EAGLE 1 RESOURCES
Subsurface Utility Consultant | Strategic Planning & Management

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August 27, 2024 **E-Filed on 08/27/2024**

The Secretary of the Commission
PA Public Utility Commission
400 North Street
Harrisburg, PA 17120

Subject: **Proposed installation of a Fiber Optics wire line across the Norfolk Southern Railway Company (NSRR) corridor within the public roadway limits of way limits of West Middle Road / TWP 539 near Girard, Erie County, Pennsylvania.**

USDOT # 471937E – West Middle Road / TWP 539
Girard, Erie County, PA
Milepost B 104.970,
Keystone Division, Lake Erie Subdivision

Lat: 41.994471
Long: -80.362970

1. Applicant Name: Windstream Kinetic Fiber Northeast, LLC
   4005 North Rodney Parham Road
   Little Rock, AR 72212

2. Applicant Attorney: Mr. Dan King
   Windstream Kinetic Fiber Northeast , LLC.
   4005 North Rodney Parham Road
   Little Rock, AR 72212
   Daniel.King@windstream.com
   office: 812-759-7973
   cell: 812-480-4786

3. Our purpose in contacting you is to provide notice that Windstream Kinetic Fiber Northeast , LLC (“Windstream”) will be accessing the public right of way at West Middle Road / TWP 539 near Girard, Erie County, Pennsylvania for the purpose of extending its communications network. Windstream’s work will be in the public right of way, which we understand crosses the railroad corridor.

4. Attached is a copy of the proposed plan, cross-section, and specifications of this project. This installation will be an underground Fiber Optics cable installation.

5. Our customer believes this installation conforms to all federal, state, county, and city laws applicable at this time. This installation will not have any impact on existing utilities and/or municipalities located within the project area. A certificate of Windstream's General Liability Insurance is available upon request. In response to any request for purchase of Railroad Protective Liability (RPL) request, our customer will provide the same or better coverage than that provided by RPL insurance, and which meets all legal requirements for insurance at public crossings.

6. The estimated cost of this installation is less than $20,000.00 USD and will be paid for with private funds.

7. This installation is required due to customer growth and system integrity.

8. Verification attached to this submission.

Wherefore, the applicant prays your Honorable Commission to approve the application.

Thank you for your assistance in reviewing Windstream's planned installation at this location. I look forward to working with you as Eagle 1 Resources, LLC provides consultant management services to our customers. If you need to discuss this matter further, please contact me at the telephone numbers listed below.

Sincerely,

David L. Thomas
Managing Member
Eagle 1 Resources, LLC
242 Bridgewater Blvd **Office** **334.209.0508**
Auburn, AL. 36830 **Mobile** **334.546.8166**

E-mail **dthomas@eagle1resources.com**
Web **www.eagle1resources.com**

cc: Mr. Albert Prah — Albert.Prah@windstream.com
Analyst II– Permitting Team — Office: 501-748-4760
Windstream Kinetic Fiber Northeast , LLC.
4005 North Rodney Parham
Little Rock, AR 72212

The following parties have been served notice of this proposed installation:

Pennsylvania Department of Transportation
Dan Leonard / Donald Smith — danleonard@pa.gov
ROW & Utility Division, Bureau of Design — dojsmith@pa.gov
P.O. Box 3362
Harrisburg, PA 17105-3362

Office of Chief Counsel — kcummings@pa.gov
Karen L. Cummings
Senior Assistant Counsel
PennDOT
P.O. 8212
Harrisburg, PA 17105-8212

Norfolk Southern Corporation — douglas.starling@nscorp.com
Real Estate Division — ns.permitting@railpros.com
1200 Peachtree Street, NE
12th Floor
Atlanta, Georgia 30309-3504

Peter Burton — pjb@burtonfuneralhome.com
Mayor — Telephone # 814.434.4935
Girard Borough
4400 Butternut Lane
Girard PA 16417

Brian Shank — bshank@eriecountypa.gov
President / Chairperson — Telephone # 814.451.6303
Erie County Courthouse Room 114
140 West 6th Street
Erie, PA 16501

Just Energy handles electricity and natural gas for the Lake City area.

Karen White
Regulatory Affairs Manager
Just Energy
5251 Westheimer Road
Suite 1000
Houston, TX 77056
Tel: 646-477-0304
Email: Regulatory_Mgmnt@justenergy.com

Lake City Boro handles the water and sewer in this area.

Andrew Graves
Mayor
Borough of Lake City
2350 Main Street
Lake City, PA 16423
(814) 774-2116
Email: skibler@lakecityboro.org

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Lat: 41.994471
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1.36. Verification.

