

October 11, 2012

**VIA HAND DELIVERY**

Mr. Darrell Nitschke  
Executive Secretary  
North Dakota Public Service Commission  
600 E. Boulevard, Dept. 408  
Bismarck, ND 58505-0480

**RECEIVED**

OCT 11 2012

**PUBLIC SERVICE COMMISSION**

**RE: HILAND OPERATING, LLC  
6-INCH NATURAL GAS LIQUIDS  
PIPELINE – MCKENZIE COUNTY  
CASE NUMBER PU-10-554**

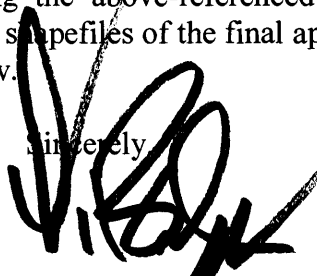
Dear Mr. Nitschke:

Enclosed for filing, please find an original and ten (10) copies of the following:

1. United States Department of the Interior Irrigation Crossing Permit; and
2. Hiland Operating, LLC's Pre-Construction Tree Count Report.

Also enclosed is a CD containing the above-referenced documents in PDF format. Finally, enclosed are three CDs containing shapefiles of the final approved route and corridor. If you have any questions, please let me know.

Sincerely,



LAWRENCE BENDER

LB/jrr  
Enclosures

cc: Mr. Michael Higgins (w/ encl. - via e-mail)  
Ms. Kathleen Spilman (w/ encl. - via e-mail)

5247415\_1.DOC

Attorneys & Advisors  
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200 North  
Bismarck  
58501-31

90

Filed: 10/11/2012 Pages: 18  
**US Dept. of Interior irrigation crossing permit,  
pre-construction tree count report**

Hiland Operating, LLC

Lawrence Bender, Fredrikson&Byron, P.A.



# United States Department of the Interior

## BUREAU OF RECLAMATION

Great Plains Region

Montana Area Office

P.O. Box 30137

Billings, Montana 59107-0137

OCT - 3 2012

IN REPLY REFER TO:

MT-210

LND-6.00

Hiland Operating, LLC  
Attn: Michael S. Higgins  
205 West Maple Avenue, Suite 1100  
Enid, OK 73701

Subject: Acknowledgement of Easement Crossing (AEC), Irrigation Facility Crossing, Lower Yellowstone Project

Dear Mr. Higgins:

We received your application, dated August 13, 2012, to cross Lower Yellowstone Project irrigation facilities in McKenzie County, North Dakota, with an 8-inch natural gas liquids pipeline. Following is a description of the eight crossings:

Name	<u>Description of Canal/Drain Crossing</u>			
	<u>Township</u>	<u>Range</u>	<u>Section</u>	<u>Quarter/Quarter</u>
Drain 29	152 N.	104 W.	5	SWNW
Drain 29	152 N.	104 W.	5	NWSE
Lateral Q	152 N.	104 W.	5	NWSE
Lateral P6	152 N.	104 W.	4	NWNE
Lateral P6-1	152 N.	104 W.	34	SWSW
Drain dNL-1	152 N.	104 W.	34	SWSW
Lateral P9	152 N.	104 W.	34	SESW
Lateral P	152 N.	104 W.	34	SWSE

Your proposal includes a pipeline crossing of Bureau of Reclamation (Reclamation) laterals and drains for which we have an existing easement. The easements on these lands are for the purposes of construction, operation, and maintenance of ditches and canals and other pertinent structures of irrigation facilities. This letter is Reclamation's AEC for the purpose of constructing, operating and maintaining your pipeline at the locations stated above. To ensure that your pipeline does not interfere with Reclamation's dominant easement, or jeopardize the operation of the Lower Yellowstone Project, the following conditions must be adhered to:

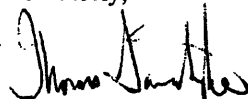
1. The timing of any construction must be coordinated with the Manager, Lower Yellowstone Irrigation District, so that any irrigation project operations are not unduly interrupted. The Manager can be reached at (406) 433-1306.
2. Hiland Operating, LLC will acquire all rights-of-way needed from the underlying landowner.
3. As requested by Lower Yellowstone Irrigation District, all pipeline crossings shall be buried at a minimum depth of 72 inches. The pipeline crossings shall be otherwise in conformance with Reclamation's Standard Crossing and Clearance Requirements, Drawing No. 40-600-11 (enclosed).

