

ADDENDUM NO. 01

FOR:

**MOBILE BAY SHORE HABITAT ACQUISITION AND RESTORATION – PHASE
II NFWF TASK 7 – IMPLEMENTATION ACTIVITIES
THREEMILE CREEK DREDGING
PROJECT NO. 2020-2045-06**

OWNER:

THE CITY OF MOBILE
Mobile Government Plaza
205 Government Street
Mobile, AL 36602

CONTRACT DOCUMENTS HAVE BEEN REVIEWED FOR USE BY:

The City of Mobile

TECHNICAL SPECIFICATIONS PREPARED BY:

Moffatt & Nichol, Inc.

Gerald Songy, PE

DISCLAIMER:

It is the sole responsibility of the Contractor to read and understand all terms and provisions contained in this document, as it is a legally binding contract. Contractors are encouraged to consult legal counsel prior to its execution.

Issued Date: March 3, 2023

General

1. This Addendum shall supplement, amend, and become part of the Bid Documents. All Bids and the Construction Contract shall be based on these modifications.
 2. Bidders shall acknowledge the receipt of this addendum on their Bid Form.
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A mandatory pre-bid meeting was held from 1:00 PM to approximately 2:00 PM on Tuesday, February 28th at the Mobile Government Plaza building. The project team consisting of members affiliated with the City of Mobile and Moffatt & Nichol were introduced, followed by a presentation on the project and time for questions at the end. Questions asked during the meeting are provided below with responses. Attendees were present both in-person and virtually, and the attendance lists are provided as an attachment to this addendum.

Bids will be publically opened and read on Wednesday, March 15th, 2023 at 2:30 PM local time in the first floor atrium of the Mobile Government Plaza Building. Questions may be asked by prospective bidders until 12:00 PM on Friday, March 10th. Submit questions by e-mail to both Gerald Songy (gsongy@moffattnichol.com) and Jenn Greene (jennifer.greene@cityofmobile.org).

Contractors are encouraged to reach out to Archnique Kidd (Archnique.kidd@cityofmobile.org) at the City of Mobile if there are any questions regarding the Disadvantaged Business Enterprise outreach, utilization, or supplier diversity requirements while preparing bids.

Questions and answers from bid questions asked during the mandatory pre-bid meeting or submitted by contractors:

Question 1: Can we enter the site and go look at it?

Response: The site can be accessed by the public from Dr. Martin Luther King, Jr. Avenue. The City owns the right-of-way for Butchers lane, and parcels within the material transfer area.

Question 2: Can you provide the engineer's estimate or budget for this project?

Response: The City cannot provide this information.

Question 3: Would any disposal fees be the responsibility of the awarded contractor to pay?

Response: Yes. Payment for Bid Item No. 4, "Dredging and Material Disposal (210-C)" will be per the contract unit price per cubic yard for removal of the material from the permitted dredge template and disposal of the material at an approved location.

Question 4: Are there any other areas of the project site (other than the residential area surrounding Bizzel, Patton, and Belsaw Avenues) that are subject to work hour limitations?

Response: None that we are aware of at this time. See page 26 of the project manual, item 36 of the Special Provisions, which states "Working hours on certain streets will be limited. All working times, closures, etc., will be coordinated with the City of Mobile Traffic Engineering Department".

Question 5: Who do we contact about working hours?

Response: All project inquiries come to this team (include Jenn Greene and Gerald Songy on all emails), and we will coordinate with the City of Mobile Traffic Department.

Question 6: What are the specific working hours that work would be limited to?

Response: Monday to Friday, 7AM to 5PM.

Question 7: Would access be allowed from the southern side of Dr. Martin Luther King, Jr. Avenue? We would consider using a crane to get equipment in the U.S. Army Corps of Engineers (USACE) Bypass Channel.

Response: This depends on what you are trying to do, because there is no boat launch there. These parcels along the USACE Bypass channel immediately to the south of the Dr. MLK, Jr. Avenue are not included in the permit and therefore would only be eligible for use to access the waterway. The parcels are owned by the City of Mobile. The awarded contractor should notify the City if this area is intended to be used at the pre-construction meeting.

Question 8: Is there a possibility of this bid opening date getting extended? The request was "seconded."

Response: Not at this time. The project team will note these requests.

Question 9: Any sort of estimate or quantity of vegetation to be cleared and grubbed and removed? We aren't worried about unit price, just the lump sum. It is difficult to evaluate that.

Response: No estimate. The engineer's estimate assumed clearing, grubbing, stump removal, and hauling the material to an approved disposal location. The existing grade shown on the drawings (which is based on the topographic survey) within the dredging area is situated at the base of any vegetation, trees, and shrubs.

Question 10: Overdredge tolerance to this project?

Response: The permitted dredge template is shown in sheets C-301 through C-309 on the design drawings. The awarded contractor shall dredge to a target elevation of -4 ft NAVD 88. There is a 1 foot allowable overdepth from the target bottom elevation of -4 ft NAVD 88 down to -5 ft NAVD 88, and 5H:1V (horizontal:vertical) side slopes until daylight. The awarded contractor will be paid for material that is removed from within the permitted dredge template. The Issued for Construction Drawings will show the allowable overdepth template situated between bottom elevations -4 ft NAVD 88 and -5 ft NAVD 88.

Question 11: Mechanical dredging of USACE Bypass channel, it appears there is a large distance between the channel and the material transfer area. The vegetation and shoaling area between the bank and the channel appears to be 50+ feet and could be challenging if using mechanical dredging methods to perform the work.

Response: Any means and methods chosen by the awarded contractor are sufficient as long as they adhere to the permit stipulations. The permit language mentions that sediment and vegetation removal are generally permitted under NWP 27. This project's permit falls under Nationwide Permit 27: Aquatic Habitat Restoration, Enhancement, and Establishment Activities. The permit language states that if greater than or equal to 1/10 of an acre (4,356 Square Feet) is permanently altered, then mitigation would need to be implemented at a 1:1 ratio. 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 only minimal adverse environmental effects. Please see the attached Nationwide Permit 27 Document for more information.

Question 12: Have you performed any testing of the material within the dredging area to ensure there are no contaminants?

Response: Yes, this analysis has been performed. A report with a summary of the analysis is provided as an attachment to this addendum.

Question 13: Is there existing topography of staging area and canal?

Response: There is publicly available LiDAR elevation data (published by the US Geological Survey in 2010) of the material staging area. The aforementioned LiDAR data was used in design, and can be provided to the awarded contractor upon request. To the best of the project team's knowledge, there are no significant variations in the LiDAR elevation data and current elevations of the staging area. Detailed bathymetry data of the canal were not collected. However, the canal is generally 5-8 feet deep depending on seasonal water levels and tides.

Question 14: Is the volume estimate associated with Bid Item No. 4, "Dredging and Material Disposal (210-C)" based on the design dredge template?

Response: The estimated volume associated with Bid Item No. 4 is based on the template outlined by a bottom elevation of -5 ft NAVD 88 having a 20 foot bottom width and sloping up at a 5:1 (horizontal:vertical) side slope to existing grade (as shown on C-301 through C-309 on the design drawings).

Question 15: Is there any overdredge that is paid?

Response: Yes, see Question 10.

Question 16: Is there a tolerance that is plus and minus?

Response: See the response to Question 10.

Question 17: That volume is a hard number and if it takes more than that to achieve design then the contractor would have to burden the cost?

Response: The Owner would pay for the volume of dredged material removed from within the permitted dredge template. The "Pre-Dredging Survey" section of the Supplemental Specifications (page 42) states "Immediately after CONTRACTOR has completed Clearing and Grubbing, the pre-dredging survey can be performed." The data collected in the pre-dredging survey will be used to re-evaluate the estimated quantity for Bid Item No. 4, "Dredging and Material Disposal (210-C)." Additional items of work necessary for the completion of this contract may be added by Change Order per Item VIII - Special Provisions item 8 (page 23).

See page 11 of the project manual, which states: "The quantities for bid items listed on the proposal sheets are estimated quantities. Payment of the Contractor will be made only for the actual quantities of work performed and accepted on materials furnished in accordance with the contract. The scheduled quantities of work to be done and materials to be furnished may each be increased, decreased or omitted as herein provided".

Question 18: Will the pre-bid attendee list be released?

Response: Yes, the pre-bid sign-in sheet and virtual attendee list are provided as an attachment to this addendum.

Question 19: Is there any provisions to the apple snail, or anything specific that we would need to do to address this?

Response: Use best management practices as practical. Annual removal and spraying has been initiated upstream. Contractor may eradicate eggs as they are encountered, and is required to report sightings to the City.

Question 20: Is there any additional dredge surveys after clearing and grubbing or are we working off of volumes from the design survey?

Response: The "Pre-Dredging Survey" section of the Supplemental Specifications (page 42) states "Immediately after CONTRACTOR has completed Clearing and Grubbing, the pre-dredging survey can be performed." The estimated quantity for Bid Item No. 4, "Dredging and Material Disposal (210-C) was calculated based on the design survey, but the contractor will be paid based on the total volume removed between the Pre-Dredging Survey grade and the Post-Dredging Survey grade (material removed from within the permitted dredge template).

Question 21: Is box cutting permitted?

Response: As long as the Contractor can form that to the dredge template.

Question 22: How old is hydro survey data?

Response: The elevation data were collected in July/August of 2021. See the dredging notes on sheet G-002 of the drawings.

Question 22: Can you send plans and specs electronically?

Response: A prospective bidder may request an electronic version of the plans from the engineer. If the prospective bidder is interested in bidding the project, they may mail to -or drop off a check at- the Moffatt & Nichol office. The Project Manual can then be provided to the prospective bidder.

Question 23: Will you be emailing all amendments to everyone that's signed up?

Response: All addenda will be emailed to each person on the pre-bid meeting sign-in sheet and virtual attendees list. All addenda will also be placed on the City's bid website (<https://www.cityofmobile.org/bids/>).

Announcement: Contractors may pick up drawings from the Moffatt & Nichol office in downtown Mobile. Bring a \$100 check. If the prospective contractor returns the plans and specs within 10 days of bid opening, the check will be returned or shredded based on the prospective Contractors preference.

Attachments:

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1. Pre-bid meeting sign-in sheet
 2. Sediment Sampling Report
 3. Pre-bid meeting presentation
 4. Nationwide Permit 27 Document: Aquatic Habitat Restoration, Enhancement, and Establishment Activities



Mobile Bay Shore Habitat Acquisition and Restoration - Three Mile Creek Hydraulic Restoration
Pre-Bid Sign-In Sheet

Contractor Name	Email Phone Number	Company
DON COLEMAN	251-370-0701	BLUE DIVING & SALVAGE, LLC
STEVE BROWN	STEVE@BLADECONSTRUCTION.COM	BLADE CONSTRUCTION
Cody Reed Archingwood LANDE	251-208-7689 251-208-7967	COM " "
JEN GREEN		COM
LLOYD HUGHES	lloydhughes55@gmail.com 251-422-4751 phughes@hpuconline.com	HUGHES PLUMBING & UTILITY CONTRACTORS, INC.
GERALD SONGY		MEN



Mobile Bay Shore Habitat Acquisition and Restoration - Three Mile Creek Hydraulic Restoration
Pre-Bid Sign-In Sheet

Contractor Name	Email Phone Number	Company
PEYTON POSEY SAMANTHA MCKISSON		M: N M: N
McElhenney Josh Meek	jmeek@mcelhenneyconst.com 251-402-2869	MCC
AM-TECH Tom Boynton	TBOYNTON@AMERICANMTECH.COM 713295-1961	AM-TECH
Fred McAll	fmcall@bellsouth.net 251-209-5017	S.C. Stagner Contracting Inc.
DANIELLE MAY	dmay@jfbrennan.com 608-780-8355	JF Brennan Company
JUSTIN CHORLOG		COASTAL DREDGING COMPANY

The following attended the meeting via Zoom and entered in this information in the chat box:

Steve Brown Blade Construction

steve@bladeconstruction.com

Danielle May Sr. Project Manager

J.F Brennan Company Inc

Lacrosse Wisconsin

dmay@jfbrennan.com

estimating@jfbrennan.com

608-780-8355

Adam Vandenhouten

avandenhouten@veitusa.com

estimating@veitusa.com

Justin Chorlog, Coastal Dredging Company, Inc.

Wesley Pitre, Wilco Marsh Buggies wpitre@wilcoindustrial.com

Justin Chorlog, Coastal Dredging Company, Inc., jchorlog@coastaldredging.net

Andrew Wood, Veit & Company, andy.wood@veitusa.com

John Watson, Greystone Industries LLC, Greystoneindustriesllc@gmail.com



EPHRIAM

ENVIRONMENTAL LLC.

CONSULTING - ECOASSESSMENTS - PERMITTING

October 20, 2021

Ms. Mary Beth Sullivan, P.E.
Moffatt and Nichol
11 North Water Street, Suite 20220
Mobile, AL 36602

Subject: Three Mile Creek Sampling Restoration and Analysis – M&N Project No. 10456-02 – Mobile, Mobile County, Alabama

Dear Ms. Sullivan,

Ephriam & Associates Environmental Consulting, LLC., (EAC) appreciates the opportunity to review the results and provide construction best management practices (BMPs) and recommend disposal and management options for the material being sample for the Three Mile Creek Restoration project. Specifically, the subject site is located in Township 4 South, Range, 1 West, Mobile County, Alabama. (Figure 1)

Sampling and Analysis of Three Mile Creek Area

EAC was tasked, by Moffat and Nichol, to analyze samples collected at three designed points along the channel of Three Mile Creek that is projected to be dredged. The historical channel and sampling points is depicted in Figure 2. Analysis on these samples collected consisted of the following analytics: Toxicity Characteristic Leaching Procedure (TCLP) Resource Conservation and Recovery Act (RCRA) 8 Metals, TCLP Semi-Volatiles, TCLP Volatiles, Ignitability of a Solid, Reactives and Ph of a Solid. Samples were collected with the assistance of Geotechnical Engineering and Testing, Inc. Samples were collected with a split spoon sampler. Samples were put on ice prior to submittal to the laboratory and numbered 22-122 B-1, 22-122 B-2 and 22-122 B-3 respectively.

Samples were received by the laboratory on August 16, 2021. Based on the report, dated August 26, 2021, it was noted that the Ph of the samples were as follows: 4.8 for 22-122 B-1, 5.0 for 22-122 B-2, and 5.8 for 22-122 B-3. (see Table 1)

All three samples were tested for TCLP RCRA 8 Metals, which consists of Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver, and Mercury. All three samples were found to be not detected at or above the adjusted reporting limit for TCLP RCRA 8 Metals.

All three samples were analyzed for TCLP Semi-Volatiles, which consist of 1,4-Dichlorobenzene, 2,4-Dinitrotoluene, Hexachloro-1,3-butadiene, Hexachloroethane, 2-Methylphenol(o-Cresol), 3&4-Methylphenol (m&p Cresol), Nitrobenzene, Pentachlorophenol, Pyridine, 2,4,5-Trichlorophenol, and 2,4,6-Trichlorophenol. All three samples were found to be not detected at or above the adjusted reporting limit for TCLP Semi-Volatiles.



