

## SOUTHERN SANDOVAL COUNTY ARROYO FLOOD CONTROL AUTHORITY *IFB# 2019-02 – LISBON CHANNEL IMPROVEMENTS PROJECT*

## ADDENDUM #1

## July 11, 2019

This Addendum consists of one (1) page and four (4) attachments. The information contained in this addendum shall be incorporated into the project bid and contract documents the same as if originally contained therein.

Bidders shall acknowledge receipt of this addendum on the Bid Proposal form in the space provided. Failure to acknowledge this addendum by any prospective bidder will render the bid non-responsive.

## 1. QUESTIONS RECEIVED FROM PROSPECTIVE BIDDERS

- Q1: Can the Notice to Proceed be delayed to avoid the Monsoon Season?
- A1: No. The federal grant funding this project has a deadline of November 30, 2019 for completion of work on this project. The Monsoon Season extends through September 30, 2019. Any large delay in issuing the Notice to Proceed could impact the time available for completion of the project.

## 2. BID AND CONTRACT DOCUMENTS

- Replace Unit Price Bid Proposal (Bid & Contract Documents Page 24) with the attached revised page, which removes Bid Items No. 2 (Construction Project Sign) & No. 5 (NPDES Compliance)
- Add the included Technical Specifications.
- U.S. Army Corps of Engineers (USACE) Nationwide Permit Verification Letter Contractor will need to comply with the conditions outlined in the letter
- USACE Nationwide Permit 13 Bank Stabilization Summary this the actual USACE permit for Contractor reference/use as needed

All other provisions of the Bid and Contract Documents shall remain unchanged. This Addendum is hereby made a part of the Bid and Contract Documents to the same extent as those provisions contained in the originals.

Charles Thomas, PE SSCAFCA Executive Engineer

Attachments:

- 1. Revised Unit Price Bid Proposal (1 page)
- 2. Technical Specifications (24 pages)
- 3. USACE Verification Letter (3 pages)
- 4. USACE Nationwide Permit (20 pages)

Page 1 of 1

## **REVISED WITH ADDENDUM #1**

### UNIT PRICE BID PROPOSAL LISBON CHANNEL IMPROVEMENTS

ltem No.	Spec.	Description	Qty	Unit	Estimate Unit Price	Estimate Amount
1	STS 1503	Construction Mobilization, Complete	1	LS		
2	STS 1504	Construction Project Sign	1	LS		
3	STS 1505	Construction Staking, Complete	1	LS		
4	STS 1506	Flood Protection, Complete	1	LS		
-5	STS 1507	NPDES Compliance, Complete	1	LS		
6	APWA 1200	Construction Traffic Control & Barricading, Complete	1	LS		
7	APWA 201	Site Clearing and Grubbing, Complete	0.85	AC		
8	APWA 501	Excavation, Backfill, and Compaction, including relocation of material and finished grading, CIP	2919	CY		
9	APWA 205	Borrow, includes haul, placement, compaction and all related work, complete	1327	CY		
10	STS 1508	Utility Relocation Allowance	1	AL	\$20,000	\$20,000
11	APWA 1012	Native Grass Seeding, incl. Gravel Mulch, complete	0.26	AC		
12	STS 551	Removal & Disposal of Concrete and Reinforcing, Complete	1	LS		
13	STS 553	Reinforced Shotcrete, 7", 4000 psi, San Diego Buff tinted, complete	280	SY		
14	APWA 301	Subgrade Prep, 12" @ 95% compaction in accordance with ASTM D-1557, CIP	1218	SY		
15	APWA 603	Dumped Rip Rap, D50=6", incl. filter fabric	253	CY		
16	NMDOT 511	Structural Concrete, Class A – retaining wall	213	CY		
17	NMDOT 540	Grade 60 reinforcing steel – retaining wall	16,872	LBS		
18	Plans	CMU wall, incl. reinforcement, concrete foundation mortar, grout, and weep holes. Complete	2622	SF		

