



PUBLIC NOTICE

FILE # NRS 17.220

Pursuant to Tennessee Rules, Chapter 0400-04-07, the proposed activity described below has been submitted for approval under an Aquatic Resource Alteration Permit and § 401 Water Quality Certification. This notice is intended to inform interested parties of this permit application and to ask for comments and information necessary to determine possible impacts to water quality. No decision has been made whether to issue or deny this application.

PERMIT COORDINATOR Mike Lee
(615) 532-0712
mike.lee@tn.gov

APPLICANT Kenneth Auville
A.O. Smith Corporation
500 Tennessee Waltz Parkway
Ashland City, TN 37015
(615) 792-6375

LOCATION

500 Tennessee Waltz Parkway, Ashland City, Cheatham County; Latitude 36.266621, Longitude -87.067433.

PROJECT DESCRIPTION / PURPOSE

A.O. Smith is the largest employer in Cheatham County. The purpose of the levee is to protect the A.O. Smith Plant from future flood events. Since its construction, the Ashland City A.O. Smith Plant has experienced multiple flood events. In 2010, the 500-year flood elevation of 407 was exceeded at the site. Plant production was significantly impacted and total cost of lost production and repairs from the 2010 flood event was in excess of 66 million dollars. Flooding of the plant parking lot during a flash flood event in February of 2016 resulted in damage to employee vehicles. Additional investment in the Plant is unlikely without completion of the proposed project.

The objective of the project is to construct a 500-year flood protection levee around the north, west and south sides of the facility to protect the facility from flood events. The levee will also surround and protect a Cumberland Electric Membership Cooperative substation located to the south of the plant and the Ashland City Waste Water Treatment Plant to the north. The levee will consist of a combination of a 75-150 foot wide and 13-27 foot tall earth berm and 8-25 foot high concrete floodwalls up to 30-inches thick.

Several alternatives have been considered to achieve the desired flood control purpose, but were eliminated from further consideration due to inadequate protection or greater environmental impacts. According to the application, every effort has been made to minimize impacts to streams and wetlands and the currently proposed alternative represents the best possible approach to protect the A.O. Smith Plant and allow for future investment and growth of the facility. In addition, the applicant states every effort has been made to keep the construction footprint as small as possible.

Construction of the levee shall require the permanent placement of fill in 3.67 acres of wetland, temporary impacts to 1.81 acres will occur during construction. Additionally, 327 linear feet of intermittent stream and 633 linear feet of perennial stream will be encapsulated/impounded. Streams 3 and 4 currently flow through culverts under the facility while streams 8 and 9 begin at the western toe of Tennessee Waltz Parkway on the west side of the facility. All must be crossed by the levee. A new stream channel 8 will be constructed relocating flow to stream 9 and then combined stream 8 and 9 will pass through a gate in the concrete floodwall. Stream 3 and 4 will pass through gated culverts in the eastern portion of the levee. Approximately 692 feet of stream 10 and 11 will be impounded due to construction of a borrow area for the levee which will be converted to a City fishing lake.

The wetland and stream compensatory mitigation plan is proposed onsite. Streams 3 and 4 (proposed encapsulation) and Streams 10 and 11 (proposed impoundment impact) are characterized as Cumberland River backwater/open water slough (lentic) areas. The total area of lentic habitat to be impacted is 0.11 acre (total of 960 linear feet). For these impacts, the applicant proposes onsite, in-kind lentic mitigation by the creation of a 7.81- acre (fishing) lake with fringe wetlands (approximate ratio of 41:1). It would be constructed at the site of the soil borrow area post-excavation with 3:1 sloping banks and a variety of depths, substrates, and habitats for fish, reptiles, amphibians, and benthic macroinvertebrates. For stream mitigation of impacts to Streams 8 and 9, total of 26.5 linear feet, the applicant proposes to relocate 24 linear feet of STR-8, remove two existing bridges and provide restoration activities including bank stabilization on approximately 100 linear feet of Stream 7 (Puzzelfool Creek). Compensation for wetland impacts is the onsite creation of approximately 14.44 acres of mixed forested, emergent and scrub-shrub wetland, preservation of 1.68 acres of forested, emergent and scrub-shrub wetlands and the preservation of 3.97 acres of buffer.

