

ADDENDUM NO. 3

**CITICO CSOTF AND PUMP STATION IMPROVEMENTS  
City Project W-12-016-202**

**CITY OF CHATTANOOGA, TENNESSEE**

**\*\*BIDS ARE DUE SEPTEMBER 8, 2016 BY 2:00 P.M.\*\***

**The following modifications are hereby introduced as part of the Project Manual:**

- 1) In Specification Volume II, Appendix B – Permits Provided by City, insert the attached Tennessee Valley Authority and Army Corps of Engineers permit documents.
- 2) In Specification 08 16 13 – Fiberglass Doors and Frames, after Article 2.01.B, insert the following additional acceptable manufacturer:
  - C. Tiger Door – Melanie R. Scott, [melanie@jmsalesllc.com](mailto:melanie@jmsalesllc.com).



August 26, 2016

---

/s/ Justin C. Holland, Administrator  
City of Chattanooga  
Department of Public Works

*Please acknowledge receipt of all addenda in your submitted Bid Form.*

*Only questions answered in writing by Addenda will be binding.*





Tennessee Valley Authority  
Section 26a Approval

Permit # 278379

Reservoir Nickajack

Category 2

DOT Project #

Name	Company	Address	Phone/Email
	City of Chattanooga	1250 Market Street, Suite 2100 Chattanooga TN 37402	423-643-6160

Tract(s) N/A-0

Subdivision/Lot(s)	Stream	Mile	Bank	Map Sheet(s)
	Tennessee R	465.1	L	26 C/D Stage
				105 Quad Sheet SE

The facilities and/or activities listed below are APPROVED subject to the plans and general and special conditions attached.

1. Pump station, Combined sewer outfall treatment facility and appurtenant land based structures

2. Outfall and Riprap

This permit SUPERSEDES all previous TVA approvals at this location including permits approved under land record numbers:

74436

TVA Representative:

Heather M Hamilton

Date:

8/24/16

May require review by U.S. Army Corps of Engineers (USACE). Plans have been forwarded to the USACE.

**No construction shall commence until you have written approval or verification that no permit is required.**

Applicant is also responsible for all local and state approvals that may be required relating to water quality.

**No construction shall commence until you have written approval or verification that no permit is required.**

# GENERAL AND STANDARD CONDITIONS

## Section 26a

### **General Conditions**

- 1 ) You agree to make every reasonable effort to construct and operate the facility authorized herein in a manner so as to minimize any adverse impact on water quality, aquatic life, wildlife, vegetation, and natural environmental values.
- 2 ) This permit may be revoked by TVA by written notice if:
  - a) the structure is not completed in accordance with approved plans;
  - b) if in TVA's judgment the structure is not maintained in a good state of repair and in good, safe, and substantial condition;
  - c) the structure is abandoned;
  - d) the structure or work must be altered or removed to meet the requirements of future reservoir or land management operations of the United States or TVA;
  - e) TVA finds that the structure has an adverse effect upon navigation, flood control, or public lands or reservations;
  - f) all invoices related to this permit are not timely paid;
  - g) you no longer have sufficient property rights to maintain a structure at this location; or
  - h) a land use agreement (e.g., license, easement, lease) for use of TVA land at this location related to this permit expires, is terminated or cancelled, or otherwise ceases to be effective.
- 3 ) If this permit for this structure is revoked, you agree to remove the structure, at your expense, upon written notice from TVA. In the event you do not remove the structure within 30 days of written notice to do so, TVA shall have the right to remove or cause to have removed, the structure or any part thereof. You agree to reimburse TVA for all costs incurred in connection with removal.
- 4 ) In issuing this Approval of Plans, TVA makes no representations that the structures or work authorized or property used temporarily or permanently in connection therewith will not be subject to damage due to future operations undertaken by the United States and/or TVA for the conservation or improvement of navigation, for the control of floods, or for other purposes, or due to fluctuations in elevations of the water surface of the river or reservoir, and no claim or right to compensation shall accrue from any such damage. By the acceptance of this approval, applicant covenants and agrees to make no claim against TVA or the United States by reason of any such damage, and to indemnify and save harmless TVA and the United States from any and all claims by other persons arising out of any such damage.
- 5 ) In issuing this Approval of Plans, TVA assumes no liability and undertakes no obligation or duty (in tort, contract, strict liability or otherwise) to the applicant or to any third party for any damages to property (real or personal) or personal injuries (including death) arising out of or in any way connected with applicant's construction, operation, or maintenance of the facility which is the subject of this Approval of Plans.
- 6 ) This approval shall not be construed to be a substitute for the requirements of any federal, state, or local statute, regulation, ordinance, or code, including, but not limited to, applicable building codes, now in effect or hereafter enacted. State 401 water quality certification may apply.
- 7 ) The facility will not be altered, or modified, unless TVA's written approval has been obtained prior to commencing work.
- 8 ) You understand that covered second stories are prohibited by Section 1304.204 of the Section 26a Regulations.
- 9 ) You agree to notify TVA of any transfer of ownership of the approved structure to a third party. Third party is required to make application to TVA for permitting of the structure in their name (1304.10). Any permit which is not transferred within 60 days is subject to revocation.
- 10 ) You agree to stabilize all disturbed areas within 30 days of completion of the work authorized. All land-disturbing activities shall be conducted in accordance with Best Management Practices as defined by Section 208 of the Clean Water Act to control erosion and sedimentation to prevent adverse water quality and related aquatic impacts. Such practices shall be consistent with sound engineering and construction principles; applicable federal, state, and local statutes, regulations, or ordinances; and proven techniques for controlling erosion and sedimentation, including any required conditions under Section 6 of the Standard Conditions.
- 11 ) You agree not to use or permit the use of the premises, facilities, or structures for any purposes that will result in draining or dumping into the reservoir of any refuse, sewage, or other material in violation of applicable standards or requirements relating to pollution control of any kind now in effect or hereinafter established.



- 12 ) The Native American Graves Protection and Repatriation Act and the Archaeological Resources Protection Act apply to archaeological resources located on the premises of land connected to any application made unto TVA. If LESSEE {or licensee or grantee (for easement) or applicant (for 26a permit)} discovers human remains, funerary objects, sacred objects, objects of cultural patrimony, or any other archaeological resources on or under the premises, LESSEE {or licensee, grantee, or applicant} shall immediately stop activity in the area of the discovery, make a reasonable effort to protect the items, and notify TVA by telephone (865-228-1374). Work may not be resumed in the area of the discovery until approved by TVA.
- 13 ) You should contact your local government official(s) to ensure that this facility complies with all applicable local floodplain regulations.
- 14 ) You agree to abide by the conditions of the vegetation management plan. Unless otherwise stated on this permit, vegetation removal is prohibited on TVA land.
- 15 ) You agree to securely anchor all floating facilities to prevent them from floating free during major floods.
- 16 ) You are responsible for accurately locating your facility, and this authorization is valid and effective only if your facility is located as shown on your application or as otherwise approved by TVA in this permit. The facility must be located on land owned or leased by you, or on TVA land at a location approved by TVA.
- 17 ) You agree to allow TVA employees access to your water use facilities to ensure compliance with any TVA issued approvals.
- 18 ) It is understood that you own adequate property rights at this location. If at any time it is determined that you do not own sufficient property rights, or that you have only partial ownership rights in the land at this location, this permit may be revoked. TVA may require the applicant to provide appropriate verification of ownership.
- 19 ) In accordance with 18 CFR Part 1304.9, Approval for construction covered by this permit expires 18 months after the date of issuance unless construction has been initiated.

**Standard Conditions** (Only items that pertain to this request have been listed.)

**Additional Conditions**

CITY OF CHATTANOOGA, TENNESSEE

CITICO CSOTF AND PUMP STATION IMPROVEMENTS

CONTRACT NO. W-12-016-202

CONSENT DECREE PROGRAM

MAYOR

ANDY BERKE

CITY COUNCIL

- DISTRICT 1 - CHIP HENDERSON
- DISTRICT 2 - JERRY MITCHELL
- DISTRICT 3 - KEN SMITH
- DISTRICT 4 - LARRY GROHN
- DISTRICT 5 - RUSSELL GILBERT
- DISTRICT 6 - CAROL B. BERZ, CHAIRPERSON
- DISTRICT 7 - CHRIS ANDERSON
- DISTRICT 8 - MOSES FREEMAN, VICE CHAIRPERSON
- DISTRICT 9 - YUSUF HAKEEM

DEPARTMENT OF PUBLIC WORKS

DONALD L. NORRIS, ADMINISTRATOR

WILLIAM C. PAYNE, P.E., CITY ENGINEER  
THESE PLANS HAVE BEEN REVIEWED AND ARE APPROVED FOR  
RELEASE BY THE CITY OF CHATTANOOGA.

WILLIAM C. PAYNE, P.E., CITY ENGINEER

DATE



PREPARED BY:



3650 MANSELL ROAD, SUITE 300  
ALPHARETTA, GA 30022  
(770) 587-4776

MAY 1, 2016

90% RESUBMITTAL

DWG. NO. TITLE  
GENERAL DRAWINGS

- G001 COVER SHEET
- G002 GENERAL NOTES
- G003 LEGEND AND ABBREVIATIONS

CIVIL DRAWINGS

- C001 CITICO CSOTF - GRADING / DEMOLITION PLAN
- C002 CITICO CSOTF - OVERALL SITE PLAN
- C003 CITICO CSOTF - PUMP STATION PLANS
- C004 CITICO CSOTF - PUMP STATION SECTIONS
- C005 CITICO CSOTF - SITE DETAILS 1
- C006 CITICO CSOTF - SITE DETAILS 2
- C007 CITICO CSOTF - EROSION CONTROL DETAILS 1
- C008 CITICO CSOTF - EROSION CONTROL DETAILS 2

MECHANICAL DRAWINGS

- M001 CITICO CSOTF - EFFLUENT BUILDING - ELECTRICAL ROOM VENTILATION PLAN

STRUCTURAL DRAWINGS

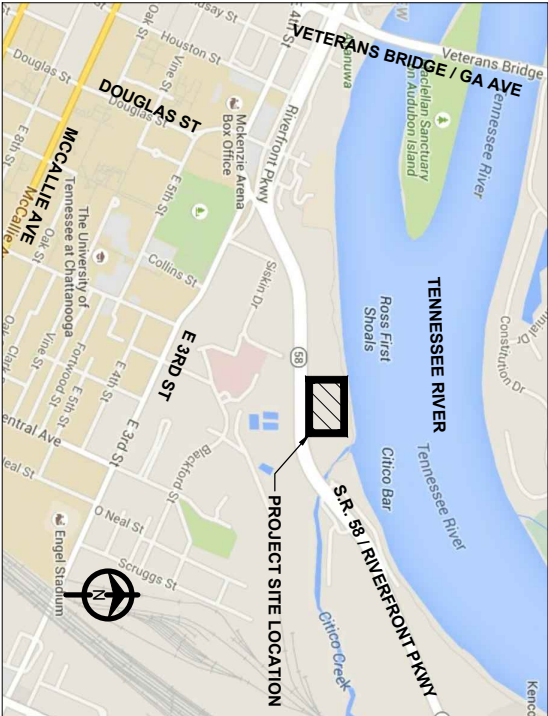
- S001 CITICO CSOTF - STRUCTURAL LEGEND
- S002 CITICO CSOTF - STRUCTURAL STANDARD DETAILS
- S003 CITICO CSOTF - PUMP STATION PLANS
- S004 CITICO CSOTF - PUMP STATION SECTIONS AND DETAIL
- S005 CITICO CSOTF - PUMP STATION SECTIONS AND DETAILS
- S006 CITICO CSOTF - EFFLUENT BUILDING DEMO PLAN AND SECTIONS
- S007 CITICO CSOTF - EFFLUENT BUILDING PLAN, SECTIONS, AND DETAILS
- S008 CITICO CSOTF - SECTIONS AND DETAILS

ELECTRICAL DRAWINGS

- E001 CITICO CSOTF - ELECTRICAL LEGEND
- E002 CITICO CSOTF - SITE PLAN
- E003 CITICO CSOTF - SITE PLANS
- E004 CITICO PUMP STATION - PUMP STATION PLAN
- E005 CITICO CSOTF - ONE-LINE DIAGRAM AND CABLE SCHEDULE
- E006 CITICO CSOTF - CONTROL DIAGRAMS
- E007 CITICO CSOTF - SCADA ARCHITECTURE DIAGRAM
- E008 CITICO CSOTF - MISCELLANEOUS ELECTRICAL DETAILS