#### BASE BID - SUBTOTAL FOR BID ITEMS 1 THRU 18 \_

MANDATORY: PLEASE FILL OUT BLANKS BELOW:

- Bidder has registered at SAM.gov (Initial to acknowledge):\_\_\_\_\_
- DUNS Number for Prime Contractor:
- Bidder acknowledges Federal Funding for project (Initial):\_

SAMS Number will be checked for debarment and debarment shall be grounds for rejection of bid -Unit Price Proposal End -



## ADDED WITH ADDENDUM #1

## . TECHNICAL SPECIFICATIONS FOR THE CONSTRUCTION OF LISBON CHANNEL IMPROVEMENTS

- 1. ALL WORK DETAILED IN THIS PROJECT IS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED IN THE SUPPLEMENTAL SPECIFICATIONS WHICH IS PROVIDED HERIN, IN ACCORDANCE WITH THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 2006.
  - a. The New Mexico Standard Specifications for Public Works Construction 2006 is available at Albuquerque Reprographics 4716 McLeod NE Albuquerque, NM 87109 (505) 884-0862 FAX (505) 883-6452 http://www.abqrepro.com. Please call ahead to ensure they will be able to fill your order.
  - New Mexico State Department of Transportation Standard Specifications for Highway and Bridge Construction – 2019 available at http://dot.state.nm.us/content/dam/nmdot/Plans\_Specs\_Estimates/2014\_Specs\_For\_Highwa y And Bridge Construction.pdf.
- 2. If alternative manufacturers other than the pre-approved manufacturers are proposed for any specified items, the CONTRACTOR/bidder must supply a submittal; after the effective date of the agreement. Although the brands listed herein are the preferred brands, it is not the intent of the owner for these specifications to be proprietary; equals will be evaluated in accordance with comparable quality, construction, strength, durability, and suitability for the purpose intended, and are listed for the purpose of describing the standard of quality performance and characteristics.



## **II. STANDARD SPECIFICATIONS**

NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 2006 SEE ATTACHED TABLE OF CONTENTS.

## SECTION 100 MATERIALS

Section No.	Title
100	Materials
101	Portland Cement Concrete
102	Steel Reinforcement
103	Epoxy-Coated Steel Reinforcement
105	Concrete Curing Compound
106	Cement Mortar and Grout
107	Joint Filler and Sealant Material
108	Brick
109	Riprap Stone
111	Colored Portland Cement Concrete
112	Paving Asphalt (Asphalt Cement)
113	Emulsified Asphalts
114	Asphalt Paving Hot Recycling
115	Slurry Seal Materials
116	Asphalt Concrete
117	Asphalt Rejuvenating Agents
118	Hydrated Lime Mineral Filler
119	Paving Fabrics
121	Plastic Pipe
122	Plastic Liner Plate
123	Reinforced Concrete Pipe
124	Reinforced Concrete Pressure Pipe
125	Vitrified Clay Pipe
127	Steel Water Pipe
128	Concrete Cylinder Pipe
129	Ductile Iron Pipe
130	Gray Iron and Ductile Iron Fittings
135	Corrugated Metal Pipe and Arches (Steel)
136	Structural Steel Plate for Pipe, Arches, and Pipe Arches
137	Corrugated Aluminum Pipe and Arches
138	Structural Aluminum Plate for Pipe, Arches, Pipe Arches, and Box Culverts
139	Structural and Rivet Steel, Rivets, Bolts, Pins and Anchor Bolts
143	Galvanizing
145	Lumber
146	Wood Preservatives
150	Timber Piles
151	Steel Piles
152	Concrete Piles
157	Paint
160	Steel Castings
161	Gray Iron Castings
162	Aluminum Castings
170	Electronic Marker Disks



