



# Public Notice

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U.S. Army Corps  
of Engineers  
Tulsa District

Reply To:

U.S. Army Corps of Engineers  
ATTN: Regulatory Office  
2488 East 81st Street  
Tulsa, Oklahoma 74137-4290

SWT-2015-712  
Public Notice No.

December 10, 2019  
Public Notice Date

January 9, 2020  
Expiration Date

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## PURPOSE

The purpose of this public notice is to inform you of a proposal for work in which you might be interested and to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest.

## SECTION 10

The U.S. Army Corps of Engineers is directed by Congress through Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) to regulate all work or structures in or affecting the course, condition, or capacity of navigable waters of the United States. The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

## SECTION 404

The U.S. Army Corps of Engineers is directed by Congress through Section 404 of the Clean Water Act (33 U.S.C. 1344) to regulate the discharges of dredged and fill material into all waters of the United States. These waters include lakes, rivers, streams, mudflats, sandflats, sloughs, wet meadows, natural ponds, and wetlands adjacent to other waters. The intent of the law is to protect these waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical, and biological integrity.

## NOTICE TO PUBLISHERS

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**DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, TULSA DISTRICT  
2488 EAST 81ST STREET  
TULSA, OKLAHOMA 74137-4290**

Application No. SWT-2015-712

**JOINT PUBLIC NOTICE  
U.S. ARMY CORPS OF ENGINEERS  
AND  
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ)  
(30-DAY COMMENT PERIOD)**

Interested parties are hereby notified that the District Engineer (DE) has received an application for a Department of the Army (DA) permit and water quality certification pursuant to Sections 404 and 401 of the Clean Water Act (CWA). The ODEQ hereby incorporates this public notice and procedure as its own public notice and procedure by reference thereto.

**Applicant:** Mr. Robert Benham  
Oklahoma Gas and Electric Company  
P.O. Box 321 MC 610  
Oklahoma City, OK 73101

**Location:** The proposed project is in Section 22, Township 12 North, Range 1 East, Oklahoma County, Oklahoma. The project site can be found on the Horseshoe Lake, Oklahoma 7.5 Minute USGS Quadrangle map at North Latitude 35.50279 and West Longitude -97.18030.

**Project Description:** The applicant proposes to construct bank stabilization activities along approximately 1,500 linear feet of the left descending bank of the North Canadian River. The proposed bank stabilization measures includes the construction of bendway weirs (BW), longitudinal peak stone toe protection (LPSTP), and living dikes (LD).

**Note:** Repair existing BW and LPSTP along the right descending bank of the North Canadian River back to original specifications that were installed in 2015, but were damaged. This proposed work is exempted from regulation under Section 404(f)(B), for the purpose of maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, and bridge abutments or approaches, and transportation structures. Our assessment is that your proposed repairs fall within the scope of the exemption. Therefore, this part of the project is not subject to regulation pursuant to Section 404 of the CWA, and a Department of the Army (DA) permit will not be required.

**Purpose:** The proposed bank stabilization project would prevent channel migration and preserve the existing water intake for Horseshoe Lake Generating Station. Currently, there is no protection at this river segment and where it would flow out of this area between Horseshoe Lake and the North Canadian River. In a large flood event, this

could result in extensive erosion at this unprotected bank adjacent to Horseshoe Lake and jeopardize the entire lake system.

Summary Table of Impacts:

| Original Proposal   |                    |                                  |                        |                                |                          |
|---|--------------------|----------------------------------|------------------------|--------------------------------|--------------------------|
| Number or Location  | Impact Activity    | Type of Water                    | Type of Fill Material  | Qty of Material cys below OHWM | Footprint (ac and/or lf) |
| Left descending bank  | Bank stabilization | Perennial (North Canadian River) | riprap and living dike | 8,777                          | 1,500 lf                 |
| cubic yards (cys), ordinary high water mark (OHWM), acre (ac), linear feet (lf) |                    |                                  |                        |                                |                          |

Description of Work: The applicant plans to install silt fencing around the work areas, prior to any earth-disturbing activities. They would install BW and LPSTP, composed of riprap. Also, the applicant is proposing several LD, consisting of deep planted rows of live un-rooted willow and sycamore trees on the left descending bank. Rip-rap would be composed of durable well-graded rock sized between 12 to 18-inches, and would be free from dirt, clay, sand, rock fines, and other materials.