(a) Applications, petitions, formal complaints, motions and answers thereto containing an averment of fact not appearing of record in the action or containing a denial of fact shall be personally verified by a party thereto or by an authorized officer of the party if a corporation or association. Verification means a signed written statement of fact supported by oath or affirmation or made subject to the penalties of 18 Pa. C.S. §4904 (relating to unsworn falsification to authorities). If verification is required, notarization is not necessary.

(b) The Verification form should comply substantially with the following:

VERIFICATION

I, __Albert Prah ___, hereby state that the facts above set forth are true and correct (or are true and correct to the best of my knowledge, information and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: _____8-27-24___

_____Albert Prah_____
(Signature)

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY)	B. Reporting Agency	C. Reason for Update (Select only one)	D. DOT Crossing Inventory Number
05 / 08 / 2022	☒ Railroad ☐ Transit ☐ State ☐ Other	☒ Change in Data ☐ New Crossing ☐ Closed ☐ No Train Traffic ☐ Quiet Zone Update ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ Admin. Correction	471937E

Part I: Location and Classification Information

1. Primary Operating Railroad	2. State	3. County
Norfolk Southern Railway Company [NS]	PENNSYLVANIA	ERIE

4. City / Municipality	5. Street/Road Name & Block Number	6. Highway Type & No.
☐ In ☒ Near GIRARD	TANNERY ROAD (Street/Road Name) | * (Block Number)	T 539

7. Do Other Railroads Operate a Separate Track at Crossing? ☐ Yes ☒ No
If Yes, Specify RR

8. Do Other Railroads Operate Over Your Track at Crossing? ☐ Yes ☒ No
If Yes, Specify RR

9. Railroad Division or Region	10. Railroad Subdivision or District	11. Branch or Line Name	12. RR Milepost
☐ None KEYSTONE	☐ None LAKE ERIE	☒ None	B | 0104.970 | (prefix) | (nnnn.nnn) | (suffix)

13. Line Segment *	14. Nearest RR Timetable Station *	15. Parent RR (if applicable)	16. Crossing Owner (if applicable)
	GIRARD	☒ N/A	☒ N/A

17. Crossing Type	18. Crossing Purpose	19. Crossing Position	20. Public Access (if Private Crossing)	21. Type of Train		22. Average Passenger Train Count Per Day
☒ Public ☐ Private	☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	☒ At Grade ☐ RR Under ☐ RR Over	☐ Yes ☐ No	☒ Freight ☐ Intercity Passenger ☐ Commuter	☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	☐ Less Than One Per Day ☐ Number Per Day 0

23. Type of Land Use
☐ Open Space ☒ Farm ☐ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard

24. Is there an Adjacent Crossing with a Separate Number?	25. Quiet Zone (FRA provided)
☐ Yes ☒ No If Yes, Provide Crossing Number	☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established

26. HSR Corridor ID	27. Latitude in decimal degrees	28. Longitude in decimal degrees	29. Lat/Long Source
☒ N/A	(WGS84 std: nn.nnnnnnn) 41.9944587	(WGS84 std: -nnn.nnnnnnn) -80.363008	☒ Actual ☐ Estimated

30.A. Railroad Use *	31.A. State Use *
30.B. Railroad Use *	31.B. State Use * NS
30.C. Railroad Use *	31.C. State Use *
30.D. Railroad Use *	31.D. State Use *
32.A. Narrative (Railroad Use) * ENS SIGN REFERENCES MIDDLE ROAD AS "T	32.B. Narrative (State Use) * ENS SIGN REFERENCES MIDDLE ROAD AS "TAN

33. Emergency Notification Telephone No. (posted)	34. Railroad Contact (Telephone No.)	35. State Contact (Telephone No.)
800-946-4744	800-946-4744	717-772-3079

Part II: Railroad Information

1. Estimated Number of Daily Train Movements

1.A. Total Day Thru Trains (6 AM to 6 PM)	1.B. Total Night Thru Trains (6 PM to 6 AM)	1.C. Total Switching Trains	1.D. Total Transit Trains	1.E. Check if Less Than One Movement Per Day ☐ How many trains per week?
10	4	4	0	

2. Year of Train Count Data (YYYY)	3. Speed of Train at Crossing
2020	3.A. Maximum Timetable Speed (mph) 60 3.B. Typical Speed Range Over Crossing (mph) From 40 to 50

4. Type and Count of Tracks
Main 1 Siding 0 Yard 0 Transit 0 Industry 0

5. Train Detection (Main Track only)
☒ Constant Warning Time ☐ Motion Detection ☐AFO ☐ PTC ☐ DC ☐ Other ☐ None

6. Is Track Signaled?	7.A. Event Recorder	7.B. Remote Health Monitoring
☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date *(MM/DD/YYYY)*	PAGE 2	D. Crossing Inventory Number *(7 char.)*
05/08/2022		471937E

