

Plains Bakken North Pipeline Construction Inspection of July 17, 2012

Case No. PU-10-630

Prepared for:

State Of North Dakota



NORTH DAKOTA PUBLIC SERVICE COMMISSION

PUBLIC UTILITIES DIVISION

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Executive Summary

The State of North Dakota, acting through its North Dakota Public Service Commission, Division of the Public Utilities, has acquired Keitu Engineers & Consultants, Inc. to perform consulting services to perform construction inspections applying engineering and science principles for the purpose of ensuring that energy conversion and transmission facilities authorized by the NDPSC are constructed in compliance with the siting laws (N.D.C.C 49-22) and rules (N. D. Administrative Code Article 69-09) and applicable Commission orders for Case No. PU-10-630. Prior to the inspection, Keitu review construction standards and issues and developed a PSC field observation report to be complete at an inspection for a crude oil pipeline.

On July 17, 2012 Keitu Engineers and Consultants conducted a construction field inspection on site and at Plains Pipeline's Grenora, ND field office. The PSC field observation report was used to conduct the inspection. Overall, **no non-compliance conditions were found**. Pipeline construction appears to be constructed in accordance with the PSC siting application and requirements and Title 49 Part 195 Subpart D. The inspection looked at lay down location, transportation of pipe, supports and bracing, pipeline route location, bending of pipe, welding procedures, weather conditions, welds: non destructive testing, installation of pipe in ditch, cover over pipeline, clearance between pipeline and underground structures, backfilling, above ground components, major crossings, construction records, and PSC orders.

Introduction

Enclosed are the field inspection notes from the construction inspection of July 17th, 2012 by Keitu Engineers and Consultants, Inc. Timothy F. Spilman of Keitu conducted the inspection and authored the field inspection report. Pictures are also part of the inspection and are enclosed as a supplement.

ND PSC Field Observation Report

Bakken North Pipeline **Project PU-10-630**
Plains Pipeline 31.8 miles 12" Trenton to ND/MT Border

Observer/Inspector: Timothy Spilman, Project Manager, Keitu Engineers & Associates, Inc.

Date of Field visit: July 17, 2012

Temperature and weather: Cloudy – low 80's sprinkle

On site field inspection and records inspection at Plains Pipeline Field Office in Grenora, ND occurred.

General Contractor: Tomahawk Pipeline – Sheridan, WY headquarters, has a Tioga office

Contract Inspectors: On & Offshore Quality Control Specialists (QCS) - Austin, TX

X-ray Contractor (Nondestructive testing of welds): JANX - Office Casper, WY

Survey, staking and GPS contractor: Endberg-Miller Engineers - Green River, WY

Plains Pipeline Inspection personnel present at PSC field inspection:

Ron McCreery – Project Coordinator

Thomas R McCormick – Director of Environmental & Regulatory Compliance

Jim Fleetwood – Project Engineer

Daniel Holli – Environmental and Regulatory Specialist

Project construction start date: May 23, 2012 notified Commission on May 22, 2012 in writing.

Preconstruction meeting: April 17, 2012

The purpose of the field observation report is to verify that construction is followed according to the PSC siting application and requirements and Title 49 Part 195 Subpart D.

Has the siting applicant provided a tree count to the Commission prior to start of construction?

No trees were removed to date. Environmental monitor counting trees prior to construction activity. Trees are flagged that are counted. Concern satisfied.

Was all equipment washed down before bringing it to the construction site to prevent outside weeds from being brought into the project area?

Mike Bondurant of Tomahawk Pipeline Construction (general contractor) stated that "We have some equipment leased or rented for this project and it arrived here from the dealer washed and clean. The equipment we own has been in ND for over a year on other projects and this equipment was power-washed before arriving at this project." Concern satisfied.

Design MAOP of Pipeline: 1,468 psig

All new pipe? Yes

Normal pipe thickness? 0.250"

Boring pipe thickness? 0.344"

Pipe size: Outside diameter 12.75" steel

Lay down Site Location: Concerns satisfied.

