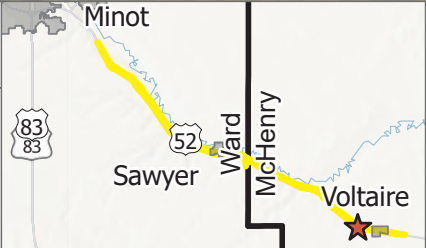
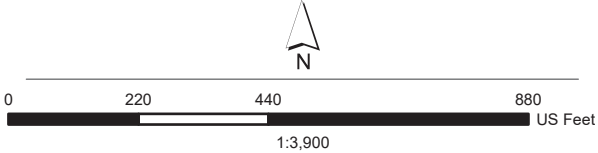
- Other Water Impact Temporary
- Wetland Impact Permanent
- Wetland Impact Temporary

MAP CREATED BY: Bryan Erickson  
DATE: 2/6/2026 8:53 AM  
PROJECT: 4-052(109)101  
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BACKGROUND: 2024 NAIP  
DATA SOURCES: Ulteig, NDGIS & NDDOT





**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**McHenry County, North Dakota**



- US Highway
- Segment 5
- Segment 6
- PLSS Sections
- Study Area

- Other Water
- Wetland
- Asphalt
- Grading Limit

**Wetland**  
**Impacts-**  
**McHenry**

- Other Water Impact Permanent

- Other Water Impact Temporary
- Wetland Impact Permanent
- Wetland Impact Temporary

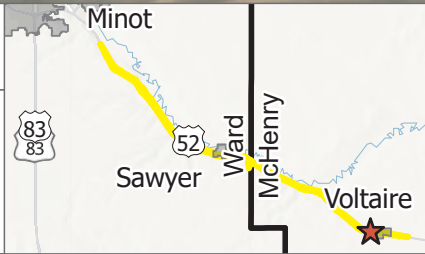
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PROJECT: 4-052(109)101  
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FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025  
BACKGROUND: 2024 NAIP  
DATA SOURCES: Ulteig, NDGIS & NDDOT







**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 6
- PLSS Sections

- Study Area
- ▨ Wetland
- Asphalt
- Grading Limit

- Wetland  
Impacts-  
McHenry**
- ▨ Wetland Impact  
Permanent

- ▨ Wetland Impact  
Temporary

MAP CREATED BY: Bryan Erickson  
DATE: 2/6/2026 8:53 AM  
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FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025  
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DATA SOURCES: Ulteig, NDGIS & NDDOT

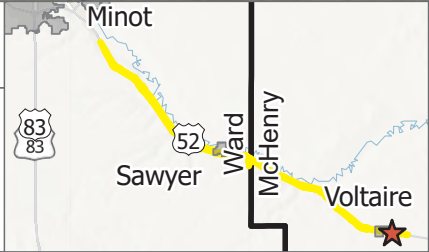








**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN**  
**McHenry County, North Dakota**



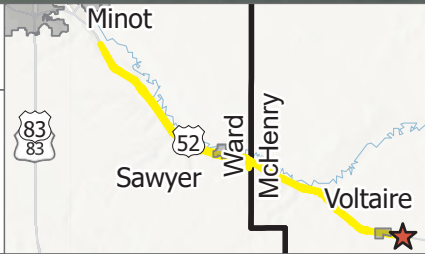
- Mile Marker
- US Highway
- Segment 6
- PLSS Sections
- Study Area
- ▨ Wetland
- Asphalt
- Grading Limit

MAP CREATED BY: Bryan Erickson  
DATE: 2/6/2026 8:53 AM  
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**WETLAND IMPACTS: ALTERNATIVE C FLUSH MEDIAN  
McHenry County, North Dakota**



- Mile Marker
- US Highway
- Segment 6
- PLSS Sections

- Study Area
- ▨ Wetland
- Asphalt
- Grading Limit

- Wetland  
Impacts-  
McHenry**
- ▨ Wetland Impact  
Permanent

- ▨ Wetland Impact  
Temporary

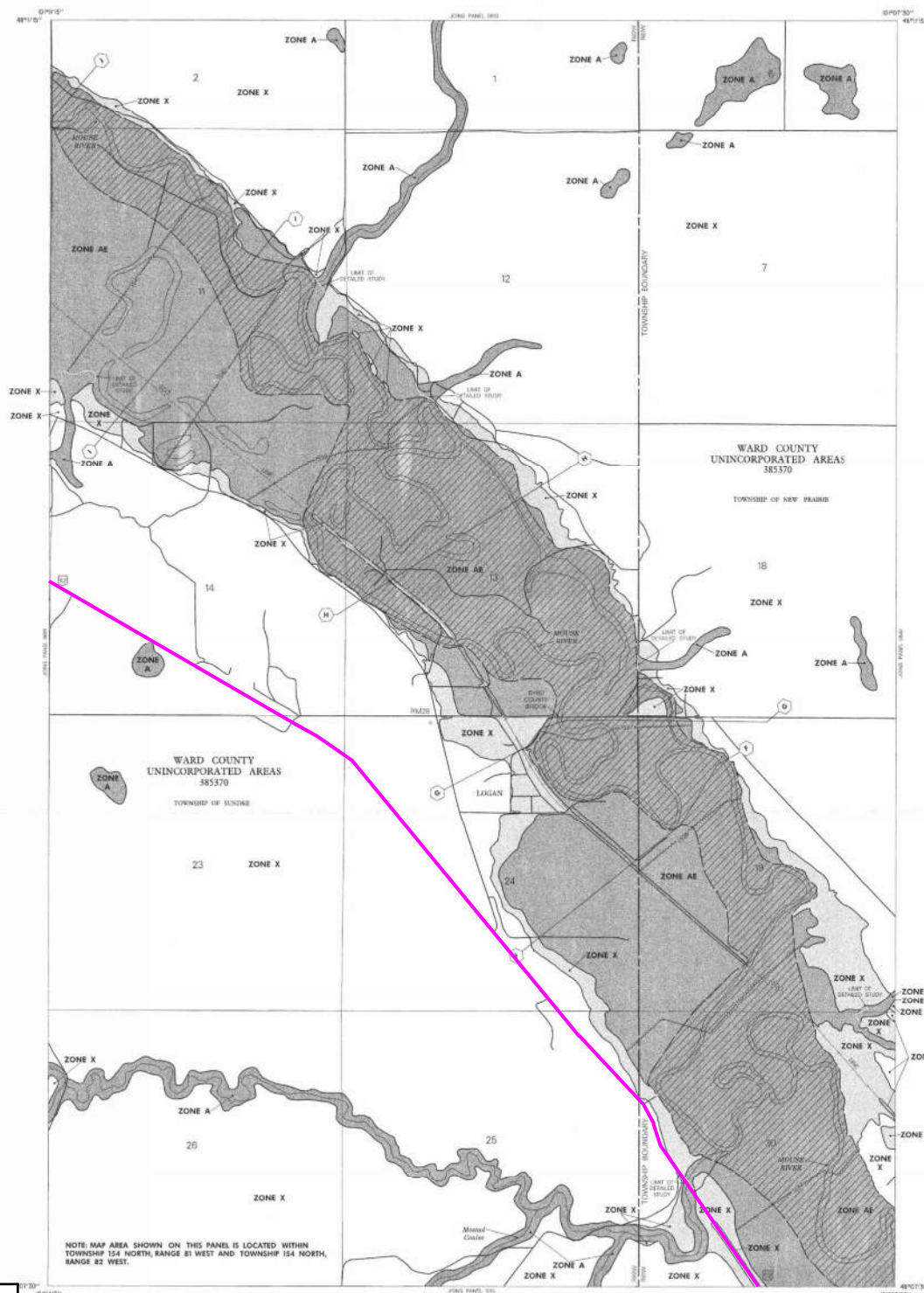
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DATE: 2/6/2026 8:53 AM  
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FIELD DATES: October 23-24, 2023; November 13-15, 2023; June 3, 2025  
BACKGROUND: 2024 NAIP  
DATA SOURCES: Ulteig, NDGIS & NDDOT



# Appendix H, FIRM Maps







NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN  
TOWNSHIP 154 NORTH, RANGE 81 WEST AND TOWNSHIP 154 NORTH,  
RANGE 82 WEST.

| NATIONAL FLOOD INSURANCE PROGRAM                       |        |                  |       |
|--------------------------------------------------------|--------|------------------|-------|
| <b>FIRM</b>                                            |        |                  |       |
| FLOOD INSURANCE RATE MAP                               |        |                  |       |
| WARD COUNTY,<br>NORTH DAKOTA AND<br>INCORPORATED AREAS |        |                  |       |
| PANEL 820 OF 1475                                      |        |                  |       |
| (SEE MAP INDEX FOR PANELS NOT PRINTED)                 |        |                  |       |
| COUNTY:                                                |        |                  |       |
| CITY/TOWN:                                             |        |                  |       |
|                                                        | NUMBER | PAGE             | SHEET |
| WARD COUNTY<br>UNINCORPORATED AREAS                    | 8200   | 0000             | 01    |
| MAP NUMBER                                             |        | 3810FC820 D      |       |
| EFFECTIVE DATE:                                        |        | JANUARY 19, 2000 |       |

Federal Emergency Management Agency













— Project Location

[illegible][illegible]

APPROXIMATE SCALE IN FE  
500 0

**FIRM**  
FLOOD INSURANCE RATE MAP  
WARD COUNTY,  
NORTH DAKOTA AND  
INCORPORATED AREAS

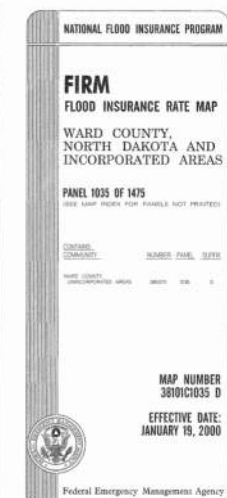
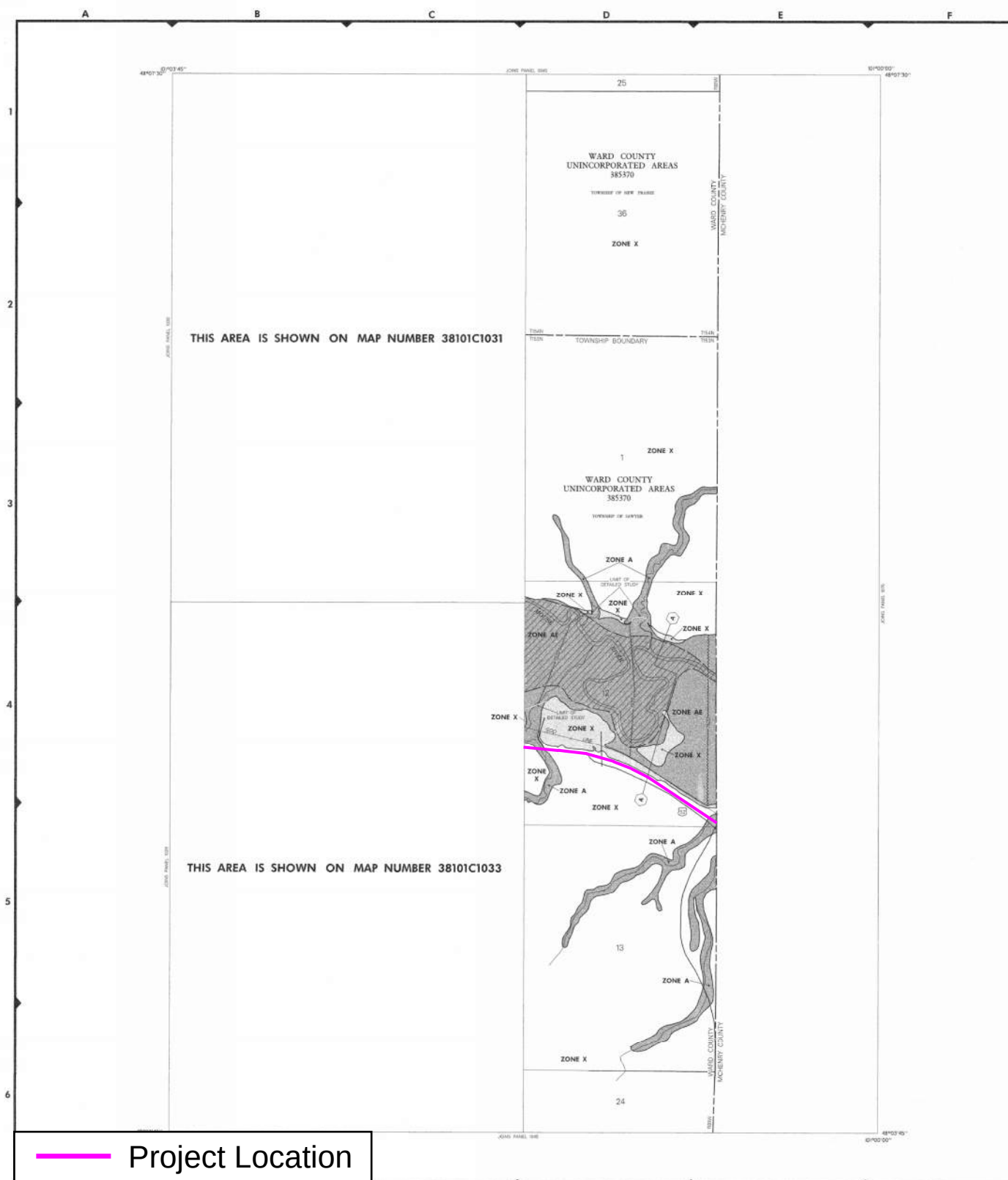
PANEL 1033 OF 1475  
(SEE MAP INDEX FOR PANELS NOT PRINTED)