Part III: Highway or Pathway Traffic Control Device Information

1. Are there Signs or Signals? ☒ Yes ☐ No

2. Types of Passive Traffic Control Devices associated with the Crossing

2.A. Crossbuck Assemblies *(count)*	2.B. STOP Signs *(R1-1)* *(count)*	2.C. YIELD Signs *(R1-2)* *(count)*	2.D. Advance Warning Signs *(Check all that apply; include count)* ☒ None
2	0		☐ W10-1 _____ ☐ W10-3 _____ ☐ W10-11 _____ ☐ W10-2 _____ ☐ W10-4 _____ ☐ W10-12 _____

2.E. Low Ground Clearance Sign *(W10-5)*	2.F. Pavement Markings	2.G. Channelization Devices/Medians	2.H. EXEMPT Sign *(R15-3)*	2.I. ENS Sign *(I-13)* Displayed
☐ Yes *(count_____)* ☒ No	☐ Stop Lines ☐ Dynamic Envelope ☐ RR Xing Symbols ☒ None	☐ All Approaches ☐ Median ☐ One Approach ☒ None	☐ Yes ☐ No	☒ Yes ☐ No

2.J. Other MUTCD Signs ☐ Yes ☒ No	2.K. Private Crossing Signs *(if private)*	2.L. LED Enhanced Signs *(List types)*
Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	☐ Yes ☐ No	

3. Types of Train Activated Warning Devices at the Grade Crossing *(specify count of each device for all that apply)*

3.A. Gate Arms *(count)*	3.B. Gate Configuration	3.C. Cantilevered *(or Bridged)* Flashing Light Structures *(count)*	3.D. Mast Mounted Flashing Lights *(count of masts)* 2	3.E. Total Count of Flashing Light Pairs
Roadway 0 Pedestrian 0	☐ 2 Quad ☐ Full *(Barrier)* Resistance ☐ 3 Quad ☐ 4 Quad ☐ Median Gates	Over Traffic Lane 0 ☐ Incandescent Not Over Traffic Lane 0 ☐ LED	☒ Incandescent ☐ LED ☒ Back Lights Included ☒ Side Lights Included	6

3.F. Installation Date of Current Active Warning Devices: *(MM/YYYY)*	3.G. Wayside Horn	3.H. Highway Traffic Signals Controlling Crossing	3.I. Bells *(count)*
_____/_____ ☐ Not Required	☐ Yes Installed on *(MM/YYYY)* _____/_____ ☒ No	☐ Yes ☒ No	1

3.J. Non-Train Active Warning	3.K. Other Flashing Lights or Warning Devices
☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☒ None	Count 0 Specify type 0

4.A. Does nearby Hwy Intersection have Traffic Signals?	4.B. Hwy Traffic Signal Interconnection	4.C. Hwy Traffic Signal Preemption	5. Highway Traffic Pre-Signals	6. Highway Monitoring Devices *(Check all that apply)*
☐ Yes ☒ No	☒ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs	☐ Simultaneous ☐ Advance	☐ Yes ☒ No Storage Distance * 0 Stop Line Distance * 0	☐ Yes - Photo/Video Recording ☐ Yes – Vehicle Presence Detection ☒ None

Part IV: Physical Characteristics

1. Traffic Lanes Crossing Railroad	2. Is Roadway/Pathway Paved?	3. Does Track Run Down a Street?	4. Is Crossing Illuminated? *(Street lights within approx. 50 feet from nearest rail)*
☐ One-way Traffic ☐ Two-way Traffic ☐ Divided Traffic Number of Lanes 2	☒ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No

5. Crossing Surface *(on Main Track, multiple types allowed)* Installation Date * *(MM/YYYY)* _____/_____ Width * _____ Length * _____
☐ 1 Timber ☐ 2 Asphalt ☒ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal
☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other *(specify)* _____

6. Intersecting Roadway within 500 feet?	7. Smallest Crossing Angle	8. Is Commercial Power Available? *
☒ Yes ☐ No If Yes, Approximate Distance *(feet)* _____	☐ 0° – 29° ☒ 30° – 59° ☐ 60° - 90°	☒ Yes ☐ No

Part V: Public Highway Information

1. Highway System	2. Functional Classification of Road at Crossing	3. Is Crossing on State Highway System?	4. Highway Speed Limit
☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☐ (03) Federal AID, Not NHS ☒ (08) Non-Federal Aid	☒ (0) Rural ☐ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☒ (7) Local	☐ Yes ☒ No	35 MPH ☒ Posted ☐ Statutory

5. Linear Referencing System *(LRS Route ID)* *

6. LRS Milepost *

7. Annual Average Daily Traffic *(AADT)*	8. Estimated Percent Trucks	9. Regularly Used by School Buses?	10. Emergency Services Route
Year 2009 AADT 000213	03 %	☐ Yes ☒ No Average Number per Day _____	☐ Yes ☐ No