Was an inspection of the lay down site/sites conducted?

All pipe was trucked directly from Sidney, Nebraska to the right of way site. In inclement weather pipe was placed in the contractor's yard in Medicine Lake, MT. Concern satisfied.

Transportation of pipe Concerns satisfied.

Pipe length? 59 to 60 feet lengths for 0.250" diameter and 40 feet for 0.344" diameter.

How was the pipe transported to the site? Pipe was trucked directly to site from factory.

Number of sticks of pipe/load trucked in? 20 to 22 pipe sticks per load.

How was pipe loaded and unloaded? Contractor using a hydraulic suction lift method.

Supports and Braces Concerns satisfied.

Was supports used to keep piping off the ground? Two wood supports prior to welding were used, then one wood support per pipe length.

Pipe where bracing is used was jeeped prior to installation? Pipe is jeeped twice. The 1st when the joints are epoxy coated and the second when the pipeline is placed in the ground. Jeeping was observed prior to pipe being laid into the trench (picture).

Pipeline Location Concerns satisfied.

Construction ROW width: 70 feet

Permanent ROW width: 30 feet

Was top soil was pulled back to the edge of the construction ROW (12" min.)? Yes. Top soil was pull to one side of the right of way. Sub soil was pulled to other side of right of way (ROW) or inside the top soil toward the center of the ROW.

Construction staking existed prior to pipe excavation or trenching? Yes. Contractor was painting the ground in front of the trencher to keep it on route. Range poles also used. Third party surveying firm was responsible for all staking and GPS of weld coordinates.

Staking and pipeline installation appeared to followed PSC approved route? Yes.

Were any locates observed along the pipeline route? Yes. Contractor responsible for their own locates. Locates were observed.

Any changes in route observed or reported to observer? No.

Construction appeared to be within the Construction Right of way? Yes. Inspector measured on site twice and construction was within ROW. Construction always appeared to be within the construction ROW.

Bending of pipe Concerns satisfied.

Multiple bends were required throughout project. Bending of pipe greater than 60 degrees done off site in Montana and brought in. On site bending was done up to 22 degree bends. Bends were so many degrees per foot.

Bends had a smooth contour with no buckling, cracks or other mechanical damage? Yes.

No wrinkle bend observed or reported to the observer? Yes.

Where markings on the pipe in the area of the bends observed? No bending of pipe occurred on day of inspection. However, markings on pipe were on pipes in bend areas. Bends were a minimum of 6 feet from ends.

Welding Procedures Concerns satisfied.

Was each welder qualified (Section 6 of API 1104 usually)? Yes. API 1104 was used. Records were available. Butt and Branch weld were preformed to qualify. Welding test x-rayed and had a destructive test. Jim Pennington, the Chief Project inspector (3rd party inspector- On & Offshore Quality Control Specialists), qualified the welders. Mr. Pennington is a Certified Welding Inspector (American Welding Society) and provided his certification records.

Where are the welder qualification recorded records kept? Records during construction are being kept at the Grenora, ND field office. The records will be kept permanently at Plain's Casper, Wyoming Office.

Verify a welding qualification record exists. Welding records were on file and available. Summary records showed 19 welders qualified and on site available for welding. Verified individual welding tests were on file. Inspector reviewed one file. Butt and Branch welds were preformed to qualify. Welding inspector has signed all records viewed.

Verify welding of a pipeline is done in 3 passes. 1st the bead pass, 2nd the hot pass, and 3rd the Cap. The thicker pipe (0.344" thickness) required a minimum of 4 passes and the standard pipe thickness (0.250") required 3 passes. Verified weld passes.

Any miter joints were observed or reported? No.

Any Arc burns observed or reported to observer (must be repaired or cut out)? No arc burns observed by the PSC inspector. Twelve 3rd party inspectors were on site doing various responsibilities during the field inspection. Inspectors have found arc burns and had them repaired or cut out if bad enough. The area of the arc burn is repair or cut out then re x-rayed to meet final approval.