The wetland creation areas will occur adjacent and should become contiguous to existing wetlands thus increasing resource values. All compensatory mitigation areas shall be monitored and protected in perpetuity with land use restrictions.

WATERSHED / WATERBODY DESCRIPTION

HUC-8 Watershed: Lower Cumberland River –Sycamore Creek (05130202)

HUC-12 Watershed: Cumberland River- Marks Creek (051302020309)

Level III Ecoregion: 71f western highland rim

Lat/Long: 36.266621, -87.067433.

For more information on this watershed or any Tennessee watershed, please visit our [TN Basins webpage](#).

To view the proposed location of these activities and the watershed condition visit: <http://tdeconline.tn.gov/dwr/> and search on the permit number listed in the title of this Public Notice.

DETERMINATIONS

In accordance with the Tennessee Anti-Degradation Statement (Rule 0400-40-03-.06), the Division has determined that the proposed activities will result in greater than de-minimis degradation to water quality. The applicant proposes to offset lost resource value through compensatory mitigation.

wetland

Wetland ID	Resource Value	Cowardin Class
Wetland 1	Very low	emergent
Wetlands 2 and 3	Low	emergent
Wetlands 9, 11, 12	moderate	emergent, forested and scrub-shrub

FACTORS CONSIDERED

In deciding whether to issue or deny a permit, the Division will consider all comments of record and the requirements of applicable federal and state laws. In making this decision, a determination will be made regarding the lost value of the resource compared to the value of any proposed mitigation. The Division shall consider practicable alternatives to the alteration, loss of waters or habitat, diminishment in biological diversity, cumulative or secondary impacts to the water resource, and adverse impacts to unique, high quality, or impaired waters.

HOW TO COMMENT

Persons wishing to comment on the proposal are invited to submit written comments to the Division. Written comments must be received within **thirty days of the date that this notice is posted**. Comments will become part of the record and will be considered in the final decision. The applicant's name and permit number should be referenced. Send all written comments to the

Division's address listed below and to the attention of the permit coordinator. You may also comment via email to water.permits@tn.gov. After the Division makes a final permit decision, a Division of Water Resources permit appeal may be filed by the applicant or by any person who participated in the public comment period whose appeal is based on comments given to the Division in writing during the public comment period or in testimony at a formal public hearing.