| CONTINGENT<br>COMPANY                | NUMBER | PAID | STATUS |
|--------------------------------------|--------|------|--------|
| WATSON CITY CO<br>WATER CONSTRUCTION | 000000 | 000  | 0      |
| WATSON CITY CO<br>WATER CONSTRUCTION | 000000 | 000  | 0      |

MAP NUMBER

EFFECTIVE DATE:  
JANUARY 19, 2000

Federal Emergency Management Agency







---



NA  
MAF REVISED  
JULY 18, 2011  
Federal Emergency Management Agency

СЕРИЙНЫЙ КОМПЬЮТЕРНЫЙ КОМПЛЕКТ



## NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **roadways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Drainage Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies the FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 14. The horizontal datum was NAD 83 (GRS 1980 spheroid). Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1989. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1989, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services  
NOAA, NGS12  
National Geodetic Survey  
55MC-1 #0023  
1315 East-West Highway  
Silver Spring, Maryland 20910-3282  
(301) 713-3242

Qualifying **bench marks** for this jurisdiction lie outside of the corporate limits and are located on non-printed panels. See the Qualifying NGS Bench Marks table in the FIS Report for a listing of bench marks. To obtain current elevation, description, and/or location information for qualifying bench marks located in the vicinity of this jurisdiction, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was derived from 2009 aerial photography obtained from the United States Department of Agriculture - Farm Survey Agency. The aerial photography has a pixel resolution of 1/2 meter.

Based on updated topographic information, this map reflects more detailed and up-to-date stream channel configurations and floodplain delineations than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel dimensions that differ from what is shown on the map. Also, the relationship between stream channel dimensions and floodplain elevations may differ from what is shown on previous maps.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses and a listing of Communities tables containing National Flood Insurance Program data for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

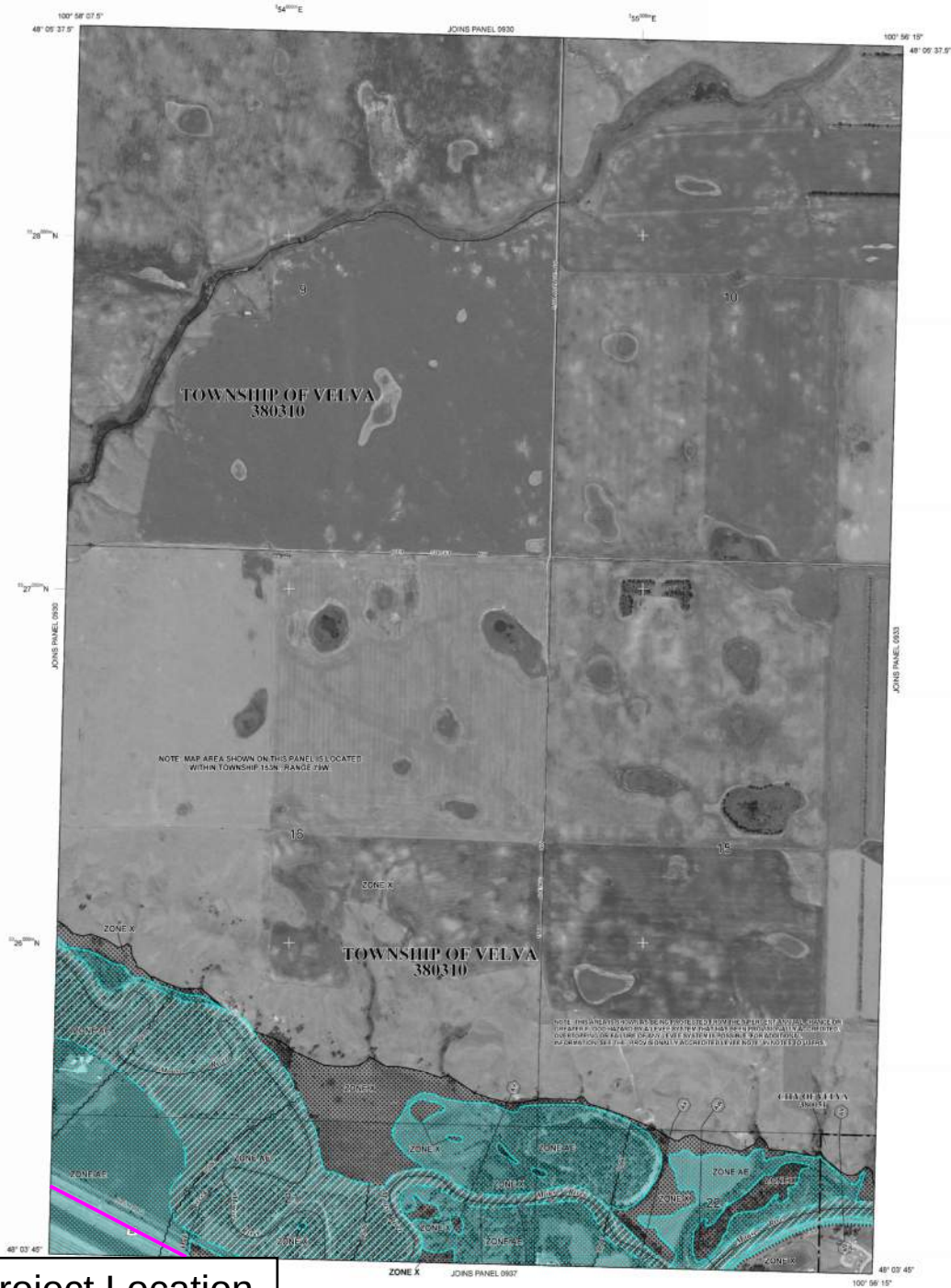
If you have questions about this map, how to use products, or the National Flood Insurance Program in general, please call the **FEMA Map Information Exchange (FMIX)** at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business>.

Vertical Datum Conversion Factor:  
Feet NAVD 83 above Feet NGVD 29:  
Mouse River = +1.2 feet

The Digital Flood Insurance Rate Map was produced as part of the Flood Hazard Map Modernization Program through a Cooperative Technical Partner agreement between the North Dakota State Water Commission and the Federal Emergency Management Agency.



Provisionally Accredited Letter Notes to Users: Check with your local community to obtain more information, such as the estimated level of protection provided (which has exceeded the 1 percent annual chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection for areas on this panel. To maintain accreditation, the levee owner or community is required to submit the data and documentation necessary to comply with Section 65.10 of the NFIP regulations by September 15, 2011. If the community or owner does not provide the necessary data and documentation or if the data and documentation provided indicate the levee system does not comply with Section 65.10 requirements, FEMA will remove the flood hazard and risk information for this area to reflect de-accreditation of the levee system. To update flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and flood proofing or other protective measures. For more information on flood insurance, interested parties should visit the FEMA website at <http://www.fema.gov/business/landowners.shtml>.



## LEGEND

**SPECIAL FLOOD HAZARD AREAS (SFHA) SUBJECT TO DRAINAGE BY THE 1% ANNUAL CHANCE FLOOD**  
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. Flooding, velocities and other effects in the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, AV, VE, and V. The base flood elevation is the water surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); Average depth determined; For areas of sheet flow, velocities and other effects.
- ZONE AR** Special Flood Hazard Areas (SFHA) subject to the 1% annual chance flood as a flood control system that was subsequently destroyed. Zone AR indicates that the former flood control system is being removed to provide protection from the 1% annual chance or greater flood.
- ZONE AV** Area to be protected from the 1% annual chance flood by a future flood protection system under construction; No Base Flood Elevations determined.
- ZONE VE** Coastal Flood zone with velocity hazard (wave action); No Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**  
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

- OTHER FLOOD AREAS**
- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with average areas less than 1 square mile; and areas subject to flooding from 1% annual chance flood.
- OTHER AREAS**
- ZONE D** Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**
- OTHERWISE PROTECTED AREAS (OPAs)**
- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% Annual Chance Floodplain Boundary
- Floodway Boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- Base Flood Elevation line and value, elevation in feet
- Base Flood Elevation value where within area, elevation in feet

Referenced to the North American Vertical Datum of 1989

**(A) (B)** Cross section line

**(A) (B)** Trench line

**48° 02' 00" N 100° 02' 00" W** Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere

**1000-meter Universal Transverse Mercator grid values, zone 14**

**CH0810 X** Bench mark (see explanation in Notes to Users section of this report)

**Sheet title**

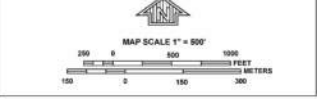
**MAP REPOSITORY**  
Refer to Map Repository list on Map Index

**EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP**  
January 18, 2009

**EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL**  
July 18, 2011 - to update map format

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6323.



**NFIP** **PANEL 0929F**

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**MCNIENRY COUNTY, NORTH DAKOTA**  
**(AND INCORPORATED AREAS)**

**PANEL 929 OF 1450**  
**(SEE MAP INDEX FOR FIRM PANEL LAYOUT)**

**CONTAINS:**

| COMMUNITY         | NUMBER | PANEL | SHEET |
|-------------------|--------|-------|-------|
| VELVA CITY OF     | 0929F  | 0929  | F     |
| VELVA TOWNSHIP OF | 0929F  | 0929  | F     |

Notice to User: The **Map Number** shown below should be used when placing map orders, the **Community Number** shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
**38049C0929F**  
**MAP REVISED**  
**JULY 18, 2011**

**Federal Emergency Management Agency**

Project Location







## NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **roadways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Drainage Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The projection used in the preparation of this map was Universal Transverse Mercator (UTM) zone 14. The horizontal datum was NAD 83 (GRS 1980) spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1989. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1989, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services  
NOAA, NGS12  
National Geodetic Survey  
SIOC-1 #6023  
1315 East-West Highway  
Silver Spring, Maryland 20910-3282  
(301) 713-3242

Qualifying **bench marks** for this jurisdiction lie outside of the corporate limits and are located on non-printed panels. See the Qualifying NGS Bench Marks table in the FIS Report for a listing of bench marks. To obtain current elevation, description, and/or location information for qualifying **bench marks** located in the vicinity of this jurisdiction, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was derived from 2009 aerial photography obtained from the United States Department of Agriculture - Farm Survey Agency. The aerial photography has a pixel resolution of 1 meter.