PROCESS DRAWINGS

- P001 CITICO CSOTF - P&ID LEGEND SHEET 1
- P002 CITICO CSOTF - P&ID LEGEND SHEET 2
- P003 CITICO CSOTF - P&ID PUMP STATION



LOCATION MAP  
NTS

GENERAL NOTES - CONSTRUCTION:	
OWNER:	CITY OF CHATTANOOGA DEPARTMENT OF PUBLIC WORKS WASTE RESOURCES DIVISION 465 MOCCASIN BEND ROAD CHATTANOOGA, TN 37405 PHONE: (423) 757-5026
CONTRACTOR:	TO BE DETERMINED AT TIME OF CONTRACT AWARD
1.	SIZES, DEPTHS, MATERIALS, AND LOCATIONS OF EXISTING UTILITIES, STRUCTURES, AND FEATURES SHOWN ON THE PLANS ARE APPROXIMATE AND NOT GUARANTEED. DATA HAS NOT BEEN VERIFIED FOR ACCURACY AND CANNOT BE GUARANTEED. EXISTING FACILITY AND SITE DATA INCLUDING BUT NOT LIMITED TO TOPOGRAPHICAL INFORMATION, ELEVATIONS, DIMENSIONS, MATERIALS, SIZES, LOCATIONS, CONDITION, AND OTHER DATA PROVIDED IS BASED ON:
A.	CITICO CSO CONTROL FACILITY DRAWINGS BY CONSOLIDATED TECHNOLOGIES, INC., DATED 5/7/99.
B.	CITICO II PUMPING STATION DRAWINGS BY HENSLEY-SCHMIDT, INC., DATED 8/24/89.
C.	CITY OF CHATTANOOGA GIS INFORMATION.
D.	SUPPLEMENTED BY FIELD INVESTIGATIONS.
2.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE LOCATION OF, AND PROTECTING, ALL EXISTING UTILITIES AND FACILITIES, INCLUDING THOSE NOT SHOWN OR INCORRECTLY SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING ALL UNDERGROUND UTILITY FACILITIES LOCATED AND MARKED PRIOR TO THE BEGINNING OF CONSTRUCTION. CONTRACTOR SHALL CONDUCT FIELD SURVEYS TO VERIFY THE EXISTENCE, SIZE, LOCATION, AND ELEVATIONS OF STRUCTURES AND UTILITIES EFFECTING THE WORK PRIOR TO CONSTRUCTION. CONTACT THE LOCAL UNDERGROUND UTILITIES PROTECTION CENTER AT 811 FOR LOCATION ASSISTANCE. COSTS OF FIELD SURVEYS AND EXPLORATORY EXCAVATIONS ARE INCIDENTAL AND INCLUDED IN THE CONTRACT PRICE. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR FIELD SURVEYING AND EXPLORATORY EXCAVATIONS.
3.	VERTICAL CLEARANCES AND UTILITY PROTECTION BETWEEN CROSSING CITY FACILITIES SHALL BE MAINTAINED IN STRICT CONFORMANCE WITH THE CITY'S DESIGN AND CONSTRUCTION STANDARDS AND THE CITY'S STANDARD DETAILS.
4.	ALL NEW AND TEMPORARY FACILITIES SHALL BE INSTALLED AROUND EXISTING UTILITIES AND FACILITIES THAT SHALL REMAIN IN PLACE. IT IS SPECIFIED AND AGREED THAT THE CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR ANY DELAYS OR INCONVENIENCE CAUSED BY UTILITY ADJUSTMENTS.
5.	THE CONTRACTOR SHALL NOTIFY THE CITY AND CONCERNED AGENCIES AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION AND EXCAVATING NEAR UTILITIES, OR INTERRUPTING ANY UTILITY SERVICES, FOR ANY EMERGENCIES. CALL 423-757-5026. THE REPAIR OR REPLACEMENT OF UTILITY COMPONENTS SHALL CONFORM TO ALL APPLICABLE REQUIREMENTS OF THE UTILITY OWNER. NO SEPARATE PAYMENT SHALL BE MADE FOR THESE ACTIVITIES, AND COMPENSATION SHALL BE INCLUDED IN THE CONTRACT PRICES FOR OTHER ITEMS.
6.	THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. SHOULD SPECIAL EQUIPMENT BE REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR SHALL BE REQUIRED TO FURNISH SUCH EQUIPMENT.
7.	ANY DAMAGE TO EXISTING UTILITIES AND STRUCTURES AND SITE IMPROVEMENTS DURING CONSTRUCTION SHALL BE REPAIRED AS RAPIDLY AS POSSIBLE AND THEN BE INSPECTED BY ITS RESPECTIVE OWNER TO DETERMINE IF REPAIR IS ACCEPTABLE AND IN ACCORDANCE WITH UTILITY OWNERS STANDARDS. INSTALLATIONS SHALL BE EQUAL TO AND CONSISTENT WITH THE UNDISTURBED PORTIONS OF THE IMPROVEMENTS EXISTING PRIOR TO THE WORK. THE ENGINEER SHALL DETERMINE IF DAMAGE IS THE RESULT OF THE CONTRACTOR'S NEGLIGENCE OR OF ANY UNAVOIDABLE CAUSE. ANY DAMAGE CAUSED BY CONTRACTOR'S CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE CITY OR UTILITY OWNER.
8.	THE CITY MAKES NO REPRESENTATIONS ABOUT SUBSURFACE CONDITIONS ENCOUNTERED WITHIN THE LIMITS OF THE PROJECT. THEREFORE, THE CONTRACTOR SHOULD SATISFY HIMSELF BY ON-SITE INSPECTIONS, GEOTECHNICAL INVESTIGATION, OR OTHER METHODS, OF THE SUBSURFACE CONDITIONS THAT MAY BE ENCOUNTERED. THE RISK OF ENCOUNTERING AND CORRECTING UNFAVORABLE, SUBSURFACE CONDITIONS SHALL BE BORNE BY THE CONTRACTOR.
9.	ALL SANITARY SEWER CONSTRUCTION MUST BE DONE BY A LICENSED MUNICIPAL UTILITY CONTRACTOR CLASSIFICATION MU.
10.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTRACTING THE CITY'S DESIGN AND CONSTRUCTION REPRESENTATIVE 48 HOURS PRIOR TO THE START OF SEWER CONSTRUCTION, TESTS, AND INSPECTIONS, AND SHALL BE RESPONSIBLE FOR THE COORDINATION, SCHEDULING, AND CONDUCTING OF ALL REQUIRED TESTING THEREOF. TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER AND/OR CITY REPRESENTATIVE. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AT 423-757-5120 (CITY) OR 423-209-6410 (COUNTY) AT LEAST 48 HOURS PRIOR TO THE START OF SEWER CONSTRUCTION.
11.	COPIES OF THE CITY'S STANDARD SPECIFICATIONS AND STANDARD DETAILS MAY BE OBTAINED FROM THE CITY'S WEBSITE AT WWW.CHATTANOOGA.GOV/PUBLIC-WORKS/GIS-MAPPING/CITY-ENGINEER_PROJECT CONSTRUCTION REFERENCES CITY DETAILS INCLUDING, BUT NOT LIMITED TO:
A.	SD-300.01 SANITARY/STORM MANHOLE (PRECAST)
B.	SD-301.03 SANITARY/STORM MANHOLE DETAILS
C.	SD-301.04 SANITARY/STORM MANHOLE DETAILS
D.	SD-307.01 TRENCH DETAILS AND BEDDING (STORM/SANITARY SEWERS).
E.	SD-700.01 REPAIR DETAILS (ROADWAY).
F.	SD-700.02 REPAIR DETAILS (ROADWAY).
12.	ALL MATERIALS AND CONSTRUCTION RELATED TO THE PROJECT SHALL BE SUBJECT TO CONSTRUCTION OBSERVATION BY CITY PERSONNEL, REPRESENTATIVES, AGENCIES, AND THE ENGINEER. CONTRACTOR SHALL PROVIDE ACCESS TO INSTALLATIONS FOR TESTING AND INSPECTING.
13.	THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES THE CITY'S DESIGN AND CONSTRUCTION STANDARDS, ONE SET OF APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS, AND ALL NECESSARY PERMITS.
14.	DURING ALL TIMES OF CONSTRUCTION, CONTRACTOR IS TO HAVE ON HAND ALL MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE A REPAIR OF ANY POTENTIAL AND/OR UNFORSEEN EXISTING SANITARY SEWER AND/OR SERVICE LINE BREAK.
15.	THE ENGINEER SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY AND CONTRACTOR PRIOR TO THE START OF ANY CONSTRUCTION.
16.	ALL INSTALLATIONS MUST BE INSTALLED, COMPACTED, AND TESTED ACCORDING TO SPECIFICATIONS AND STANDARDS. SURFACES MUST BE RESTORED AND STABILIZED, AND ALL FACILITIES MUST BE IN WORKING ORDER AND APPROVED BY THE OWNER PRIOR TO ACCEPTANCE. STABILIZE AND RESTORE ALL DISTURBED SURFACES TO PRE-CONSTRUCTION CONDITIONS OR BETTER.
17.	THE CONTRACTOR SHALL NOTIFY THE CITY OF ANY PROBLEM IMPACTING WASTEWATER FACILITIES THAT WOULD POTENTIALLY REQUIRE A VARIANCE FROM THE APPROVED PLANS AND SPECIFICATIONS. ANY VARIANCE FROM THE APPROVED DOCUMENTS SHALL BE AT THE SOLE DISCRETION OF THE CITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORPING ALL FIELD CHANGES TO THE APPROVED DOCUMENTS AND PREPARING RECORD DOCUMENTS AS REQUIRED BY THE CITY. PROBATIONARY ACCEPTANCE OF THE WORK SHALL BE CONTINGENT UPON THE CITY'S RECEIPT OF THE CONTRACTOR'S RED LINED DRAWINGS.
