



# ONEOK Bakken Pipeline

Pump Station Additions – McKenzie & Dunn Counties

Case No. PU-20-18

Topsoil and Construction Inspection Report – Big Gulch



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March 8, 2021

RE: Case No. PU-20-018  
ONEOK Bakken Pipeline  
Pump Station Additions – McKenzie &  
Dunn Counties  
Topsoil and Construction Inspection  
Report – Big Gulch

Mr. Victor Schock  
North Dakota Public Service Commission  
600 East Boulevard Avenue, Dept. 408  
Bismarck, ND 58505-0480

Dear Mr. Schock:

Attached is the Topsoil and Construction Inspection Report for the above referenced project. This report includes the following:

1. Executive Summary
2. Inspection Report
3. Appendix A - Map of Photograph Locations
4. Appendix B - Photographs

Sincerely,

A handwritten signature in blue ink that reads "Matthew Schaible".

Matthew Schaible, PE  
Short Elliott Hendrickson Inc.  
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Bismarck, ND 58503-5677

Engineers | Architects | Planners | Scientists

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**EXECUTIVE SUMMARY**

Date: 02/26/2021

Project: Big Gulch Pump Station

Topsoil Removal and Construction Site Visit was conducted to verify that there were no changes to Contractor's topsoil removal plans following ONEOK's Expedited Request for Authorization for Topsoil Removal letter approved by Public Service Commission. Contractor and associated equipment operators demonstrate proficiency in topsoil reclamation of frozen topsoil, removal, and stockpiling operations following siting laws, siting rules, and applicable Commission Orders for Topsoil Removal During Frozen Conditions.

No concerning issues were identified for topsoil segregation or in-place erosion control measured as the contractor's plan for storage of topsoil mitigated any potential mixing of topsoil and subsoils (see inspection diary).

Silt fence located along the west boundary of the site was determined by ONEOK needing to be relocated farther to the west in order to allow more room for equipment. Due to proposed new location for silt fence approaching existing pipeline, ONEOK required that pipeline be potholed beforehand.

  
Inspector's Signature



**INSPECTOR'S DIARY**

Project: Big Gulch Pump Station		Contractor: Martin Construction	
Date: 02/26/2021	Day: Friday	Subcontractor:	
Weather: Partly Cloudy, Wind 10-15mph from NW		Temp: 40 F	Inspector: Brandon Myran
Work Activities: *Topsoil Removal and Stockpiling Operations			
Labor Force: Martin Construction - 2 Operators (On Standby) KLJ - 1 Inspector			
Contractor Correspondence:  * Inspector previously called with David Rayon from Oneok. David indicated that silt fence has been installed by trenching attachment on skidsteer. David said that Martin Construction followed reclamation plans previously discussed. CAT RM500B Reclaimer made passes on topsoil starting in the southeast and southwest corner of site proceeding south to north up to East/West drainage low spot. From East/West drainage low spot north of it, reclaimer made passes going parallel traveling East/West.  * Inspector meets onsite with KLJ Inspector "Nute Bishop"; Nute is currently unaware on Martin Construction operators plans as they currently are not working. The two operators that were working today were parked on gravel road. All equipment for topsoil removal is parked along the east edge of the work site along the N/S gravel road. Nute says they only shaved 1 inch off of hilly knob that showed traces of skoria. Very little amounts of topsoil appear to be on the hilly knob (see photo P35, P36, P37, & P38). Martin Construction has been careful with topsoil removal making sure electronic control of depth of reclaimer met soil bore depths as identified on 2/23/2021. Once topsoil that's already been reclaimed has been picked up, further and final passes will be made to verify topsoil segregation from subsoil.			
Other Remarks:  * KLJ inspector says that the silt fence is planned to be redone, pushing the west boundary of it farther west. Contractors will have to pothole Northwest/Southeast existing pipeline first before trenching in silt fence farther west than current position.			