4. Future maintenance of any installed pipeline is the responsibility of, and must be performed by, Hiland Operating, LLC or their representative, so that Reclamation's right and ability to deliver water and maintain the irrigation project facilities is not unduly impacted. Additionally, all maintenance activities must be communicated and coordinated with the Lower Yellowstone Irrigation District Manager prior to the maintenance occurring.
5. The permittee agrees to install appropriate signs to designate the pipeline alignment. Signs shall state: a) depth of line; b) size of line; and c) distance of sign to pipeline.

Please be aware that if the aforementioned conditions are not followed, and your project jeopardizes Reclamation's right and ability to operate and maintain the Federal irrigation facilities during construction, or at a later date, Reclamation will seek full and just compensation.

We appreciate your cooperation in this matter. If you have any questions, please contact Mr. Peter Stevenson me at 406-247-7310.

Sincerely,



Thomas Sawatzke  
Deputy Area Manager

Enclosures

cc: James Brower  
Lower Yellowstone Irrigation District  
2327 Lincoln Avenue SE  
Route 1, Box 2064  
Sidney MT 59270

Derek Zander  
Staff Engineer - Geological  
Keitu Engineers & Consultants, Inc.  
2610 Old Red Trail Ste C; PO Box 98  
Mandan, ND 58554



**PSC Order: PU-10-554**

**Inventory of Trees and Shrubs Along the Right-of-Way  
of Hiland Operating, LLC 8-Inch Natural Gas Liquids  
Pipeline**



*Hiland Operating, LLC  
205 West Maple, Suite 1100  
Enid, Oklahoma 73701*

McKenzie County, North Dakota

Prepared by



*2610 Old Red Trail Ste C PO Box 98*

*Mandan, ND 58554-0098*

*Engineering, Environmental, & Regulatory Affairs Professionals*

## **Executive Summary**

In compliance with a certificate condition issued by the North Dakota Public Service Commission, in the Findings of Fact, Conclusions of Law and Order, (Date), trees and shrubs expected to be cleared along the Hiland Operating, LCC Natural Gas Liquids (NGL) Pipeline Project (Project) right-of-way (ROW) in North Dakota were inventoried for replacement. The species and numbers of trees and shrubs within several native growth areas (i.e. woodlots) and 1 wind break/shelterbelt areas identified within the construction ROW were documented by field crews in August 2012. Results of the inventory determined that the Project will remove a total of 1,142 trees and shrubs within 150 feet of the centerline (75 feet on each side). However, a post-construction inventory will take place to determine the exact number of trees that were removed, therefore, determining the exact amount that will need to be replaced post-construction. Following stipulations in the Order and supplemental orders, the amount of trees that will have to be replaced is double the amount taken out; therefore, a total of 2,284 trees and shrubs are required to be planted as compensation for those cleared by the Project or after review of the post construction inventory, double the amount removed.

## **Introduction**

Hiland Operating, LLC proposes to construct and operate a new 14-mile-long, 8-inch natural gas liquids (NGL) pipeline originating at the Hiland Operating Plant 7 miles northeast of Cartwright, North Dakota and will terminate at the Hiland Operating Rail Terminal, approximately 5 miles north and 8 miles west of Cartwright, North Dakota.

Surface facilities installed will be limited to pipeline markers, rectifiers, a "pig" launcher/receiver and block valves. Some small fenced-in enclosures to house associated power and control systems may be installed to allow valves to be operated remotely.

Upon completion, the Project will enable transportation of NGLs produced in northwestern North Dakota to the various delivery areas served by Yellowstone Valley Railroad. The Project will provide capacity to transport increased production of processed natural gas liquids from the Bakken and Three Forks formations.

The North Dakota Public Service Commission directed Hiland to inventory trees and shrubs anticipated to be cleared during the Project construction. Replacement ratios for trees and shrubs removed by the Project were established in the Order.

The purpose of this inventory was to determine the number and species of trees and shrubs that would be removed by this Project, as well as calculate the number of trees and shrubs, by species, to be planted as compensation for those removed. Hiland recorded the numbers and species of trees and shrubs in windbreaks, shelterbelts and all other wooded areas affected by the Project right-of-way (ROW) and temporary extra workspaces.

## **Methods**

The Order pertains to a) windbreaks and shelterbelts and b) lengths of wooded areas in excess of 50 feet of route length, also called "native growth areas." Hiland conducted a full inventory of trees and shrubs prior to clearing or associated construction activities.

The Order requires the Project to inventory woody plants within windbreaks and replace all trees and shrubs anticipated to be cleared within the temporary construction right-of-way (150 feet) including those that are considered invasive or noxious species. The Tree and Shrub Mitigation Specifications (TSMS) requires the Project to inventory woody plants anticipated to be cleared within woodlots as follows: all trees of one-inch diameter at breast height (dbh) and greater; shrubs anticipated to be cleared within the permanent ROW; and shrubs anticipated to be cleared in areas where topsoil would not be preserved and replaced.