## SECTION 200 EARTHWORK

Section No.	<u>Title</u>
201	Clearing and Grubbing
202	Roadway Excavation
204	Fill Construction
205	Borrow Material
207	Lean Fill Construction
210	Open Area Land Leveling

## SECTION 300 STREETS AND RELATED WORK

Section No.	Title
301	Subgrade Preparation
302	Aggregate Base Course Construction
303	Subbase Preparation
304	Lime Treated Subgrade and/or Subbase
305	Cement Treated Base
306	Bituminous Stabilized Base and Surfacing
307	Plant Mix Bituminous Treated Base (Asphalt Treated Base)
308	Natural Gravel Surfacing for Unpaved Roadways
320	Utility and Monument Access Cover Adjustments
328	Quite Asphalt Concrete Pavement
329	Plant Mix Seal Coat
330	Asphalt Emulsion Slurry Seal
331	Asphalt Concrete Overlay
332	Heater-Remix Resurfacing
333	Fog Seal Coat
334	Seal Coat and Chips and Precoated Chip Seal Coat
335	Paving Fabric Installation
336	Asphalt Concrete Pavement
337	Portland Cement Concrete Pavement
340	Portland Cement Concrete Curbs, Gutters, Walks, Driveways, Alley,
	Intersections, and Median Paving
341	Extruded Asphalt Curb
342	Soil Sterilization
343	Removal and Disposal of Existing Pavements, Curbs, Gutters, Sidewalks, and
	Drivepads
344	Cold Milling of Pavement Surfaces
346	Textured Concrete
347	Brick Sidewalk
348	Brick Pavement Surface
349	Concrete Curing



## SECTION 400 TRAFFIC CONTROL

2110N 400 1 KA	
Section No.	Title
401	Concrete Wall and Metal Barriers
410	Fences
420	General Clauses for Traffic Signal and Street Lighting Systems
421	Signal and Lighting
422	Signal and Lighting Standards
423	Foundations for Signal and Lighting Installations
424	Electrical Conduit
425	Pull Boxes, Splice Cabinets and Manholes

- 425 Pull Boxes, Splice Cabinets a
- 426 Wiring
- 427 Signal Assemblies
- 428 Vehicle, Pedestrian, and Emergency Vehicle Detectors
- 429 Traffic Signal Controllers
- 430 Removal of Traffic Signal Pressure Detector
- 431 Beacons and Special Signal Equipment
- 432 Luminaries
- 440 Reflectorized Painted Pavement Markings
- 441 Retroreflective Preformed Plastic Pavement Markings
- 443 Pavement Marking Removal
- 450 Traffic Signs and Sign Structures

## **SECTION 500 STRUCTURES**

#### Section No. Title

- 501 Excavation and Backfill for Structures
- 502 Driving Piles
- 503 Subdrainage
- 510 Concrete Structures
- 511 Pneumatically Applied Concrete
- 512 Precast Prestressed Members
- 520 Steel Structures
- 530 Timber Structures and Timber Construction
- 540 Concrete Block Masonry Structures
- 541 Brick Masonry Structures
- 550 Metal Railings

## SECTION 600 OPEN CHANNELS, DIKES, OR DAMS

Section No.Title601Earthwork for Open Channels, Dikes or Dams602Portland Cement Fly Ash Concrete for Channel Lining and Dike or Dam<br/>Surfacing603Riprap Surface Treatment604Flexible Soil Mattings610Gabions

#### SECTION 700 TRENCHING AND BORING FOR UTILITIES

#### Section No. Title

701	Trenching Excavation and Backfill
710	Boring, Drilling and Jacking

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## SECTION 800 WATER TRANSMISSION, COLLECTOR, DISTRIBUTION AND SERVICE LINES

Section No.	
801	Installation of Water Transmission, Collector and Distribution Lines
802	Installation of Water Service Lines