Figure 1
Site Location



USGS Topo Map Mobile Alabama 1982

Legend

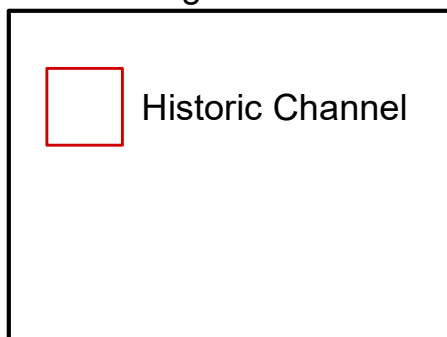




Figure 2
Sampling Locations



- Hydraulic Restoration Area
- Material Transfer Area
- Soil Borings

500 250 0 500 Feet



Three Mile Creek Project Sampling Data

Table 1

Sample Number	Date Collected	Analytic	Result	Sample Number	Date Collected	Analytic	Result	Sample Number	Date Collected	Analytic	Result
21-122 B-1	8/16/2021	RCRA 8 Metals - TCLP - EPA 6010 Arsenic Barium Cadmium Chromium Lead Selenium Silver Mercury	ND* ND ND ND ND ND ND ND ND	21-122 B-2	8/16/2021	RCRA 8 Metals - TCLP - EPA 6010 Arsenic Barium Cadmium Chromium Lead Selenium Silver Mercury	ND ND ND ND ND ND ND ND ND	21-122 B-3	8/16/2021	RCRA 8 Metals - TCLP - EPA 6010 Arsenic Barium Cadmium Chromium Lead Selenium Silver Mercury	ND ND ND ND ND ND ND ND ND
21-122 B-1	8/16/2021	Semi-Volatiles - TCLP - EPA 8270 1,4-Dichlorobenzene 2,4-Dinitrotoluene Hexachloro-1,3-butadiene Hexachloroethane 2-Methylphenol(o-Cresol) 3&4-Methylphenol(m&p Cresol) Nitrobenzene Pentachlorophenol Pyridine 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol	ND ND ND ND ND ND ND ND ND ND ND ND	21-122 B-2	8/16/2021	Semi-Volatiles - TCLP - EPA 8270 1,4-Dichlorobenzene 2,4-Dinitrotoluene Hexachloro-1,3-butadiene Hexachloroethane 2-Methylphenol(o-Cresol) 3&4-Methylphenol(m&p Cresol) Nitrobenzene Pentachlorophenol Pyridine 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol	ND ND ND ND ND ND ND ND ND ND ND ND	21-122 B-3	8/16/2021	Semi-Volatiles - TCLP - EPA 8270 1,4-Dichlorobenzene 2,4-Dinitrotoluene Hexachloro-1,3-butadiene Hexachloroethane 2-Methylphenol(o-Cresol) 3&4-Methylphenol(m&p Cresol) Nitrobenzene Pentachlorophenol Pyridine 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol	ND ND ND ND ND ND ND ND ND ND ND ND
21-122 B-1	8/16/2021	Volatiles - TCLP - EPA 8260 Benzene 2-Butanone (MEK) Carbon Tetrachloride Chlorobenzene Chloroform 1,2-Dichloroethane 1,1-Dichloroethene Tetrachloroethene Trichloroethene Vinyl Chloride	ND ND ND ND ND ND ND ND ND ND	21-122 B-2	8/16/2021	Volatiles - TCLP - EPA 8260 Benzene 2-Butanone (MEK) Carbon Tetrachloride Chlorobenzene Chloroform 1,2-Dichloroethane 1,1-Dichloroethene Tetrachloroethene Trichloroethene Vinyl Chloride	ND ND ND ND ND ND ND ND ND ND	21-122 B-3	8/16/2021	Volatiles - TCLP - EPA 8260 Benzene 2-Butanone (MEK) Carbon Tetrachloride Chlorobenzene Chloroform 1,2-Dichloroethane 1,1-Dichloroethene Tetrachloroethene Trichloroethene Vinyl Chloride	ND ND ND ND ND ND ND ND ND ND
21-122 B-1	8/16/2021	Ignitability of Solid - SW-846 Ignitability Ignites by Flame Ignites Spontaneously Ignites when Agitated Ignites with Moisture	Not Ignitable No No No No	21-122 B-2	8/16/2021	Ignitability of Solid - SW-846 Ignitability Ignites by Flame Ignites Spontaneously Ignites when Agitated Ignites with Moisture	Not Ignitable No No No No	21-122 B-3	8/16/2021	Ignitability of Solid - SW-846 Ignitability Ignites by Flame Ignites Spontaneously Ignites when Agitated Ignites with Moisture	Not Ignitable No No No No
21-122 B-1	8/16/2021	Reactive Sulfide - SW-846 Sulfide, Reactive	ND	21-122 B-2	8/16/2021	Reactive Sulfide - SW-846 Sulfide, Reactive	ND	21-122 B-3	8/16/2021	Reactive Sulfide - SW-846 Sulfide, Reactive	ND
21-122 B-1	8/16/2021	Ph Solid - EPA 9045 Ph	4.8	21-122 B-2	8/16/2021	Ph Solid - EPA 9045 Ph	5.0	21-122 B-3	8/16/2021	Ph Solid - EPA 9045 Ph	5.8
21-122 B-1	8/16/2021	Reactive Cyanide - SW-846 Reactive, Cyanide	ND	21-122 B-2	8/16/2021	Reactive Cyanide - SW-846 Reactive, Cyanide	ND	21-122 B-3	8/16/2021	Reactive Cyanide - SW-846 Reactive, Cyanide	ND

*Not detected at or above adjusted reporting limit

limit for TCLP Semi-Volatiles.

All three samples were analyzed for TCLP Volatiles, which consist of Benzene, Methyl Ethyl Ketone (2-Butanone), Carbon Tetrachloride, Chlorobenzene, Chloroform, 1,2-Dichloroethane, 1,1-Dichloroethene, Tetrachloroethene, Trichloroethene, and Vinyl Chloride. All three samples were found to be not detected at or above the adjusted reporting limit for TCLP Volatiles.

All three samples were analyzed for the Ignitability of a Solid. The samples were tested based on ignitability, ignites by flame, ignites spontaneously, ignites when agitated, and ignites with moisture. All three samples were found not to ignite under these circumstances.

All three samples were tested for Reactive Sulfides and Reactive Cyanides. All three samples were found to be not detected at or above the adjusted reporting limit for Reactives.

Disposal Considerations

According to RCRA, the law that regulates hazardous waste disposal, a characteristic hazardous waste is a waste that ignites, reacts, is corrosive, or is toxic. The samples collected for the Three Mile Creek project were sampled for each of these characteristics. All of the samples collected were found to be not detected at or above the adjusted reporting limits for each of these characteristics. Therefore, it is found that this material is deemed not hazardous and can be disposed of at a landfill or other location that will accept such waste.

Before disposal of the material is considered, the material will need to be dewatered. During the dewatering process, if excess water is produced that will need disposal, this water will need to be sampled accordingly to make sure that it maintains its non-hazardous status before it can be sent for disposal. Furthermore, wastewater disposal facilities will require sampling for certain parameters before the material can be manifested for disposal. If needed, water collected from this process can be stored in frac tanks, and in certain circumstances, can be returned to the receiving waters if the Ph matches that of those waters, permit dependent.

After the dredge material is dewatered, it can be taken for disposal. Because of the quantity and weight of the material, it may be cost prohibitive to dispose of the material at an industrial landfill or any other landfill that can take the material. Cost effective and beneficial use considerations should be researched prior to disposal. Some potential methods include, but are not limited to, utilization as landfill cap, utilization as fill material in an upland area, the capping of working Brownsfield sites, restoration or enhancement projects, and shoreline stabilization. All of these options should be considered prior to disposal.

Best Management Practices

During the offloading and dewatering process of the dredged material, Best Management Practices (BMPs) should be utilized to prevent sediment and stormwater runoff into the subsequent receiving waters and nearby wetland areas. A brief desktop review of the National Wetland Inventory (NWI) map revealed that there are potential wetland areas to the northeast of the dredge spoil staging and dewatering area. These areas will need to be protected with BMPs during the dewatering process prior to disposal with the utilization of siltation fences and other approved methods. Furthermore, because of the nature of the project and location, it is recommended that a Notice of Intent (NOI) and a Construction Best Management Practices Plan (CBMPP) be completed per the National Pollutant Discharge Elimination

System (NDPES) program's requirements. The CBMPP should outline the methods that the Qualified Credentialed Professional (QCP) recommends for BMP utilization during the duration of the project.

Conclusions

EAC was tasked with analyzing samples taken from the historical channel of Three Mile Creek in preparation for dredging. Analysis of the samples revealed that the material is non-hazardous and can be disposed at a landfill willing to accept the material. Furthermore, it is recommended that all considerations be made to reduce disposal costs by looking for alternate means of disposal including, but not limited to, landfill capping, Brownsfield capping, fill in uplands, restoration or enhancement projects and shoreline stabilization. BMPs will need to be utilized, according to the NOI and CBMPP plan for the site, during the dredging and dewatering processes.

Thank you for the opportunity to assist you with this project. If you have any questions, please feel free to contact me at leslie@ephriamenvirollc.com or at (251) 378-8081.

Sincerely,



Leslie Hiles Lott, P.G.
Lead Environmental Manager

Attachments

Attachment 1
Sampling Results

August 26, 2021

Leslie Lott
Ephriam and Associates Environmental
Consulting
3439 St. Stephens Road
Mobile, AL 36610

RE: Project: Project No. 10456-02
Pace Project No.: 20217655

Dear Leslie Lott:

Enclosed are the analytical results for sample(s) received by the laboratory on August 16, 2021. The results relate only to the samples included in this report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - New Orleans

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Savannah Wallace
savannah.wallace@pacelabs.com
251-344-9106
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Project No. 10456-02

Pace Project No.: 20217655

Pace Analytical Services New Orleans

Florida Department of Health (NELAC): E87595

Illinois Environmental Protection Agency: 0025721

Kansas Department of Health and Environment (NELAC):

E-10266

Louisiana Dept. of Environmental Quality (NELAC/LELAP):

02006

Texas Commission on Env. Quality (NELAC):

T104704405-09-TX

U.S. Dept. of Agriculture Foreign Soil Import: P330-10-

00119

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Project No. 10456-02
Pace Project No.: 20217655

Lab ID	Sample ID	Matrix	Date Collected	Date Received
20217655001	21-122 B-1 Upper/Lower	Solid	08/16/21 10:30	08/16/21 14:40
20217655003	21-122 B-2 Upper/Lower	Solid	08/16/21 11:05	08/16/21 14:40
20217655005	21-122 B-3 Upper/Lower	Solid	08/16/21 11:35	08/16/21 14:40

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Project No. 10456-02

Pace Project No.: 20217655

Lab ID	Sample ID	Method	Analysts	Analytes Reported
20217655001	21-122 B-1 Upper/Lower	EPA 6010	AJS	7
		EPA 7470	AJS	1
		EPA 8270	SLK	18
		EPA 8260	JRP	13
		SW-846 7.1.2	JLH	5
		SW-846 7.3.4.2	TMO	1
		EPA 9045	JLH	1
		SW-846 7.3.3.2	ABW	1
20217655003	21-122 B-2 Upper/Lower	EPA 6010	AJS	7
		EPA 7470	AJS	1
		EPA 8270	SLK	18
		EPA 8260	JRP	13
		SW-846 7.1.2	JLH	5
		SW-846 7.3.4.2	TMO	1
		EPA 9045	JLH	1
		SW-846 7.3.3.2	ABW	1
20217655005	21-122 B-3 Upper/Lower	EPA 6010	AJS	7
		EPA 7470	AJS	1
		EPA 8270	SLK	18
		EPA 8260	JRP	13
		SW-846 7.1.2	JLH	5
		SW-846 7.3.4.2	TMO	1
		EPA 9045	JLH	1
		SW-846 7.3.3.2	ABW	1

PASI-N = Pace Analytical Services - New Orleans

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Project No. 10456-02
Pace Project No.: 20217655

Sample: 21-122 B-1 Upper/Lower **Lab ID: 20217655001** Collected: 08/16/21 10:30 Received: 08/16/21 14:40 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Leachate Method/Date: EPA 1311; 08/23/21 15:30								
Pace Analytical Services - New Orleans								
Arsenic	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 15:49	7440-38-2	
Barium	ND	mg/L	2.0	1	08/24/21 10:09	08/24/21 15:49	7440-39-3	
Cadmium	ND	mg/L	0.10	1	08/24/21 10:09	08/24/21 15:49	7440-43-9	
Chromium	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 15:49	7440-47-3	
Lead	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 15:49	7439-92-1	
Selenium	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 15:49	7782-49-2	
Silver	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 15:49	7440-22-4	

7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 08/23/21 15:30								
Pace Analytical Services - New Orleans								
Mercury	ND	mg/L	0.00020	1	08/25/21 07:03	08/25/21 12:37	7439-97-6	

8270 MSSV TCLP								
Analytical Method: EPA 8270 Preparation Method: EPA 3535								
Leachate Method/Date: EPA 1311; 08/23/21 15:30								
Pace Analytical Services - New Orleans								
1,4-Dichlorobenzene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:39	106-46-7	
2,4-Dinitrotoluene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:39	121-14-2	
Hexachloro-1,3-butadiene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:39	87-68-3	
Hexachlorobenzene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:39	118-74-1	
Hexachloroethane	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:39	67-72-1	
2-Methylphenol(o-Cresol)	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:39	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:39		
Nitrobenzene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:39	98-95-3	
Pentachlorophenol	ND	mg/L	0.25	1	08/24/21 10:37	08/24/21 20:39	87-86-5	
Pyridine	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:39	110-86-1	
2,4,5-Trichlorophenol	ND	mg/L	0.25	1	08/24/21 10:37	08/24/21 20:39	95-95-4	
2,4,6-Trichlorophenol	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:39	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	85	%	29-137	1	08/24/21 10:37	08/24/21 20:39	4165-60-0	
2-Fluorobiphenyl (S)	80	%	25-100	1	08/24/21 10:37	08/24/21 20:39	321-60-8	
Terphenyl-d14 (S)	89	%	26-141	1	08/24/21 10:37	08/24/21 20:39	1718-51-0	
Phenol-d6 (S)	19	%	10-92	1	08/24/21 10:37	08/24/21 20:39	13127-88-3	
2-Fluorophenol (S)	26	%	10-90	1	08/24/21 10:37	08/24/21 20:39	367-12-4	
2,4,6-Tribromophenol (S)	110	%	20-130	1	08/24/21 10:37	08/24/21 20:39	118-79-6	

8260 MSV TCLP								
Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 08/20/21 15:30								
Pace Analytical Services - New Orleans								
Benzene	ND	mg/L	0.10	20		08/25/21 13:34	71-43-2	
2-Butanone (MEK)	ND	mg/L	0.20	20		08/25/21 13:34	78-93-3	
Carbon tetrachloride	ND	mg/L	0.10	20		08/25/21 13:34	56-23-5	
Chlorobenzene	ND	mg/L	0.10	20		08/25/21 13:34	108-90-7	
Chloroform	ND	mg/L	0.10	20		08/25/21 13:34	67-66-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Project No. 10456-02

Pace Project No.: 20217655

Sample: 21-122 B-1 Upper/Lower **Lab ID: 20217655001** Collected: 08/16/21 10:30 Received: 08/16/21 14:40 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP								
Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 08/20/21 15:30								
Pace Analytical Services - New Orleans								
1,2-Dichloroethane	ND	mg/L	0.10	20		08/25/21 13:34	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.10	20		08/25/21 13:34	75-35-4	
Tetrachloroethene	ND	mg/L	0.10	20		08/25/21 13:34	127-18-4	
Trichloroethene	ND	mg/L	0.10	20		08/25/21 13:34	79-01-6	
Vinyl chloride	ND	mg/L	0.10	20		08/25/21 13:34	75-01-4	
Surrogates								
Toluene-d8 (S)	99	%	76-124	20		08/25/21 13:34	2037-26-5	
4-Bromofluorobenzene (S)	100	%	78-121	20		08/25/21 13:34	460-00-4	
Dibromofluoromethane (S)	90	%	74-128	20		08/25/21 13:34	1868-53-7	

Ignitability of Solids

Analytical Method: SW-846 7.1.2

Pace Analytical Services - New Orleans

Ignitability	Not Ignitable			1		08/22/21 13:07		
Ignites by flame	N/A			1		08/22/21 13:07		
Ignites spontaneously	No			1		08/22/21 13:07		
Ignites when agitated	No			1		08/22/21 13:07		
Ignites with moisture	No			1		08/22/21 13:07		

734S Reactive Sulfide

Analytical Method: SW-846 7.3.4.2 Preparation Method: SW-846 7.3.4.2

Pace Analytical Services - New Orleans

Sulfide, Reactive	ND	mg/kg	50.0	1	08/20/21 05:45	08/20/21 08:14		
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9045 pH Soil

Analytical Method: EPA 9045

Pace Analytical Services - New Orleans

pH at 25 Degrees C	4.8	Std. Units	0.010	1		08/23/21 14:30		
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733C S Reactive Cyanide

Analytical Method: SW-846 7.3.3.2 Preparation Method: SW-846 7.3.3.2

Pace Analytical Services - New Orleans

Cyanide, Reactive	ND	mg/kg	25.0	1	08/20/21 05:45	08/20/21 10:29		
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Sample: 21-122 B-2 Upper/Lower **Lab ID: 20217655003** Collected: 08/16/21 11:05 Received: 08/16/21 14:40 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Leachate Method/Date: EPA 1311; 08/23/21 15:30								
Pace Analytical Services - New Orleans								
Arsenic	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 16:14	7440-38-2	
Barium	ND	mg/L	2.0	1	08/24/21 10:09	08/24/21 16:14	7440-39-3	
Cadmium	ND	mg/L	0.10	1	08/24/21 10:09	08/24/21 16:14	7440-43-9	
Chromium	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 16:14	7440-47-3	
Lead	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 16:14	7439-92-1	

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ANALYTICAL RESULTS

Project: Project No. 10456-02
Pace Project No.: 20217655

Sample: 21-122 B-2 Upper/Lower **Lab ID: 20217655003** Collected: 08/16/21 11:05 Received: 08/16/21 14:40 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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6010 Metals, TCLP

Analytical Method: EPA 6010 Preparation Method: EPA 3010
Leachate Method/Date: EPA 1311; 08/23/21 15:30
Pace Analytical Services - New Orleans

Selenium	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 16:14	7782-49-2	
Silver	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 16:14	7440-22-4	

7470 Mercury, TCLP

Analytical Method: EPA 7470 Preparation Method: EPA 7470
Leachate Method/Date: EPA 1311; 08/23/21 15:30
Pace Analytical Services - New Orleans

Mercury	ND	mg/L	0.00020	1	08/25/21 07:03	08/25/21 12:40	7439-97-6	
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8270 MSSV TCLP

Analytical Method: EPA 8270 Preparation Method: EPA 3535
Leachate Method/Date: EPA 1311; 08/23/21 15:30
Pace Analytical Services - New Orleans

1,4-Dichlorobenzene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 19:45	106-46-7	
2,4-Dinitrotoluene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 19:45	121-14-2	
Hexachloro-1,3-butadiene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 19:45	87-68-3	
Hexachlorobenzene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 19:45	118-74-1	
Hexachloroethane	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 19:45	67-72-1	
2-Methylphenol(o-Cresol)	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 19:45	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 19:45		
Nitrobenzene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 19:45	98-95-3	
Pentachlorophenol	ND	mg/L	0.25	1	08/24/21 10:37	08/24/21 19:45	87-86-5	
Pyridine	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 19:45	110-86-1	
2,4,5-Trichlorophenol	ND	mg/L	0.25	1	08/24/21 10:37	08/24/21 19:45	95-95-4	
2,4,6-Trichlorophenol	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 19:45	88-06-2	