Trees and shrubs along the Project route requiring inventory were identified by review of aerial photographs. Along the Project route, a constant 150 foot corridor was inventoried and marked appropriately. Trees and shrubs were identified to genus and species

where possible and tallied. Trees and shrubs with multiple stems were counted based on connection to the common rootstock and not as individual stems. In areas of dense foliage, the number of trees and shrubs occurring in the area were estimated, however this occurrence was rare.

If field personnel were unable to identify a tree or shrub in the field, plant material samples were collected, photographs of the stem, leaves or other unique features were taken and a detailed description of the plant was recorded. The sample was later identified.

## Results

A total of 1142 trees and shrubs were identified within the 150-foot survey corridor during the August 2012 tree survey. Within the areas inventoried, 14 trees and 3 shrub species were identified and a total of 1142 trees and shrubs were estimated to be removed during the construction of the Project. This tree amount is estimated and a post-construction inventory will take place to determine the exact number of trees that will need to be replaced. Areas not included in this tabulation include the Yellowstone River corridor, between specified bore start and end locations, as trees and shrubs will not be impacted during the bore process.

Table 1 Tree and Shrub Species Identified for Replacement Along the Project's Right-of-Way

Common Name	Scientific Name	Quantity Inventoried	Quantity to be Replaced
Green Ash	<i>Fraxinus pennsylvanica</i>	555	1110
Blue Spruce	<i>Picea pungens</i>	6	12
Boxelder	<i>Acer negundo</i>	20	40
Silver Buffaloberry	<i>Shepherdia argentea</i>	3	6
Siberian Peashrub	<i>Caragana arborescens</i>	6	12
Chokecherry	<i>Prunus virginiana</i>	331	662
Plains Cottonwood	<i>Populus deltoides</i>	91	182
Redosier Dogwood	<i>Cornus sericea</i>	8	16
American Elm	<i>Ulmus americana</i>	18	36
Juneberry	<i>Amelanchier alnifolia</i>	7	14
Common Juniper	<i>Juniperus communis</i>	17	34
Creeping Juniper	<i>Juniperus horizontalis</i>	8	16
Rocky Mountain Juniper	<i>Juniperus scopulorum</i>	42	84
Bur Oak	<i>Quercus macrocarpa</i>	1	2
Russian Olive	<i>Elaeagnus angustifolia</i>	4	8
Skunkbrush	<i>Rhus trilobata</i>	18	36
Shining Willow	<i>Salix lucida</i>	1	2
Sandbar Willow	<i>Salix interior</i>	1	2
Yellow Willow	<i>Salix lutea</i>	5	10
<b>Total:</b>		1142	2284

## **Discussion**

Placement of the NGL pipeline resulted in a relatively low quantity of trees that will be removed during construction and therefore a low number to be replaced. The majority of the route runs through crop and rangeland with the majority of the trees inventoried were located either in woody drainages or on the bluffs located to the east of the Yellowstone River. The Yellowstone River will be bored; thereby eliminating the need for an inventory within the main river channel. The pipeline route will be re-inventoried post construction so an exact number of trees to be replaced will be known.



**Legend**

- |                        |                      |
|------------------------|----------------------|
| ● Ash, Green           | ● Elm, American      |
| ● Blue Spruce          | ● Juneberry          |
| ● Boxelder             | ● Juniper, Common    |
| ● Buffaloberry, Silver | ● Juniper, Rocky Mtn |
| ● Caragana             | ● Oak, Bur           |
| ● Chokecherry          | ● Olive, Russian     |
| ● Cottonwood, Plains   | ● Willow, Sandbar    |
| ● Dogwood, Redosier    | ● Willow, Yellow     |