Based on updated topographic information, this map reflects more detailed and up-to-date stream channel configurations and floodplain delineations than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel dimensions that differ from what is shown on the map. Also, the road to floodplain relationships for unimproved streams may differ from what is shown on previous maps.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses and a listing of Communities table containing National Flood Insurance Program zones for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, aerial digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have questions about this map, how to order products or the National Flood Insurance Program in general, please call the **FEMA Map Information Exchange (FMIX)** at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/businessinfo>.

Vertical Datum Conversion Factor:

Feet NAVD 89 above Feet NGVD 29:

Mouse River = +1.2 feet

This Digital Flood Insurance Rate Map was produced as part of the Flood Hazard Map Modernization Program through a Cooperative Technical Partner agreement between the North Dakota State Water Commission and the Federal Emergency Management Agency.

Provisionally Accredited Letter Notes to Users: Check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1 percent annual chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection for areas on this panel. To maintain accreditation, the levee owner or community is required to submit the data and documentation necessary to comply with Section 65.10 of the NFIP regulations by September 15, 2011. If the community or owner does not provide the necessary data and documentation or if the data and documentation provided indicate the levee system does not comply with Section 65.10 requirements, FEMA will remove the flood hazard and risk information for this area to reflect de-accreditation of the levee system.

To mitigate flood risk in residential risk areas, property owners and residents are encouraged to consider flood insurance and flood proofing or other protective measures. For more information on flood insurance, interested parties should visit the FEMA website at <http://www.fema.gov/businessinfo/index.shtml>.

Vertical Datum Conversion Factor:

Feet NAVD 89 above Feet NGVD 29:

Mouse River = +1.2 feet

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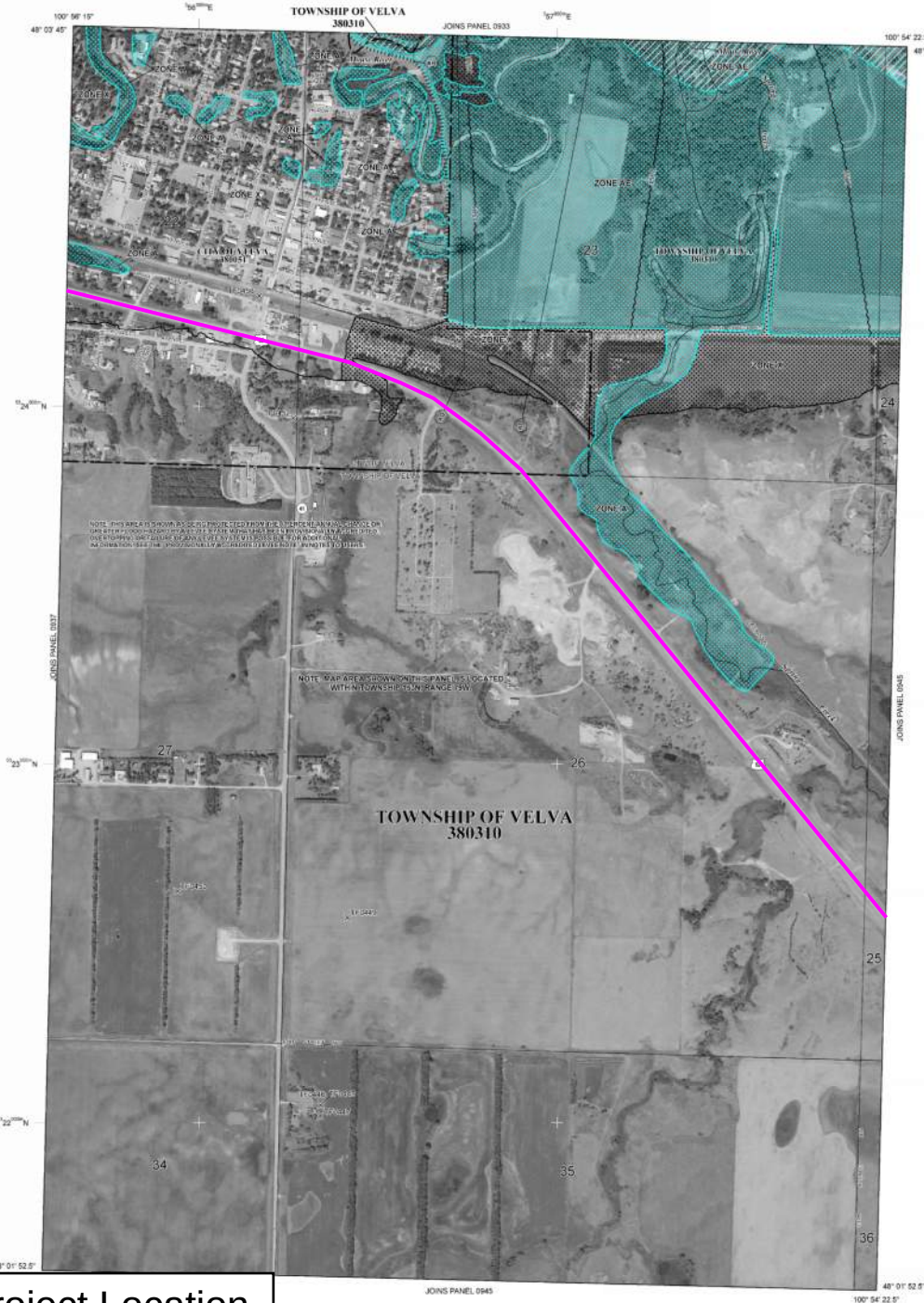
To mitigate flood risk in residential risk areas, property owners and residents are encouraged to consider flood insurance and flood proofing or other protective measures. For more information on flood insurance, interested parties should visit the FEMA website at <http://www.fema.gov/businessinfo/index.shtml>.

Vertical Datum Conversion Factor:

Feet NAVD 89 above Feet NGVD 29:

Mouse River = +1.2 feet

This Digital Flood Insurance Rate Map was produced as part of the Flood Hazard Map Modernization Program through a Cooperative Technical Partner agreement between the North Dakota State Water Commission and the Federal Emergency Management Agency.



## LEGEND

**SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO DETERMINATION BY THE 1% ANNUAL CHANCE FLOOD**

The 1% annual chance flood (also known as the "base flood") is the flood that has a 1% chance of being equaled or exceeded in any given year. Floods greater than the base flood are subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, AR, ARS, V, VE, X, Y, and Z.

- ZONE A:** No Base Flood Elevations determined.
- ZONE AH:** Base Flood Elevations determined.
- ZONE AO:** Flood depths of 1 to 3 feet (usually sheet flow on varying terrain). Average depths determined. For areas of sheet flow, velocities and other factors.
- ZONE AR:** Special Flood Hazard Areas (SFHAs) subject to the 1% annual chance flood by a flood control system that was subsequently elevated. Zone AR indicates that the former flood control system is being retained to provide protection from the 1% annual chance or greater flood.
- ZONE ARS:** Area to be protected from the 1% annual chance flood by a flood control system under construction. No Base Flood Elevations determined.
- ZONE V:** Coastal flood zone with velocity hazard (wave action). No Base Flood Elevations determined.
- ZONE VE:** Coastal flood zone with velocity hazard (wave action). No Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**

- ZONE X:** Areas of 0.2% annual chance flood, areas of 1% annual chance flood with average depths of less than 1 foot or with discharge areas less than 1 square mile, and areas protected from less than 1% annual chance flood.
- OTHER AREAS:** Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are undetermined, but possible.
- ZONE D:** COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS.
- ZONE O:** OTHERWISE PROTECTED AREAS (OPAs).

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary:** Boundary of the 1% annual chance floodplain.
- 0.2% Annual Chance Floodplain Boundary:** Boundary of the 0.2% annual chance floodplain.
- Floodway Boundary:** Boundary of the floodway.
- Zone D boundary:** Boundary of the coastal barrier resources system.
- CBRS and OPA boundary:** Boundary of the coastal barrier resources system and otherwise protected areas.
- Boundary dividing Special Flood Hazard Area zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood effects:** Boundary of the Special Flood Hazard Area.
- Base Flood Elevation line and value, elevation in feet:** Line indicating the base flood elevation.
- Base Flood Elevation value where uniform within panel, elevation in feet:** Value indicating the base flood elevation.

Referenced to the North American Vertical Datum of 1989.

- Geographic coordinates:** Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere.
- 1000-meter Universal Transverse Mercator grid values, zone 14:** 1000-meter Universal Transverse Mercator grid values, zone 14.
- North arrow:** North arrow indicating the orientation of the map.
- Scale bar:** Scale bar indicating the distance in feet and meters.
- Inset map:** Inset map showing the location of the map area within the state of North Dakota.

MAP REPOSITORY:

Refer to State Map Repository for Map Index.

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP:

January 18, 2010.

EFFECTIVE DATE OF REVISIONS TO THIS PANEL:

July 18, 2011 - to update map format.

For community map modernization prior to community mapping, refer to the Community Map Modernization table in the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6322.

MAP SCALE 1" = 500'

200 0 500 1000 FEET

100 0 100 200 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0941F

FIRM

FLOOD INSURANCE RATE MAP

MCHENNY COUNTY, NORTH DAKOTA

(AND INCORPORATED AREAS)

PANEL 941 OF 1450

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY NUMBER PANEL SHEETS

MCHENNY COUNTY 380310 0941 F

VELVA TOWNSHIP OF 380310 0941 F

Notice to User: The Map Number shown below should be used when placing map orders, the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER 38049C0941F

MAP REVISED JULY 18, 2011

Federal Emergency Management Agency

Project Location



## NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Elevation Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies the FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 14. The horizontal datum was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRM for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1989. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1989, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services  
NOAA, NGS-12  
National Geodetic Survey  
SIOC-1 #0022  
1315 East West Highway  
Silver Spring, Maryland 20910-3282  
(301) 713-3242

Qualifying **bench marks** for this jurisdiction lie outside of the corporate limits and are located on non-printed panels. See the Qualifying NGS Bench Marks table in the FIS Report for a listing of bench marks. To obtain current elevation, description, and/or location information for qualifying **bench marks** located in the vicinity of this jurisdiction, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was derived from 2009 aerial photography obtained from the United States Department of Agriculture - Farm Survey Agency. The aerial photography has a pixel resolution of 1 meter.

Based on updated topographic information this map reflects more detailed and up-to-date stream channel configurations and floodplain delineations than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unimproved streams may differ from what is shown on previous maps.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

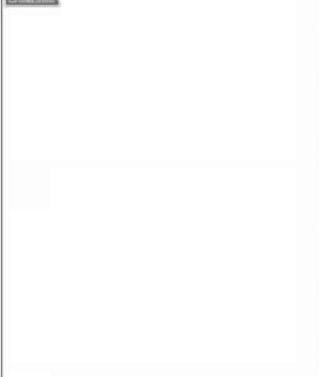
Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses, and a listing of Communities table containing National Flood Insurance Program data for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at <http://nfm.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have questions about this map, how to enter products, or the National Flood Insurance Program in general, please call the **FEMA Map Information Exchange (FMIX)** at 1-877-FEMA-MAP (1-877-335-2627) or visit the FEMA website at <http://www.fema.gov/business/firm>.

Vertical Datum Conversion Factor:  
Feet NAD83 above Feet NGVD 29  
Moude River = +1.2 feet

The Digital Flood Insurance Rate Map was produced as part of the Flood Hazard Map Modernization Program through a Cooperative Technical Partner agreement between the North Dakota State Water Commission and the Federal Emergency Management Agency.