PUBLIC HEARING

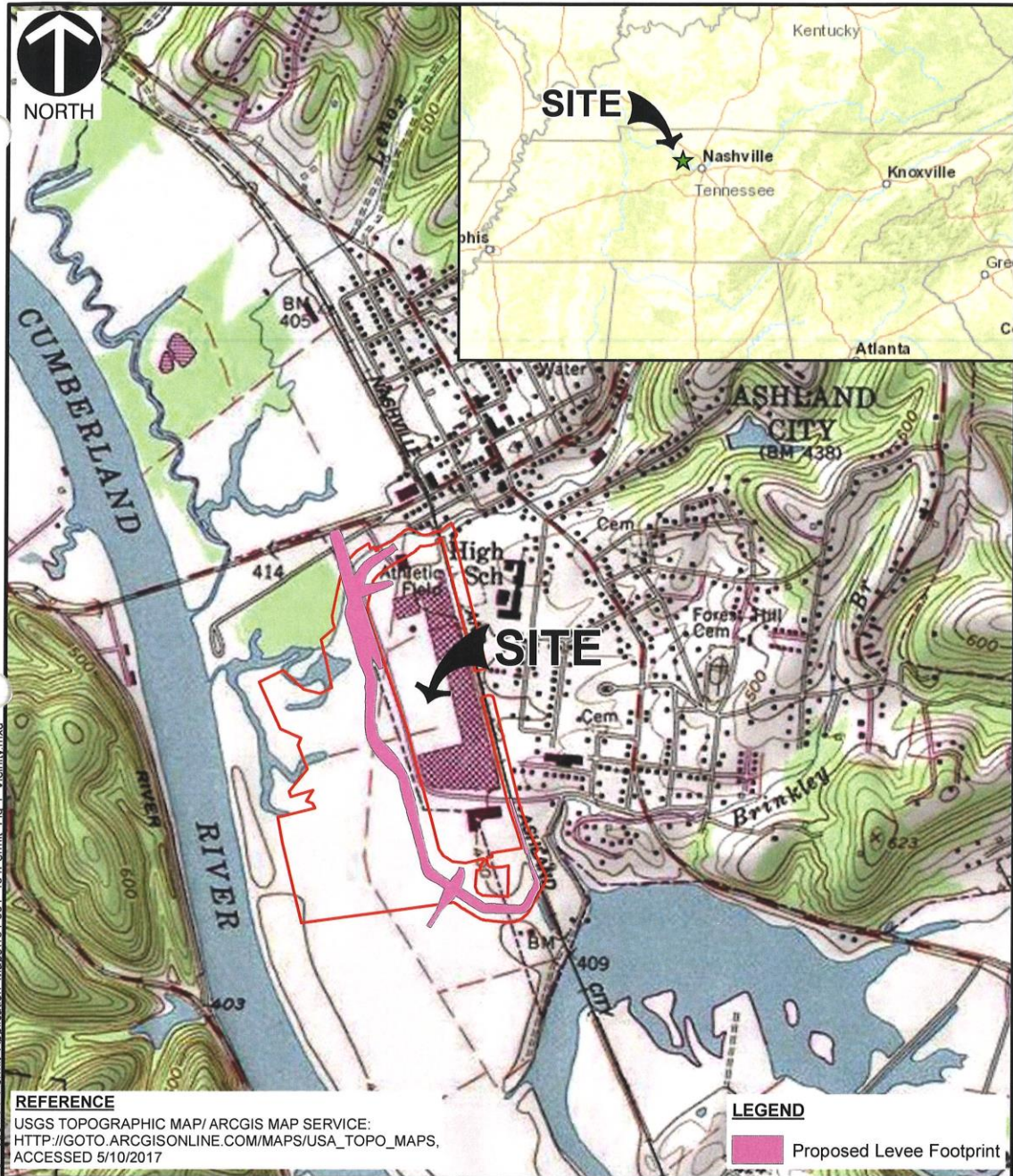
Interested persons may request in writing that the Division hold a public hearing on this application. The request must be received by the Division within the comment period, indicate the interest of the person requesting it, the reasons that the hearing is warranted, and the water quality issues being raised. When there is sufficient public interest in water quality issues, the Division will hold a public hearing. Send all public hearing requests to the attention of the permit coordinator at the address listed below.

FILE REVIEW

The permit application, supporting documentation including detailed plans and maps, and related comments are available for review on the internet at the Division's [data viewer](#) by entering the permit number listed in the title of this Public Notice. The file may be viewed in person at the Division's address (listed below) for review and/or copying.

Tennessee Department of Environment & Conservation
Division of Water Resources, Natural Resources Unit
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243

