Public Notice

U.S. Army Corps of Engineers
Tulsa District

Reply To:

U.S. Army Corps of Engineers
ATTN: Regulatory Office
2488 E 81st Street
Tulsa, OK 74137

SWT-2008-657
Public Notice No.

September 19, 2022
Public Notice Date

October 18, 2022
Expiration Date

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 USC 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 USC 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
This public notice has been provided as a public service and may be reprinted at your discretion. However, any cost incurred as a result of reprinting or further distribution shall not be a basis for claim against the Government.

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

Application No. SWT-2008-657

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: Ms. Rachel Hanigan, P.E.
Oklahoma City Waste Disposal, Inc.
7600 SW 15th Street
Oklahoma City, OK 73128

Agent: Mr. Jonathan Queen, P.E.
Weaver Consultants Group, LLC
6420 Southwest Boulevard, Suite 206
Fort Worth, TX 76109

Location: The proposed project is in portions of Sections 8 and 9, Township 11 North, Range 4 West, near the intersection of Interstate Highway 40 and Council Road, Oklahoma County, Oklahoma. The project site can be found on the Mustang, Oklahoma 7.5 Minute USGS Quadrangle map at North Latitude 35.44405 and West Longitude 97.63623.

Project Description: The application is to modify an existing DA Permit to reroute Campbell Creek to accommodate additional solid waste storage within the southeast area of the development that is currently part of the compensatory mitigation plan.

Purpose: The overall purpose of this work is to extend the lifespan of an existing long-term solid waste disposal facility for the City of Oklahoma City and surrounding areas. The applicant's proposed project would result in approximately 49 acres (ac) of expansion to the existing Oklahoma City Landfill.

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)**
Campbell Creek (Previously authorized Impacts)	Placement of Fill Material	Perennial Stream	Clean Soil	41,000	3,840 lf
Campbell Creek (Proposed Impacts)	Placement of Fill Material	Perennial Stream	Clean Soil	6,500	730 lf
Campbell Creek (Proposed Impacts to existing mitigation)	Placement of Fill Material	Perennial Stream	Clean Soil	24,000	2,890 lf
cubic yards (cys), ordinary high water mark (OHWM), acre (ac), linear feet (lf), feet (ft)					

Description of Work: The applicant is proposing to impact 730 lf (0.4 ac) of Campbell Creek by placing approximately 6,500 cys of dredged and fill material within the stream channel to accommodate additional landfill capacity and infrastructure, including the expanding landfill foundation and liner system along the southern portion of the site. In addition to this modification request, the applicant is also proposing to impact 2,890 lf (1.3 ac) of the permittee responsible mitigation (PRM) consisting of stream creation channel (Campbell Creek). The combined placement of dredged and fill below the OHWM is approximately 71,500 cys, which includes the originally authorized impact. Dredged and fill material would come from on-site excavation and would consist of clay, silt, sand, shale, and sandstone. The dredge and fill material would be excavated, hauled, and placed utilizing standard earthwork equipment.

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:

> The applicant evaluated several options to avoid and minimize impacts to Section 404 jurisdictional areas located within the northern area of the 475.72 ac landfill permit boundary. A description of the evaluation process and alternatives considered are provided in the mitigation plan. The selected alternative balances the need to provide for the long-term solid waste disposal needs for Oklahoma City while minimizing the impact to existing jurisdictional areas located onsite. The selected alternative places a priority on (1) maintaining portions of the existing

riparian woodlands, (2) the creation of additional waters of the United State to offset the unavoidable impacts to the unnamed tributary, and (3) the creation of additional public use area. This mitigation plan has been developed to ensure that there will be no overall net loss of waters of the United States with this project.

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

This plan proposes the creation of 11,660 lf of waters of the United States that would mitigate for the combined impacts by this project. This provides for a mitigation ratio of over 3:1. In addition, this project also provides the following:

- Avoidance of 3,380 lf of Campbell Creek
- Enhancement of 2,160 lf of Campbell Creek.
- Construction of a 3.2 ac wetland area and the construction of 420 ac ft of floodplain storage over a 38 ac area.

The majority of the 210 ac buffer zone (i.e., area between the landfill disposal area and property lines) would also be planted with various native trees and shrubs to offset the 25.9 ac riparian area that would be impacted by the site development. The approximate planting areas are noted below:

- Existing woodland areas to be preserved - 40.6 ac
- Riparian woodland - 28.5 ac
- Woodland mix - 48.5 ac
- Ornamental habitat and buffer planting - 22.4 ac
- Total - 140.0 ac

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 and extent of mitigation required if the project proposed herein is authorized.

Government Authorizations obtained or received: To incorporate the proposed changes, a new Conditional Letter of Map Revision (CLOMR) would be submitted to Oklahoma City and FEMA. A Tier III Permit Modification will be submitted to ODEQ to modify the existing solid waste operation permit. The modification would include the Oklahoma City Zoning Permit, CLOMR request, and the Section 404 DA Permit. The Tier III Permit Modification also would include additional ODEQ location restriction correspondence with various local, state, and federal agencies.

Previous DA Authorizations: SWT-2008-657, approved in December 2010: The DA authorization included the placement of dredged or fill approximately in 3,840 lf of Campbell Creek. Approximately 98,000 cys of dredged or fill material was placed below the OHWM of Campbell Creek. Fill material for this project was excavated material consisting of soils (loamy to clayey) and bedrock material (sandstone and shale). Campbell Creek was filled and relocated in two phases. The permit included PRM, which includes the construction of a new channel totaling 11,660 lf was excavated in uplands. Gabion baskets and 1,800 lf of turf reinforcement mats were used to ensure bank stabilization. The relocated creek has drainage controls, perimeter channels, culverts, and detention ponds designed to convey the 25-year flood frequency.

SWT-2008-657, approved in May 2015: Project modification included the placement of dredged or fill material within 3,840 lf (1.1 ac) of Campbell Creek, which represents a permanent loss of perennial stream habitat, these impacts have been completed. The original DA authorization also resulted in approximately 41,000 cys of dredged or fill material being placed in Campbell Creek to accommodate additional landfill capacity. The DA authorization allowed on-site, in-kind, PRM to compensate for the authorized impacts. The PRM is not complete.

SWT-2008-657, approved in November 2018: This modification included minor changes to the PRM design and extended the permit expiration to November 2023.

Status of Prior PRM: The current proposal would modify an area that is currently required as PRM for completed impacts to Campbell Creek. This area of proposed impact is approximately 78% (2,890 lf) of the constructed (3,675 lf) PRM, which is approximately 32% of the required 11,660 lf of stream creation PRM, as depicted on enclosure 3 of 11. The other proposed stream impact of 730 lf, would reduce the applicant's originally proposed PRM stream avoidance amount from 3,380 lf to 2,650 lf, if authorized. The proposed PRM enhancement activities have not been conducted yet for 2,160 lf of Campbell Creek. The proposed PRM wetland creation of 3.2 ac has also not been conducted yet.

The relocated PRM channel is currently functioning as designed as a replacement of the previously impacted reach of Campbell Creek.

Project Setting: The Oklahoma City Landfill is located in the Cross Timbers ecoregion, which is a transition area between winter wheat growing regions to the west and the forested low mountains of eastern Oklahoma. The landfill is located within the floodplain of the North Canadian River, the project is adjacent to the North Canadian River and Campbell Creek. Campbell Creek has a drainage area of approximately 4,600 ac and is mapped as perennial in proximity to the project. The proposed expansion area includes two adjacent properties totaling approximately 60 ac along the southeast boundary of the existing project area. These new properties are composed of agricultural land and an industrial development.

Existing Condition: The existing landfill is surrounded by waters of the United States due to numerous permitted reroutes of natural streams/wetlands in close proximity to the project. The Oklahoma City Landfill entrance road, scale house, outbuilding, and parking lot are along the northwest corner of the landfill.

Forested uplands are the predominant vegetative community surrounding the developed landfill site. These areas surround much of the landfill. Dominant canopy species include American elm (*Ulmus americana*), sugar hackberry (*Celtis laevigata*), western soapberry (*Sapindus drummondii*), and eastern cottonwood (*Populus deltoides*). The understory consists of American beautyberry (*Callicarpa americana*), greenbrier (*Smilax L.*), giant ragweed (*Ambrosia trifida*), and saplings of the canopy species.

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 are no known historic properties, as defined by the NHPA, in or within the vicinity of the proposed permit area. The original DA permit (SWT-2008-657) was coordinated with both the Oklahoma Historical Society and Oklahoma Archeological Survey, which resulted in a cultural survey. The applicant had the two new properties surveyed for historic properties and cultural resources; the result of the survey was that no resources were identified. The current project is an expansion of the overall landfill site to the Southeast. Based on the information currently available to our office, the project would result in a "no effect" determination to historic and cultural resources.