## SECTION 900 SANITARY AND STORM SEWER FACILITIES

Section No.	<u>Title</u>
901	Sanitary Sewer Collector and Interceptor Facilities
905	Sanitary Sewer Service Lines
910	Storm Sewer Pipe Installations
915	Storm Sewer Drainage Appurtenances
920	Sanitary and Storm Sewer Manholes
925	Vacuum Sewer Collector, Interceptor & Force Main Facilities

### SECTION 1000 LANDSCAPING

- Section No. Title
- 1001 Landscape Irrigation
- 1005 Plantings
- 1010 Grass Sodding
- Turf Grass Seeding 1011
- Native Grass Seeding 1012
- Trash and Litter Receptacles 1015

## SECTION 1200 BARRICADING AND TEMPORARY TRAFFIC CONTROL

Section No.

1200

Title Barricading and Temporary Traffic Control

## SECTION 1500 MISCELLANEOUS ITEMS

Section No.	<u>Title</u>
1501	Monuments
1502	Submittals

## SECTION 2000 STANDARD DETAIL DRAWINGS

Section No.	Title
2100	Standard Details for Sewer
2200	Standard Details for Drainage
2300	Standard Details for Water
2400	Standard Details for Paving
2500	Standard Details for Traffic
2800	Standard Details for Temporary Traffic Control

## SECTION 3000 BIBLIOGRAPHY

Section No.

Title 3010 Abbreviations and Definitions



## III. Supplemental Technical Specifications

SECTION – NAME			
ADDED SECTIONS			
1503	CONSTRUCTION MOBILIZATION		
1505	CONSTRUCTION STAKING		
1506	FLOOD PROTECTION		
1508	UTILITY RELOCATION ALLOWANCE		
551	REMOVAL AND DISPOSAL OF STRUCTURAL CONCRETE		
	AND REINFORCING		
553	SHOTCRETE 7", 4000 PSI		
MODI	FIED SECTIONS		
201	SITE CLEARING AND GRUBBING		
501	EXCAVATION AND BACKFILL FOR STRUCTURES		
GEOTECHNICAL REPORT			
GEOTECHNICAL REPORT	"Geotechnical Engineering Services Report Job No. 1-		
	80714 Lisbon Dam & Channel Rio Rancho, NM October 8,		
	2018". Prepared by Geo-Test Inc., Albuquerque, New		
Mexico			



# Supplemental Technical Specifications

**Added Sections** 

SOUTHERN SANDOVAL COUNTY ARROYO FLOOD CONTROL AUTHORITY (SSCAFCA) • LISBON CHANNEL IMPROVEMENTS • BID AND CONTRACT DOCUMENTS



#### CONSTRUCTION MOBILIZATION

#### 1503.1 DESCRIPTION

This work shall consist of preparatory and final work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to and from the project site; for the establishment of all offices, buildings and other facilities necessary for work on the project; and, for all other work and operations which must be performed or costs incurred prior to beginning work on the project.

#### 1503.2 MOBILIZATION ADMINISTRATION REQUIREMENTS

#### 1503.2.1 DEFINITIONS

The following definitions shall apply:

- a) Total original contract amount shall mean the total amount bid as compensation for the contract.
- b) Total original contract amount less mobilization and demobilization shall mean the total amount bid as compensation for the contract less the amounts bid for mobilization.

#### 1503.2.2 GENERAL

It is the intent of this specification to provide for the Contractor to:

a) Receive 100% of the amount bid for mobilization by the time the Contractor has performed 10% of the total original contract amount bid less the amount bid for mobilization.

#### 1503.2.3 PAYMENT PROCEDURES FOR MOBILIZATION

The following will apply in effecting mobilization payments:

- a) When the Contractor is eligible for payment of less than 5% of the total original contract amount bid less mobilization, the Contractor will be paid 25% of the amount bid for mobilization.
- b) When the Contractor is eligible for payment of from 5% to less than 10% of the total original amount bid less mobilization, the Contractor will be paid 50% of the amount bid for mobilization minus any mobilization amount already paid.
- c) When the Contractor is eligible for payment of 10% or more of the total original contract amount less mobilization, the Contractor will be paid 100% of the amount bid for mobilization minus any mobilization amount already paid.