Avoidance and Minimization Information: The applicant provided the following statement with regard to how avoidance and minimization of impacts to aquatic resources was incorporated into the project plan: Impacts to the North Canadian River would be avoided and minimized to the greatest extent practicable, and only the minimum amount of fill required would be used to achieve the design requirements. The stabilization measures on the southern bank of the river are being repaired back to design specifications, and so additional impacts to the river should be minimal. A no-action alternative for stabilization measures on the northern bank of the river was not acceptable due to the risk of a major flood event in the following year eroding the bank and draining the settling basin. This would significantly affect the water supply for the Horseshoe Lake Generating Station.

Mitigation: Furthermore, the applicant proposes the following as compensatory mitigation for the unavoidable impacts to aquatic resources expected from the proposed project:

(The project design would result in the creation of a stable riparian zone for plant communities to establish in the future. Living dikes would be constructed as part of the project to augment stabilization of the bank and to aid in the creation of a riparian zone. A construction stormwater plan is developed for the project and would be followed. Best management practices that would be followed include the installation of silt fences to prevent discharge of soil laden waters from entering into the North Canadian River, as well as securing construction materials, trash, and other items.)

This mitigation plan is the applicant's proposal. The Corps has made no determination at this time with regard to the adequacy of the proposed mitigation relative to the federal mitigation rules and guidance, including Tulsa District's Mitigation and Monitoring Guidelines. Compensatory Mitigation for unavoidable impacts may be required to ensure that this activity requiring a Section 404 permit, if issued, complies with the Section 404 (b)(1) Guidelines. The Corps bears the final decision on the need for and extent of mitigation required if the project proposed herein is authorized.

Government Authorizations obtained or received:

Project Setting: The project area is located in the North Canadian River Watershed, which is part of the Northern Cross Timbers ecoregion, which is naturally covered by a mosaic of oak savanna, scrubby oak forest, eastern red cedar, and tall grass prairie. The median flow in the North Canadian River near Wetumka (downstream of Horseshoe Lake, representing the upstream basin) is greater than 13,800 AF/month throughout the year and greater than 35,000 AF/month in the spring and early summer. However, the river can have periods of low to very low flow in any month of the year. According to the Oklahoma Conservation Commission, the majority of the land use in the watershed is for cultivation and grazing, which has also been the historical use since the 1930s. Urbanization upstream of the project area can be seen on aerial imagery.

Existing Condition: The western portion of the project area along the right descending bank of the North Canadian River was previously stabilized with BW and LPSTP in 2015. The eastern portion of the project along the left descending bank of the North Canadian River was stabilized at some point in the past. The south bank of the North Canadian River immediately adjoins pastureland, while the northern bank of the North Canadian River has a vegetated buffer adjacent to the Horseshoe Lake Generating Station.

Cultural Resources: The DE is responsible to ensure compliance with the National Historic Preservation Act of 1966 (NHPA) (Public Law 89-665), as amended, and other cultural resources laws and Executive Orders. A preliminary review of the state's records has been completed for the presence of sites included in, or eligible for, inclusion in the National Register of Historic Places, as well as the Oklahoma Landmark Inventory Database. There may be known historic properties, as defined by the NHPA, in or within the vicinity of the proposed permit area.

Threatened and Endangered Species: The following federally listed species are known to occur in the vicinity or are listed for the county in which the proposed action is located: Interior Least Tern (*Sterna antillarum*), Piping Plover (*Charadrius melodus*), Whooping Crane (*Grus americana*), and the Red Knot (*Calidris cantus rufa*). A copy of this notice is being furnished to the U.S. Fish and Wildlife Service and appropriate state agencies. The IPAC consultation number is 02EKOK00-2020-SLI-0463. Our preliminary determination is that the proposed activity would not affect listed threatened or endangered species or their critical habitat.

