Pensacola Hydroelectric Project FERC Project No. 1494

Exhibit A Description of Project

Final License Application

Prepared for



Prepared by



May 2023

TABLE OF CONTENTS

				Page		
1.	Desc	ription o	f Facilities	1		
	1.1	Dam		1		
		1.1.1	West Non-Overflow Section	1		
		1.1.2	Multiple Arch Section	1		
		1.1.3	Main Spillway Section	2		
		1.1.4	East Non-Overflow Section	2		
		1.1.5	Middle Spillway Section	2		
		1.1.6	East Spillway Section	2		
	1.2	Spillwa	ay Sections	2		
		1.2.1	Main Spillway Section	2		
		1.2.2	Middle Spillway Section			
		1.2.3	East Spillway Section	2		
	1.3	Power	house and Intake Structure	3		
2.	Desc	ription of	f Reservoir	4		
3.	Desc	ription of	f Generating Units	4		
4.	Tailra	ace		5		
5.			ation and Transmission Equipment			
J.	Switt	Jilliy Sta	tuon and mansinission Equipment			
6.	Appu	Appurtenant Equipment				
7.	Unite	United States Land within the Pensacola Project Boundary				
8.	Work	Works Cited6				

APPENDICES

- Appendix A-1: Pensacola Project Location
- Appendix A-2: Pensacola Project Facilities
- Appendix A-3 Nameplate Pictures
- Appendix A-4: Principal Electrical Circuits
- Appendix A-5: Report on Federal Lands Within the Project Boundary

LIST OF ABBREVIATIONS

cfs cubic feet per second

FERC Federal Energy Regulatory Commission

FPA Federal Power Act

Grand Lake O' the Cherokees
GRDA Grand River Dam Authority

hp horsepower kW Kilowatts kV Kilovolts

kVA Kilovolt Amperes

Licensee Grand River Dam Authority
MOD Motor-Operated Disconnect

MVA Megavolt Amperes

MW Megawatts

NAVD North American Vertical Datum 1988 NGVD National Geodetic Vertical Datum 1929

PD Pensacola datum

Pensacola Project Pensacola Hydroelectric Project
Project Pensacola Hydroelectric Project

rpm revolutions per minute

USACE United States Army Corps of Engineers

1. Description of Facilities

The Pensacola Hydroelectric Project (Pensacola Project or Project) is located on the Grand (Neosho) River in Craig, Delaware, Mayes, and Ottawa Counties, Oklahoma. **Appendix A-1** of this application includes a map showing the general location of the Pensacola Project. **Appendix A-2** presents an aerial photograph showing the Pensacola Project facilities, which include the dam with a gated main spillway, middle gated spillway, east gated spillway, powerhouse, tailrace, electrical switching station, transmission, Grand Lake O' the Cherokees (Grand Lake), arch toe pump station, and surrounding land extending landward to an approximate elevation of 750 feet Pensacola Datum (PD).¹ From right to left looking downstream, the principal Project works consist of the intake structure for the powerhouse, main gated spillway adjoining to the dam, middle gated spillway, and east gated spillway.² The Project has an authorized capacity of 105.176 megawatts (MW).

1.1 Dam

The Pensacola Project's dam is a multi-section structure. The different sections, from right to left looking downstream, consist of: West Non-Overflow Section, Multiple Arch Section, Main Spillway Section, East Non-Overflow Section, Middle Spillway Section, and East Spillway Section. A non-Project highway bridge comprised of two lanes and a pedestrian sidewalk, State Highway 28, runs along the top of the dam. The grade elevation of the lanes is approximately 763.5 feet PD at the multiple arch section and 768.5 feet PD at the east and middle spillway segments.

1.1.1 West Non-Overflow Section

The west abutment is connected to the west end of the west non-overflow section of the dam which is a concrete gravity section approximately 28 feet long. The east side of the west non-overflow section is connected to the multiple arch section. The cross-sectional width is approximately 43 feet and the height from the base of the section to the top of the roadbed is approximately 75 feet. The width and height measurements are scaled from the Exhibit F drawings.

1.1.2 Multiple Arch Section

The main portion of the dam is a reinforced concrete multiple-arch structure consisting of 52 buttresses spaced 84 feet apart. The buttresses are hollow except for the first and last. There are 51 free span concrete arches resulting in an approximate length of 4,284 feet. A typical buttress has a length of 84 feet. The dam has a crest elevation of 757 feet PD. An arch section has a cross sectional width varying from approximately 185 to 130 feet. The height from the base of the section to the top of the roadbed varies from approximately 100 to 155 feet. The width and height measurements are scaled from the Exhibit F drawings.

Seepage through the Pensacola Dam and runoff from the surrounding area result in standing water in the ditch at the toe of the dam. The pump station is located outside of Arch 6, which consists of two 6-inch submersible pumps and a single 12-inch vertical turbine pump. The pumps are connected to a 20-inch diameter pipe that discharges into the tailrace below the powerhouse.

¹ Unless otherwise noted on the Project Boundary Map contained in Exhibit G of this application.

² Unless otherwise cited, all facility description attributes are from the Supporting Technical Information Document filed with the FERC January 2021 (GRDA, 2021).

1.1.3 Main Spillway Section

The main spillway section is described in Section 1.2.

1.1.4 East Non-Overflow Section

The east end of the main spillway is connected to the east non-overflow section of the dam which is a concrete gravity section approximately 451 feet long. The east side of the non-overflow is connected to the east abutment. The section has a cross sectional width varying from approximately 70 feet to 40 feet. The height from the base of the section to the top of the roadbed varies from approximately 85 feet to 55 feet. The width and height measurements are scaled from the Exhibit F drawings.

1.1.5 Middle Spillway Section

The middle spillway section is described in Section 1.2.

1.1.6 East Spillway Section

The east spillway section is described in Section 1.2.

1.2 Spillway Sections

The Pensacola Project is comprised of three spillways: Main spillway, Middle spillway, and East spillway.

1.2.1 Main Spillway Section

The main spillway section is integral to the dam on its west end and connected to the east non-overflow section at the other end. The structure is mass concrete with an ogee-shaped spillway with a crest elevation of 730 feet PD. The spillway is comprised of 21 radial gates that are 36 feet wide by 25 feet tall resulting in a structure length of approximately 860 feet. The top of the gate elevation is 755 feet PD. The approximate cross-sectional width is 90 feet and height from the base of the section to the top of the roadbed of a typical section of the spillway is 100 feet. The width and height measurements are scaled from the Exhibit F drawings. The gates are operated by two traveling gate hoists located above the main spillway. Water flows into the main spillway channel below the spillway. The spillway channel merges with the east spillway channel and flows into the tailrace further downstream.

1.2.2 Middle Spillway Section

The middle spillway section is situated about 0.9 mile east of the dam's east abutment. The structure is mass concrete with an ogee-shaped spillway, which has a crest elevation of 740 feet PD. The spillway is comprised of 11 radial gates that are 37 feet wide and 15 feet tall resulting in a structure length of approximately 450 feet. The typical cross-sectional width and height of the middle spillway from the base of the section to the top of the roadbed is approximately 45 feet and 40 feet, respectively. The width and height measurements are scaled from the Exhibit F drawings. Gates are operated by a traveling hoist located at the middle spillway section. Water flows for approximately 0.5 miles within the middle spillway channel until it joins with the east spillway channel.

1.2.3 East Spillway Section

The East spillway section is located approximately 700 feet east of the middle spillway section. The structure is mass concrete with an ogee-shaped spillway, which has a crest elevation of 740 feet PD.

The east spillway is comprised of 10 radial gates that are 37 feet wide and 15 feet tall resulting in a structure length of approximately 410 feet. The typical cross-sectional width and height of the east spillway from the base of the section to the top of the roadbed is approximately 45 feet and 40 feet respectively. The width and height measurements are scaled from the Exhibit F drawings. Gates are operated by a traveling hoist located at the east spillway section. Water flows into the east spillway channel below the spillway. The east spillway channel is approximately 1.5 miles long and 850 feet wide. The east spillway channel merges with the tailrace further downstream.

1.3 Powerhouse and Intake Structure

The powerhouse is located below Arches 2 through 4 of the Pensacola Dam (Arch 1 is the western-most arch). The powerhouse is a multi-story, reinforced concrete building and is 87.75 feet wide in the upstream to downstream direction, 279 feet long in the west to east direction, and approximately 45 feet tall. The elevation of the generator floor is 652.0 feet PD.

The intake structure supplies water to the penstocks that supply flow to the powerhouse's six hydropower units and the house unit. The reinforced concrete structure is located on top of Arches 2 through 4. The intake structure has a length of 246 feet, a cross-sectional width of 23 feet, and a height of 75 feet. The minimum intake elevation is 682 feet PD and the top deck elevation is 757 feet PD. The intake includes vertical trash racks that are 73 feet high with 3.75-inch spacing to catch debris and bulkhead gates that are used to isolate and dewater individual penstocks (Grand River Dam Authority, 2017) (Grand River Dam Authority, 2021). The gates are operated by a traveling gantry crane mounted on the top deck on the intake structure.

Six separate steel penstocks transfer flow from the intake structure to the powerhouse hydroelectric units. The length of the penstocks is approximately 195 feet long. The six main penstocks have a 15-foot diameter and flow is controlled by wicket gates at the entrance of each turbine. Two (2) draft tubes per hydroelectric unit located below the powerhouse discharge the flow in the tailrace. The draft tubes are 12 feet tall by 14 feet wide with an invert elevation of 602.5 feet PD. Slots in the draft tube opening can be utilized to install stoplogs to dewater a unit using a traveling hoist. A separate 3-foot diameter penstock transfers flow to the house unit.³

The draft tubes of the powerhouse discharge in the tailrace located below the powerhouse. The tailrace is approximately 1.5 miles long and 300 feet wide. The tailwater elevations for the Pensacola Project typically range between 620 and 625 feet PD at normal reservoir elevations depending on the conditions at the downstream Lake Hudson Project.

A bypass system, on the west end of the powerhouse, consists of a 30-inch diameter pipe. The system has not been operated in years. It is unknown if any flow could pass through the system due to sedimentation at the intake.

A 30-inch diameter bypass flow pipe was included in the Project's design to provide a means of releasing water from the Project at all times, even when none of the hydropower units are operating or none of the spillway gates are open. It is not needed for the operation of the Project (Grand River Dam Authority,

³ The house unit is currently inoperable and is scheduled to be returned to service in 2025.

2021).

2. Description of Reservoir

Grand Lake O' the Cherokees (Grand Lake) is impounded by the Pensacola Dam and was created in 1940 with the completion of the Pensacola Project. During GRDA's normal Project operations, GRDA anticipates operating the reservoir for power generation purposes between 742 and 745 feet PD during the new license term. Pursuant to section 7 of the Flood Control Act of 1944 and section 7612 of the National Defense Authorization Act for Fiscal Year 2020, GRDA controls the operation of the Project until the reservoir elevation is expected to exceed 745 feet PD, at which time the United States Army Corps of Engineers (USACE) has exclusive jurisdiction over Project operations, for purposes of flood control. The reservoir contains approximately 1.44 million acre-feet in water storage and has a surface area of approximately 45,056 acres at an elevation of 745 feet PD. The reservoir contains approximately 1.31 million acre-feet in water storage and has a surface area of approximately 41,581 acres at an elevation of 742 feet PD (Hunter, S.L., et. al., 2020). The usable water storage between 742 and 745 feet PD is 130,000 acre-feet.

3. Description of Generating Units

The powerhouse has six main hydroelectric units with Francis-style hydraulic turbines and associated generators. The six main hydroelectric units have an as-built turbine head of 117.5 feet. One additional hydroelectric unit, the house unit, has an as-built turbine head of 115 feet.

Each of the 6 main turbines has a nameplate capacity of 17,446 kilowatts (kW) or 23,395 horsepower (hp) at a nameplate flow of 1,950 cubic feet per second (cfs). Each turbine operates at 150 rpm and the normal maximum flow for each turbine is 2,317 cfs (Grand River Dam Authority, 2004). The house turbine has a nameplate capacity of 563 kW or 750 hp.⁴ It has a maximum hydraulic capacity of 60 cfs (Grand River Dam Authority, 2017), and operates at 720 rpm.

Each of the 6 generating units has a generator nameplate rating of 21.640 MW and 24 megavolt Amperes (MVA) at 90% nameplate power factor. The generators are Westinghouse A/C, 60 cycle models generating at 13.8 Kilovolts (kV) (Grand River Dam Authority, 2004).

The 500-kW house unit generator has a nameplate rating of 500 kW and 625 kilovolt amperes (kVA) at 80% nameplate power factor. The generator is a Westinghouse A/C, 60-cycle model which operates at 480 volts. The house unit is generator capacity limited to 500 kW.

The combined generation capacity for the Project is 105.176 MW.5

Pictures of the nameplates for the six main hydroelectric units were filed with the Commission on May 19, 2010. For reference purposes, the May 2010 filing, and pictures of the nameplates of the house unit have been incorporated into this exhibit as **Appendix A-3**.

⁴ Watts are calculated from horsepower: 750 watts equals 1 hp.

 $^{^{\}mbox{\tiny 5}}$ Output is turbine-limited for the six main units.

4. Tailrace

The Project tailrace is approximately 270 feet wide and under normal water elevations approximately 18 feet deep at the downstream end of the powerhouse. The portion of the tailrace immediately downstream of the powerhouse was originally excavated from the chert bedrock during the construction of the project. The entire tailrace extends approximately 7,500 feet downstream of the powerhouse until it merges with the spillway channel.

5. Switching Station and Transmission Equipment

The Pensacola Project's switching station is located on the bluff west of the powerhouse downstream of the arch dam. The primary transmission lines terminate at 15 kV breakers at the non-Project switching station. There are 6 generator leads made of parallel 500k circular mils copper, medium voltage cable operating at 13.8 kV that vary in length from 450 to 650 feet (Grand River Dam Authority, 2017). The 13.8 kV disconnects are the point of interconnect for the Project. A diagram of principal electrical circuits associated with the Pensacola Project is included in **Appendix A-4.**

6. Appurtenant Equipment

Accessory electrical equipment, such as relay devices and sensors, switchgear, switchboards, panels, control equipment, and associated wiring required for the safe, self-protected, operation of the turbine-generator units is included as a part of the Project. Additional equipment includes, but is not limited to, bearing lubrication systems, gate hoist equipment, hoisting equipment for maintenance and repair of the turbine generators, protective devices, and metering devices.

7. United States Land within the Pensacola Project Boundary

Historically, the Project has never occupied any lands of the United States. In the last relicensing, for example, no federal lands were identified at the Project, and the Commission imposed no federal land use annual charges requirement in the license (Federal Energy Regulatory Commission, 1992). As recently as 2017, the Commission concluded that the Project "does not occupy federal lands" (Grand River Dam Authority, 2017).

At the outset of the relicensing effort, however, the U.S. Department of the Interior, Bureau of Indian Affairs (BIA) on March 6, 2018 filed with the Commission Trust Maps based on land inventory data contained in the BIA's Trust Asset and Accounting Management System (TAAMS), which contains trust and restricted fee lands of federally-recognized Native American Nations and Native American individuals (Bureau of Indian Affairs, 2018). In response, the Commission cited GRDA's responsibility under federal regulations to identify all lands of the United States as part of its Application for New License:

As the Commission's regulations require, in its final license application, GRDA must provide exhibit G maps that show a project boundary enclosing all project works and lands necessary for operation and maintenance of the project and other project purposes including recreation, shoreline control, and protection of environmental resources (see 18 C.F.R section 4.41(h)(2)). Further, the Commission's regulations require that GRDA

provide an exhibit A that describes all lands of the United States that are enclosed within the project boundary, identified and tabulated by legal subdivisions of a public land survey of the affected area or, in the absence of a public land survey, by the best available legal description (see 18 C.F.R. section 4.51(b)(6)) (Federal Energy Regulatory Commission, 2018).

Accordingly, GRDA over the past several years has completed a comprehensive review and legal analysis of all lands identified by BIA from its TAAMS report and map provided to the Commission in 2018. **Appendix A-5** contains GRDA's report of this effort, together with title work conducted on all parcels that BIA identified as occurring within or immediately adjacent to the current Project boundary.

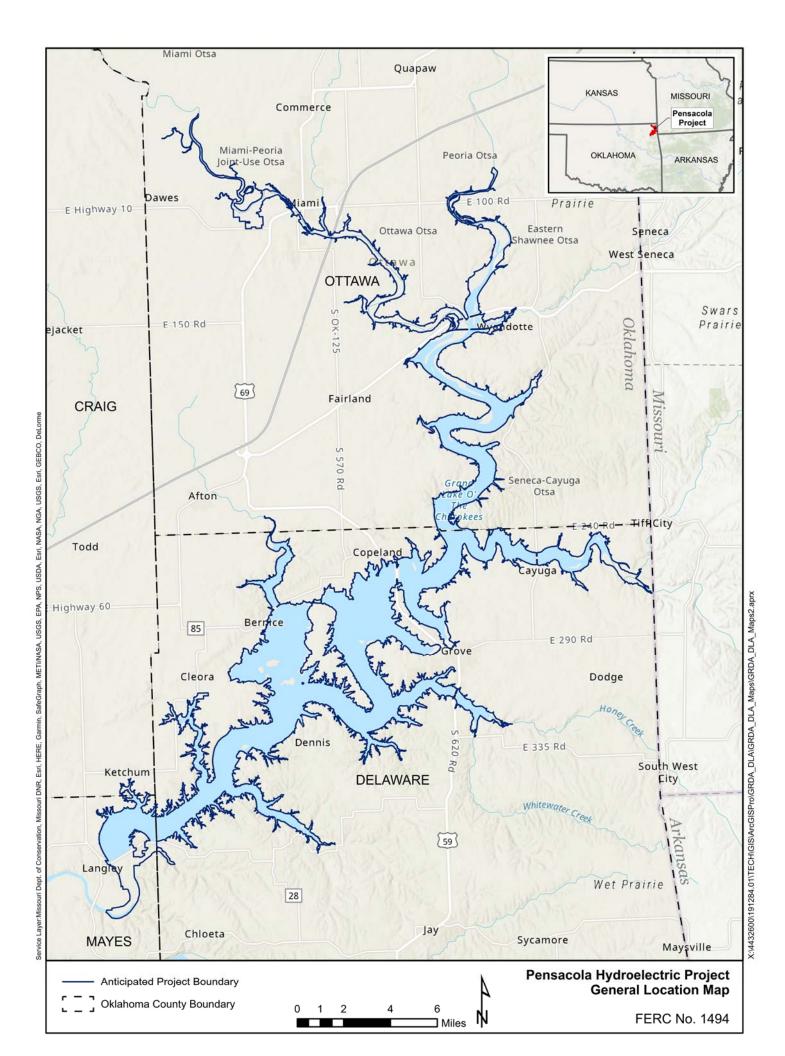
As a result of this effort GRDA has concluded that 65.812 acres of United States lands, including 57.69 acres of wetland easements, are included within the Project boundary.⁶

8. Works Cited

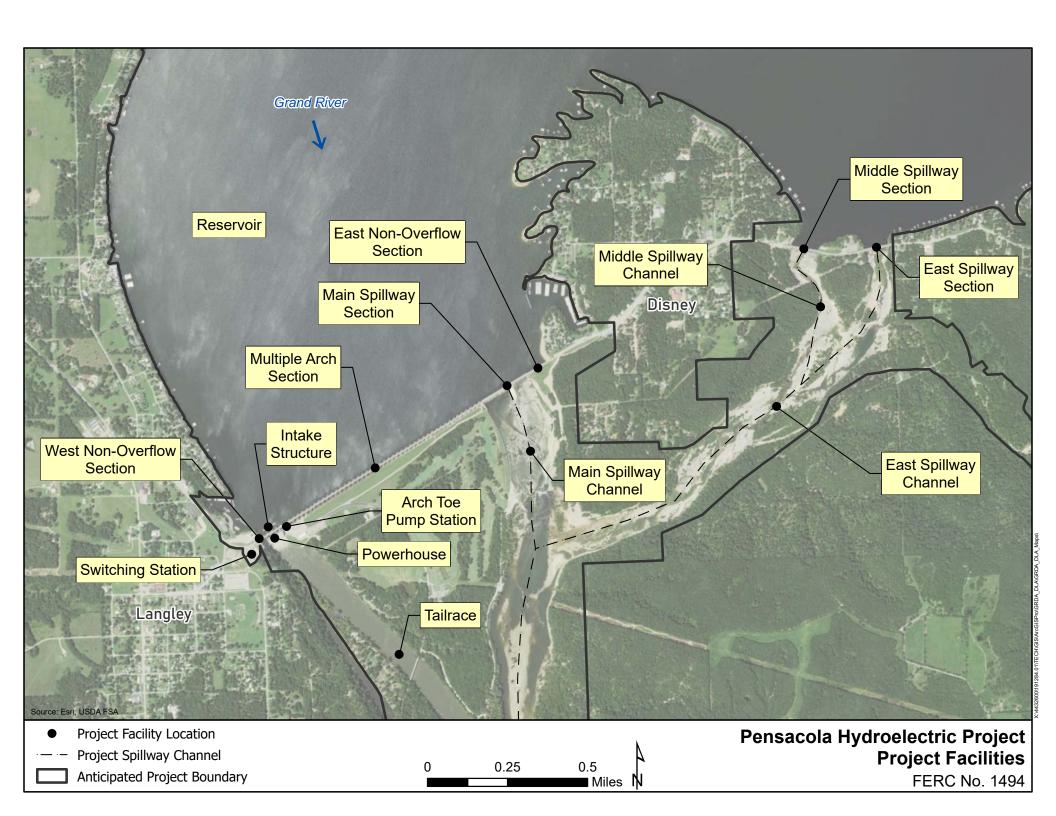
- Bureau of Indian Affairs. (2018). Submittal of Tribal Lands Maps for the Pensacola Project, FERC Accession Nos. 20180306-5100, 20180306-5111, 20180306-5112. March 6, 2018.
- Federal Energy Regulatory Commission. (1992). *Grand River Dam Authority, Project No. 1494-002-Oklahoma, Order Issuing New License.* 59 FERC ¶62,073. April 24, 1992.
- Federal Energy Regulatory Commission. (2018). Study Plan Determination of the Pensacola Project Under P-1494, FERC Accession No. 20181108-3052. November 8, 2018.
- Grand River Dam Authority. (2004). As Built Exhibit A Under P-1494, FERC Accession No. 20040624-0097. June 24, 2004.
- Grand River Dam Authority. (2017). Pensacola Project (FERC No. 1494) Notice of Intent to File License Application and Pre-Application Document, Grand River Dam Auth., 159 FERC ¶ 62,341. February 1, 2021.
- Grand River Dam Authority. (2021). Supporting Technical Information Document Revision 3, FERC Accession No. 20210205-5148. February 5, 2021.
- Hunter, S.L., et. al. (2020). Bathymetric Map, Surface Area and Capacity of Grand Lake O' the Cherokees, Northeastern Oklahoma, 2019. Denver, USGS.