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: piping plover (*Charadrius melodus*), red knot (*Calidris canutus*), and whooping crane (*Grus americana*). A copy of this notice is being furnished to the U.S. Fish and Wildlife Service and appropriate state agencies. Our preliminary determination is that the proposed activity would not affect listed threatened or endangered species or their critical habitat. The IPAC project code is (2022-0003581). Our preliminary determination is that the proposed activity will not affect listed threatened or endangered species or their critical habitat.

Evaluation Factors: The decision whether to issue a permit will 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 will 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 will 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.

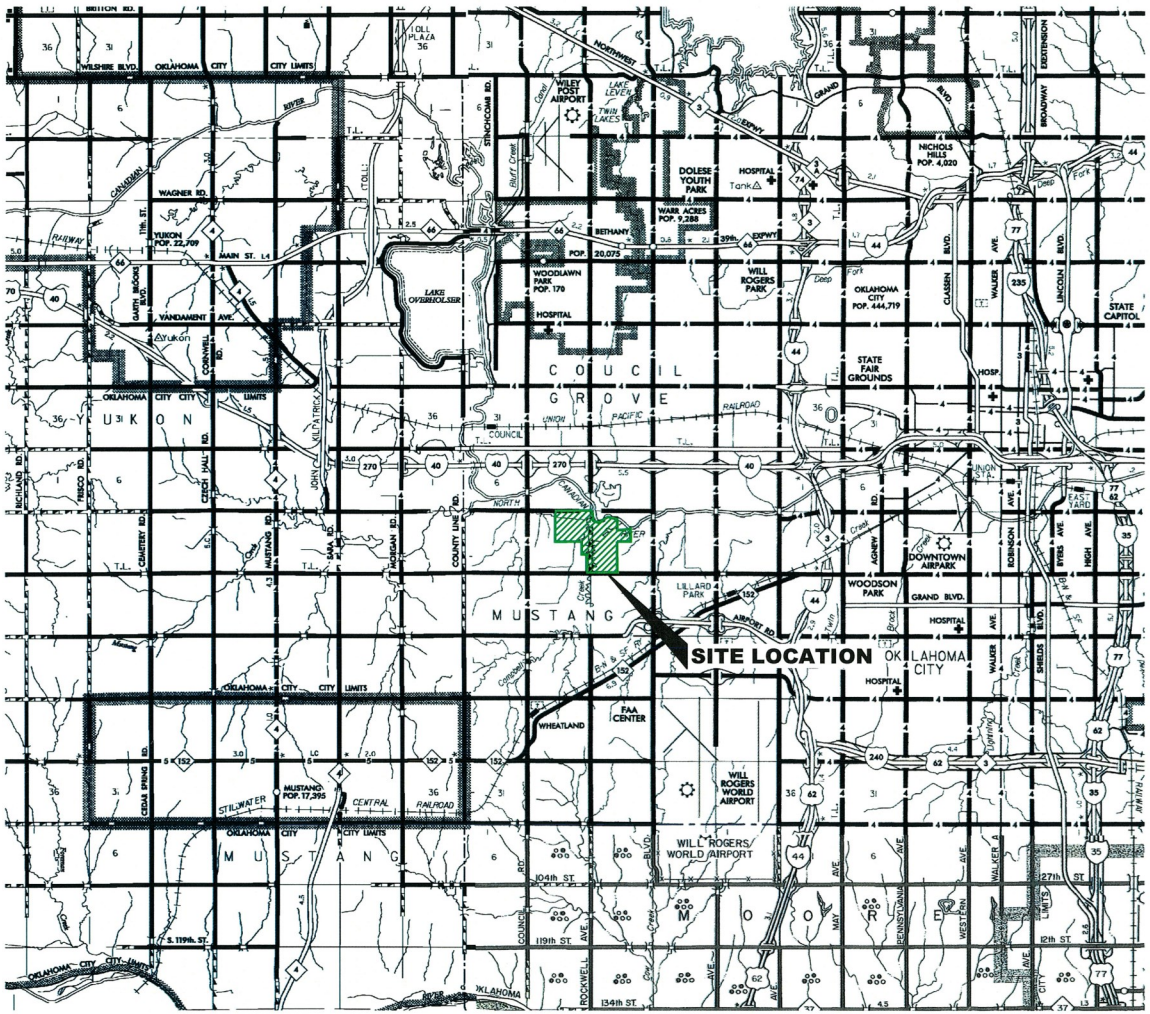
Comments: The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine 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.

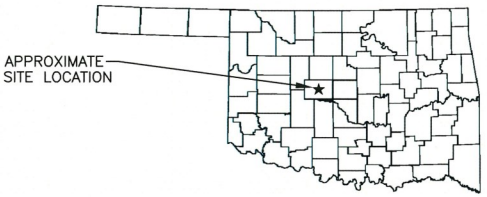
Any comments on this proposal must be submitted to be received by the Corps by the expiration date of this public notice comment period. Comments received after this date will not be considered in our decision. You may submit comments to mailing address Tulsa District Corps of Engineers, ATTN: Regulatory Office, 2488 East 81st Street, Tulsa, OK 74137 or email CESWT-RO@usace.army.mil. Please include the public notice number SWT-2008-657 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





LEGEND

NOTES:

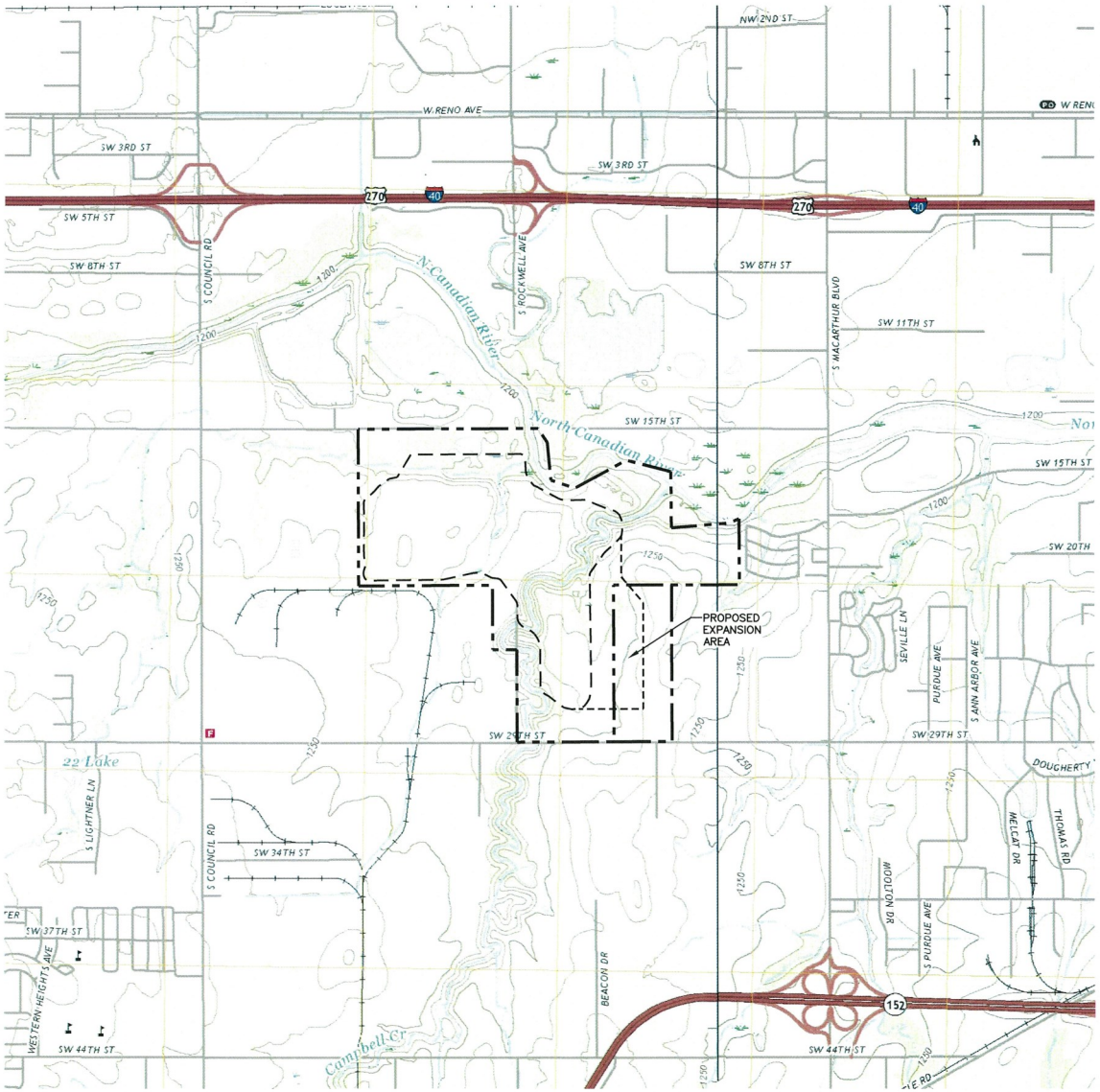
1. REPRODUCED FROM GENERAL HIGHWAY MAP, OKLAHOMA COUNTY, OKLAHOMA (OKDOT PLANNING DIVISION, APRIL 1999), GENERAL HIGHWAY MAP, CLEVELAND COUNTY, OKLAHOMA (OKDOT PLANNING