Evaluation Factors: The decision whether to issue a permit would be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. That decision would reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal would be considered, including the cumulative effects thereof: conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownerships, and, in general, the needs and welfare of the people. A permit will be denied if the discharge does not comply with the Environmental Protection Agency's 404(b)(1) Guidelines. Subject to the 404(b)(1) Guidelines and any other applicable guidelines or criteria, a permit will be granted unless the DE determines that it would be contrary to the public interest.

Plans and Data: Plans showing the location of the proposed activity and other data are enclosed with this notice. If additional information is desired, it may be obtained from Mr. Bryan Noblitt, Tulsa District Corps of Engineers, ATTN: Regulatory Office, 2488 East 81st Street, Tulsa, OK 74137; or telephone 918-669-7400.

Comments: The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any comments on this proposal must be submitted to be received by the Corps by the expiration date of this public notice comment period. Comments received after this date will not be considered in our decision. You may submit comments to mailing address Tulsa District Corps of Engineers, ATTN: Regulatory Office, 2488 East 81st Street, Tulsa, OK 74137 or email CESWT-RO@usace.army.mil. Please include the public notice number SWT-2015-712 in the subject line of your email message.

Comments concerning water quality impacts will be forwarded to ODEQ for consideration in issuing a Section 401 Water Quality Certification for the proposed project. Work may **not** commence until decisions have been made on both Sections 401 and 404.