Verify the pipeline company inspectors visually inspecting each weld and documenting each inspection to insure compliance with requirements? Plains pipeline contracted 3rd party inspectors (On & Offshore Quality Control Specialists (QCS) from Austin, TX) to perform the visual inspections. Welding inspector was on site inspecting welds while PSC inspector was on site. Records are kept with GPS coordinates of each weld.

What equipment are the company pipeline inspectors using to check for a low cap during an inspection of a weld? No equipment is used for low cap inspection because each weld is x-rayed tested when completed.

What is the procedure for the inspector or person performing the nondestructive testing to report and insure an unacceptable weld is removed or repaired? If an inspector finds an unacceptable weld he or she will fill out a Nondestructive testing report which will identify the reason of the unacceptable weld. The weld will be flagged or marked on the pipe. Once the repair is made, the weld is re x-ray tested again. Should it fail the x-ray test again it would be cut out entirely and the weld would be started over. The x-ray test has film that can be reviewed of each weld.

Is a follow up inspection conducted and documented after a repair or removal of defects? Verify. X-ray test reports are generated daily. PSC inspector viewed reports. PSC Inspector took weld failure 1MLA1007 and had pipeline company show all paper work and procedures followed to repair or remove a defect. Failure 1MLA1007 weld failed on July 13, 2012. Documentation was found that the repair and another x-ray test of the weld was preformed and passed.

Has any pipe been observed out of round during the pipeline company inspection? If yes Where? None found to date on project. An internal line up clamp is used to line up pipe and would help a welder determine if pipe was out of round.

Which welders perform tie-ins? The contractor determines which welder will perform a tie in weld. Any welder may perform a tie-in as they are qualified by testing.

Are visual weld inspections supplemented by nondestructive testing? A QCS inspector visually inspects each weld pass and an x-ray (nondestructive test) is performed by JANX once all passes of the weld are complete.

Welding Weather Concerns satisfied.

Welding must be protected from weather conditions that would impair the quality of the completed weld.

Was any weather protection used? A slight rain sprinkle occurred during the PSC inspector's field inspection. A tarp was used for additional protection. The project has been shut down due to rain.

Did pipe have to be pre heated prior to weld of cap pass? The contractor is pre heating pipe at times.

Welds: Nondestructive Testing Concerns satisfied.

What method of nondestructive testing is being used on this project? X-ray testing is being used on 100% of the welds.

Were personnel trained in nondestructive testing established procedures and use of equipment that were employed in the Testing? Plains Pipeline contracted a 3rd party contractor to do all x-ray testing of welds. The 3rd party contractor is JANX. ASTM testing standards are followed and formal training records were available for inspection.

Are at least 10% of the girth welds made by each welder during each day nondestructively tested over the entire circumference of the weld? Verify. All welds are X-ray tested over the entire circumference of the weld. It takes 3 film photos to test around the entire circumference. A weld recorded was viewed.

Was any pipe dropped on the ground and required nondestructive testing the day of the field visit? No pipe was dropped on site the day of the field inspection. Plains Pipeline's policy is if a pipe stick is dropped, the pipe is not used and the contractor has to purchase it.

Installation of pipe in a ditch Concerns satisfied.

Is pipe pre-heated? Pipe is preheated prior to welding and is heated to 463 degrees prior to epoxy coating the welds. Heating observed during inspection.

Did the PSC inspector observe high beads on weld being filed or grinded down prior to tape coating of welds? Inspection of the bead of the weld was very consistent with no high beads observed. No grinding observed. Weld areas were sand blasted prior to coating.