Submission Information - *This information is used for administrative purposes and is not available on the public website.*

Submitted by _____ Organization _____ Phone _____ Date _____

Frac-Out Contingency Plan

For Horizontal Directional Drilling

FOC PLAN - TABLE OF CONTENTS

FRAC-OUT CONTINGENCY PLAN (FCP)

1.0 Introduction and Purpose

Directional bore operations have a potential to release drilling fluids into the surface environment through frac-outs (A frac-out is the condition where drilling mud is released through fractured bedrock into the surrounding rock and sand and travels toward the surface.) Because drilling muds consist largely of a bentonite clay-water mixture, they are not classified as toxic or hazardous substances. However, if it is released into water bodies, bentonite has the potential to adversely impact fish and invertebrates. While drilling fluid seepage associated with a frac-out is most likely to occur near the bore entry and exit points where the drill head is shallow, frac-outs can occur in any location along a directional bore. This Frac-Out Contingency Plan (FCP) establishes operational procedures and responsibilities for the prevention, containment, and cleanup of frac-outs associated with the proposed directional drilling utility project. All personnel responsible for the work must adhere to this plan during the directional drilling process. The specific objectives of this plan are to:

1. Minimize the potential for a frac-out associated with directional drilling activities;
2. Provide for the timely detection of frac-outs;

3. Protect the environmentally sensitive riverbed and associated riparian vegetation;
4. Ensure an organized, timely, and "minimum-impact" response in the event of a frac-out and release of drilling bentonite; and
5. Ensure that all appropriate notifications are made immediately to the customer, management and safety personnel.

2.0 Description of Work

The proposed project consists of:

Explain work task in detail to crew members. Drilling operations will be halted by the drill rig operators immediately upon detection of a drop in drilling pressure or other evidence of a frac-out. The cleanup of all spills shall begin immediately. Management and safety department shall be notified immediately of any spills and shall be consulted regarding clean-up procedures. A spill kit shall be onsite and used if a frac-out occurs. A vacuum truck and containment materials, such as straw bales, shall also be on-site prior to and during all operations. The Site Supervisor will be immediately notified. In the event of a frac-out, the on-site foreman/supervisor will conduct an evaluation of the situation and direct recommended mitigation actions, based on the following guidelines.

a. If the frac-out is minor, easily contained, has not reached the surface and is not threatening sensitive sources, drilling operations may resume after use of a leak stopping compound or redirection of the bore.
b. If the frac-out has reached the surface, any material contaminated with bentonite shall be removed by hand to a depth of 2-feet, contained and properly disposed of, as required by law. The drilling contractor shall be responsible for ensuring that the bentonite is either properly disposed of at an approved disposal facility or properly recycled in an approved manner. The Site Supervisor shall notify and take any necessary follow-up response actions in coordination with agency representatives. The Site Supervisor will coordinate the mobilization of equipment stored at off-site locations (e.g., vacuum trucks) on an as needed basis.

3.0 Site Supervisor/Foremen Responsibilities

The Site Supervisor/Foremen has overall responsibility for implementing this FCP. The Site Supervisor/Foremen will ensure that all employees are trained prior to all drilling. The Site Supervisor/Foremen shall be notified immediately when a frac-out is detected. The Site Supervisor/Foremen will be responsible for ensuring that the safety department is aware of the frac-out, coordinating personnel, response, cleanup, regulatory agency notification and coordination to ensure proper clean-up, disposal of recovered material and timely reporting of the incident. The Site Supervisor/Foremen shall ensure all waste materials are properly containerized, labeled, and removed from the site to an approved disposal facility by personnel experienced in the removal, transport and disposal of drilling mud.

The Site Supervisor/Foremen shall be familiar with all aspects of the drilling activity, the contents of this Frac-Out Contingency Plan and the conditions of approval under which the activity is permitted to take place. The Site Supervisor/Foremen shall have the authority to stop work and commit the resources (personnel and equipment) necessary to implement this plan. The Site Supervisor/Foremen shall assure that a copy of this plan is available (onsite) and accessible to all construction personnel. The Site Supervisor/Foremen shall ensure that all workers are properly trained and familiar with the necessary procedures for response to a frac-out, prior to commencement of drilling operations.