Surrogates

Nitrobenzene-d5 (S)	80	%	29-137	1	08/24/21 10:37	08/24/21 19:45	4165-60-0	
2-Fluorobiphenyl (S)	75	%	25-100	1	08/24/21 10:37	08/24/21 19:45	321-60-8	
Terphenyl-d14 (S)	70	%	26-141	1	08/24/21 10:37	08/24/21 19:45	1718-51-0	
Phenol-d6 (S)	19	%	10-92	1	08/24/21 10:37	08/24/21 19:45	13127-88-3	
2-Fluorophenol (S)	26	%	10-90	1	08/24/21 10:37	08/24/21 19:45	367-12-4	
2,4,6-Tribromophenol (S)	100	%	20-130	1	08/24/21 10:37	08/24/21 19:45	118-79-6	

8260 MSV TCLP

Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 08/20/21 15:30
Pace Analytical Services - New Orleans

Benzene	ND	mg/L	0.10	20		08/25/21 13:53	71-43-2	
2-Butanone (MEK)	ND	mg/L	0.20	20		08/25/21 13:53	78-93-3	
Carbon tetrachloride	ND	mg/L	0.10	20		08/25/21 13:53	56-23-5	
Chlorobenzene	ND	mg/L	0.10	20		08/25/21 13:53	108-90-7	
Chloroform	ND	mg/L	0.10	20		08/25/21 13:53	67-66-3	
1,2-Dichloroethane	ND	mg/L	0.10	20		08/25/21 13:53	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.10	20		08/25/21 13:53	75-35-4	
Tetrachloroethene	ND	mg/L	0.10	20		08/25/21 13:53	127-18-4	
Trichloroethene	ND	mg/L	0.10	20		08/25/21 13:53	79-01-6	
Vinyl chloride	ND	mg/L	0.10	20		08/25/21 13:53	75-01-4	

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ANALYTICAL RESULTS

Project: Project No. 10456-02
Pace Project No.: 20217655

Sample: 21-122 B-2 Upper/Lower **Lab ID: 20217655003** Collected: 08/16/21 11:05 Received: 08/16/21 14:40 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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8260 MSV TCLP

Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 08/20/21 15:30
Pace Analytical Services - New Orleans

Surrogates

Toluene-d8 (S)	98	%	76-124	20		08/25/21 13:53	2037-26-5	
4-Bromofluorobenzene (S)	99	%	78-121	20		08/25/21 13:53	460-00-4	
Dibromofluoromethane (S)	91	%	74-128	20		08/25/21 13:53	1868-53-7	

Ignitability of Solids

Analytical Method: SW-846 7.1.2
Pace Analytical Services - New Orleans

Ignitability	Not Ignitable			1		08/22/21 13:07		
Ignites by flame	N/A			1		08/22/21 13:07		
Ignites spontaneously	No			1		08/22/21 13:07		
Ignites when agitated	No			1		08/22/21 13:07		
Ignites with moisture	No			1		08/22/21 13:07		

734S Reactive Sulfide

Analytical Method: SW-846 7.3.4.2 Preparation Method: SW-846 7.3.4.2
Pace Analytical Services - New Orleans

Sulfide, Reactive	ND	mg/kg	50.0	1	08/20/21 05:45	08/20/21 08:14		
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9045 pH Soil

Analytical Method: EPA 9045
Pace Analytical Services - New Orleans

pH at 25 Degrees C	5.0	Std. Units	0.010	1		08/23/21 14:31		
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733C S Reactive Cyanide

Analytical Method: SW-846 7.3.3.2 Preparation Method: SW-846 7.3.3.2
Pace Analytical Services - New Orleans

Cyanide, Reactive	ND	mg/kg	25.0	1	08/20/21 05:45	08/20/21 10:29		
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Sample: 21-122 B-3 Upper/Lower **Lab ID: 20217655005** Collected: 08/16/21 11:35 Received: 08/16/21 14:40 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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6010 Metals, TCLP

Analytical Method: EPA 6010 Preparation Method: EPA 3010
Leachate Method/Date: EPA 1311; 08/23/21 15:30
Pace Analytical Services - New Orleans

Arsenic	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 16:18	7440-38-2	
Barium	ND	mg/L	2.0	1	08/24/21 10:09	08/24/21 16:18	7440-39-3	
Cadmium	ND	mg/L	0.10	1	08/24/21 10:09	08/24/21 16:18	7440-43-9	
Chromium	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 16:18	7440-47-3	
Lead	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 16:18	7439-92-1	
Selenium	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 16:18	7782-49-2	
Silver	ND	mg/L	0.20	1	08/24/21 10:09	08/24/21 16:18	7440-22-4	

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ANALYTICAL RESULTS

Project: Project No. 10456-02

Pace Project No.: 20217655

Sample: 21-122 B-3 Upper/Lower **Lab ID: 20217655005** Collected: 08/16/21 11:35 Received: 08/16/21 14:40 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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7470 Mercury, TCLP

Analytical Method: EPA 7470 Preparation Method: EPA 7470

Leachate Method/Date: EPA 1311; 08/23/21 15:30

Pace Analytical Services - New Orleans

Mercury	ND	mg/L	0.00020	1	08/25/21 07:03	08/25/21 12:42	7439-97-6	
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8270 MSSV TCLP

Analytical Method: EPA 8270 Preparation Method: EPA 3535

Leachate Method/Date: EPA 1311; 08/23/21 15:30

Pace Analytical Services - New Orleans

1,4-Dichlorobenzene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:12	106-46-7	
2,4-Dinitrotoluene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:12	121-14-2	
Hexachloro-1,3-butadiene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:12	87-68-3	
Hexachlorobenzene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:12	118-74-1	
Hexachloroethane	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:12	67-72-1	
2-Methylphenol(o-Cresol)	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:12	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:12		
Nitrobenzene	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:12	98-95-3	
Pentachlorophenol	ND	mg/L	0.25	1	08/24/21 10:37	08/24/21 20:12	87-86-5	
Pyridine	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:12	110-86-1	
2,4,5-Trichlorophenol	ND	mg/L	0.25	1	08/24/21 10:37	08/24/21 20:12	95-95-4	
2,4,6-Trichlorophenol	ND	mg/L	0.10	1	08/24/21 10:37	08/24/21 20:12	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	80	%	29-137	1	08/24/21 10:37	08/24/21 20:12	4165-60-0	
2-Fluorobiphenyl (S)	71	%	25-100	1	08/24/21 10:37	08/24/21 20:12	321-60-8	
Terphenyl-d14 (S)	79	%	26-141	1	08/24/21 10:37	08/24/21 20:12	1718-51-0	
Phenol-d6 (S)	19	%	10-92	1	08/24/21 10:37	08/24/21 20:12	13127-88-3	
2-Fluorophenol (S)	27	%	10-90	1	08/24/21 10:37	08/24/21 20:12	367-12-4	
2,4,6-Tribromophenol (S)	103	%	20-130	1	08/24/21 10:37	08/24/21 20:12	118-79-6	

8260 MSV TCLP

Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 08/20/21 15:30

Pace Analytical Services - New Orleans

Benzene	ND	mg/L	0.10	20		08/25/21 14:12	71-43-2	
2-Butanone (MEK)	ND	mg/L	0.20	20		08/25/21 14:12	78-93-3	
Carbon tetrachloride	ND	mg/L	0.10	20		08/25/21 14:12	56-23-5	
Chlorobenzene	ND	mg/L	0.10	20		08/25/21 14:12	108-90-7	
Chloroform	ND	mg/L	0.10	20		08/25/21 14:12	67-66-3	
1,2-Dichloroethane	ND	mg/L	0.10	20		08/25/21 14:12	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.10	20		08/25/21 14:12	75-35-4	
Tetrachloroethene	ND	mg/L	0.10	20		08/25/21 14:12	127-18-4	
Trichloroethene	ND	mg/L	0.10	20		08/25/21 14:12	79-01-6	
Vinyl chloride	ND	mg/L	0.10	20		08/25/21 14:12	75-01-4	
Surrogates								
Toluene-d8 (S)	99	%	76-124	20		08/25/21 14:12	2037-26-5	
4-Bromofluorobenzene (S)	99	%	78-121	20		08/25/21 14:12	460-00-4	
Dibromofluoromethane (S)	92	%	74-128	20		08/25/21 14:12	1868-53-7	

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ANALYTICAL RESULTS

Project: Project No. 10456-02

Pace Project No.: 20217655

Sample: 21-122 B-3 Upper/Lower **Lab ID: 20217655005** Collected: 08/16/21 11:35 Received: 08/16/21 14:40 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Ignitability of Solids		Analytical Method: SW-846 7.1.2 Pace Analytical Services - New Orleans						
Ignitability	Not Ignitable			1		08/22/21 13:07		
Ignites by flame	N/A			1		08/22/21 13:07		
Ignites spontaneously	No			1		08/22/21 13:07		
Ignites when agitated	No			1		08/22/21 13:07		
Ignites with moisture	No			1		08/22/21 13:07		
734S Reactive Sulfide		Analytical Method: SW-846 7.3.4.2 Preparation Method: SW-846 7.3.4.2 Pace Analytical Services - New Orleans						
Sulfide, Reactive	ND	mg/kg	50.0	1	08/20/21 05:45	08/20/21 08:14		
9045 pH Soil		Analytical Method: EPA 9045 Pace Analytical Services - New Orleans						
pH at 25 Degrees C	5.8	Std. Units	0.010	1		08/23/21 14:32		
733C S Reactive Cyanide		Analytical Method: SW-846 7.3.3.2 Preparation Method: SW-846 7.3.3.2 Pace Analytical Services - New Orleans						
Cyanide, Reactive	ND	mg/kg	25.0	1	08/20/21 05:45	08/20/21 10:29		

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QUALITY CONTROL DATA

Project: Project No. 10456-02
Pace Project No.: 20217655

QC Batch: 234834 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP
Laboratory: Pace Analytical Services - New Orleans

Associated Lab Samples: 20217655001, 20217655003, 20217655005

METHOD BLANK: 1105727 Matrix: Water

Associated Lab Samples: 20217655001, 20217655003, 20217655005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	08/25/21 12:10	

METHOD BLANK: 1105190 Matrix: Water

Associated Lab Samples: 20217655001, 20217655003, 20217655005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	08/25/21 12:14	

METHOD BLANK: 1105274 Matrix: Water

Associated Lab Samples: 20217655001, 20217655003, 20217655005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	08/25/21 12:16	

LABORATORY CONTROL SAMPLE: 1105728

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.001	0.0010	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1105729 1105730

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		20217700001 Result	Spike Conc.	Spike Conc.	Result						
Mercury	mg/L	<0.00020	0.001	0.001	0.0011	0.0011	112	112	75-125	0	20

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QUALITY CONTROL DATA

Project: Project No. 10456-02
Pace Project No.: 20217655

QC Batch: 234829 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP
Laboratory: Pace Analytical Services - New Orleans

Associated Lab Samples: 20217655001, 20217655003, 20217655005

METHOD BLANK: 1105697 Matrix: Water

Associated Lab Samples: 20217655001, 20217655003, 20217655005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.20	08/24/21 15:33	
Barium	mg/L	ND	2.0	08/24/21 15:33	
Cadmium	mg/L	ND	0.10	08/24/21 15:33	
Chromium	mg/L	ND	0.20	08/24/21 15:33	
Lead	mg/L	ND	0.20	08/24/21 15:33	
Selenium	mg/L	ND	0.20	08/24/21 15:33	
Silver	mg/L	ND	0.20	08/24/21 15:33	

METHOD BLANK: 1105190 Matrix: Water

Associated Lab Samples: 20217655001, 20217655003, 20217655005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.20	08/24/21 15:41	
Barium	mg/L	ND	2.0	08/24/21 15:41	
Cadmium	mg/L	ND	0.10	08/24/21 15:41	
Chromium	mg/L	ND	0.20	08/24/21 15:41	
Lead	mg/L	ND	0.20	08/24/21 15:41	
Selenium	mg/L	ND	0.20	08/24/21 15:41	
Silver	mg/L	ND	0.20	08/24/21 15:41	

METHOD BLANK: 1105274 Matrix: Water

Associated Lab Samples: 20217655001, 20217655003, 20217655005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.20	08/24/21 15:45	
Barium	mg/L	ND	2.0	08/24/21 15:45	
Cadmium	mg/L	ND	0.10	08/24/21 15:45	
Chromium	mg/L	ND	0.20	08/24/21 15:45	
Lead	mg/L	ND	0.20	08/24/21 15:45	
Selenium	mg/L	ND	0.20	08/24/21 15:45	
Silver	mg/L	ND	0.20	08/24/21 15:45	

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QUALITY CONTROL DATA

Project: Project No. 10456-02

Pace Project No.: 20217655

LABORATORY CONTROL SAMPLE: 1105698

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	2	2.0	98	85-115	
Barium	mg/L	2	ND	100	85-115	
Cadmium	mg/L	2	2.0	100	85-115	
Chromium	mg/L	2	2.0	99	85-115	
Lead	mg/L	2	2.0	100	85-115	
Selenium	mg/L	2	1.9	97	85-115	
Silver	mg/L	1	0.99	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1105699 1105700

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		20217655001 Result	Spike Conc.	Spike Conc.	MS Result						
Arsenic	mg/L	ND	2	2	1.8	1.9	91	93	80-120	2	20
Barium	mg/L	ND	2	2	2.1	2.2	92	93	80-120	2	20
Cadmium	mg/L	ND	2	2	1.7	1.8	86	87	80-120	1	20
Chromium	mg/L	ND	2	2	1.7	1.7	85	87	80-120	1	20
Lead	mg/L	ND	2	2	1.7	1.7	81	83	80-120	1	20
Selenium	mg/L	ND	2	2	1.8	1.9	90	92	80-120	2	20
Silver	mg/L	ND	1	1	0.88	0.89	88	89	80-120	1	20

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QUALITY CONTROL DATA

Project: Project No. 10456-02

Pace Project No.: 20217655

QC Batch:	234861	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV TCLP
		Laboratory:	Pace Analytical Services - New Orleans

Associated Lab Samples: 20217655001, 20217655003, 20217655005

METHOD BLANK: 1104295 Matrix: Water

Associated Lab Samples: 20217655001, 20217655003, 20217655005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	mg/L	ND	0.10	08/24/21 14:07	
1,2-Dichloroethane	mg/L	ND	0.10	08/24/21 14:07	
2-Butanone (MEK)	mg/L	ND	0.20	08/24/21 14:07	
Benzene	mg/L	ND	0.10	08/24/21 14:07	
Carbon tetrachloride	mg/L	ND	0.10	08/24/21 14:07	
Chlorobenzene	mg/L	ND	0.10	08/24/21 14:07	
Chloroform	mg/L	ND	0.10	08/24/21 14:07	
Tetrachloroethene	mg/L	ND	0.10	08/24/21 14:07	
Trichloroethene	mg/L	ND	0.10	08/24/21 14:07	
Vinyl chloride	mg/L	ND	0.10	08/24/21 14:07	
4-Bromofluorobenzene (S)	%	98	78-121	08/24/21 14:07	
Dibromofluoromethane (S)	%	100	74-128	08/24/21 14:07	
Toluene-d8 (S)	%	100	76-124	08/24/21 14:07	

METHOD BLANK: 1105185 Matrix: Water

Associated Lab Samples: 20217655001, 20217655003, 20217655005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	mg/L	ND	0.10	08/24/21 14:46	
1,2-Dichloroethane	mg/L	ND	0.10	08/24/21 14:46	
2-Butanone (MEK)	mg/L	ND	0.20	08/24/21 14:46	
Benzene	mg/L	ND	0.10	08/24/21 14:46	
Carbon tetrachloride	mg/L	ND	0.10	08/24/21 14:46	
Chlorobenzene	mg/L	ND	0.10	08/24/21 14:46	
Chloroform	mg/L	ND	0.10	08/24/21 14:46	
Tetrachloroethene	mg/L	ND	0.10	08/24/21 14:46	
Trichloroethene	mg/L	ND	0.10	08/24/21 14:46	
Vinyl chloride	mg/L	ND	0.10	08/24/21 14:46	
4-Bromofluorobenzene (S)	%	98	78-121	08/24/21 14:46	
Dibromofluoromethane (S)	%	97	74-128	08/24/21 14:46	
Toluene-d8 (S)	%	99	76-124	08/24/21 14:46	

LABORATORY CONTROL SAMPLE: 1105814

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	mg/L	0.4	0.42	104	63-130	
1,2-Dichloroethane	mg/L	0.4	0.41	104	65-131	

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QUALITY CONTROL DATA

Project: Project No. 10456-02
Pace Project No.: 20217655

LABORATORY CONTROL SAMPLE: 1105814

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Butanone (MEK)	mg/L	0.4	0.36	90	34-170	
Benzene	mg/L	0.4	0.43	106	74-132	
Carbon tetrachloride	mg/L	0.4	0.41	102	68-129	
Chlorobenzene	mg/L	0.4	0.42	104	79-121	
Chloroform	mg/L	0.4	0.42	104	70-120	
Tetrachloroethene	mg/L	0.4	0.41	103	62-138	
Trichloroethene	mg/L	0.4	0.41	103	77-117	
Vinyl chloride	mg/L	0.4	0.41	102	48-130	
4-Bromofluorobenzene (S)	%			99	78-121	
Dibromofluoromethane (S)	%			99	74-128	
Toluene-d8 (S)	%			100	76-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1106463 1106464