⁶ This acreage figure is based upon the shape files provided to the BIA and DOI on March 15, 2023. See also Appendix A-5.

APPENDIX A-1 Project Location



APPENDIX A-2 Project Facilities



APPENDIX A-3 Nameplate Pictures





May 12th, 2010

2010 MAY 19 P 1:55

REGUEATERY COMMISSION

Secretary's Office Federal Energy Regulatory Commission 888 First Street Northeast Washington D.C. 20426

Subject: Project No. 1494-274

Dear Sir.

Earlier on 4/16/2010 the following were submitted to Mr. Joseph Fayyad. Upon receipt and evaluation he requested that I send three copies for your review. Enclosed are the installed turbine and generator nameplates on Pensacola's six units.

These reflect the revised installed capacities authorized in the FERC order.

An additional three copies of this letter and photographs were sent to:

Mr. Charles Wagner, Regional Engineer FERC Division Of Dam Safety Atlanta Regional Office 3700 Crestwood Parkway, Suite 950 Duluth, GA 30096

Charles D Atkin

Sincerely

Superintendent-Hydro Operations

Grand River Dam Authority

cc: Kevin Easley-Chief Executive Officer
Mike Kiefner-Chief Operating Officer
Gretchen Zumwalt-Smith General Counsel
Mr. Joseph Fayyad Engineering Team lead

[☐] ADMINISTRATION • PO Box 409 • Vinita OK 74301-0409 • 918-256-5545 • Fax 918-256-5289 ☐ COAL-FIRED COMPLEX • PO Box 609 • Chouteau OK 74337 • 918-824-1074 • Fax 918-825-7791

CUSHING FIELD OFFICE • PO Box 329 • Cushing OK 74023 • 918-225-1507

[□] ENERGY CONTROL CENTER • PO Box 772 • Locust Grove OK 74352 • 918-479-5249 • Fax 918-825-1935 □ ENVIRONMENTAL • PO Box 220 • Chouteau OK 74337 • 918-824-1034 • Fax 918-824-2049

 $[\]Box$ LAKE PATROL • PO Box 70 • Langley OK 74350 • 918-782-9594 • 918-782-4723 Fax

U OFFICE OF ECOSYSTEMS MANAGEMENT • PO Box 409 • Vinita OK 74301-0409 • 918-256-5545
U OKLAHOMA CITY • PO Box 2605 • Oklahoma City OK 73104-2605 • 405-297-9963 • Fax 405-290-7631

[☐] PENSACOLA DAM • PO Box 70 • Langley OK 74350 • 918-782-3382 also Fax

[□] **SAFETY** • PO Box 10 • Chouteau OK 74337 • 918-824-1034 • Fax 918-824-2049

[☐] SALINA PUMPED STORAGE PROJECT + PO Box 609 + Salina OK 74365 + 918-434-5920 also Fax ☐ TRANSMISSION/ENGINEERING + PO Box 1128 + Pryor OK 74362 + 918-825-0280 + Fax 918-825-9416

Unit #1

WOITH SIEMENS HYDRO POWER GENERATION GRAND RIVER DAM AUTHORITY

PROJECT: PENSACOLA DAM TYPE OF TURBINE: FRANCIS

MACHINE NO: 18622 YEAR BUILT: 1999

TURBINE RATING

GENERATOR RATING

THEAD = 117.5 FT

KVA = 24,000

RISE = 60°C

EED = 150 RPM

VOLTS = 13,800

FIELD VOLTS = 230

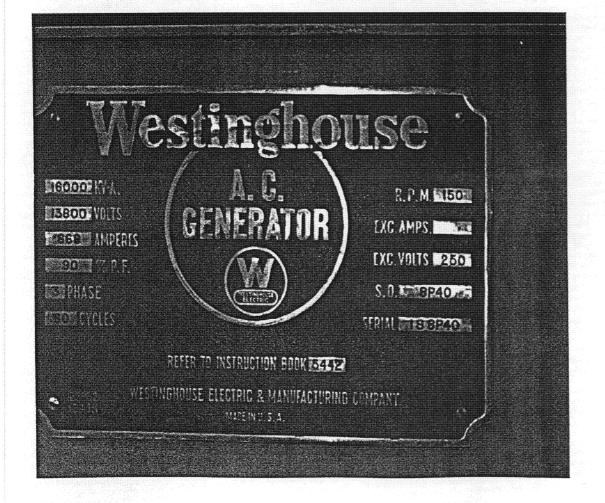
TPUT = 23,395 HP (17,446 KW) AMPS = 1006

FIELD AMPS = 540

X. FLOW = 2317 CFS

POWER FACTOR = 0.9 FREQUENCY = 60 HZ

YORK, PENNSYLVANIA, USA



Unit #2



PROJECT: PENSACOLA DAM TYPE OF TURBINE: FRANCIS

MACHINE NO: 18928 YEAR BUILT: 2000

TURBINE RATING

GENERATOR RATING

NET HEAD = 117.5 FT

KVA = 24,000

RISE = 60° C

SPEED = 150 RPM

VOLTS = 13,800

FIELD VOLTS = 230

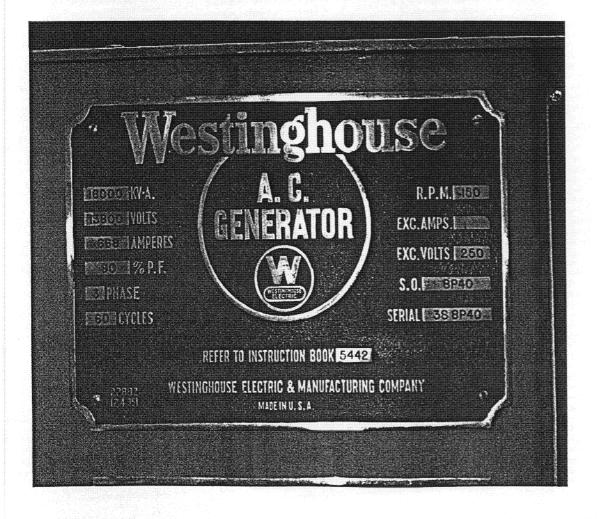
OUTPUT = 23,395 HP (17,446 KW) AMPS = 1006

FIELD AMPS = 540

MAX, FLOW = 2817 CFS

POWER FACTOR = 0.9 FREQUENCY = 60 HZ

YORK, PENNSYLVANIA, USA



Unit #3

VOITH SIEMENS

HYDRO POWER GENERATION **GRAND RIVER DAM AUTHORITY**

PROJECT: PENSACOLA DAM TYPE OF TURBINE: FRANCIS

MACHINE NO: 18621

YEAR BUILT: 1998

TURBINE RATING

GENERATOR RATING

ET HEAD = 117.5 FT

EED = 150 RPM

KVA = 24,000

RISE = 60°C

VOLTS = 13,800

JTPUT = 23,395 HP (17,446 KW) AMPS = 1006

FIELD VOLTS = 230

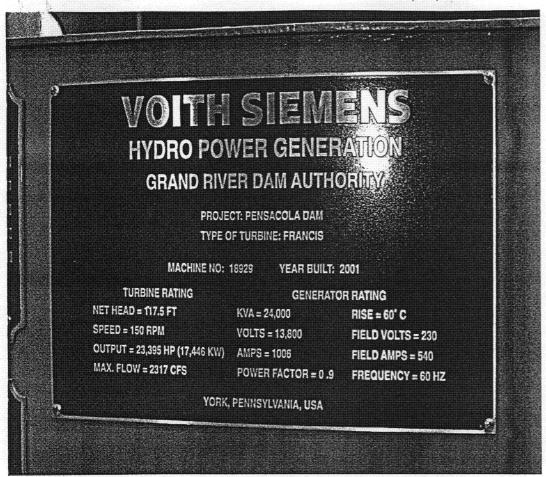
IX. FLOW = 2317 CFS

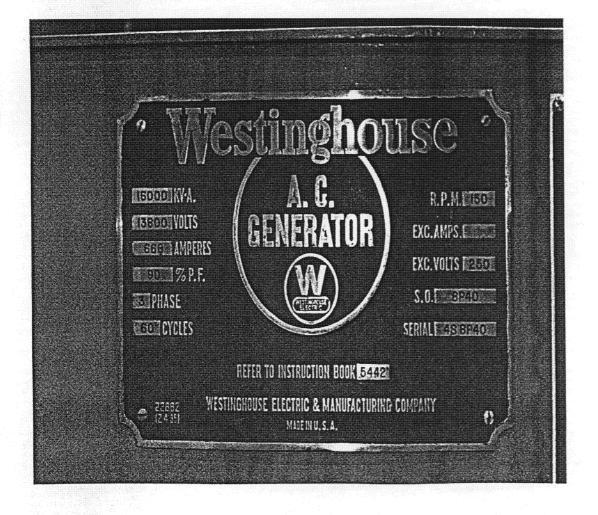
POWER FACTOR = 0.9 FREQUENCY = 60 HZ

FIELD AMPS = 540

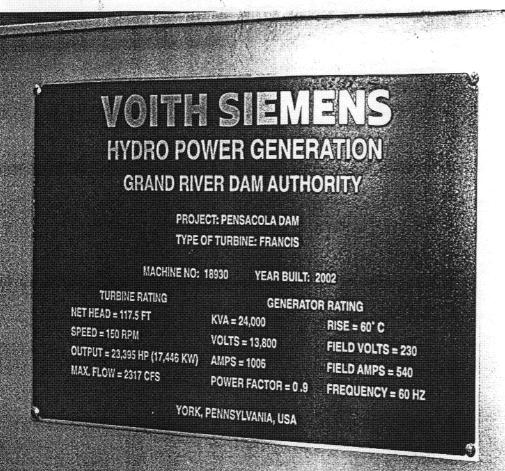
YORK, PENNSYLVANIA, USA

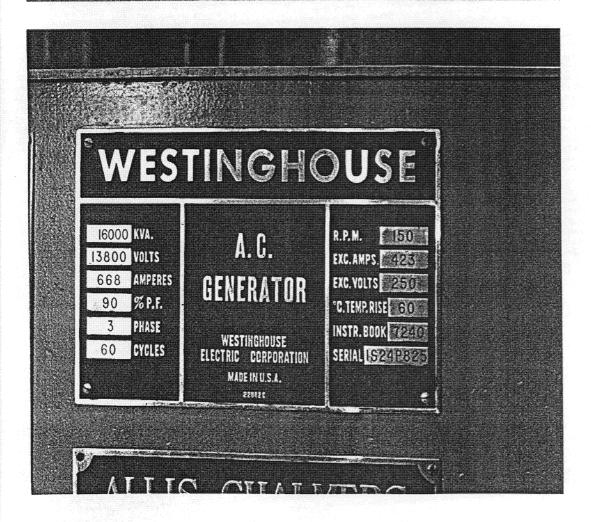
5000 140 5000 FXICANIC 669 EXCLADITS 1250 20 \$11 \$1111 28 8 9 10 REFER TO INSTRUCTION BOOK 5442 WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY MINERIUS A.





Unit #5





Unit #6

VOITH SIEWENS HYDRO POWER GENERATION GRAND RIVER DAMAUTHORITY

PROJECT: PENSACOLA DAM TYPE OF TURBINE: FRANCIS

MACHINE NO: 18931

YEAR BUILT: 2003

TURBINE RATING

GENERATOR RATING

NET HEAD = 117.5 FT

KVA = 24,000 RISE = 60°C

SPEED = 150 RPM

VOLTS = 13,800

FIELD VOLTS = 280

OUTPUT = 23,395 HP (17,446 KW) AMPS = 1006

FIELD AMPS = 540

MAX. FLOW = 2317 CFS

POWER FACTOR = 0.9 FREQUENCY = 60 HZ

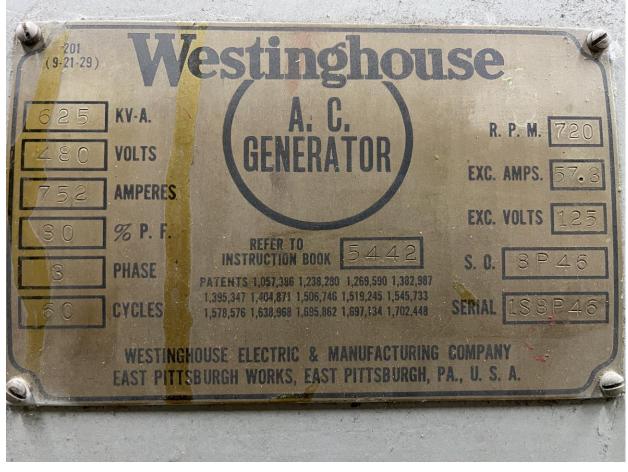
YORK, PENNSYLVANIA, USA

WESTINGHOUSE 5000 WA 150 A. G. TOTAL VOLTS EXCLAMPS. 428 SSS AMPERES GENERATOR EXC. VOLTS 250 7.0 C. TEMP. RISE 60 INSTR. BOOK 1/2:10 WESTINGHOUSE ELECTRIC **WIR** SERIAL IS SUPASO CORPORATION MADERNISA

Document Content(s)	
016B54FB-66E2-5005-8110-C31FAFC91712.TIF	1

Document Accession #: 20100519-0019 Filed Date: 05/19/2010





Pensacola Hydroelectric Project FERC Project No. 1494

Appendix A-5
Grand River Dam Authority
Land Analysis



May 2023

TABLE OF CONTENTS

		Page
1.	Introduction	1
2.	Methods	1
3.	Results	3

EXHIBITS

Exhibit 1: Detailed Parcel Maps and Corresponding Title Opinions

LIST OF ABBREVIATIONS

BIA Bureau of Indian Affairs

DLA Draft License Application

DOI Department of Interior

FLA Final License Application

GRDA Grand River Dam Authority

Project Pensacola Hydroelectric Project

TAAMS BIA's Trust Asset and Accounting Management System

1. Introduction

At the outset of the relicensing effort for the Pensacola Hydroelectric Project (Project), the U.S. Department of the Interior, Bureau of Indian Affairs (BIA) on March 6, 2018 filed with the Commission Trust Maps based on land inventory data contained in the BIA's Trust Asset and Accounting Management System (TAAMS), which contains trust and restricted fee lands of federally-recognized Indian tribes and individual Indians (Bureau of Indian Affairs, 2018). In response, the Commission cited Grand River Dam Authority's (GRDA's) responsibility under federal regulations to identify all lands of the United States as part of its Application for New License:

As the Commission's regulations require, in its final license application, GRDA must provide Exhibit G maps that show a project boundary enclosing all project works and lands necessary for operation and maintenance of the project and other project purposes including recreation, shoreline control, and protection of environmental resources (see 18 C.F.R section 4.41(h)(2)).

Further, the Commission's regulations require that GRDA provide an Exhibit A that describes all lands of the United States that are enclosed within the Project boundary, identified and tabulated by legal subdivisions of a public land survey of the affected area or, in the absence of a public land survey, by the best available legal description (see 18 C.F.R. section 4.51(b)(6)).

Accordingly, GRDA over the past several years has completed a comprehensive review and legal analysis of all lands identified by BIA from its TAAMS report and map provided to the Commission in 2018.

The following is GRDA's report of this effort, together with title work conducted on all parcels identified by BIA occurring within or immediately adjacent to the current Project boundary.

2. Methods

As part of the relicensing process, GRDA has reviewed the Project boundary in an effort to identify lands or interests in land under federal ownership, including "trust or restricted lands" and "trust or restricted interest in land" (collectively, "Trust Land"), which federal law defines as follows:

- (i) "trust or restricted lands" means lands, title to which is held by the United States in trust for an Indian tribe or individual, or which is held by an Indian tribe or individual subject to a restriction by the United States against alienation; and
- (ii) "trust or restricted interest in land" or "trust or restricted interest in a parcel of land" means an interest in land, the title to which is held by an Indian tribe or individual subject to a restriction by the United States against alienation."

In October 2016, as a starting point, GRDA independently reviewed online land records in the county clerk's office and parcel data from the county assessor's office for Delaware, Ottawa, Craig, and Mayes counties for all parcels with a tribal affiliation near the Project boundary.

Grand River Dam Authority

¹ 25 U.S.C. § 2201(4)

Based upon GRDA's research, a map was developed to show potential parcels of Trust Land located within the Project boundary.

On February 17, 2017, GRDA sent a letter to BIA requesting information about Trust Land in the above counties near the reservoir and its tributaries. Upon request by the BIA, GRDA narrowed the area of the request to eliminate portions of land based on distance from the Project boundary (e.g., the south half of Section 6, rather than all of Section 6).

Thereafter on June 20, 2017, the BIA e-mailed excel files with legal descriptions of Trust Lands potentially within the Project boundary and GRDA hired a surveyor to create GIS shapefiles for tracts that had been identified as Trust Land. These tracts were then mapped to see what land may lie within the Project boundary. Tracts appearing to lie in the Project boundary were then abstracted and examined by a real estate title attorney.

On August 16, 2018, GRDA met with the BIA to discuss information contained in BIA maps filed with FERC on March 6, 2018. The BIA explained they were still working on the CNM (Could Not Map) tracts requiring further manual research. The BIA stated they would provide updated maps to GRDA within the next month. At that meeting GRDA was advised to contact Cherokee Nation as it maintains its own records. Letters were sent August 21, 2017, and October 24, 2018, to Cherokee Nation requesting information on identifying Tribal Lands for all four counties. On October 30, 2018, Cherokee Nation responded it had sent all its Tribal Land information on April 30, 2018 to the BIA.