18.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY GROUNDWATER ENCOUNTERED DURING THE CONSTRUCTION OF ANY PORTION OF THE WORK. IN ORDER TO ALLOW CONSTRUCTION OF IMPROVEMENTS SHOWN ON THE PLANS, GROUNDWATER SHALL BE PUMPED, PIPED, REMOVED, AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE FLOODING OF EXISTING STREETS, EROSION ON ADJUTING PROPERTIES, OR WATER QUALITY DEGRADATIONS TO NEARBY WATER BODIES AND WETLANDS. NO CONCRETE SHALL BE PLACED WHERE GROUNDWATER IS VISIBLE UNTIL THE GROUNDWATER TABLE HAS BEEN LOWERED BELOW THE PROPOSED IMPROVEMENTS. ANY UNSTABLE AREAS DUE TO GROUNDWATER SHALL BE STABILIZED AS DIRECTED BY THE CITY.
19.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING, DIVERTING, AND BARRICADING EXISTING RIVER WATER, TO PREVENT WATER INTRUSION AND POTENTIAL DAMAGE TO EXISTING SEWER AND STRUCTURE IMPROVEMENTS AND NEW INSTALLATIONS. ANY TEMPORARY STRUCTURES AND COFFER DAMS INSTALLED MUST BE INSTALLED AND REMOVED AS SOON AS POSSIBLE TO PREVENT ANY OBSTRUCTION TO THE CSOT FLOWLINE, AND TO PREVENT BACKUPS WITHIN THE FACILITY. NOTIFY THE TVA, USACE, AND CITY OF CHATTANOOGA PRIOR TO CONDUCTING ANY WORK WITHIN THE TENNESSEE RIVER BUFFER AREAS IN ACCORDANCE WITH PERMIT REQUIREMENTS AND REGULATIONS.
20.	CONSTRUCTION WATER IS AVAILABLE TO THE CONTRACTOR THROUGH EXISTING PUMP STATION AND CSOT WATER FACILITIES. AS AGREED UPON WITH CITY REPRESENTATIVES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE CITY REGARDING CURRENT REGULATIONS AND REQUIRED AGREEMENTS RELATED TO THE PROVISION OF CONSTRUCTION WATER. EXISTING POTABLE WATER VALVES WITHIN THE CITY SHALL ONLY BE OPERATED BY CITY PERSONNEL, UNLESS OTHERWISE ALLOWED BY THE CITY.
21.	CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, INCLUDING THOSE APPLIED FOR BY ENGINEER, FOR CONSTRUCTION. CONTRACTOR SHALL CONFINE CONSTRUCTION OPERATIONS WITHIN EXISTING EASEMENTS, RIGHTS-OF-WAY, TEMPORARY CONSTRUCTION EASEMENTS, AND CITY PROPERTIES. IF THE CONTRACTOR DETERMINES ADDITIONAL SPACE IS REQUIRED ON PRIVATE PROPERTIES FOR CONSTRUCTION OPERATIONS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THE NECESSARY EASEMENTS TO COMPLETE THE WORK.
22.	THE CONTRACTOR SHALL PROTECT EXISTING TREES, SHRUBS, FENCING, WALLS, AND ALL OTHER FEATURES ON THE PROPERTY. IN CASES WHERE CONTRACTOR FEELS PROTECTION IS IMPOSSIBLE, CONTRACTOR SHALL REMOVE AND REPLACE SUCH ITEMS ONLY AFTER RECEIVING WRITTEN OWNER APPROVAL. CONTRACTOR SHALL GIVE THE OWNER ONE WEEK'S NOTICE PRIOR TO FEATURE CUTTING AND REMOVING. REMOVAL AND REPLACEMENT WILL BE AT THE COST OF THE CONTRACTOR. ANY FEATURES REMOVED SHALL BE REPLACED TO THE SATISFACTION OF THE OWNER.
23.	WHERE EXCAVATION IS REQUIRED UNDER EXISTING ASPHALT OR CONCRETE PAVEMENT AND SIDEWALKS, THE EXISTING PAVEMENT SHALL BE SAW CUT IN A MANNER TO AFFECT A SMOOTH, STRAIGHT-CUT EDGE. CONTRACTOR SHALL REPLACE REMOVED PAVEMENT UPON COMPLETION OF INSTALLATIONS IN ACCORDANCE WITH CITY AND TDOT STANDARDS AND THE PROJECT DRAWINGS. EXCAVATIONS ADJACENT TO EXISTING PAVEMENT SHALL BE MADE TO A NEAT LINE.
24.	THE CONTRACTOR IS TO DISPOSE OF, AT HIS OWN EXPENSE, ALL UNSUITABLE AND/OR SURPLUS, EXCAVATED MATERIAL AS DIRECTED BY THE ENGINEER. ALL SUITABLE, EXCAVATED MATERIAL, SHALL BE USED AS DIRECTED BY THE ENGINEER. ALL UNSUITABLE MATERIAL, AS DETERMINED BY THE ENGINEER OR CITY REPRESENTATIVE, OR THROUGH TESTING, IS TO BE REMOVED AND REPLACED WITH SUITABLE MATERIALS.
25.	THE EXISTING SEWER SYSTEM, CSOT, AND PUMP STATION FACILITIES ARE TO REMAIN IN SERVICE DURING CONSTRUCTION. CONTRACTOR SHALL DIVERT SEWAGE FLOWS AROUND SECTIONS OF SEWER AND FACILITIES AS NEEDED WITH TEMPORARY PIPES, BYPASS PIPING AND PUMPING, AND TEMPORARY BRACING WITHIN THE EXISTING STRUCTURES AND CUTFALL AS NECESSARY. BYPASS PUMPING SHALL BE ACCOMPLISHED WITH PORTABLE PUMPS AND PIPING, AND SHALL BE DESIGNED AND MAINTAINED BY THE CONTRACTOR. AT NO POINT IN TIME SHALL SEWAGE BE ALLOWED TO DISCHARGE ON SITE OUTSIDE THE SANITARY SEWAGE FACILITIES. BYPASS PUMPING OPERATIONS MUST BE MONITORED AT ALL TIMES, AND REMOVED UPON COMPLETION OF THE WORK.
26.	CONTRACTOR SHALL COVER AND BARRICADE ALL WORK PRIOR TO THE END OF EACH WORK DAY. NO OPEN HOLES ARE ALLOWED OVER NIGHT. ALL WORK SHALL BE IN ACCORDANCE WITH PERMIT REQUIREMENTS AND APPLICABLE STANDARDS.
27.	PRIOR TO BEGINNING CONSTRUCTION WITHIN FACILITIES, CONTRACTOR SHALL PROVIDE ALL TEMPORARY MEASURES AND EQUIPMENT NECESSARY TO PREVENT DEBRIS FROM WASHING TO DOWNSTREAM SECTIONS OF SEWER. ALL CLEANING AND REMOVAL SHALL BE INCLUDED IN THE DESIGNATED BID ITEM, AND PERFORMED AT NO ADDITIONAL COSTS TO THE OWNER, INCLUDING DISPOSAL COSTS.
28.	CONTRACTOR SHALL ADHERE TO WORKING HOURS AND WORK TIMES LISTED IN THE GENERAL CONDITIONS SECTION 6.02.
29.	ALL SANITARY SEWER PIPING AND STRUCTURE INSTALLATIONS AND REHABILITATION SHALL BE TESTED AND INSPECTED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION REQUIREMENTS, PART 3. FOR THE DESIGNATED INSTALLATION OR REHABILITATION, ALL INSPECTIONS AND TESTING OF REHABILITATION WORK SHALL BE PERFORMED UNDER THE SUPERVISIONS OF THE ENGINEER AND/OR CITY REPRESENTATIVE.
30.	ALL SALVAGEABLE MATERIAL (DESIGNATED BY THE CITY) FROM EXISTING PIPING AND STRUCTURES SHALL REMAIN THE PROPERTY OF THE CITY OF CHATTANOOGA, SAID MATERIAL SHALL BE CLEANED, PACKAGED, AND THEN DELIVERED TO THE OWNER AT A LOCATION DESIGNATED BY THE CITY REPRESENTATIVE.
31.	IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE FIELD LAYOUTS AND CONTROLS, STAGING PLANS, DEMATERING PLANS, AND TRAFFIC CONTROL PLANS (AS NECESSARY) PRIOR TO START OF CONSTRUCTION OPERATIONS.
32.	THE CITY AND/OR ITS REPRESENTATIVE IS NOT RESPONSIBLE FOR SAFETY IN, ON, OR ABOUT THE PROJECT SITE, NOR FOR COMPLIANCE BY THE APPROPRIATE PARTY OF ANY REGULATIONS RELATING THERETO.
33.	THE CITY AND/OR ITS REPRESENTATIVES EXERCISES NO CONTROL OF THE SAFETY OR ADEQUACY OF ANY EQUIPMENT, BUILDING COMPONENTS, SCAFFOLDING, FORMS, OR ANY OTHER WORK AIDS USED IN OR ABOUT THE PROJECT, OR IN THE SUPERINTENDING OF THE SAME.
35.	SHOULD THERE BE A CONFLICT BETWEEN THESE GENERAL NOTES, CONTRACT DRAWINGS, AND/OR SPECIFICATIONS, THE MOST RESTRICTIVE INTERPRETATION SHALL PREVAIL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING FROM THE ENGINEER ANY CLARIFICATION OF GENERAL NOTES, CONTRACT DRAWINGS AND/OR SPECIFICATIONS IN WRITING IN ADVANCE OF START OF CONSTRUCTION.
36.	THE CONTRACTOR SHALL MEASURE AND RECORD ON THE CONSTRUCTION RECORD DRAWINGS ALL IMPROVEMENTS BY REFERENCING THE DISTANCES TO EXISTING STRUCTURES PROVIDED IN THE PROJECT DRAWINGS. THE CONTRACTOR SHALL PROVIDE RECORD DRAWINGS OF THE PROJECT WITHIN 30 DAYS AFTER SUBSTANTIAL COMPLETION OF THE WORK, AS DEFINED BY THE SPECIFICATIONS. THE ENGINEER RESERVES THE RIGHT TO WITHHOLD RETAINAGE UNTIL RECEIPT AND APPROVAL OF A COMPLETE SET OF RECORD DRAWINGS.
37.	THE PROJECT IS LOCATED WITHIN A 100-YEAR FLOOD PLAIN AND MAY BE SUBJECT TO FLOODING THROUGHOUT THE YEAR. CONTRACTOR SHALL PLAN FOR ANY POTENTIAL DELAYS FOR POTENTIAL FLOODING AND SYSTEM BACKUPS DUE TO RIVER WATER. CONTRACTOR SHALL ACCOUNT FOR POTENTIAL DELAYS DUE TO FLOODING WITHIN THE CONSTRUCTION SCHEDULE, AND SHALL HAVE CONTINGENCY PLANS IN PLACE TO QUICKLY REMOVE EQUIPMENT, MATERIALS, AND LABORERS FROM THE SITE AND PROVIDE TEMPORARY PROTECTIONS OF INSTALLED FACILITIES AND WORK AREAS FROM POTENTIAL DAMAGE DUE TO FLOODING DURING THE PROTECT DURATION.