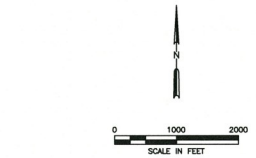
☐ DRAFT
☒ FOR PERMITTING PUR
☐ ISSUED FOR CONSTRU

DATE: 12/2021
FILE: 0601-01-11
CAD: 1-SITE LOC MAP.DWG

Weaver Co
CA 3804 P

SWT-2008-657
Oklahoma City Landfill
Oklahoma City, Oklahoma
Campbell Creek
Enclosure 1 of 11





LEGEND

- PROPOSED PERMIT BOUNDARY
- PROPOSED LIMIT OF WASTE
- EXISTING PERMIT BOUNDARY
- PERMITTED LIMIT OF WASTE

ROAD CLASSIFICATION

Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
State Route	

MUSTANG, OK
2018

OKLAHOMA CITY, OK
2018

NOTES:

1. ADAPTED FROM USGS 7.5 MINUTE QUADRANGLE TOPOGRAPHIC MAP (MUSTANG, OK 2018 AND OKLAHOMA CITY, OK 2018).
2. THE MAP AREA SHOWN IS WITHIN SECTIONS 8 AND 9 OF TOWNSHIP 11 NORTH, RANGE 4 WEST.
3. THE PERMIT BOUNDARY WAS REPRODUCED FROM A LEGAL DESCRIPTION PREPARED BY LEMKE LAND SURVEYING, INC.

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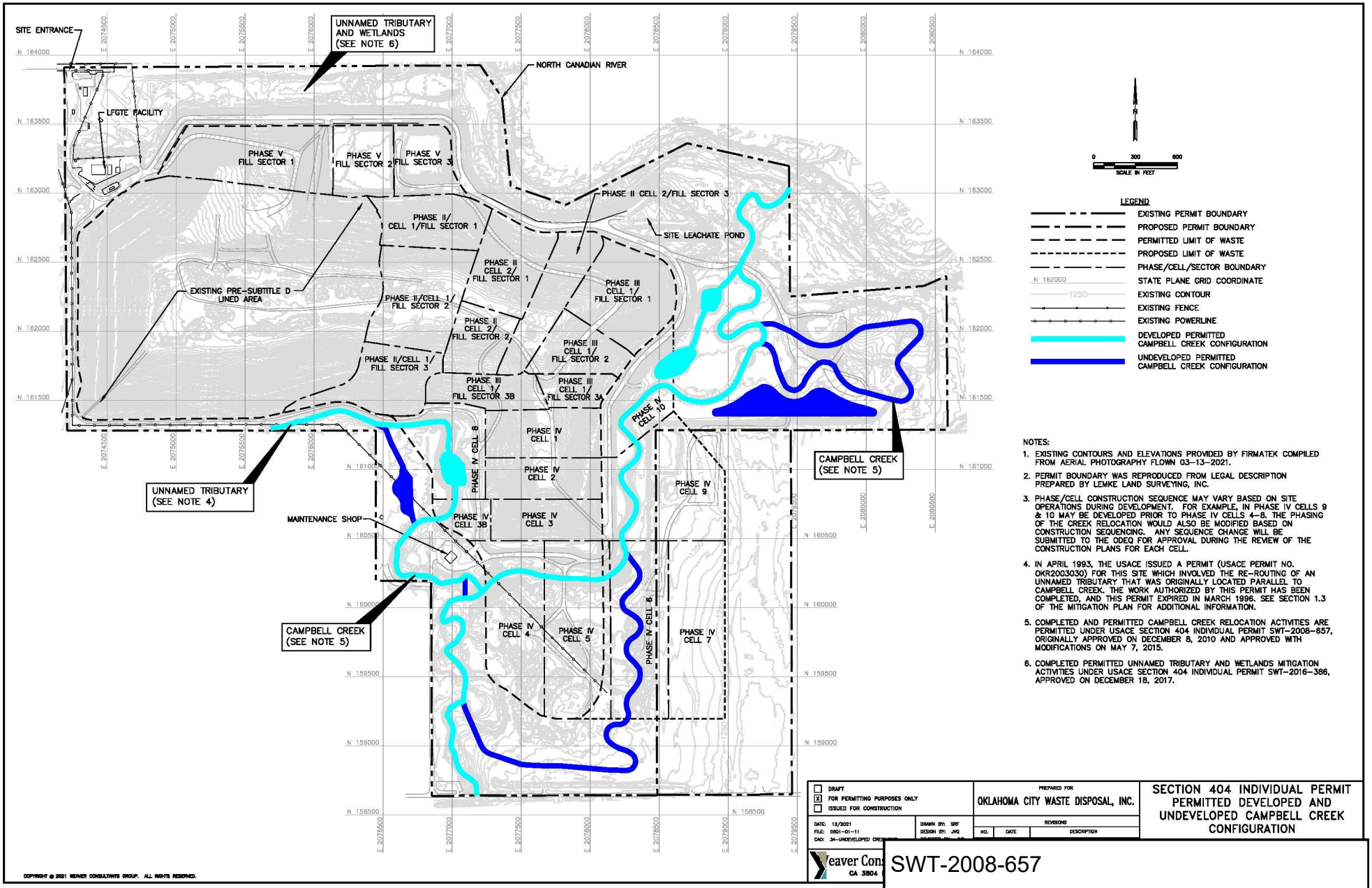
☒ FOR PERMITTIN
☐ ISSUED FOR C

DATE: 12/2021
FILE: 0601-01-11
CAD: 2-SITE LOC MAP

Weaver
CA 38

MIT
MAP

SWT-2008-657
Oklahoma City Landfill
Oklahoma City, Oklahoma
Campbell Creek
Enclosure 2 of 11



NOTES:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY FIRMATEK COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 03-13-2021.
2. PERMIT BOUNDARY WAS REPRODUCED FROM LEGAL DESCRIPTION PREPARED BY LEMKE LAND SURVEYING, INC.
3. PHASE/CELL CONSTRUCTION SEQUENCE MAY VARY BASED ON SITE OPERATIONS DURING DEVELOPMENT. FOR EXAMPLE, IN PHASE IV CELLS 9 & 10 MAY BE DEVELOPED PRIOR TO PHASE IV CELLS 4-8. THE PHASING OF THE CREEK RELOCATION WOULD ALSO BE MODIFIED BASED ON CONSTRUCTION SEQUENCING. ANY SEQUENCE CHANGE WILL BE SUBMITTED TO THE ODEQ FOR APPROVAL DURING THE REVIEW OF THE CONSTRUCTION PLANS FOR EACH CELL.
4. IN APRIL 1993, THE USACE ISSUED A PERMIT (USACE PERMIT NO. OKR2003030) FOR THIS SITE WHICH INVOLVED THE RE-ROUTING OF AN UNNAMED TRIBUTARY THAT WAS ORIGINALLY LOCATED PARALLEL TO CAMPBELL CREEK. THE WORK AUTHORIZED BY THIS PERMIT HAS BEEN COMPLETED, AND THIS PERMIT EXPIRED IN MARCH 1996. SEE SECTION 1.3 OF THE MITIGATION PLAN FOR ADDITIONAL INFORMATION.
5. COMPLETED AND PERMITTED CAMPBELL CREEK RELOCATION ACTIVITIES ARE PERMITTED UNDER USACE SECTION 404 INDIVIDUAL PERMIT SWT-2008-657, ORIGINALLY APPROVED ON DECEMBER 8, 2010 AND APPROVED WITH MODIFICATIONS ON MAY 7, 2015.
6. COMPLETED PERMITTED UNNAMED TRIBUTARY AND WETLANDS MITIGATION ACTIVITIES UNDER USACE SECTION 404 INDIVIDUAL PERMIT SWT-2016-386, APPROVED ON DECEMBER 18, 2017.

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 12/2021
FILE: 0801-01-11
CAD: 3A-UNDEVELOPED CREEK

DRAWN BY: SRF
DESIGN BY: JVQ

PREPARED FOR
OKLAHOMA CITY WASTE DISPOSAL, INC.