Was the pipe weld areas cleaned prior to coating? A grit blaster to sand blast the weld ends of the pipe was done. A picture was taken of this activity. After sand blasting occurred the weld end was immediately covered with plastic to prevent foreign matter from getting on the area before coating. After sand blasting occurred, the weld ends were pre heated with a heat induction coil to 463 degrees. Then the bare pipe was sprayed with fusion bonded epoxy (FBE). A 3rd party inspector following the epoxy spraying checked final mill thickness of the coating. The inspector would use a Elco meter dry film thickness gauge to determine that the final coating thickness is acceptable. The inspector also has a weather station to verify acceptable weather is occurring to fusion bond the epoxy coating. Inspector will shut down coating of pipe if weather conditions are not acceptable. During the PSC visit the coating operation was shut down due to a rain sprinkle.

Was all bare pipes observed tape coated prior to installation in the ditch? PSC inspector verified all pipe ends were epoxy coated prior to being laid in a ditch. A second coating was applied to the pipe to be bored. No tape coating occurred on this project.

All pipes were jeeped for nicks in coating prior to pipe being laid in the ditch? Yes.

Equipment used to lay pipe in ditch where on one side of the ditch? Yes. Equipment used to lay pipe in the ditch was on the working side of the open ditch. This is also the pipe side of the ditch. The top soil is normally on opposite side of the working side of the ditch.

Was pipe installed in a manner that minimizes introduction of secondary stresses and possibly damage to the pipe? Yes. Centerline of each piece of pipe was marked on the pipe so an operator can lift the pipe with a balanced weight. Proper method of installation was followed while PSC inspector was on site.

Clearance between Pipe and Underground Structures Concerns satisfied.

Were any other underground structures except drain tile exposed during the field visit? No. Pot holes were established at some utility crossings to establish exact depth of existing underground facilities.

Did the pipe installed underground have at least 12" of clearance between the outside of the pipe and the extremity of any other underground structure? Talked with the lead 3rd party inspector and he stated all crossing of underground facilities have a minimum separation of 12". Plains pipeline personnel also gave same answer to PSC inspector. No underground crossings observed the day of the PSC field inspection.

Crossing and clearances measurements at each location are:

Was any drain tile found within the pipeline ROW during the field visit? No drain tile found during PSC site inspection.

Has the siting applicant found any drain tile during construction to date? Landowners said they don't have any drain tile. Plains Pipeline and its contractor have not found any drain tile so far on this project.

Backfilling Concerns satisfied.

Was firm support under the pipe in place before backfilling occurred? PSC inspector viewed several miles of exposed trench and piping was on firm support in open ditch. Locations did have water in the ditch. The trench width with the trencher was 36 inches.

Were any rock areas along the pipeline excavation area found during the site visit? If yes, identify locations. Rocks were found throughout the entire project. The rocks were pulled to the side of the ROW and rocks 4 to 5" or larger were removed by contractor.

Was protective rock guard or clean (no rock) fill installed to prevent damage to the pipe coating and pipe during backfilling at all rock areas along the pipeline excavation? A padding machine and shaker bucket was used for installation of fill for the first 20 inch in the excavation trench. Rocks were screened out of the bottom soil being placed within the first 20" of fill. No rock guard was installed or required.

Was backfill installed in such a manner that it prevents damage to the pipe and or pipe coating from equipment or from the backfill material? Yes, method described in previous question. Backfilling after the initial 20" in the trench was installed by track hoe then dozer. Flagging tape was being installed about 2 feet below the final ground elevation as a best practices measure.

Above Ground Components Concerns satisfied.

All components located above ground were protected from forces exerted by anticipated loads? Only the first above ground valve installation was constructed prior to PSC inspection. The 153rd Avenue block valve was inspected. All above ground valves will be chain link fenced with barb wire over the top. A double gate is to be installed with a company lock. Support bracing is currently found at the block valve. With size of pipe a support probably is not required on the final installation.

No pipeline crossings were found overhead at highways, railroads, or bodies of water? Correct.

No overhead pipeline spans were found over ditches and gullies? Correct.

Were any block valves or scraper traps observed during the site visit? Yes, the 153rd Avenue block valve.

Were valves located in locations accessible to authorized employees? Yes the valve was located as on the proposed map submitted to the PSC.