Andrew R. Commer  
Chief, Regulatory Office

Enclosures





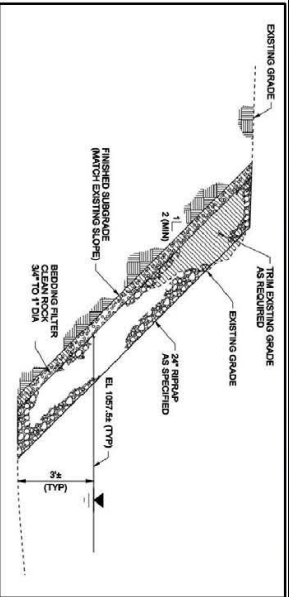
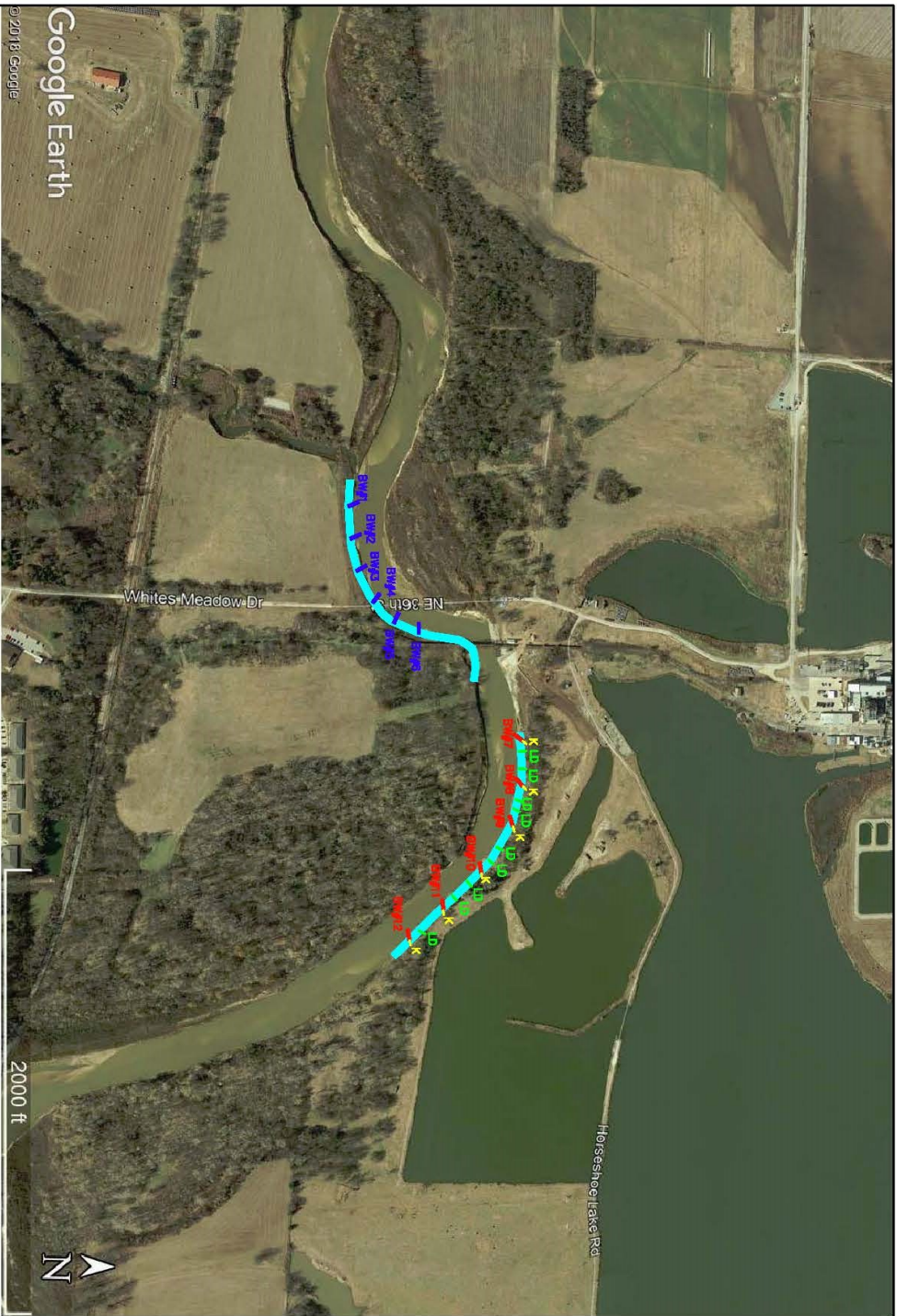
Repair existing 1,200 linear feet of bendway weirs and longitudinal stone toe protection.

Install 1,500 linear feet of new bendway weirs, longitudinal stone toe protection, and living dikes.

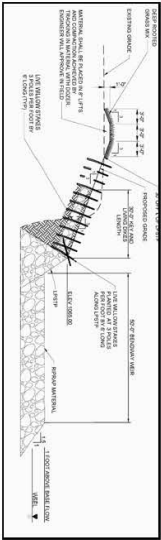
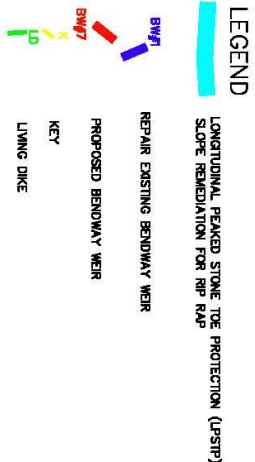
OG&E Horseshoe Lake Bank Stabilization Project

SWT-2015-712  
Oklahoma Gas and Electric Horseshoe Lake  
Bank Stabilization on the North Canadian River  
Harrah, Oklahoma  
North Canadian River  
Enclosure 1 of 5