THIS AREA SHOWN AT A  
SCALE OF 1" = 500'  
ON MAP NUMBER  
38049C0941

## LEGEND

**SPECIAL FLOOD HAZARD AREAS (SFHA) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**  
The 1% annual chance flood (100-year flood) is the flood that has a 1% chance of being equaled or exceeded in any given year. The area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AO, AR, AV, VE, and V. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevation determined.
- ZONE AE** Base Flood Elevation determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevation determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of sheet flow, velocities are determined.
- ZONE AR** Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently destroyed. Zone AR indicates that the former flood control system is being replaced to provide protection from the 1% annual chance or greater flood.
- ZONE AR** Area to be protected from the 1% annual chance flood by a federal flood protection system under construction; no Base Flood Elevation determined.
- ZONE AV** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevation determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevation determined.

**FLOODWAY AREAS IN ZONE AE:**  
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

- OTHER FLOOD AREAS**
- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with changing areas less than 1 square mile, and areas protected by levees from the 1% annual chance flood.
- OTHER AREAS**
- ZONE D** Areas determined to be outside the 0.2% annual chance floodplain; areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**
- OTHERWISE PROTECTED AREAS (OPAs)**
- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway Boundary
- Zone D boundary
- Zone X boundary
- CBRS and OPA boundary
- Boundary defining Special Flood Hazard Area zones and boundary defining Special Flood Hazard Areas of different Base Flood Elevation, flood depths, or flood velocities.
- Base Flood Elevation line and value, elevation in feet
- Base Flood Elevation value where uniform within zone; elevation in feet

Referenced to the North American Vertical Datum of 1989

**Map Symbols:**  
A Cross section line  
B Transverse line  
Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere  
1000-meter Universal Transverse Mercator grid values, zone 14  
North arrow  
North arrow (true) and magnetic declination for this section of the FIRM panel  
Scale bar  
Scale 1:50,000

**MAP REVISIONS**  
Refer to Map Revision History table in map index  
EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP  
January 18, 2011  
EFFECTIVE DATES OF REVISIONS TO THIS PANEL  
July 18, 2011 - To update map format

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study Report for this jurisdiction.  
To determine if Flood Insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-625-6223.



**NFIP**

**PANEL 0945F**

**FIRM**

**FLOOD INSURANCE RATE MAP**

**MCHENRY COUNTY, NORTH DAKOTA (AND INCORPORATED AREAS)**

**PANEL 945 OF 1450**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY             | NUMBER | PANEL | SUFFIX |
|-----------------------|--------|-------|--------|
| LEWISTON, TOWNSHIP OF | 00020  | 0945  | F      |
| MCHENRY COUNTY        | 00007  | 0945  | F      |
| WYOLA, TOWNSHIP OF    | 00010  | 0945  | F      |

Notice to User: The **Map Number** shown below should be used when placing map orders, the **Community Number** shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
38049C0945F  
**MAP REVISED**  
JULY 18, 2011

Federal Emergency Management Agency

Project Location



## NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies the FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 14. The horizontal datum was NAD 83. GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services  
NOAA, NGS-12  
National Geodetic Survey  
SIOC-1 #0023  
1315 East-West Highway  
Silver Spring, Maryland 20910-3282  
(301) 713-3342

Qualifying **bench marks** for this jurisdiction lie outside of the corporate limits and are located on non-printed panels. See the Qualifying NGS Bench Marks table in the FIS Report for a listing of bench marks. To obtain current elevation, description, and/or location information for qualifying **bench marks** located in the vicinity of this jurisdiction, please contact the Information Services Branch of the National Geodetic Survey at (800) 713-3342, or visit its website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was derived from 2009 aerial photography obtained from the United States Department of Agriculture -Farm Survey Agency. The aerial photography has a pixel resolution of 1 meter.

Based on updated topographic information this map reflects more detailed and up-to-date stream channel configurations and floodplain delineations than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on the map. Also, the road to floodplain relationships for unreviewed streams may differ from what is shown on previous maps.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses, and a listing of Communities table containing National Flood Insurance Program rates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at <http://firms.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have questions about this map, how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information Exchange (FMIX)** at 1-877-FEMA-MAP (1-877-335-2627) or visit the FEMA website at <http://www.fema.gov/business/firm>.

Vertical Datum Conversion Factor:  
Feet NAD 83 above Feet NGVD 29  
Moose River = +1.2 feet

This Digital Flood Insurance Rate Map was produced as part of the Flood Hazard Map Modernization Program through a Cooperative Technical Partner Agreement between the North Dakota State Water Commission and the Federal Emergency Management Agency.



THIS AREA SHOWN AT A  
SCALE OF 1" = 1000'  
ON MAP NUMBER  
38049C0955

THIS AREA SHOWN AT A  
SCALE OF 1" = 1000'  
ON MAP NUMBER  
38049C0960



## LEGEND

**SPECIAL FLOOD HAZARD AREAS (SFHA) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**  
The 1% annual chance flood (100-year flood), also known as the **base flood**, is the flood that has a 1% chance of being equaled or exceeded in any given year. The flood elevation is the elevation of the water surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); flow Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually areas of ponding); average depths determined. For areas of flood depths determined.
- ZONE AR** Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently destroyed. Zone AR indicates that the former flood control system is being retained to provide protection from the 1% annual chance or greater flood.
- ZONE AR** Area to be protected from the annual chance flood by a future flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE:**  
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

- OTHER FLOOD AREAS**
- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot and with drainage areas less than 1 square mile; and areas subject to erosion from the 1% annual chance flood.
- OTHER AREAS**
- ZONE D** Areas determined to be outside the 0.2% annual chance floodplain.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**
- OTHERWISE PROTECTED AREAS (OPAs)**

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.  
1% Annual Chance Floodplain Boundary  
0.2% Annual Chance Floodplain Boundary  
Floodway boundary  
Zone boundary  
CBRS and OPA boundary  
Boundary defining Special Flood Hazard Area zones and boundary defining Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.  
Base Flood Elevation line and value, elevation in feet  
Base Flood Elevation value where uniform within panel; elevation in feet

Referenced to the North American Vertical Datum of 1988  
Cross section line  
Traverse line  
Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere  
1983-meter Universal Transverse Mercator grid values, zone 14  
North arrow  
North arrow (true) and magnetic (false) declination for this FIRM panel  
Scale bar  
Map repository  
Refer to Map Repository for map index  
EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP  
January 18, 2011  
EFFECTIVE DATES OF REVISIONS TO THIS PANEL  
February 15, 2012 - TO INCORPORATE PREVIOUSLY ISSUED LETTER OF MAP REVISIONS  
July 18, 2011 - TO UPDATE MAP NUMBER

For community map revision history prior to community mapping, refer to the Community Map History table located in the Flood Insurance Study Report for this jurisdiction.  
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6623.



**NFIP**  
**NATIONAL FLOOD INSURANCE PROGRAM**

**PANEL 0975F**

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**MCHENRY COUNTY,**  
**NORTH DAKOTA**  
**(AND INCORPORATED AREAS)**

**PANEL 975 OF 1450**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY            | NUMBER | PANEL | SUFFIX |
|----------------------|--------|-------|--------|
| LEWISTON TOWNSHIP OF | 98029  | 0975  | F      |
| MCHENRY COUNTY       | 98037  | 0975  | F      |
| VOLUNTARY CITY OF    | 98041  | 0975  | F      |

Notice to User: The **Map Number** shown below should be used when placing map orders, the **Community Number** shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
**38049C0975F**  
**MAP REVISED**  
**JULY 18, 2011**

**Federal Emergency Management Agency**

Project Location

# Appendix I, Preferred Alternative Recommendation Memo



# **US HIGHWAY 52 FOUR LANE**

**Project No.**

4-052(109)101

**PCN**

24012

US Highway 52 Four Lane from Approximately 2.3 Miles  
West of Junction 79<sup>th</sup> Avenue SE to Voltaire

Ward & McHenry Counties



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Prepared by

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION  
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## I. Project Description

NDDOT Project No.: 4-052(109)101, PCN 24012  
Highway: US Highway 52  
District: Minot  
Limits: Reference Point (RP) 101.2 near Minot (approximately 2.3 miles west of Junction 79<sup>th</sup> Ave SE) to RP 123.0 just east of Voltaire

## II. Purpose of Decision Document

The purpose of this document is to record the selections of the Preferred Alternative and Options for the US Highway 52 four lane project located at (RP) 101.2 near Minot (approximately 2.3 miles west of Junction 79<sup>th</sup> Ave SE) to RP 123.0 just east of Voltaire. Please refer to **Figure 1, Study Area**.

A brief summary is provided below of the alternatives/options and key elements. Please refer to the Draft Environmental Assessment (EA) that was prepared for the proposed action for further details on the purpose and need statement, alternative description and analysis, and summary of the affected environmental impacts. A copy of this completed and signed Preferred Alternative Recommendation will be included in the EA appendices.

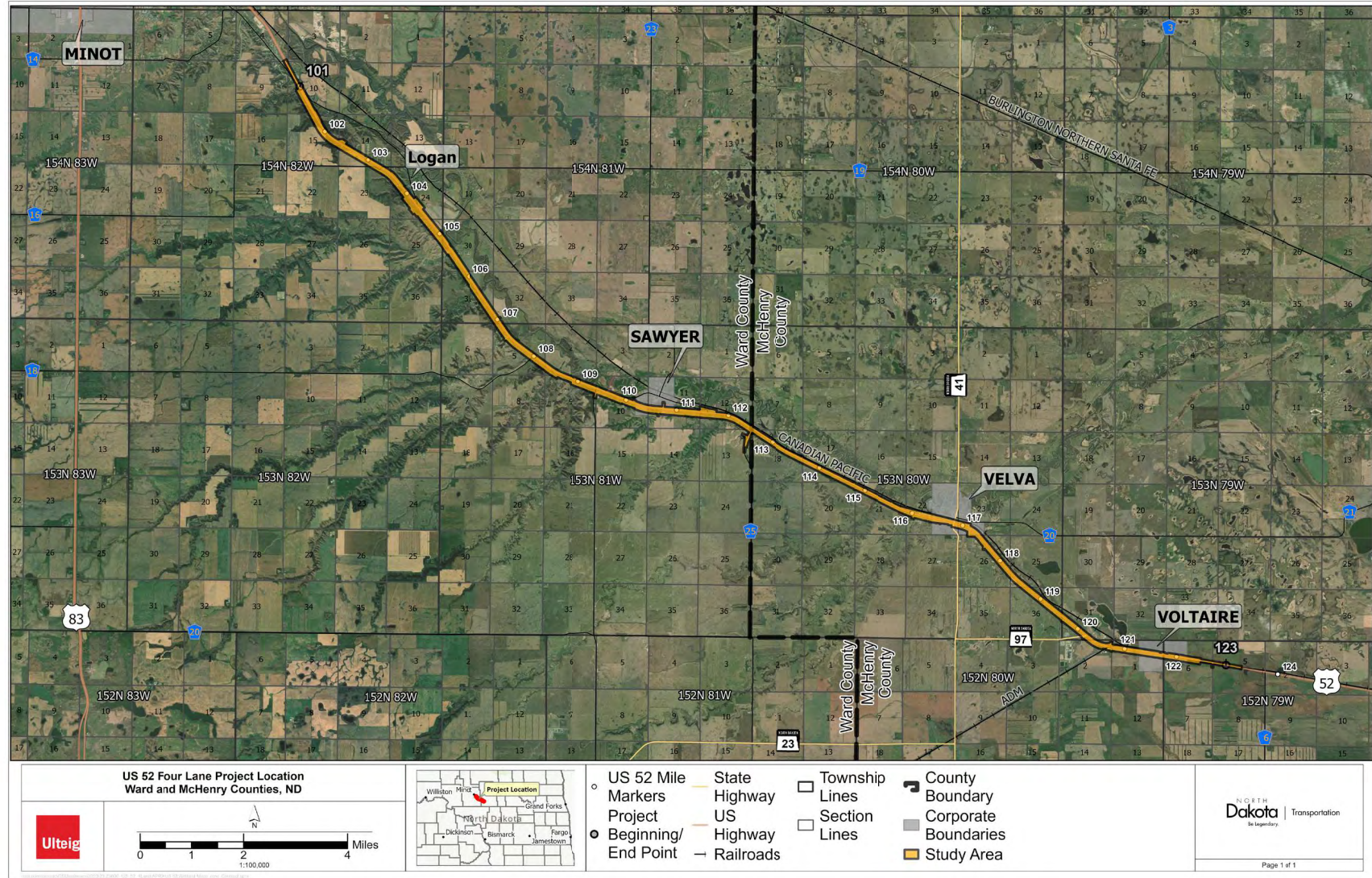


Figure 1, Study Area



### III. Alternatives/Options

The overall corridor was divided into six segments, analyzing distinct build alternatives for each segment. Please refer to **Figure 2, Project Segments**. The six segments were broken down into the following RP ranges:

- Segment 1: RP 101.20 to RP 108.94
- Segment 2: RP 108.94 to RP 112.51
- Segment 3: RP 112.51 to RP 116.22
- Segment 4: RP 116.22 to RP 117.53
- Segment 5: RP 117.53 to RP 120.65
- Segment 6: RP 120.65 to RP 123.00

The no build alternative and two build alternatives were carried forward for detailed analysis in the EA. Each segment includes both a four-lane divided depressed median alternative (Alternative B) and a four-lane divided flush median alternative (Alternative C), except for Segment 4, where the depressed median alternative was deemed not feasible and has been eliminated from further consideration. In addition, a design option (Option V-1) to incorporate a shared-use path has been carried forward in Velva (Segment 4); the option could be selected in combination with or separate from Alternative C. The no build alternative is also under consideration for all segments.

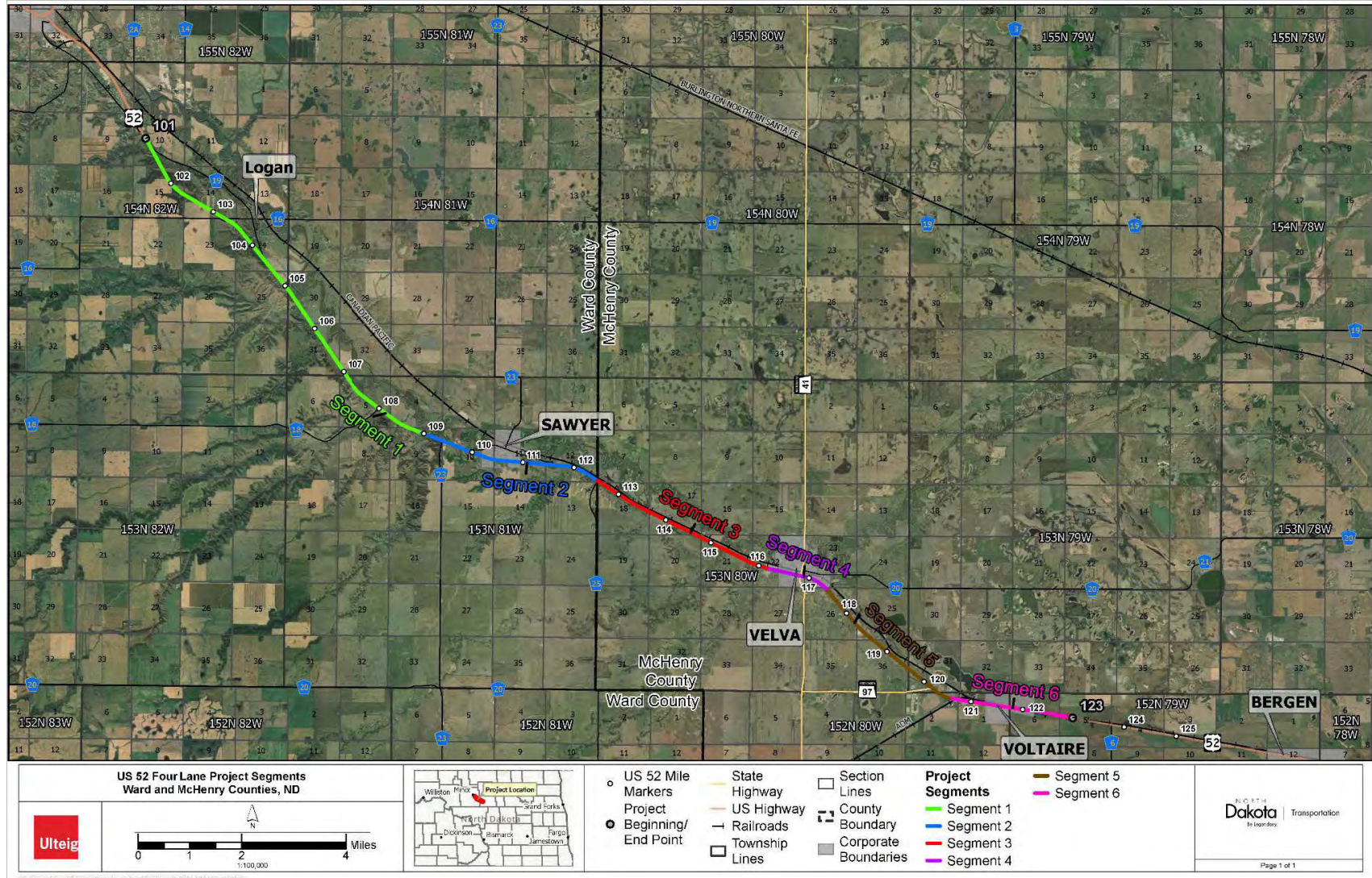


Figure 2, Project Segments



A. Alternative A: No Build

Alternative A, the no build alternative, would not address the identified needs related to perceived safety concerns, existing and future traffic demands, fulfillment of legislative funding obligations, or regional social and economic development. Under this alternative, US Highway 52 would remain in its current configuration, with only routine maintenance activities taking place.

B. Alternative B: Divided Four-Lane Highway with a Depressed Center Median

The depressed center median alternatives would consist of two 12-foot driving lanes in each direction, with 8-foot outside shoulders and 4-foot inside shoulders. A 52-foot-wide grassed depressed median would separate the two roadways. This median width could be reduced during final design to minimize impacts at select locations. To the extent practicable, the existing highway would be used to carry two lanes of traffic in one direction, while two new lanes would be constructed adjacent to the existing roadway to carry traffic in the opposite direction. The posted speed limit for this alternative would be 70 miles-per-hour (mph). Turn lanes would be installed throughout the corridor where warranted. Please refer to **Figure 3, Proposed Depressed Median** for the proposed typical section.

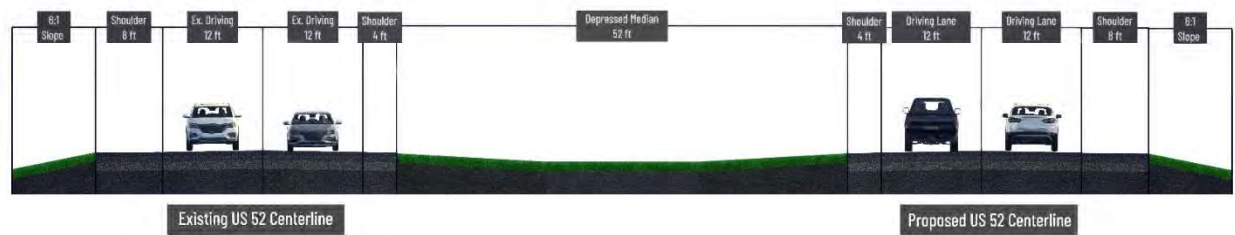


Figure 3, Proposed Depressed Median

C. Alternative C: Divided Four-Lane Highway with a Flush Paved Center Median

The flush center median alternatives would consist of two 12-foot driving lanes in each direction, with 8-foot outside shoulders. A 20-foot-wide paved flush median would separate the opposing lanes of traffic. Where feasible, the median centerline would follow the existing roadway centerline, shifting off the crown only where necessary to avoid impacts. The posted speed limit for this alternative would be 65 mph outside Velva, reduced to 50 mph and 40 mph within city limits. Turn lanes would be installed throughout the corridor where warranted. Please refer to **Figure 4, Proposed Flush Median** for the proposed typical section.

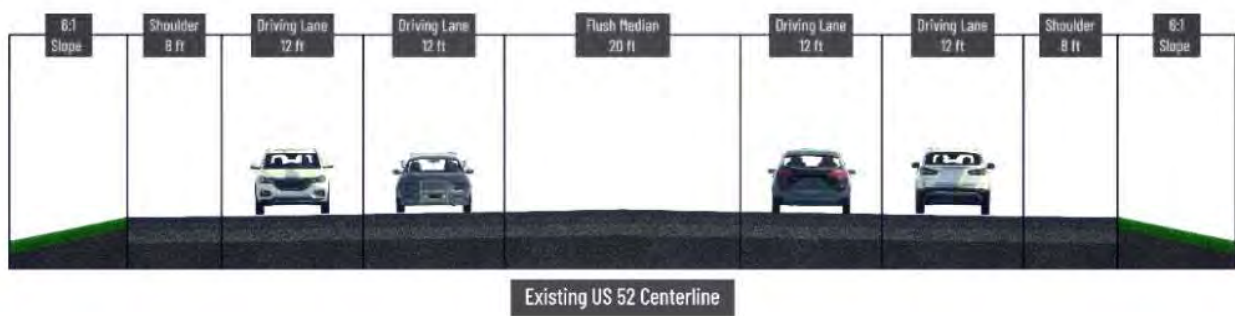


Figure 4, Proposed Flush Median

## D. Alternatives By Segment

### 1. Segment 1 RP 101.20 to RP 108.94

Segment 1 extends a total distance of 7.74 miles. At its western terminus, the corridor connects to the existing four-lane section of US Highway 52, which begins south of the US Highway 2 interchange. Segment 1 is characterized by steep river break terrain as it parallels the Souris River. Throughout this segment, NDDOT owns excess right-of-way (ROW) along the south side of the highway.

#### a) *Alternative B1*

The existing roadway would be used to carry two lanes of westbound traffic, while a new two-lane facility would be constructed to the south to accommodate eastbound traffic.

#### b) *Alternative C1*

The existing roadway would be widened evenly to both sides to accommodate the additional lanes and center median.

### 2. Segment 2 RP 108.94 to RP 112.51

Segment 2 extends a total distance of 3.57 miles. This segment runs along the south side of the city of Sawyer. Throughout Segment 2, NDDOT owns excess ROW along the south side of the highway.

#### a) *Alternative B2*

The existing roadway would be used to carry two lanes of westbound traffic, while a new two-lane facility would be constructed to the south to accommodate eastbound traffic.

#### b) *Alternative C2*

The existing roadway would be widened to the south, shifting the current centerline an average of 27 feet (18 feet to 34 feet) to minimize impacts to existing constraints.

### 3. Segment 3 RP 112.51 to RP 116.22

Segment 3 extends a total distance of 3.71 miles. For most of its length, this segment directly parallels a Canadian Pacific Kansas City (CPKC) rail line located north of the highway, which represents a primary ROW constraint.

In addition, this segment would require raising the grade of US Highway 52 up to 6 feet to address potential flooding concerns per the Mouse River Enhanced Flood Protection Project's recommendation. Please refer to **Figure 5, Velva Grade Raise**. A speed limit reduction would occur at RP 115 to 50 mph and would then reduce to 40 mph as the segment enters Velva.