LOCATION/TOPOGRAPHIC MAP



54-001\GIS\Maps\404_Permit_Application_Maps\154-001_404Permit_Fig-1_Vicinity.mxd

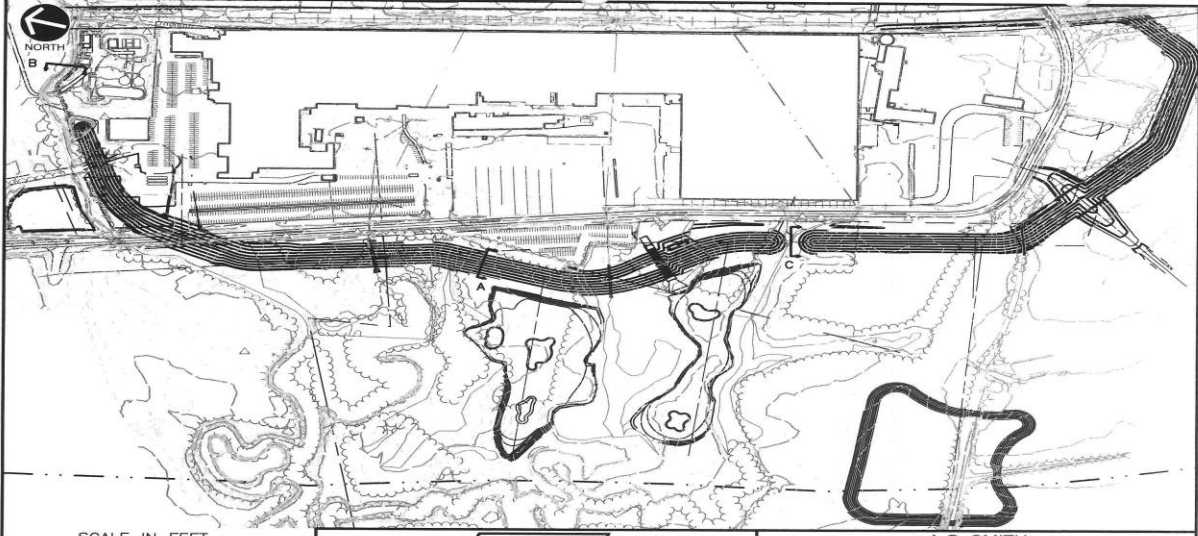
REFERENCE

USGS TOPOGRAPHIC MAP/ ARCGIS MAP SERVICE:
[HTTP://GOTO.ARCGISONLINE.COM/MAPS/USA_TOPO_MAPS](http://gto.arcgis.com/maps/usa_topo_maps),
 ACCESSED 5/10/2017

LEGEND

Proposed Levee Footprint

 Civil & Environmental Consultants, Inc. 325 Seaboard Lane, Ste. 170 Franklin, Tennessee 615-333-7797 · 800-763-2326 www.cecinc.com		A.O. SMITH, INC. FLOOD CONTROL LEVEE PROJECT ASHLAND CITY FACILITY ASHLAND CITY, CHEATHAM COUNTY, TN	
SITE VICINITY TOPOGRAPHIC MAP		FIGURE NO: 1	
DRAWN BY:	CEC	CHECKED BY:	JG
DATE:	5/10/2017	SCALE:	1" = 1,333 feet
APPROVED BY:	JTD	PROJECT NO:	154-001

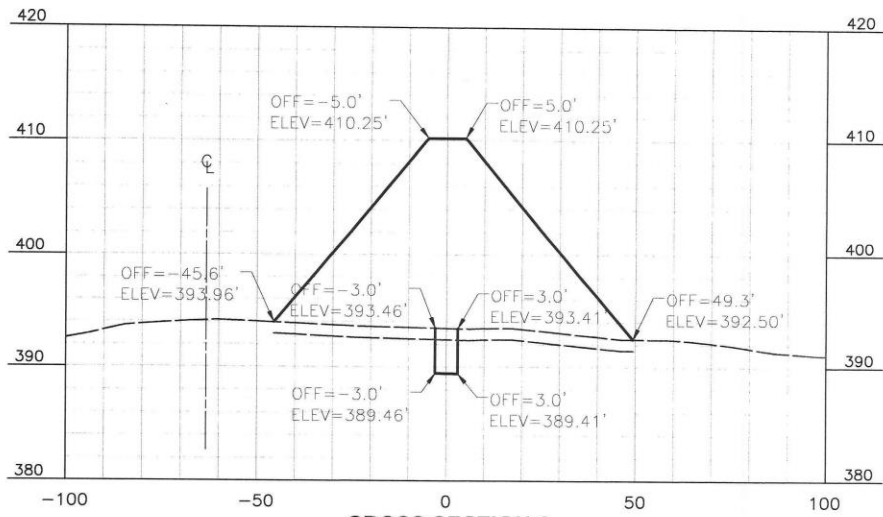


NOTES:
1. PLANS FOR PERMITTING PURPOSES ONLY, NOT FOR CONSTRUCTION.