3650 MANSELL ROAD  
SUITE 300  
ALPHARETTA, GA 30022

NOT RELEASED FOR CONSTRUCTION

CITICO CSOTF AND PUMP STATION IMPROVEMENTS

CITY OF CHATTANOOGA, TN

CONSENT DECREE PROGRAM



REV	DATE	REVISION DESCRIPTION
	05-01-2016	90% RESUBMITTAL

THIS LINE LONG WHEN PLOTTED FULL SCALE

THIS DRAWING MUST BE USED IN CONJUNCTION WITH THE APPLICABLE OR GOVERNING TECHNICAL SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS.

PROJECT NO. 82841

DATE: JULY 17, 2015

DISC. LEND. DESIGNER: CHECKER:

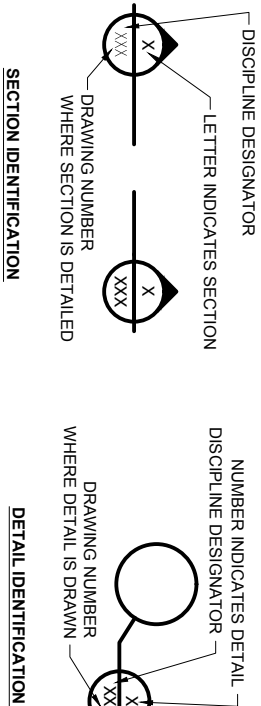
AW AV CO

SHEET TITLE CIVIL

SHEET G002



F	STANDARD ABBREVIATIONS		SCADA		SUPERVISORY CONTROL AND DATA ACQUISITION	
	AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	SCH / SCHED	SCHEDULE		
E	AD	ACCESS DOOR	SG	SLIDE GATE		
	APPROX	APPROXIMATE	SP	SUBMERSIBLE PUMP		
D	ARV	AIR RELIEF VALVE	SQ FT / SF	SQUARE FOOT		
	ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	SR	STATE ROUTE		
C	AVE	AVENUE	SS	SANITARY SEWER		
	BLVD	BOULEVARD	SS / SST	STAINLESS STEEL		
B	BM	BENCHMARK	SSFM	SANITARY SEWER FORCE MAIN		
	BMP	BEST MANAGEMENT PRACTICES	SSPC	SANITARY SEWER MANHOLE		
A	BV	BALL VALVE	ST	SOCIETY FOR PROTECTIVE COATINGS		
	BW	BOTTOM OF WALL	STA	STATION		
	CFR	CODE OF FEDERAL REGULATIONS	STD	STANDARD		
	CLPP	CURED-IN-PLACE PIPE	STL	STEEL		
	CLR	CLEAR / CLEARANCE	SW	SIDEWALK		
	CLR	CLEAR / CLEARANCE	T&B	TOP AND BOTTOM		
	CONC	CONCRETE	TBM	TRUE BENCHMARK		
	CONC	CONCRETE	TOP	TERRACOTTA CLAY PIPE		
	CR	MONORAIL AND CRANE HOIST	TDEC	TENNESSEE DEPARTMENT OF ENVIRONMENTAL CONTROL		
	CSARV	COMBINATION SEWER AIR RELIEF AND VACUUM VALVE STATION	TDOT	TENNESSEE DEPARTMENT OF TRANSPORTATION		
	CSOTF	COMBINED SEWER OVERFLOW TREATMENT FACILITY	TN	TENNESSEE		
	CTRD	CENTERED	TN	TONS		
	CV	CHECK VALVE	TVA	TENNESSEE VALLEY AUTHORITY		
	DI	DUCTILE IRON	TW	TOP OF WALL		
	DIA	DIAMETER	TYP	TYPICAL		
	DIP	DUCTILE IRON PIPE	UL T	ULTRASONIC LEVEL SENSOR AND TRANSMITTER		
	DWG	DRAWING	UNO	UNLESS OTHERWISE NOTED		
	E	EAST	USACE	UNITED STATES ARMY CORP OF ENGINEERS		
	EF	EACH FACE	USGS	UNITED STATES GEOLOGICAL SURVEY		
	EJ	EXPANSION JOINT	VC	VITRIFIED CLAY		
	EPD	ENVIRONMENTAL PROTECTION DIVISION	VFD	VARIABLE FREQUENCY DRIVE		
	EL / ELEV	ELEVATION	WL	WATER LINE		
	EOP	EDGE OF PAVEMENT	WW	WATER VALVE		
	ES&PC	EROSION, SEDIMENT, AND POLLUTION CONTROL	WWTP	WASTEWATER TREATMENT PLANT		
	EW	EACH WAY	±	APPROXIMATELY		
	EXIST / EX	EXISTING	Ø	DIAMETER		
	fc	SPECIFIED 28 DAY COMPRESSIVE STRENGTH OF CONCRETE				
	FY / fy	YIELD STRESS				
	FL	LIQUID LEVEL FLOAT CONTROL				
	FLG	FLANGE				
	FRP	FIBERGLASS REINFORCED PLASTIC				
	FT	FEET				
	GAB	GRADED AGGREGATE BASE				
	GALV	GALVANIZED				
	GDOT / GADOT	GEORGIA DEPARTMENT OF TRANSPORTATION				
	GJ	GROOVE JOINT				
	GV	GATE VALVE				
	HDPE	HIGH DENSITY POLYETHYLENE PIPE				
	HVAC	HEATING, VENTILATION, AND AIR CONDITIONING				
	HW	HEADWALL				
	IE	INVERT ELEVATION				
	ID	INSIDE DIAMETER / INSIDE DIMENSIONS				
	INC	INCORPORATED				
	IPF	IRON PIN FOUND				
	IPS	IRON PIN SET				
	INV	INVERT				
	KSI	KIPS PER SQUARE INCH				
	LDP	LAND DISTURBANCE PERMIT				
	LF	LINEAR FOOT				
	LL	LAND LOT				
	LL	MAXIMUM				
	MFG	MANUFACTURER				
	MFM	MAGNETIC FLOW METER				
	MH	MANHOLE				
	MIN	MINIMUM				
	MJ	MECHANICAL JOINT				
	MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES				
	NOM	NOMINAL				
	N	NORTH				
	N/F	NOW OR FORMALLY				
	NO / #	NUMBER				
	NOI	NOTICE OF INTENT				
	NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM				
	NTS	NOT TO SCALE				
	OC	ON CENTER				
	OD	OUTSIDE DIAMETER				
	OSHA	OCCUPATIONAL SAFETY AND HEALTH ACT				
	PCF	POUNDS PER CUBIC FOOT				
	PE	POLYETHYLENE				
	PE	PLAIN END				
	PKWY	PARKWAY				
	PLC	PROGRAMMABLE LOGIC CONTROLLER				
	PLV	PLUG VALVE				
	PP	POWER POLE				
	PS	PUMP STATION				
	PSI	POUNDS PER SQUARE INCH				
	PVC	POLYVINYL CHLORIDE PIPE				
	PVMT	PAVEMENT				
	RAD	RADIUS				
	RCP	REINFORCED CONCRETE PIPE				
	RD	ROAD				
	REINF	REINFORCED				
	REQ	REQUIRED				
	REV	REVISED / REVISION				
	RJ	RESTRAINED JOINT / ROUGHENED JOINT				
	RW / RW	RIGHT-OF-WAY				
	S	SOUTH				



UTILITIES PROTECTION CENTER

CALL FREE

IN METRO AREA

615-367-1110

THROUGHOUT TENNESSEE

1-800-351-1111

THREE WORKING DAYS BEFORE YOU DIG

## LEGEND

	PROPERTY BOUNDARY
	ROAD RIGHT-OF-WAY
	EXISTING ROADWAY
	EXISTING SIDEWALK
	EXISTING PAVEMENT TO REMOVE
	PROPOSED ROADWAY
	EXISTING STRUCTURE / BUILDING
	EXISTING STRUCTURE TO DEMOLISH
	PROPOSED STRUCTURE
	EXISTING SANITARY SEWER PIPE
	EXISTING SANITARY SEWER PIPE
	PROPOSED SEWER FORCE MAIN
	PROPOSED GROUT FILLING
	EXISTING SANITARY SEWER MANHOLE
	PROPOSED ADJUSTED MANHOLE
	EXISTING ABANDONED SEWER
	EXISTING WATER LINE
	EXISTING STORM SEWER
	EXISTING STORM STRUCTURE
	EXISTING OVERHEAD ELECTRIC
	PROPOSED OVERHEAD ELECTRIC
	EXISTING POWER POLE AND GUY WIRE
	EXISTING CHAIN LINK FENCE
	EXISTING FENCE TO REMOVE
	PROPOSED CHAIN LINK FENCE
	EXISTING HAND RAIL
	EXISTING GUARD RAIL
	EXISTING GUARD RAIL TO REMOVE
	GATE
	PROPOSED GATE
	EXISTING TOP OF BANK
	LIMITS OF CONSTRUCTION / DISTURBANCE
	STREAM BUFFER
	EXISTING STONE STABILIZATION
	TEMPORARY CONSTRUCTION EXIT
	TEMPORARY SILT FENCING
	TEMPORARY COFFER DAM
	TEMPORARY VEGETATION
	PERMANENT VEGETATION
	TEMPORARY MULCH
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR LABELS
	PROPOSED MINOR CONTOUR
	PROPOSED CONTOUR LABELS

## CITICO CSOTF AND PUMP STATION IMPROVEMENTS

### CITY OF CHATTANOOGA, TN

### CONSENT DECREE PROGRAM



3650 MANSELL ROAD  
SUITE 300  
ALPHARETTA, GA 30022

NOT RELEASED FOR  
CONSTRUCTION

REV	DATE	REVISION DESCRIPTION
B	05-01-2016	90% RESUBMITTAL

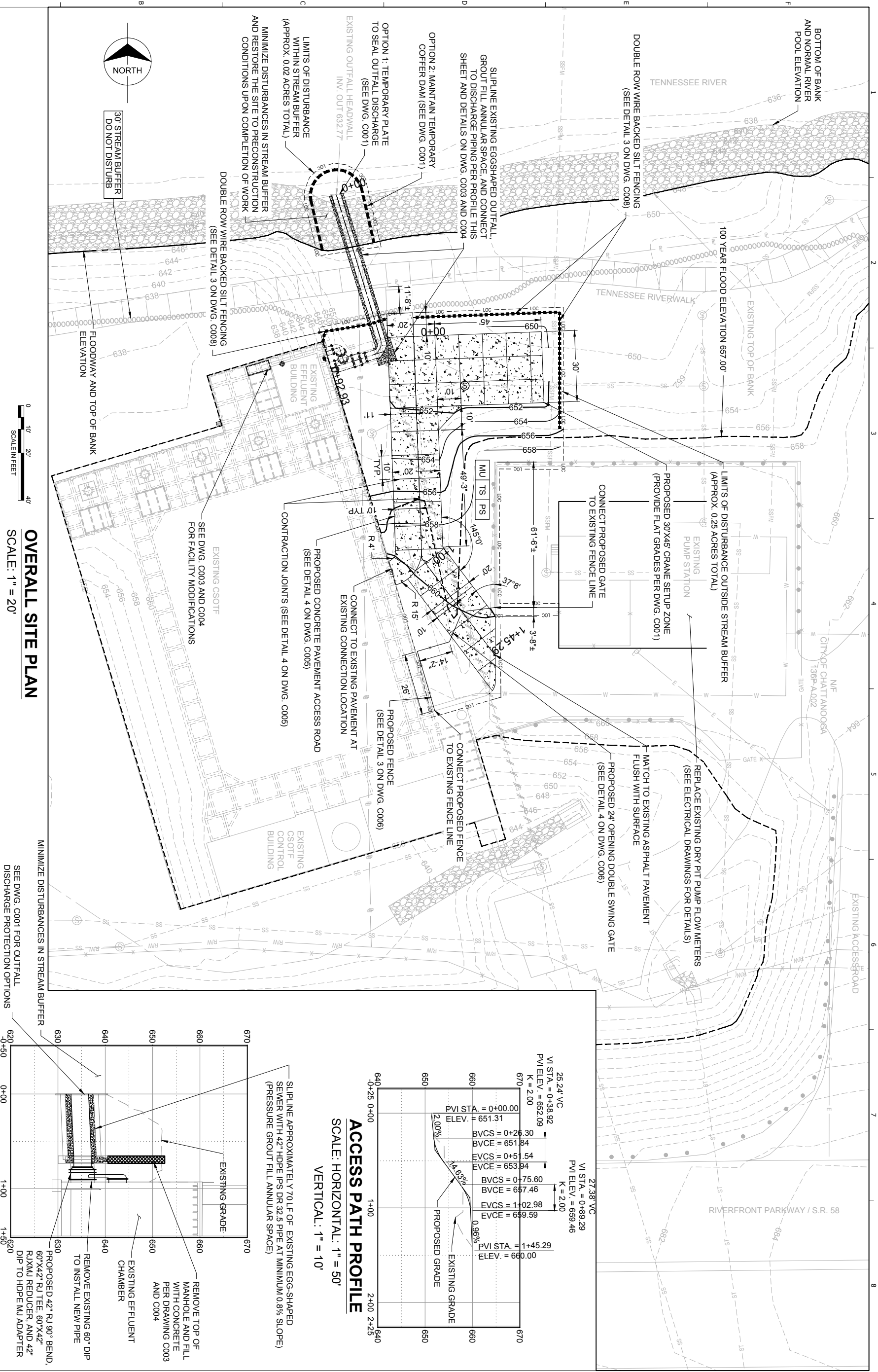
THIS LINE 1" = 15 ONE INCH LONG WHEN PLOTTED FULL SCALE	
THIS DRAWING MUST BE USED IN CONJUNCTION WITH THE APTI TABLE OR GOVERNING TECHNICAL SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS.	
PROJECT NO.: 82841	
DATE: JULY 17, 2015	
DISC. LBD:	CHECKER:
AW	AW
SHEET TITLE	
CIVIL	

## CITICO CSOTF

### LEGEND AND ABBREVIATIONS







3650 MANSELL ROAD  
SUITE 300  
ALPHARETTA, GA 30022

NOT RELEASED FOR  
CONSTRUCTION

CITICO CSOTF AND PUMP STATION  
IMPROVEMENTS  
CITY OF CHATTANOOGA, TN  
CONSENT DECREE PROGRAM



REV	DATE	REVISION DESCRIPTION
C	05-01-2016	90% RESUBMITTAL

THIS LINE LONG WHEN PLOTTED FULL SCALE	
THIS DRAWING MUST BE USED IN CONJUNCTION WITH THE APPLICABLE OR GOVERNING TECHNICAL SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS.	
PROJECT NO. 82841	
DATE: JULY 17, 2015	
DISC. LEAD:	CHECKER:
AW	JS
SHEET TITLE	
CIVIL	

CITICO CSOTF  
OVERALL SITE PLAN

SHEET C002

EROSION CONTROL NOTES:  
OWNER: CITY OF CHATTANOOGA  
DEPARTMENT OF PUBLIC WORKS  
WASTE RESOURCES DIVISION  
465 MOCCASIN BEND ROAD  
CHATTANOOGA, TN 37405  
PHONE: (423) 757-5026

CONTRACTOR: TO BE DETERMINED AT TIME OF CONTRACT AWARD.