*Figure 5, Velva Grade Raise*

*a) Alternative B3*

Between RP 112.51 and RP 115.00, Alternative B3 would consist of a four-lane roadway with a depressed center median, with expansion occurring to the south of US Highway 52. At RP 115.00, the roadway would start transitioning to a flush center median section to avoid impacts to the Holy Cross Cemetery. The CPKC rail line parallels much of this segment on the north side, limiting expansion in that direction; however, near the Holy Cross Cemetery the rail line shifts away from the highway. In this location, the roadway centerline would be shifted slightly to the north to minimize encroachment on the cemetery before returning to the existing centerline prior to entering Velva. Under this alternative, the existing roadway alignment would be used to carry two lanes of westbound traffic, while a new two-lane facility would be constructed to the south to accommodate eastbound traffic.

*b) Alternative C3*

Alternative C3 would include two new eastbound lanes and the flush median would be constructed south of the existing roadway, requiring a centerline shift of approximately 16 feet prior to the grade raise and 36 feet throughout the portions of the grade raise that parallel the CPKC rail line. The CPKC rail line parallels much of this segment on the north side, limiting expansion in that direction; however, near the Holy Cross Cemetery the rail line shifts away from the highway. In this location, the roadway centerline would be shifted slightly to the north to minimize encroachment on the cemetery before returning to the existing centerline prior to entering Velva. The existing roadway alignment would continue to carry westbound traffic.

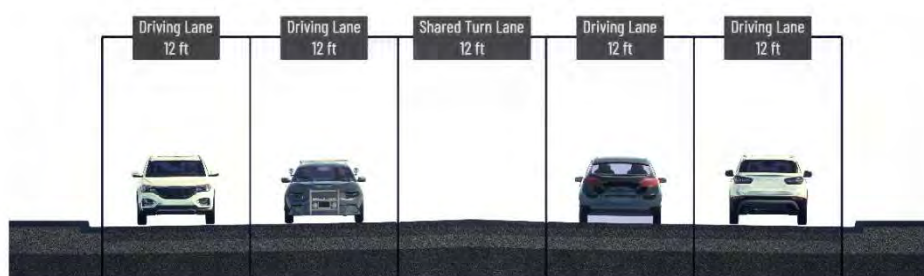
**4. Segment 4 RP 116.22 to RP 117.53**

Segment 4 extends a total length of 1.31 miles. This segment passes through the city of Velva and is the only urban portion of the project corridor. The current roadway configuration for this segment includes curb and gutter with two 12-foot-wide driving lanes separated by a 14-foot-wide paved center median that functions as a shared two-way left-turn lane, and 8-foot outside shoulders. The corridor is closely bordered by businesses and residences on both sides of the highway. Implementing a depressed median alternative in this area would require additional ROW acquisition and likely result in the relocation of adjacent properties. Due to these constraints, the depressed median alternative was determined not to be feasible for Segment 4 and was eliminated from further consideration. An optional work item has been included in this segment for a shared-use path.

#### a) *Alternative C4*

As shown in **Figure 6, Velva Typical Section**, the typical section would include two 12-foot driving lanes in each direction, separated by a 12-foot paved median functioning as a two-way left-turn lane. The corridor would be designed as an urban section with curb and gutter and stormwater drainage improvements. Under this alternative, the posted speed limit would be 40 mph within the city of Velva. At RP 117.00, the speed limit would increase to 50 mph before transitioning to match the Segment 5 design speed.

Under Alternative C4, three existing right turn lanes would be removed due to the addition of a continuous travel lane in each direction. The intersection of US Highway 52 and ND Highway 41 currently does not have a dedicated right-turn lane along the southbound leg of ND Highway 41; however, the existing approach is wide enough to function as a right-turn lane onto US Highway 52. This movement has the highest right-turn volume at the intersection. Although a dedicated right-turn lane was not evaluated in the traffic operations report, it will be added based on engineering judgement to clarify lane assignments and improve intersection operations.



*Figure 6, Velva Typical Section*

An existing north/south pedestrian crossing is located at the intersection of US Highway 52 and ND Highway 41. Alternative C4 would improve pedestrian safety at this crossing by installing an enhanced crosswalk with a rectangular rapid-flashing beacon and advanced signing. To further enhance safety, a 6-foot pedestrian refuge median would be added on the east side of the intersection, paired with a 6-foot gore area on the opposite side to accommodate additional post-mounted flashing beacons. Although current pedestrian and traffic volumes do not warrant such a crossing improvement, this treatment is recommended based on engineering judgement to improve safety and visibility of pedestrians.

#### 5. Segment 4 Design Option

Segment 4 is the only urban roadway segment along the project corridor and the only segment with existing pedestrian facilities. Currently, pedestrian accommodations are limited to a sidewalk along the east side of ND Highway 41, located both north and south of the US Highway 52 intersection, with a marked pedestrian crossing at the intersection. To enhance pedestrian connectivity and safety, one design option is under consideration for this segment. The option could be selected in combination with or separate from Alternative C4.

#### a) *Option V-1: 10-foot Shared-Use Path*

Option V-1 in Segment 4 would provide a continuous 10-foot-wide shared-use path along the north side of US Highway 52 through Velva, extending from approximately RP 116.15 to ND Highway 41. Please refer to **Figure 7, Velva Shared Use Path**. The path would be constructed along the outside edge of the highway ROW, creating separation from the roadway and allowing space for snow storage within the median.



6. Segment 5 RP 117.53 to RP 120.65

a) *Alternative B5*

b) *Alternative C5*

### 7. Segment 6 RP 120.65 to RP 123.00

a) *Alternative B6*

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*b) Alternative C6*

Under this alternative, the existing roadway would be widened evenly to both sides to accommodate the additional lanes and center median. At the east end of Segment 6, an existing eastbound passing lane begins at RP 123.0. To ensure a proper transition between roadway sections, the proposed four-lane typical section would end at approximately RP 122.0, and the existing eastbound passing lane would be extended approximately 1 mile to the west to tie into the four-lane section.

As part of a separate NDDOT project (PCN 23404), acceleration and deceleration lanes are proposed at the railroad crossing at RP 120.65. These improvements are anticipated to be completed prior to construction of this four-lane expansion. The flush median section for Alternative C6 would tie into the existing widened pavement at this location.

## IV. Summary of Property Impacts for Alternatives/Options

Based on the preliminary design of the alternatives, it is anticipated that approximately 92.58 acres to 182.10 acres of additional permanent ROW would be required, depending on the alternative selected. Where construction limits approach or extend beyond the existing ROW, additional ROW would be purchased. Two sheds/outbuildings would be removed as a result of Alternative B; no structure relocations would be required under any alternative/option. One piece of Intelligent Transportation System (ITS) technology, a camera and infrared illuminator mounted on a steel pole, is located in Segment 1 at RP 102.7 and would be relocated for both Alternative A and B. A detailed summary of ROW needs and building removals for each alternative is provided in **Table 1, Right-of-Way Impacts**.

*Table 1, Right-of-Way Impacts*

| Segment      | Alternative/Option                | No. of Buildings Removed | Temporary Easement (acres) | Permanent ROW (acres) |
|--------------|-----------------------------------|--------------------------|----------------------------|-----------------------|
| Segments 1-6 | Alternative A                     | 0                        | 0                          | 0                     |
| Segment 1    | Alternative B1                    | 0                        | 20.5                       | 65.0                  |
|              | Alternative C1                    | 0                        | 19.4                       | 33.3                  |
| Segment 2    | Alternative B2                    | 1                        | 7.8                        | 26.4                  |
|              | Alternative C2                    | 0                        | 1.5                        | 9.9                   |
| Segment 3    | Alternative B3                    | 1                        | 6.0                        | 49.1                  |
|              | Alternative C3                    | 0                        | 7.7                        | 28.4                  |
| Segment 4    | Alternative C4 without Option V-1 | 0                        | 1.9                        | 1.9                   |
|              | Alternative C4 with Option V-1    | 0                        | 2.0                        | 2.3                   |
|              | Option V-1 without Alternative C4 | 0                        | 0.7                        | 0.4                   |
| Segment 5    | Alternative B5                    | 0                        | 4.8                        | 31.0                  |
|              | Alternative C5                    | 0                        | 4.0                        | 14.1                  |
| Segment 6    | Alternative B6                    | 0                        | 2.4                        | 8.3                   |
|              | Alternative C6                    | 0                        | 1.1                        | 6.5                   |



## V. Summary of Estimated Costs

A preliminary cost summary was prepared for each alternative and option under consideration. Please refer to **Table 2, Cost Summary**.

*Table 2, Cost Summary*

| Segment      | Alternative                       | Preliminary Cost | Cost Per Mile   |
|--------------|-----------------------------------|------------------|-----------------|
| Segments 1-6 | Alternative A                     | \$0              | \$0             |
| Segment 1    | Alternative B1                    | \$94.55 million  | \$12.17 million |
|              | Alternative C1                    | \$61.20 million  | \$7.88 million  |
| Segment 2    | Alternative B2                    | \$49.85 million  | \$14.08 million |
|              | Alternative C2                    | \$47.90 million  | \$13.53 million |
| Segment 3    | Alternative B3                    | \$36.48 million  | \$9.83 million  |
|              | Alternative C3                    | \$33.87 million  | \$7.63 million  |
| Segment 4    | Alternative C4 without Option V-1 | \$10.93 million  | \$8.34 million  |
|              | Alternative C4 with Option V-1    | \$11.83 million  | \$9.03 million  |
|              | Option V-1 without Alternative C4 | \$1.04 million   | \$1.48 million  |
| Segment 5    | Alternative B5                    | \$26.68 million  | \$8.55 million  |
|              | Alternative C5                    | \$21.52 million  | \$6.90 million  |
| Segment 6    | Alternative B6                    | \$12.34 million  | \$5.25 million  |
|              | Alternative C6                    | \$12.08 million  | \$5.14 million  |

## VI. Key Advantages and Disadvantages

This section summarizes advantages and disadvantages among alternatives/options across segments. Note that right-of-way and cost information has been presented above and is not repeated here.

Due to no construction, Alternative A would result in the following:

- Project purpose and need would not be met.
- Traffic congestion and associated noise would continue and likely increase over time.
- Regional economic development or long-term corridor reliability would not be supported.
- Continued reliance on routine maintenance only (no construction resource commitments).
- Emissions (i.e., fugitive dust, criteria pollutants) would increase as traffic volume increases.
- No new earthwork, grading, or ground disturbance.
- No new impervious surfaces added.
- No impacts to wetlands, other waters, floodplains, water resources, or water quality.
- No impacts to vegetation, wildlife habitat, fisheries, or threatened and endangered species.
- No impacts to cultural resources or Section 4(f) properties.
- No hazardous materials disturbance and no construction-related spill risk.
- No changes to visual character or infrastructure.

Across all segments, common differences between Alternative B and Alternative C are:

- Alternative B would have a larger construction footprint than Alternative C.
- Alternative B would have a greater safety benefit from head-on collisions than Alternative C.
- Alternative C would have slightly more new impervious surface area than Alternative B.
- Alternative C would have slightly higher potential for stormwater runoff, erosion, and sedimentation during and after construction.