Did the above ground components have protective coating found on them? The valve set is currently not complete as of the inspection. No protective coating was found on the bare pipe yet.

Does the siting applicant have fence or a protective barricade around above ground components to protect from damage or tampering? All above ground valves will be chain link fenced with barb wire over the top. A double gate is to be installed with a company lock. No barricade installed yet.

No Pumping stations are part of this pipeline siting route? A pumping station is to be established prior to the start of the transmission in the Plains Trenton station.

Valves are installed on each side of a water crossing that is more than 100 feet wide from high-water mark to high-water mark? No water crossing of more than 100 feet wide is found on this project.

Twelve valves are located along the entire MT/ND line. Seven remote block valve with SCADA and 5 check valves. One valve is to be installed about every 10 miles of pipeline.

No breakout tanks are part of this siting permit? There is one Break out tank (80,000 barrel) to be constructed at Plain's Trenton Station.

A valve must be installed on each lateral takeoff from a trunk line. No lateral takeoff lines are part of this siting route? Correct.

No aboveground facilities are being located in wetlands? Correct.

How often are line markers installed? Line markers came in on Monday, July 16th. They are to be installed within line of site of each other along the line.

Will Aerial Markers be installed on this pipeline? Yes, they were received Friday July 13th, 2012. Installation is to start the week of July 23rd, 2012.

Major Crossings Concerns satisfied.

Is there any railroad crossings? No railroad crossings.

Is there any highway crossings? Three highway crossings (Highway 2, County Hwy 10, and Highway 1804). The Highway 2 and Highway 1804 crossings were observed during the PSC inspection. Bore pipe was on site and was being welded for the Hwy 1804 crossing. Pipe for the Hwy 2 crossing was welded together and inspected by PSC inspector.

Was any casing pipe installed for these crossings? Thicker pipe will be used and bored. No casing pipe required.

Was thicker pipe installed or is to be installed at these crossings to adequately withstand the dynamic forces exerted by anticipated traffic loads? Yes, a 0.344" thickness will be used and bored as identified on crossing permits.

Was the pipe at these crossings to be bored? Welding of pipe is currently occurring the day of the inspection. These crossing will be bored based on construction materials found on site.

Was a tougher or thicker protective coating used for these pipe crossings? Yes, for thicker bore pipe of 0.344" wall thickness with a double coating applied to each weld end. A 1416 mil fusion bonding epoxy is applied first and a second 30 mil ARO coating is applied after that.

Did the pipe have to be preheated before applying the epoxy coating? Yes the pipe is preheated to 463 degrees.

Construction Records Concerns satisfied.

(ND Century Code Chapter 49-19-02 says Commission shall take reports from and may investigate the books and records kept by any pipeline carrier in connection with its business)

The siting applicant stated that they are maintaining complete **records for the life of the pipeline** facility for:

- Total number of girth welds and number of nondestructive welds tested. 100 % of the welds are x-ray tested by JANX. GPS coordinates are established with depth for each weld location.
- The amount, location; and cover of each size of pipe installed. These items are documented using GPS surveying. A 3rd party contractor “Endberg- Miller Engineers” is responsible for these records and all surveying and staking of the line.
- The location of each crossing of another pipeline. A 3rd party contractor “Endberg-Miller Engineers” is responsible for these records.
- The location of each buried utility crossing. A 3rd party contractor “Endberg- Miller Engineers” is responsible for these records.
- The location of each valve and corrosion test stations. A 3rd party contractor “Endberg-Miller Engineers” is responsible for these records. Three test stations installed to date.
- Hydro tests of all piping. The general contractor Tomahawk Pipeline is responsible for the Hydro tests. In the weekly progress reports the Plains Project Coordinator will report when all pipe is hydro tested. Establishing of the MAOP of 1,468 psig will be documented and records in Plains Pipeline Casper, WY Office.

PSC Commission Orders

Did the siting applicant provide the landowners and/or tenant advance notice before beginning construction of the property? Yes, land man works with owner first and give notice. Should a problem arise, the Land man called 1st and will bring Project Coordinator if necessary.