4.0 Equipment

The Site Supervisor shall ensure that:

- All equipment and vehicles are checked and maintained daily to prevent leaks of hazardous materials.
- Spill kits and spill containment materials are available on-site at all times and that the equipment is in good working order.
- Equipment required to contain and clean up a frac-out release will either be available at the work site or readily available at an offsite location within 15-minutes of the bore site.
- If equipment is required to be operated near a riverbed, absorbent pads and plastic sheeting for placement beneath motorized equipment shall be used to protect the riverbed from engine fluids;

5.0 Training

Prior to the start of construction, the Site Supervisor/Foremen, shall ensure that the crew members receive training in the following:

- The provisions of the Frac-Out Contingency Plan, equipment maintenance and site specific permit and monitoring requirements;
- Inspection procedures for release prevention and containment equipment and materials;
- Contractor/crew obligation to immediately stop the drilling operation upon first evidence of the occurrence of a frac-out and to immediately report any frac-out releases;
- Contractor/crew member responsibilities in the event of a release;
- Operation of release prevention and control equipment and the location of release control materials, as necessary and appropriate; and
- Protocols for communication with agency representatives who might be on-site during the clean-up effort.

6.0 Drilling Procedures

The following procedures shall be followed each day, prior to the start of work.

The Frac-Out Contingency Plan shall be available on-site during **all** construction.
The Site Supervisor/Foremen shall be on-site at any time that drilling is occurring or is planned to occur. The Site Supervisor/Foremen shall ensure that a Job Briefing meeting is held at the start of each day of drilling to review the appropriate procedures to be followed in case of a frac-out. Questions shall be answered and clarification given on any point over which the drilling crew or other project staff has concerns.

Drilling pressures shall be closely monitored so they do not exceed those needed to penetrate the formation.
Pressure levels shall be monitored randomly by the operator.
Pressure levels shall be set at a minimum level to prevent frac-outs.
During the pilot bore, maintain the drilled annulus. Cutters and reamers will be pulled back into previously-drilled sections after each new joint of pipe is added.
Exit and entry pits shall be enclosed by silt fences and straw.
A spill kit shall be on-site and used if a frac-out occurs.
A vacuum truck shall be readily available on-site prior to and during all drilling operations.
Containment materials (Straw, silt fencing, sand bags, frac-out spill kits, etc.) shall be staged on-site at location where they are readily available and easily mobilized for immediate use in the event of an accidental release of drilling mud (frac-out).
If necessary, barriers (straw bales or sedimentation fences) between the bore site and the edge of the water source, shall be constructed, prior to drilling, to prevent released bentonite material from reaching the water.
Once the drill rig is in place, and drilling begins, the drill operator shall stop work whenever the pressure in the drill rig drops, or there is a lack of returns in the entrance pit. At this time, the Site Supervisor/Foremen shall be informed of the potential frac-out. The Site Supervisor/Foremen and the drill rig operator(s) shall work to coordinate the likely location of the frac-out. The location of the frac-out shall be recorded and notes made on the location and measures taken to address the concern. The following subsections shall be adhered to when addressing a frac-out situation.

Water containing mud, silt, bentonite, or other pollutants from equipment washing or other activities, shall not be allowed to enter a lake, flowing stream or any other water source. The Bentonite used in the drilling process shall be either disposed of at an approved disposal facility or recycled in an approved manner. Other construction materials and wastes shall be recycled, or disposed of, as appropriate.

6.1 Vac-Truck

A vacuum truck shall be staged at a location from which it can be mobilized and relocated so that any place along the drill shot, can be reached by the apparatus, within 10 minutes of a frac-out.

6.2 Field Response to Frac-Out Occurrence

The response of the field crew to a frac-out release shall be immediate and in accordance with procedures identified in this Plan. All appropriate emergency actions that do not pose additional threats to sensitive resources will be taken, as follows:

a. Directional boring will stop immediately;
b. The bore stem will be pulled back to relieve pressure on frac-out;
c. The Site Supervisor/Foremen will be notified to ensure that management and the safety department is notified, adequate response actions are taken and notifications made;
d. The Site Supervisor/Foremen shall evaluate the situation and recommend the type and level of response warranted, including the level of notification required; e. If the frac-out is minor, easily contained, has not reached the surface and is not threatening sensitive resources, a leak stopping compound shall be used to block the frac-out. If the use of leak stopping compound is not fully successful, the bore stem shall be redirected to a new location along the desired drill path where a frac-out has not occurred;
f. If the frac-out has reached the surface, any material contaminated with bentonite shall be removed by hand, to a depth of 2 feet, contained and properly disposed of, as required by law. A dike or berm may be constructed around the frac-out to entrap released drilling fluid, if necessary. Clean sand shall be placed and the area returned to pre-project contours.
g. If a frac-out occurs, reaches the surface and becomes widespread, the Site Supervisor/Foremen shall authorize a readily accessible vacuum truck and bulldozer stored off-site to be mobilized. The vacuum truck may be either positioned at either end of the line of the drill so that the frac-out can be reached by crews on foot, or may be pulled by a bulldozer, so that contaminated soils can be vacuumed up.