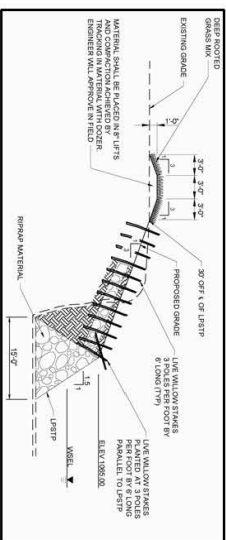




SLOPE REMEDIATION FOR RIPRAP



BENDWAY WEIR DETAIL



LIVING DIKE DETAIL

..\\users\\volames\\desktop\\vnotest1.jpg

ROCK SIZE FOR RIPRAP, KEY,  
LPSTP AND BENDWAY WEIR

Oklahoma Gas and Electric

Horseshoe Lake Power Plant

SWT-2015-712

Oklahoma Gas and Electric Horseshoe Lake  
Bank Stabilization on the North Canadian River  
Harrah, Oklahoma

North Canadian River

Enclosure 2 of 5

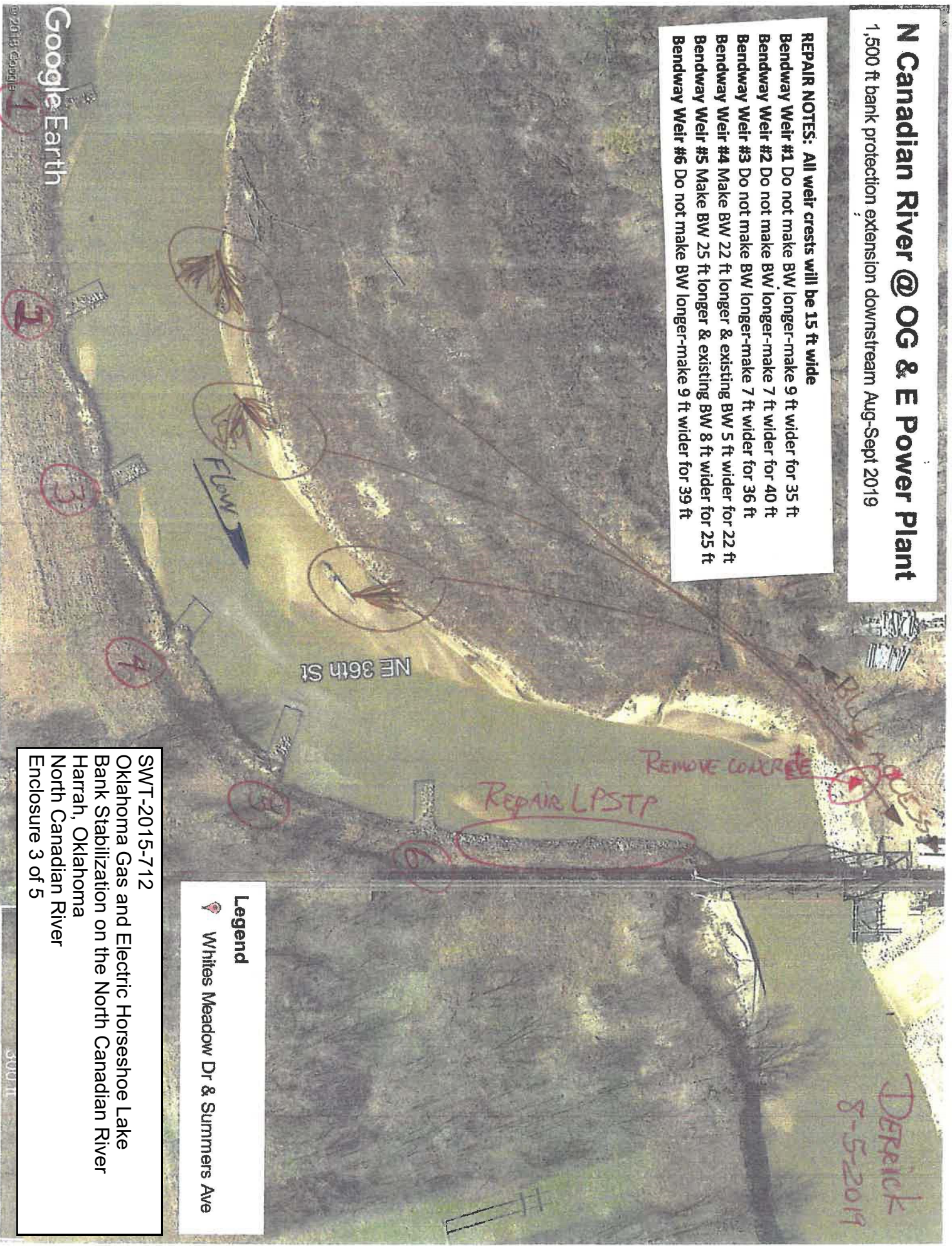


# N Canadian River @ OG & E Power Plant

1,500 ft bank protection extension downstream Aug-Sept 2019