On September 18, 2018, the BIA filed supplemental information regarding Trust Land Maps of previous CNM tracts that were now mapped per the BIA. The information filed with FERC by the BIA was compared and combined with GRDA's previous maps to determine any additional areas where it appeared Trust Lands intersected with the Project boundary. Additional abstracts and real estate title examinations were conducted for tracts not already examined.

As part of the development of the Exhibit G maps, GRDA made minor adjustments to the proposed Project boundary, in areas where such adjustments would still maintain within the proposed boundary all lands necessary for Project purposes. In addition, when developing the Exhibit G maps, GRDA identified additional federal lands (federal wetland easements) contained within the proposed Project boundary.

In the Draft License Application (DLA), as a result of the methods described above, GRDA enclosed individual maps for each parcel identified by the BIA that it found either intersecting with, immediately adjacent to, or in close proximity of the anticipated Project boundary. In most cases, GRDA's abstract and title work found the land ownership information provided by BIA did not account for GRDA's acquisitions of Project lands contemporaneous with the original development of the Project. Thus, in most instances, BIA's records indicating federal trust land within the Project were inaccurate, as GRDA had acquired fee title to properties that BIA's system had misidentified as federal trust lands.

Also in the DLA, GRDA indicated the assessment of 8.06 acres of federal trust lands within the anticipated Project boundary was based upon land ownership files provided by BIA. GRDA used the BIA data as it was provided without adjustment for difference in coordinate system, projection, or digitizing accuracies. Maps displaying the acreage were included in Exhibit 1 of Appendix A-5 of the DLA. In the DLA, GRDA indicated that the location of the parcels may be shifted and were not mapped as precisely

as the background data indicating such mapping practices could lead to inaccurate acreage calculations. GRDA also indicated it would discuss this situation with the BIA and agree upon a solution to be displayed in the Final License Application (FLA).

Following the filing of the DLA, GRDA contacted the BIA by letter on March 9, 2023 to provide five maps that GRDA believed more accurately portrayed the federal land parcels and requested BIA concurrence. BIA responded to GRDA via email on March 10, 2023, requesting the shape files for the five maps. On March 15, 2023, via email, GRDA provided the shape files to the BIA, and the Solicitor's Office of the U.S. Department of the Interior (DOI) per BIA's request. In this submittal, GRDA included an explanation regarding the need for further revision of parcel V for consistency with the Exhibit G maps filed with the DLA. Additionally, GRDA informed the BIA that the abstracts used as a basis for the ownership information were available for their review.

On March 30, 2023, via email, DOI asked whether the abstracts were digitized and if not, could they arrange a date and time to see them. GRDA responded via email on March 30, 2023, indicating the abstracts are located at the GRDA Ecosystems & Education Center in Langley and are available for viewing from 8:30 a.m. to 4:30 p.m. GRDA also requested some dates and times for GRDA to arrange for a conference room for viewing.

On May 4, 2023, via email, DOI requested GRDA if the abstracts were available for viewing on either May 15 or 17, 2023. GRDA responded on May 4, 2023, indicating they could accommodate either date for viewing. Viewing of the abstracts took place on May 15, 2023. Documentation of Consultation is included in Appendix X-3 of this FLA.

3. Results

As of the date of this FLA, GRDA has not received any additional comments on the 5 maps provided to the BIA and DOI on March 15, 2023. As a result, GRDA has enclosed the individual maps for each parcel identified by the BIA that it has found either intersecting with, immediately adjacent to, or in proximity of the anticipated Project boundary as was submitted to the BIA and DOI on March 15, 2023. In most cases, GRDA's abstract and title work has found the BIA information provided does not provide detailed enough information to properly map the federal trust land because GRDA's ownership on the parcels identified by the BIA is not accurate.

The maps provided to the BIA and DOI on March 15, 2023 and enclosed in Exhibit 1 are an attempt by GRDA to adjust the TAAMS report information to correspond with the geo-referenced and accurate background information such as the public land survey system information displayed on each map.

For purposes of calculating acres of federal land within the Project boundary in this FLA, as stated above GRDA attempted to rectify the precision of the BIA parcel information and the calculated acreage within the Project boundary according to the shape file information provided to the BIA and DOI on March 15, 2023. GRDA intends to consult with BIA to make further refinements, as appropriate and will submit the final results of the consultation with the Commission.

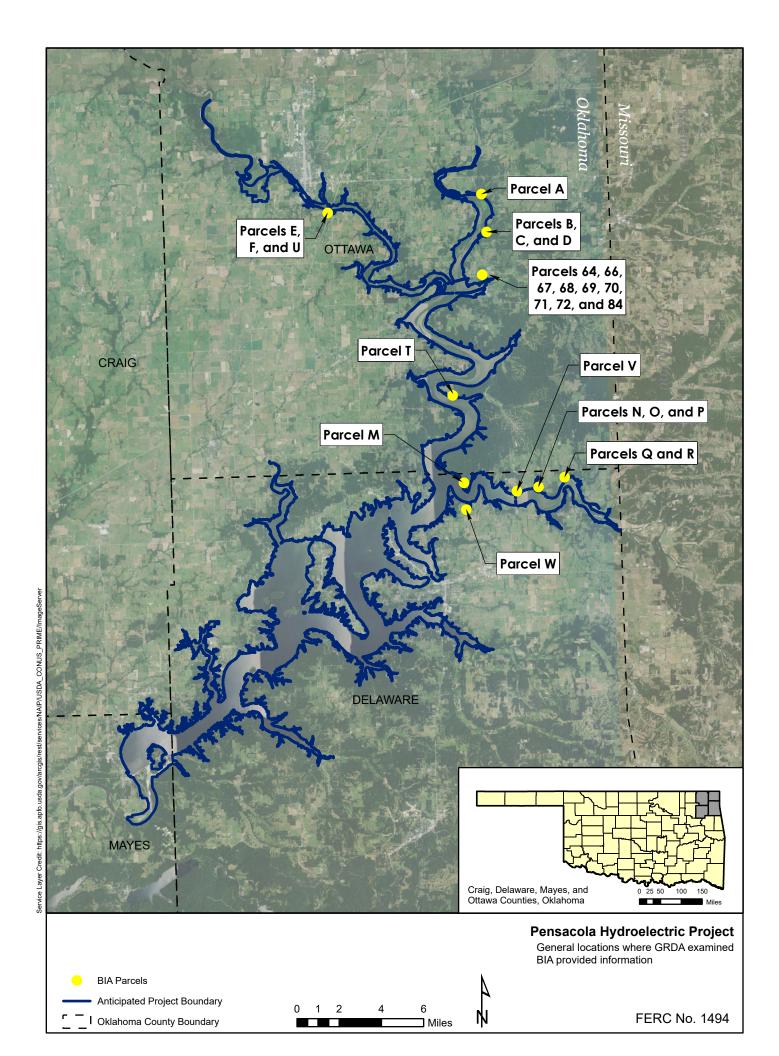
The title and abstract work completed by GRDA results in a total of 8.122 acres² of Trust Land held in

² This acreage figure is based upon the shape files provided to the BIA and DOI on March 15, 2023.

trust by the BIA within the proposed Project boundary. GRDA holds a flowage easement for all 8.122 acres of Trust Land within the proposed Project boundary.

The individual detailed maps and title opinions are enclosed in Exhibit 1.

Exhibit 1 - Detailed Parcel Maps and Corresponding Title Opinions





Parcel 64 - Federal Lands (BIA)

Anticipated Project Boundary (750FT NGVD29) Parcel 64

Section Line

Federal Lands within the Project Boundary: 0 Acres

LAW OFFICES OF MORROW, WATSON, JAMES, AND WEEDN

A PROFESSIONAL CORPORATION
21 SOUTH MAIN P.O. BOX 1168
MIAMI, OKLAHOMA 74355
TEL. 918-542-5501 FAX 918-542-5400

DENNIS J. WATSON *RICHARD D. JAMES JOHN M. WEEDN

COY DEAN MORROW

* Admitted to practice in Oklahoma & Missouri

March 23, 2018

Ms. Tamara Jahnke, Esquire Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Ottawa County Abstract and Title Company Abstract No. 12056
Covering: E ½ SE ¼ SE ¼ in Section 20, Township 27 North, Range 24 East of the Indian Base and Meridian, Ottawa County, Oklahoma;
Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title. This parcel was conveyed by Trust Patent and subsequently by full patent without restrictions in 1917 to Catherine Crotzer by instruments shown at page 4 and 6 of the abstract and recorded in Book 12 at Page 127 and Book 163 at Page 787, respectively. The property was then acquired by John Crotzer from the heirs of Catherine Crotzer through a partition action which resulted in the Sheriff's Deed shown at page 47 of the abstract and recorded June 4, 1945 in Book 187 at Page 745. The property was acquired by J. Howard Meadows and Alta Louise Meadows in 1960 by the Administrator's Deed shown at page 58 of the abstract shown at page 36 of the abstract, and recorded in Book 276 at Page 941. In 2014, The Wyandotte Tribe acquired the property by means of the Warranty Deed shown at page 137 of the abstract and recorded in Book 998 at Page 599. In 2015, the Tribe conveyed the property to the USA, in Trust for the benefit of the Tribe by means of the Warranty Deed shown at page 138 of the abstract, recorded in Book 1021 at Page 571.

A flowage Easement over the subject premises appears at page 16 of the abstract and is recorded in Book 180 at Page 521. This easement was acquired by condemnation by the United States of America, and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises lying below elev. 760 sea level datum.

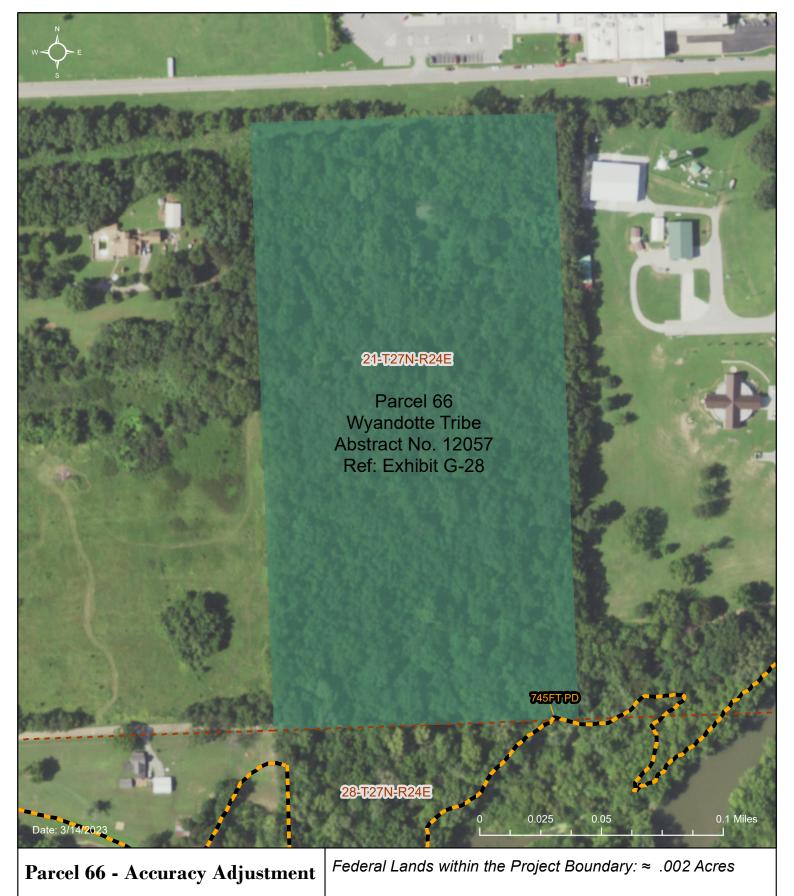
The creation of the flowage easement predated by some seventy years the transfer of the subject premises to the Secretary of the Interior for the benefit of the Wyandotte Tribe, and the property had been free from any restrictions on transfer for almost one hundred years at the time. Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 760 sea level datum, by virtue of the easement acquired by condemnation.

Very truly yours,

RICHARD D. JAMES, OBA No. 4617

FOR THE FIRM

RDJ/le Enc.



Proposed Project Boundary

Federal Lands in Proposed Project Boundary

Flowage Easement on Federal Lands

Parcel 66

Section Line

GRDA holds a flowage easement for all federal lands within the Anticipated Project Boundary for Parcel 66.

The federal acreage is derived from Bureau of Indian Affairs GIS data that has been digitzed, adjusted, and recalculated by GRDA in an effort to increase accuracy.

LAW OFFICES OF MORROW, WATSON, JAMES, AND WEEDN

A PROFESSIONAL CORPORATION
21 SOUTH MAIN P.O. BOX 1168
MIAMI, OKLAHOMA 74355
TEL. 918-542-5501 FAX 918-542-5400

Jay Office:
510 KRAUSE STREET P.O. BOX 1018

JAY, OK 74346 TEL. 918-253-6208 FAX 918-253-6209

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES JOHN M. WEEDN

* Admitted to practice in Oklahoma & Missouri

March 22, 2018

Ms. Tamara Jahnke, Esquire Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Ottawa County Abstract and Title Company Abstract No. 12057 Covering: E ½ SW ¼ SW ¼ in Section 21, Township 27 North, Range 24 East of the Indian Base and Meridian, Ottawa County, Oklahoma; Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title. This parcel, along with the other four parcels which we have examined to date, were part of the property formerly owned by the United States of America and utilized in the operation of the now defunct Seneca Indian Boarding School. An illuminative description of the background and history of the acquisition of these lands by the Federal Government is contained in the decision of Administrative Law Judge Franklin E. Arness which appears at pages 41-53 of the abstract. As set forth therein, a portion of these properties were withheld for school purposes from allotment during the 1890's by the Wyandotte Tribe and purchased by the government from the Tribe in 1934 for purposes of operation of the boarding school. The remaining properties were purchased from various private land owners by the government during the 1940's and also utilized by the boarding school. Upon the closing of the Seneca Indian Boarding School in 1981, all of these properties were transferred to the Secretary of the Interior to be held in trust for the benefit and use of the Wyandotte Tribe of Oklahoma. This transfer is shown at page 32 of the abstract, recorded in Book 977 at Page 275.

A Flowage Easement over the subject premises appears at page 22 of the abstract, and is recorded in Book 180 at Page 521. This easement was acquired by condemnation by the United States of America, and provides for a perpetual right to "inundate, submerge, and flow" over all of the subject premises lying below elevation 760 sea level datum.

The creation of the flowage easement predated the transfer of the subject premises to the Secretary of the Interior for the benefit of the Wyandotte Tribe, and the transfer was specifically made subject to the Flowage Easement of the Southwestern Power Administration. Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 760 sea level datum, by virtue of the easement acquired by condemnation.

RICHARD D. JAMES, OBA No. 4617 FOR THE FIRM

RDJ/kc

Enc.



Parcel 67 - Federal Lands (BIA)



Federal Lands within the Project Boundary: 0 Acres

Law Office of

MORROW, WATSON, & JAMES

A PROFESSIONAL CORPORATION
21 SOUTH MAIN P.O. BOX 1168
MIAMI, OKLAHOMA 74355
TEL. 918-542-5501 FAX. 918-542-5400

Jay Office: 510 KRAUSE STREET JAY, OK 74346 TEL. 918-253-6208 FAX 918-253-6209

August 31, 2022

Of Counsel

**HON. ROBERT E. REAVIS II

Admitted to practice in

*Oklahoma & Missouri

COY DEAN MORROW

DENNIS J. WATSON

*RICHARD D. JAMES

** Oklahoma & Kansas

Ms. Tamara Jahnke, Esquire Assistant General Counsel, Grand River Dam Authority P.O. Box 70 Langley, OK 74350

Re: Photo Abstract Company Abstract No. 18833

Covering: SE¼ NE¼ SE¼ in Section 21, Township 27 North, Range 24 East

of the Indian Base and Meridian, Ottawa County, Oklahoma;

Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title. All of the property was transferred by the original Wyandotte allotee free of restrictions by means of the BIA approved Warranty Deed shown at page 7 of the abstract and recorded in Book R at Page 273, a copy of which is attached as Ex. No. 1. That portion of this parcel lying South of Lost Creek was part of the property formerly owned by the United States of America and utilized in the operation of the now defunct Seneca Indian Boarding School. An illuminative description of the background and history of the acquisition of these lands by the Federal Government is contained in the decision of Administrative Law Judge Franklin E. Arness which appears at pages 37-49 of the abstract. As set forth therein, a portion of the lands within the former Wyandotte Reservation were withheld for school purposes from allotment during the 1890's by the Wyandotte Tribe and purchased by the government from the Tribe in 1934 for purposes of operation of the boarding school. Other properties, including that portion of the subject premises lying South of Lost Creek, were purchased from various private land owners by the government during the 1940's and also utilized by the boarding school, by means of the Warranty Deed shown at page 34 of the abstract, recorded in Book 194 at Page 597, a copy of which is attached hereto as Exhibit No. 2. Upon the closing of the Seneca Indian Boarding School in 1981, all of these properties were transferred to the Secretary of the Interior to be held in trust for the benefit and use of the Wyandotte Tribe of Oklahoma. This transfer is shown at page 35 of the abstract, recorded in Book 977 at Page 275, a copy of which is attached hereto as Exhibit No. 3. That portion of the property lying North of Lost

Creek is in unrestricted private ownership, by virtues of the Deeds shown at pages 149 and 204 of the abstract, copies attached as Exhibits 7 and 8.

A flowage Easement over the subject premises appears at page 16 of the abstract and is recorded in Book 169 at Page 507, a copy of which is attached as Exhibit No. 4., a second easement was acquired by condemnation by the United States of America, and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises lying below elev. 760 sea level datum, as per the terms of the Journal Entry of Judgment shown at page 20 of the abstract, recorded in Book 180 at Page 521, a copy of which is attached hereto as Exhibit No. 5.

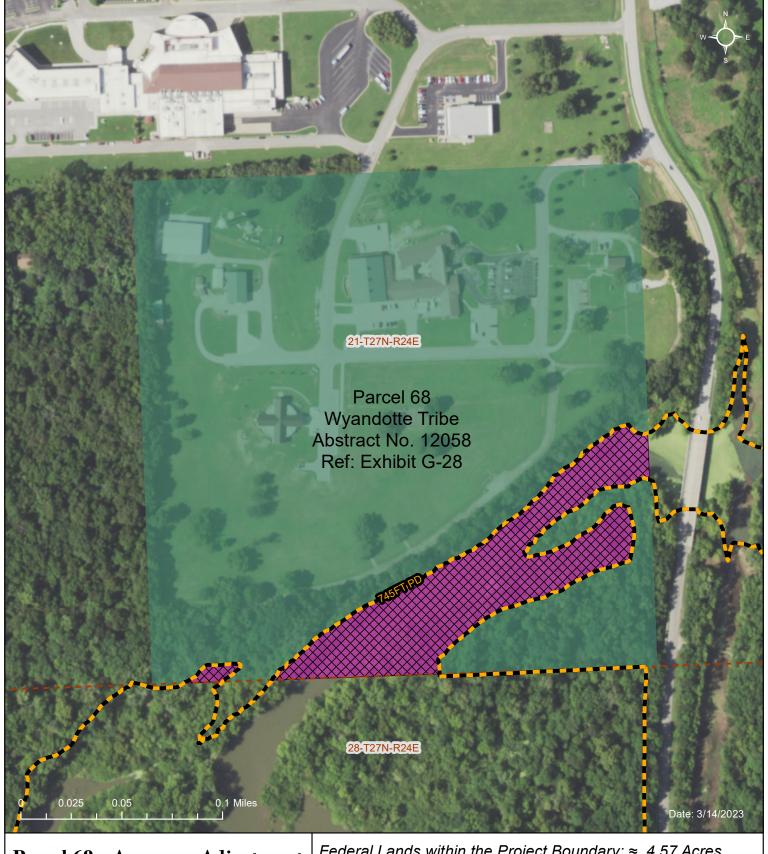
The creation of the flowage easement predated the transfer of the subject premises to the Secretary of the Interior for the benefit of the Wyandotte Tribe, and the transfer was specifically made subject to the latter. Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 760 sea level datum, by virtue of the easement acquired by condemnation. It should also be noted that GRDA owns in fee simple that portion of the property described in the Judgment appearing at page 11 of the abstract and recorded in Book 166 at Page 910, a copy of which is attached hereto as Exhibit No. 6.