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		20218057001 Result	Spike Conc.	Spike Conc.	MS Result								
1,1-Dichloroethene	mg/L	ND	0.4	0.4	0.32	0.38	81	95	28-176	16	20		
1,2-Dichloroethane	mg/L	ND	0.4	0.4	0.35	0.36	88	89	51-147	1	20		
2-Butanone (MEK)	mg/L	ND	0.4	0.4	0.43	0.34	85	63	10-200	23	20	R1	
Benzene	mg/L	ND	0.4	0.4	0.37	0.38	94	96	29-186	2	20		
Carbon tetrachloride	mg/L	ND	0.4	0.4	0.35	0.37	89	91	45-162	3	20		
Chlorobenzene	mg/L	ND	0.4	0.4	0.39	0.40	97	101	71-135	3	20		
Chloroform	mg/L	ND	0.4	0.4	0.36	0.37	91	92	61-136	1	20		
Tetrachloroethene	mg/L	ND	0.4	0.4	0.38	0.40	95	99	18-193	5	20		
Trichloroethene	mg/L	ND	0.4	0.4	0.36	0.38	91	96	24-181	5	20		
Vinyl chloride	mg/L	ND	0.4	0.4	0.27	0.24	66	59	19-169	12	20		
4-Bromofluorobenzene (S)	%						99	99	78-121				
Dibromofluoromethane (S)	%						93	92	74-128				
Toluene-d8 (S)	%						99	98	76-124				

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QUALITY CONTROL DATA

Project: Project No. 10456-02

Pace Project No.: 20217655

QC Batch:	234826	Analysis Method:	EPA 8270
QC Batch Method:	EPA 3535	Analysis Description:	8270 TCLP MSSV
		Laboratory:	Pace Analytical Services - New Orleans

Associated Lab Samples: 20217655001, 20217655003, 20217655005

METHOD BLANK: 1105190 Matrix: Water

Associated Lab Samples: 20217655001, 20217655003, 20217655005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	mg/L	ND	0.10	08/24/21 16:08	
2,4,5-Trichlorophenol	mg/L	ND	0.25	08/24/21 16:08	
2,4,6-Trichlorophenol	mg/L	ND	0.10	08/24/21 16:08	
2,4-Dinitrotoluene	mg/L	ND	0.10	08/24/21 16:08	
2-Methylphenol(o-Cresol)	mg/L	ND	0.10	08/24/21 16:08	
3&4-Methylphenol(m&p Cresol)	mg/L	ND	0.10	08/24/21 16:08	
Hexachloro-1,3-butadiene	mg/L	ND	0.10	08/24/21 16:08	
Hexachlorobenzene	mg/L	ND	0.10	08/24/21 16:08	
Hexachloroethane	mg/L	ND	0.10	08/24/21 16:08	
Nitrobenzene	mg/L	ND	0.10	08/24/21 16:08	
Pentachlorophenol	mg/L	ND	0.25	08/24/21 16:08	
Pyridine	mg/L	ND	0.10	08/24/21 16:08	
2,4,6-Tribromophenol (S)	%	96	20-130	08/24/21 16:08	
2-Fluorobiphenyl (S)	%	64	25-100	08/24/21 16:08	
2-Fluorophenol (S)	%	27	10-90	08/24/21 16:08	
Nitrobenzene-d5 (S)	%	69	29-137	08/24/21 16:08	
Phenol-d6 (S)	%	21	10-92	08/24/21 16:08	
Terphenyl-d14 (S)	%	59	26-141	08/24/21 16:08	

METHOD BLANK: 1105274 Matrix: Water

Associated Lab Samples: 20217655001, 20217655003, 20217655005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	mg/L	ND	0.10	08/24/21 17:02	
2,4,5-Trichlorophenol	mg/L	ND	0.25	08/24/21 17:02	
2,4,6-Trichlorophenol	mg/L	ND	0.10	08/24/21 17:02	
2,4-Dinitrotoluene	mg/L	ND	0.10	08/24/21 17:02	
2-Methylphenol(o-Cresol)	mg/L	ND	0.10	08/24/21 17:02	
3&4-Methylphenol(m&p Cresol)	mg/L	ND	0.10	08/24/21 17:02	
Hexachloro-1,3-butadiene	mg/L	ND	0.10	08/24/21 17:02	
Hexachlorobenzene	mg/L	ND	0.10	08/24/21 17:02	
Hexachloroethane	mg/L	ND	0.10	08/24/21 17:02	
Nitrobenzene	mg/L	ND	0.10	08/24/21 17:02	
Pentachlorophenol	mg/L	ND	0.25	08/24/21 17:02	
Pyridine	mg/L	ND	0.10	08/24/21 17:02	
2,4,6-Tribromophenol (S)	%	112	20-130	08/24/21 17:02	
2-Fluorobiphenyl (S)	%	84	25-100	08/24/21 17:02	
2-Fluorophenol (S)	%	36	10-90	08/24/21 17:02	

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QUALITY CONTROL DATA

Project: Project No. 10456-02
Pace Project No.: 20217655

METHOD BLANK: 1105274 Matrix: Water
Associated Lab Samples: 20217655001, 20217655003, 20217655005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrobenzene-d5 (S)	%	89	29-137	08/24/21 17:02	
Phenol-d6 (S)	%	26	10-92	08/24/21 17:02	
Terphenyl-d14 (S)	%	85	26-141	08/24/21 17:02	

LABORATORY CONTROL SAMPLE: 1105690

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	mg/L	0.5	0.20	39	31-100	
2,4,5-Trichlorophenol	mg/L	0.5	0.32	64	35-109	
2,4,6-Trichlorophenol	mg/L	0.5	0.30	60	35-112	
2,4-Dinitrotoluene	mg/L	0.5	0.33	66	36-110	
2-Methylphenol(o-Cresol)	mg/L	0.5	0.24	47	25-98	
3&4-Methylphenol(m&p Cresol)	mg/L	1	0.47	47	24-97	
Hexachloro-1,3-butadiene	mg/L	0.5	0.30	59	26-121	
Hexachlorobenzene	mg/L	0.5	0.28	56	35-115	
Hexachloroethane	mg/L	0.5	0.23	46	26-105	
Nitrobenzene	mg/L	0.5	0.29	59	41-129	
Pentachlorophenol	mg/L	0.5	0.33	66	10-105	
Pyridine	mg/L	0.5	.09J	18	10-99	
2,4,6-Tribromophenol (S)	%			86	20-130	
2-Fluorobiphenyl (S)	%			71	25-100	
2-Fluorophenol (S)	%			31	10-90	
Nitrobenzene-d5 (S)	%			75	29-137	
Phenol-d6 (S)	%			22	10-92	
Terphenyl-d14 (S)	%			74	26-141	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1105691 1105692

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		20217655001 Result	Spike Conc.	Spike Conc.	Conc.								
1,4-Dichlorobenzene	mg/L	ND	0.5	0.5	0.24	0.28	48	57	20-106	17	20		
2,4,5-Trichlorophenol	mg/L	ND	0.5	0.5	0.46	0.48	92	96	16-122	5	20		
2,4,6-Trichlorophenol	mg/L	ND	0.5	0.5	0.44	0.46	87	92	16-124	5	20		
2,4-Dinitrotoluene	mg/L	ND	0.5	0.5	0.46	0.49	92	97	20-121	6	20		
2-Methylphenol(o-Cresol)	mg/L	ND	0.5	0.5	0.31	0.31	62	61	10-111	2	20		
3&4-Methylphenol(m&p Cresol)	mg/L	ND	1	1	0.63	0.62	63	62	10-110	2	20		
Hexachloro-1,3-butadiene	mg/L	ND	0.5	0.5	0.39	0.39	78	79	17-123	1	20		
Hexachlorobenzene	mg/L	ND	0.5	0.5	0.35	0.39	70	78	22-121	11	20		
Hexachloroethane	mg/L	ND	0.5	0.5	0.27	0.32	55	65	16-111	16	20		
Nitrobenzene	mg/L	ND	0.5	0.5	0.38	0.42	76	83	17-144	9	20		
Pentachlorophenol	mg/L	ND	0.5	0.5	0.45	0.48	89	96	10-108	8	20		
Pyridine	mg/L	ND	0.5	0.5	ND	0.11	20	21	10-110		20		

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QUALITY CONTROL DATA

Project: Project No. 10456-02

Pace Project No.: 20217655

Parameter	Units	1105691		1105692		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		20217655001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
2,4,6-Tribromophenol (S)	%					104	104	20-130			
2-Fluorobiphenyl (S)	%					83	85	25-100			
2-Fluorophenol (S)	%					40	32	10-90			
Nitrobenzene-d5 (S)	%					85	89	29-137			
Phenol-d6 (S)	%					30	24	10-92			
Terphenyl-d14 (S)	%					79	89	26-141			

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QUALITY CONTROL DATA

Project: Project No. 10456-02
Pace Project No.: 20217655

QC Batch: 234526	Analysis Method: SW-846 7.3.4.2
QC Batch Method: SW-846 7.3.4.2	Analysis Description: 734S Reactive Sulfide
	Laboratory: Pace Analytical Services - New Orleans

Associated Lab Samples: 20217655001, 20217655003, 20217655005

METHOD BLANK: 1104136 Matrix: Solid
Associated Lab Samples: 20217655001, 20217655003, 20217655005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Reactive	mg/kg	ND	50.0	08/20/21 08:14	

LABORATORY CONTROL SAMPLE: 1104137

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Reactive	mg/kg	500	441	88	1-110	

MATRIX SPIKE SAMPLE: 1104139

Parameter	Units	20217712001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Reactive	mg/kg	<50.0	500	441	84	1-110	

SAMPLE DUPLICATE: 1104138

Parameter	Units	20217712001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Reactive	mg/kg	<50.0	ND		20	

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QUALITY CONTROL DATA

Project: Project No. 10456-02

Pace Project No.: 20217655

QC Batch:	234648	Analysis Method:	EPA 9045
QC Batch Method:	EPA 9045	Analysis Description:	9045 pH
		Laboratory:	Pace Analytical Services - New Orleans

Associated Lab Samples: 20217655001, 20217655003, 20217655005

LABORATORY CONTROL SAMPLE: 1104977

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
pH at 25 Degrees C	Std. Units	6	6.0	100	97-103	

SAMPLE DUPLICATE: 1104978

Parameter	Units	20217695001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	5.6	5.7	3	20	

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QUALITY CONTROL DATA

Project: Project No. 10456-02
Pace Project No.: 20217655

QC Batch: 234525	Analysis Method: SW-846 7.3.3.2
QC Batch Method: SW-846 7.3.3.2	Analysis Description: 733C Reactive Cyanide
	Laboratory: Pace Analytical Services - New Orleans

Associated Lab Samples: 20217655001, 20217655003, 20217655005

METHOD BLANK: 1104132 Matrix: Solid
Associated Lab Samples: 20217655001, 20217655003, 20217655005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/kg	ND	25.0	08/20/21 10:29	

LABORATORY CONTROL SAMPLE: 1104133

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	100	ND	12	1-110	

MATRIX SPIKE SAMPLE: 1104135

Parameter	Units	20217712001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	<25.0	100	ND	4	1-110	

SAMPLE DUPLICATE: 1104134

Parameter	Units	20217712001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide, Reactive	mg/kg	<25.0	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Project No. 10456-02

Pace Project No.: 20217655

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

ANALYTE QUALIFIERS

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Project No. 10456-02
Pace Project No.: 20217655

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
20217655001	21-122 B-1 Upper/Lower	EPA 3010	234829	EPA 6010	234833
20217655003	21-122 B-2 Upper/Lower	EPA 3010	234829	EPA 6010	234833
20217655005	21-122 B-3 Upper/Lower	EPA 3010	234829	EPA 6010	234833
20217655001	21-122 B-1 Upper/Lower	EPA 7470	234834	EPA 7470	234910
20217655003	21-122 B-2 Upper/Lower	EPA 7470	234834	EPA 7470	234910
20217655005	21-122 B-3 Upper/Lower	EPA 7470	234834	EPA 7470	234910
20217655001	21-122 B-1 Upper/Lower	EPA 3535	234826	EPA 8270	234856
20217655003	21-122 B-2 Upper/Lower	EPA 3535	234826	EPA 8270	234856
20217655005	21-122 B-3 Upper/Lower	EPA 3535	234826	EPA 8270	234856
20217655001	21-122 B-1 Upper/Lower	EPA 8260	234861		
20217655003	21-122 B-2 Upper/Lower	EPA 8260	234861		
20217655005	21-122 B-3 Upper/Lower	EPA 8260	234861		
20217655001	21-122 B-1 Upper/Lower	SW-846 7.1.2	234649		
20217655003	21-122 B-2 Upper/Lower	SW-846 7.1.2	234649		
20217655005	21-122 B-3 Upper/Lower	SW-846 7.1.2	234649		
20217655001	21-122 B-1 Upper/Lower	SW-846 7.3.4.2	234526	SW-846 7.3.4.2	234544
20217655003	21-122 B-2 Upper/Lower	SW-846 7.3.4.2	234526	SW-846 7.3.4.2	234544
20217655005	21-122 B-3 Upper/Lower	SW-846 7.3.4.2	234526	SW-846 7.3.4.2	234544
20217655001	21-122 B-1 Upper/Lower	EPA 9045	234648		
20217655003	21-122 B-2 Upper/Lower	EPA 9045	234648		
20217655005	21-122 B-3 Upper/Lower	EPA 9045	234648		
20217655001	21-122 B-1 Upper/Lower	SW-846 7.3.3.2	234525	SW-846 7.3.3.2	234581
20217655003	21-122 B-2 Upper/Lower	SW-846 7.3.3.2	234525	SW-846 7.3.3.2	234581
20217655005	21-122 B-3 Upper/Lower	SW-846 7.3.3.2	234525	SW-846 7.3.3.2	234581

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: **Ephraim Associates**

Address: **3489 St Stephens RD, Whistler, BC V8W 2R2**

Report To: **City of Whistler, 46101 Dept City Attorney, Whistler, BC V8W 2R2**

Customer Project Name/Number: **00-000-1871 mobile A 34033**

Phone: **(250) 376-8081** Site/Facility ID #: **10450-02**

Collected By (print): **P. Kasi** Purchase Order #: **00092490**

Sample Disposal: Return Same Day Next Day

Customer Sample ID: **Z1-112 P-1 1' MOE / lower SL**

Customer Sample ID	Matrix	Comp / Grab	Collected (or Composite Start) Date	Composite End Date	Res Cl	# of Cms
Z1-112 P-1 1' MOE / lower SL	SL	Comp	8/16/21	1030		1
Z1-112 B-1 1' MOE / lower SL	SL	Comp	8/16/21	1040		1
Z1-112 B-2 1' MOE / lower SL	SL	Comp	8/16/21	1105		1
Z1-112 B-3 1' MOE / lower SL	SL	Comp	8/16/21	1135		1
Z1-112 B-3 1' MOE / lower SL	SL	Comp	8/16/21	1135		1

LAB USE ONLY - Affix Workorder

MO# : 20217655

20217655

ALL SHADE

Container Preservative Type

Analyses

Lab Profile/Line

Lab Sample Receipt Checklist:

Custody Seals Present/Intact Y N

Custody Signatures Present Y N

Collector Signatures Present Y N

Bottles Intact Y N

Correct Bottles Y N

Sufficient Volume Y N

Samples Received on Ice Y N

VOA - Headspace Acceptable Y N

USDA Regulated Soils Y N

Samples in Holding Time Y N

Residual Chlorine Present Y N

Cl Strips: Y N

Sample pH Acceptable Y N

pH Strips: Y N

Sulfide Present Y N

Lead Acetate Strips: Y N

LAB USE ONLY: Lab Sample # / Comments

Type of Ice Used:	Met	Blue	Dry	None
SHO RT HOLDS PRESENT (<72 hours):	Y	N	N/A	
Lab Tracking #:	2580260			
Samples received via:	FEDEX	UPS	Client	Courier
Date/Time:	8/16/21	12:25		
Date/Time:	8/16/21	14:40		

Relinquished by/Company: (Signature) **P. Kasi / City of Whistler** Date/Time: **8-16-21** 1:00

Received by/Company: (Signature) **Samanta Wadley** Date/Time: **8/16/21** 14:40

Relinquished by/Company: (Signature) **Danny DeBorja** Date/Time: **8-16-21**

Received by/Company: (Signature) **Melissa SRTY** Date/Time: **8/16/21** 14:40

Temp Blank Received: Y N

Temp ID#: **1E-081**

Cooler 1 Temp Upon Receipt: **14.3** °C

Cooler 1 Therm Corr. Factor: **0** °C

Cooler 1 Corrected Temp: **14.3** °C

Comments:

Trip Blank Received: Y N

HCL MeOH TSP Other

Non Conformance(s): **NO**

Page: **1** of **1**

PRE-BID CONFERENCE

Mobile Bay Shore Habitat Acquisition and Restoration - Phase II

NFWF Task 7 – Implementation Activities

Three Mile Creek Dredging

Project No. 2020-2045-06

Mobile, Alabama
February 28, 2023

This meeting is for informational purposes only.



moffatt & nichol

Project Team

- › Owner – The City of Mobile
 - › Jennifer Greene
 - › Cody Reed
- › Funding Agency – National Fish and Wildlife Foundation (NFWF)
- › Engineer – Moffatt & Nichol, Inc.
 - › Gerald Songy – Engineer of Record
 - › Kate Dawson
 - › Meg Goecker

Sign-in Instructions


Outline of Bid Process

- A. Mandatory pre-bid conference.
- B. No Bid packages will be issued later than 24 hours after the Pre-Bid Conference. No questions will be addressed after 12:00 p.m. on **March 10th, 2023**.
- C. Sealed bids will be received by the City Clerk of the City of Mobile, Alabama, 205 Government Street, 9th Floor, South Tower, **until 2:30 p.m. local time, March 15th, 2022**. Received Bids will then be publicly opened and read in the first floor atrium.
- D. Project awarded to lowest responsive bidder as determined by the sum of the Base Bid.