C&E
Civil & Environmental Consultants, Inc.
325 Seaboard Lane - Suite 170 - Franklin, TN 37067
615-333-7797 - 800-763-2326
www.cecinc.com

A.O. SMITH
FLOOD CONTROL PROJECT
ASHLAND CITY
CHEATHAM COUNTY, TN
OVERALL PROJECT VIEW
DESIGN PLAN

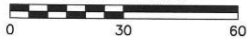
DRAWN BY:	BRD	CHECKED BY:	DRAFT	APPROVED BY:	DRAFT	FIGURE NO.:	EX-A
DATE:	JUNE 2017	DWG SCALE:	AS SHOWN	PROJECT NO.:	154-203		



CROSS SECTION A

HORIZONTAL SCALE

SCALE IN FEET



VERTICAL SCALE

SCALE IN FEET



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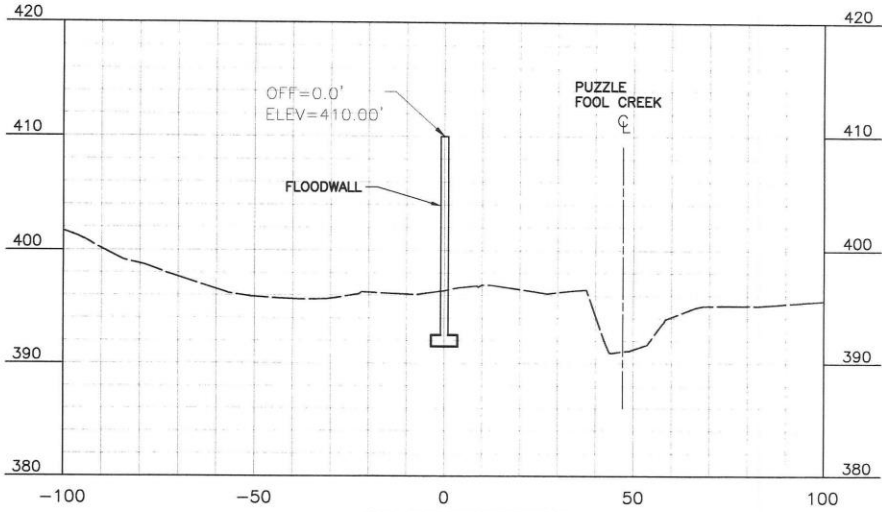
Civil & Environmental Consultants, Inc.

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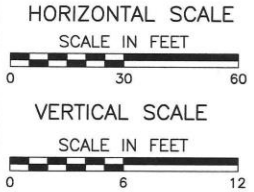
A.O. SMITH
FLOOD CONTROL PROJECT
ASHLAND CITY
CHEATHAM COUNTY, TN
**PROPOSED LEVEE
CROSS SECTIONS**

DRAWN BY: BRD	CHECKED BY: DRAFT	APPROVED BY: DRAFT	FIGURE NO.:
DATE: JUNE 2017	DWG SCALE: AS SHOWN	PROJECT NO: 154-203	

EX-B



CROSS SECTION B



NOTES:
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 Civil & Environmental Consultants, Inc. 325 Seaboard Lane - Suite 170 - Franklin, TN 37067 615-333-7797 - 800-763-2326 www.cecinc.com	A.O. SMITH FLOOD CONTROL PROJECT ASHLAND CITY CHEATHAM COUNTY, TN	
	PROPOSED LEVEE CROSS SECTION B	
DRAWN BY: BRD DATE: JUNE 2017	CHECKED BY: DRAFT DWG SCALE: AS SHOWN	APPROVED BY: DRAFT PROJECT NO: 154-203

EX-C



Photo 7 – Upstream view of Stream 8 from about 125 feet west of Tennessee Waltz Parkway.



Photo 8- Downstream view of Stream 9 from just west of Tennessee Waltz Parkway.

Photo Summary: AO Smith Permittee-Responsible Mitigation



Photo 9 - View west across OW-3 area from just below Stream 9 confluence.