Very truly yours,

RICHARD D AMES, OBA No. 4617

FOR THE FIRM

RDJ/kf Enc.



Parcel 68 - Accuracy Adjustment

Proposed Project Boundary

Federal Lands in Proposed Project Boundary

Flowage Easement on Federal Lands

Parcel 68

Section Line

Federal Lands within the Project Boundary: ≈ 4.57 Acres

GRDA holds a flowage easement for all federal lands within the Anticipated Project Boundary for Parcel 68.

The federal acreage is derived from Bureau of Indian Affairs GIS data that has been digitzed, adjusted, and recalculated by GRDA in an effort to increase accuracy.

LAW OFFICES OF MORROW, WATSON, JAMES, AND WEEDN

A PROFESSIONAL CORPORATION

21 SOUTH MAIN P.O. BOX 1168 MIAML OKLAHOMA 74355

TEL. 918-542-5501 FAX 918-542-5400

Jay Office:

510 KRAUSE STREET P.O. BOX 1018 JAY, OK 74346

TEL. 918-253-6208 FAX 918-253-6209

* Admitted to practice in Oklahoma & Missouri

COY DEAN MORROW

DENNIS J. WATSON

*RICHARD D. JAMES JOHN M. WEEDN

March 22, 2018

Ms. Tamara Jahnke, Esquire Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re:

Ottawa County Abstract and Title Company Abstract No. 12058

Covering: SE 1/4 SW 1/4 and NE 1/4 SW 1/4 all in Section 21, Township 27 North,

Range 24 East of the Indian Base and Meridian, Ottawa County, Oklahoma;

Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title. This parcel, along with the other four parcels which we have examined to date, were part of the property formerly owned by the United States of America and utilized in the operation of the now defunct Seneca Indian Boarding School. An illuminative description of the background and history of the acquisition of these lands by the Federal Government is contained in the decision of Administrative Law Judge Franklin E. Arness which appears at pages 23-35 of the abstract. As set forth therein, a portion of these properties were withheld for school purposes from allotment during the 1890's by the Wyandotte Tribe and purchased by the government from the Tribe in 1934 for purposes of operation of the boarding school. The remaining properties were purchased from various private land owners by the government during the 1940's and also utilized by the boarding school. Upon the closing of the Seneca Indian Boarding School in 1981, all of these properties were transferred to the Secretary of the Interior to be held in trust for the benefit and use of the Wyandotte Tribe of Oklahoma. This transfer is shown at page 20 of the abstract, recorded in Book 977 at Page 275.

A Flowage Easement over the subject premises appears at page 5 of the abstract, and is recorded in Book 171 at Page 304. This easement was created by act of congress of June 11, 1940 in favor of the Grand River Dam Authority.

The creation of the flowage easement predated the transfer of the subject premises to the Secretary of the Interior for the benefit of the Wyandotte Tribe, and the transfer was specifically made subject to the same. Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over that portion of the subject premises described by metes and bounds in the easement shown at page 5 of the abstract, consisting of approximately 26.7 acres.

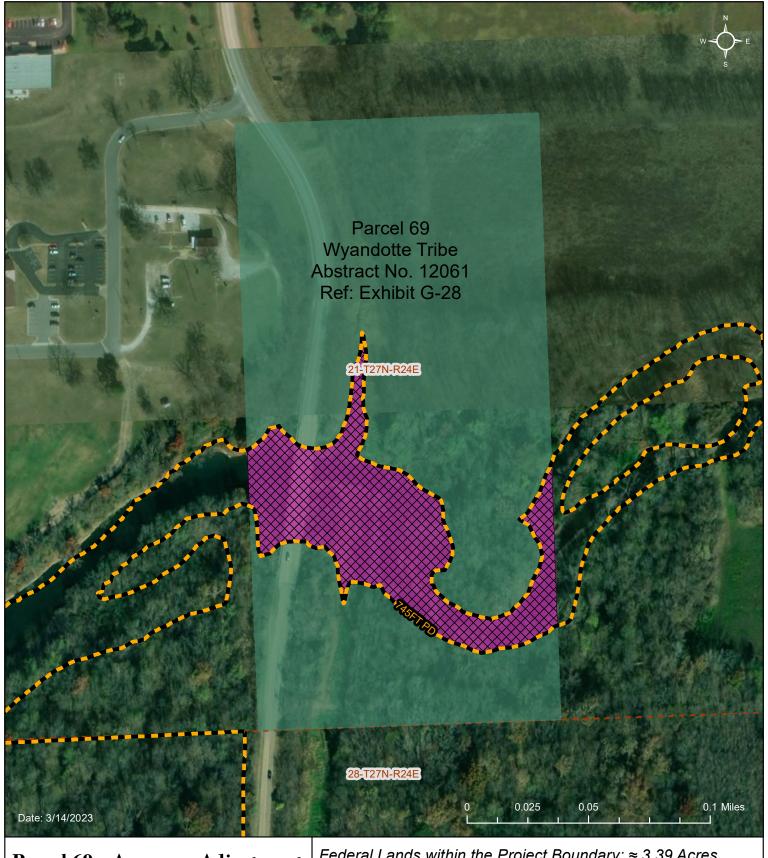
ery truly yours

RICHARD D. JAMES, OBA No. 4617

FOR THE **KIK**M

RDJ/kc

Enc.



Parcel 69 - Accuracy Adjustment

Proposed Project Boundary

Flowage Easement on Federal Lands

Federal Lands in Proposed Project Boundary

Parcel 69

Section Line

Federal Lands within the Project Boundary: ≈ 3.39 Acres

GRDA holds a flowage easement for all federal lands within the Anticipated Project Boundary for Parcel 69.

The federal acreage is derived from Bureau of Indian Affairs GIS data that has been digitzed, adjusted, and recalculated by GRDA in an effort to increase accuracy.

LAW OFFICES OF MORROW, WATSON, JAMES, AND WEEDN

A PROFESSIONAL CORPORATION
21 SOUTH MAIN P.O. BOX 1168
MIAMI, OKLAHOMA 74355
TEL. 918-542-5501 FAX 918-542-5400

JOHN M. WEEDN

*Admitted to practice in Oklahoma & Missouri

COY DEAN MORROW

DENNIS J. WATSON

*RICHARD D. JAMES

March 22, 2018

Ms. Tamara Jahnke, Esquire Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Ottawa County Abstract and Title Company Abstract No. 12061

Covering: W 1/2 SW 1/4 SE 1/4 in Section 21, Township 27 North, Range 24 East of

the Indian Base and Meridian, Ottawa County, Oklahoma;

Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title. This parcel, along with the other four parcels which we have examined to date, were part of the property formerly owned by the United States of America and utilized in the operation of the now defunct Seneca Indian Boarding School. An illuminative description of the background and history of the acquisition of these lands by the Federal Government is contained in the decision of Administrative Law Judge Franklin E. Arness which appears at pages 43-55 of the abstract. As set forth therein, a portion of these properties were withheld for school purposes from allotment during the 1890's by the Wyandotte Tribe and purchased by the government from the Tribe in 1934 for purposes of operation of the boarding school. The remaining properties were purchased from various private land owners by the government during the 1940's and also utilized by the boarding school. Upon the closing of the Seneca Indian Boarding School in 1981, all of these properties were transferred to the Secretary of the Interior to be held in trust for the benefit and use of the Wyandotte Tribe of Oklahoma. This transfer is shown at page 40 of the abstract, recorded in Book 977 at Page 275.

Flowage Easements over the subject premises appear at pages 5 and 6 of the abstract, and are recorded in Book 171 at Page 304 and Book 180 at Page 521. The first of these easements was created by act of congress of June 11, 1940 in favor of the Grand River Dam Authority. The second easement was acquired by condemnation by the United States of America, shown at page 6 of the abstract and recorded in Book 180 at Page 521,

and subsequently assigned to the Grand River Dam Authority by assignment appearing at Page 20 of the abstract and recorded in Book 201 at Page 127.

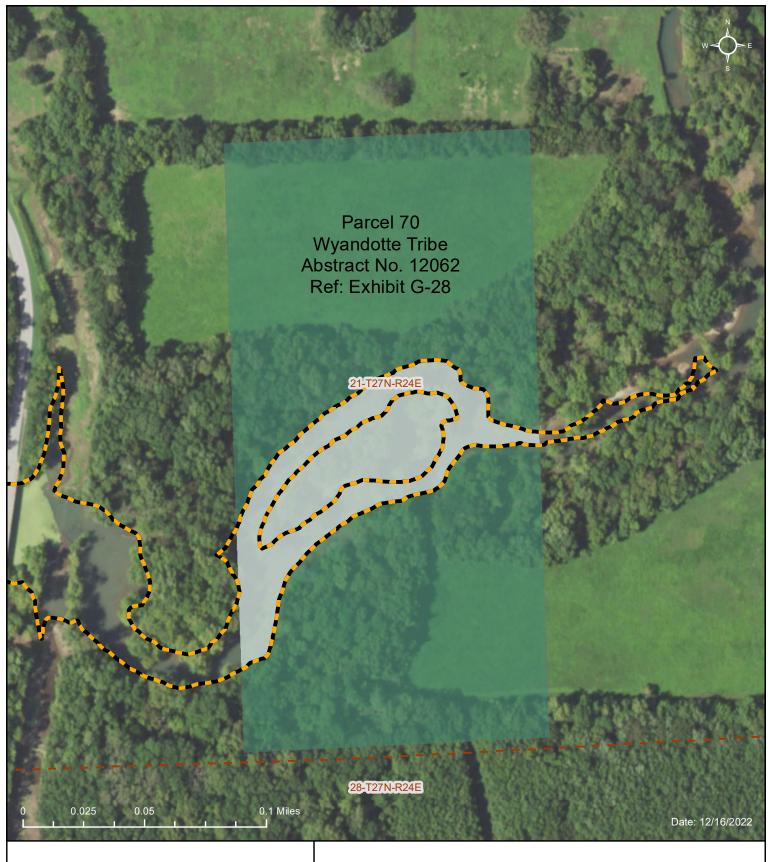
The creation of both flowage easements predated the transfer of the subject premises to the Secretary of the Interior for the benefit of the Wyandotte Tribe, and the transfer was specifically made subject to the latter. Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has valid and subsisting flowage easements over that portion of the subject premises described by metes and bounds in the easement shown at page 5 of the abstract and over all of the remainder of the property lying below elevation 760 sea level datum, by virtue of the easement acquired by condemnation.

Very truly yours,

RICHARD D. JAMES, OBA No. 4617

FOR THE FIRM

RDJ/kc Enc.



Parcel 70 - Federal Lands (BIA)

Anticipated Project Boundary (745FT PD)

GRDA Owned Land

Parcel 70

Section Line

Federal Lands within the Project Boundary: 0 Acres

GRDA owns all the property within the Anticipated Project Boundary for Parcel 70.

LAW OFFICES OF MORROW, WATSON, JAMES, AND WEEDN

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES JOHN M. WEEDN

* Admitted to practice in Oklahoma & Missouri A PROFESSIONAL CORPORATION
21 SOUTH MAIN P.O. BOX 1168
MIAMI, OKLAHOMA 74355
TEL. 918-542-5501 FAX 918-542-5400

March 22, 2018

Ms. Tamara Jahnke, Esquire Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re:

Ottawa County Abstract and Title Company Abstract No. 12062

Covering: E 1/2 SW 1/4 SE 1/4 in Section 21, Township 27 North, Range 24 East of

the Indian Base and Meridian, Ottawa County, Oklahoma;

Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title. This parcel, along with the other four parcels which we have examined to date, were part of the property formerly owned by the United States of America and utilized in the operation of the now defunct Seneca Indian Boarding School. An illuminative description of the background and history of the acquisition of these lands by the Federal Government is contained in the decision of Administrative Law Judge Franklin E. Arness which appears at pages 130-142 of the abstract. As set forth therein, a portion of these properties were withheld for school purposes from allotment during the 1890's by the Wyandotte Tribe and purchased by the government from the Tribe in 1934 for purposes of operation of the boarding school. The remaining properties were purchased from various private land owners by the government during the 1940's and also utilized by the boarding school. Upon the closing of the Seneca Indian Boarding School in 1981, all of these properties were transferred to the Secretary of the Interior to be held in trust for the benefit and use of the Wyandotte Tribe of Oklahoma. This transfer is shown at page 127 of the abstract, recorded in Book 977 at Page 275.

A Flowage Easement over the subject premises appears at page 39 of the abstract, and is recorded in Book 180 at Page 521. This easement was acquired by condemnation by the United States of America, and provides for a perpetual right to "inundate, submerge, and flow" over all of the subject premises lying below elevation 760 sea level datum and subsequently assigned to the Grand River Dam Authority by assignment appearing at Page 53 of the abstract and recorded in Book 201 at Page 127.

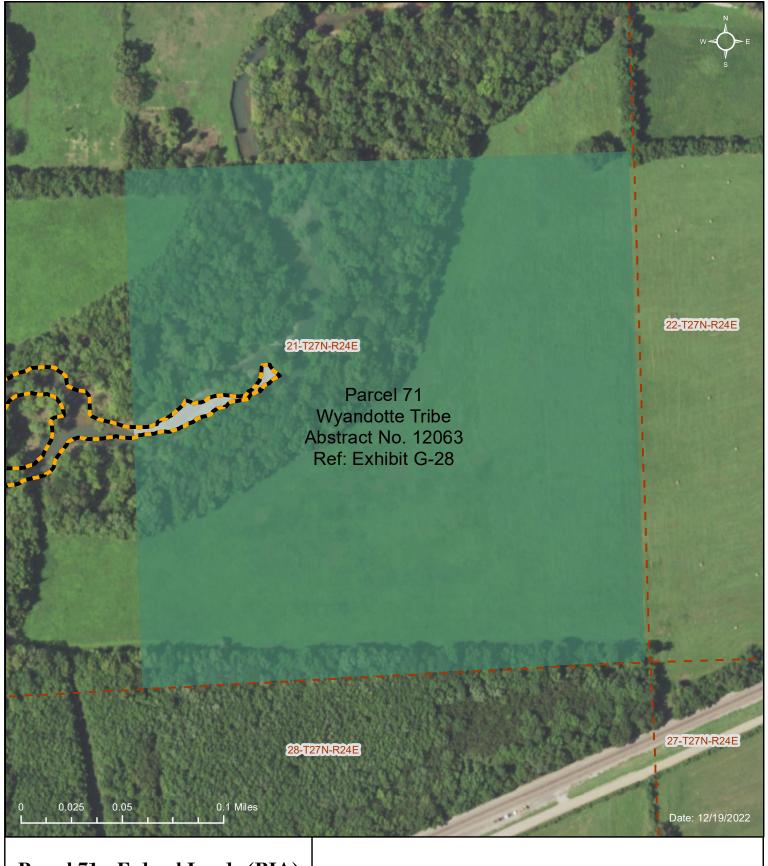
The creation of both the flowage easement and the assignment to GRDA predated the transfer of the subject premises to the Secretary of the Interior for the benefit of the Wyandotte Tribe. Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the remainder of the property lying below elevation 760 sea level datum, by virtue of the easement acquired by condemnation. Also, it should be noted that the GRDA owns in fee simple that portion of the premises described in the Warranty Deed shown at page 13 of the abstract and recorded in Book 163 at Page 332.

Verv**atuly** vour

RICHARD D. JAMES, OBA No. 4617

FOR THE FIRM

RDJ/kc Enc.



Parcel 71 - Federal Lands (BIA)

Anticipated Project Boundary (745FT PD)

GRDA Owned Land

Parcel 71

Section Line

Federal Lands within the Project Boundary: 0 Acres

GRDA owns all the property within the Anticipated Project Boundary for Parcel 71.

LAW OFFICES OF MORROW, WATSON, JAMES, AND WEEDN

A PROFESSIONAL CORPORATION
21 SOUTH MAIN P.O. BOX 1168
MIAMI, OKLAHOMA 74355
TEL. 918-542-5501 FAX 918-542-5400

*RICHARD D. JAMES JOHN M. WEEDN

COY DEAN MORROW

DENNIS J. WATSON

* Admitted to practice in Oklahoma & Missouri

March 23, 2018

Ms. Tamara Jahnke, Esquire Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Ottawa County Abstract and Title Company Abstract No. 12063 Covering: SE ¼ SE ¼ in Section 21, Township 27 North, Range 24 East of the Indian Base and Meridian, Ottawa County, Oklahoma; Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title. This parcel, along with the other four parcels which we have examined to date, were part of the property formerly owned by the United States of America and utilized in the operation of the now defunct Seneca Indian Boarding School. An illuminative description of the background and history of the acquisition of these lands by the Federal Government is contained in the decision of Administrative Law Judge Franklin E. Arness which appears at pages 43-55 of the abstract. As set forth therein, a portion of these properties were withheld for school purposes from allotment during the 1890's by the Wyandotte Tribe and purchased by the government from the Tribe in 1934 for purposes of operation of the boarding school. The remaining properties were purchased from various private land owners by the government during the 1940's and also utilized by the boarding school. Upon the closing of the Seneca Indian Boarding School in 1981, all of these properties were transferred to the Secretary of the Interior to be held in trust for the benefit and use of the Wyandotte Tribe of Oklahoma. This transfer is shown at page 36 of the abstract, recorded in Book 977 at Page 275.

A flowage Easement over the subject premises appears at page 18 of the abstract and is recorded in Book 180 at Page 521. This easement was acquired by condemnation

by the United States of America, and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises lying below elev. 760 sea level datum.

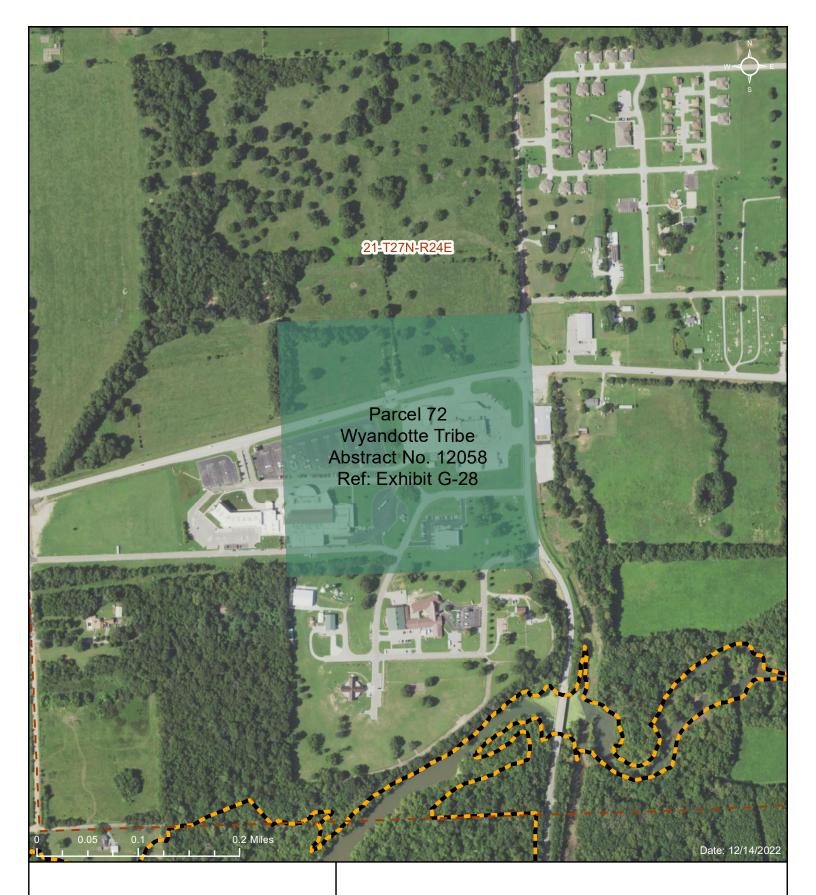
The creation of the flowage easement predated the transfer of the subject premises to the Secretary of the Interior for the benefit of the Wyandotte Tribe, and the transfer was specifically made subject to the latter. Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 760 sea level datum, by virtue of the easement acquired by condemnation. It should also be noted that GRDA owns in fee simple that portion of the property described in the Warranty Deed appearing at page 14 of the abstract and recorded in Book 163 at Page 332.