6.3 Response Closeout Procedures

When the release has been contained and cleaned up, response closeout activities will be conducted at the direction of the Site Supervisor/Foremen and shall include the following:

a. The recovered drilling fluid will either be recycled or hauled to an approved facility for disposal. No recovered drilling fluids will be discharged into streams, storm drains or any other water source;
b. All frac-out excavation and clean-up sites will be returned to pre-project contours using clean fill, as necessary;
c. All containment measures (fiber rolls, straw bale, etc.) will be removed, unless otherwise specified by the Site Supervisor/Foremen.

6.4 Construction Re-start

For small releases not requiring external notification, drilling may continue, if 100 percent containment is achieved through the use of a leak stopping compound or redirection of the bore and the clean-up crew remains at the frac-out location throughout the construction period.
For releases requiring external notification and/or other agencies, construction activities will not restart without prior approval from the safety department.

6.5 Bore Abandonment

Abandonment of the bore will only be required when all efforts to control the frac-out within the existing directional bore have failed. Bore must immediately be filled with grout and a new installation procedure and revised plans must be submitted to, and approved by, NS or its representative before work can resume.

7.0 Notification

In the event of a frac-out that reaches a water source, the Site Supervisor/Foremen will notify safety department so they can notify the appropriate resource agencies. All agency notifications will occur within 24 hours and proper documentation will be accomplished in a timely and complete manner. The following information will be provided:

1. Name *and* telephone number of person reporting;
2. Location of the release;
3. Date and time of release:
4. Type and quantity, estimated size of release;
5. How the release occurred;
6. The type of activity that was occurring around the area of the frac-out;
7. Description of any sensitive areas, and their location in relation to the frac-out;
8. Description of the methods used to clean up or secure the site; and
9. Listing of the current permits obtained for the project.

7.1 Communicating with Regulatory Agency Personnel

All employees and subcontractors will adhere to the following protocols when permitting Regulatory Agency Personnel arrive on site. Regulatory Agency Personnel will be required to comply with appropriate safety rules. Only the Site Supervisor/Foremen and the safety department are to coordinate communication with Regulatory Agency Personnel.

7.2 Documentation

The Site Supervisor/Foremen shall record the frac-out event in his or her daily log. The log will include the following: Details on the release event, including an estimate of the amount of bentonite released, the location and time of release, the size of the area impacted, and the success of the clean-up action. The log report shall also include the: Name and telephone number of person reporting; Date, How the release occurred; The type of activity that was

occurring around the area of the frac-out; Description of any sensitive areas, and their location in relation to the frac-out; Description of the methods used to clean up or secure the site; and a listing of the current permits obtained for the project.

8.0 Project Completion and Clean-up

a. All materials and any rubbish-construction debris shall be removed from the construction zone at the end of each workday;
b. Sump pits at bore entry and exits will be filled and returned to natural grade; and
c. All protective measures (fiber rolls, straw bale, silt fence, etc.) will be removed unless otherwise specified by the Site Supervisor/Foremen.

Please see attached HDD Bore Plan Template for Installation Specifications.

The work will be continuous until the drilling is complete and the pipe is pulled in place

The bore will be constantly tracked with location and depth marked every 10 feet

Horizontal Directional Drilling (HDD) Bore Plan Template

Failure to provide all requested information will cause a delay in processing your request.

Bore Pipe Information:

Pipe Size (O.D.): 6.625" Pipe Material & Grade: HDPE SDR 11 Weight of Pipe (lb/ft): 4.971 lb. / ft

**HDPE must be grade SDR 11 or better (thicker wall)

Equipment Information:

Proposed Equipment (Brand/Model): Vermeer 20x22 Series

Method of Drilling Fluid Recovery: Vermeer V500 Vacuum System

Maximum Drilling Machine Pullback Capabilities: 22,000 lb

Minimum Drilling RPM: 50 Maximum Drilling RPM: 130

Minimum Drilling PSI: 5,000 Maximum Drilling PSI: 20,000

Minimum Drilling GPM: 5 Maximum Drilling GPM: 25

Drilling Head Type: Chevron Dia.: 6 in. Number/Size of Holes/Nozzles: 7/.5"/NA

Back Reamer Head: Type: Vermeer Dia.: 8 in. Number/Size of Holes/Nozzles: 1/.125"/NA

Drilling Head Fluid Pressure: Pilot Bore: 800 psi/min 1000 psi/max 900 Operating psi

Back Ream: 400 psi/min 500 psi/max 450 Operating psi

Anticipated Drilling Fluid Rate: Pilot Bore: 25 gal/min Back Ream: 25 gal/min

Geotechnical: Soil Type: Glacier Silt / Elston Sandy Loam Bearing Capacity: N/A psi

***For bores 20" or larger; a soil boring geotechnical profile is required

Design Information: Entry Angle: 10 Deg Exit Angle: 10 Deg Depth: Base of rail to Top of Casing: 15'