- SITE DESCRIPTION
  - PROJECT CONDITIONS: THE PROJECT INVOLVES MODIFICATIONS TO THE CITCO CSOTF EFFLUENT CHAMBER AND INSTALLATION OF 3 SUBMERSIBLE PUMPS, PROCESS PIPING, VALVES, INSTRUMENTATION AND CONTROLS, CONNECTIONS TO AND REHABILITATION OF THE CSOTF OUTFALL, SUMP LINING AND GROUT FILLING THE EXISTING OUTFALL, HVAC, ELECTRICAL, AND STRUCTURAL IMPROVEMENTS, EXCAVATION, GRADING, INSTALLATION OF A NEW CONCRETE ACCESS ROAD, AND RELATED SITE WORK, PROTECTION, AND RESTORATION. ADDITIONAL MODIFICATIONS SHALL BE APPLIED TO THE ADJACENT CITCO PUMP STATION, INCLUDING REPLACEMENT OF EXISTING FLOW METERS.
  - TOTAL PROJECT AREA IS APPROXIMATELY 713 ACRES. TOTAL DISTURBED ACREAGE WILL BE APPROXIMATELY 0.27 ACRES TOTAL (0.02 ACRES WITHIN THE STREAM BUFFER AND 0.25 ACRES WITHIN THE 100-YEAR FLOOD PLAIN AND OUTSIDE THE STREAM BUFFER).
  - THE PROJECT IS LOCATED WITHIN EXISTING CITY OF CHATTANOOGA CITCO PUMP STATION AND CSOTF PROPERTY, AT 1004 RIVERSIDE DRIVE / S.R. 58, ALONG THE TENNESSEE RIVER. SITE SOILS ARE PRIMARILY (S8) SEQUOIA TO HIE-URBAN LAND COMPLEX, 2 TO 7 PERCENT SLOPE, TYPE B SOIL, APPROXIMATELY 360 SQUARE YARDS OF ADDITIONAL IMPERVIOUS SURFACE IS CREATED BY THIS WORK.
- THE PRE-CONSTRUCTION COMPOSITE RUNOFF COEFFICIENT (CN) FOR THE SITE IS APPROXIMATELY 73. PERMANENT VEGETATION, EQUAL TO OR GREATER TO PRE-CONSTRUCTION QUALITY, WILL BE RE-ESTABLISHED ON ALL DISTURBED AREAS UPON COMPLETION OF CONSTRUCTION. THEREFORE, RE-ESTABLISHING THE RUNOFF CHARACTERISTICS PRESENT BEFORE CONSTRUCTION AND MAINTAINING A 73 RUNOFF COEFFICIENT.
- PRIOR TO COMMENCING LAND DISTURBING AND CLEARING ACTIVITIES, THE LIMITS OF LAND DISTURBANCE, CLEARING, AND BUFFERS SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, TREE PROTECTION FENCING, OR OTHER APPROPRIATE MEANS AS NEEDED. NO TREES OUTSIDE OF THE PROJECT LIMITS SHALL BE REMOVED. SAFETY FENCING SHALL BE UTILIZED WHERE WORK IS IN CLOSE PROXIMITY TO ADJACENT PROPERTIES, TRAILS, OR OTHER PUBLIC AREAS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE SHALL OCCUR INSIDE THE EXISTING CITY PROPERTY AND LIMITS OF CONSTRUCTION/ DISTURBANCE INDICATED. THE CONTRACTOR SHALL USE DUE CARE IN PLACING CONSTRUCTION TOOLS, EQUIPMENT, EXCAVATED MATERIALS, AND PIPELINE MATERIALS AND SUPPLIES, SO AS TO CAUSE THE LEAST POSSIBLE DAMAGE TO THE PROPERTY AND INTERFERENCE WITH FACILITY OPERATIONS.
- THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO CONTROL EROSION AND WATER POLLUTION THROUGH THE CONSTRUCTION PERIOD. EMBANKMENTS AND EXCAVATED AREAS SHALL BE PROMPTLY STABILIZED TO MINIMIZE EROSION. BAILED STRAW EROSION CHECKS AND SILT FENCING SHALL BE USED ALONG THE TOE OF FILL SLOPES, IN DITCHES, AND IN OTHER AREAS WHERE EROSION IS A PROBLEM AND SILT-LADEN RUNOFF MAY ENTER A STREAM OR ADJACENT PROPERTY, AND AS DIRECTED BY THE ENGINEER. THESE TEMPORARY MEASURES SHALL BE COORDINATED WITH THE PERMANENT EROSION CONTROL FEATURES TO ASSURE ECONOMIC, EFFECTIVE, AND CONTINUOUS EROSION CONTROL THROUGHOUT THE PROJECT.
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES, IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE CHECKED DAILY AND ANY DEFICIENCIES NOTED WILL BE CORRECTED BY THE END OF EACH DAY BY CONTRACTOR. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY AFTER ON-SITE INSPECTION BY THE ISSUING AUTHORITY. MAINTENANCE OF ALL SOIL AND EROSION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL INSTALL NO LESS THAN THE EROSION CONTROL MEASURES AS SHOWN ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES MANUAL, AVAILABLE FROM THE ENGINEERING/STORMWATER DIVISION OF THE CITY OF CHATTANOOGA, DEPARTMENT OF PUBLIC WORKS ORDINANCE 9942 AS AMENDED, AND THE TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK\* BY TDEC, FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES OF CONSTRUCTION.
- ANY ADDITIONAL SILT FENCE, RIP-RAP, MULCHING, OR PERMANENT GRASSING REQUIRED BY THE CONTRACT DOCUMENTS SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION HAS PROCEEDED TO THE POINT THAT THESE MEASURES CAN BE EFFECTIVELY IMPLEMENTED AND SHALL BE MAINTAINED IN PROPER WORKING ORDER UNTIL ALL DISTURBED AREAS ARE STABILIZED AND PERMANENT VEGETATION HAS BEEN ESTABLISHED. AMENDMENTS AND REVISIONS TO THE EROSION CONTROL PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH HYDRAULIC COMPONENTS MUST BE CERTIFIED BY THE ENGINEER.
- ALL CUT/FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE SLOPES TOE. SILT FENCE WILL BE PLACED DOWN GRADIENT OF ALL STOCKPILED SOIL OR BORROW AREAS. ALL SPOIL WILL BE PLACED ON TRENCH SIDE AWAY FROM STREAMS AND DITCHES. A NATURAL BUFFER WILL BE MAINTAINED BETWEEN EXPOSED AREAS AND STREAMS.
- THE EROSION CONTROL MEASURES DETAILED HEREON SHALL BE CONTINUED UNTIL THE PERMANENT VEGETATION IS SUFFICIENTLY ESTABLISHED ON PLANTED GRADES AND SLOPES TO BE AN EFFECTIVE EROSION DETERRENT. THE SEDIMENT REMOVED FROM THE CONTROL STRUCTURES SHALL BE EVENLY DISTRIBUTED UPSTREAM OF EROSION CONTROL MEASURES OR DISPOSED OF OFF-SITE. DISPOSED SEDIMENT SHALL BE PERMANENTLY GRASSSED, PROVIDE PERMANENT GRASSING OF ALL CONTRACTOR DISTURBED AREAS THAT ARE NOT COVERED BY PAVEMENT, STRUCTURES, STONE AGGREGATE, OR SIMILAR FEATURES.
- PRIOR TO ANY CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH ENTRY TO OR EXIT FROM WORK AREAS LOCATED ADJACENT TO PUBLIC RIGHTS-OF-WAY. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD INTO PUBLIC RIGHTS-OF-WAY. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCES/EXITS, ALL PERIMETER EROSION CONTROL DEVICES SHALL BE INSTALLED. CONTRACTOR SHALL KEEP ROADS AND DRIVES FREE OF DIRT AND DEBRIS AT ALL TIMES.
- GRADE, FINISH, AND DRESS DISTURBED AREAS AS NECESSARY SO THAT EXCAVATED SURFACES ARE LEFT IN A SMOOTH, NEAT, AND EVEN CONDITION. GRADE SITE DISTURBANCES SO AS TO PREVENT STANDING WATER AND DIRECT FLOWS AWAY FROM SRUCTURES.

WHERE APPLICABLE, ALL SOILS SHALL BE PLACED ON TRENCH SIDE AWAY FROM DITCHES AND STREAMS. ANY STOCKPILED SOIL OR FILL MATERIAL SHALL BE LOCATED AND TREATED IN A MANNER TO PREVENT SILT'S ENTERING STREAMS. AT LOCATIONS WHERE THERE IS INSUFFICIENT ROOM TO STOCKPILE EXCAVATED MATERIAL AWAY FROM THE ROAD, DITCHES, AND STREAMS, EXCAVATED MATERIAL SHALL BE REMOVED FROM THE AREA AND RETURNED TO SITE FOR BACKFILL. STOCKPILING MATERIALS ON THE PAVED ROAD OR WITHIN WETLANDS, FLOOD PLAINS, AND BUFFERS WILL NOT BE PERMITTED. NO EXCAVATED MATERIAL SHALL BE DISCHARGED INTO DITCHES.

PLACE BACKFILL AND FILL MATERIALS IN LAYERS, COMPACT, AND TEST COMPACTION IN ACCORDANCE WITH SPECIFICATIONS.

ALL VEGETATIVE STABILIZATION SHALL BE ACCOMPLISHED AS SOON AS CONSTRUCTION PERMITS. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING. PROVIDE PERMANENT GRASSING OF ALL DISTURBED AREAS. FOLLOW TDOOT, CITY, AND COUNTY VEGETATIVE AND PLANTING SCHEDULE GUIDELINES, AND PROVIDE GRASSING TO MATCH EXISTING LAWN TYPE AND CONDITIONS.

REFER TO SPECIFICATIONS FOR ADDITIONAL TEMPORARY EROSION AND SEDIMENTATION CONTROL AND GRASSING REQUIREMENTS.

GRADE, FINISH, AND DRESS DISTURBED AREAS AS NECESSARY SO THAT EXCAVATED SURFACES ARE LEFT IN A SMOOTH, NEAT, AND EVEN CONDITION. GRADE SITE DISTURBANCES SO AS TO PREVENT STANDING WATER AND DIRECT FLOWS AWAY FROM

A COPY OF THE APPROVED LAND DISTURBANCE PERMIT AND USAGE AND TVA PERMITS SHALL BE PRESENT ON SITE WHENEVER LAND DISTURBING ACTIVITY IS IN PROGRESS.

REMOVE ALL DEBRIS AND WASTE, INCLUDING EXCESS SOIL, CONSTRUCTION AND DEMOLITION DEBRIS, ETC., FROM THE PROJECT SITE AND DISPOSE OF IT IN A LEGAL MANNER. NO DEBRIS OR WASTE MATERIALS ARE TO BE DISCHARGED TO STREAMS, DITCHES, CHANNELS, OR OTHER STORMWATER CONVEYANCE SYSTEMS. REMOVED TREES, NOT USED IN MULCH STABILIZATION, SHALL ALSO BE REMOVED FROM THE SITE. EQUIPMENT SHALL NOT BE WASHED OR CLEANED OUT ON THE PROJECT EXCEPT IN AREAS WHERE UNUSED PRODUCT CONTAMINANTS CAN BE PREVENTED FROM ENTERING WATERWAYS.

STATE WATERS EXIST WITHIN 200 FEET OF THIS SITE. THE RECEIVING WATER IS THE TENNESSEE RIVER, A NAVIGABLE WATERWAY.

PETROLEUM PRODUCTS ARE NOT TO BE STORED ON SITE. CONSTRUCTION EQUIPMENT IS TO BE REFUELED OFF SITE. IN THE EVENT OF A PETROLEUM LEAK OR SPILL, THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL CONTAMINATED MATERIALS AND REPLACEMENT WITH UNCONTAMINATED SUITABLE FILL MATERIALS, AND ALL TESTING REQUIRED TO DETERMINE THE PRESENCE OF CONTAMINANTS ONSITE.

UPON COMPLETION OF CONSTRUCTION, SITE STABILIZATION, AND SUBSTANTIAL COMPLETION, CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES FROM SITE.

THERE DO NOT APPEAR TO BE WETLANDS WITHIN THE LIMITS OF CONSTRUCTION. THE DESIGN PROFESSIONAL, WHOSE SEAL APPEARS HEREON, CERTIFIES THE FOLLOWING: 1) THE NATIONAL WETLAND INVENTORY MAPS HAVE BEEN CONSULTED, AND, 2) THE APPROPRIATE PLAN SHEET DOES NOT INDICATE AREAS OF UNITED STATES ARMY CORPS OF ENGINEERS JURISDICTIONAL WETLANDS AS SHOWN ON THE MAPS, AND 3) IF WETLANDS ARE INDICATED, THE LAND OWNER OR DEVELOPER HAS BEEN ADVISED THAT LAND DISTURBANCE OF PROTECTED WETLANDS SHALL NOT OCCUR UNLESS THE APPROPRIATE FEDERAL WETLANDS ALTERATION ("SECTION 404") PERMIT OR AQUATIC RESOURCE ALTERATION PERMIT HAS BEEN OBTAINED.