#### 1503.2.4 PAYMENT CALCULATIONS

PM	=	Mobilization Payment
М	=	Total amount bid for Mobilization
fм	=	Mobilization payment percentage factor
	=	0.25, or 0.50, or 1.0, as applicable
Рм	=	M x f <sub>M</sub>

#### EXAMPLE 1 MOBILIZATION

Total Original Contract Amount Bid	\$110,000
Amount Bid for Mobilization	\$ 5,000
Total Original Contract Amount Less Mobilization	\$105,000

Percent of Work Comp	leted	fм		Μ		P <sub>M</sub>
<5% of \$102,000 >5% to <10% of \$102,0 ≥10% of \$102,000 *minus previously paid	0.25 000 0.50 d amounts	x x 1.00	5,000 5,000 x	= = 5,000	\$1,250 \$2,500* =	\$5,000*

#### 1503.3 METHOD OF MEASUREMENT

Mobilization will be measured by lump sum unit.

#### 1503.4 BASIS OF PAYMENT

Mobilization will be paid for at the contract price per Mobilization Bid Item. The amount Bid for Mobilization shall not exceed 5% of the Total Base Bid.

No additional payments will be made for demobilization and remobilization due to shutdowns or suspensions of the work or for other mobilization and demobilization activities required to complete the contract.

END OF ITEM SPECIFICATION



#### **CONSTRUCTION STAKING**

#### 1505.1 DESCRIPTION

This work consists of construction staking lines, grades, and layouts by the Contractor in accordance with the plans and specifications and as directed by the Engineer for the control and completion of the project.

#### 1505.2 MATERIALS

The Contractor shall furnish all stakes, templates, straightedges, surveying equipment and other devices necessary for establishing, checking, marking, and maintaining points, including P.I.'s, P.C.'s, P.T.'s, and lines, grades and layouts. As directed by the Engineer, points shall be referenced so that they may later be re-established.

#### **1505.3 CONSTRUCTION REQUIREMENTS**

Local Survey Control has been set for vertical and horizontal control throughout the construction area. These stakes and marks shall constitute the field control by and in accordance with which the Contractor shall establish other necessary controls and perform the work.

The Contractor shall be responsible for all other control, slope stakes, cut stakes, offset stakes, bench marks, blue tops or other staking necessary for proper execution of the work, or as requested by the Project Manager, to assure compliance with the plans.

#### **1505.4 CONSTRUCTION SURVEYS**

The contractor shall obtain and pay for the services of a Professional Surveyor registered in the State of New Mexico to perform surveys of earthwork quantities, during and at the completion of the project construction. These surveys shall consist of the following phases.

- Phase 1. A cross section survey, with no greater than 50 foot spacing, to determine the location of existing ground prior to construction after clearing and grubbing and after removal of the trash and debris. Cross section data collected shall be of sufficient spacing, including all breaks in the terrain to be able to create an original ground digital terrain model (DTM). The "original ground" DTM shall be submitted to the Engineer for review and acceptance prior to proceeding with excavation, embankment or export of excess material. Cross section data must be sufficient to determine earthwork quantities.
- Phase 2. Cross-section and location surveys that may be made during the excavation and backfill construction for the purposes of verifying the contractor's work. Where shown, the excavation dimensions (pay limits for unclassified excavation, backfill and sub-excavation) shown on the plans shall be used to determine the excavation cross-section for payment to the contractor. The cross-section data must be sufficient to verify the limits of excavation.
- Phase 3. A cross-section survey, at the same locations as the cross-sections in Phase 1 to determine the location of the finish grade at the completion of construction.