— Route Centerline

□ 150' Corridor

1 inch = 1,000 feet

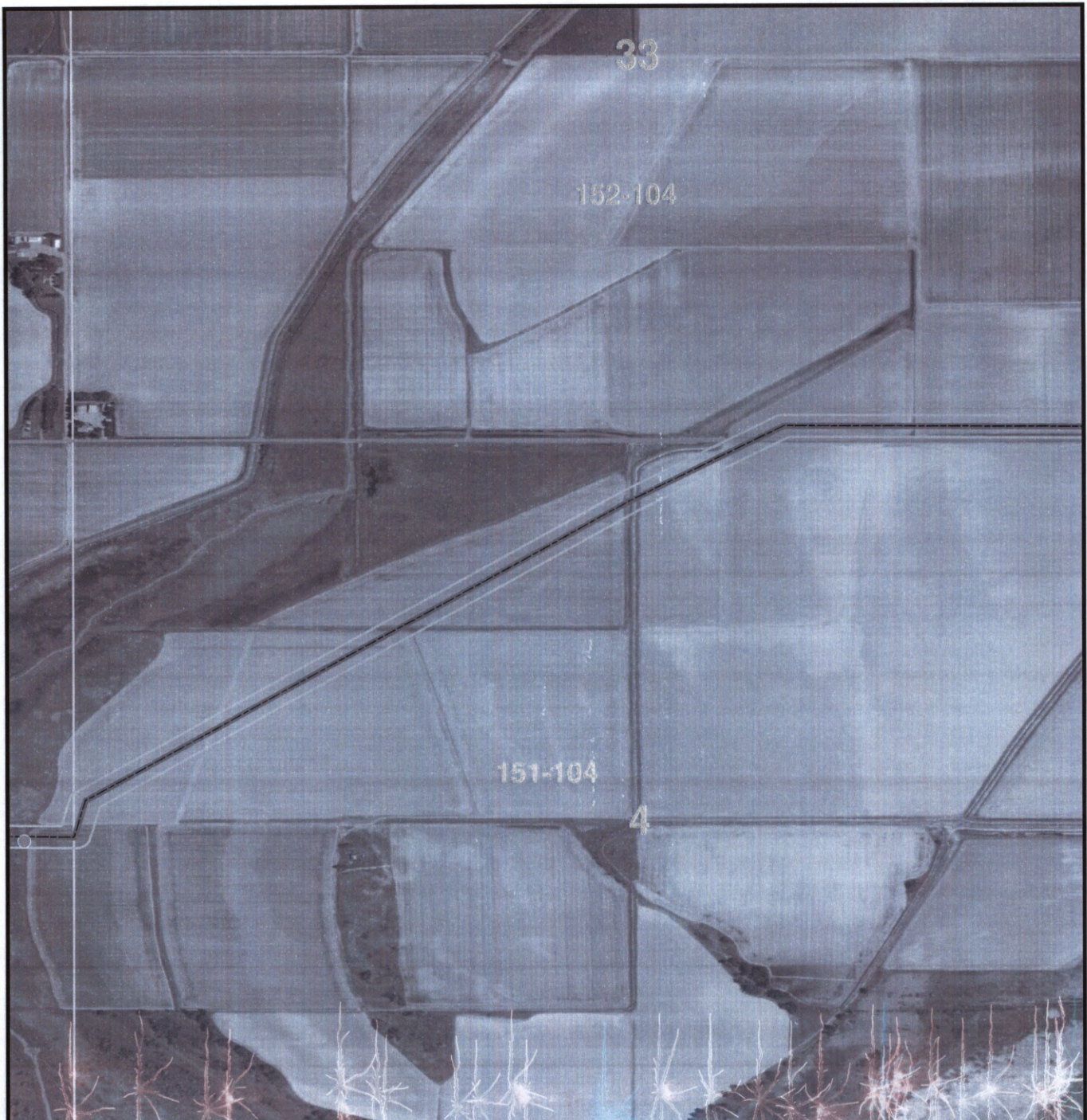
**1B Line - McKenzie County ND  
Trees and Shrubs**



Highland Operating, LLC  
205 West Maple, Suite 1100  
Enid, Oklahoma 73701  
580-616-2080