  
Inspector's Signature



**INSPECTOR'S DIARY**

Date: 02/26/2021

Project: Big Gulch Pump Station	Contractor or Sub: Martin Construction
<b>Work Performed &amp; Location:</b>	
<p>* Erosion Control: - Silt Fence was installed Wednesday 02/24/2021 along the south (see photo P33 &amp; P34) and west (see photo P30, P31, P32, P51 &amp; P52) boundary according to Grading Plan Drawing dated 03/13/2020. All devices are in good standing, and trenched into place minus the last 15 feet in Northwest corner which was not installed. See "Other Remarks" section for update to plans by contractor.</p> <p>* Current site surface is dry and is in good condition. Topsoil has been reclaimed at varying depths following guidance from soil boring data completed on 02/23/2021. Currently CAT RM500B Reclaimer (see photo P44) is parked off site south of site location. Topsoil removal and stockpiling has begun and appears to be about 55% complete. It is noticed that the south portion of the site has most of the topsoil removed with only final pass required in scattered areas to remove last of topsoil. Topsoil depth appears to vary in depth in pockets by several inches, therefore contractor will have to visually confirm reaching subsoil. Subsoil with little to no organics appears grey in color and as a lean to fat clay. Currently a temporary stockpile of topsoil has been placed in North Northwest portion of the site (see photo P27, P28, &amp; P29). Topsoil pile appears very well segregated. This spot is said to be used to temporary stockpile until grading and fill has been placed in the south portion of the site where the topsoil was originally planned for stockpiling.</p> <p>* With the portion of topsoil currently stripped and stockpiled, there still remains scattered areas where topsoil still requires final pass (approximately 1 to 3 inches). In other areas, clearly visible to naked eye is grey subsoil (see photo P39 &amp; P40) where no more removals are required. Contractor is aware full removal has been reached at this location and will be achieving the same result throughout the site. If temperatures fore-casted continue above 32 deg F, frozen ground may not be an issue for final removal therefore reclaimer may not be required.</p> <p><b>Method of Removal:</b> - Although not witnessed, after discussion with KLJ inspector it was determined Martin Construction operators moved and stockpiled topsoil by use of 2 operators with CAT 627G Scrapers (see photo P42 &amp; P43) making passes from south end of site where reclaimer has ripped up frozen topsoil for easy pickup by scraper to temporary stockpile location in North Northwest portion of site. Photos confirms what KLJ inspector said about topsoil operations. CAT D8T Dozer (see photo P41) was operated to maintain good structure within the temporary stockpile. Once operators stripped topsoil up to the North side of the skoria mound previously noted, operators began making Southeast to Northwest passes with the scraper in a downslope (see photo P25). Scrapers have not removed any topsoil north of low drain area cutting across the site east to west northwest (see photo P26), but this area has been prepped by the CAT RM500B Reclaimer.</p> <p>* Also stored on site are CAT skidsteer and worktrailer (see photo P46) located on the east side of the North/South gravel road and a fuel tank trailer located west of the North/South gravel road within the low spot (see photo P45).</p>	
<b>CONTRACTOR EQUIPMENT:</b>	
Martin Construction: (2) CAT Scraper 627G Scrapers, (1) CAT D8T Dozer, (1) CAT 272D Skidsteer, (1) CAT RM500B Reclaimer	

  
Inspector's Signature



**INSPECTOR'S DIARY**

Date: 02/26/2021

Project: Big Gulch Pump Station Contractor or Sub:

Photo Description:

- | Photo Name: | Description:   |
|-------------|--|
| P25         | - Topsoil Stripping Progress_Facing Southeast        |
| P26         | - Topsoil Stripping Progress_Facing East             |
| P27         | - Temporary Topsoil Stockpile_Facing Northeast       |
| P28         | - Temporary Topsoil Stockpile_North Edge_Facing East |
| P29         | - Temporary Topsoil Stockpile_Facing East            |
| P30         | - Silt Fence_Facing South                            |
| P31         | - Silt Fence_Facing North                            |
| P32         | - Silt Fence_Facing Northwest                        |
| P33         | - Silt Fence_Facing East                             |
| P34         | - Silt Fence_Facing East                             |
| P35         | - Skoria Mound_Facing Northwest                      |
| P36         | - Skoria Mound_Facing Southwest                      |
| P37         | - Skoria Mound_Facing West                           |
| P38         | - Skoria Mound_Existing Surface                      |
| P39         | - Topsoil Stripping_Facing Northwest                 |
| P40         | - Topsoil Stripping_Facing Northwest_Subsoil Reached |
| P41         | - Equipment_CAT D8T Dozer                            |
| P42         | - Equipment_CAT 627G Scraper_13-31                   |
| P43         | - Equipment_CAT 627G Scraper_13-61                   |
| P44         | - Equipment_CAT RM500B Reclaimer                     |
| P45         | - Equipment_Fuel Tank Trailer                        |
| P46         | - Equipment_CAT 272D Skidsteer & Work Trailer        |
| P47         | - Topsoil Stripping_Facing Southeast                 |
| P48         | - Topsoil Stripping_Facing Northwest                 |
| P49         | - Topsoil Stripping_Facing South                     |
| P50         | - Topsoil Stripping_Facing East                      |
| P51         | - Silt Fence_Facing South                            |
| P52         | - Silt Fence_Facing South Southeast                  |

\*See attached Photo Layout Map with location of each photo, and attached pages of photo's.