Subcontracting Plan and DBE Utilization Report

› Attachment C of the Specifications (pages 54 – 60)

› **INSERT 0% AND SIGN IF YOU DO NOT PLAN TO USE A DBE CONTRACTOR**



OFFICE OF SUPPLIER DIVERSITY
CITY OF MOBILE
Subcontracting and Major Supplier Plan

Contact Office of Supplier Diversity for questions on completing this form.
Via email: Archnique.kidd@cityofmobile.org
251.208.7967
205 Government Street, 4th Floor

Bidders and Proposers – Please complete and submit these forms as required by your City of Mobile Bid or Proposal Specification.

This document provides information to the City of Mobile about the subcontractors and major suppliers you intend to use to complete this contract. **Failure to submit this form, when so required by the bid or proposal specification, will render your bid non-responsible.** Not all specifications require this form to be completed, or may require its completion under varying circumstances. Refer to the specification for direction.

The City of Mobile will use this form to:

- Understand your intended use of subcontractors and major suppliers as part of your bid/proposal submission.
- Evaluate your capability to complete the performance of this contract.
- Determine your use of Disadvantaged Business Enterprises (DBEs) as subcontractors and suppliers.
- For certain contracts, assess whether you exercised "good faith efforts" to use DBE subcontractors and suppliers for at least 15% of the value of your bid/proposal amount. (See City of Mobile City Code Sec. 14-2.)

Include this form with your bid/proposal submission. Should your bid be considered the lowest responsible bid, you will have the opportunity to update this form at contract signature. You also will be required to re-verify your information at contract conclusion.

The bid specification may require you to attempt in "good faith" to use DBE subcontractors and suppliers for at least 15% of the value of your bid in the performance of this contract. If you don't have that level of DBE subcontractor / supplier usage (as documented on Form 1), you are required to complete the "good faith effort" documentation on Form 2. **When so required, failure to adequately address the good faith effort factors on Form 2 will render your bid or proposal as non-responsive.** The determination whether the bid or proposal adequately demonstrates and documents a DBE subcontractor/supplier plan, or good faith efforts to complete such a plan, will be at the sole discretion of the City of Mobile. You are encouraged to work with the City of Mobile Supplier Diversity Manager when preparing this form.

About "DBEs": The City of Mobile considers businesses owned by minorities, women, or disabled veterans to be DBEs. Please consult with the City Supplier Diversity Manager for clarification or lists of certified DBEs.

About "Good Faith" Effort: The City of Mobile expects contractors holding large contracts to recruit and engage DBEs to be a part of their team. If the specification sets, and you cannot meet, the 15% target, you must show us how you attempted to recruit and engage DBEs to meet this target. This helps the City identify DBE market weaknesses for development, and ensures all bidders are equally considering this obligation in preparing a bid. The "good faith effort" factors on Form 2 are not intended to be a mandatory, exhaustive, or exclusive. They are a tool to help you, and to help the City consistently and fairly consider your effort.

Page 1 of 5
Subcontractor/Supplier Plan

Page 54 of 173

OFFICE OF SUPPLIER DIVERSITY
CITY OF MOBILE
DBE Compliance
DBE UTILIZATION REPORT

Return to Office of Supplier Diversity
Via email: archnique.kidd@cityofmobile.org
or
P.O. Box 1948
Mobile, AL 36633

CONTRACTOR:		Certified DBE: YES NO	Contract Start Date:		
DESCRIPTION:			Estimated Completion Date:		
This report is for the month of: (CHECK ONE):		JAN FEB MARCH	APR MAY JUNE	JULY AUG SEPT	OCT NOV DEC
Original Contract Amount	Total Amount of Contract Changes (change orders or amendments)	Final Contract Amount (include contract changes)	Payments to Date from City of Mobile	OFFICE USE ONLY (Verification)	
\$	\$	\$	\$		
<p>Instructions: List all DBEs utilized on the contract, whether or not the firms were originally listed for DBE goal credit. List actual amount paid to each DBE firm. If the established Percentage is not being met, please include a narrative description of the progress being made in DBE participation.</p>					
DBE SUBCONTRACTOR	DBE DESCRIPTION OF WORK	DBE SUBCONTRACT AMOUNT	DBE PAYMENTS THIS REPORT	PAYMENTS TO DATE	OFFICE USE ONLY (Verification)
		\$	\$	\$	
		\$	\$	\$	
		\$	\$	\$	
		\$	\$	\$	
TOTALS		\$	\$	\$	
<p>I HEREBY CERTIFY THAT THE INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT. SUPPORTING DOCUMENTATION IS ON FILE AND IS AVAILABLE FOR INSPECTION BY CITY OF MOBILE OFFICE OF SUPPLIER DIVERSITY PERSONNEL AT ANY TIME.</p>					
<p>PRINT NAME: _____</p> <p>SIGNATURE: _____ (Title) _____ (Date)</p>					

DBE Utilization Report

Project Area



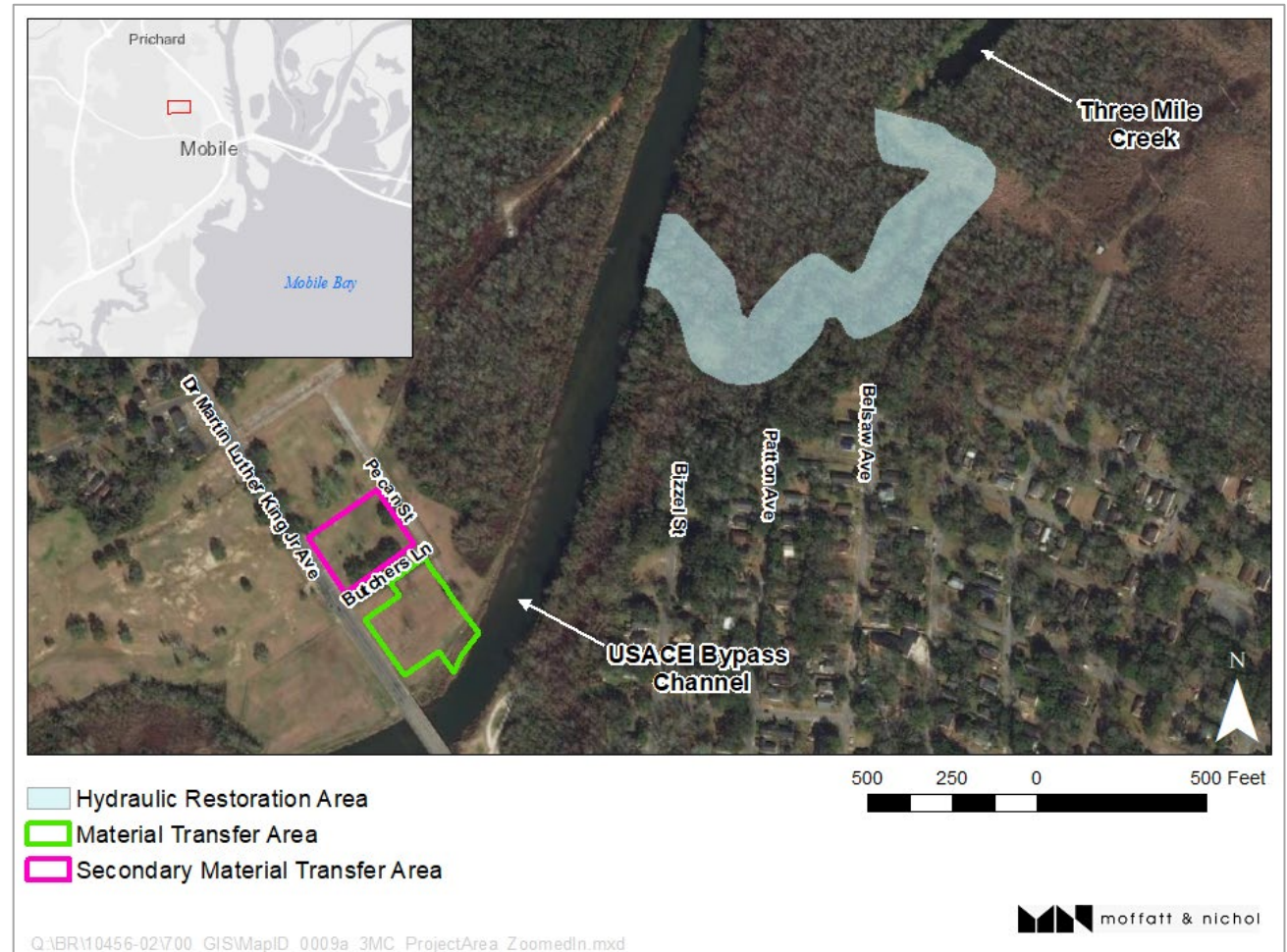
**PROJECT
LOCATION**



LOCATION MAP
SCALE: NTS

Project Overview

- › Urbanization of the region and channelization of the creek have ultimately resulted in sedimentation and a blockage which prohibits flow through a segment of the creek.
- › This causes stagnant water which reduces levels of dissolved oxygen and impairs water quality.
- › Project Goal:
 - › reestablishment of flow through the creek
 - › improved water quality
 - › enhanced habitat quality as a result of restoring the historic creek channel



Project

The Three Mile Creek Restoration Project proposes to remove accumulated sediment and vegetation within an approx. 1,800 linear foot segment of the historic alignment to restore the creek.

Material to be transported to an approved off-site material disposal facility.

Outline of Bid Documents

- › Construction Drawings – 22 Sheets

- › Specifications –

- I. Advertisement for Bids
- II. Instructions to Bidders
- III. Proposal
 - I. Contract time: **215 calendar days**
- IV. Bid Bond
- V. Labor and Materials Bond
- VI. Performance Bond
- VII. Certificate of Contractor's and Subcontractor's Insurance
- VIII. Special Provisions
- IX. Articles of Agreement
- X. Supplemental Specifications

- › Specifications Attachments –

- A. Location
- B. Contractors Insurance Certification
- C. Subcontracting Plan, E-Verify Affidavit and **DBE Utilization Report**
- D. Certifications, Affidavits, & Project Closeout
- E. Sign Details
- F. Geotechnical and Soil Testing Reports
- G. Project Addendums
- H. USACE and ADEM Permits
- I. Design Survey Information

NOTE: DBE Utilization report must be filled out by all bidders regardless of whether bidders plan to utilize a DBE firm.

Bid Form

ITEM NO.	DESCRIPTION	QTY	UNIT
1	MOBILIZATION (600-A)	1	LS
2	GEOMETRIC CONTROLS (680)	1	LS
3	CLEARING AND GRUBBING (201-A)	1	LS
4	DREDGING AND MATERIAL DISPOSAL (210-C)	21,202	CY
5	TEMPORARY SOIL EROSION AND TURBIDITY CONTROLS (665)	1	LS
6	TRAFFIC CONTROL (740-A)	1	LS

Specifications - Utilities

- › 13. It will be the Contractor's responsibility to determine the exact location of all existing utilities, whether public or private, and make the necessary adjustments as required to construct the project. Prior to construction, the Contractor shall notify all utility companies to obtain information on locations, depths, etc. of their utilities.
 - › The utility companies, directed by the Project Manager unless provided for in this contract, shall undertake any relocation and/or adjustments of utilities. The Contractor shall cooperate with the utility companies and provide assistance in excavation for such adjustments and relocation work, if requested. This work will be paid for under the appropriate items of work for excavation and borrow.
- › 23. All water and sanitary sewer work shall comply with the Mobile Area Water and Sewer System (MAWSS) Standard Specifications, latest edition. All MAWSS work, whether by prime or subcontractor, shall be accomplished by an experienced contractor, familiar with MAWSS construction and specifications.
 - › The Engineer or Project Manager may require the Contractor to provide necessary documentation explaining such experience before permission to accomplish work is granted.

Specifications - Environmental

- › 34. The Contractor shall be responsible for implementing all erosion control BMPs on City construction projects and for all sediment within and leaving the construction site until the project is accepted by the City. Severe penalties will be imposed to ensure compliance.
- › 40. The Contractor shall be solely responsible for complete compliance with all requirements of the Department of the Army (Corps of Engineers) Permit Number SAM-2021-00187-JCC, and other regulatory agencies having jurisdiction over this work relation to dredging operations.
 - › This shall include, but may not be limited to, Section 401 Water Quality Certification and the State of Alabama Coastal Consistency Concurrence issued by the State of Alabama Department of Environmental Management, and the Alabama Department of Environmental Management permit.
- › 41. Contractor shall immediately document the date and location of each observed Apple Snail (*Pomacea maculata*) and Apple Snail Egg observed near the project site during construction and notify the Engineer and Owner immediately.



Plans – General Notes

4. ALL AREAS OUTSIDE THE "CONSTRUCTION LIMITS" WHICH ARE DAMAGED BY THE CONTRACTOR, SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION. THE RESTORATION SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER. CONSTRUCTION LIMITS SHALL INCLUDE THE FOLLOWING: HYDRAULIC RESTORATION AREA (AND 25' BUFFER FOR CONSTRUCTION), MATERIAL TRANSFER AREA, SECONDARY MATERIAL TRANSFER AREA, AND CONTRACTOR HAUL ROUTES SHOWN ON SHEET G-101.

13. CONTRACTOR SHALL USE TURBIDITY CONTROLS AS NECESSARY TO CONTROL TURBIDITY PLUMES. TURBIDITY SHALL BE KEPT <50 NTU ABOVE BACKGROUND TURBIDITY VALUES AS MEASURED AT A POINT 400FT FROM THE HYDRAULIC RESTORATION AREA .

17. ESTIMATED RANGE OF DRAFTS FOR VESSELS TO BE USED FOR CONSTRUCTION.

WORK BOATS	4-6 FT
CREW BOATS.....	2-4 FT
WORK BARGES, FUEL BARGES.....	2-6 FT
SMALL BARGE MOUNTED CLAMSHELL OR EXCAVATOR.....	4-6 FT

19. ALL CLEARED AND GRUBBED MATERIAL SHALL BE PROPERLY DISPOSED AT AN APPROVED DISPOSAL FACILITY. ON-SITE DISPOSAL OR BURNING SHALL NOT BE ALLOWED.

Plans – General Notes

4. THE DISPOSAL OF SEDIMENT, TREES, BRUSH & OTHER PROJECT RELATED DEBRIS IN ANY WETLAND, STREAM, CORRIDOR, OR OTHER SURFACE WATER IS PROHIBITED. TREES, BRUSH, OTHER DEBRIS, EXCESS SOIL & OTHER MATERIALS GENERATED FROM PROJECT CONSTRUCTION MUST BE REMOVED TO AN APPROVED DISPOSAL LOCATION.
2. ACCESS TO THE PROJECT SITE SHALL USE RESIDENTIAL CITY ROADS. THE CONTRACTOR THEREFORE WILL BE REQUIRED TO VIDEO DOCUMENT THE CONDITION OF THE CITY STREET PRIOR TO CONSTRUCTION AND AFTER CONSTRUCTION. ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY RESULTING FROM THE CONTRACTORS EQUIPMENT, MATERIAL, ETC.. ACCESS WILL BE REPAIRED TO PRE-EXISTING CONDITIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.
3. MINIMAL EXCAVATION MAY BE REQUIRED FOR THE CONTRACTOR TO REACH THE SITE USING THE USACE BYPASS CHANNEL. IF EXCAVATION IS NECESSARY, EXCAVATED MATERIAL VOLUME MUST NOT EXCEED 1,000 CY & SHALL BE PLACED IN THE MATERIAL TRANSFER AREA FOR DEWATERING & DISPOSED AT AN APPROVED DISPOSAL FACILITY.