## REPAIR NOTES: All weir crests will be 15 ft wide

- Bendway Weir #1 Do not make BW longer-make 9 ft wider for 35 ft
- Bendway Weir #2 Do not make BW longer-make 7 ft wider for 40 ft
- Bendway Weir #3 Do not make BW longer-make 7 ft wider for 36 ft
- Bendway Weir #4 Make BW 22 ft longer & existing BW 5 ft wider for 22 ft
- Bendway Weir #5 Make BW 25 ft longer & existing BW 8 ft wider for 25 ft
- Bendway Weir #6 Do not make BW longer-make 9 ft wider for 39 ft



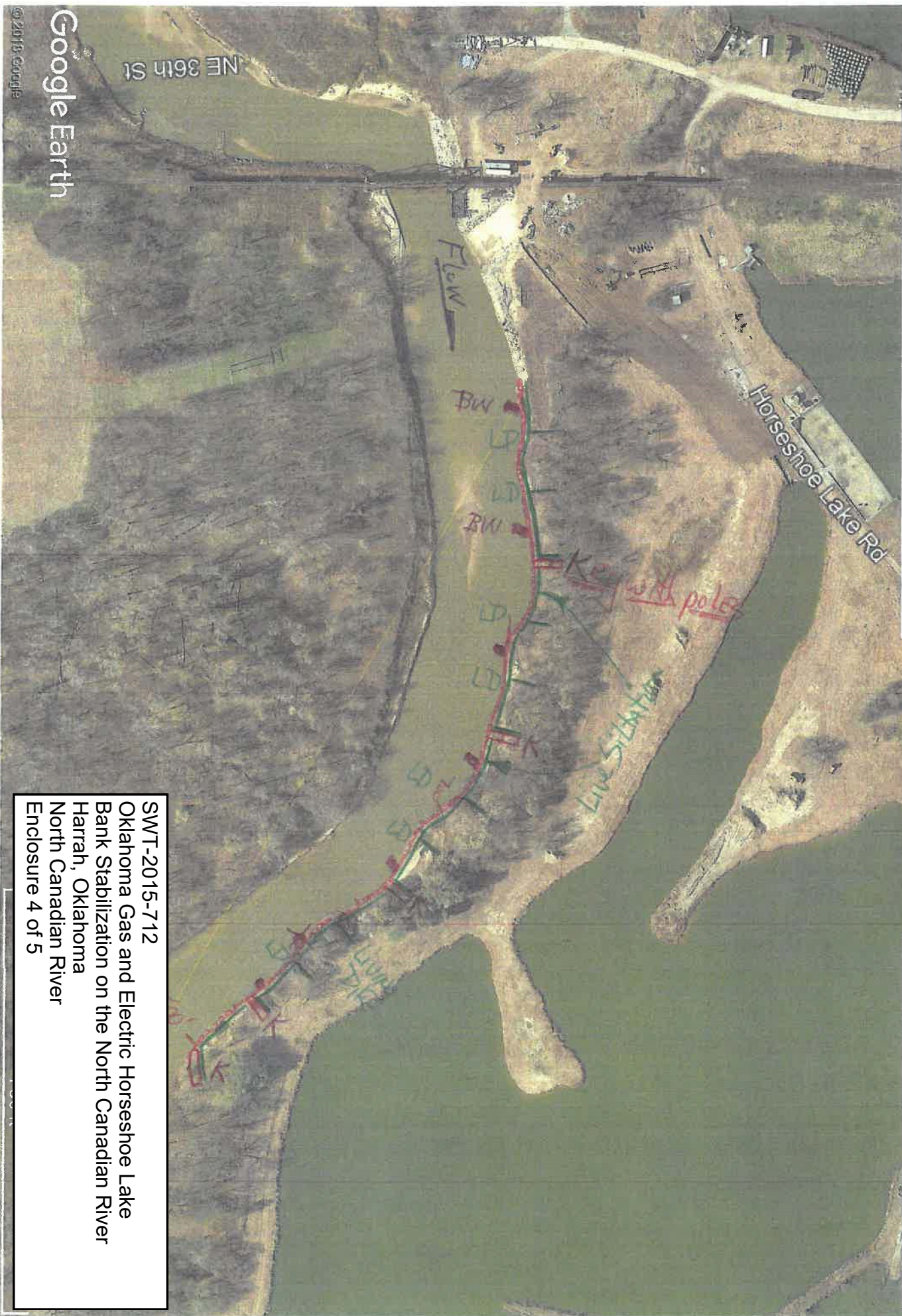
**Legend**  
Whites Meadow Dr & Summers Ave