  
Inspector's Signature

# Appendix A

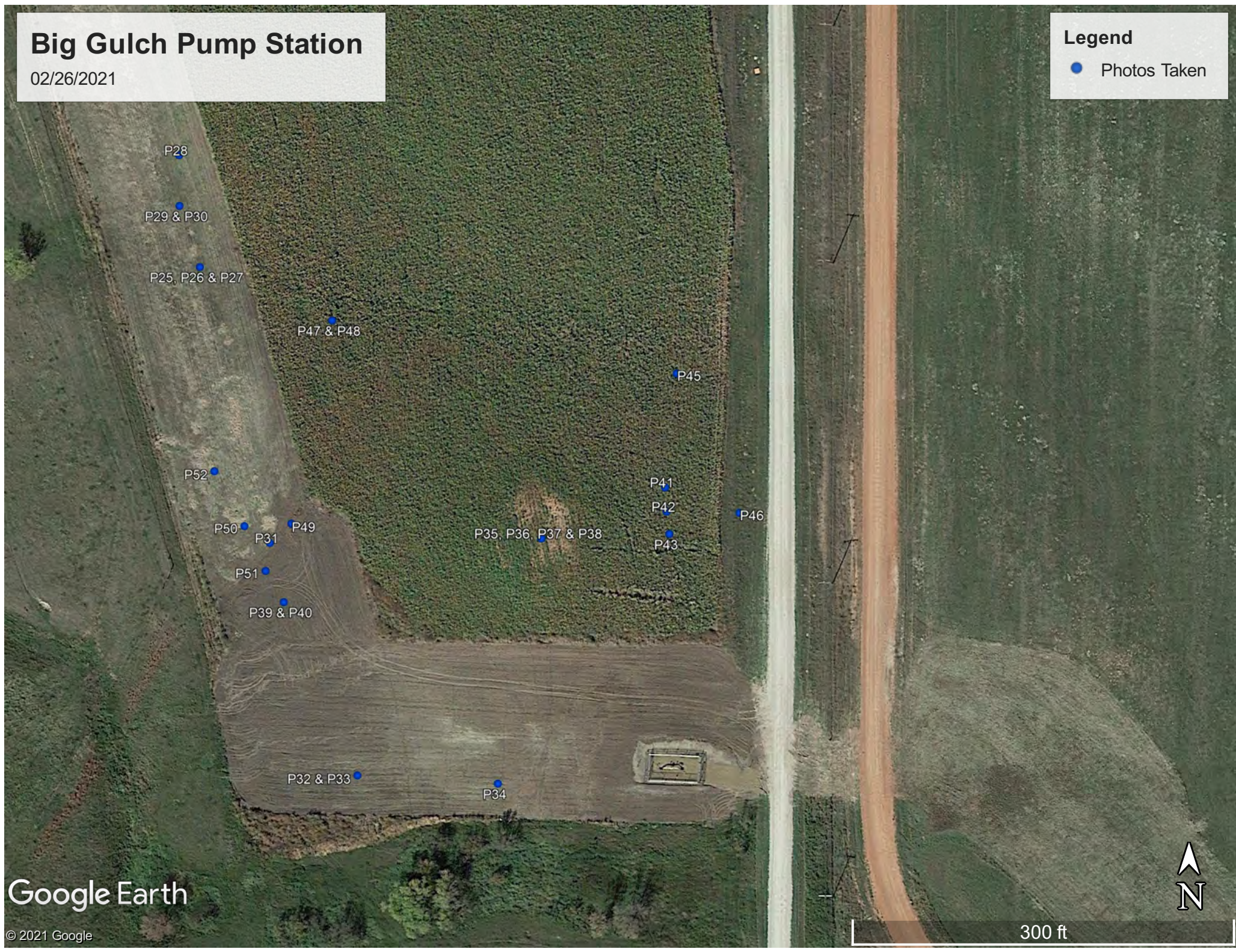
Photo Location Maps

# Big Gulch Pump Station

02/26/2021

## Legend

● Photos Taken



P28

P29 & P30

P25, P26 & P27

P47 & P48

P45

P52

P41

P42

P46

P50

P31

P49

P35, P36, P37 & P38

P43

P51

P39 & P40

P32 & P33

P34





# Appendix B

Photos

P25.



P26.



P27.



P28.



P29.



P30.



P31.



P32.



P33.



P34.



P35.



P36.



P37.



P38.



P39.



P40.



P41.



P42.



P43.



P44.



P45.



P46.



P47.



P48.



P49.



P50.



P51.



P52.





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