THE SUBJECT PROPERTY EXTENDS INTO THE 100-YR FLOODPLAIN, FLOOD INSURANCE STUDY MAPS ISSUED BY FEMA HAVE BEEN CONSULTED AND FEMA PANEL 47066C034-H DESIGNATES THE PROJECT LIMIT OF WORK AREA IS WITHIN THE 100-YEAR FLOOD PLAIN IN SOME LOCATIONS, AS DEMONSTRATED BY THE DRAWINGS. ANY EARTHWORK CONDUCTED WITHIN THE 100-YEAR FLOOD PLAIN WILL RESULT IN NO INCREASE IN FILL AND THEREFORE WILL NOT AFFECT ANY FLOOD PLAIN STORAGE CAPACITY.

## STREAM BUFFER Do NOT DISTURB

DESCRIPTION: A STRIP OF UNDISTURBED LAND SURROUNDING THE SITE OR BORDERING A WATERCOURSE OR WETLANDS. FOR TYPICAL STREAMS, THE BUFFER INCLUDES A 30-FOOT WIDE STRIP ADJACENT TO THE WATERCOURSE, MEASURED HORIZONTALLY FROM THE LINE OF WRESTED VEGETATION. FOR IMPAIRED STREAMS OR EXCEPTIONAL TENNESSEE WATERS, THE BUFFER IS EXTENDED TO A 60-FOOT AVERAGE WIDE STRIP ADJACENT TO THE WATERCOURSE. WITH A MINIMUM 30-FOOT WIDE STRIP AT ANY MEASURED LOCATION, CONTRACTOR SHALL PROTECT TREES, SHRUBS, AND OTHER NATURAL VEGETATION WITHIN THE BUFFER ZONE FROM WILDLIFE AND EQUIPMENT DAMAGE. NO DISTURBANCE SHALL OCCUR WITHIN THE BUFFER ZONE. ANY CLEARING CONDUCTED WITHIN EXISTING EASEMENTS IN BUFFER ZONES SHALL BE MINIMIZED WHENEVER POSSIBLE, AND SHALL NOT RESULT IN GRUBBING, STUMP GRINDING, OR OTHER ACTIVITY THAT WILL RESULT IN DISTURBANCES.

### STABILIZATION WITH STRAW MULCH

USE DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEEDS SEEDS. DRY STRAW OR HAY SHALL BE APPLIED AT THE RATE OF 2.0 TONS PER ACRE. MULCHING SHALL BE USED DURING MONTHS THAT GRASSING SHOULD NOT BE APPLIED BASED ON THE SCHEDULE BELOW.

PRESS MULCH INTO SOIL WITH SPECIAL CRIMPERS OR DISK HARROWS. BIND MULCH TO SOIL WITH LIQUID MULCH BINDERS AND TACKIFIERS, OR INSTALL LIGHTWEIGHT NETTINGS OVER MULCH TO HOLD MULCH IN PLACE UPON APPLICATION. DO NOT FLOW SOILS OR OTHERWISE APPLY MULCH ANCHORING THAT WILL RESULT IN ADDITIONAL DISTURBED SURFACES. INSPECT MULCH PERIODICALLY, AND AFTER RAINSTORMS, AND CORRECT ANY NOTED DEFECTS OR FAILURES IN THE MULCH INSTALLATION.

### TEMPORARY VEGETATION

TEMPORARY GRASSES SHALL CONSIST OF SOWING A QUICK GRASS SUCH AS RYE, BROWN TOP MILLET, OR GRASS SUITABLE TO THE AREA AND SEASON. MULCH IS NOT REQUIRED AND SHOULD ONLY BE USED AS DICTATED BY SITE CONDITIONS. TEMPORARY GRASSING IS REQUIRED WHEN DISTURBED AREA IS LEFT EXPOSED MORE THAN 14 DAYS, OR AS NECESSARY TO STABILIZE CONSTRUCTION ACCESS PATHS.

SPECIES	RATE	PLANTING DATES
ANNUAL RYE GRASS	12#/ACRE	FEBRUARY-MAY
OATS/BROWN TOP MILLET	30.6#/ACRE	MAY-AUGUST
OATS/WINTER WHEAT	30.3#/ACRE	AUGUST-DECEMBER

### PERMANENT VEGETATION

## PS

PERMANENT GRASSING SHALL CONSIST OF GROUND PREPARATION, MULCHING AND SEEDING. THE GROUND SHALL BE PREPARED BY PLOWING AND DISKING TO A DEPTH NOT LESS THAN 4". UNLESS WITHIN BUFFER ZONES WHERE NO DISTURBANCE IS ALLOWED, A PH BETWEEN 6.0 AND 6.5 SHOULD BE ACHIEVED WHENEVER POSSIBLE.

WHEN DISTURBED, THE GROUND SHALL BE FINISHED OFF SMOOTH AND UNIFORM AND BE FREE OF ROCKS, CLODS, ROOTS AND WEEDS. FERTILIZER SHALL BE APPLIED WHEN WEATHER PERMITS. SEEDING SHALL BE DONE WITHIN 24 HOURS OF FERTILIZER APPLICATION. SEED SHALL BE UNIFORMLY SPREAD AT THE RATES SHOWN BELOW. MULCHING MAY BE REQUIRED AND SHALL BE DONE IMMEDIATELY AFTER SEEDING. MULCH SHALL BE UNIFORMLY APPLIED OVER THE AREA LEAVING APPROXIMATELY 25% OF THE GROUND SURFACE EXPOSED. THE RATE OF APPLICATION SHALL BE DOUBLED ON SLOPES STEEPER THAN 4:1.

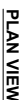
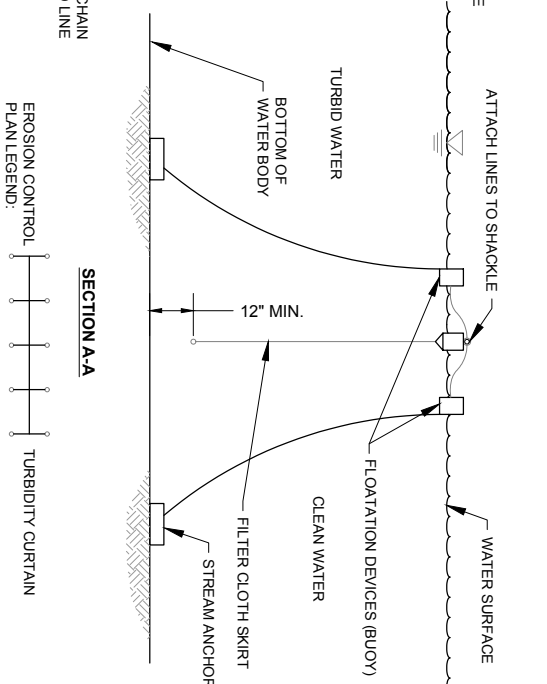
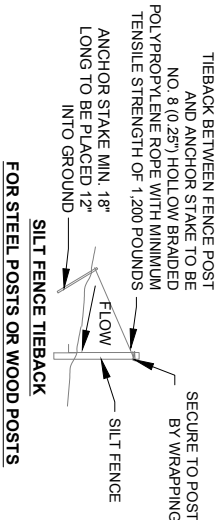
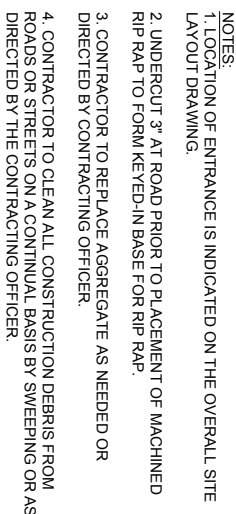
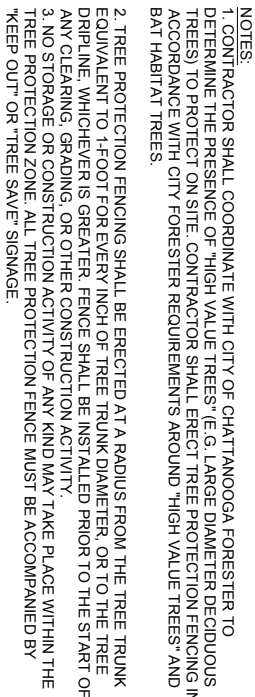
### TURBIDITY CURTAIN

DESCRIPTION: AN IN-STREAM SEDIMENT CONTROL MEASURE IS DESIGNED TO TRAP OR FILTER SEDIMENT, NOT TO HALT THE MOVEMENT OF THE WATER ITSELF. THIS DEVICE CONSISTS OF A FILTER FABRIC CURTAIN SUSPENDED FROM FLOATS AND HELD VERTICALLY IN THE WATER BY MEANS OF A BOTTOM BALLAST CHAIN. THIS MEASURE IS PLACED AROUND A CONSTRUCTION SITE LOCATED EITHER ADJACENT TO, OR WITHIN A WATER BODY, TO PROVIDE AN ISOLATED WORK ZONE WHERE SEDIMENTS GENERATED BY THE PROJECT CAN SETTLE. IN THIS WAY, IT PREVENTS THE MIGRATION OF THESE SEDIMENTS INTO THE LARGER REMAINING WATER BODY.

MAINTENANCE: REPAIR RIPPED OR SEPARATED SECTIONS, IF WATER ELEVATION CHANGES SIGNIFICANTLY CAUSING THE FLOATING TURBIDITY CURTAIN TO FAIL. THE MOORING AND ANCHORING SYSTEM MAY NEED TO BE ADJUSTED.

PREFERRED SEED MIXES USING NATIVES OR NATURALIZED PLANTS AND PLANTING DATES				
ZONE	BEST SEED DATES	MARGINAL SEED DATES	RATE MIX (LB/AC PLUS)	
REGION III, <2500 FT ELEV.; STEEP SLOPES	AUG 15 - SEPT 1 MAR 1 - APR 1	SEPT 1 - SEPT 15 APR 1 - JUNE 10	5 PURPLETOP 10 LITTLE BLUESTEM 10 INDIAN GRASS 2 BLACK-EYED SUSAN 0.5 MONARDA (BERGAMOT) 4 MARYLAND SENNA	
REGION III, <2500 FT ELEV.; SHALLOW SOILS	AUG 15 - SEPT 1 MAR 1 - APR 1	SEPT 1 - SEPT 15 APR 1 - JUNE 10	4 PURPLETOP 10 LITTLE BLUESTEM 10 BROODSEDGE 2 PARTIDGE PEA 2 BLACK-EYED SUSAN 0.5 MONARDA (BERGAMOT)	
REGION III, <2500 FT ELEV.; MODERATE SLOPES	AUG 15 - SEPT 1 MAR 1 - APR 1	SEPT 1 - SEPT 15 APR 1 - JUNE 10	4 PURPLETOP 10 LITTLE BLUESTEM 10 INDIAN GRASS 2 BLACK-EYED SUSAN 0.5 MONARDA (BERGAMOT) 4 MARYLAND SENNA	
SEED MIXES FROM TENNESSEE EROSION & SEDIMENT CONTROL MANUAL HANDBOOK TABLE 7-9-1				