Maximum size of bore hole: 6 " Number and Diameter of back reams: 1 / 8"

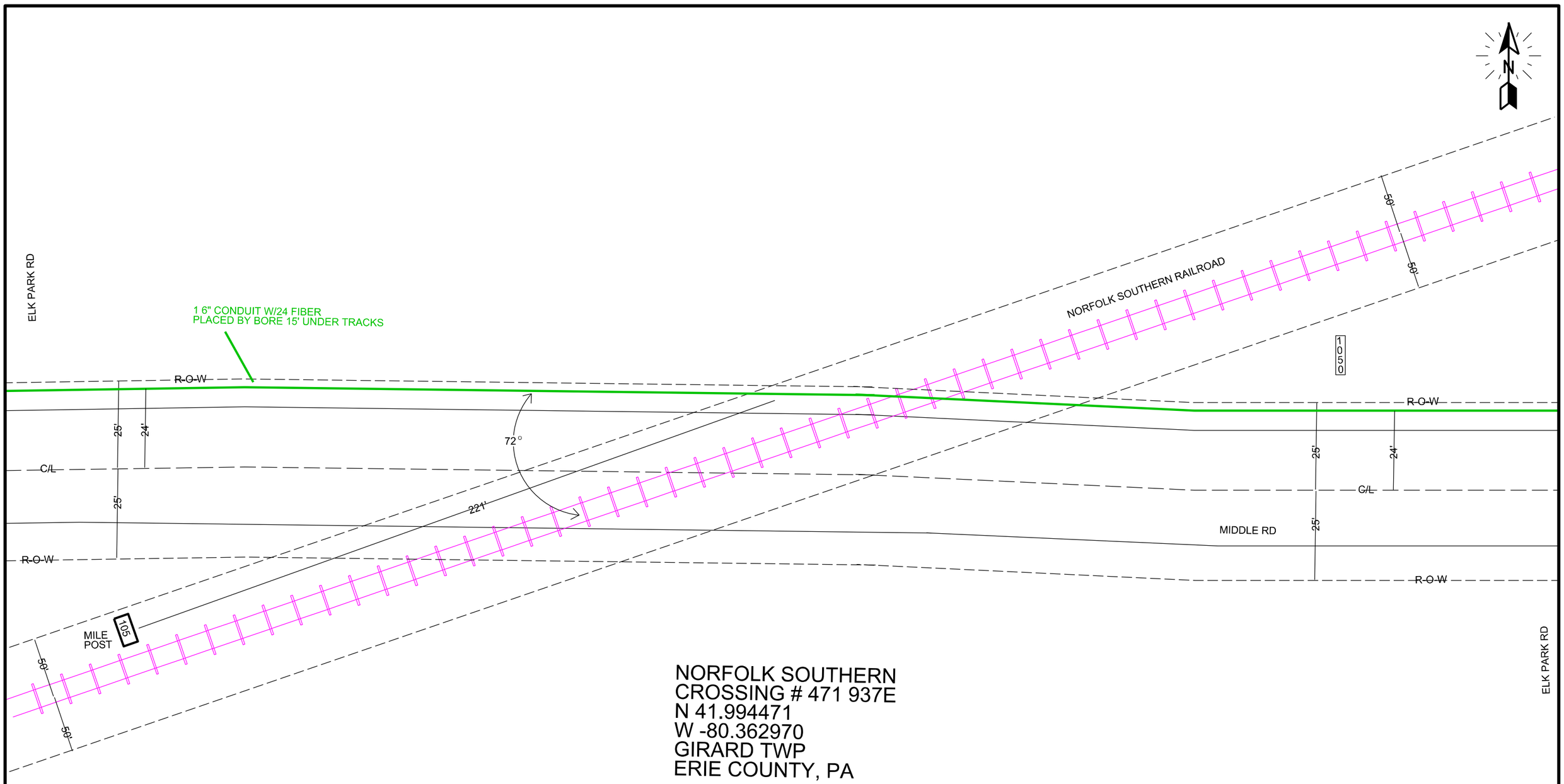
****The maximum size of the bore hole may not exceed Outside Diameter (O.D.) x 1.5 if O.D. is 10" or less. If the O.D. is greater than 10", the bore hole may not exceed O.D. x 1.3 or 12" whichever is less.