REVISIONS

NO.	DATE	DESCRIPTION

SECTION 404 INDIVIDUAL PERMIT
PERMITTED DEVELOPED AND
UNDEVELOPED CAMPBELL CREEK
CONFIGURATION

Weaver Cons
CA 3804

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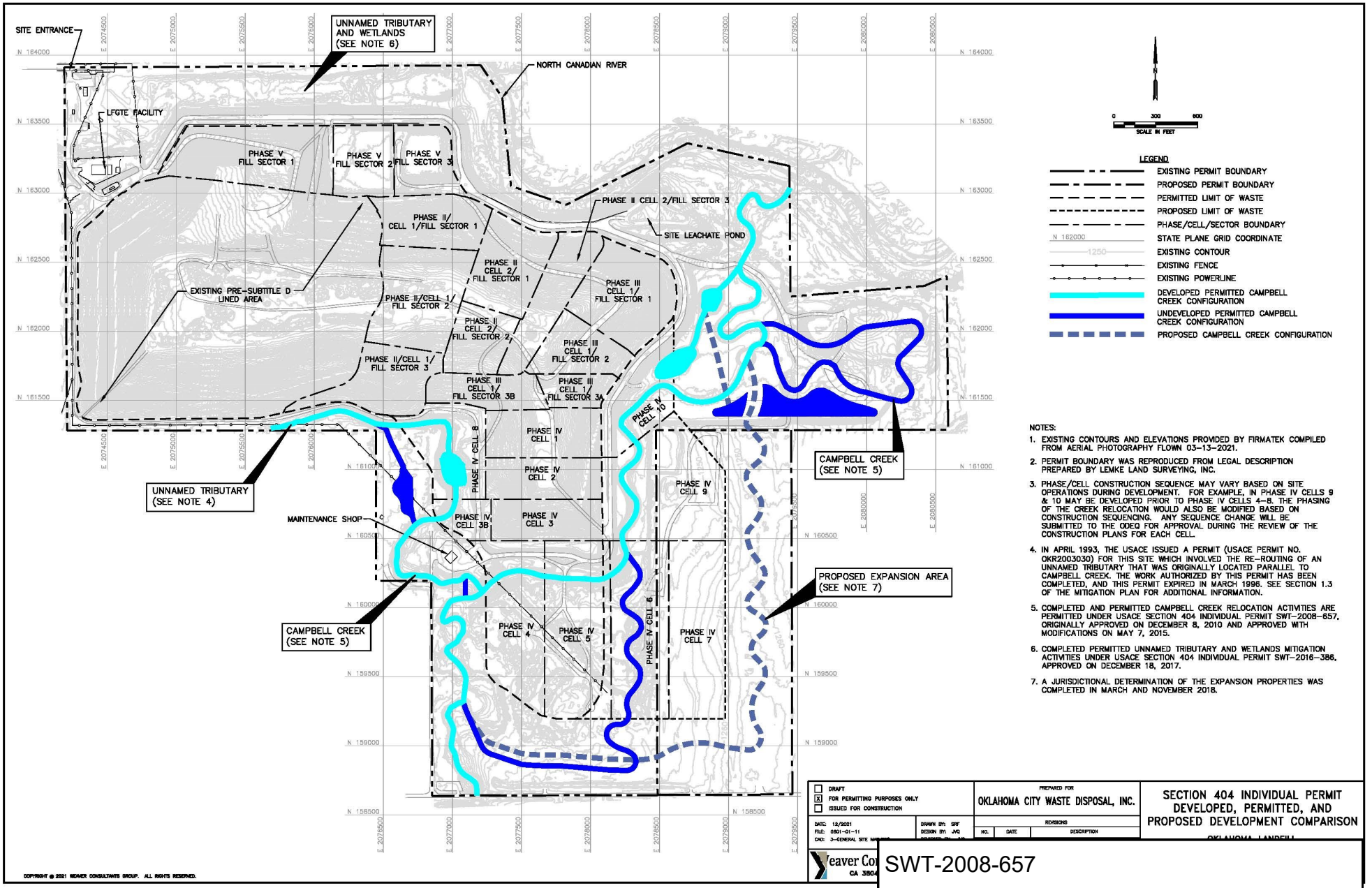
SWT-2008-657
Oklahoma City Landfill
Oklahoma City, Oklahoma
Campbell Creek
Enclosure 3 of 11



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5. COMPLETED AND PERMITTED CAMPBELL CREEK RELOCATION ACTIVITIES ARE PERMITTED UNDER USACE SECTION 404 INDIVIDUAL PERMIT SWT-2008-657, ORIGINALLY APPROVED ON DECEMBER 8, 2010 AND APPROVED WITH MODIFICATIONS ON MAY 7, 2015.
6. COMPLETED PERMITTED UNNAMED TRIBUTARY AND WETLANDS MITIGATION ACTIVITIES UNDER USACE SECTION 404 INDIVIDUAL PERMIT SWT-2016-386, APPROVED ON DECEMBER 18, 2017.
7. A JURISDICTIONAL DETERMINATION OF THE EXPANSION PROPERTIES WAS COMPLETED IN MARCH AND NOVEMBER 2018.

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 12/2021
FILE: 0801-01-11
CAD: 3-GENERAL SITE MAP

DRAWN BY: SRF
DESIGN BY: JVQ

PREPARED FOR
OKLAHOMA CITY WASTE DISPOSAL, INC.

REVISIONS

NO.	DATE	DESCRIPTION

SECTION 404 INDIVIDUAL PERMIT DEVELOPED, PERMITTED, AND PROPOSED DEVELOPMENT COMPARISON

OKLAHOMA LANDFILL

Weaver Co
CA 3804

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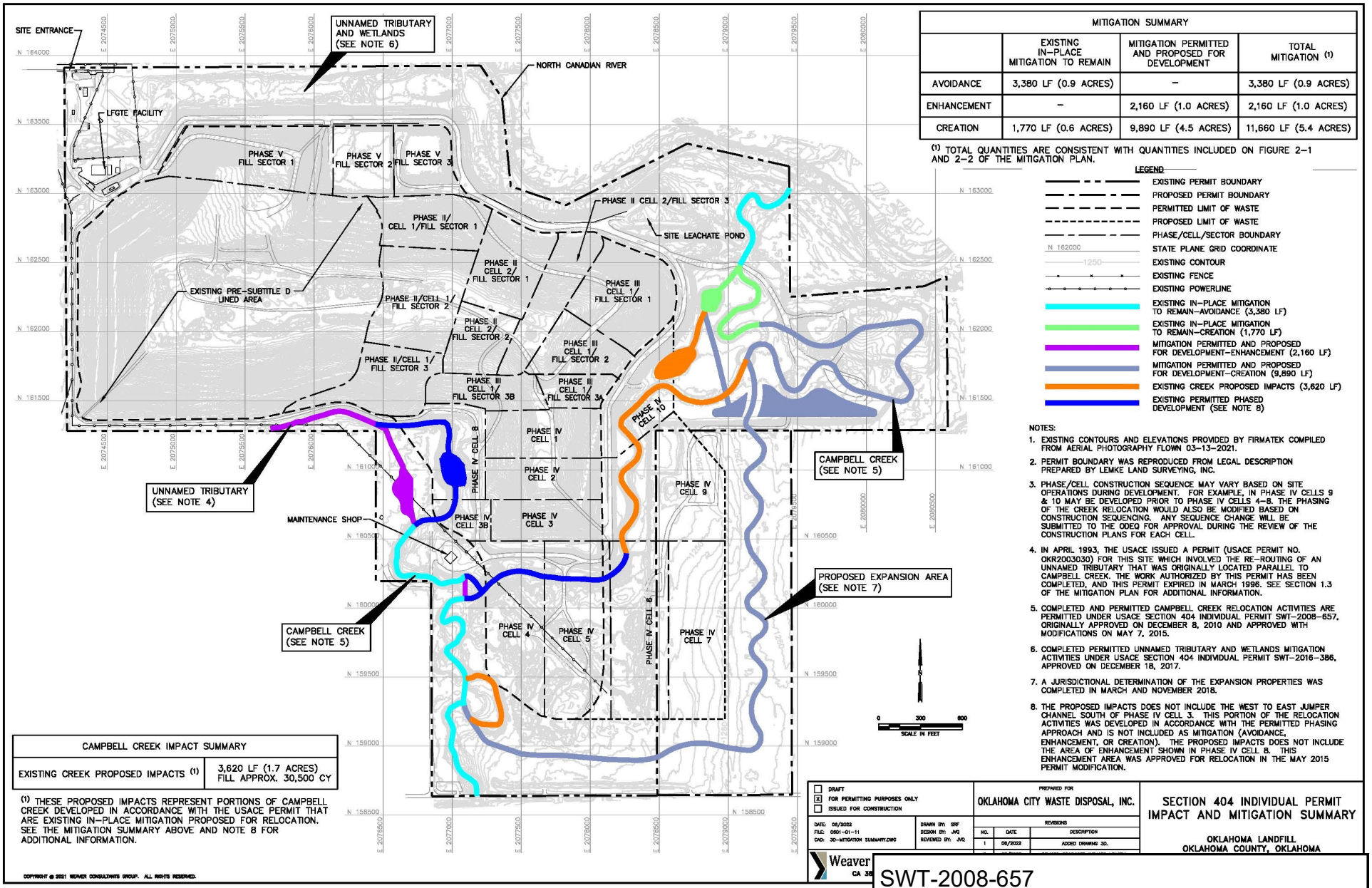
SWT-2008-657
Oklahoma City Landfill
Oklahoma City, Oklahoma
Campbell Creek
Enclosure 4 of 11



MITIGATION SUMMARY			
	EXISTING IN-PLACE MITIGATION TO REMAIN	MITIGATION PERMITTED AND PROPOSED FOR DEVELOPMENT	TOTAL MITIGATION (1)
AVOIDANCE	3,380 LF (0.9 ACRES)	–	3,380 LF (0.9 ACRES)
ENHANCEMENT	–	2,160 LF (1.0 ACRES)	2,160 LF (1.0 ACRES)
CREATION	1,770 LF (0.6 ACRES)	9,890 LF (4.5 ACRES)	11,660 LF (5.4 ACRES)

(1) TOTAL QUANTITIES ARE CONSISTENT WITH QUANTITIES INCLUDED ON FIGURE 2-1 AND 2-2 OF THE MITIGATION PLAN.