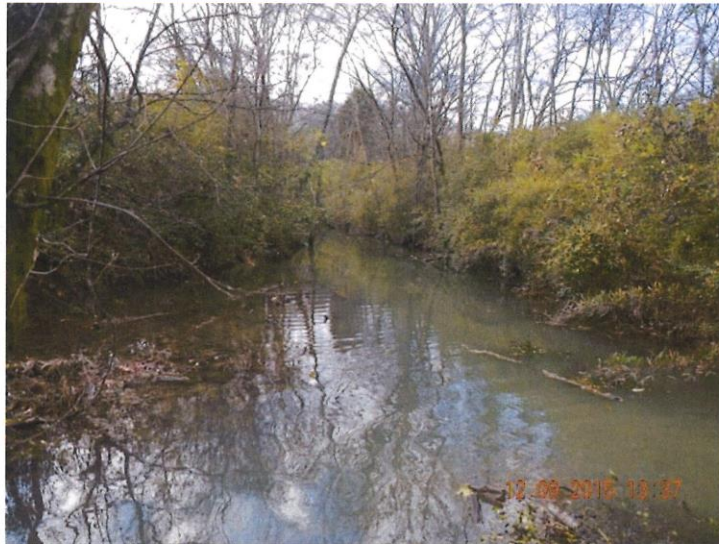
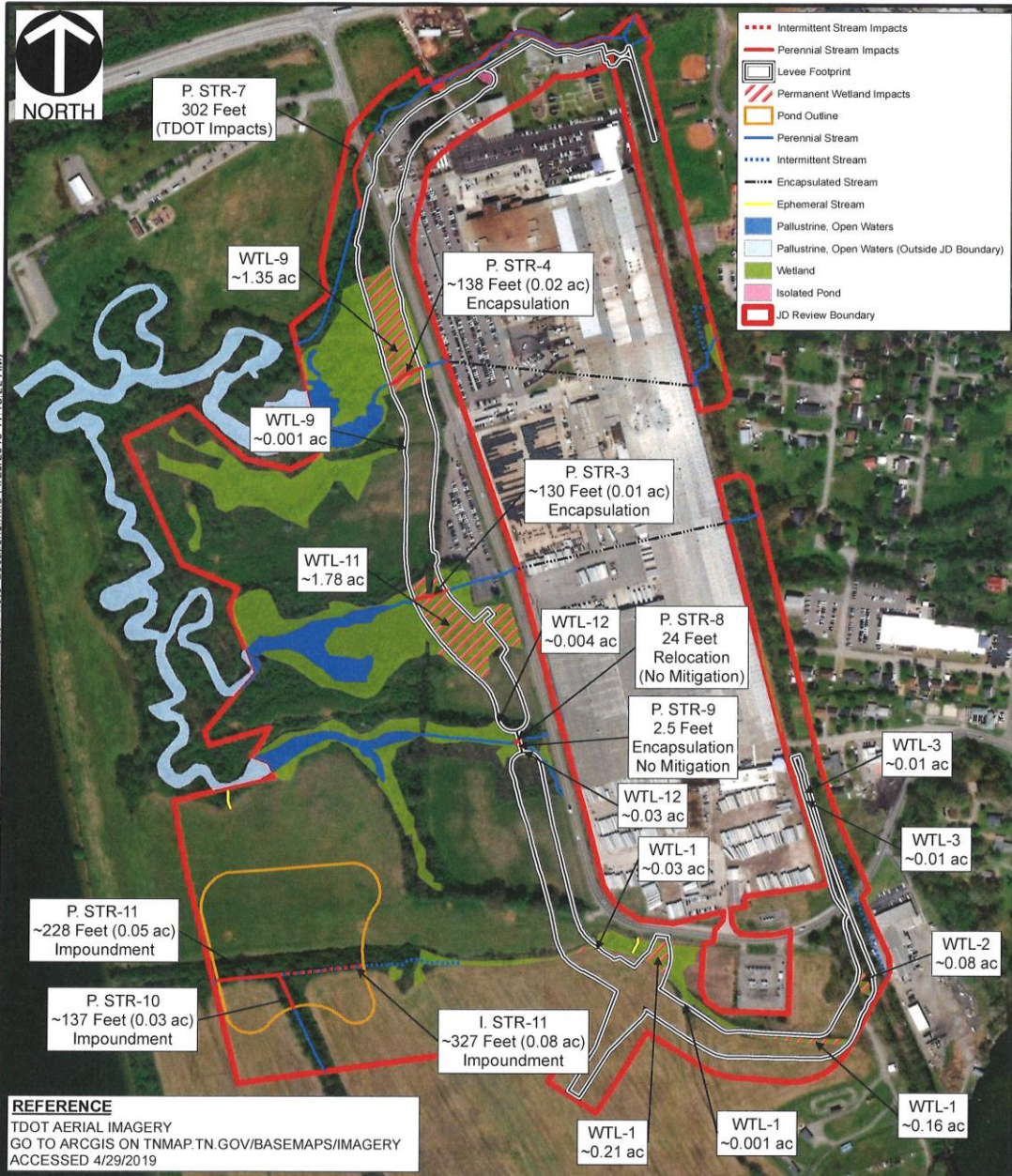