Did the placement of the pipeline appear to be following the route permit? Yes, inspector determined survey staking could be seen at all times on the project.

Was top soil separated and bermed along the right of way (to 12" depth)? Yes, all top soil was pulled to one side of the right of way. Sub soil was a separate pile.

Cover over Buried Pipeline Concerns satisfied.

Public Service Commission requires a pipeline must be buried to a minimum depth from the ground surface to the top of the pipe of 48 inches in rangeland, 48 inches for cultivated land, 48 inches at the bottom of the ditch for road crossings, and 72 inches across undeveloped section lines. Were these cover minimum depth followed during the field visit? The PSC inspector verified standard trench depth of 60" without final sub soil and top soil installed. The inspector verified a bore depth of 82" in depth for a road crossing bore. Construction inspection verified Commission's required minimum depth were met.

Erosion protection- Concerns satisfied.

Is silt fence installed along the pipeline? The environmental monitor is responsible for checking fences. Installation of fences noted in weekly progress reports. PSC inspector verified silt fences and erosion protection sufficient on project with all silt fences observed well maintained. Straw rolls present in addition to silt fences in areas with potential for heavy runoff.

Does any of the silt fences need repair? PSC inspector verified silt fences and erosion protection sufficient on project with all silt fences observed well maintained.

Fence and gates Concerns satisfied.

Is any damage to fences or gates observed? Plains Pipeline has installed new fence gates at each property line along pipeline. Only one location was observed that a new fence gate had not been installed yet do to soil piles on ROW being so large and not practice for the fence gate to be installed yet.

Are fences and gates repaired to pre-construction condition? Yes, because Plains Pipeline has installed new fence gates at each property line along pipeline.

Is construction occurring during breeding season from February 1st to July 15th? Construction started May 23, 2012 and continued to date of inspection of July 17th. Construction did occur during breeding season. A 3rd party environmental monitor was and is always on site during construction. Crew works 6 days on and one day off. Third party Environmental firm, SWCA, has conducted special surveys of identified nesting areas within 5 day of construction start for an evaluation approval before construction can occur in these areas. Concern satisfied.

If yes is there a biologist or environmental monitor on site? Yes, a 3rd party Inspector, Kathy Owen, of On & Offshore Quality Specialists is on site during all construction and is monitoring environmental issues as necessary. Concern satisfied.

Who is the environmental monitor on site today? Kathy Owen of On & Offshore Quality Specialists from Austin, TX. Concern satisfied.

Any critical habitat of threatened or endangered species or of bald or golden eagles sited during construction to date? None seen or reported to date. None observed during PSC inspection. Concern satisfied.

Was any training of construction personal been conducted to recognize critical habitat of threatened or endangered species or of bald or golden eagles? Judy Cooper of SWCA did perform a pre-job project training awareness with construction personnel. Concern satisfied.

Were wetlands being crossed during construction? Yes. Mats were placed as a best management practice. A plain has a nationwide permit 12 and showed it to the inspector. The plan is to trench most wetlands with at least one to be bored. Concern satisfied.

Did it appear that where wetlands that are being crossed the shortest practicable route within the wetland resulting in the least amount of physical impact to the wetland was selected? Yes. Concern satisfied.

Did it appear that heavy equipment in wetlands appeared to be kept to a minimum extent practicable? Yes. Equipment and vehicles used mats in wetlands. Concern satisfied.

No temporary fill in wetlands was observed during the inspection (Must have USACE's written consent to have temporary fill in wetlands)? Yes. Plains Pipeline stated that no temporary fill was required for this project in wetland areas. Concern satisfied.

What mitigation measures are being taken by the siting applicant to protect wetlands? Mats were installed at all wetlands observed by the PSC inspector. Equipment and vehicles were staying on the mats. Silt fences were installed as needed in area. It appeared Plains was waiting to do all wetland crossings at one time for consistency of work in these areas. Plains decided one wetland crossing should be bored vs. trenched observed by inspector. Concern satisfied.