LEGEND

- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- PERMITTED LIMIT OF WASTE
- PROPOSED LIMIT OF WASTE
- PHASE/CELL/SECTOR BOUNDARY
- N 162000 STATE PLANE GRID COORDINATE
- 1250 EXISTING CONTOUR
- EXISTING FENCE
- EXISTING POWERLINE
- EXISTING IN-PLACE MITIGATION TO REMAIN-AVOIDANCE (3,380 LF)
- EXISTING IN-PLACE MITIGATION TO REMAIN-CREATION (1,770 LF)
- MITIGATION PERMITTED AND PROPOSED FOR DEVELOPMENT-ENHANCEMENT (2,160 LF)
- MITIGATION PERMITTED AND PROPOSED FOR DEVELOPMENT-CREATION (9,890 LF)
- EXISTING CREEK PROPOSED IMPACTS (3,620 LF)
- EXISTING PERMITTED PHASED DEVELOPMENT (SEE NOTE 8)

NOTES:

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4. IN APRIL 1993, THE USACE ISSUED A PERMIT (USACE PERMIT NO. OKR2003030) FOR THIS SITE WHICH INVOLVED THE RE-ROUTING OF AN UNNAMED TRIBUTARY THAT WAS ORIGINALLY LOCATED PARALLEL TO CAMPBELL CREEK. THE WORK AUTHORIZED BY THIS PERMIT HAS BEEN COMPLETED, AND THIS PERMIT EXPIRED IN MARCH 1998. SEE SECTION 1.3 OF THE MITIGATION PLAN FOR ADDITIONAL INFORMATION.
5. COMPLETED AND PERMITTED CAMPBELL CREEK RELOCATION ACTIVITIES ARE PERMITTED UNDER USACE SECTION 404 INDIVIDUAL PERMIT SWT-2008-657, ORIGINALLY APPROVED ON DECEMBER 8, 2010 AND APPROVED WITH MODIFICATIONS ON MAY 7, 2015.
6. COMPLETED PERMITTED UNNAMED TRIBUTARY AND WETLANDS MITIGATION ACTIVITIES UNDER USACE SECTION 404 INDIVIDUAL PERMIT SWT-2016-386, APPROVED ON DECEMBER 18, 2017.
7. A JURISDICTIONAL DETERMINATION OF THE EXPANSION PROPERTIES WAS COMPLETED IN MARCH AND NOVEMBER 2018.
8. THE PROPOSED IMPACTS DOES NOT INCLUDE THE WEST TO EAST JUMPER CHANNEL SOUTH OF PHASE IV CELL 3. THIS PORTION OF THE RELOCATION ACTIVITIES WAS DEVELOPED IN ACCORDANCE WITH THE PERMITTED PHASING APPROACH AND IS NOT INCLUDED AS MITIGATION (AVOIDANCE, ENHANCEMENT, OR CREATION). THE PROPOSED IMPACTS DOES NOT INCLUDE THE AREA OF ENHANCEMENT SHOWN IN PHASE IV CELL 8. THIS ENHANCEMENT AREA WAS APPROVED FOR RELOCATION IN THE MAY 2015 PERMIT MODIFICATION.

CAMPBELL CREEK IMPACT SUMMARY	
EXISTING CREEK PROPOSED IMPACTS (1)	3,620 LF (1.7 ACRES) FILL APPROX. 30,500 CY

(1) THESE PROPOSED IMPACTS REPRESENT PORTIONS OF CAMPBELL CREEK DEVELOPED IN ACCORDANCE WITH THE USACE PERMIT THAT ARE EXISTING IN-PLACE MITIGATION PROPOSED FOR RELOCATION. SEE THE MITIGATION SUMMARY ABOVE AND NOTE 8 FOR ADDITIONAL INFORMATION.

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2022
FILE: 0801-01-11
CAD: 3D-MITIGATION SUMMARY.DWG

DRAWN BY: SRF
DESIGN BY: JVQ
REVIEWED BY: JVQ

PREPARED FOR
OKLAHOMA CITY WASTE DISPOSAL, INC.

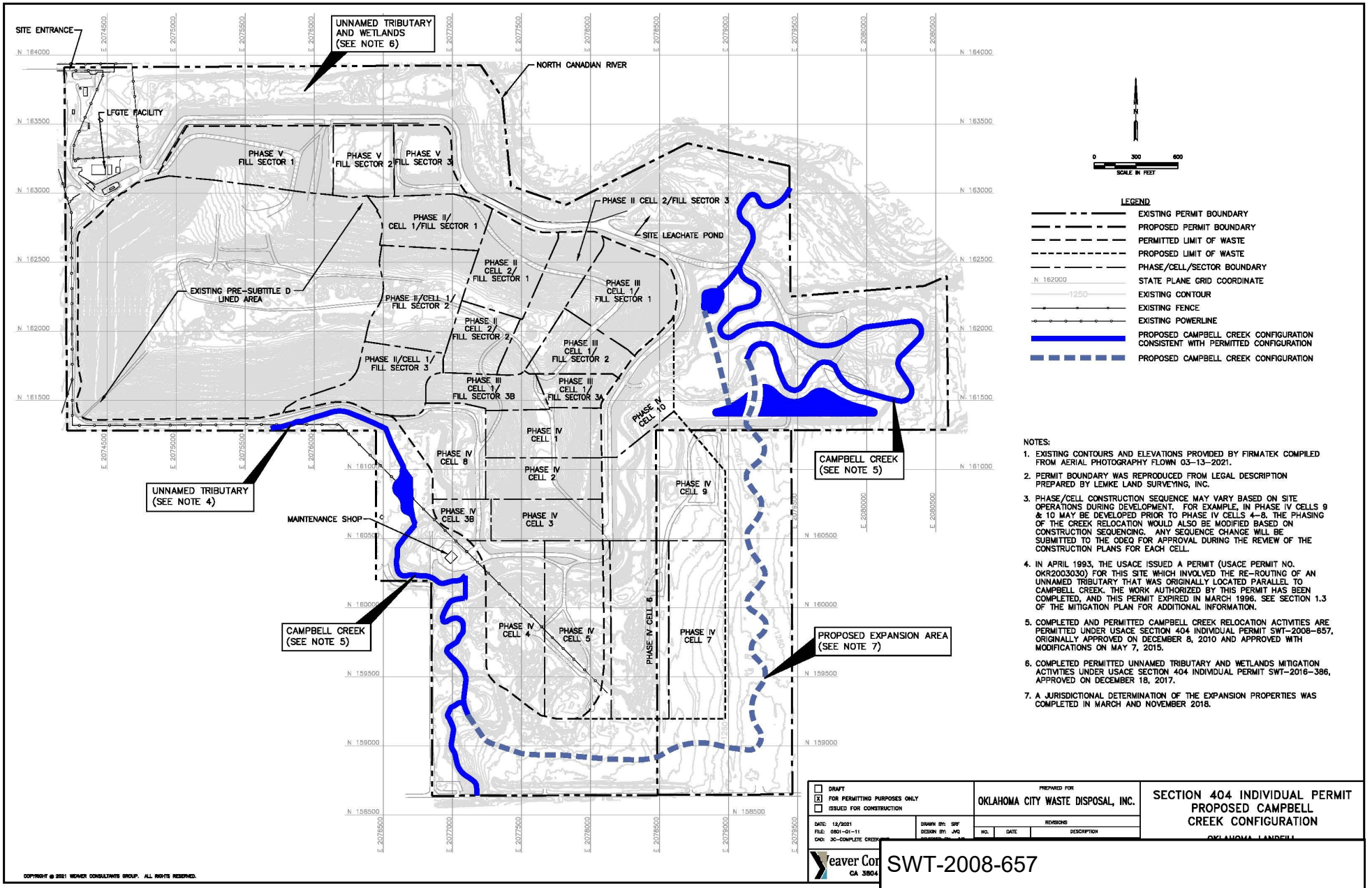
REVISIONS		
NO.	DATE	DESCRIPTION
1	06/2022	ADDED DRAWING 3D.