SWT-2015-712  
Oklahoma Gas and Electric Horseshoe Lake  
Bank Stabilization on the North Canadian River  
Harrah, Oklahoma  
North Canadian River  
Enclosure 3 of 5



**N Canadian River @ OG & E Power Plant**  
*2019 Project - Bank Protection*

**Legend**  
8-5-2019  
Whites Meadow Dr & Summers Ave

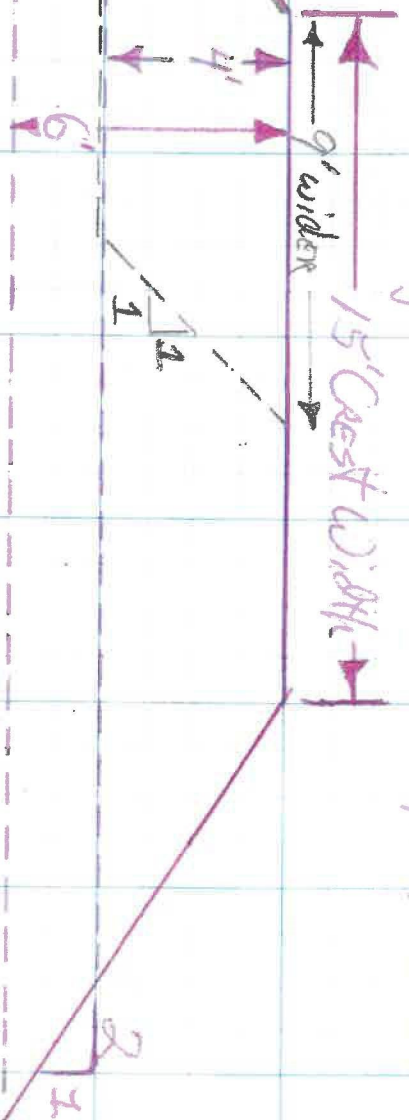


SWT-2015-712  
Oklahoma Gas and Electric Horseshoe Lake  
Bank Stabilization on the North Canadian River  
Harrah, Oklahoma  
North Canadian River  
Enclosure 4 of 5

# Bend Way Weir Stone Calculator

8-5-2019  
Derrick

Bendway Weirs for Harrah, OK - OGE



BW - 15' wide crest - 6' section = 144 cu. ft. (14' x 110' / 6' ft)  
Widen existing weir = 4 ft section = 9 ft wider  
5' wider = 23 x 110 = 2000 = 1.3 tons / ft 7 ft wider

SWT-2015-712  
Oklahoma Gas and Electric Horseshoe Lake  
Bank Stabilization on the North Canadian River  
Harrah, Oklahoma  
North Canadian River  
Enclosure 5 of 5