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**Legend**

- Ash, Green
- Blue Spruce
- Boxelder
- Buffaloberry, Silver
- Caragana
- Chokecherry
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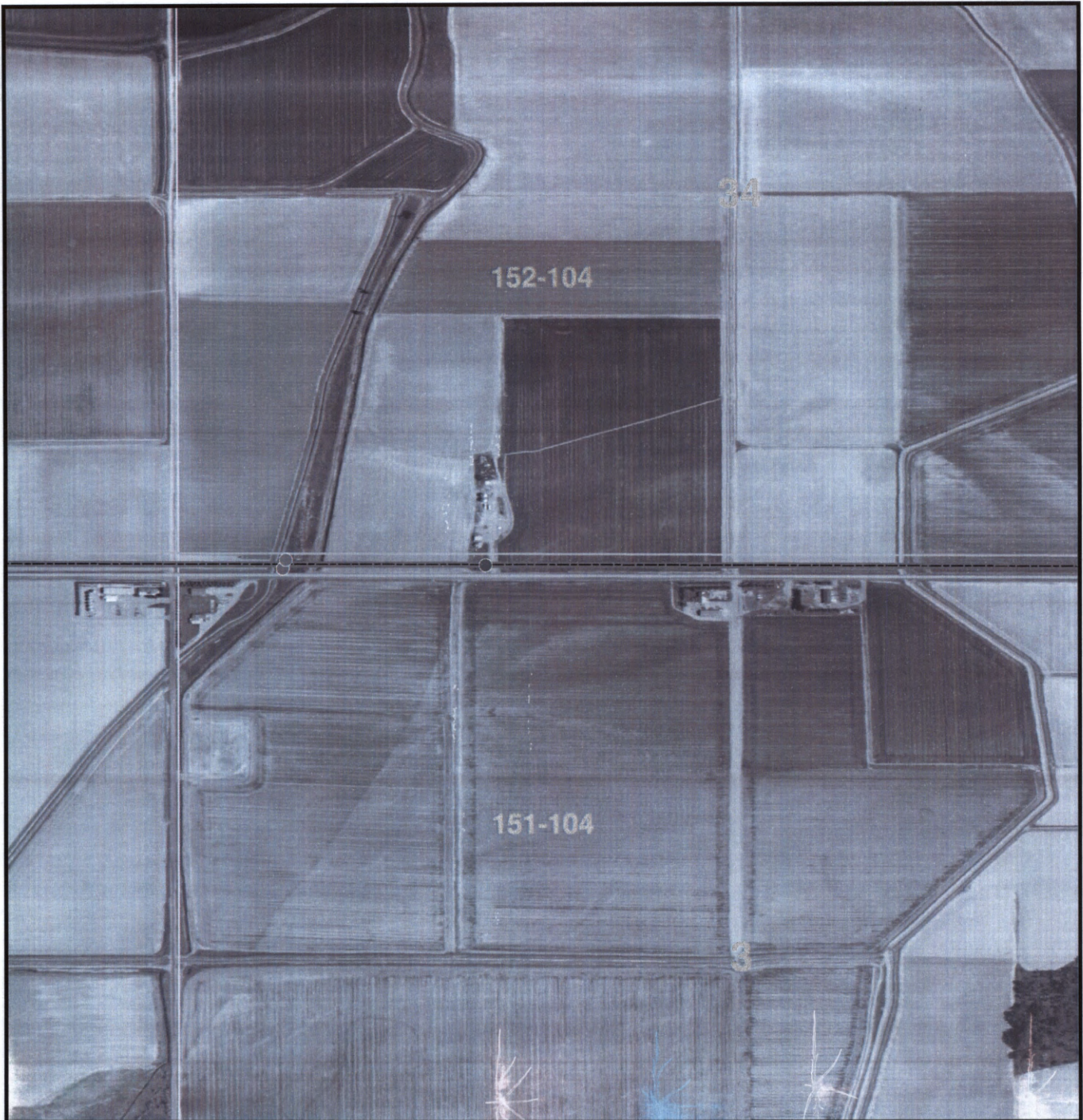
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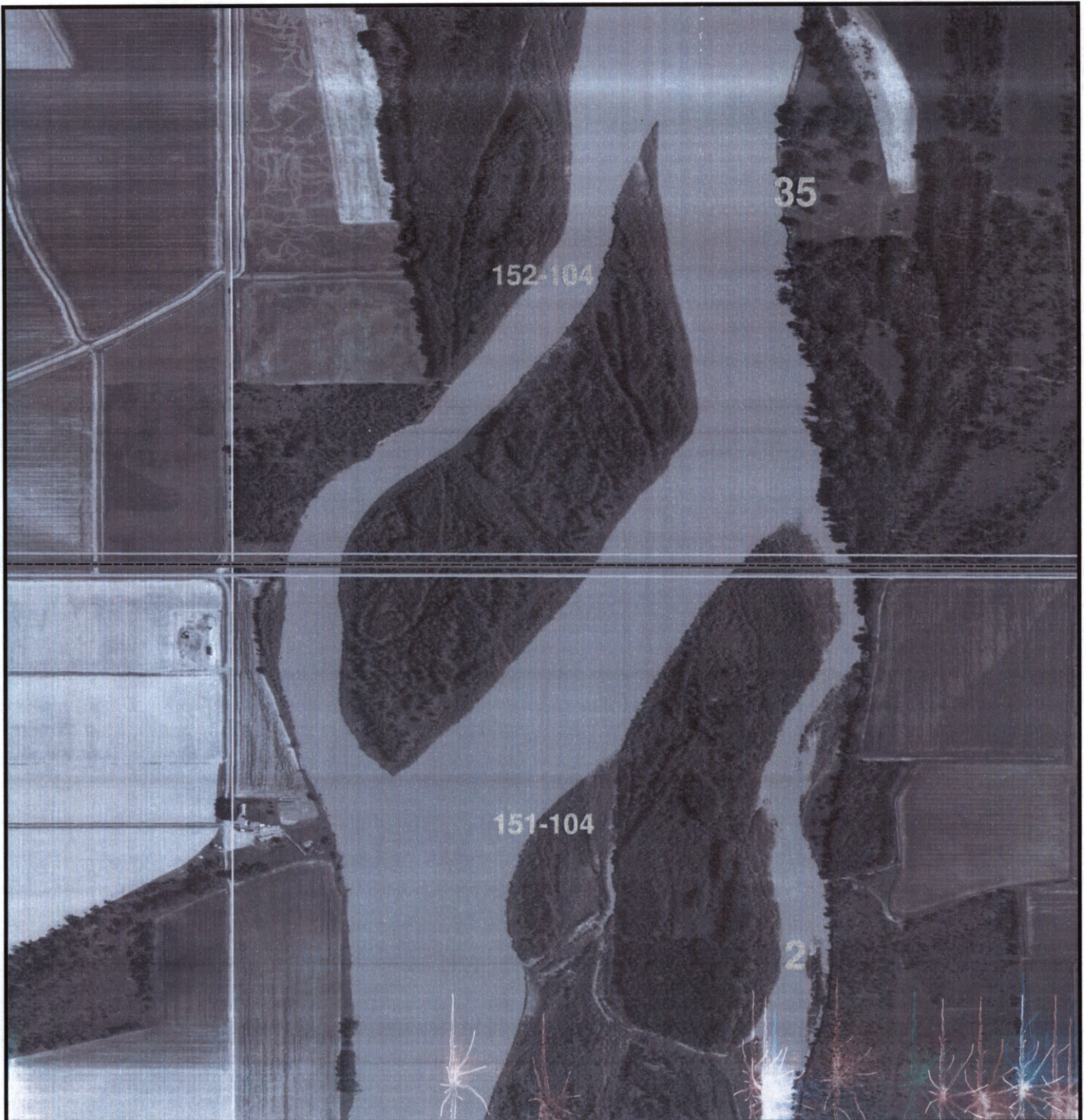