Very truly yours,

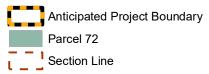
RICHARD D. JAMES, OBA No. 4617

FOR THE FIRM

RDJ/le Enc.



Parcel 72 - Federal Lands (BIA)



Federal Lands within the Project Boundary: 0 Acres

LAW OFFICES OF MORROW, WATSON, JAMES, AND WEEDN

A PROFESSIONAL CORPORATION

21 SOUTH MAIN P.O. BOX 1168 MIAML OKLAHOMA 74355

TEL. 918-542-5501 FAX 918-542-5400

Jay Office:

510 KRAUSE STREET P.O. BOX 1018 JAY, OK 74346

TEL. 918-253-6208 FAX 918-253-6209

* Admitted to practice in Oklahoma & Missouri

COY DEAN MORROW

DENNIS J. WATSON

*RICHARD D. JAMES JOHN M. WEEDN

March 22, 2018

Ms. Tamara Jahnke, Esquire Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re:

Ottawa County Abstract and Title Company Abstract No. 12058

Covering: SE 1/4 SW 1/4 and NE 1/4 SW 1/4 all in Section 21, Township 27 North,

Range 24 East of the Indian Base and Meridian, Ottawa County, Oklahoma;

Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title. This parcel, along with the other four parcels which we have examined to date, were part of the property formerly owned by the United States of America and utilized in the operation of the now defunct Seneca Indian Boarding School. An illuminative description of the background and history of the acquisition of these lands by the Federal Government is contained in the decision of Administrative Law Judge Franklin E. Arness which appears at pages 23-35 of the abstract. As set forth therein, a portion of these properties were withheld for school purposes from allotment during the 1890's by the Wyandotte Tribe and purchased by the government from the Tribe in 1934 for purposes of operation of the boarding school. The remaining properties were purchased from various private land owners by the government during the 1940's and also utilized by the boarding school. Upon the closing of the Seneca Indian Boarding School in 1981, all of these properties were transferred to the Secretary of the Interior to be held in trust for the benefit and use of the Wyandotte Tribe of Oklahoma. This transfer is shown at page 20 of the abstract, recorded in Book 977 at Page 275.

A Flowage Easement over the subject premises appears at page 5 of the abstract, and is recorded in Book 171 at Page 304. This easement was created by act of congress of June 11, 1940 in favor of the Grand River Dam Authority.

The creation of the flowage easement predated the transfer of the subject premises to the Secretary of the Interior for the benefit of the Wyandotte Tribe, and the transfer was specifically made subject to the same. Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over that portion of the subject premises described by metes and bounds in the easement shown at page 5 of the abstract, consisting of approximately 26.7 acres.

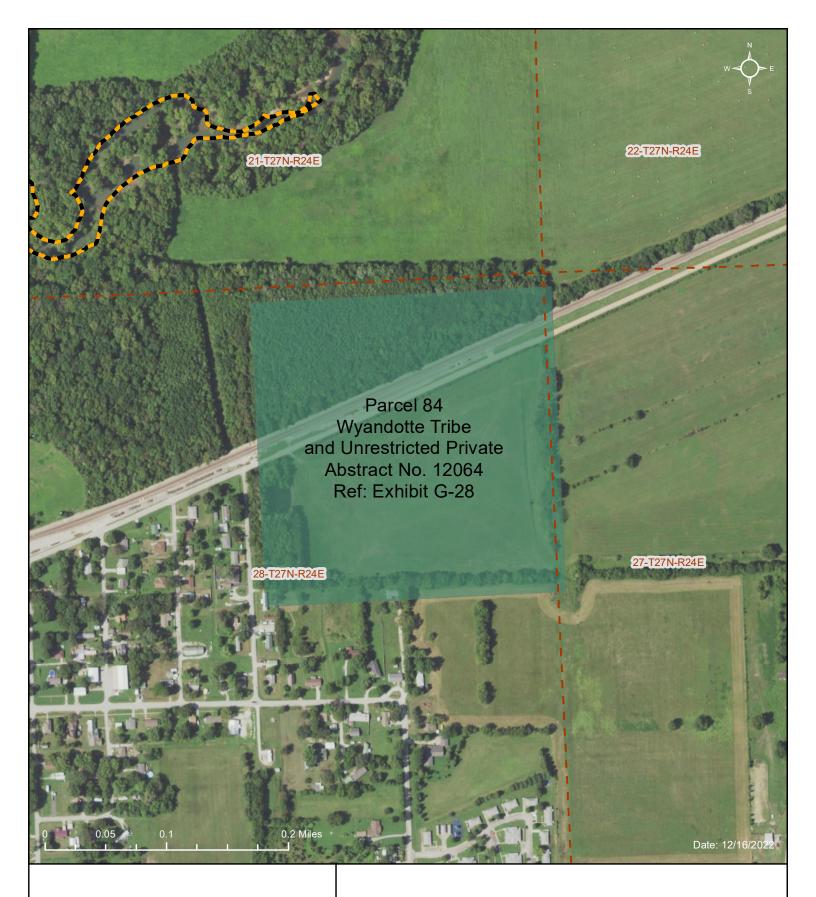
ery truly yours

RICHARD D. JAMES, OBA No. 4617

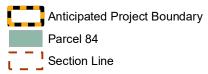
FOR THE **KIK**M

RDJ/kc

Enc.



Parcel 84 - Federal Lands (BIA)



Federal Lands within the Project Boundary: 0 Acres

LAW OFFICES OF MORROW, WATSON, JAMES, AND WEEDN

A PROFESSIONAL CORPORATION
21 SOUTH MAIN P.O. BOX 1168
MIAMI, OKLAHOMA 74355
TEL. 918-542-5501 FAX 918-542-5400

Jay Office:

510 KRAUSE STREET P.O. BOX 1018

TEL. 918-253-6208 FAX 918-253-6209

*Admitted to practice in Oklahoma & Missouri

COY DEAN MORROW

DENNIS J. WATSON

*RICHARD D. JAMES JOHN M. WEEDN

April 3, 2018

Ms. Tamara Jahnke, Esquire Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Ottawa County Abstract and Title Company Abstract No. 12064 Covering: NE ¼ NE ¼ in Section 28, Township 27 North, Range 24 East of the Indian Base and Meridian, Ottawa County, Oklahoma; Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title. This parcel was conveyed by Trust Patent with restrictions subsequently removed in 1892 to Mary E. Brown and James A. Brown by instruments shown at page 4 and 6 of the abstract and recorded in Book 12 at Page 117 and Book 8 at Page 559, respectively. The portion of the property North of the Railroad Right of Way has remained in private ownership and is now owned by Susan Victor by virtue of a Probate Decree shown at page 326 of the abstract and a Warranty Deed shown at page 347, which are recorded in Book 863 at Page 724 and 740. The property south of the Railroad Right of Way remained in private ownership until 2005, when the Wyandotte Tribe acquired the property by means of the Warranty Deed shown at page 233 of the abstract and recorded in Book 796 at Page 485. In 2014, the Tribe conveyed the property to the USA, in Trust for the benefit of the Tribe by means of the Warranty Deed shown at page 260 of the abstract, recorded in Book 994 at Page 422.

A flowage Easement over the subject premises south of the Railroad Right of Way appears at page 43 of the abstract and is recorded in Book 181 at Page 179. This easement was acquired by condemnation by the United States of America, and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises lying below

elev. 760 sea level datum. At page 49 of the abstract appears a Flowage Easement granted to GRDA by the St. Louis-San Francisco Railway Co., covering all railroad right of way and other property lying below elev. 755 sea level datum recorded in Book 214 at Page 147. No Flowage Easement appears of record covering the property north of the Railroad Right of Way.

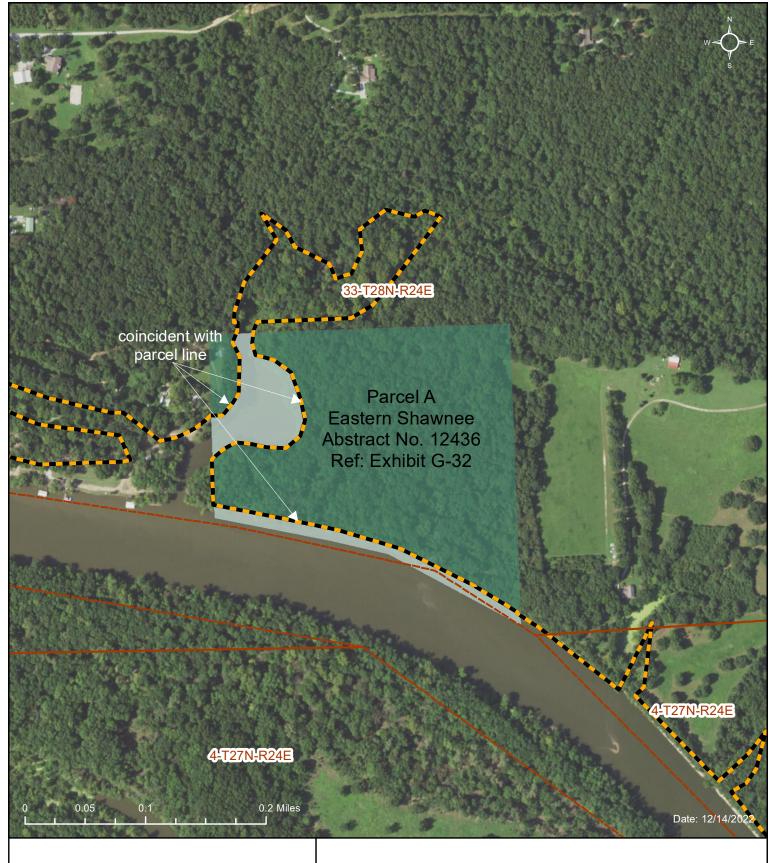
The creation of the flowage easement predated by some seventy years the transfer of the subject premises to the Secretary of the Interior for the benefit of the Wyandotte Tribe, and the property had been free from any restrictions on transfer for almost one hundred years at the time. Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property south of the Railroad Right of Way, lying below elevation 760 sea level datum, by virtue of the easement acquired by condemnation, and below elevation 755 sea level datum on the Railroad Right of Way portion of the premises by virtue of the easement granted by the St. Louis-San Francisco Railway Co. We find no flowage easement north of the Railroad Right of Way.

Very truly yours,

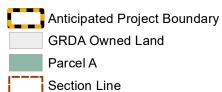
RICHARD D. JAMES, OBA No. 4617

FOR THE FIRM

RDJ/le Enc.



Parcel A - Federal Lands (BIA)



Federal Lands within the Project Boundary: 0 Acres

GRDA owns all the property within the Anticipated Project Boundary for Parcel A.

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel
**HON. ROBERT E. REAVIS II

- Admitted to practice in *Oklahoma & Missouri
- ** Oklahoma & Kansas

Law Office of Morrow, Watson, & James

A PROFESSIONAL CORPORATION
21 SOUTH MAIN P.O. BOX 1168
MIAMI, OKLAHOMA 74355
TEL 918-542-5501 FAX 918-542-5400

Jay Office: 510 KRAUSE STREET JAY, OK 74346 TEL. 918-253-6208 FAX 918-253-6209

December 26, 2019

Ms. Tamara Jahnke, Esq.
Assistant General Counsel, Grand River Dam Authority
P.O. Box 409
Vinita, OK 74350

Re: Ottawa County Abstract and Title Company Abstract No. 12436, Volumes I and II,

Covering: Lots 1, 2 and 3 (S½ SW¼) of Section 33, Township 28 North, Range 24 East of the Indian Meridian, Ottawa County Oklahoma. Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 424 pages, and last certified as of 12/20/19 at 7:55 A.M. Lot 1 was conveyed by Trust Patent to Eastern Shawnee allotee, Milton Turkeyfoot, by an instrument shown at page 4 of the abstract. GRDA acquired fee simple title to all of Lot 1 lying below elev. 750, consisting of 9.3 acres, by a BIA approved Warranty Deed shown at page 5 of the abstract. The remainder of Lot 1 was conveyed by Fee Simple Patent shown at page 22 of the abstract to Matilda Stand Beaver. This instrument is recorded in Book 274 at Page 454. Title appears now to be vested in Jan Colbort Killough and Bobbie Rae Killough pursuant to the probate Order shown at page 29 of the abstract and recorded in Book 294 at Page 224, and is unrestricted as per the terms of the BIA Certification shown at page 190 of the abstract and recorded in Book 893 at Page 288.

Lot 2 was conveyed by Trust Patent to Eastern Shawnee allotee, Minnie Turkeyfoot by an instrument shown at page 367 of the abstract. GRDA acquired fee simple title to all of Lot 2 lying below elev. 750, consisting of 9.0 acres by a BIA approved Indian Deed shown at page 374 of the abstract. Title to the remainder of Lot 2 is unclear, but appears to remain restricted and vested in highly

fractionalized interests in the heirs of Minnie Turkeyfoot Robbins, and their descendants.

Lot 3 was conveyed by Trust Patent to Ottawa allotee Matilda Wind, by an instrument shown at page 398 of the abstract, and subsequently conveyed free of all restrictions by a BIA approved Warranty Deed shown at page 399 of the abstract. GRDA thereafter acquired fee simple title to all of Lot 3 in 1940 by means of a Warranty Deed shown at page 422 of the abstract, and recorded in Book 163 at Page 846.

A flowage easement over Lots 1 and 2 of the subject premises appears at page 7 of the abstract and is recorded in Book 180 at Page 744. This easement was acquired by condemnation by the United States of America in 1944 and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 760 sea level datum.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of Lots 1 and 2 of the property lying below elevation 760 sea level datum, by virtue of the easement acquired by condemnation, and owns in fee simple that portion which lies below elevation 750 sea level datum. Grand River Dam Authority owns all of Lot 3 in fee simple.

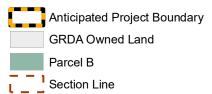
Very truly yours,

RICHARD D. JAMES,

OBA No. 4617 FOR THE FIRM



Parcel B - Federal Lands (BIA)



Federal Lands within the Project Boundary: 0 Acres

GRDA owns all property within the Anticipated Boundary for Parcel B.

Law Office of

Morrow, Watson, & James

A PROFESSIONAL CORPORATION 21 SOUTH MAIN P.O. BOX 1168 MIAMI, OKLAHOMA 74355

TEL. 918-542-5501 FAX. 918-542-5400

Jay Office:

510 KRAUSE STREET P.O. BOX 1018 JAY, OK 74346

TEL. 918-253-6208 FAX 918-253-6209

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel
**HON. ROBERT E. REAVIS II

Admitted to practice in *Oklahoma & Missouri

** Oklahoma & Kansas

March 11, 2020

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority 9933 East 16th Street Tulsa, OK 74128

Re: Ottawa County Abstract and Title Company Abstract No. 12435,

Volumes I and II,

Covering: S1/2; and Sw1/4 NE1/4 of Section 9, Township 27 North,

Range 24 East of the Indian Meridian, Ottawa County Oklahoma.

Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 572 pages, and last certified as of 03/04/20 at 7:55 A.M. Lot 7, or that part of the NW1/4 SW1/4 lying West of Spring River, was conveyed by unrestricted Patent, by an instrument shown at page 515 of the abstract, and recorded in Book 99 at Page 852. GRDA acquired fee simple title to all of Lot 7, by a BIA approved Warranty Deed shown at page 542 of the abstract, and recorded in Book 163 at Page 10. The remainder of the NW1/4 SW1/4, or Lot 3, along with the SW1/4 NE1/4 and NE1/4 SW1/4, was conveyed by Allotment Deed shown at page 474 of the abstract to Eastern Shawnee allotee, Carrie Bluejacket. This instrument is recorded in Book 164 at Page 99. Title continues to be restricted and vested in the remote descendants of the allotee. At page 475 appears a BIA approved Warranty Deed to GRDA conveying Fee Simple Title to all of the NW1/4 SW1/4 (Lot 3), NE1/ SW1/4, and SW1/4 NE1/4 lying below elev. 750.

The NE1/4 SE1/4 was conveyed by Trust Patent to Eastern Shawnee allotee, Amy Bluejacket by an instrument shown at page 4 of the abstract, and recorded in Book 118 at Page 769. Restrictions were removed by an instrument shown at page 5 of the abstract and recorded in Book 115 at Page 219. A Flowage Easement to the USA covering all of the NE1/4 SE1/4 lying below elev 760 appears at page 27 of the abstract and is recorded in Book 181 at Page 179. The S1/2 SW1/4 was conveyed to Blanche Bluejacket by Trust Patent shown at page 202 of the abstract, and recorded in Book 128 at Page 846. Restrictions were subsequently removed by instruments shown at pages 205, 365 and 378 of the abstract. GRDA acquired fee simple title to all of the S1/2 SW1/4 lying below elev 750 by instruments shown at pages 209 and 360 of the abstract, which are recorded in Book 162 at Page 949 and Book 163 at Page 596.

Title to the remainder of the SE1/4 was conveyed by Trust Patent to Eastern Shawnee allotees, Rose and Anna Skakah by instruments shown at pages 488 and 495 of the abstract, and subsequently conveyed with all restrictions by a BIA approved Warranty Deed shown at page 510 of the abstract, to Willie Blakeburn, restricted Indian, and current record owner, which is recorded in Book 326 at Page 923. GRDA thereafter acquired fee simple title to all of the W1/2 SW1/4 SE1/4 lying below elev 750 by means of a BIA approved Warranty Deed shown at page 497 of the abstract, and recorded in Book 166 at Page 34, and a Flowage Easement on all of the E1/2 SW1/4 SE1/4 lying below elev 750 by means of a BIA approved instrument shown at page 491 of the abstract and recorded in Book 173 at Page 406. This grant of Easement is problematic in that it only covers property below elev. 750, title to which is held by GRDA in fee simple. This is probably the result of a typographical error showing 750 instead of the intended 760.

A flowage easement over the remainder of the subject premises appears at page 499 of the abstract and is recorded in Book 180 at Page 521. This easement was acquired by condemnation by the United States of America in 1944 and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 760 sea level datum.

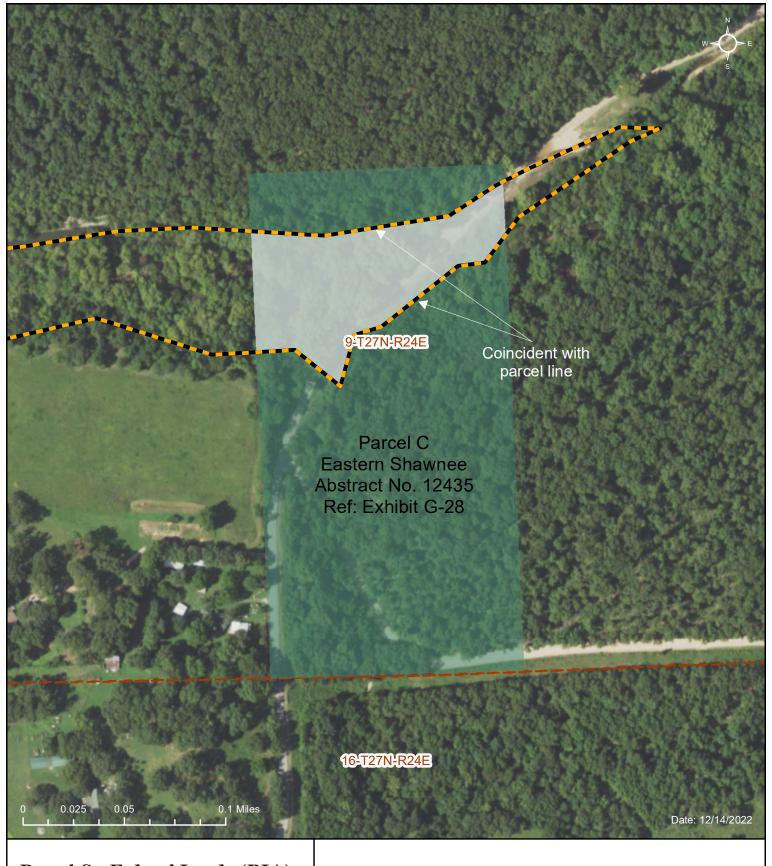
Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 760 sea level datum, with the exception of the E1/2 SW1/4 SE1/4 as set forth above, by virtue of the easement acquired by grant and condemnation, and owns in fee simple that portion which lies below elevation 750 sea level datum. The USA holds title to the NW/14 SE1/4, SW1/4 SE1/4, SE1/4 SE1/4, SW1/4 NE1/4, NE1/4 SW1/4, and NW1/4 SW1/4 lying East of Spring River in Trust for the benefit of restricted Indians as above set forth.