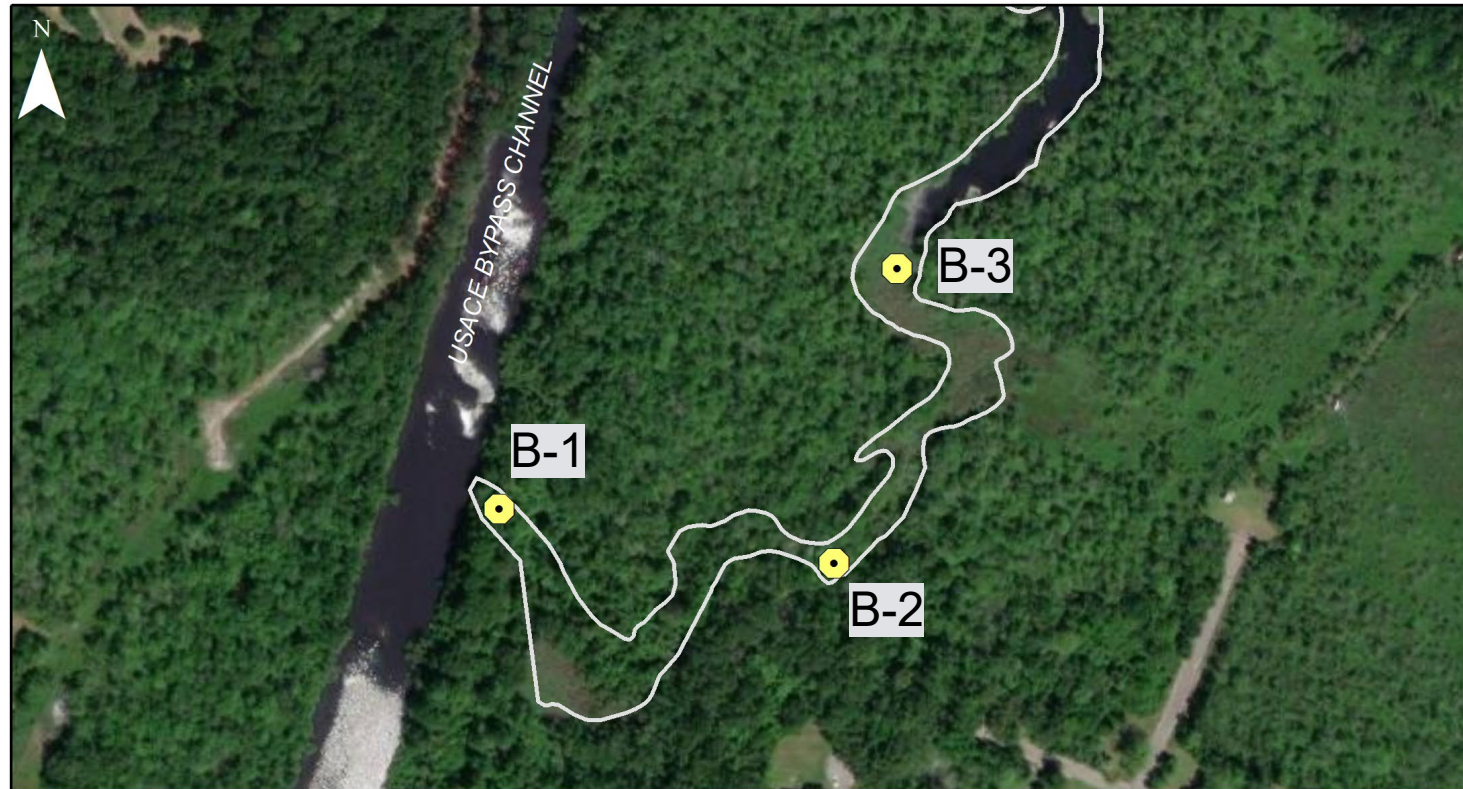
Excavations and Temporary Fill Quantities

EXCAVATIONS	VOLUME		AREA	
HYDRAULIC RESTORATION AREA	21,202	CY	4.1	ACRES
TEMPORARY FILL	VOLUME		AREA	
MATERIAL TRANSFER AREA	(SEE NOTES)	CY	1.4	ACRES
SECONDARY MATERIAL TRANSFER AREA	(SEE NOTES)	CY	1.1	ACRES



NOTES

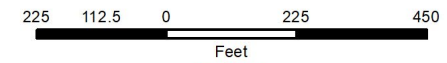
1. FILL WITHIN THE MATERIAL TRANSFER AREA(S) WILL BE TEMPORARILY STOCKPILED, AND WILL BE HAULED OFF TO A MATERIAL DISPOSAL SITE AN ESTIMATED FOUR (4) WEEKS AFTER TEMPORARY PLACEMENT.
2. TEMPORARY FILL INCLUDES TOTAL POTENTIAL MAXIMUM FILL OVER ENTIRE CONSTRUCTION DURATION OF THE PROJECT INCLUDING AN APPLIED BULKING FACTOR.
3. CONTRACTOR MAY USE MATERIAL TRANSFER AREA(S) AS NEEDED DURING CONSTRUCTION FOR DREDGE MATERIAL DEWATERING.

Geotechnical Data – Dredging Area



3MC Geotechnical
Data Collection

-  Proposed Primary Soil Borings
-  3MC (Historic Extents)



Geotechnical Data – Dredging Area

- › Boring 1: Black organic silt and clay and Gray sand with some silt
- › Boring 2: Gray silty sand with organics and dark gray silty clay with organics
- › Boring 3: Gray silty clay with organics

BORING NUMBER: B-2

ELEV IN FEET	DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T.		ATTERBERG LIMITS		DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	UNIF CLASS
					N _i	W.C. %	LL	P.I.				
	0		Water									
	0		Gray silty sand w/ organics	1		45				14.5		
			Dark gray silty clay w/ organics	2		79				60.5		
	5		Gray sandy clay w/ organics & light gray sand	3		72				47.4		
	-5		Light gray sand with some silt	4								

BORING NUMBER: B-1

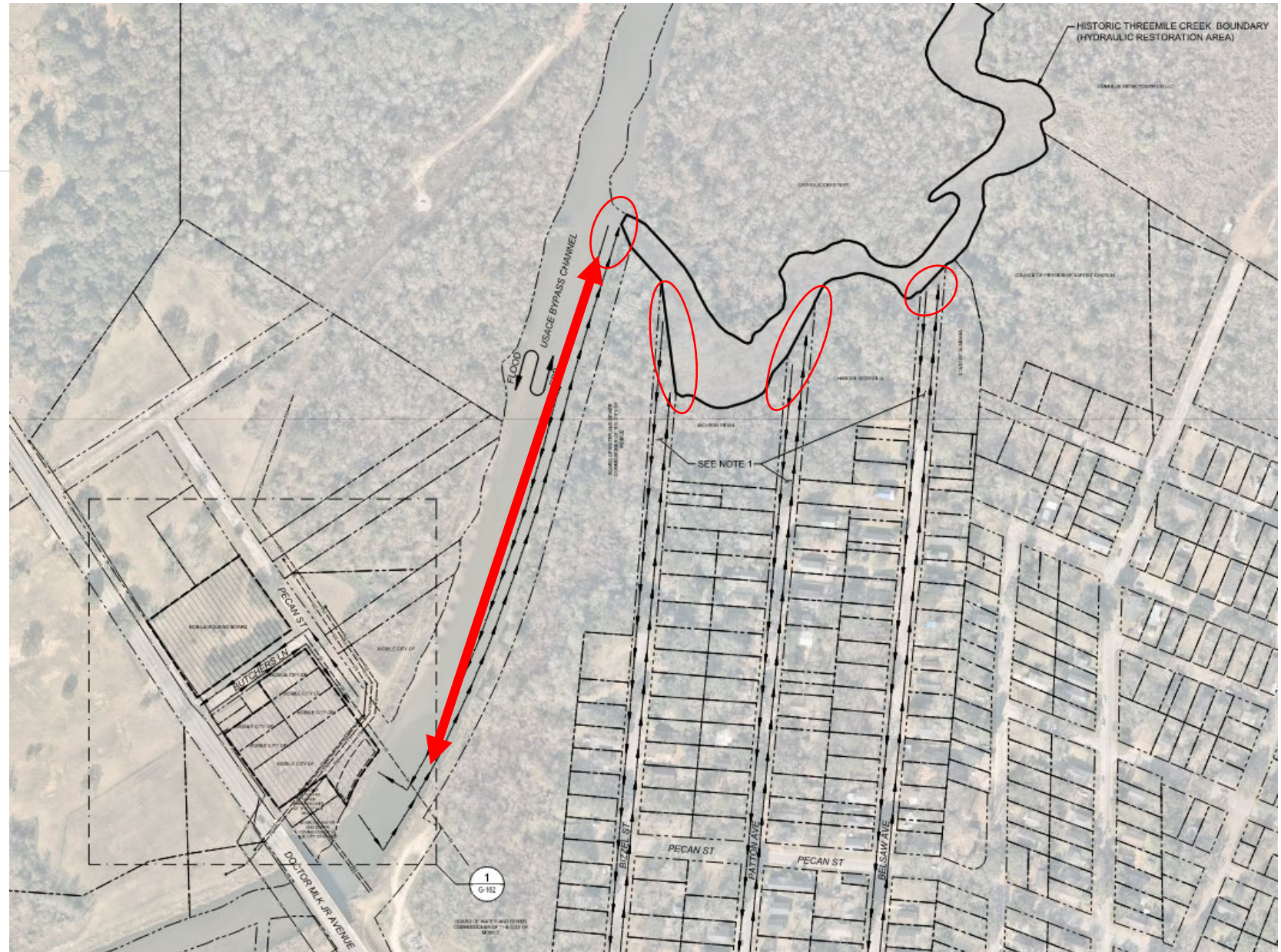
ELEV IN FEET	DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T.		ATTERBERG LIMITS		DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	UNIFIED CLASS
					N _i	W.C. %	LL	P.I.				
	0		Water									
			Black organic silt and clay	1		86				47.4		
			Gray sand with some silt	2		29				6.1		
			Black organic silt and clay	3								
			Gray sand with some silt	4								

BORING NUMBER: B-3

ELEV IN FEET	DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.P.T.		ATTERBERG LIMITS		DRY UNIT WT. pcf	% MINUS #200	SHEAR STRENGTH tsf	UNIFIED CLASS
					N _i	W.C. %	LL	P.I.				
	0		Water									
	5		Gray silty clay w/ organics	1		143				83.3		
			Light gray sand with some silt	2								

Site Access

- › Option to access site via land or water
 - › Land:
 - › City ROWs via Bizzel Ave, Patton Ave, and Belsaw Ave
 - › Water:
 - › USACE Bypass Channel



Site Access Photos (City ROWs)

End of Bizzel Ave



End of Patton Ave



End of Belsaw Ave



36. Working **hours** on certain streets will be limited. All working times, closures, etc., will be coordinated with the City of Mobile Traffic Engineering Department.

Site Access – Material Staging/Transfer Area



Site Access – USACE Bypass Channel

- › Water depths were recorded in August 2021 within the USACE Bypass channel between the Material Transfer Area and the Hydraulic Restoration Area.
- › Recorded depths were between 5 and 8 feet, with most measurements around 6 feet
- › Minor access dredging is permitted (under 1,000 CY) to access the site (if necessary)



Datums for 8737048, Mobile State Docks AL

NOTICE: All data values are relative to the NAVD88.

Elevations on NAVD88

Station: 8737048, Mobile State Docks, AL

T.M.: 90

Status: Accepted (Feb 5 2018)

Epoch: 1983-2001

Units: Feet

Datum: NAVD88

Control Station: 8741533 Pascagoula NOAA Lab, MS

Datum	Value	Description
MHHW	1.16	Mean Higher-High Water
MHW	1.07	Mean High Water
MTL	0.34	Mean Tide Level
MSL	0.33	Mean Sea Level
DTL	0.33	Mean Diurnal Tide Level
MLW	-0.40	Mean Low Water
MLLW	-0.49	Mean Lower-Low Water
NAVD88	0.00	North American Vertical Datum of 1988

Existing Site Conditions – Three Mile Creek

Creek entrance (USACE Bypass Channel)



Hydraulic Restoration Area North Entrance

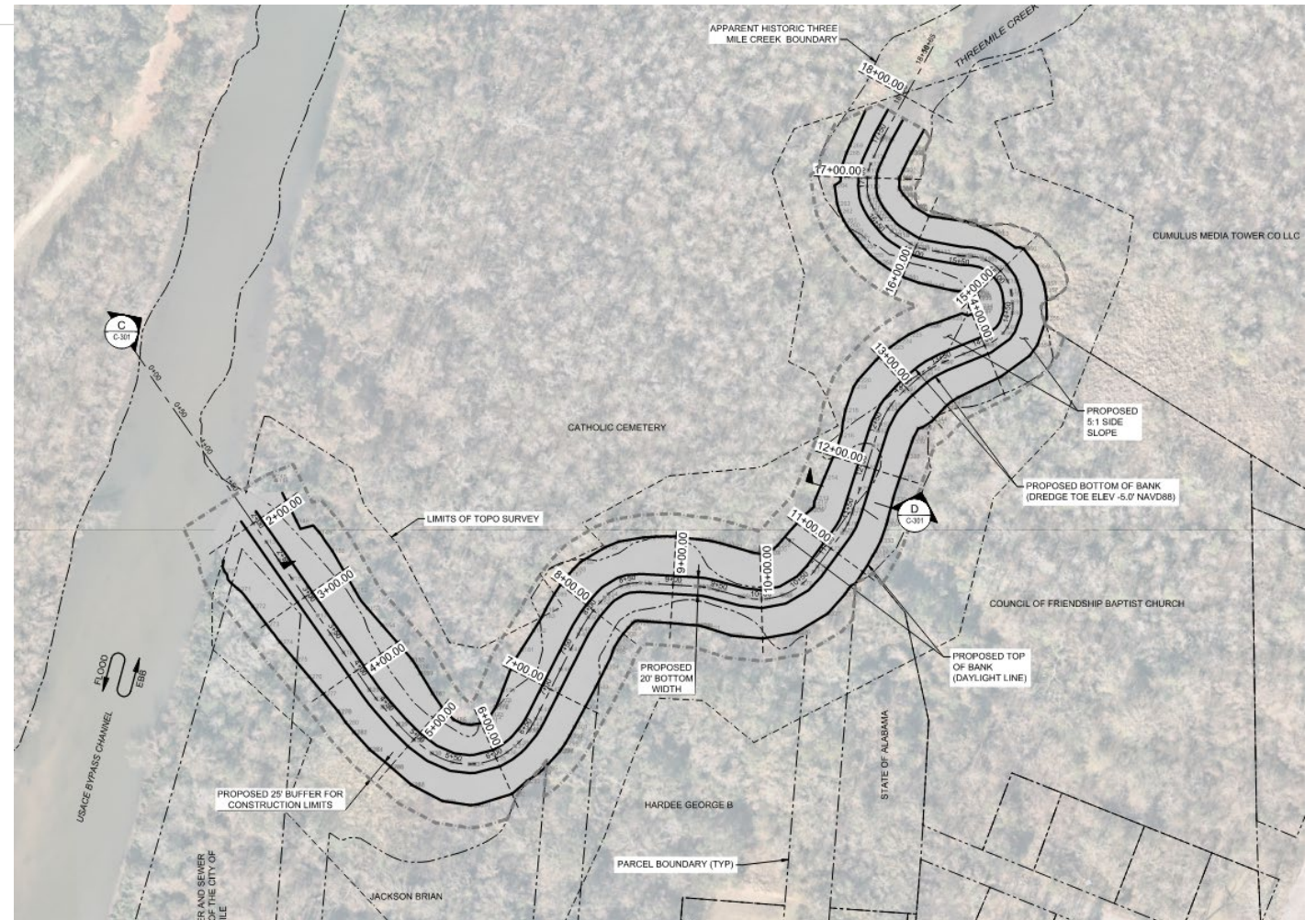


Hydraulic Restoration Area

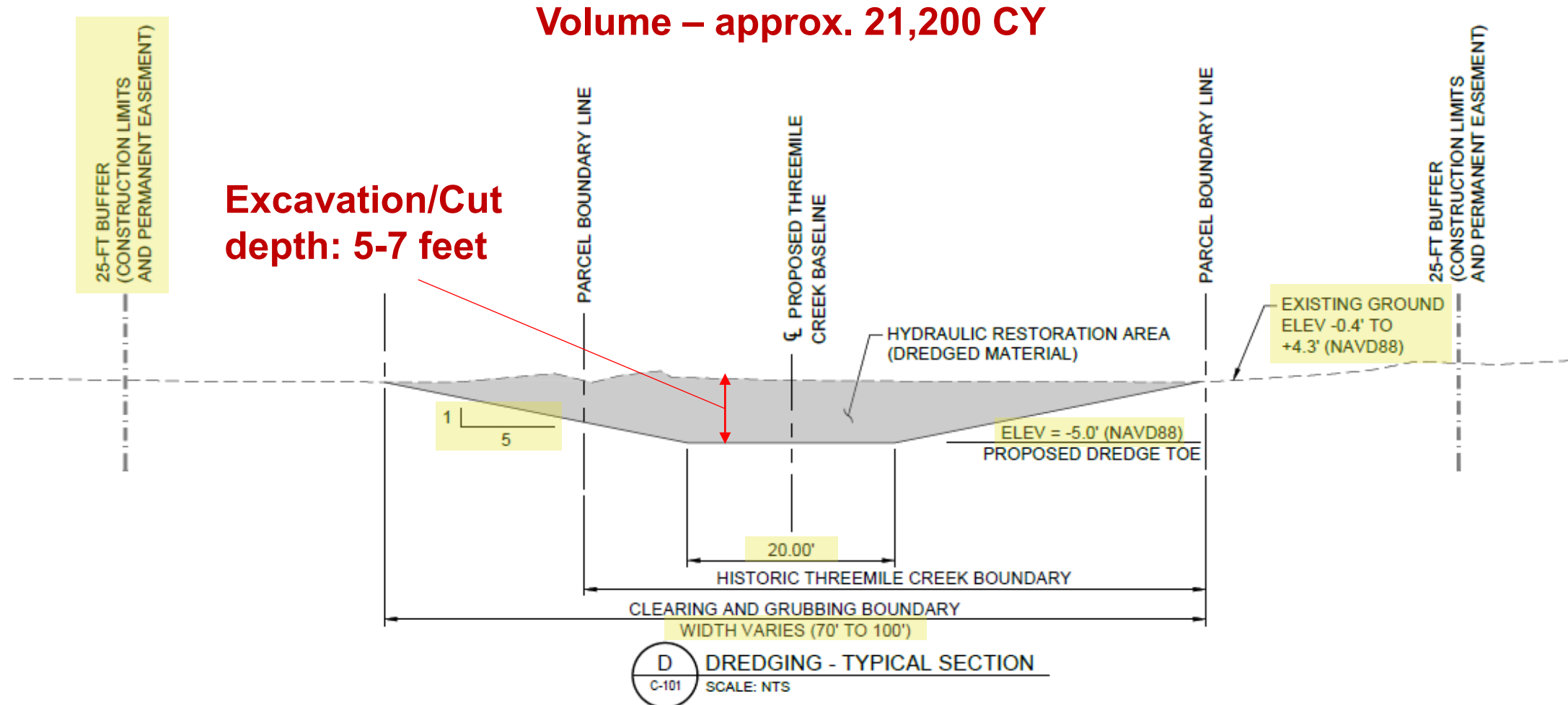


Hydraulic Restoration Area (Plan View)