Was a nationwide permit 33 obtained or required for using mats in wetland areas?

Mats are being used on the project and were verified during field visit. Plains Pipeline had its Nationwide Permit 12 available for review. The Nationwide permit states the nationwide permit authorizes temporary structures, fills, and work necessary to conduct the utility activity. Mats are considered temporary structures. Matthew J. Mikulecky of the North Dakota Regulatory Office of the US Army Corps of Engineers has determined in ND that a permit 12 is all that is required in North Dakota. Concern satisfied.

What safety requirements are the siting applicant following on during construction? All workers and inspectors wear hard hats, reflective vests, safety glasses while on the project site. This and additional safety PPE was observed being used for specific jobs on site by the inspector. Equipment was on one side of trench. PSC inspector was limited due to safety as to what he could do without a Plains Pipeline representative. All overhead crossings were flagged overhead for safety and awareness. Concern satisfied.

What safety measures have been used for traffic control? Coning, Ribbon and Signing was observed on site. Concern satisfied.

Is a safety director on project site? The general contractor has a full time safety director on site. Plains pipeline also contracted a 3rd party On & Offshore Quality Control Specialist safety inspector on site. Concern satisfied.

Is restroom accommodations provided on site? Restroom facilities on site were the responsibility of the general contractor. Contractor had 130 workers on site plus inspectors and Plains Pipeline employees. Portable restrooms were available on most section lines along the project work area. Concern satisfied.

Is any major water crossing occurring during this project? If so, what are they? None. Concern satisfied.

What are the width of clear cuts through any wooded areas and shelterbelts (50 feet max.)? No sites were observed the day of the field inspection. Plains Pipeline is aware of the 50 feet rule and feels it is no problem in North Dakota. Concern satisfied.

Has construction ever been suspended due to weather to date on this project? When? Yes rain has affected the project. Welding and pipe coating are weather sensitive. Weekly Progress reports document shut downs. During the PSC field inspection the coating crew was shut down part of the day, the welding crew tarp roofed over the welding area and welded. More rain also occurred at pipe coating site vs. welding site on project. Concern satisfied.

Any cultural resource, paleontological resource, archeological resource, historical resource, or gravesite discovered during construction of the facilities? Was construction halted? None observed during construction to date. On 52nd street one was found during the corridor evaluation. An

archeologist was called to the site and evaluated it. This area is to be bored. Archeologist is to be on site when this occurs. Concern satisfied.

Do pre-existing roads during construction appear to be damaged and need final restoration? All existing roads appear in good working order. Other construction projects were going in the same area. One water pipeline and one natural gas pipeline were being constructed in the area. Concern satisfied.

Were temporary roads to be used for construction? No temporary roads were required for this project. Concern satisfied.

Did the pipeline company contact affected Landowners or tenants for their knowledge of drain tile locations prior to the pipeline installation? Yes. Land man talked with landowners. No one is aware of drain tile in the area. Concern satisfied.

Was any drain tile found during construction prior to field visit? No. Concern satisfied.

Is there any drain tile that the site applicant is aware of on this project? None. Concern satisfied.

Was any drain tile damaged on this project? None was found to date. Concern satisfied.

Was any waste or construction related debris observed along the pipeline route? Material such as excess construction materials or litter generated by the construction crews are to be removed. Waste and construction debris was found in areas where open trench existed. Pipe scraps, rocks, pallets, and wood pieces were observed. All other areas of the project had no waste or debris found along the pipeline. Clean up is occurring. Concern satisfied.

Have trees that been cleared in the ROW been hauled away before site visit? No trees were observed removed along the project area during the inspection. Plains said no trees had been removed in the ND side of the project but bushes and shrubs along the ROW had been removed. The environmental monitor has been responsible for these items. No shrubs that were removed were seen along the pipeline by the PSC inspector. Concern satisfied.