Very truly yours,

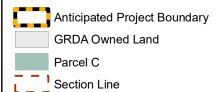
RICHARD/D/JAMES,

OBA No. 4617

FOR THE FIRM



Parcel C - Federal Lands (BIA)



Federal Lands within the Project Boundary: 0 Acres

GRDA owns all the property within the Anticipated Project Boundary for Parcel C.

Law Office of

Morrow, Watson, & James

A PROFESSIONAL CORPORATION 21 SOUTH MAIN P.O. BOX 1168 MIAMI, OKLAHOMA 74355

TEL. 918-542-5501 FAX. 918-542-5400

Jay Office:

510 KRAUSE STREET P.O. BOX 1018 JAY, OK 74346

TEL. 918-253-6208 FAX 918-253-6209

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel
**HON. ROBERT E. REAVIS II

Admitted to practice in *Oklahoma & Missouri

** Oklahoma & Kansas

March 11, 2020

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority 9933 East 16th Street Tulsa, OK 74128

Re: Ottawa County Abstract and Title Company Abstract No. 12435,

Volumes I and II,

Covering: S1/2; and Sw1/4 NE1/4 of Section 9, Township 27 North,

Range 24 East of the Indian Meridian, Ottawa County Oklahoma.

Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 572 pages, and last certified as of 03/04/20 at 7:55 A.M. Lot 7, or that part of the NW1/4 SW1/4 lying West of Spring River, was conveyed by unrestricted Patent, by an instrument shown at page 515 of the abstract, and recorded in Book 99 at Page 852. GRDA acquired fee simple title to all of Lot 7, by a BIA approved Warranty Deed shown at page 542 of the abstract, and recorded in Book 163 at Page 10. The remainder of the NW1/4 SW1/4, or Lot 3, along with the SW1/4 NE1/4 and NE1/4 SW1/4, was conveyed by Allotment Deed shown at page 474 of the abstract to Eastern Shawnee allotee, Carrie Bluejacket. This instrument is recorded in Book 164 at Page 99. Title continues to be restricted and vested in the remote descendants of the allotee. At page 475 appears a BIA approved Warranty Deed to GRDA conveying Fee Simple Title to all of the NW1/4 SW1/4 (Lot 3), NE1/ SW1/4, and SW1/4 NE1/4 lying below elev. 750.

The NE1/4 SE1/4 was conveyed by Trust Patent to Eastern Shawnee allotee, Amy Bluejacket by an instrument shown at page 4 of the abstract, and recorded in Book 118 at Page 769. Restrictions were removed by an instrument shown at page 5 of the abstract and recorded in Book 115 at Page 219. A Flowage Easement to the USA covering all of the NE1/4 SE1/4 lying below elev 760 appears at page 27 of the abstract and is recorded in Book 181 at Page 179. The S1/2 SW1/4 was conveyed to Blanche Bluejacket by Trust Patent shown at page 202 of the abstract, and recorded in Book 128 at Page 846. Restrictions were subsequently removed by instruments shown at pages 205, 365 and 378 of the abstract. GRDA acquired fee simple title to all of the S1/2 SW1/4 lying below elev 750 by instruments shown at pages 209 and 360 of the abstract, which are recorded in Book 162 at Page 949 and Book 163 at Page 596.

Title to the remainder of the SE1/4 was conveyed by Trust Patent to Eastern Shawnee allotees, Rose and Anna Skakah by instruments shown at pages 488 and 495 of the abstract, and subsequently conveyed with all restrictions by a BIA approved Warranty Deed shown at page 510 of the abstract, to Willie Blakeburn, restricted Indian, and current record owner, which is recorded in Book 326 at Page 923. GRDA thereafter acquired fee simple title to all of the W1/2 SW1/4 SE1/4 lying below elev 750 by means of a BIA approved Warranty Deed shown at page 497 of the abstract, and recorded in Book 166 at Page 34, and a Flowage Easement on all of the E1/2 SW1/4 SE1/4 lying below elev 750 by means of a BIA approved instrument shown at page 491 of the abstract and recorded in Book 173 at Page 406. This grant of Easement is problematic in that it only covers property below elev. 750, title to which is held by GRDA in fee simple. This is probably the result of a typographical error showing 750 instead of the intended 760.

A flowage easement over the remainder of the subject premises appears at page 499 of the abstract and is recorded in Book 180 at Page 521. This easement was acquired by condemnation by the United States of America in 1944 and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 760 sea level datum.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 760 sea level datum, with the exception of the E1/2 SW1/4 SE1/4 as set forth above, by virtue of the easement acquired by grant and condemnation, and owns in fee simple that portion which lies below elevation 750 sea level datum. The USA holds title to the NW/14 SE1/4, SW1/4 SE1/4, SE1/4 SE1/4, SW1/4 NE1/4, NE1/4 SW1/4, and NW1/4 SW1/4 lying East of Spring River in Trust for the benefit of restricted Indians as above set forth.

Very truly yours,

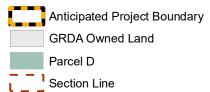
RICHARD/D/JAMES,

OBA No. 4617

FOR THE FIRM



Parcel D - Federal Lands (BIA)



Federal Lands within the Project Boundary: 0 Acres

GRDA owns all the property within the Anticipated Project Boundary for Parcel D.

Law Office of

Morrow, Watson, & James

A PROFESSIONAL CORPORATION 21 SOUTH MAIN P.O. BOX 1168 MIAMI, OKLAHOMA 74355

TEL. 918-542-5501 FAX. 918-542-5400

Jay Office:

510 KRAUSE STREET P.O. BOX 1018 JAY, OK 74346

TEL. 918-253-6208 FAX 918-253-6209

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel
**HON. ROBERT E. REAVIS II

Admitted to practice in *Oklahoma & Missouri

** Oklahoma & Kansas

March 11, 2020

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority 9933 East 16th Street Tulsa, OK 74128

Re: Ottawa County Abstract and Title Company Abstract No. 12435,

Volumes I and II,

Covering: S1/2; and Sw1/4 NE1/4 of Section 9, Township 27 North,

Range 24 East of the Indian Meridian, Ottawa County Oklahoma.

Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 572 pages, and last certified as of 03/04/20 at 7:55 A.M. Lot 7, or that part of the NW1/4 SW1/4 lying West of Spring River, was conveyed by unrestricted Patent, by an instrument shown at page 515 of the abstract, and recorded in Book 99 at Page 852. GRDA acquired fee simple title to all of Lot 7, by a BIA approved Warranty Deed shown at page 542 of the abstract, and recorded in Book 163 at Page 10. The remainder of the NW1/4 SW1/4, or Lot 3, along with the SW1/4 NE1/4 and NE1/4 SW1/4, was conveyed by Allotment Deed shown at page 474 of the abstract to Eastern Shawnee allotee, Carrie Bluejacket. This instrument is recorded in Book 164 at Page 99. Title continues to be restricted and vested in the remote descendants of the allotee. At page 475 appears a BIA approved Warranty Deed to GRDA conveying Fee Simple Title to all of the NW1/4 SW1/4 (Lot 3), NE1/ SW1/4, and SW1/4 NE1/4 lying below elev. 750.

The NE1/4 SE1/4 was conveyed by Trust Patent to Eastern Shawnee allotee, Amy Bluejacket by an instrument shown at page 4 of the abstract, and recorded in Book 118 at Page 769. Restrictions were removed by an instrument shown at page 5 of the abstract and recorded in Book 115 at Page 219. A Flowage Easement to the USA covering all of the NE1/4 SE1/4 lying below elev 760 appears at page 27 of the abstract and is recorded in Book 181 at Page 179. The S1/2 SW1/4 was conveyed to Blanche Bluejacket by Trust Patent shown at page 202 of the abstract, and recorded in Book 128 at Page 846. Restrictions were subsequently removed by instruments shown at pages 205, 365 and 378 of the abstract. GRDA acquired fee simple title to all of the S1/2 SW1/4 lying below elev 750 by instruments shown at pages 209 and 360 of the abstract, which are recorded in Book 162 at Page 949 and Book 163 at Page 596.

Title to the remainder of the SE1/4 was conveyed by Trust Patent to Eastern Shawnee allotees, Rose and Anna Skakah by instruments shown at pages 488 and 495 of the abstract, and subsequently conveyed with all restrictions by a BIA approved Warranty Deed shown at page 510 of the abstract, to Willie Blakeburn, restricted Indian, and current record owner, which is recorded in Book 326 at Page 923. GRDA thereafter acquired fee simple title to all of the W1/2 SW1/4 SE1/4 lying below elev 750 by means of a BIA approved Warranty Deed shown at page 497 of the abstract, and recorded in Book 166 at Page 34, and a Flowage Easement on all of the E1/2 SW1/4 SE1/4 lying below elev 750 by means of a BIA approved instrument shown at page 491 of the abstract and recorded in Book 173 at Page 406. This grant of Easement is problematic in that it only covers property below elev. 750, title to which is held by GRDA in fee simple. This is probably the result of a typographical error showing 750 instead of the intended 760.

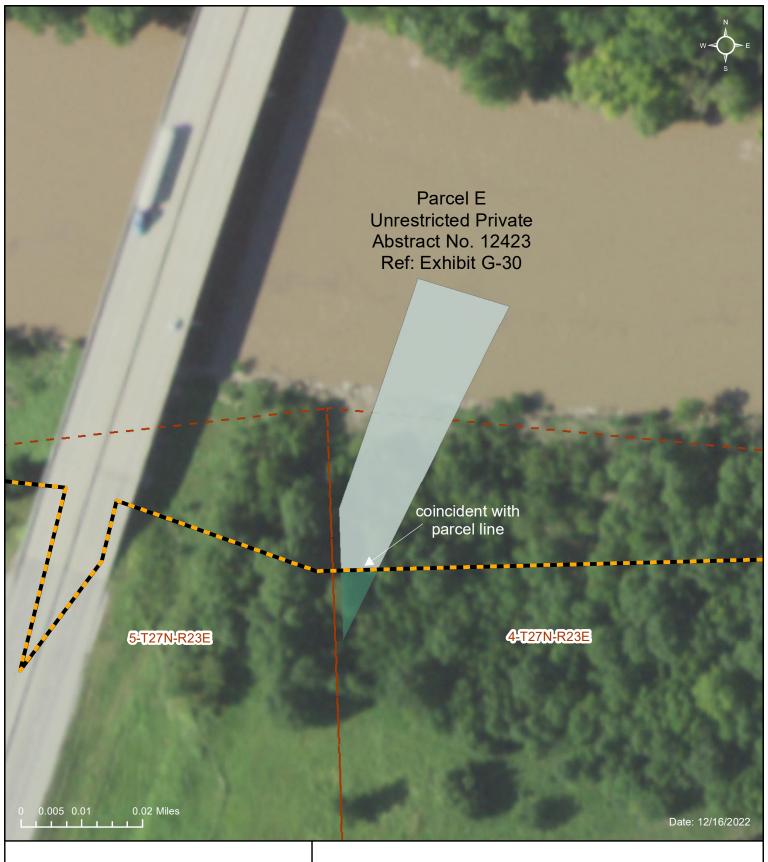
A flowage easement over the remainder of the subject premises appears at page 499 of the abstract and is recorded in Book 180 at Page 521. This easement was acquired by condemnation by the United States of America in 1944 and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 760 sea level datum.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 760 sea level datum, with the exception of the E1/2 SW1/4 SE1/4 as set forth above, by virtue of the easement acquired by grant and condemnation, and owns in fee simple that portion which lies below elevation 750 sea level datum. The USA holds title to the NW/14 SE1/4, SW1/4 SE1/4, SE1/4 SE1/4, SW1/4 NE1/4, NE1/4 SW1/4, and NW1/4 SW1/4 lying East of Spring River in Trust for the benefit of restricted Indians as above set forth.

Very truly yours,

RICHARD/D/JAMES,

OBA No. 4617



Parcel E - Federal Lands (BIA)



Federal Lands within the Project Boundary: 0 Acres

GRDA owns all the property within the Anticipated Project Boundary for Parcel E.

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel

- ** HON. ROBERT E. REAVIS II
 Admitted to practice in
- *Oklahoma & Missouri
- ** Oklahoma & Kansas

MORROW, WATSON, & JAMES A PROFESSIONAL CORPORATION

Law Office of

21 SOUTH MAIN P.O. BOX 1168 MIAMI, OKLAHOMA 74355 TEL. 918-542-5501 FAX, 918-542-5400

Jay Office: 510 KRAUSE STREET P.O. BOX 1018 JAY, OK 74346 TEL. 918-253-6208 FAX 918-253-6209

September 4, 2019

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Ottawa County Abstract and Title Company Abstract No. 12423 Covering: Lot 10 in the SW ¼ of Section 4, Township 27 North, Range 23 East of the Indian Meridian, Ottawa County, Oklahoma; Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 212 pages. This parcel was conveyed by Allotment Deed multiple Cherokee Freedmen, and was originally unrestricted. Subsequently, title was held in trust by the USA for the benefit of a restricted Quapaw grantee, but was thereafter conveyed free from restrictions by a Deed approved by the BIA, and shown at page 100 of the abstract, and recorded in Book 612 at Page 595. Title is presently held by Jacqueline Dawn Lipps and Jeromy John Lipps, by virtue of a Warranty Deed shown at page 176 of the abstract and recorded in Book 1007 at Page 449, less that portion to which the Grand River Dam Authority acquired fee simple title by condemnation. This is the portion of the property lying below the approximate 750 foot meander line which is described by metes and bounds in the Journal Entry shown at page 74 of the abstract and recorded in Book 169 at Page 331. Outstanding Mortgages covering the portion of the property owned by Mr. and Mrs. Lipps are shown at pages 186, 198, 205 and 207 of the abstract.

Flowage easements over the subject premises appear at pages 81 and 82 of the abstract and are recorded in Book 189 at Page 554, and Book 206 at Page 243. These easements were acquired by condemnation by the United States of America in 1945 and 1947 and grant a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 756.1 sea level datum, and to "inundate, submerge and flow intermittently, during Flood Periods," that portion of the premises lying between 756.1 and 760 sea level datum.

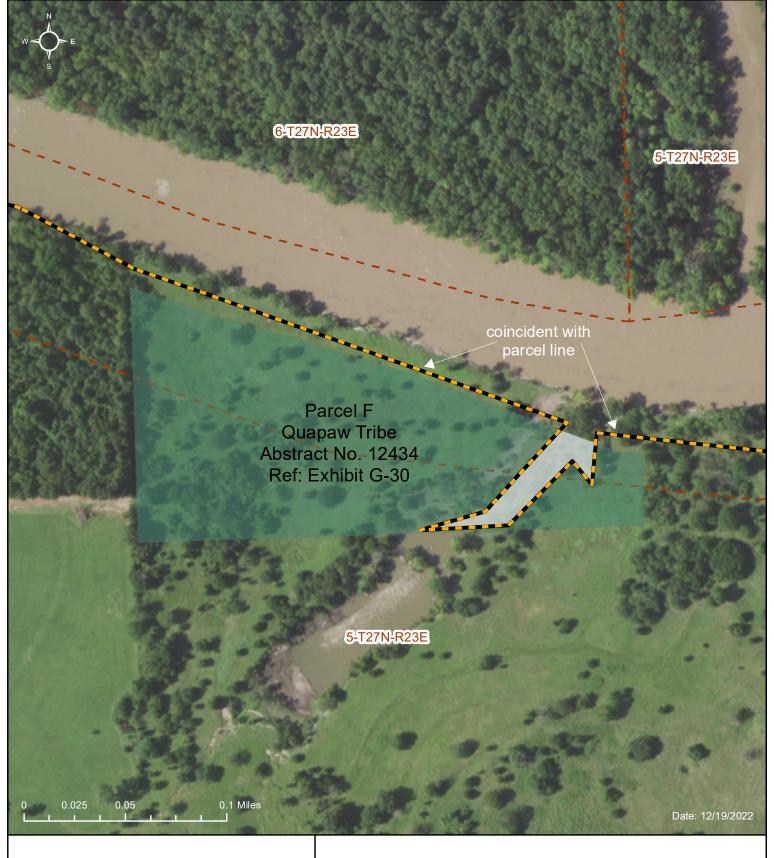
The property is subject to the provisions of the Ottawa County Floodplain Regulation of 2006 shown at page 150 of the abstract and recorded in Book 819 at Page 160, and the Amendment thereto shown at page 155 of the abstract and recorded in Book 839 at Page 1.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has valid and subsisting flowage easements over all of the property lying below elevation 760 sea level datum, by virtue of the easements acquired by condemnation, and owns in fee simple that portion which lies below elevation 750 sea level datum.

Very truly yours,

RICHARD D JAMES,

OBA No. 4617 FOR THE FIRM



Parcel F - Federal Lands (BIA)

Anticipated Project Boundary
GRDA Owned Land

Parcel F
Section Line

Federal Lands within the Project Boundary: 0 Acres

GRDA owns all the property within the Anticipated Project Boundary for Parcel F.

COY DEAN MORROW DENNIS J. WATSON

*RICHARD D. JAMES Of Counsel ** HON. ROBERT E. REAVIS II

- Admitted to practice in
- *Oklahoma & Missouri
- ** Oklahoma & Kansas

LAW OFFICE OF MORROW, WATSON, & JAMES A PROFESSIONAL CORPORATION 21 SOUTH MAIN P.O. BOX 1168 MIAMI, OKLAHOMA 74355

TEL. 918-542-5501 FAX. 918-542-5400

Jay Office: 510 KRAUSE STREET P.O. BOX 1018 JAY, OK 74346 TEL. 918-253-6208 FAX 918-253-6209

February 3, 2020

Ms. Tamara Jahnke, Esquire Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Ottawa County Abstract and Title Company Abstract No. 12434 Re: Covering: Lots 7 and 8; and NW1/4 SE1/4; and E1/2 SE1/4 in Section 5, Township 27 North, Range 23 East of the Indian Meridian, Ottawa County, Oklahoma. Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 384 pages, and last certified as of January 29, 2020 at 7:55 a.m. All of the property was originally conveyed by allotment and homestead deeds to Amanda Drew, Mont Smith, Melinda Smith and Issac Drew, Cherokee allotees, none of whom were of sufficient quantity of Indian blood so as to make the allotments restricted against alienation. Title to that portion of the property lying below elev 750 sea level datum was acquired in fee simple by condemnation by GRDA in 1941 by Judgment shown at page 91 of the abstract and recorded in Book 169 at Page 331. The Judgment shown at page 98 of the abstract and recorded in Book 181 at Page 206 grants the USA a flowage easement on all of the property lying below 756.1 sea level datum and an Intermittent Flowage Easement during flood conditions over all of the property lying between elev 756.1 and 760, sea level datum.

Title to all of the property lying East of the Will Rogers Turnpike remains unrestricted and vested in Jacqueline Dawn Lipps and Jeromy John Lipps pursuant to a Warranty Deed shown at page 336 of the abstract and recorded in Book 1007 at Page 449. A small tract on the South boundary bordering State Highway 125 was conveyed to Lance Mauer by Warranty Deed shown at page 215 of the abstract and recorded in Book 745 at Page 97.

That portion of the property lying West of the Will Rogers Turnpike is held in Trust by the United States of America pursuant to a Deed to Restricted Indian Land shown at page 126 of the abstract and recorded in Book 302 at Page 765, for the benefit of Jean Ann Quapaw, now Blue, now deceased.