- › Mostly within historic Threemile Creek parcel boundary
- › Drainage easements or landrights agreements have been finalized where Hydraulic Restoration Area encroaches onto surrounding parcels



Hydraulic Restoration Area (Dredge Template)

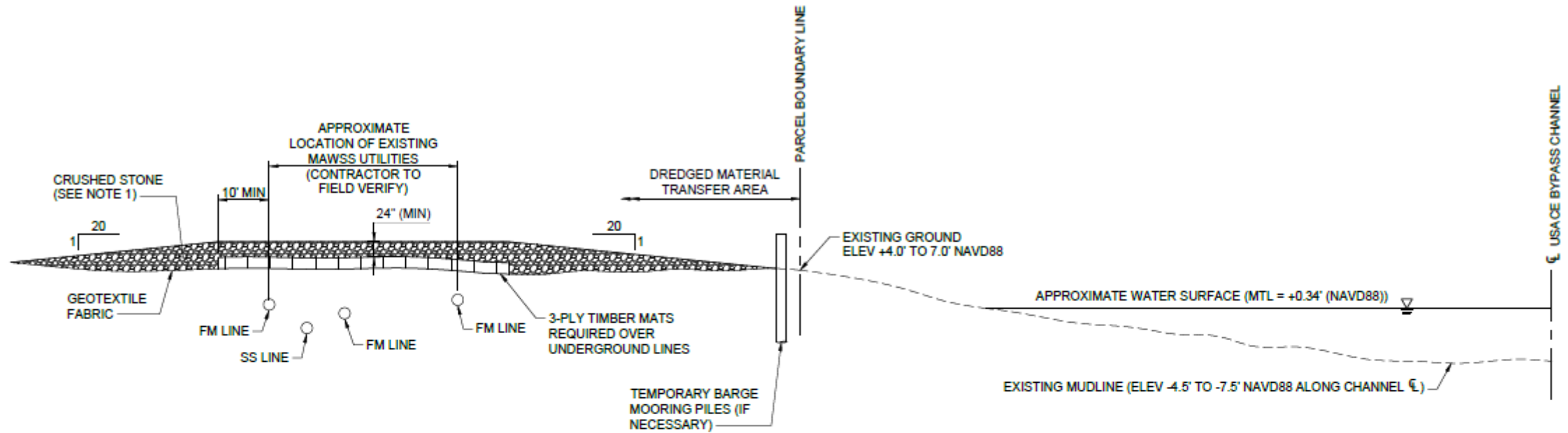


Material Placement

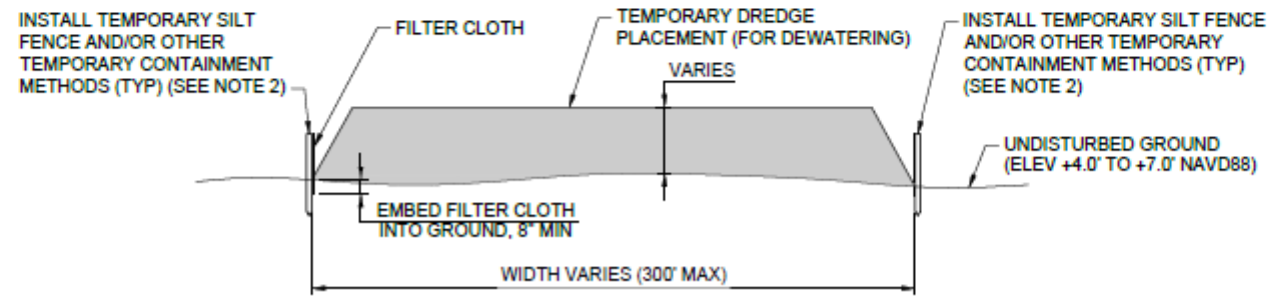
- › Primary Staging/Material Transfer Area is **1.4 acres**
- › Secondary Staging/Material Transfer area is **1.1 acres**
- › Native material within the material transfer areas may be graded to construct temporary berms for containment, but the areas must be returned to pre-construction condition prior to demobilization



Material Handling & Temporary Placement



A MATERIAL TRANSFER AREA (BURIED UTILITIES CROSSING) - TYPICAL SECTION
G-102 SCALE: NTS



B TEMPORARY DREDGE PLACEMENT - TYPICAL SECTION
G-102 SCALE: NTS

Material Disposal (sheet G-103)

- Three options for material disposal (or other engineer/owner-approved location)

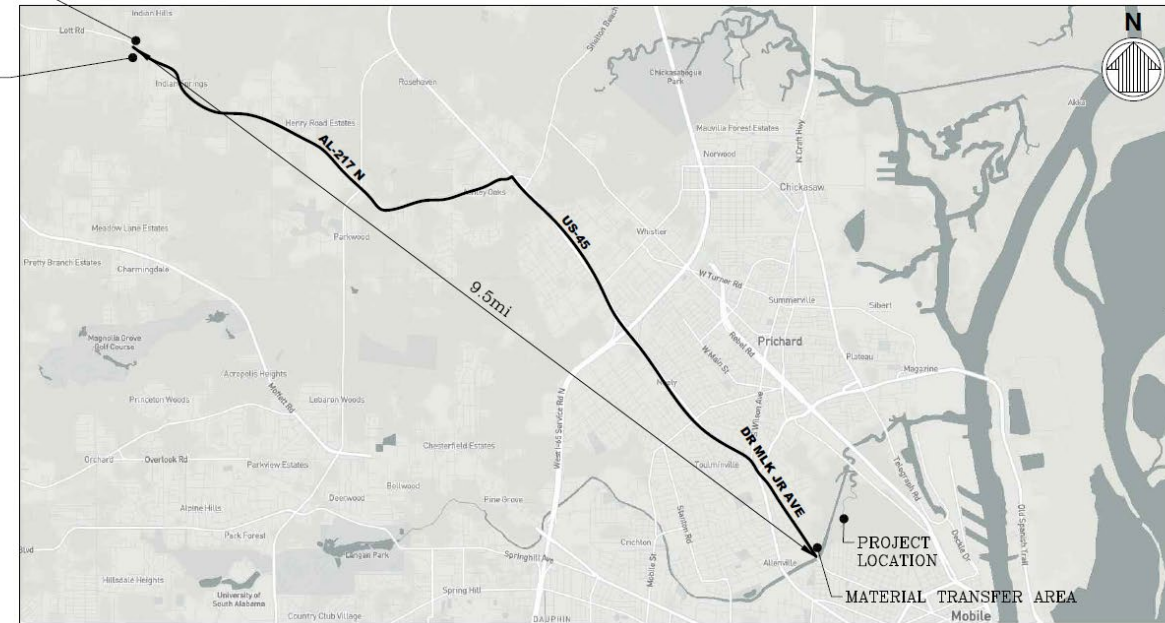


ESFELLER CORPORATION LANDFILL
8230 PADGETT SWITCH RD
IRVINGTON, AL 36544

MATERIAL DISPOSAL SITE 3
SCALE: NTS

BROWNLEE DIRT PIT
4460 LOTT RD
EIGHT MILE, AL 36613

LOTT ROAD LANDFILL
4429 W LOTT RD
EIGHT MILE, AL 36613



Questions

Closing Remarks

Contact

Jennifer Greene (jennifer.greene@cityofmobile.org)
Gerald Songy (gsongy@moffattnichol.com)

NATIONWIDE PERMIT 27
Aquatic Habitat Restoration,
Enhancement, and Establishment
Activities

Effective Date: March 19, 2017
(NWP Final Notice, 82 FR 4)

27. Aquatic Habitat Restoration, Enhancement, and Establishment Activities. Activities in waters of the United States associated with the restoration, enhancement, and establishment of tidal and non-tidal wetlands and riparian areas, the restoration and enhancement of non-tidal streams and other non-tidal open waters, and the rehabilitation or enhancement of tidal streams, tidal wetlands, and tidal open waters, provided those activities result in net increases in aquatic resource functions and services.

To be authorized by this NWP, the aquatic habitat restoration, enhancement, or establishment activity must be planned, designed, and implemented so that it results in aquatic habitat that resembles an ecological reference. An ecological reference may be based on the characteristics of an intact aquatic habitat or riparian area of the same type that exists in the region. An ecological reference may be based on a conceptual model developed from regional ecological knowledge of the target aquatic habitat type or riparian area.

To the extent that a Corps permit is required, activities authorized by this NWP include, but are not limited to: the removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms, as well as discharges of dredged or fill material to restore appropriate stream channel configurations after small water control structures, dikes, and berms, are removed; the installation of current deflectors; the enhancement, rehabilitation, or re-establishment of riffle and pool stream structure; the placement of in-stream habitat structures; modifications of the stream bed and/or banks to enhance, rehabilitate, or re-establish stream meanders; the removal of stream barriers, such as undersized culverts, fords, and grade control structures; the backfilling of artificial channels; the removal of existing drainage structures, such as drain tiles, and the filling, blocking, or reshaping of drainage ditches to restore wetland hydrology; the installation of structures or fills necessary to restore or enhance wetland or stream hydrology; the construction of small nesting islands; the construction of open water areas; the construction of oyster habitat over unvegetated bottom in tidal waters; shellfish seeding; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; re-establishment of submerged aquatic vegetation in areas where those plant communities previously existed; re-establishment of tidal wetlands in tidal waters where those wetlands previously existed; mechanized land clearing to remove non-native invasive, exotic, or nuisance vegetation; and other related activities. Only native plant species should be planted at the site.

This NWP authorizes the relocation of non-tidal waters, including non-tidal wetlands and streams, on the project site provided there are net increases in aquatic resource functions and services.

Except for the relocation of non-tidal waters on the project site, this NWP does not authorize the conversion of a stream or natural wetlands to another aquatic habitat type (e.g., the conversion of a stream to wetland or vice versa) or uplands. Changes in wetland plant communities that occur when wetland hydrology is more fully restored during wetland rehabilitation activities are not considered a conversion to another aquatic habitat type. This NWP does not authorize stream channelization. This NWP does not authorize the relocation of tidal waters or the

conversion of tidal waters, including tidal wetlands, to other aquatic uses, such as the conversion of tidal wetlands into open water impoundments.

Compensatory mitigation is not required for activities authorized by this NWP since these activities must result in net increases in aquatic resource functions and services.

Reversion. For enhancement, restoration, and establishment activities conducted: (1) In accordance with the terms and conditions of a binding stream or wetland enhancement or restoration agreement, or a wetland establishment agreement, between the landowner and the U.S. Fish and Wildlife Service (FWS), the Natural Resources Conservation Service (NRCS), the Farm Service Agency (FSA), the National Marine Fisheries Service (NMFS), the National Ocean Service (NOS), U.S. Forest Service (USFS), or their designated state cooperating agencies; (2) as voluntary wetland restoration, enhancement, and establishment actions documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or (3) on reclaimed surface coal mine lands, in accordance with a Surface Mining Control and Reclamation Act permit issued by the Office of Surface Mining Reclamation and Enforcement (OSMRE) or the applicable state agency, this NWP also authorizes any future discharge of dredged or fill material associated with the reversion of the area to its documented prior condition and use (i.e., prior to the restoration, enhancement, or establishment activities). The reversion must occur within five years after expiration of a limited term wetland restoration or establishment agreement or permit, and is authorized in these circumstances even if the discharge occurs after this NWP expires. The five-year reversion limit does not apply to agreements without time limits reached between the landowner and the FWS, NRCS, FSA, NMFS, NOS, USFS, or an appropriate state cooperating agency. This NWP also authorizes discharges of dredged or fill material in waters of the United States for the reversion of wetlands that were restored, enhanced, or established on prior-converted cropland or on uplands, in accordance with a binding agreement between the landowner and NRCS, FSA, FWS, or their designated state cooperating agencies (even though the restoration, enhancement, or establishment activity did not require a section 404 permit). The prior condition will be documented in the original agreement or permit, and the determination of return to prior conditions will be made by the Federal agency or appropriate state agency executing the agreement or permit. Before conducting any reversion activity the permittee or the appropriate Federal or state agency must notify the district engineer and include the documentation of the prior condition. Once an area has reverted to its prior physical condition, it will be subject to whatever the Corps Regulatory requirements are applicable to that type of land at the time. The requirement that the activity results in a net increase in aquatic resource functions and services does not apply to reversion activities meeting the above conditions. Except for the activities described above, this NWP does not authorize any future discharge of dredged or fill material associated with the reversion of the area to its prior condition. In such cases a separate permit would be required for any reversion.

Reporting. For those activities that do not require pre-construction notification, the permittee must submit to the district engineer a copy of: (1) The binding stream enhancement or restoration agreement or wetland enhancement, restoration, or establishment agreement, or a project description, including project plans and location map; (2) the NRCS or USDA Technical Service Provider documentation for the voluntary stream enhancement or restoration action or wetland restoration, enhancement, or establishment action; or (3) the SMCRA permit issued by OSMRE or the applicable state agency. The report must also include information on baseline ecological conditions on the project site, such as a delineation of wetlands, streams, and/or other aquatic habitats. These documents must be submitted to the district engineer at least 30 days prior to commencing activities in waters of the United States authorized by this NWP.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing any activity (see general condition 32), except for the following activities:

(1) Activities conducted on non-Federal public lands and private lands, in accordance with the terms and conditions of a binding stream enhancement or restoration agreement or wetland enhancement, restoration, or establishment agreement between the landowner and the FWS, NRCS, FSA, NMFS, NOS, USFS or their designated state cooperating agencies;

(2) Voluntary stream or wetland restoration or enhancement action, or wetland establishment action, documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or

(3) The reclamation of surface coal mine lands, in accordance with an SMCRA permit issued by the OSMRE or the applicable state agency.

However, the permittee must submit a copy of the appropriate documentation to the district engineer to fulfill the reporting requirement. (Authorities: Sections 10 and 404)

Note: This NWP can be used to authorize compensatory mitigation projects, including mitigation banks and in-lieu fee projects. However, this NWP does not authorize the reversion of an area used for a compensatory mitigation project to its prior condition, since compensatory mitigation is generally intended to be permanent.

Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

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

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

(c) The permittee understands and agrees that, if future operations by the United States 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 United States. No claim shall be made against the United States 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. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

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 United States 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 NWP 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, storm water management activities, and temporary and permanent road crossings, 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 United States during periods of low-flow or no-flow, or during low tides.

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. (a) No NWP 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.

(b) If a proposed NWP activity will 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, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) 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, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. Tribal Rights. No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

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 ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the

Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity 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 pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. 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 pre-construction notification. 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 activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species or critical habitat, or until ESA 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 the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWP.

(e) Authorization of an activity by an 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 FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States 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) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA

section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether “incidental take” permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to 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. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might 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 might have the potential to be affected by the proposed NWP activity 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 properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, 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 in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations

for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and so 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 to historic properties or that NHPA section 106 consultation has been completed.

(d) For non-federal permittees, 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. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity 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 (54 U.S.C. 306113) 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 permitted 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 a 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 United States 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 wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district

engineer may authorize activities under these NWP's 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 the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States 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 individual and cumulative adverse environmental effects are no more than 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 environmental effects of the proposed activity are no more than minimal, and provides an activity-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 only minimal adverse environmental effects.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored 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 restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting 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 minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) 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 no more than minimal adverse environmental effects. For the NWP, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)).

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) 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) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, 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)).

(5) 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.

(6) 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 (see 33 CFR 332.4(c)(1)(ii)).

(g) 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 NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, 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 an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible 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.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert 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 environmental effects of the activity to the no more than 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 U.S. EPA 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 United States 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 United States 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 implementation of 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 activity 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(1)(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 activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission is not authorized by NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (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. The request must specify the information needed 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 are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might 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 activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and 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, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity 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);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other 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 wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) 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 environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-Federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-Federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will 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, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(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 NWP and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, 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 (FWS, state natural resource or water quality agency, EPA, 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 notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental 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 pre-construction 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 of the proposed activity are no more than 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 pre-construction 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.

(4) 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.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed

activity. For a linear project, this determination will include an evaluation of the individual crossings of waters of the United States to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51, 52, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects. For those NWPs that have a waivable 300 linear foot limit for losses of intermittent and ephemeral stream bed and a 1/2-acre limit (i.e., NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52), the loss of intermittent and ephemeral stream bed, plus any other losses of jurisdictional waters and wetlands, cannot exceed 1/2-acre.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters (e.g., streams). The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, 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. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed

under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31, or to evaluate PCNs for activities authorized by NWPs 21, 49, and 50), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. 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 (see general condition 31).

F. Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term “discharge” means any discharge of dredged or fill material into waters of the United States.