Was any excess soil and rock removed from the site unless otherwise requested by the landowner? Rock could be seen on the sides of the ROW along the construction area after excavation occurred. Special padding operation occurred to prevent rocks getting within the first 20' of fill in the trench. Rock removal is the responsibility of the general contractor. All 5" and larger rocks are to be removed. Rocks were observed removed in final restoration areas. Concern satisfied.

How is the site applicant disposing of waste or construction debris along the project? The general contractor is responsible for waste or construction debris. Excess pipe is going to the contractor's yard in MT and all other waste is being land filled. Concern satisfied.

What reclamation, fertilization and reseeding has been done to date by the siting applicant? Reclamation was started on the first mile of pipeline east of the MT/ND border. A bulldozer was doing the final spreading of top soil and final land contouring. Contouring was matching existing contours with no rocks seen on land after reclamation. A 3rd party seeding inspector had been hired to work for On & Offshore quality specialists. Seeding was to start the week of July 23rd. Concern satisfied.

Was compaction being done as part of the reclamation? The first 20" of fill was being placed by special equipment to prevent rock by the pipe. Compaction for the first 20" was compacted with that equipment. A track hoe was filling and compacting the remaining fill. A bulldozer then came over the top as the final compaction tool. Concern satisfied.

Did reclamation and clean-up along the ROW look to be continuous and coordinated with ongoing construction? Waste and construction debris was found in areas where open trench existed. Pipe scraps, rocks, pallets, and wood pieces were observed. All other areas of the project had no waste or debris found along the pipeline. The inspector observation was that clean-up looked continuous and coordinated along the pipeline. Concern satisfied.

Was land with ruts restored to as near as practical to its pre-construction conditions? Yes, final restoration with the bulldozer restored the land to as near as practical to its pre-construction condition. Concern satisfied.

Disturbed areas due to construction or clearing were regraded to reflect pre-construction topography? A bulldozer was doing the final spreading of top soil and final land contouring. Contouring was matching existing contours with no rocks seen on land after reclamation. A grader was seen on site by the inspector and may also be used. Concern satisfied.

Was top soil and soil restoration completed to as near as practical to its pre-construction condition? A bulldozer was doing the final spreading of top soil and final land contouring. Contouring was matching existing contours with no rocks seen on land after reclamation. Concern satisfied.

No fertilizers, pesticides, or herbicides were used in areas where prohibited by landowners or agencies with authority over the location? Correct. Concern satisfied.

Permanent restoration within wetland areas included the removal of all construction mats and restoration of all ruts and depressions left by mats that were greater than six inches deep? Plains Pipeline stated to the PSC inspector that all ruts will be removed and final contour will be with existing soil in the wetland. Restoration in wetlands had not begun as construction was not completed in the wetlands the day of the construction inspection. Removal of construction mats and contouring will have to be inspected during the post construction inspection.

Was fill from outside of a wetland area used for repair of ruts? Plains Pipeline stated to the PSC inspector that all ruts will be removed and contoured with existing soil in the wetland. No fill is required or will be used. Concern satisfied.

Did seedbed preparation and seeding appear to have occurred immediately following completion of construction activities and site cleanup? Seedbed preparation had just started the day of inspection. The 31.8 miles of pipeline in ND had about a mile of pipe remaining to be welded except for major tie ins. Areas of the pipeline route were wet and were difficult to access. Seeding was to start the week of July 23rd. The post construction inspection will have to review final seeding. Seeding was to be as landowner's request. Seedbed preparation and seeding appeared to be timely within the time line of the project. Concern satisfied.

Were there any complaints from residents or landowners about radio or TV interference? No complaints as of the day of inspection. Concern satisfied.

How are complaints concerning the pipeline handled? Procedure is the person is to call the Plains Pipeline office in Grenora, ND and they will handle. Land agent is the first contact to handle a complaint with a landowner. The Plains Pipeline Project Coordinator will be brought in to assist as needed to assure any complaint is handled. Concern satisfied.

APPENDIX A PICTURES