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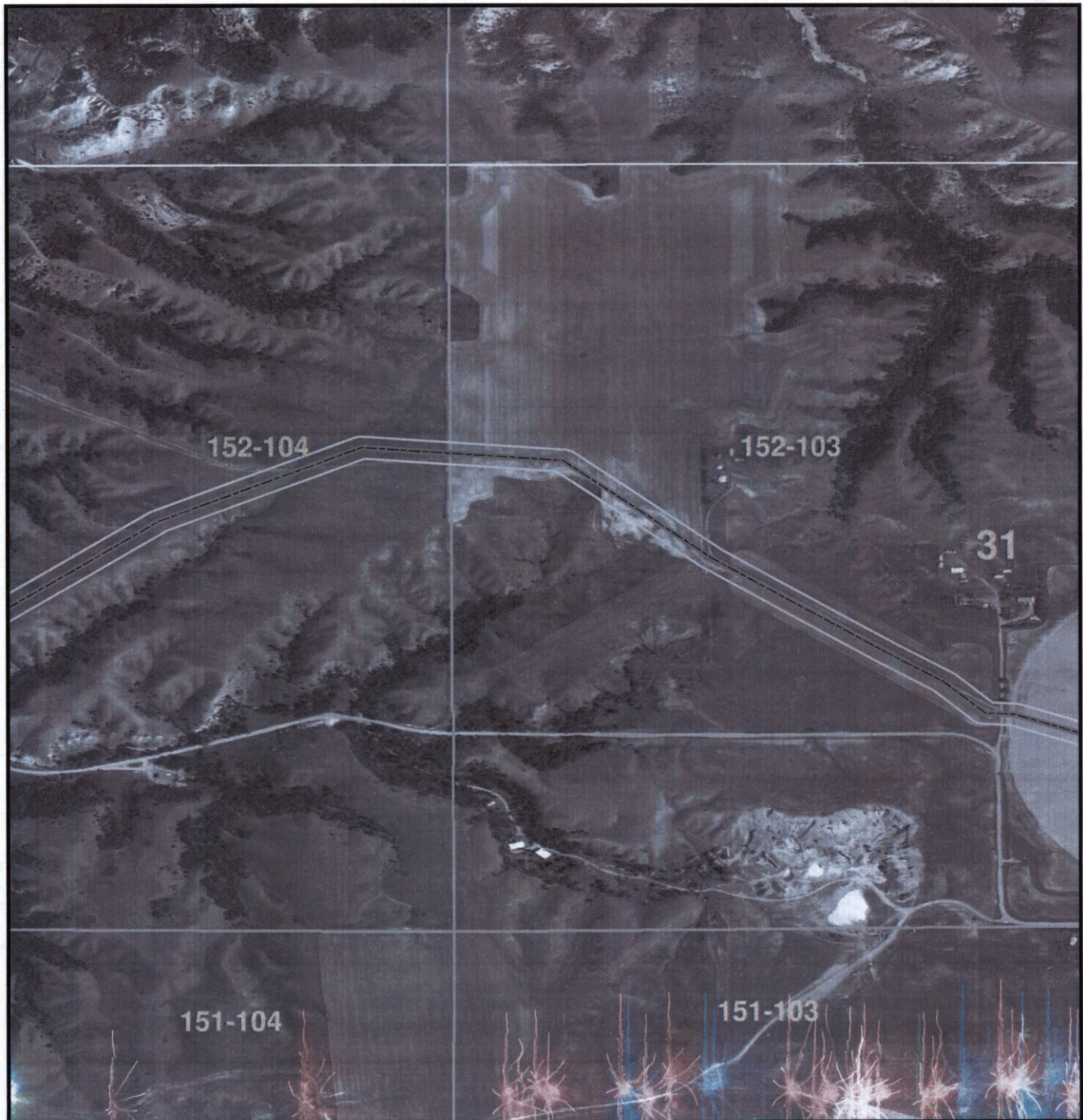
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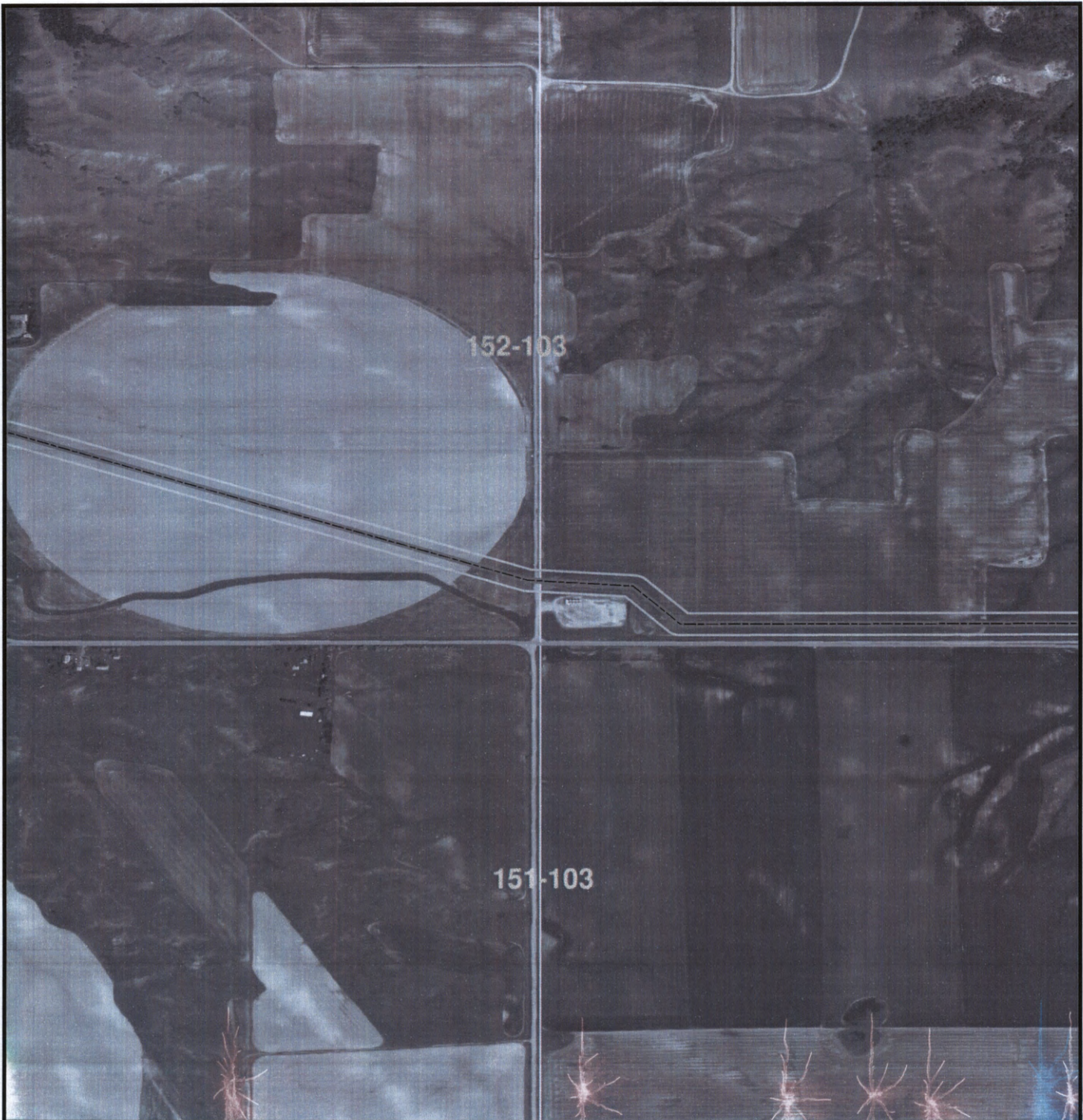