THIS LINE \_\_\_\_\_ IS ONE INCH



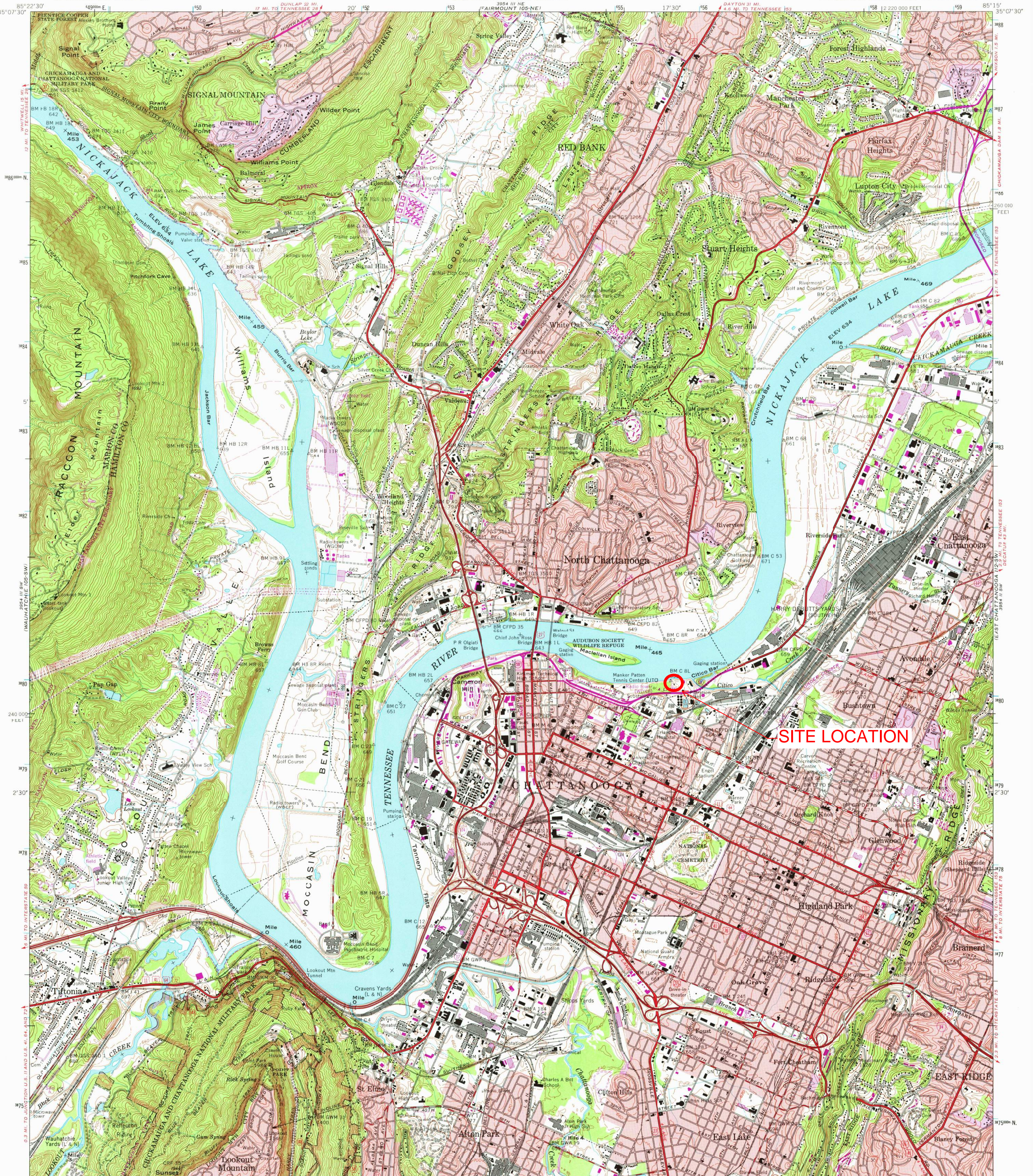


Figure 1. Aerial map depicting the architectural viewshed



Figure 2. Aerial map depicting the archaeological APE and STPs





Maped and edited by Tennessee Valley Authority  
Published by the Geological Survey  
Control by NOS/NOAA, USGS, CE, and TVA  
Revised by TVA in 1968 by photogrammetric methods using  
aerial photographs taken 1968 and by reference to TVA-USGS  
quadrangle dated 1958. Map field checked by TVA, 1969  
Polyconic projection, 1927 North American datum  
10,000 foot grid based on Tennessee rectangular  
coordinate system  
1000-metre Universal Transverse Mercator Grid ticks,  
Zone 16, shown in blue  
Fine red dashed lines indicate selected fence and field lines  
visible on aerial photographs. This information is unchecked  
Red tint indicates areas in which only landmark buildings are shown

Revisions shown in purple and recompilation of woodland  
areas compiled by the Tennessee Valley Authority from aerial  
photographs taken 1976. This information not field checked  
Purple tint indicates extension of urban areas

SCALE 1:24,000  
CONTOUR INTERVAL 20 FEET  
DASHED LINES REPRESENT HALF-INTERVAL CONTOURS  
NATIONAL GEODETIC DATUM OF 1929  
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U.S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092  
TENNESSEE DIVISION OF GEOLOGY, NASHVILLE, TENN. 37219,  
U.S. TENNESSEE VALLEY AUTHORITY, CHATTANOOGA, TENN. 37401 OR KNOXVILLE, TENN. 37902.  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION  
Heavy-duty ..... Poor motor road .....  
Medium-duty ..... Wagon and jeep track .....  
Light-duty ..... Foot trail .....  
Interstate Route ..... U.S. Route ..... State Route .....  
In developed areas, only through roads are classified  
USGS  
Historical File  
Graphic Division  
CHATTANOOGA, TENN.  
N3500-W8515/7.5  
1969  
PHOTOREVISED 1976  
AMS 3954-III SE-SERIES V841  
JUL 06 1978  
3650



# JOINT APPLICATION FORM

## Department of the Army/TVA

The Department of the Army (DA) permit program is authorized by **Section 10 of the Rivers and Harbors Act of 1899** and **Section 404 of the Clean Water Act (P.L. 95-217)**. These laws require permits authorizing structures and work in or affecting navigable waters of the United States and the discharge of dredged or fill material into waters of the United States. **Section 26a of the Tennessee Valley Authority Act**, as amended, prohibits the construction, operation, or maintenance of any structure affecting navigation, flood control, or public lands or reservations across, along, or in the Tennessee River or any of its tributaries until plans for such construction, operation, and maintenance have been submitted to and approved by the Tennessee Valley Authority (TVA).

Describe in detail the proposed activity, its purpose and intended use (*private, public, commercial, or other*). Describe structures to be erected including those placed on fills, piles, or floating platforms. Also describe the type, composition, and quantity of materials to be discharged or placed in the water; the means of conveyance; and the source of discharge or fill material. Please attach additional sheets if needed.

Application is hereby made for approval of the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I understand that TVA and the U.S. Army Corps of Engineers may contact an Authorized Agent listed above and such Agent may act on my behalf on all aspects of this application. **I agree that, if this application is approved by TVA, I will comply with the terms and conditions and any special conditions that may be imposed by TVA. Please note the U.S. Army Corps of Engineers may impose additional conditions or restrictions.**

Signature of Applicant

The subject properties are owned by the City of Chattanooga, Tennessee and the University of Tennessee. The address for the facility is 1004 Riverside Drive, Chattanooga, Tennessee 37403. The City contact is William Payne, City Engineer, at 423-643-6190. No adjacent properties will be affected by this work.



# TVA RESTRICTED INFORMATION

List of previous DA/TVA permits/approvals	<input type="checkbox"/> DA	Unknown <i>Permit Number</i>	<input type="checkbox"/> TVA	Unknown <i>Permit Number</i>
Previous Property Owner (if known) <u>Unknown</u>				

Is any portion of the activity for which authorization is sought now complete? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(If "Yes" attach explanation)</i>	
Month and year the activity was completed: _____ . Indicate the existing work on the drawings.	

List all approvals or certifications required by other federal, interstate, state, or local agencies for any structures, construction, discharges, deposits, or other activities described in this application.

Issuing Agency	Type Approval	Identification No.	Date of Application	Date of Approval
City of Chattanooga	Land Disturbance Permit		March 23, 2016	Pending
TDEC (Dept. of Environment & Conservation)	ARAP General Permit		March 23, 2016	Pending

Has any agency denied approval for the activity described herein or for any activity directly related to the activity described herein?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(If "Yes" attach explanation)</i>	

Project plans or drawings, on paper suitable for reproduction no larger than 11 x 17 inches or in electronic format (dxf, docx, or pdf), must accompany the application. Submit the application to the appropriate TVA and U.S. Army Corps of Engineers offices. An application that is not complete will be returned for additional information.

U.S.A.C.E. Offices		TVA Offices	
U.S. Army Corps of Engineers Eastern Regulatory Field Office 501 Adesa Parkway., Suite 250 Lenoir City, Tennessee 37771 (865) 986-7296  U.S. Army Corps of Engineers Regulatory Branch 3701 Bell Road Nashville, Tennessee 37214 (615) 369-7500  U.S. Army Corps of Engineers Norfolk District P.O. Box 338 Abingdon, Virginia 24212 (276) 623-5259	U.S. Army Corps of Engineers Savannah District The Plaza, Suite 130 1590 Adamson Parkway Morrow, Georgia 30260-1763 (678) 422-2729  U.S. Army Corps of Engineers Western Regulatory Field Office 2424 Danville Road, SW, Suite N Decatur, Alabama 35603 (256) 350-5620  U.S. Army Corps of Engineers Asheville Regulatory Field Office 151 Patton Avenue, Room 208 Asheville, North Carolina 28801-5006 (828) 271-4856	Tennessee Valley Authority Chattanooga Regional Office 4601 N. Access Road, Bldg. B Chattanooga, Tennessee 37415-3825 1-800-882-5263  Tennessee Valley Authority Gray Regional Office 106 Tri-Cities Business Park Drive Gray, Tennessee 37615 1-800-882-5263  Tennessee Valley Authority Guntersville Regional Office 3941 Brashers Chapel Road Guntersville, Alabama 35976 1-800-882-5263  Tennessee Valley Authority Lenoir City Regional Office 260 Interchange Park Drive, LCB 1A-LCT Lenoir City, Tennessee 37772-5664 1-800-882-5263	Tennessee Valley Authority Murphy Regional Office 4800 US Highway 64 West, Suite 102 Murphy, North Carolina 28906 1-800-882-5263  Tennessee Valley Authority Muscle Shoals Regional Office Post Office Box 1010, MPB 1H Muscle Shoals, Alabama 35662-1010 1-800-882-5263  Tennessee Valley Authority Paris Regional Office 2835-A East Wood Street Paris, Tennessee 38242-5948 1-800-882-5263

<b>Privacy Act Statement</b>
<p>This information is being requested in accordance with Section 26a of the TVA Act as cited on the front page of this form. Disclosure of the information requested is voluntary; however, failure to provide any required information or documents may result in a delay in processing your application or in your being denied a Section 26a permit. An application that is not complete will be returned for additional information. TVA uses this information to assess the impact of the proposed project on TVA programs and the environment and to determine if the project can be approved. Information in the application is made a matter of public record through issuance of a public notice if warranted. Routine uses of this information include providing to federal, state, or local agencies, and to consultants, contractors, etc., for use in program evaluations, studies, or other matters involving support services to the program; to respond to a congressional inquiry concerning the application or Section 26a program; and for oversight or similar purposes, corrective action, litigation or law enforcement.</p>

<b>Burden Estimate Statement</b>
<p>Public reporting burden for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Agency Clearance Officer, Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402; and to the Office of Management and Budget, Paperwork Reduction Project (3316-0060), Washington, D.C. 20503.</p>



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, TN 37902

July 21, 2016

Mr. E. Patrick McIntyre, Jr.  
Executive Director  
Tennessee Historical Commission  
2941 Lebanon Pike  
Nashville, Tennessee 37243-0442

Dear Mr. McIntyre:

**CITY OF CHATTANOOGA, CITICO OVERFLOW TREATMENT FACILITY, PROPOSED  
ACCESS PATH EXPANSION; FENCE MODIFICATIONS; OUTFALL & PIPE MODIFICATIONS;  
GATE INSTALLATION, HAMILTON COUNTY, TENNESSEE**

TVA received a request from the City of Chattanooga for access and outfall modifications at the Citico Overflow Treatment facility on Nickajack Reservoir, Tennessee River Mile 465.1L in Hamilton County, Tennessee (-85.292084W, 35.053087N). The City of Chattanooga is requesting the installation of three submersible pumps and piping, changes to the existing outfall, installation of a gate, fence modifications, and grading and expansion of the existing access path. TVA considers the archaeological area of potential effects (APE) for the proposed undertaking to be all areas where ground disturbing activities would occur. The architectural APE is the line of sight from the proposed facilities location (Figure 1 – 2).