File Number: _____

PIPE DATA AND SPECIFICATIONS *(Use F11 Key to tab from cell to cell)*			
	Specification	**Carrier Pipe**	**Casing Pipe**
(1)	Pipe material	Fiber Optic Cable	HDPE Conduit
(2)	Material specifications and grade	N/A	SDR-11
(3)	Specified minimum yield strength	N/A	160 PSI
(4)	Nominal size in inches	N/A	6”
(5)	Wall thickness in inches	N/A	.602”
(6)	Type of seam	N/A	N/A
(7)	Type of joints	N/A	N/A
	Check Yes or No		
(8)	Are tunnel liner plates required	Yes No	
(9)	Protective coating	Yes No	
(10)	Cathodic protection	Yes No	
(11)	Cathodic protection type	N/A	

(12)	Commodity Description:	Underground Utility Wireline
(13)	Maximum Operating Pressure:	N/A
(14)	Is Commodity Flammable:	No

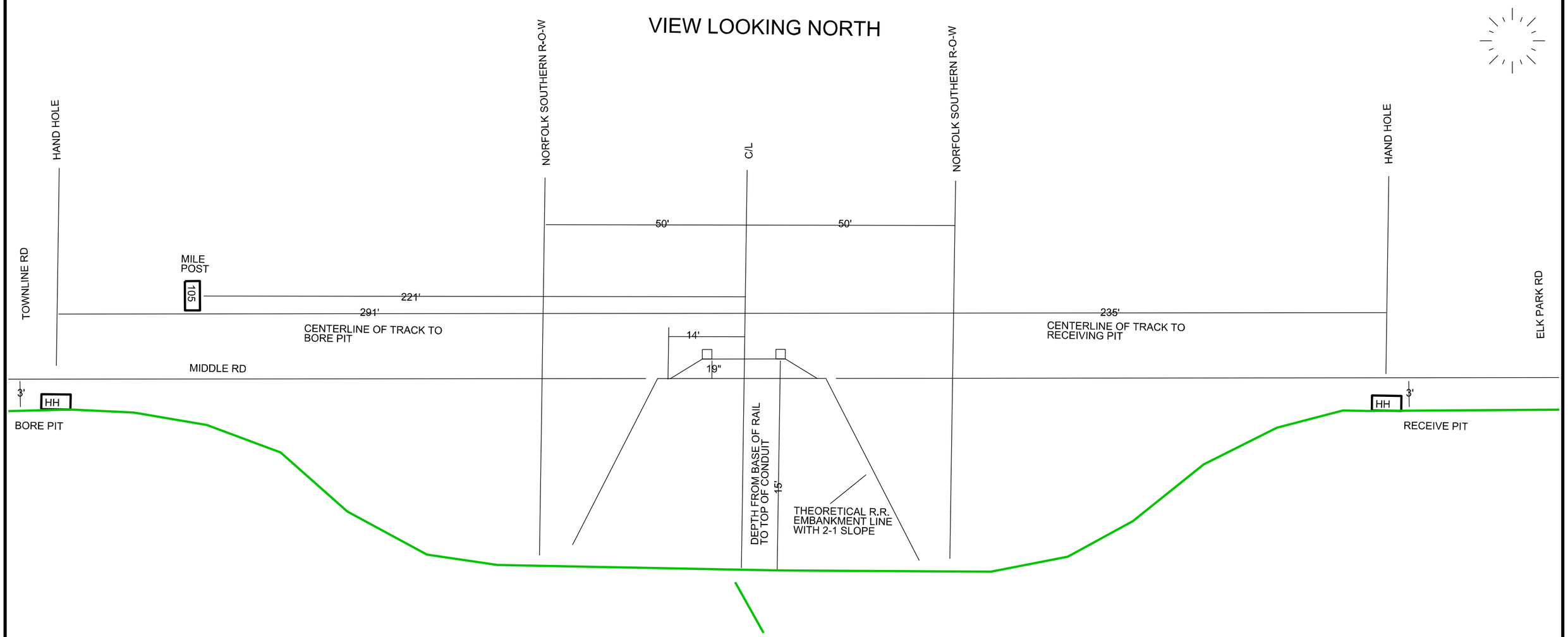
Notes / Comments:



NORFOLK SOUTHERN
CROSSING # 471 937E
N 41.994471
W -80.362970
GIRARD TWP
ERIE COUNTY, PA

JOB DESCRIPTION			ENGINEER	PROJ MANAGER	EXCHANGE	ISSUE DATE	REV DATE	REV#	SHEET#	OF
PL COND/FIBER UNDER TRACKS MIDDLE RD			**JOE QUICKLE**		**WEST SPRINGFIEL**	**4/3/2024**	**7/15/2024**	**2**	**1**	**2**
FTBB	WORK ORDER **789632002**	DISTRICT	PHONE **814-333-0289**	OPER MANAGER	JOINT WORK REQ	PERMIT REQUEST **Y**				
AWGF	GEO BLOCK	TAX DISTRICT	REQUESTED BY	OTHER CONTACTS	CIRCUIT ID	CUT SHT REQ	MOP REQ			

VIEW LOOKING NORTH



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