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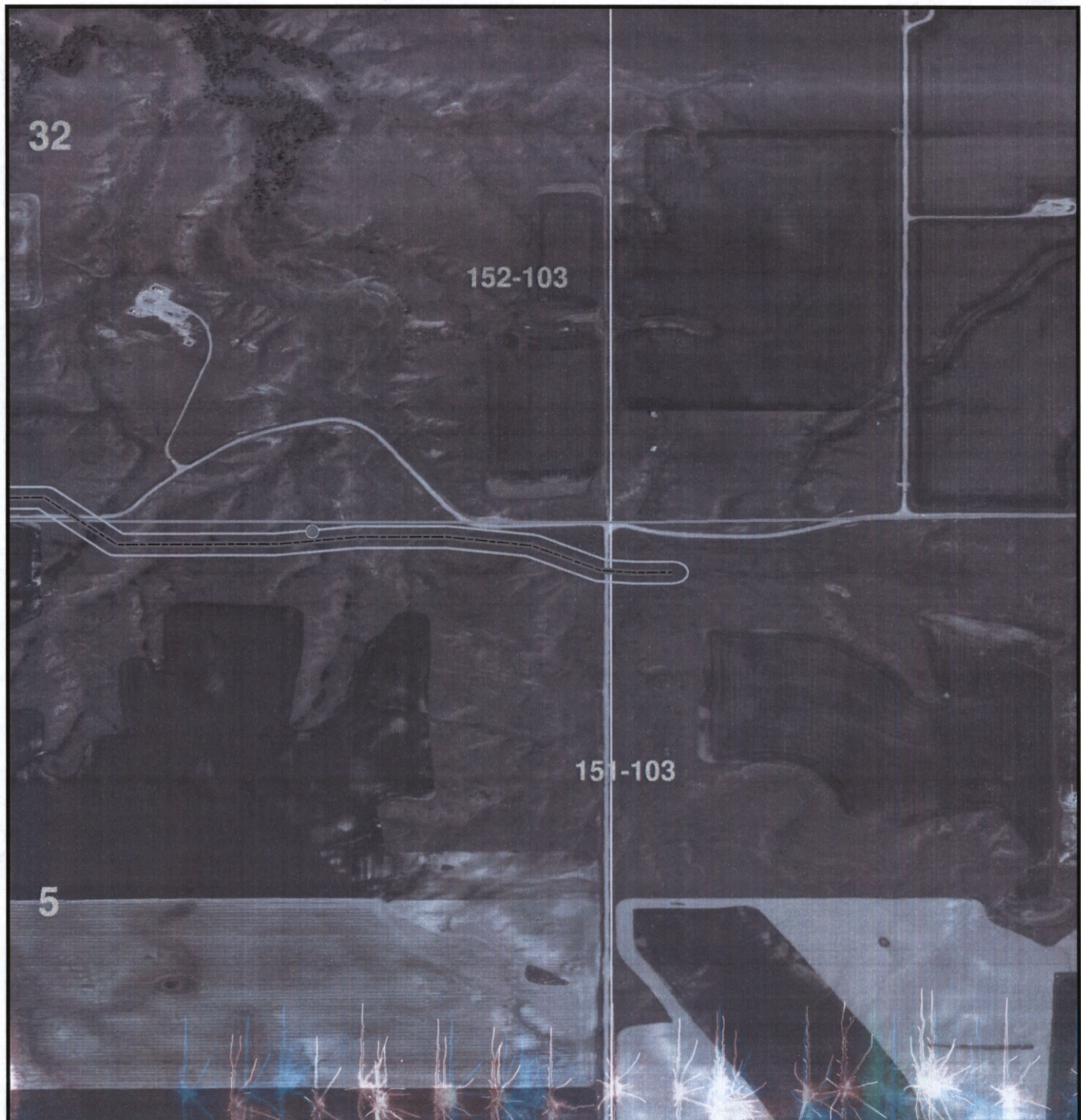
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