On June 30, 2016, TVA Cultural Compliance staff conducted a reconnaissance survey at the location of the proposed modifications. Three archaeological sites (40HA064; 40HA120; 40HA210) lay within a 0.5 mile radius of the project location. Visual inspection of the eroded areas on the sloped landform failed to produce any cultural material or evidence for intact cultural deposits. The area had been heavily disturbed by the construction of the existing facilities. Two shovel test pits (STP) were excavated 30 meters apart along the main portion of the APE. Neither of the STPs yielded any cultural material. STP 1 (the southernmost STP) revealed mottled, yellowish-brown, gravelly, silt clay fill (0cm-55cm). STP 2 (the northernmost STP) was placed in a flat area just north of the sloped portion of the APE. This STP revealed a thin layer of dark brown, gravelly sandy loam (0cm – 10cm) underlain by a yellowish-brown, gravelly, silt clay layer (10cm – 45cm). Based on observations of the STPs excavated, it seems that this landform has been highly altered.

TVA's Cultural Compliance staff also performed a visual survey of the architectural view shed to determine if there would be an effect on structures eligible, or potentially eligible, for listing on the National Register of Historic Places (NRHP). There are no standing structures greater than 50 years in age within the view shed of the proposed project area. Therefore, it is TVA's determination that no structures eligible for listing or listed on the NRHP will be affected by this undertaking. (Figure 3-6)

Mr. E Patrick McIntyre, Jr.  
Page Two  
July 21, 2016

Based on the reconnaissance survey, it is TVA's determination that the proposed facilities improvements would not affect any historic properties eligible for listing or listed on the NRHP.

Pursuant to 36 CFR Part 800.4(d)(1), TVA seeks your concurrence with these findings and recommendations.

Pursuant to 36 CFR Part 800.3(f)(2), TVA is consulting with federally recognized Indian tribes regarding properties within the proposed project's APE that may be of religious and cultural significance to them and eligible for the NRHP.

If you have any questions, please contact Michaelyn Harle at (865) 632-2248 or by email at mharle@tva.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Clinton E. Jones". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Clinton E. Jones  
Manager, Biological and Cultural Compliance  
Safety, River Management and Environment  
WT11C--K

MSH:CSD

Enclosures

cc (Enclosures):

Ms. Jennifer Barnett  
Tennessee Division of Archaeology  
1216 Foster Avenue, Cole Bldg. #3  
Nashville, Tennessee 37210

INTERNAL COPIES:

Heather Hamilton COC  
Amy Henry, WT11D-K  
Susan Jacks, WT11C-K  
Emily Willard, MR 4G-C  
ECM, WT CA-K



## TVA RESTRICTED INFORMATION

OMB No. 3316-0060  
Exp. Date 08/31/2016Section 26a Permit and Land Use Application  
Applicant Disclosure Form

By signing the Joint Application Form (Department of Army/TVA) or TVA's Land Use Application and again below, you agree to disclose any business, political, or financial interest that may present an actual or potential conflict of interest with TVA. If a new significant business, political, or financial interest is obtained during the period of the time that the application is under review, you agree to file an additional disclosure.

Disclose if any of the following apply to you (check all that apply ☒ ). I am:

- ☐ An elected government official
- ☐ A policy making level employee of an entity that regulates TVA or its activities
- ☐ A management level employee of a power customer of TVA
- ☐ A TVA Director
- ☐ A TVA employee
- ☐ An immediate family member of one of the above
- ☐ A representative of a corporation or entity submitting an application and one of the above applies to me. Print entity or corporation name, and identify which of the above applies to you.
- \_\_\_\_\_
- \_\_\_\_\_
- ☐ A representative of a corporation or entity submitting an application and the corporation or entity has partners, investors, or senior management that are one of the above. Print entity or corporation name, and identify the partner(s), investor(s), or senior manager(s) and which of the above applies.
- \_\_\_\_\_
- \_\_\_\_\_
- ☒ None of the above

Do you have any other business or personal relationships not covered in your answers above that could appear to be a conflict of interest? (check one) Yes ☐ No ☒ If yes, provide more detail here.

The application is made on behalf of the City of Chattanooga, Tennessee.

\_\_\_\_\_

\_\_\_\_\_

By signing this form, you consent to this Applicant Disclosure Form being made available to the public in response to an appropriate request, including, without limitation, a request made under the Freedom of Information Act.

**Please sign and return this form with your application package. Your application cannot be processed without receipt of this signed form.**

Adam Ward, Burns & McDonnell  
Name of applicant (Printed)

Adam Ward  
Signature of Applicant

4/28/16  
Date

All applications and communications that occur as part of the application process may be made public to the extent permitted by applicable law, including the Freedom of Information Act and the Privacy Act, and could be reviewed formally by the Office of Inspector General (OIG). All written correspondence regarding your request may be forwarded to the TVA Chief Ethics and Compliance Officer (CECO) and the OIG, and all oral communication between TVA and the applicant regarding this request may be documented and maintained by TVA. Inquiries concerning your application from any person who falls into one of the categories described above will be disclosed to the CECO and OIG.

## Privacy Act Statement

This information is being requested in accordance with Sections 4(k), 15d, 26a, and/or 31 of the TVA Act; 40 U.S.C. § 1314; 30 U.S.C. § 185; 16 U.S.C. § 667b; and/or 40 U.S.C. § 483. Disclosure of the information requested is voluntary; however, failure to provide any required information or documents may result in a delay in processing your application or in your application being denied. An application that is not complete will be returned for additional information. TVA uses this information to assess the impact of the proposed project on TVA programs and the environment and to determine if the project can be approved. Information in the application is made a matter of public record through issuance of a public notice if warranted. Routine uses of this information include providing to federal, state, or local agencies, and to consultants, contractors, etc., for use in program evaluations, studies, or other matters involving support services to the program; to respond to a congressional inquiry concerning the application or the applicable program; and for oversight or similar purposes, corrective action, litigation, or law enforcement.



## Ward, Adam R (Ric)

---

**From:** McIntosh, Mark M LRN <Mark.M.McIntosh@usace.army.mil>  
**Sent:** Friday, August 26, 2016 10:55 AM  
**To:** Ward, Adam R (Ric)  
**Subject:** CSOTF  
**Attachments:** 3- Maintenance 2012.docx; General Conditions 2012.pdf; 278379\_FinalPermit.pdf

Mr. Ward,

Thank you for sending the information on the Citico Combined Sewer Overflow Treatment Facility (CSOTF) in Chattanooga, Tennessee (Lat 35.0539N, Long 85.2913W). Please refer to File Number 2016-00856 in future correspondence for this project.

It appears that the work within waters of the U.S. (outfall maintenance, and temporary cofferdam) may qualify for a non-reporting NWP#3 Maintenance, specifically, it appears to fall under NWP#3(a) and (c). If no special aquatic resources are being impacted (wetlands, riffle/pool complexes, etc), you may proceed with the work without notification as long as you can follow the 2012 NWP General Conditions and activity specific conditions (NWP#3 Maintenance).

I have attached the NWP and activity-specific conditions for NWP#3 Maintenance. Please read over them carefully. If you cannot meet all of the conditions, are unsure that you meet them, or if your plans change, please contact this office to submit an application for verification that the activity meets the NWP. Otherwise, you may proceed without anything further from the Corps.

Please don't hesitate to contact me if you have any questions,

Mark M McIntosh  
Regulatory Specialist, East Branch  
Regulatory Division  
Nashville District  
501 Adesa Parkway, Suite 250  
Lenoir City, TN 37771

Phone: (865) 986-7296

Email: [mark.m.mcintosh@usace.army.mil](mailto:mark.m.mcintosh@usace.army.mil)  
Internet: <http://www.lrn.usace.army.mil/Missions/Regulatory.aspx>  
Facebook: <http://www.facebook.com/nashvillecorps>

-----Original Message-----

From: Ward, Adam R (Ric) [mailto:[arward@burnsmcd.com](mailto:arward@burnsmcd.com)]  
Sent: Friday, August 26, 2016 9:18 AM  
To: McIntosh, Mark M LRN <Mark.M.McIntosh@usace.army.mil>  
Cc: Bracewell, Matt <[mbracewell@burnsmcd.com](mailto:mbracewell@burnsmcd.com)>; 82841 <[82841@burnsmcd.com](mailto:82841@burnsmcd.com)>  
Subject: [EXTERNAL] RE: Contact Info

Mark:

Please see the attached approved TVA permit for our work on the City of Chattanooga Citico CSOTF and Pump Station Improvements project. Per our phone conversation, the work only involves work on the pump station property and sliplining of an existing outfall that discharges into the Tennessee River. The only disturbance that will occur in the River is any work that is require to temporarily close the outfall to allow for the groutfilling around the sliplined pipe or any temporary cofferdam that must be constructed to dewater the end of the outfall. Please review the submittal. If this qualifies for a quick ACOE approval like a NWP 3, please send us an acceptance letter and/or email for our records, in accordance with the first page of the TVA permit.

Thank you for your assistance.

Ric Ward, PE\* \ Burns & McDonnell  
Staff Engineer \ Water

O 770-510-4545 \ M 864-650-5191 \ F 770-587-4772 arward@burnsmcd.com \ Blockedwww.burnsmcd.com  
3650 Mansell Road, Suite 300 \ Alpharetta, GA 30022 Please consider the environment before printing this email.  
\*Registered in: GA

This email and any attachments are solely for the use of the addressed recipients and may contain privileged client communication or privileged work product. If you are not the intended recipient and receive this communication, please contact the sender by phone at 816-333-9400, and delete and purge this email from your email system and destroy any other electronic or printed copies. Thank you for your cooperation.

-----Original Message-----

From: McIntosh, Mark M LRN [mailto:Mark.M.McIntosh@usace.army.mil]  
Sent: Friday, August 26, 2016 9:03 AM  
To: Ward, Adam R (Ric) <arward@burnsmcd.com>  
Subject: Contact Info

Mark M McIntosh  
Regulatory Specialist, East Branch  
Regulatory Division  
Nashville District  
501 Adesa Parkway, Suite 250  
Lenoir City, TN 37771

Phone: (865) 986-7296

Email: mark.m.mcintosh@usace.army.mil  
Internet: Blockedhttp://www.lrn.usace.army.mil/Missions/Regulatory.aspx  
Facebook: Blockedhttp://www.facebook.com/nashvillecorps



US Army Corps  
of Engineers®  
Nashville District

FN-

# Nationwide Permit

---

## 3. Maintenance

### 3. *Maintenance.*

(a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure, or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project or within the boundaries of the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris in the vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.) and/or the placement of new or additional riprap to protect the structure. The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization. The placement of new or additional riprap must be the minimum necessary to protect the structure or to ensure the safety of the structure. Any bank stabilization measures not directly associated with the structure will require a separate authorization from the district engineer.

(c) This NWP also authorizes temporary structures, fills, and work necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and

discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to preconstruction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

*Notification:* For activities authorized by paragraph (b) of this NWP, the permittee must submit a preconstruction notification to the district engineer prior to commencing the activity (see general condition 31). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Sections 10 and 404)

**Note:** This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.



# Nationwide Permit Conditions

FN

The following General Conditions must be followed in order for any authorization by NWP to be valid:

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the US Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the US.

(c) The permittee understands and agrees that, if future operations by the US require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the US. No claim shall be made against the US on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the US that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high

tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the US during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, US Forest Service, US Fish and Wildlife Service).

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from Corps.

(d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.



(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the US to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS at <http://www.fws.gov/> or <http://www.fws.gov/ibac> and <http://www.noaa.gov/fisheries.html> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under the USFWS's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA is complete.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who,

with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including waters adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the US to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater, and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.



(3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) – (14) must be approved by the district engineer before the permittee begins work in waters of the US, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the US, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(h) Where certain functions and services of waters of the US are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has

been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee) \_\_\_\_\_

(Date) \_\_\_\_\_

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the work and mitigation.

31. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a PCN as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
  - (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
- (b) Contents of Pre-Construction Notification. The PCN must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed project;
- (3) A description of the proposed project, the project's purpose, direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the US expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);
- (4) The PCN must include a delineation of wetlands, other special aquatic sites, and waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the US. The 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- (5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of PCN Notification. The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination. (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP activities that require PCN notification and result in the loss of greater than 1/2-acre of waters of the US, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require PCN notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require PCN notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (USFWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the PCN notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each PCN notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of PCN notifications to expedite agency coordination.

Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.