SECTION 404 INDIVIDUAL PERMIT IMPACT AND MITIGATION SUMMARY

OKLAHOMA LANDFILL
OKLAHOMA COUNTY, OKLAHOMA

Weaver
CA 38

SWT-2008-657
Oklahoma City Landfill
Oklahoma City, Oklahoma
Campbell Creek
Enclosure 5 of 11



NOTES:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY FIRMATEK COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 03-13-2021.
2. PERMIT BOUNDARY WAS REPRODUCED FROM LEGAL DESCRIPTION PREPARED BY LEMKE LAND SURVEYING, INC.
3. PHASE/CELL CONSTRUCTION SEQUENCE MAY VARY BASED ON SITE OPERATIONS DURING DEVELOPMENT. FOR EXAMPLE, IN PHASE IV CELLS 9 & 10 MAY BE DEVELOPED PRIOR TO PHASE IV CELLS 4-8. THE PHASING OF THE CREEK RELOCATION WOULD ALSO BE MODIFIED BASED ON CONSTRUCTION SEQUENCING. ANY SEQUENCE CHANGE WILL BE SUBMITTED TO THE ODEQ FOR APPROVAL DURING THE REVIEW OF THE CONSTRUCTION PLANS FOR EACH CELL.
4. IN APRIL 1993, THE USACE ISSUED A PERMIT (USACE PERMIT NO. OKR2003030) FOR THIS SITE WHICH INVOLVED THE RE-ROUTING OF AN UNNAMED TRIBUTARY THAT WAS ORIGINALLY LOCATED PARALLEL TO CAMPBELL CREEK. THE WORK AUTHORIZED BY THIS PERMIT HAS BEEN COMPLETED, AND THIS PERMIT EXPIRED IN MARCH 1996. SEE SECTION 1.3 OF THE MITIGATION PLAN FOR ADDITIONAL INFORMATION.
5. COMPLETED AND PERMITTED CAMPBELL CREEK RELOCATION ACTIVITIES ARE PERMITTED UNDER USACE SECTION 404 INDIVIDUAL PERMIT SWT-2008-657, ORIGINALLY APPROVED ON DECEMBER 8, 2010 AND APPROVED WITH MODIFICATIONS ON MAY 7, 2015.
6. COMPLETED PERMITTED UNNAMED TRIBUTARY AND WETLANDS MITIGATION ACTIVITIES UNDER USACE SECTION 404 INDIVIDUAL PERMIT SWT-2016-386, APPROVED ON DECEMBER 18, 2017.
7. A JURISDICTIONAL DETERMINATION OF THE EXPANSION PROPERTIES WAS COMPLETED IN MARCH AND NOVEMBER 2018.

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 12/2021
FILE: 0801-01-11
CAD: 3C-COMPLETE CREEK

DRAWN BY: SRF
DESIGN BY: JVQ

PREPARED FOR
OKLAHOMA CITY WASTE DISPOSAL, INC.

REVISIONS

NO.	DATE	DESCRIPTION

SECTION 404 INDIVIDUAL PERMIT
PROPOSED CAMPBELL CREEK CONFIGURATION

Weaver Con
CA 3804

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Oklahoma City, Oklahoma
Campbell Creek
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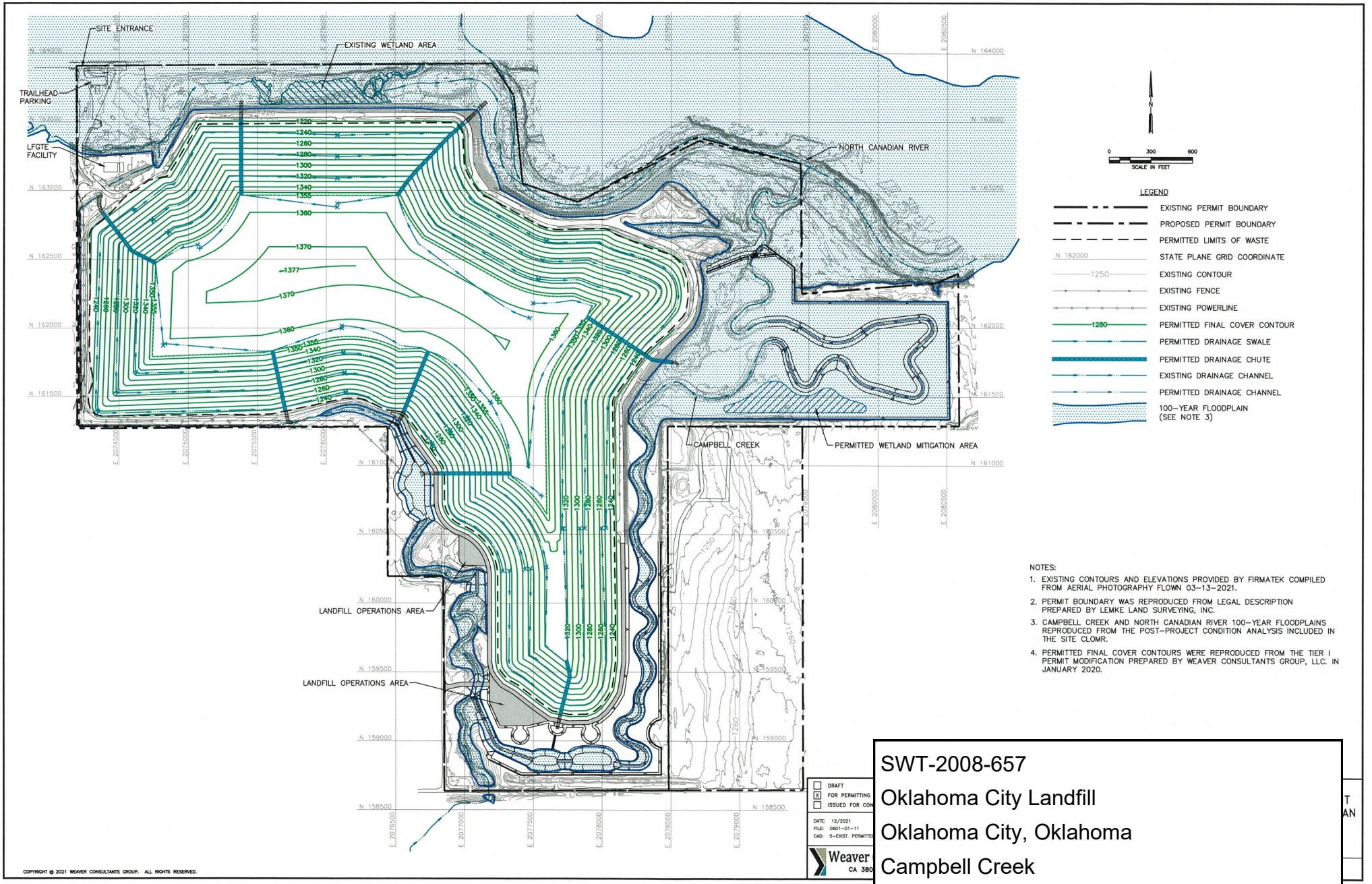

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Oklahoma City Landfill
Oklahoma City, Oklahoma
Campbell Creek
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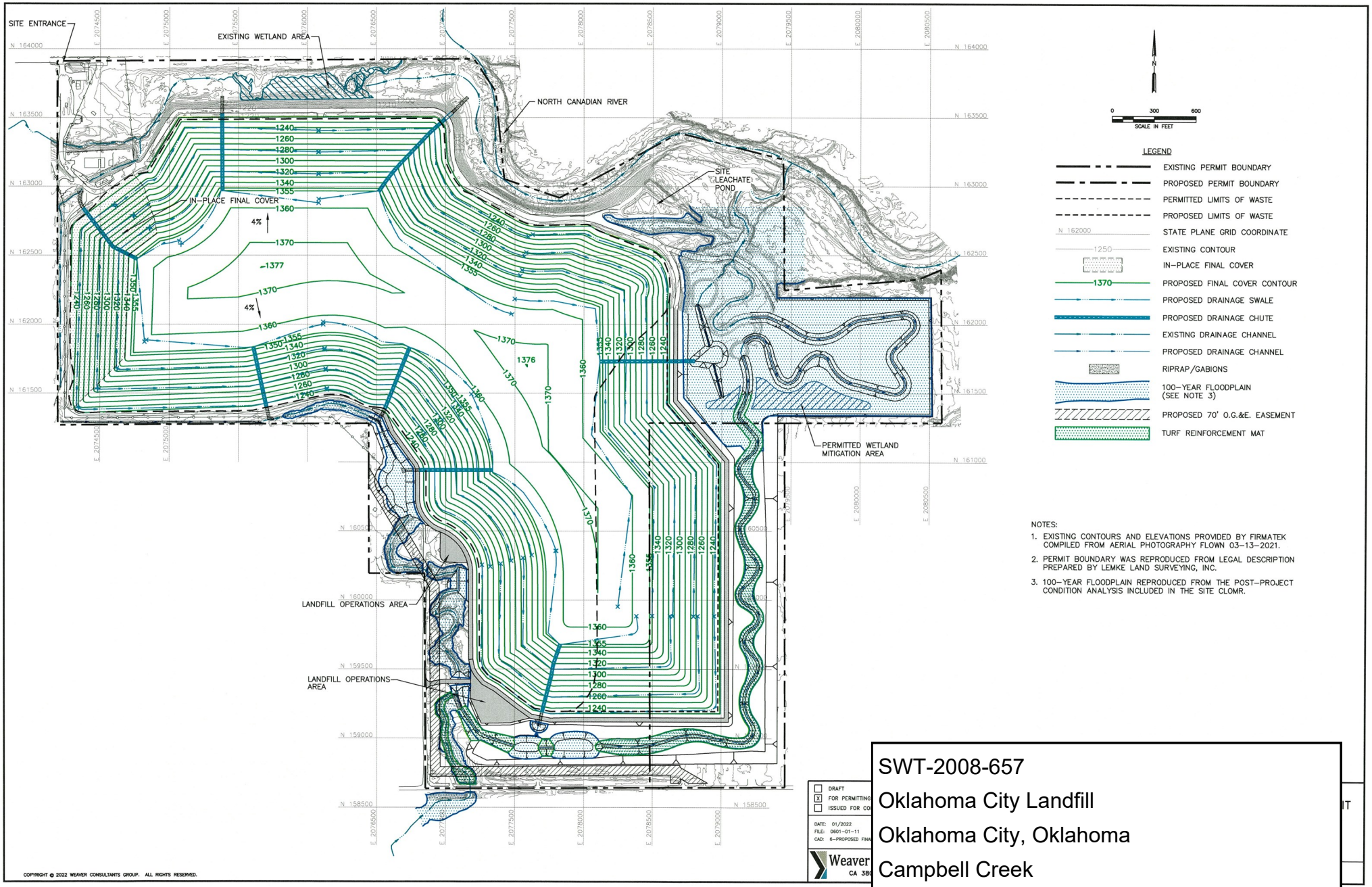