Across all segments, Alternatives B and C share the following:

- Meet project purpose and need by addressing perceived safety issues, existing and future traffic needs, or social and economic demands.
- Effect determinations for threatened and endangered species:
  - No effect on piping plover, piping plover critical habitat, Rufa red knot, and Dakota skipper critical habitat.
  - May affect, but not likely to adversely affect northern long-eared bat and whooping crane.
  - May affect, and likely to adversely affect Dakota skipper.
- No adverse effect on cultural resources.
- No impacts to sole source aquifers, groundwater resources, drinking water, or source water protection areas.
- Beneficial impact on transportation infrastructure.
- Consistent with goals identified in local, state, and regional plans for transportation and land use.
- Increased temporary demand for construction contractors and local services during construction.
- Roadway would be closer to homes, businesses, and community services, impacting noise and visual environments. Potential reduction in emissions due to increased efficiency of roadway network but may be offset as traffic volumes increase.
- Compliant with 23 CFR 772 for traffic noise; none of the traffic noise impacts identified warrant noise abatement.
- Temporary construction impact on travel patterns, noise environment, and visual environment.
- Temporary and permanent impact on visual resources and viewshed, but generally compatible with existing visual character and no impact on visual quality is expected.
- Potential temporary, short term utility service interruptions during relocations.
- Relocation of one piece of ITS technology.
- No significant demand on energy resources or their availability.
- More efficient flow of traffic during operation with resulting reduced energy consumption.
- No impacts anticipated for species of concern, significant ecological communities, and bald and golden eagles.
- No known hazardous materials sites requiring active mitigation. Potential for minor accidental spills or leaks of hazardous materials used during construction.

Across all segments, Alternative B would have slightly greater impacts on the following than Alternative C due to larger construction footprint:

- Potential to spread noxious weeds during construction.
- Temporary impacts on soil from construction activities: soil compaction, reduced permeability and infiltration capacity, potential for erosion, sedimentation, and/or spills.
- Potential for unanticipated discovery of cultural resources.
- Potential for unanticipated discovery of paleontological resources.
- Potential to impact air quality during construction activities.
- Commitment of resources during construction.
- Potential habitat degradation and fragmentation, avoidance of habitat, barriers to wildlife movement, and wildlife-vehicle collisions due to expansion of the transportation corridor.
- Potential for mortality to species with limited mobility due to construction activities.
- Potential to encounter hazardous materials during construction.
- Longer culvert extensions.



Option V-1 would generally result in the following:

- Safety, mobility, and recreational benefits for pedestrians and bicyclists.
- Additional construction footprint.
- Additional environmental impacts.

Advantages and disadvantages that differ between segments for the build alternatives/option that are not discussed above are presented in **Table 3, Key Advantages and Disadvantages**.

*Table 3, Key Advantages and Disadvantages*

| Segment   | Alternative/Option | Advantages (Compared to other Alternative/Option)                                                                                                                                                                                                                                                                                                                                                                                                                     | Disadvantages (Compared to other Alternative/Option)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Segment 1 | Alternative B1     | <ul style="list-style-type: none"> <li>Slightly less permanent conversion of prime farmland</li> <li>Slightly less total linear feet of utility impacts</li> </ul>                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>More permanent and temporary earthwork impacts</li> <li>Slightly more temporary easement acquisition</li> <li>Slightly less permanent conversion of vegetation to roadway</li> <li>Slightly more impacts to wetland and other waters</li> <li>Similar work in Special Flood Hazard Areas as Alternative C1</li> <li>More permanent habitat conversion</li> <li>More utility pole removals/relocations</li> </ul>                                                                                                         |
|           | Alternative C1     | <ul style="list-style-type: none"> <li>Less permanent and temporary earthwork impacts</li> <li>Slightly less temporary easement acquisition</li> <li>Slightly more permanent conversion of vegetation to roadway</li> <li>Slightly less impact to wetland and other waters</li> <li>Less permanent habitat conversion</li> <li>More utility pole removals/relocations</li> </ul>                                                                                      | <ul style="list-style-type: none"> <li>Slightly more permanent conversion of prime farmland</li> <li>Similar work in Special Flood Hazard Areas as Alternative B1</li> <li>Slightly more total linear feet of utility impacts</li> </ul>                                                                                                                                                                                                                                                                                                                        |
| Segment 2 | Alternative B2     | <ul style="list-style-type: none"> <li>Less permanent vegetation impacts</li> <li>Slightly less impact to other waters</li> </ul>                                                                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>More permanent and temporary earthwork impacts</li> <li>More permanent conversion of prime farmland</li> <li>More temporary vegetation impacts</li> <li>Slightly more impacts to wetlands</li> <li>More permanent habitat conversion</li> <li>Similar temporary impacts to Sno-Trails Snowmobile Trail as Alternative C2 and temporary impacts to Sawyer Baseball Diamond</li> <li>Removal of one building</li> <li>More utility pole removals/relocations</li> <li>More total linear feet of utility impacts</li> </ul> |
|           | Alternative C2     | <ul style="list-style-type: none"> <li>Less permanent and temporary earthwork impacts</li> <li>Less permanent conversion of prime farmland</li> <li>Less temporary vegetation impacts</li> <li>Slightly less impacts to wetlands</li> <li>Less permanent habitat conversion</li> <li>No impact to Sawyer Baseball Diamond</li> <li>No building removals</li> <li>Less utility pole removals/relocations</li> <li>Less total linear feet of utility impacts</li> </ul> | <ul style="list-style-type: none"> <li>More permanent vegetation impacts</li> <li>Slightly more impacts to other waters</li> <li>Similar temporary impacts to Sno-Trails Snowmobile Trail as Alternative B2</li> </ul>                                                                                                                                                                                                                                                                                                                                          |



| Segment   | Alternative/Option                | Advantages (Compared to other Alternative/Option)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Disadvantages (Compared to other Alternative/Option)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Segment 3 | Alternative B3                    | <ul style="list-style-type: none"> <li>Less permanent vegetation impacts</li> <li>Similar grade raise for flood protection as Alternative C3</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>More permanent and temporary earthwork impacts</li> <li>Slightly more permanent conversion of prime farmland</li> <li>More temporary vegetation impacts</li> <li>Slightly more impact to wetland and other waters</li> <li>Impact to Velva flood protection levee</li> <li>More permanent habitat conversion</li> <li>Similar temporary impacts to Sno-Trails Snowmobile Trail as Alternative C3</li> <li>Removal of one building</li> <li>Many more utility pole removals/relocations</li> <li>More total linear feet of utility impacts</li> </ul>                                                                                                                                                         |
|           | Alternative C3                    | <ul style="list-style-type: none"> <li>Less permanent and temporary earthwork impacts</li> <li>Slightly less permanent conversion of prime farmland</li> <li>Less temporary vegetation impacts</li> <li>Slightly less impact to wetlands and other waters</li> <li>Similar grade raise for flood protection as Alternative B3</li> <li>Less permanent habitat conversion</li> <li>No building removal</li> <li>Much less utility pole removals/relocations</li> <li>Less total linear feet of utility impacts</li> </ul>                                          | <ul style="list-style-type: none"> <li>More permanent vegetation impacts</li> <li>Impact to Velva flood protection levee</li> <li>Similar temporary impacts to Sno-Trails Snowmobile Trail as Alternative B3</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Segment 4 | Alternative C4 without Option V-1 | <ul style="list-style-type: none"> <li>Less permanent conversion of prime farmland than Alternative C4 with Option V-1</li> <li>Less permanent and temporary earthwork impacts than Alternative C4 with Option V-1</li> <li>Less new impervious surface area added than Alternative C4 with Option V-1</li> <li>Slightly lower wetland and other water impacts than Alternative C4 with Option V-1</li> <li>Slightly less utility pole removals/relocations</li> <li>Slightly less total linear feet of utility impacts Alternative C4 with Option V-1</li> </ul> | <ul style="list-style-type: none"> <li>Does not add a pedestrian/bicycle facility that would improve safety and connectivity</li> <li>More permanent and temporary earthwork impacts than Option V-1 without Alternative C4</li> <li>More new impervious surface area than Option V-1 without Alternative C4</li> <li>More impact to wetlands and other waters than Option V-1 without Alternative C4</li> <li>Conversion of potential habitat</li> <li>More utility pole removals/relocations than Option V-1 without Alternative C4</li> <li>More total linear feet of utility impacts than Option V-1 without Alternative C4</li> <li>Temporary impact on Sno-Trails Snowmobile Trail</li> <li>Impact to Velva flood protection levee</li> </ul> |

| Segment | Alternative/Option                | Advantages (Compared to other Alternative/Option)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Disadvantages (Compared to other Alternative/Option)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | Alternative C4 with Option V-1    | <ul style="list-style-type: none"> <li>Adds a pedestrian/bicycle facility that would improve safety and connectivity</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>More permanent and temporary earthwork impacts than Option V-1 without Alternative C4 and Alternative C4 without Option V-1</li> <li>More new impervious surface area than Option V-1 without Alternative C4 and Alternative C4 without Option V-1</li> <li>More permanent conversion of prime farmland than Option V-1 without Alternative C4 and Alternative C4 without Option V-1</li> <li>More wetland and other water impacts than Option V-1 without Alternative C4 and Alternative C4 without Option V-1</li> <li>Conversion of potential habitat</li> <li>More utility pole removals/relocations than Option V-1 without Alternative C4 and Alternative C4 without Option V-1</li> <li>More total linear feet of utility impacts than Option V-1 without Alternative C4 and Alternative C4 without Option V-1</li> <li>Impact to Velva flood protection levee</li> <li>Temporary impact on Sno-Trails Snowmobile Trail</li> </ul> |
|         | Option V-1 without Alternative C4 | <ul style="list-style-type: none"> <li>Adds a pedestrian/bicycle facility that would improve safety and connectivity</li> <li>Much less permanent and temporary earthwork impacts than Alternative C4 with Option V-1 and Alternative C4 without Option V-1</li> <li>Much less new impervious surface area than Alternative C4 with Option V-1 and Alternative C4 without Option V-1</li> <li>Much less temporary vegetation impacts than Alternative C4 with Option V-1 and Alternative C4 without Option V-1</li> <li>Lowest impact to wetlands and other waters than Alternative C4 with Option V-1 and Alternative C4 without Option V-1</li> <li>No habitat conversion</li> <li>Slightly less utility pole removals/relocations than Alternative C4 with Option V-1 and Alternative C4 without Option V-1</li> <li>Much less total linear feet of utility impacts than Alternative C4 with Option V-1 and Alternative C4 without Option V-1</li> <li>No impact to Velva flood protection levee</li> </ul> | <ul style="list-style-type: none"> <li>Does not add roadway capacity</li> <li>Slightly more impact to prime farmland than Alternative C4 without Option V-1</li> <li>Temporary impact on Sno-Trails Snowmobile Trail</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |



| Segment   | Alternative/Option | Advantages (Compared to other Alternative/Option)                                                                                                                                                                                                                                                                                                                                                                     | Disadvantages (Compared to other Alternative/Option)                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Segment 5 | Alternative B5     | <ul style="list-style-type: none"> <li>• Less permanent vegetation impacts</li> <li>• Less permanent habitat conversion</li> <li>• Slightly less utility pole removals/relocations</li> </ul>                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>• Slightly more permanent and temporary earthwork impacts</li> <li>• Slightly more permanent conversion of prime farmland</li> <li>• More temporary vegetation impacts</li> <li>• Slightly more impact to wetland and other waters</li> <li>• Slightly more total linear feet of utility impacts</li> </ul>                                                                                                                                                                            |
|           | Alternative C5     | <ul style="list-style-type: none"> <li>• Slightly less permanent and temporary earthwork impacts</li> <li>• Slightly less permanent conversion of prime farmland</li> <li>• Less temporary vegetation impacts</li> <li>• Slightly less impacts to wetlands and other waters</li> <li>• Slightly less total linear feet of utility impacts</li> </ul>                                                                  | <ul style="list-style-type: none"> <li>• More permanent vegetation impacts</li> <li>• More permanent habitat conversion</li> <li>• Slightly more utility pole removals/relocations</li> </ul>                                                                                                                                                                                                                                                                                                                                 |
| Segment 6 | Alternative B6     | <ul style="list-style-type: none"> <li>• Same no impact to other waters as Alternative C6</li> <li>• Less permanent habitat conversion</li> </ul>                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>• Slightly more permanent and temporary earthwork impacts</li> <li>• Slightly more permanent conversion of prime farmland</li> <li>• Slightly more temporary and permanent vegetation impacts</li> <li>• Slightly more impact to wetlands</li> <li>• Similar permanent and temporary impacts to USFWS wetland easements as Alternative C6</li> <li>• Same utility pole removals/relocations as Alternative C6</li> <li>• Slightly more total linear feet of utility impacts</li> </ul> |
|           | Alternative C6     | <ul style="list-style-type: none"> <li>• Slightly less permanent and temporary earthwork impacts</li> <li>• Slightly less permanent conversion of prime farmland</li> <li>• Slightly less temporary and permanent vegetation impacts</li> <li>• Slightly less impact to wetlands</li> <li>• Same no impact to other waters as Alternative B6</li> <li>• Slightly less total linear feet of utility impacts</li> </ul> | <ul style="list-style-type: none"> <li>• Similar permanent and temporary impacts to USFWS wetland easements as Alternative B6</li> <li>• More permanent habitat conversion</li> <li>• Same utility pole removals/relocations as Alternative B6</li> </ul>                                                                                                                                                                                                                                                                     |