Photo 10 - Stream 11 looking west/downstream from Stream 10 confluence near center of proposed City borrow area / fishing lake.



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REFERENCE
 TDOT AERIAL IMAGERY
 GO TO ARCGIS ON TNMAP.TN.GOV/BASEMAPS/IMAGERY
 ACCESSED 4/29/2019


Civil & Environmental Consultants, Inc.
 325 Seaboard Lane, Ste. 170 Franklin, Tennessee
 615-333-7797 • 800-763-2326
www.cecinc.com

A.O. SMITH, INC
FLOOD CONTROL LEVEE PROJECT
ASHLAND CITY FACILITY
ASHLAND CITY, CHEATHAM COUNTY, TN

AQUATIC RESOURCE IMPACTS

DRAWN BY: CEC	CHECKED BY:	CL	APPROVED BY: JTD <small>*Hand signature on file</small>
DATE: 4/29/2019	SCALE: 1" = 500'	PROJECT NO: 154-001	FIGURE NO: 2



Wetland Creation: 14.44 ac / 4 = 3.61 credits
Wetland Preservation: 1.68 ac / 10 = 0.17 credits
Upland Buffer Preservation: 3.97 ac / 15 = 0.26 credits
Total Wetland Credit: 4.05 credits
Fishing Pond: 7.81 ac / 41 = 0.19 ac of stream credit
Bridge Removal: 100 x 1.0 = 100 linear ft of stream credit

- LEGEND**
- Bridge Removal
 - Upland Buffer Preservation
 - Flood Levee Outline with TDOT Alignment
 - CM Site Boundaries
 - Wetland Preservation
 - Existing Wetland on Corps Property
 - Palustrine Open Water on Corps Property
 - Wetland Creation
 - Planted and Maintained Buffer
 - Fishing Pond
 - Stream Relocation
 - Perennial Stream
 - Intermittent Stream
 - Encapsulated Stream
 - Ephemeral Stream
 - Palustrine, Open Waters (Outside JD Boundary)

REFERENCE
 TDOT AERIAL IMAGERY
 GO TO ARCGIS ON TNMAP.TN.GOV/BASEMAPS/IMAGERY
 ACCESSED 4/19/2019



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A.O. SMITH CORPORATION
FLOOD CONTROL LEVEE PROJECT
PERMITTEE-RESPONSIBLE MITIGATION PLAN
ASHLAND CITY, CHEATHAM COUNTY, TN

CONCEPTUAL MITIGATION PLAN (AERIAL)

DRAWN BY: BCL	CHECKED BY: CEC	APPROVED BY: JTD <small>*Hand signature on file</small>	FIGURE NO: 6
DATE: 4/19/2019	SCALE: 1" = 500'	PROJECT NO: 154-001	

I:\SVR\MA\SHA\154-001-GIS\Map\154-001-Fig. 6 Conceptual Mitigation Aerial Map.mxd (4/19/2019 8:54:40 AM)