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Oklahoma City Landfill
Oklahoma City, Oklahoma
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ORNAMENTAL HABITAT AND BUFFER PLANTINGS

Medium to small groupings of trees and shrubs chosen for color, habitat and for planting in utility easement.

Typical Trees and Large Shrubs: Redbud-Cercis canadensis; Downy Hawthorn-Crataegus mollis; Possumhaw-Ilex decidua; Chickasaw Plum - Prunus angustifolia

WOODLAND MIX

Woodland trees and colonizing shrubs.

Typical Trees: Hackberry-Celtis occidentals; Persimmon-Diospyros virginiana; Kentucky Coffee Tree-Gymnocladus dioicus; Little Seeded Walnut-Jugans microcarpa; Osage Orange-Maclura pomiforia; Burr Oak-Quercus macrocarpa; Chiquapin Oak-Quercus muhlenbergii; Shumard Oak-Quercus shumardii; Western Soapberry-Sapindus drummondi; American Elm-Ulmus americana.

Typical Shrubs: Fragrant Sumac-Rhus aromatica; Smooth Sumac-Rhus galbra; Rusty Blackhaw-Viburnum rufidulum

RIPARIAN WOODLAND

Native selection of trees and shrubs that are adapted to riparian conditions, and will help in stream bank and floodplain stabilization.

Typical Trees: Pecan-Carya spp.; Sycamore-Platanus occidentalis; Cottonwood-Populus spp.; Bald Cypress-Taxodium distichum.

Typical Shrubs: Beautyberry-Callicarpa americana; Button Bush-Cephalanthus occidentalis; Roughleaf Dogwood-Cornus drummondii; Coyote Willow- Salix exigua; Coralberry-Symphoricarpos orbiculatus

0 300 600
SCALE IN FEET

OKLAHOMA CITY LANDFILL EXPANSION, WASTE CONNECTIONS, INC.

END USE PLAN

SWT-2008-657
Oklahoma City Landfill
Oklahoma City, Oklahoma
Campbell Creek
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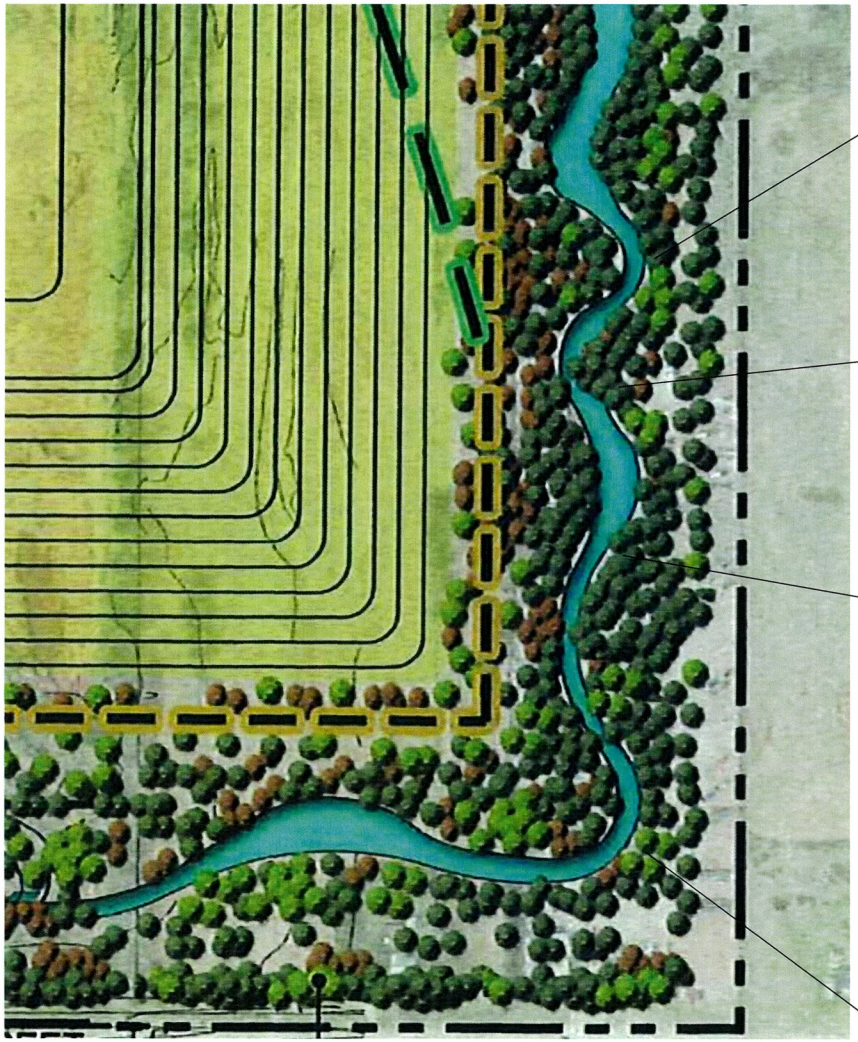

TREES/SHRUBS WILL BE CONCENTRATED ON OUTSIDE MEANDER OF STREAM

SHRUBS PLANTED IN HEAVILY MULCHED GROUPS

TREE AND SHRUB PLANTING WILL BE CONCENTRATED ALONG STREAM IN RIPARIAN CORRIDOR

TREES WILL BE PLANTED AT A MINIMUM SPACING OF 15 FEET ON CENTER

N

0 100 200
SCALE IN FEET

RIPARIAN WOODLAND - PROPOSED MITIGATION

AREA	MITIGATION AREA	PLANTING SPECIFICATIONS	PLANTING SUMMARY FOR TYPICAL AREA SHOWN
EXAMPLE AREA	500 LF	20 TREES/SHRUBS PER 100 LF 6 TREES PER 100 LF 14 SHRUBS PER 100 LF 46 HERBACEOUS PLANTS PER 100 LF	100 TOTAL TREES/SHRUBS 30 TREES 70 SHRUBS 230 HERBACEOUS PLANTS
TOTAL RIPARIAN CORRIDOR MITIGATION AREA	10,100 LF	TYPICAL PLANTING LIST PROVIDED BELOW • MINIMUM 4 TREE SPECIES • MINIMUM 4 SHRUB SPECIES • MINIMUM 2 HERBACEOUS SPECIES • 1,000 HERBACEOUS PLANTS PER ACRE • SIDESLOPES AND CHANNEL BOTTOM AREA WILL BE PLANTED WITH NATIVE GRASS MIX	TOTAL MITIGATION WILL INCLUDE 606 TREES 1,414 SHRUBS 4,646 HERBACEOUS PLANTS

TYPICAL PLANTING LIST (1)