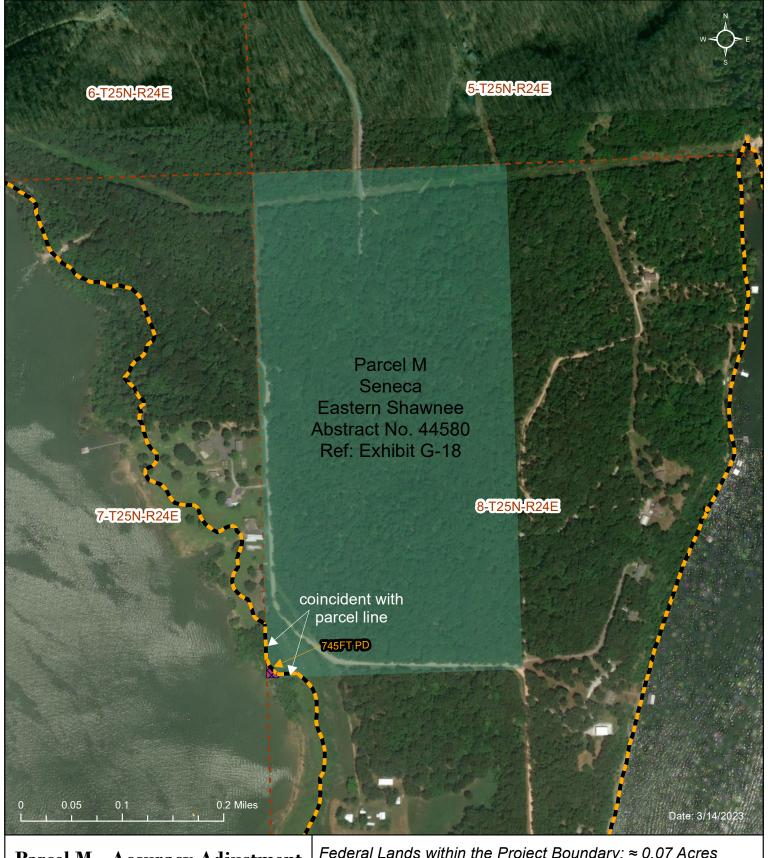
Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elev 756.1 sea level datum, and an Intermittent Flowage Easement during flood conditions over that portion of the property lying between elev 756.1 and 760 sea level datum, by virtue of the easements acquired by condemnation, and owns in fee simple that portion which lies below elev 750 sea level datum.

Very truly yours,

RICHARD D. JAMES, OBA No. 4617

FOR THE FIRM

RDJ/cb Enc.



Parcel M - Accuracy Adjustment

Proposed Project Boundary

Federal Lands in Proposed Project Boundary

Flowage Easement on Federal Lands

Parcel M

Section Line

Federal Lands within the Project Boundary: ≈ 0.07 Acres

GRDA holds a flowage easement for all federal lands within the Anticipated Project Boundary for Parcel M.

The federal acreage is derived from Bureau of Indian Affairs GIS data that has been digitzed, adjusted, and recalculated by GRDA in an effort to increase accuracy.

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel

**HON. ROBERT E. REAVIS II

Admitted to practice in

*Oklahoma & Missouri

** Oklahoma & Kansas

LAW OFFICE OF
MORROW, WATSON, & JAMES
A PROFESSIONAL CORPORATION

21 SOUTH MAIN P.O. BOX 1168

MIAMI, OKLAHOMA 74355

September 17, 2019

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Grand River Abstract and Title Company Abstract No. 44580 Covering: The W½ NW¼ of Section 8, Township 25 North, Range 24 East of the Indian Meridian, Delaware County, Oklahoma, LESS GRDA and subject to any and all easements.

Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 129 pages, and last certified as of 9/13/19 at 7:55 A.M. This parcel was conveyed by Trust Patent to Alexander Nichols Junior, Seneca Cayuga allotee. Pursuant to Probate Order shown at page 113 of the abstract and recorded in Book 254 at Page 596, title remains vested in the United States of America, in Trust for the benefit of James Franklin Higbee (1/4), Dixie Whitetree (1/4) and Nettie Nichols Rackleff (1/2).

A flowage easement over the subject premises appears at page 21 of the abstract and is recorded in Book 157 at Page 102. This easement was acquired by condemnation by the United States of America in 1944 and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 758 sea level datum, and subsequently assigned to the GRDA by an Assignment shown at page 74 of the abstract and recorded in Book 170 at Page 194.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 758 sea level datum, by virtue of the easement acquired by condemnation.

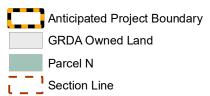
Very truly yours,

RICHARD D. JAMES,

OBA (%). 4617



Parcel N - Federal Lands (BIA)



Federal Lands within the Project Boundary: 0 Acres

GRDA owns all the property within the Anticipated Project Boundary for Parcel N.

LAW OFFICE OF

MORROW, WATSON, & JAMES

A PROFESSIONAL CORPORATION
21 SOUTH MAIN P.O. BOX 1168
MIAMI, OKLAHOMA 74355
TEL. 918-542-5501 FAX. 918-542-5400

Jay Office: 510 KRAUSE STREET JAY, OK 74346

TEL. 918-253-6208 FAX 918-253-6209

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel

** HON, ROBERT E, REAVIS II

Admitted to practice in

*Oklahoma & Missouri **Oklahoma & Kansas

October 11, 2019

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Grand River Abstract and Title Company Abstract No. 44611 Covering: The W½ E½ SW¼ SE¼ of Section 11, Township 25 North, Range 24 East of the Indian Meridian, Delaware County, Oklahoma, subject to any and all easements.

Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 372 pages, and last certified as of 9/25/19 at 7:55 A.M. This parcel was conveyed by Trust Patent to Seneca Cayuga allotee, John Sandstone, by an instrument shown at page 4 of the abstract. Title remained restricted and in Trust for the benefit of multiple generations of the descendants of the allotee until conveyed by BIA approved Warranty Deeds shown at pages 95, 97 and 89 of the abstract to Todd William England and Pamela Sue England, the current record owner. These instruments are recorded in Book 1382 at Pages 23 and 25, and Book 237 at Page 169 cover the subject premises less the portion to which the Grand River Dam Authority acquired fee simple title by BIA approved Deed to the Inherited Lands. This is the portion of the property lying below the 750 foot meander line, described by metes and bounds in the Indian Deed to Inherited Lands shown at page 14 of the abstract and recorded in Book 14 at Page 32.

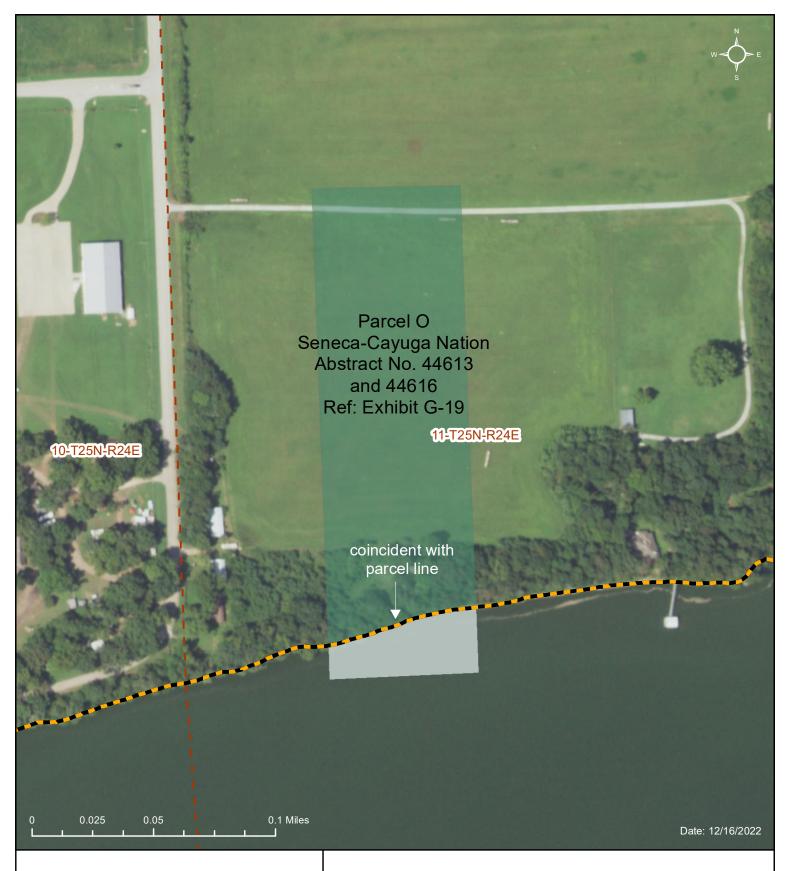
A flowage easement over the subject premises appears at page 16 of the abstract and is recorded in Book 157 at Page 149. This easement was acquired by condemnation by the United States of America in 1944 and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 758 sea level datum.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 758 sea level datum, by virtue of the easement acquired by condemnation, and owns in fee simple that portion which lies below elevation 750 sea level datum.

Very truly yours,

RICHARD D. JAMES,

OBA No. 4617/



Parcel O - Federal Lands (BIA)



Anticipated Project Boundary





Parcel O

Section Line

Federal Lands within the Project Boundary: 0 Acres

GRDA owns all the property within the Anticipated Project Boundary for Parcel O.

Law Office of

MORROW, WATSON, & JAMES

A PROFESSIONAL CORPORATION
21 SOUTH MAIN P.O. BOX 1168
MIAMI, OKLAHOMA 74355

TEL. 918-542-5501 FAX. 918-542-5400

Jay Office: 510 KRAUSE STREET P.O. BOX 1018 JAY, OK 74346 TEL. 918-253-6208 FAX 918-253-6209

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel ** HON. ROBERT E. REAVIS II

Admitted to practice in *Oklahoma & Missouri

** Oklahoma & Kansas

October 10, 2019

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Grand River Abstract and Title Company Abstract No. 44613
Covering: The E½ SW¼ NW¼ SW¼ of Section 11, Township 25
North, Range 24 East of the Indian Meridian, Delaware County,
Oklahoma, subject to any and all easements.
Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 94 pages, and last certified as of 9/27/19 at 7:55 A.M. This parcel was conveyed by Trust Patent to Seneca Cayuga allotee, Malinda Dick, by an instrument shown at page 4 of the abstract. Title remained restricted and in Trust for the benefit of multiple generations of the descendants of the allotee until conveyed by BIA approved Warranty Deeds shown at pages 80, 83, 86 and 89 of the abstract to the Seneca Cayuga Tribe of Oklahoma, the current record owner. These instruments are recorded in Book 1930 at Pages 126, 129, 132 and 135, and cover the subject premises less the portion to which the Grand River Dam Authority acquired fee simple title by condemnation. This is the portion of the property lying below the 750 foot meander line, described by metes and bounds in the Journal Entry of Judgment shown at page 14 of the abstract and recorded in Book 143 at Page 541.

A flowage easement over the subject premises appears at page 19 of the abstract and is recorded in Book 157 at Page 149. This easement was acquired by condemnation by the United States of America in 1944 and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 758 sea level datum.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 758 sea level datum, by virtue of the easement acquired by condemnation, and owns in fee simple that portion which lies below elevation 750 sea level datum.

Very truly yours,

RICHARD D. JAMES,

OBA No. 461/7

LAW OFFICE OF

Morrow, Watson, & James

A PROFESSIONAL CORPORATION 21 SOUTH MAIN P.O. BOX 1168

MIAMI, OKLAHOMA 74355 TEL. 918-542-550! FAX. 918-542-5400

Jay Office:

510 KRAUSE STREET P.O. BOX 1018 JAY, OK 74346

TEL. 918-253-6208 FAX 918-253-6209

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel

** HON. ROBERT E. REAVIS II
Admitted to practice in

*Oklahoma & Missouri

** Oklahoma & Kansas

October 10, 2019

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Grand River Abstract and Title Company Abstract No. 44616
Covering: The E½ NW¼ SW¼ SW¼ of Section 11, Township 25
North, Range 24 East of the Indian Meridian, Delaware County,
Oklahoma, subject to any and all easements.
Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 96 pages, and last certified as of 10/1/19 at 7:55 A.M. This parcel was conveyed by Trust Patent to Seneca Cayuga allotee, Malinda Dick, by an instrument shown at page 4 of the abstract. Title remained restricted and in Trust for the benefit of multiple generations of the descendants of the allotee until conveyed by BIA approved Warranty Deeds shown at pages 82, 85, 88 and 91 of the abstract to the Seneca Cayuga Tribe of Oklahoma, the current record owner. These instruments are recorded in Book 1930 at Pages 126, 129, 132 and 135, and cover the subject premises less the portion to which the Grand River Dam Authority acquired fee simple title by condemnation. This is the portion of the property lying below the 750 foot meander line, described by metes and bounds in the Journal Entry of Judgment shown at page 14 of the abstract and recorded in Book 143 at Page 541. It is also described in the above referenced deeds to the current record owner as being the South 112.2 feet of the property.

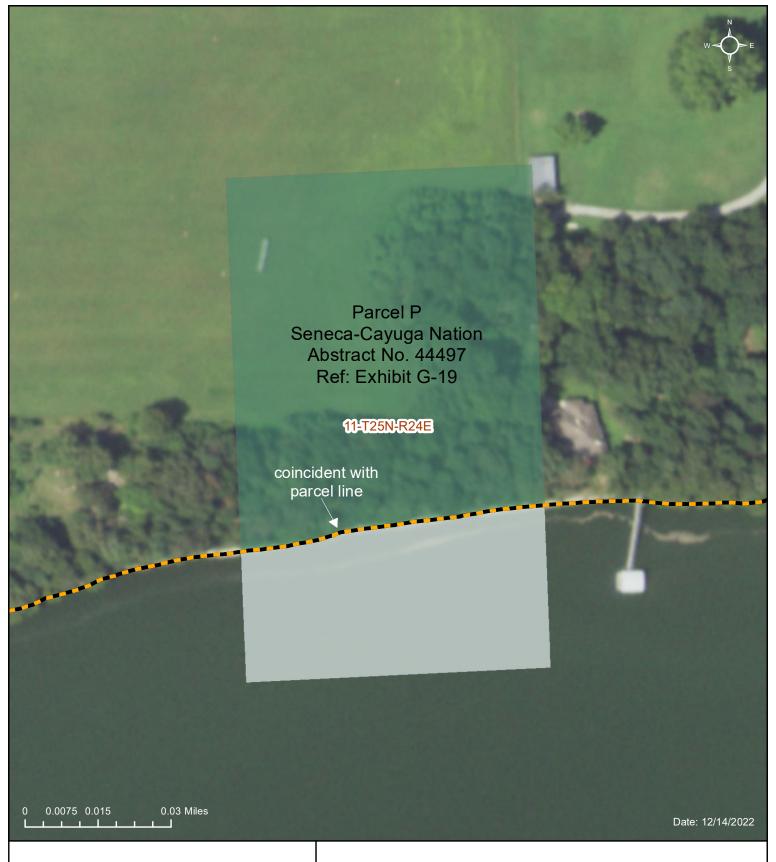
A flowage easement over the subject premises appears at page 19 of the abstract and is recorded in Book 157 at Page 149. This easement was acquired by condemnation by the United States of America in 1944 and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 758 sea level datum.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 758 sea level datum, by virtue of the easement acquired by condemnation, and owns in fee simple that portion which lies below elevation 750 sea level datum.

Very truly yours,

RICHARD D. JAMES,

OBA No. 4617



Parcel P - Federal Lands (BIA)



Federal Lands within the Project Boundary: 0 Acres

GRDA owns all the property within the Anticipated Project Boundary for Parcel P.

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel

**HON. ROBERT E. REAVIS II

Admitted to practice in

*Oklahoma & Missouri

** Oklahoma & Kansas

LAW OFFICE OF
MORROW, WATSON, & JAMES
A PROFESSIONAL CORPORATION
21 SOUTH MAIN P.O. BOX 1168
MIAMI, OKLAHOMA 74355
TEL. 918-542-5501 FAX. 918-542-5400

Jay Office: 510 KRAUSE STREET P.O. BOX 1018 JAY, OK 74346 TEL. 918-253-6208 FAX 918-253-6209

September 17, 2019

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Grand River Abstract and Title Company Abstract No. 44497
Covering: The W½ NE¼ SW¼ SW¼ of Section 11, Township 25
North, Range 24 East of the Indian Meridian, Delaware County,
Oklahoma, subject to any and all easements.
Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 78 pages, and last certified as of 7/25/19 at 7:55 A.M. This parcel was conveyed by Trust Patent to Seneca Cayuga allotee, Malinda Dick, by an instrument shown at page 6 of the abstract. Title remained restricted and in Trust for the benefit of multiple generations of the descendants of the allotee until conveyed by BIA approved Warranty Deeds shown at pages 67, 70, and 73 of the abstract to the Seneca Cayuga Tribe of Oklahoma, the current record owner. These instruments are recorded in Book 193 at Pages 129, 132 and 135, and cover the subject premises less the portion to which the Grand River Dam Authority acquired fee simple title by condemnation. This is the portion of the property lying below the 750 foot meander line, described by metes and bounds in the Journal Entry of Judgement shown at page 14 of the abstract and recorded in Book 143 at Page 541. It is also described in the above referenced deeds to the current record owner as being the South 112.2 feet of the property.

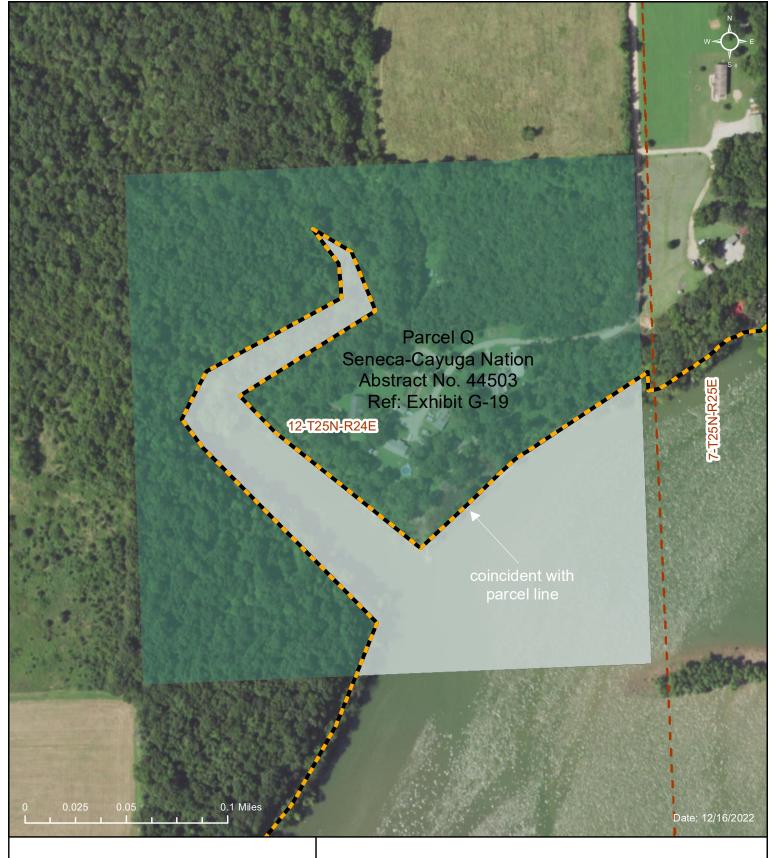
A flowage easement over the subject premises appears at page 19 of the abstract and is recorded in Book 157 at Page 149. This easement was acquired by condemnation by the United grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 758 sea level datum.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 758 sea level datum, by virtue of the easement acquired by condemnation, and owns in fee simple that portion which lies below elevation 750 sea level datum.

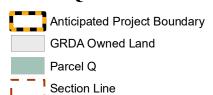
Very truly yours,

RICHARD D. JAMES,

OBA No. 4617



Parcel Q - Federal Lands (BIA)



Federal Lands within the Project Boundary: 0 Acres
GRDA owns all the property within the Anticipated
Project Boundary for Parcel Q.