## VII. Summary of Public Comments

Public input reflects broad support to move forward with four-laning this section of US Highway 52 in order to address heavy truck traffic and safety, with many commenters favoring a depressed center median for reduced head-on collision risk and safer winter conditions due to easier snow removal. However, several commenters prefer the flush paved center median in all segments to minimize ROW impacts to adjacent landowners, preserve driveways and turn lanes, and provide safer access for emergency vehicles. Several commenters urged a hybrid, segment-by-segment approach due to different constraints (e.g., ROW, safety). Conversely, some opposed four-laning outright as it seems unnecessary with current traffic data and pushed for further studies and discussion, while others sought no-build in specific segments due to property, noise, and quality-of-life impacts.

Others had concerns in specific areas of US Highway 52. In Sawyer, safety is a concern due to the downhill grade, limited sight distance near 2<sup>nd</sup> Avenue, and a lack of dedicated turn lanes, leading to requests for the depressed center median and access changes where there is limited sight distance. In Velva, some commenters asked to keep the in-town section as-is (i.e., two lanes with center turn lane) and do not want to turn it into a four lane. Many want to prioritize pedestrian safety, including calls for an underpass or at least an enhanced crossing at ND Highway 41, and add a shared-use path on the north side. Multiple requests from unnamed commenters called for a traffic signal, though NDDOT indicated it does not meet warrants today, but could be warranted in the future.



## VIII. Recommendations

Please refer to **Table 4, Recommendations** to move forward with recommendations for this project.

*Table 4, Recommendations*

|                                                    | 1. Do you concur with the project concepts as proposed? | 2. Which alternative/option should proceed with the project (choose one per segment)? |                |        |        |                |        |        |                |        |        |                |                        |                     |                        |                |        |        |                |        |        |
|----------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------------------------------------|----------------|--------|--------|----------------|--------|--------|----------------|--------|--------|----------------|------------------------|---------------------|------------------------|----------------|--------|--------|----------------|--------|--------|
|                                                    |                                                         | Yes/No                                                                                | Segment 1      |        |        | Segment 2      |        |        | Segment 3      |        |        | Segment 4      |                        |                     |                        | Segment 5      |        |        | Segment 6      |        |        |
|                                                    |                                                         |                                                                                       | Alt A          | Alt B1 | Alt C1 | Alt A          | Alt B2 | Alt C2 | Alt A          | Alt B3 | Alt C3 | Alt A          | Alt C4 without Opt V-1 | Alt C4 with Opt V-1 | Opt V-1 without Alt C4 | Alt A          | Alt B5 | Alt C5 | Alt A          | Alt B6 | Alt C6 |
| Office of Project Development                      | Yes                                                     |                                                                                       | X              |        |        | X              |        |        | X              |        |        |                | X                      |                     |                        | X <sup>1</sup> |        |        | X              |        |        |
| Office of Operations                               | Yes                                                     |                                                                                       | X              |        |        | X              |        |        | X              |        |        | X <sup>2</sup> |                        |                     | X                      |                |        | X      |                |        |        |
| Bridge Division                                    | Yes                                                     |                                                                                       | X              |        |        | X              |        |        | X              |        |        |                | X                      |                     |                        | X              |        |        | X              |        |        |
| Construction Services Division                     |                                                         |                                                                                       |                |        |        |                |        |        |                |        |        |                |                        |                     |                        |                |        |        |                |        |        |
| Design Division                                    | Yes                                                     |                                                                                       | X <sup>3</sup> |        |        | X <sup>4</sup> |        |        | X <sup>5</sup> |        |        |                | X <sup>6</sup>         |                     |                        | X <sup>7</sup> |        |        | X <sup>8</sup> |        |        |
| District                                           | Yes                                                     |                                                                                       | X              |        |        | X              |        |        | X              |        |        |                | X                      |                     |                        | X              |        |        | X              |        |        |
| Environmental and Transportation Services Division | Yes                                                     |                                                                                       | X              |        |        | X              |        |        | X              |        |        |                | X                      |                     |                        | X              |        |        | X              |        |        |
| Local Government Division                          | Yes                                                     |                                                                                       | X              |        |        | X              |        |        | X              |        |        |                | X                      |                     |                        | X              |        |        | X              |        |        |
| Maintenance Division                               |                                                         |                                                                                       |                |        |        |                |        |        |                |        |        |                |                        |                     |                        |                |        |        |                |        |        |
| Materials and Research Division                    |                                                         |                                                                                       |                |        |        |                |        |        |                |        |        |                |                        |                     |                        |                |        |        |                |        |        |
| Programming Division                               | Yes <sup>9</sup>                                        |                                                                                       | X              |        |        | X              |        |        | X              |        |        |                | X                      |                     |                        | X              |        |        | X              |        |        |
| Planning/Asset Management Division                 |                                                         |                                                                                       |                |        |        |                |        |        |                |        |        |                |                        |                     |                        |                |        |        |                |        |        |
| FHWA                                               |                                                         |                                                                                       |                |        |        |                |        |        |                |        |        |                |                        |                     |                        |                |        |        |                |        |        |
| City of Velva                                      |                                                         |                                                                                       |                |        |        |                |        |        |                |        |        | X              |                        |                     |                        |                |        |        |                |        |        |

### Division Comments

- <sup>1</sup> Generally like the depressed median however it appears that the flush paved median will tie into 2026 work better and does avoid additional impacts.
- <sup>2</sup> If US 52 is a 4-lane facility then we should keep it 4-lane. If the city doesn't want it through their city or if there are safety concerns, then we should go around the city like we have done with most of our communities on rural 4 lane roadways.
- <sup>3</sup> Additional ROW was purchased to construct a four-lane divided highway as part of the 1960 grading project extending from south of Minot to the Ward County line (south of Sawyer). It makes sense to construct the ultimate roadway segment that was planned as part of the 1960 grading project. The proposed four-lane depressed median typical section would match the existing four-lane depressed median segment from RP 97 to RP 102 that travels north into Minot. Although additional ROW was purchased for the four-lane divided roadway, 65 acres of permanent ROW will be needed due to the rugged backslopes on the south side of US 52.
- <sup>4</sup> This 3.57-mile segment also has additional ROW purchased in the 1960's to construct additional lanes south of the existing two-lane roadway for the divided four-lane depressed center median roadway alternate. Twenty-six acres of additional ROW will be needed due to the steep inslopes and backslopes of the river valley. Alt C2 flush paved median typically requires widening on both sides of US 52. This will not work near Sawyer. If Alt C (paved flush median) is chosen, the roadway will require realignment to the south avoid the impacts to the water tower and various properties adjacent to US 52 near Sawyer.
- <sup>5</sup> This roadway segment requires a grade raise for 2.3 miles of the 3.7-mile segment. It may be less impacts to the traveling public if we construct the 2 new lanes of a divided depressed roadway, shift traffic to the new two-lane roadway, then raise the existing roadway to accommodate the grade raise recommended as part of the Mouse River Enhanced Flood Protection Project. If Alt C3 (paved flush median) if chosen, it may be more difficult to construct the grade raise while maintaining traffic on the same roadway.
- <sup>6</sup> Many residents of Velva expressed concern with the speeds on US 52 through the city of Velva. Any widening or the addition of any lanes may increase the potential for drivers to use excessive speed in this urban setting that is currently posted at 40 mph. We recommend keeping the existing two 12-foot driving lanes, shared left turn lane, 8' shoulders with curb & gutter roadway segment. This three-lane urban segment though Velva was reconstructed in year 2000 and seems to function well without additional lanes and impacts associated with widening. If the existing three lane roadway is kept, additional right turn lanes should be added for higher volume approaches throughout the city.
- <sup>7</sup> The paved flush median will tie into the RR acceleration/deceleration lanes, RR crossing expansion, and RR signal replacement project at RP 120.65 that will be constructed in 2026. Alternate B -Divided Four-Lane Highway with a Depressed Center Median requires a lot of roadway realignment and reconstruction to avoid impacts to properties, cultural sites, and a utility substation. Since traffic volumes are substantially less south of Velva, a paved flush median alternate may be more appropriate for both roadway segments southeast of Velva.
- <sup>8</sup> The flush paved median typical section would tie into the north end railroad acceleration/deceleration crossing improvement (RP 120.65), numerous turn lanes improvements at CF Industries, Dakota Midland Grain, Voltaire, and the eastbound passing lane at the south termini.
- <sup>9</sup> Concur with the project concepts with the understanding an alternative funding source beyond the regular program funding would be needed to proceed.



## IX. Executive Decisions

1. Do you concur with the project concepts as proposed?
  - ☒ Yes
  - ☐ No
2. Which alternative(s)/option should proceed with the project?
  - a. Segment 1
    - ☐ Alternative A: No Build
    - ☒ Alternative B1: Divided Four-Lane Highway with a Depressed Center Median
    - ☐ Alternative C1: Divided Four-Lane Highway with a Flush Paved Center Median
  - b. Segment 2
    - ☐ Alternative A: No Build
    - ☒ Alternative B2: Divided Four-Lane Highway with a Depressed Center Median
    - ☐ Alternative C2: Divided Four-Lane Highway with a Flush Paved Center Median
  - c. Segment 3
    - ☐ Alternative A: No Build
    - ☒ Alternative B3: Divided Four-Lane Highway with a Depressed Center Median
    - ☐ Alternative C3: Divided Four-Lane Highway with a Flush Paved Center Median
  - d. Segment 4
    - ☐ Alternative A: No Build
    - ☐ Alternative C4: Divided Four-Lane Highway with a Flush Paved Center Median *without* Option V-1: Shared Use Path
    - ☒ Alternative C4: Divided Four-Lane Highway with a Flush Paved Center Median *with* Option V-1: Shared Use Path
    - ☐ Option V-1: Shared Use Path *without* Alternative C4: Divided Four-Lane Highway with a Flush Paved Center Median
  - e. Segment 5
    - ☐ Alternative A: No Build
    - ☒ Alternative B5: Divided Four-Lane Highway with a Depressed Center Median
    - ☐ Alternative C5: Divided Four-Lane Highway with a Flush Paved Center Median
  - f. Segment 6
    - ☐ Alternative A: No Build
    - ☒ Alternative B6: Divided Four-Lane Highway with a Depressed Center Median
    - ☐ Alternative C6: Divided Four-Lane Highway with a Flush Paved Center Median

Amendments/Comments for Project No. 4-052(109)101

Segment 4 through the City of Velva: Traffic calming design elements should be considered during the design phase to give drivers the feel that they need to reduce speed to coincide with the reduced speed limit.

*Matt Linneman*

Matt Linneman, P.E., Deputy Director for Engineering

05/13/26

Date