TREES	SHRUBS	HERBACEOUS
• REDBUD–CERCIS CANADENSIS • DOWNY HAWTHORN–CRATAEGUS MOLLIS • POSSUMHAW–LLEX DECIDUA • CHICKASAW PLUM–PRUNUS ANGUSTIFOLIA • HACKBERRY–CELTIS OCCIDENTALS • PERSIMMON–DIOSPYROS VIRGINIANA • KENTUCKY COFFEE TREE–GYMNOCLADUS DIOICUS • LITTLE SEEDED WALNUT–JUGANS MICROCARPA • OSAGE ORANGE–MACLURA POMIFORIA • BURR OAK–QUERCUS MACROCARPA • CHIQUAPIN OAK–QUERCUS MUHLENBERGII • SHUMARD OAK–QUERCUS SHUMARDII • WESTERN SOAPBERRY–SAPINDUS DRUMMONDI • AMERICAN ELM–ULMUS AMERICANA • PECAN–CARYA SPP • SYCAMORE–PLATANUS OCCIDENTALIS • COTTONWOOD–POPULUS SPP • BALD CYPRESS–TAXODIUM DISTICHUM	• FRAGRANT SUMAC–RHUS AROMATICA • SMOOTH SUMAC–RHUS GALBRA • RUSTY BLACKHAW–VIBURNUM RUFIDULUM • BEAUTYBERRY–CALLICARPA AMERICANA • BUTTON BUSH–CEPHALANTHUS OCCIDENTALIS • ROUGHLEAF DOGWOOD–CORNUS DRUMMONDII • COYOTE WILLOW–SALIX EXIGUA • CORALBERRY–SYMPHORICARPOS ORBICULATUS	• SWITCH GRASS (PANICUM VIRGATUM) • BIG BLUE STEM (ANDROPOGON GERARDII) • SOFT RUSH (JUNCUS EFFUSUS) • WATERWILLOW (JUSTICIA AMERICANA)

(1) ADDITIONAL SPECIES NOT INCLUDED ON THE PLANTING LIST MAY BE UTILIZED GIVEN ACCESSIBILITY OF LOCAL SELLERS

☐ DRAFT
☒ FOR PERMITTING
☐ ISSUED FOR CON

DATE: 12/2021
FILE: 0601-01-11
CAD: 11-WOODLAND MITIG

Weaver
CA 380

O:\0601\01\EXPANSION 2021\USACE\11-TYPICAL RIPARIAN MITIGATION AREA.dwg, sford, 1:2

SWT-2008-657
Oklahoma City Landfill
Oklahoma City, Oklahoma
Campbell Creek
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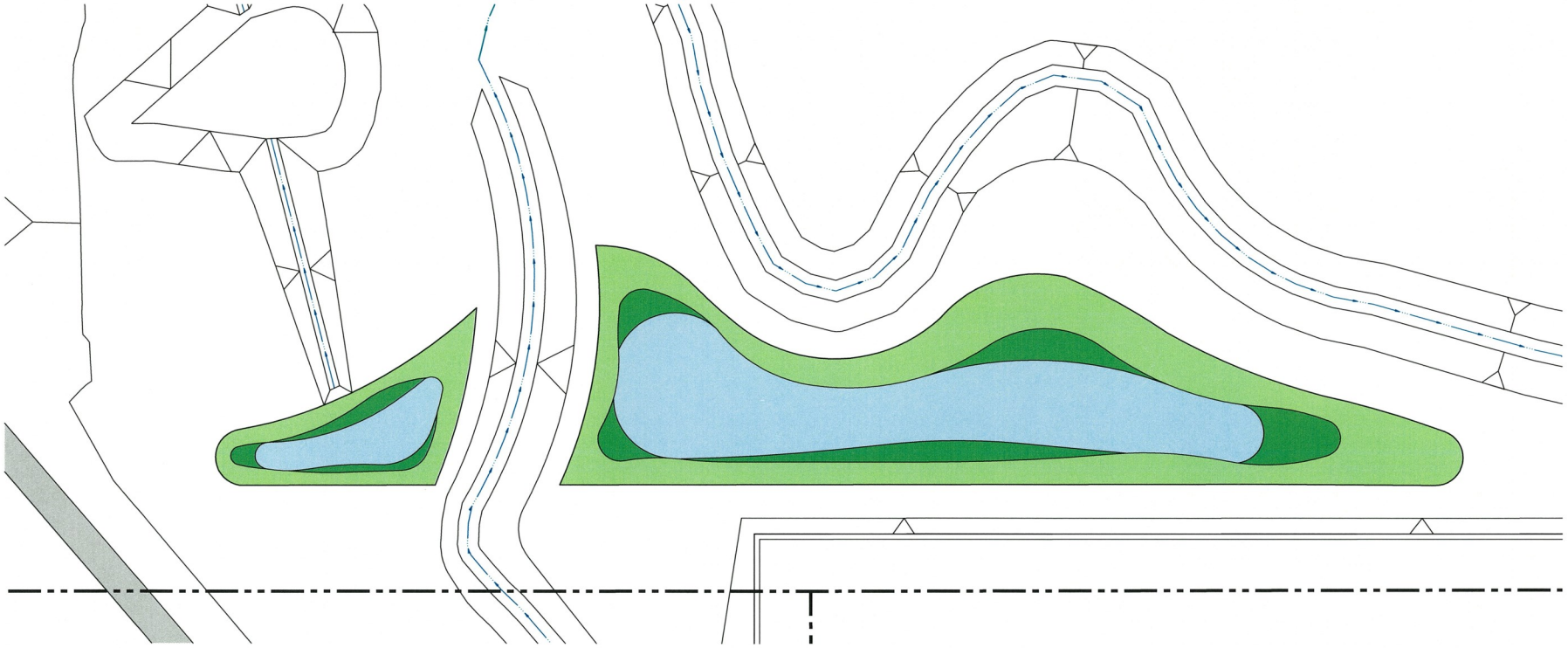

TYPICAL PLANTING LIST (1)		
TREES	**SHRUBS**	**HERBACEOUS**
• REDBUD–CERCIS CANADENSIS • DOWNY HAWTHORN–CRATAEGUS MOLLIS • POSSUMHAW–LLEX DECIDUA • CHICKASAW PLUM–PRUNUS ANGUSTIFOLIA • HACKBERRY–CELTIS OCCIDENTALS • PERSIMMON–DIOSPYROS VIRGINIANA • KENTUCKY COFFEE TREE–GYMNOCLADUS DIOICUS • LITTLE SEEDED WALNUT–JUGANS MICROCARPA • OSAGE ORANGE–MACLURA POMIFORIA • BURR OAK–QUERCUS MACROCARPA • CHIQUAPIN OAK–QUERCUS MUHLENBERGII • SHUMARD OAK–QUERCUS SHUMARDII • WESTERN SOAPBERRY–SAPINDUS DRUMMONDI • AMERICAN ELM–ULMUS AMERICANA • PECAN–CARYA SPP • SYCAMORE–PLATANUS OCCIDENTALIS • COTTONWOOD–POPULUS SPP • BALD CYPRESS–TAXODIUM DISTICHUM	• FRAGRANT SUMAC–RHUS AROMATICA • SMOOTH SUMAC–RHUS GALBRA • RUSTY BLACKHAW–VIBURNUM RUFIDULUM • BEAUTYBERRY–CALLICARPA AMERICANA • BUTTON BUSH–CEPHALANTHUS OCCIDENTALIS • ROUGHLEAF DOGWOOD–CORNUS DRUMMONDII • COYOTE WILLOW–SALIX EXIGUA • CORALBERRY–SYMPHORICARPOS ORBICULATUS	• SWITCH GRASS (PANICUM VIRGATUM) • BIG BLUE STEM (ANDROPOGON GERARDII) • SOFT RUSH (JUNCUS EFFUSUS) • WATERWILLOW (JUSTICIA AMERICANA)

(1) ADDITIONAL SPECIES NOT INCLUDED ON THE PLANTING LIST MAY BE UTILIZED GIVEN ACCESSIBILITY OF LOCAL SELLERS

WETLAND MITIGATION AREA		
MITIGATION AREA	**PLANTING SPECIFICATIONS**	**PLANTING SUMMARY FOR TYPICAL AREA SHOWN**
3.2 ACRE	36 TREES/SHRUBS PER ACRE. 30%/70% RATIO OF TREES/SHRUBS. MINIMUM OF 4 SPECIES OF TREES. MINIMUM OF 4 SPECIES OF SHRUBS.	116 TOTAL TREES/SHRUBS (35 TREES AND 81 SHRUBS)
	1,000 HERBACEOUS PLANTS PER ACRE. MINIMUM OF 2 SPECIES.	3200 HERBACEOUS PLANTS

SIDESLOPES AND BOTTOM AREA WILL BE PLANTED WITH NATIVE GRASS MIX.

N

0 50 100
SCALE IN FEET

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 12/2021
FILE: 0601-01-11
CAD: 12-WETLAND MITIGATION
DRAWN BY: SRF
DESIGN BY: JVQ

PREPARED FOR
OKLAHOMA CITY WASTE DISPOSAL, INC.

REVISIONS

NO.	DATE	DESCRIPTION

Weaver Co
CA 3804

SECTION 404 INDIVIDUAL PERMIT
WETLAND MITIGATION AREA

OKLAHOMA LANDFILL

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Oklahoma City Landfill
Oklahoma City, Oklahoma
Campbell Creek
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