Law Office of

MORROW, WATSON, & JAMES A PROFESSIONAL CORPORATION

21 SOUTH MAIN P.O. BOX 1168 MIAMI, OKLAHOMA 74355

TEL. 918-542-5501 FAX. 918-542-5400

Jay Office:

510 KRAUSE STREET P.O. BOX 1018 JAY, OK 74346 TEL. 918-253-6208 FAX 918-253-6209

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel

** HON. ROBERT E. REAVIS II Admitted to practice in

*Oklahoma & Missouri

** Oklahoma & Kansas

August 1, 2019

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Grand River Abstract and Title Company Abstract No. 44503 Re: Covering: The SE¼ NE¼ of Section 12, Township 25 North, Range 24 East of the Indian Meridian, Delaware County, Oklahoma; Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 45 pages. This parcel was never conveyed by Allotment Deed, Patent or Trust Patent, and title thus remains held in Trust by the United States of America for the benefit of the Seneca Cayuga Tribe of Oklahoma, less that portion to which the Grand River Dam Authority acquired fee simple title by condemnation. This is the portion of the property lying below the 750 foot meander line which is described by metes and bounds in the Journal Entry shown at page 5 of the abstract and recorded in Book 144 at Page 245.

A flowage easement over the subject premises appears at page 9 of the abstract and is recorded in Book 157 at Page 149. This easement was acquired by condemnation by the United States of America in 1944 and

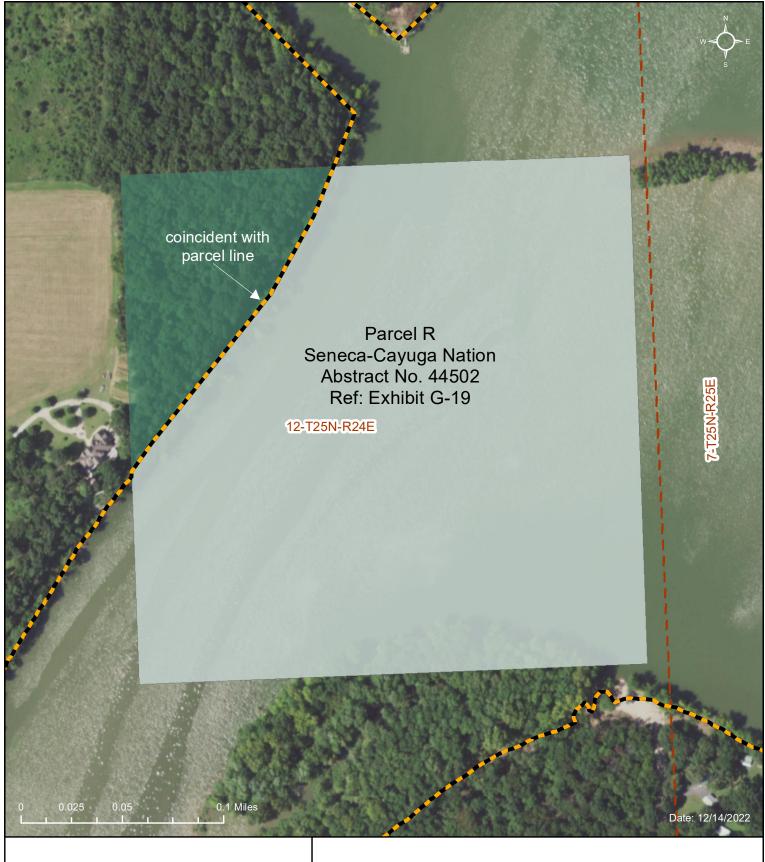
grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 758 sea level datum.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 758 sea level datum, by virtue of the easement acquired by condemnation, and owns in fee simple that portion which lies below elevation 750 sea level datum.

Very truly yours,

RICHARD D. JAMES,

OBA No/4617



Parcel R - Federal Lands (BIA)



Federal Lands within the Project Boundary: 0 Acres

GRDA owns all the property within the Anticipated Project Boundary for Parcel R.

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel

**HON. ROBERT E. REAVIS II

Admitted to practice in

*Oklahoma & Missouri

** Oklahoma & Kansas

LAW OFFICE OF
MORROW, WATSON, & JAMES
A PROFESSIONAL CORPORATION
21 SOUTH MAIN P.O. BOX 1168
MIAMI, OKLAHOMA 74355
TEL. 918-542-5501 FAX. 918-542-5400

Jay Office: 510 KRAUSE STREET P.O. BOX 1018
JAY, OK 74346
TEL. 918-253-6208 FAX 918-253-6209

August 1, 2019

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Grand River Abstract and Title Company Abstract No. 44502 Covering: The NE¼ SE¼ of Section 12, Township 25 North, Range 24 East of the Indian Meridian, Delaware County, Oklahoma; Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 45 pages. This parcel was never conveyed by Allotment Deed, Patent or Trust Patent, and title thus remains held in Trust by the United States of America for the benefit of the Seneca Cayuga Tribe of Oklahoma, less that portion to which the Grand River Dam Authority acquired fee simple title by condemnation. This is the portion of the property lying below the 750 foot meander line which is described by metes and bounds in the Journal Entry shown at page 5 of the abstract and recorded in Book 144 at Page 245.

A flowage easement over the subject premises appears at page 9 of the abstract and is recorded in Book 157 at Page 149. This easement was acquired by condemnation by the United States of America in 1944 and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 758 sea level datum.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 758 sea level datum, by virtue of the easement acquired by condemnation, and owns in fee simple that portion which lies below elevation 750 sea level datum.

Very truly yours,

RICHARD D. JAMES,

OBA No. 461/7



Parcel T - Federal Lands (BIA)

Anticipated Project Boundary
Parcel T
Section Line

Federal Lands within the Project Boundary: 0 Acres

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel

- ** HON. ROBERT E. REAVIS II
 - Admitted to practice in
- *Oklahoma & Missouri
- ** Oklahoma & Kansas

LAW OFFICE OF

MORROW, WATSON, & JAMES
A PROFESSIONAL CORPORATION
21 SOUTH MAIN P.O. BOX 1168
MIAMI, OKLAHOMA 74355

TEL. 918-542-5501 FAX. 918-542-5400

Jay Office: 510 KRAUSE STREET JAY, OK 74346 TEL. 918-253-6208 FAX 918-253-6209

November 8, 2019

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Ottawa County Abstract and Title Company Abstract No. 12433 Covering: The SW 1/4 NE 1/4 of Section 19, Township 26 North, Range 24 East of the Indian Meridian, Ottawa County, Oklahoma. Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 87 pages, and last certified as of 11/6/19 at 7:55 A.M. This parcel was conveyed by Trust Patent to Seneca Cayuga allotee, Susannah Young, by an instrument shown at page 7 of the abstract. Title remains restricted and in Trust for the benefit of multiple generations of the descendants of the allotee, pursuant to the BIA Probate Order shown at page 40 of the abstract. This Order distributes the property to Phillip Steven Gourd, Mark Anthony Gourd, and John Louis Gourd, Seneca-Cherokee unallotees and the current record owners, subject to a life estate in favor of their non-Indian mother, Ellen Mae Hagan Gourd. This instrument is recorded in Book 347 at Page 477 and covers the subject premises less the portion to which the Grand River Dam Authority acquired fee simple title by BIA approved Warranty Deed shown at page 8 of the abstract and recorded in Book 163 at page 582. This is the portion of the property lying below the 750 foot meander line, described by metes and bounds in the said deed.

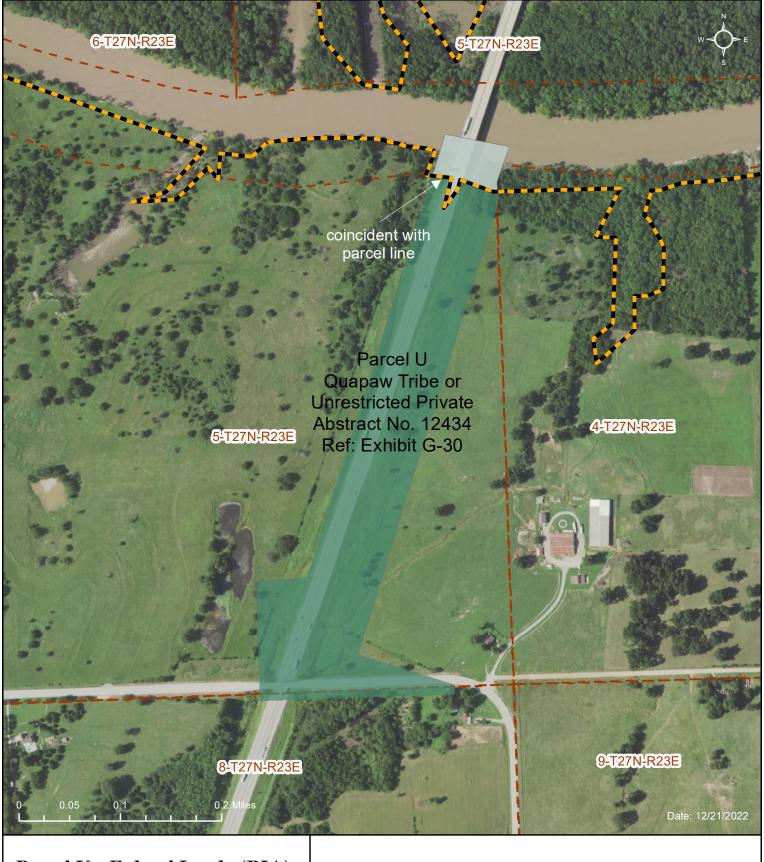
A flowage easement over the subject premises appears at page 10 of the abstract and is recorded in Book 179 at Page 981. This easement was acquired by condemnation by the United States of America in 1944 and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 758 sea level datum.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 758 sea level datum, by virtue of the easement acquired by condemnation, and owns in fee simple that portion which lies below elevation 750 sea level datum.

Very truly yours,

RICHARD D. JAMES,

OBA No. 4617 FOR THE FIRM



Parcel U - Federal Lands (BIA)

Anticipated Project Boundary

GRDA Owned Land

Parcel U

Section Line

Federal Lands within the Project Boundary: 0 Acres

GRDA owns all the property within the Anticipated Project Boundary for Parcel U.

COY DEAN MORROW DENNIS J. WATSON

*RICHARD D. JAMES Of Counsel ** HON. ROBERT E. REAVIS II

- Admitted to practice in
- *Oklahoma & Missouri
- ** Oklahoma & Kansas

LAW OFFICE OF MORROW, WATSON, & JAMES A PROFESSIONAL CORPORATION 21 SOUTH MAIN P.O. BOX 1168 MIAMI, OKLAHOMA 74355

TEL. 918-542-5501 FAX. 918-542-5400

Jay Office: 510 KRAUSE STREET P.O. BOX 1018 JAY, OK 74346 TEL. 918-253-6208 FAX 918-253-6209

February 3, 2020

Ms. Tamara Jahnke, Esquire Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Ottawa County Abstract and Title Company Abstract No. 12434 Re: Covering: Lots 7 and 8; and NW1/4 SE1/4; and E1/2 SE1/4 in Section 5, Township 27 North, Range 23 East of the Indian Meridian, Ottawa County, Oklahoma. Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 384 pages, and last certified as of January 29, 2020 at 7:55 a.m. All of the property was originally conveyed by allotment and homestead deeds to Amanda Drew, Mont Smith, Melinda Smith and Issac Drew, Cherokee allotees, none of whom were of sufficient quantity of Indian blood so as to make the allotments restricted against alienation. Title to that portion of the property lying below elev 750 sea level datum was acquired in fee simple by condemnation by GRDA in 1941 by Judgment shown at page 91 of the abstract and recorded in Book 169 at Page 331. The Judgment shown at page 98 of the abstract and recorded in Book 181 at Page 206 grants the USA a flowage easement on all of the property lying below 756.1 sea level datum and an Intermittent Flowage Easement during flood conditions over all of the property lying between elev 756.1 and 760, sea level datum.

Title to all of the property lying East of the Will Rogers Turnpike remains unrestricted and vested in Jacqueline Dawn Lipps and Jeromy John Lipps pursuant to a Warranty Deed shown at page 336 of the abstract and recorded in Book 1007 at Page 449. A small tract on the South boundary bordering State Highway 125 was conveyed to Lance Mauer by Warranty Deed shown at page 215 of the abstract and recorded in Book 745 at Page 97.

That portion of the property lying West of the Will Rogers Turnpike is held in Trust by the United States of America pursuant to a Deed to Restricted Indian Land shown at page 126 of the abstract and recorded in Book 302 at Page 765, for the benefit of Jean Ann Quapaw, now Blue, now deceased.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elev 756.1 sea level datum, and an Intermittent Flowage Easement during flood conditions over that portion of the property lying between elev 756.1 and 760 sea level datum, by virtue of the easements acquired by condemnation, and owns in fee simple that portion which lies below elev 750 sea level datum.

Very truly yours,

RICHARD D. JAMES, OBA No. 4617

FOR THE FIRM

RDJ/cb Enc.



Parcel V - Accuracy Adjustment

Proposed Project Boundary

Federal Lands in Proposed Project Boundary

Flowage Easement on Federal Lands

Parcel V

Section Line

Federal Lands within the Project Boundary: ≈ 0.09 Acres

GRDA holds a flowage easement for all federal lands within the Anticipated Project Boundary for Parcel V.

The federal acreage is derived from Bureau of Indian Affairs GIS data that has been digitzed, adjusted, and recalculated by GRDA in an effort to increase accuracy.

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel

- ** HON. ROBERT E. REAVIS II
 - Admitted to practice in
- *Oklahoma & Missouri
- ** Oklahoma & Kansas

LAW OFFICE OF MORROW, WATSON, & JAMES A PROFESSIONAL CORPORATION

21 SOUTH MAIN P.O. BOX 1168 MIAMI, OKLAHOMA 74355 TEL 918-542-5501 FAX 918-542-5400

Jay Office: 510 KRAUSE STREET JAY, OK 74346 TEL. 918-253-6208 FAX 918-253-6209

October 11, 2019

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Grand River Abstract and Title Company Abstract No. 44601 Covering: The W½ SE¼ of Section 10, Township 25 North, Range 24 East of the Indian Meridian, Delaware County, Oklahoma, subject to any and all easements.

Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 208 pages, and last certified as of 9/20/19 at 7:55 A.M. This parcel was conveyed by Unrestricted Patent to Mitchell Spicer, purchaser of lands within the allotment of Seneca Cayuga allotee Kate Bee, by an instrument shown at page 4 of the abstract. Title remained unrestricted until the same was conveyed in 2011 in Trust to the United States of America, the current record owner, for the benefit of the Seneca Cayuga Tribe of Oklahoma BIA approved Warranty Deed shown at page 206, of the abstract and recorded in Book 1967 at Page 198.

A flowage easement over the subject premises appears at page 71 of the abstract and is recorded in Book 157 at Page 149. This easement was acquired by condemnation by the United States of America in 1944 and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 758 sea level datum. An Assignment of the same from the United States of America to the Grand

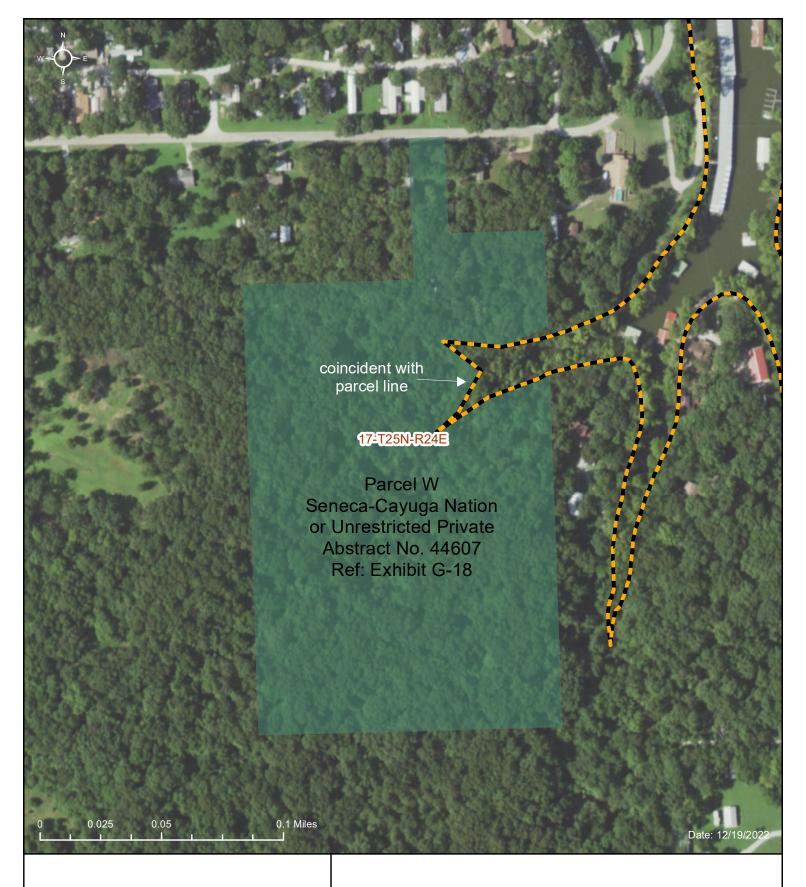
River Dam Authority appears at page 96 of the abstract and is recorded in Book 170 at Page 194.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 758 sea level datum, by virtue of the easement acquired by condemnation.

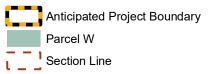
Very truly yours,

RICHARD D/JAMES,

OBA No. 46/17 FOR THE FIRM



Parcel W - Federal Lands (BIA)



Federal Lands within the Project Boundary: 0 Acres

Law Office of

Morrow, Watson, & James

A PROFESSIONAL CORPORATION 21 SOUTH MAIN P.O. BOX 1168 MIAMI, OKLAHOMA 74355

TEL 918-542-5501 FAX. 918-542-5400

Jay Office: 510 KRAUSE STREET JAY, OK 74346 TEL. 918-253-6208 FAX 918-253-6209

COY DEAN MORROW DENNIS J. WATSON *RICHARD D. JAMES

Of Counsel

** HON, ROBERT E. REAVIS II
Admitted to practice in

*Oklahoma & Missouri **Oklahoma & Kansas

October 11, 2019

Ms. Tamara Jahnke, Esq. Assistant General Counsel, Grand River Dam Authority P.O. Box 409 Vinita, OK 74350

Re: Grand River Abstract and Title Company Abstract No. 44607 Covering: The NW ¼ SW ¼ of Section 17, Township 25 North, Range 24 East of the Indian Meridian, Delaware County, Oklahoma, subject to any and all easements. Our File No. 21463

Dear Ms. Jahnke:

We have completed examination of the above referenced abstract of title, consisting of 219 pages, and last certified as of 9/23/19 at 7:55 A.M. This parcel was conveyed by Trust Patent to Seneca Cayuga allotee, Mary J. Kariho, by an instrument shown at page 4 of the abstract. Title remains restricted and in Trust for the benefit of the allotee and her immediate and remote grantees of the two separate one acre tracts conveyed by BIA approved Warranty Deeds shown at pages 204 and 208 of the abstract to James Logan and Raylene Faye Birkes Hackler, the current record owners. These instruments are recorded in Book 336 at Pages 213, and Book 1157 at Page 144, and cover the above referenced one acre tracts. An additional one acre tract was conveyed by the allotee, free of restrictions by BIA approved Warranty Deed shown at page 68 of the abstract and recorded in Book 306 at Page 239. Title to this tract is now vested in Sabrina A. Neal, free from restrictions by virtue of the Warranty Deed shown at page 169 of the abstract, and recorded in Book 1585 at Page 53. The portion of the

property lying below the 750 foot meander line, described by metes and bounds in the BIA approved Restricted Indian Deed shown at page 7 of the abstract and recorded in Book 131 at Page 540, was acquired in fee simple by the GRDA in 1939.

A flowage easement over the subject premises appears at page 9 of the abstract and is recorded in Book 157 at Page 102. This easement was acquired by condemnation by the United States of America in 1944 and grants a perpetual easement to "inundate, submerge, and flow" over all of the subject premises, lying below elevation 758 sea level datum.

Accordingly, it is the opinion of the undersigned that Grand River Dam Authority has a valid and subsisting flowage easement over all of the property lying below elevation 758 sea level datum, by virtue of the easement acquired by condemnation, and owns in fee simple that portion which lies below elevation 750 sea level datum.

Very truly yours.

RICHARD JAMES,

OBA No. 4617