Ecological reference: A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water’s surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the acres or linear feet of stream bed that are filled or excavated as a result of the regulated activity. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work

and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Protected tribal resources: Those natural resources and properties of traditional or customary religious or cultural importance, either on or off Indian lands, retained by, or reserved by or for, Indian tribes through treaties, statutes, judicial decisions, or executive orders, including tribal trust resources.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete project” is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of “independent utility”). Single and complete non-linear projects may not be “piecemealed” to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream’s course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWP, a waterbody is a jurisdictional water of the United States. If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of “waterbodies” include streams, rivers, lakes, ponds, and wetlands.

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

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

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

(c) The permittee understands and agrees that, if future operations by the United States 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 United States. No claim shall be made against the United States 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. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

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 United States 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 NWP 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, storm water management activities, and temporary and permanent road crossings, 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 United States during periods of low-flow or no-flow, or during low tides.

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. (a) No NWP 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.

(b) If a proposed NWP activity will 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, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) 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, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. Tribal Rights. No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

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 ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity 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 pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. 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 pre-construction notification. 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 activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species or critical habitat, or until ESA 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 the Corps.

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

(e) Authorization of an activity by an 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 FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States 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) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether “incidental take” permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to 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. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might 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 might have the potential to be affected by the proposed NWP activity 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 properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, 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 in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and so 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 to historic properties or that NHPA section 106 consultation has been completed.

(d) For non-federal permittees, 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. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity 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 (54 U.S.C. 306113) 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 permitted 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 a 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 United States are not authorized by NWP 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 wetlands adjacent to such waters.

(b) For NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, 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 the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States 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 individual and cumulative adverse environmental effects are no more than 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 environmental effects of the proposed activity are no more than minimal, and provides an activity-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 only minimal adverse environmental effects.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored 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 restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting 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 minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) 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 no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)).

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) 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) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, 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)).

(5) 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.

(6) 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 (see 33 CFR 332.4(c)(1)(ii)).

(g) 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 NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, 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 an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible 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.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert 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 environmental effects of the activity to the no more than 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 U.S. EPA 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 United States 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 United States 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 implementation of 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 activity 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(1)(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 activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission is not authorized by NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (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. The request must specify the information needed 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 are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might 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 activity;
- (3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;
- (4) A description of the proposed activity; the activity’s purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and 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, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity 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);
- (5) The PCN must include a delineation of wetlands, other special aquatic sites, and other 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 wetlands, other special aquatic sites, and other waters. Furthermore,

the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) 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 environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-Federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-Federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will 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, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(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 activity’s adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess

of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, 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 (FWS, state natural resource or water quality agency, EPA, 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 notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental 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 pre-construction 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 of the proposed activity are no more than 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 pre-construction 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.

(4) 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.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the individual crossings of waters of the United States to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51, 52, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects. For those NWPs that have a waivable 300 linear foot limit for losses of intermittent and

ephemeral stream bed and a 1/2-acre limit (i.e., NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52), the loss of intermittent and ephemeral stream bed, plus any other losses of jurisdictional waters and wetlands, cannot exceed 1/2-acre.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters (e.g., streams). The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, 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. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the

adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31, or to evaluate PCNs for activities authorized by NWPs 21, 49, and 50), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. 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 (see general condition 31).

F. Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term “discharge” means any discharge of dredged or fill material into waters of the United States.

Ecological reference: A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An

ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the acres or linear feet of stream bed that are filled or excavated as a result of the regulated activity. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated

with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Protected tribal resources: Those natural resources and properties of traditional or customary religious or cultural importance, either on or off Indian lands, retained by, or reserved by or for, Indian tribes through treaties, statutes, judicial decisions, or executive orders, including tribal trust resources.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP

authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of “independent utility”). Single and complete non-linear projects may not be “piecemealed” to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream’s course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWP, a waterbody is a jurisdictional water of the United States. If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of “waterbodies” include streams, rivers, lakes, ponds, and wetlands.

ADDITIONAL INFORMATION

This nationwide permit is effective March 19, 2017, and expires on March 18, 2022.

Information about the U.S. Army Corps of Engineers regulatory program, including nationwide permits, may also be found at <http://www.swf.usace.army.mil/Missions/Regulatory.aspx> and <http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx>

**2017 NATIONWIDE PERMIT (NWP) REGIONAL CONDITIONS
FOR THE STATE OF TEXAS**

The following regional conditions apply within the entire State of Texas:

1. For all discharges proposed for authorization under Nationwide Permits (NWP) 3, 6, 7, 12, 14, 18, 19, 21, 23, 25, 27, 29, 39, 40, 41, 42, 43, 44, 49, 51, and 52, into the following habitat types or specific areas, the applicant shall notify the appropriate District Engineer in accordance with the NWP General Condition 32, Pre-Construction Notification (PCN). The Corps of Engineers (Corps) will coordinate with the resource agencies as specified in NWP General Condition 32(d) (PCN). The habitat types or areas are:

- a. Pitcher Plant Bogs: Wetlands typically characterized by an organic surface soil layer and include vegetation such as pitcher plants (*Sarracenia* spp.) and/or sundews (*Drosera* spp.).
- b. Bald Cypress-Tupelo Swamps: Wetlands dominated by bald cypress (*Taxodium distichum*) and/or water tupelo (*Nyssa aquatic*).

2. For all activities proposed for authorization under any Nationwide Permit (NWP) at sites approved as compensatory mitigation sites (either permittee-responsible, mitigation bank and/or in-lieu fee) under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899, the applicant shall notify the appropriate District Engineer in accordance with the NWP General Condition 32 - Pre-Construction Notification prior to commencing the activity.

3. For all activities proposed for authorization under NWP 16, the applicant shall notify the appropriate District Engineer in accordance with the NWP General Condition 32 (Pre-Construction Notification) and must obtain an individual water quality certification (WQC) from the TCEQ. Work cannot begin under NWP 16 until the applicant has received written approval from the Corps and WQC.

NOTE: For all activities proposing to use equipment that has operated or been stored in a water body on the Texas list of zebra mussel (*Dreissena polymorpha*) infected water bodies, equipment should be decontaminated prior to relocation in accordance with Texas Administrative Code, Title 31, Part 2, Chapter 57, Subchapter A. The following decontamination Best Management Practices (BMPs), as a minimum, are indicated:

- a. Clean: Clean both the inside and outside of equipment and gear, by removing all plants, animals, and mud and thoroughly washing the equipment using a high pressure spray nozzle.
- b. Drain: Drain all water from receptacles before leaving the area, including livewells, bilges, ballast, and engine cooling water on boats.
- c. Dry: Allow time for your equipment to dry completely before relocating in other waters. Equipment should be dried prior to relocation. High temperature pressure washing (greater than or equal to 140F) or professional cleaning may be substituted for drying time.

The following regional condition only applies within the Albuquerque, Fort Worth, and Galveston Districts:

4. For all activities proposed for authorization under Nationwide Permit (NWP) 12 that involve a discharge of fill material associated with mechanized land clearing of wetlands dominated by native woody shrubs, the applicant shall notify the appropriate District Engineer in accordance with the NWP General Condition 32 – Pre-Construction Notification prior to commencing the activity. For the purpose of this regional condition, a shrub dominated wetland is characterized by woody vegetation less than 3.0 inches in diameter at breast height but greater than 3.2 feet in height, which covers 20% or more of the area. Woody vines are not included.

The following regional conditions apply within the Albuquerque District.

5. Nationwide Permit (NWP) 23 – Approved Categorical Exclusions. A pre-construction notification (PCN) to the District Engineer in accordance with General Condition 32 - PCN is required for all proposed activities under NWP 23.

6. Nationwide Permit (NWP) 27 – Aquatic Habitat Restoration, Establishment, and Enhancement Activities. For all proposed activities under NWP 27 that require pre-construction notification, a monitoring plan commensurate with the scale of the proposed restoration project and the potential for risk to the aquatic environment must be submitted to the Corps. (See “NWP 27 Guidelines” at <http://www.spa.usace.army.mil/Missions/RegulatoryProgramandPermits/NWP.aspx>).

7. Channelization. Nationwide Permit (NWP) General Condition 9 for Management of Water Flows is amended to add the following: Projects that would result in permanent channelization to previously un-channelized streams require pre-construction notification to the Albuquerque District Engineer in accordance with NWP General Condition 32 – Pre-Construction Notification.

8. Dredge and Fill Activities in Intermittent and Perennial Streams, and Special Aquatic Sites: For all activities subject to regulation under the Clean Water Act Section 404 in intermittent and perennial streams, and special aquatic sites (including wetlands, riffle and pool complexes, and sanctuaries and refuges), pre-construction notification (PCN) to the Albuquerque District Engineer is required in accordance with Nationwide Permit General Condition 32 - PCN.

9. Springs. For all discharges of dredged or fill material within 100 feet of the point of groundwater discharge of natural springs located in an aquatic resource, a pre-construction notification (PCN) is required to the Albuquerque District Engineer in accordance with Nationwide Permit General Condition 32 - PCN. A natural spring is defined as any location where ground water emanates from a point in the ground and has a defined surface water connection to another waters of the United States. For purposes of this regional condition, springs do not include seeps or other groundwater discharges which lack a defined surface water connection.

10. Suitable Fill. Use of broken concrete as fill or bank stabilization material is prohibited unless the applicant demonstrates that its use is the only practicable material (with respect to cost, existing technology, and logistics). Any applicant who wishes to use broken concrete as bank stabilization must provide notification to the Albuquerque District Engineer in accordance with Nationwide Permit General Condition 32 - Pre-Construction Notification along with justification for such use. Use of broken concrete with rebar or used tires (loose or formed into bales) is prohibited in all waters of the United States.

The following regional conditions apply only within the Fort Worth District.

11. For all discharges proposed for authorization under all Nationwide Permits (NWP) into the area of Caddo Lake within Texas that is designated as a “Wetland of International Importance” under the Ramsar Convention, the applicant shall notify the Fort Worth District Engineer in accordance with the NWP General Condition 32 – Pre-Construction Notification (PCN). The Fort Worth District will coordinate with the resource agencies as specified in NWP General Condition 32(d) - PCN.

12. Compensatory mitigation is generally required for losses of waters of the United States that exceed 1/10 acre and/or for all losses to streams that exceed 300 linear feet. Loss is defined in Section F of the Nationwide Permits (NWP). Mitigation thresholds are cumulative irrespective of aquatic resource type at each single and complete crossing. Compensatory mitigation requirements will be determined in accordance with the appropriate district standard operating procedures and processes. The applicant shall notify the Fort Worth District Engineer in accordance with the NWP General Condition 32 - Pre-Construction Notification prior to commencing the activity.

13. For all activities proposed for authorization under Nationwide Permits (NWP) 12, 14 and/or 33 that involve a temporary discharge of fill material into 1/2 acre or more of emergent wetland OR 1/10 acre of scrub-shrub/forested wetland, the applicant shall notify the Fort Worth District Engineer in accordance with the NWP General Condition 32 - Pre-Construction Notification prior to commencing the activity.

14. For all discharges proposed for authorization under Nationwide Permits (NWP) 51 and 52, the Fort Worth District will provide the pre-construction notification (PCN) to the U.S. Fish and Wildlife Service as specified in NWP General Condition 32(d)(2) - PCN for its review and comments.

The following regional conditions apply only within the Galveston District.

15. No Nationwide Permits (NWP), except NWP 3, shall be used to authorize discharges into the habitat types or specific areas listed in paragraphs a through c, below. The applicant shall notify the Galveston District Engineer in accordance with the NWP General Condition 32 - Pre-Construction Notification prior to commencing the activity under NWP 3.

- a. Mangrove Marshes. For the purpose of this regional condition, Mangrove marshes are those waters of the United States that are dominated by mangroves (*Avicennia* spp., *Laguncularia* spp., *Conocarpus* spp., and *Rhizophora* spp.).
- b. Coastal Dune Swales. For the purpose of this regional condition, coastal dune swales are wetlands and/or other waters of the United States located within the backshore and dune areas in the coastal zone of Texas. They are formed as depressions within and among multiple beach ridge barriers, dune complexes, or dune areas adjacent to beaches fronting tidal waters of the United States.
- c. Columbia Bottomlands. For the purpose of this regional condition, Columbia bottomlands are defined as waters of the United States that are dominated by bottomland hardwoods in the Lower Brazos and San Bernard River basins identified in the 1997 Memorandum of Agreement between the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, Natural Resource Conservation Service, and Texas Parks and Wildlife Department for bottomland hardwoods in Brazoria County. (For further information, see <http://www.swg.usace.army.mil/Business-With-Us/Regulatory/Permits/Nationwide-General-Permits/>)

16. A Compensatory Mitigation Plan is required for all special aquatic site losses, as defined in Section F of the Nationwide Permits (NWP), that exceed 1/10 acre and/or for all losses to streams that exceed 200 linear feet. Compensatory mitigation requirements will be determined in accordance with the appropriate district standard operating procedures and processes. The applicant shall notify the Galveston District Engineer in accordance with the NWP General Condition 32 - Pre-Construction Notification prior to commencing the activity.

17. For all seismic testing activities proposed for authorization under Nationwide Permit (NWP) 6, the applicant shall notify the Galveston District Engineer in accordance with the NWP General Condition 32 - Pre-Construction Notification (PCN). The PCN must state the time period for which the temporary fill is proposed, and must include a restoration plan for the special aquatic sites. For seismic testing under NWP 6 within the Cowardin Marine System, Subtidal Subsystem; as defined by the U.S. Fish and Wildlife Service, Classification of Wetlands and Deepwater Habitats of the United States, December 1979/Reprinted 1992, the Corps will coordinate with the resource agencies in accordance with NWP General Condition 32(d) - PCN.

18. For all activities proposed under Nationwide Permits (NWP) 10 and 11 located in vegetated shallows and coral reefs; as defined by 40 CFR 230.43 and 230.44 respectively, the applicant shall notify the Galveston District Engineer in accordance with the NWP General Condition 32 - Pre-Construction Notification. Examples include, but are not limited to: seagrass beds, oyster reefs, and coral reefs.

19. Nationwide Permit 12 shall not be used to authorize discharges within 500 feet of vegetated shallows and coral reefs; as defined by 40 CFR 230.43 and 230.44 respectively. Examples include, but are not limited to: seagrass beds, oyster reefs, and coral reefs.

20. For all activities proposed for authorization under Nationwide Permit 12 that involve underground placement below a non-navigable river bed and/or perennial stream bed there shall a minimum cover of 48 inches (1,219 millimeters) of soil below the river and/or perennial stream thalweg.

21. For all discharges and work proposed below the high tide line under Nationwide Permits (NWP) 14 and 18, the applicant shall notify the Galveston District Engineer in accordance with the NWP General Condition 32 - Pre-Construction Notification (PCN). The Galveston District will coordinate with the resource agencies in accordance with NWP General Condition 32(d) - PCN.

22. For all activities proposed for authorization under Nationwide Permit (NWP) 33 the applicant shall notify the Galveston District Engineer in accordance with the NWP General Condition 32 – Pre-Construction Notification (PCN). The PCN must include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions. Activities causing the temporary loss, as defined in Section F of the NWPs, of more than 0.5 acres of tidal waters and/or 200 linear feet of stream will be coordinated with the agencies in accordance with NWP General Condition 32(d) - PCN.

23. No Nationwide Permits (NWP), except NWPs 3, 16, 20, 22, 37, shall be used to authorize discharges, structures, and/or fill within the standard setback and high hazard zones of the Sabine-Neches Waterway as defined in the Standard Operating Procedure - Permit Setbacks along the Sabine-Neches Waterway. The applicant shall notify the Galveston District Engineer in accordance with NWP General Condition 32 - Pre-Construction Notification for all discharge, structures and/or work in medium hazard zones and all NWP 3 applications within the standard setback and high hazard zones of the Sabine-Neches Waterway.

24. No Nationwide Permits (NWP), except 20, 22, and 37, shall be used to authorize discharges, structures, and/or fill within the standard setback exemptions of the Gulf Intracoastal Waterway as defined in the Standard Operating Procedure- Department of the Army Permit Evaluation Setbacks along the Gulf Intracoastal Waterway. The applicant shall notify the Galveston District Engineer in accordance with NWP General Condition 32 (Pre-Construction Notification) for all discharges, structures and/or work within the standard setback, shoreward of the standard setback, and/or standard setback exemption zones.

25. The use of Nationwide Permits in the San Jacinto River Waste Pits Area of Concern are revoked. (For further information, see <http://www.swg.usace.army.mil/Business-With-Us/Regulatory/Permits/Nationwide-General-Permits/>)

26. The use of Nationwide Permits 51 and 52 are revoked within the Galveston District boundaries.

27. Nationwide Permit (NWP) 53 pre-construction notifications will be coordinated with resource agencies as specified in NWP General Condition 32(d) – Pre-construction Notification.

28. For all activities proposed under Nationwide Permits (NWP) 21, 29, 39, 40, 42, 43, 44, and 50 that result in greater than 300 feet of loss in intermittent and/or ephemeral streams, as defined in Section F of the NWPs, require evaluation under an Individual Permit.

The following regional conditions apply only within the Tulsa District.

29. Upland Disposal: Except where authorized by Nationwide Permit 16, material disposed of in uplands shall be placed in a location and manner that prevents discharge of the material and/or return water into waters or wetlands unless otherwise authorized by the Tulsa District Engineer.

30. Major Rivers: The prospective permittee shall notify the Tulsa District Engineer for all Nationwide Permit 14 verifications which cross major rivers within Tulsa District. For the purposes of this condition, major rivers include the following: Canadian River, Prairie Dog Town Fork of the Red River, and Red River.