Phase 4. The Phase 4 Survey will be completed during construction to demonstrate compliance with the design grades shown on the plan set. Phase 4 Survey will also include the update and completion of asbuilts for the project and the submittal on a weekly basis of as-builts on a set of the construction drawings, to the satisfaction of the Project Manager.

All surveys must be certified by the Professional Surveyor and include complete documentation. Cross sections of the Phase 1, 2 and 3 surveys and the pay limit for excavation as shown on the plans must be used by the Professional Surveyor to compute the quantity of excavation, subject to the provisions for measurement in Sections 501 (Excavation and Backfill for Structures) and 601 (Earthwork for Open Channels, Dikes and Dams) of the Standard Specifications. Volume shall be based on the "average end area" computation. All computations of excavation and backfill must be submitted to the Engineer in sufficient detail. This submittal shall be such that methods and computations can be fully verified and are subject to approval by the Engineer. The Contractor shall also submit the electronic survey point files, including break lines, in a format compatible with Civil3D such that the Engineer can use the data for verification of cut/fill quantities.

At the end of the Project, Bohannan Huston Inc. will transcribe the as-built information provided by the Contractor onto the mylar record drawing. The Contractor's Professional Surveyor will be required to stamp, sign and certify the information shown on the mylar As-Built drawings.

### 1505.5 METHOD OF MEASUREMENT

Submit a construction-staking schedule of values as part of Construction Progress Meetings or monthly progress schedule to the Project Manager for approval.

#### 1505.6 BASIS OF PAYMENT

Pay Item	<u>Pay Unit</u>
Construction Staking by the Contractor	LS

SSCAFCA will make partial payments in accordance with the approved construction-staking schedule of values.

END OF ITEM SPECIFICATION



#### FLOOD PROTECTION

#### 1506.1 DESCRIPTION

This work covers the control of storm and nuisance flow water in the vicinity of this project.

#### **1506.2 CONSTRUCTION REQUIREMENTS**

All permanent work shall be performed in areas free from water. The CONTRACTOR shall construct and maintain all dikes and drainage ditches necessary for the elimination of water from work areas and shall furnish, install, maintain, and operate all necessary pumping and other dewatering equipment required for dewatering the various work areas. Three (3) types of flow can be expected;

- 1) Continuous or intermittent flow through the main arroyo;
- 2) Continuous or intermittent flow through the arroyo tributaries
- 3) Local sheet flow from adjacent properties or adjacent streets.

The CONTRACTOR is responsible for adequacy of the scheme or plans, or for furnishing all equipment, labor and materials necessary for dewatering the work areas and breaking up and removing such ice or snow as may have formed or settled in the work area. The CONTRACTOR shall be fully responsible for all dewatering operations, and the cost of all dewatering operations shall be included in the lump sum price for this work. The CONTRACTOR shall also be responsible for removal of any sediment deposited by storm and nuisance water, and the cost of sediment removal work shall be included in the lump sum price for this work.

In the event that storm flow, snowmelt or other water flows overtop the Contractor's diversion method, the Contractor will be responsible for any and all damage, including damage to the existing channel and any damage to new work and is responsible for immediate resolution and repair in a manner acceptable to SSACFCA.

Diversion methods may be by use of sand bag diversion channels, sand bag dams, pumping or piping around or over the work areas, or any method or combination.

#### 1506.3 BASIS OF PAYMENT

The bid item for this effort will be on a Lump Sum (LS) basis. Providing and maintaining the diversion and care of water, regardless of the amount of water actually handled, shall be paid for as follows:

Payment for protection of project from water will be made as a percentage of the dollar amount of work completed to date minus the Mobilization bid item and Flood Protection bid item.

Pay Item Protection of Project from Water During Construction

<u>Pay Unit</u> LS

#### **END OF ITEM SPECIFICATION**



#### UTILITY RELOCATION ALLOWANCE

1508.1 Where possible, all conflict with existing utilities shall be avoided by minor adjustments to the alignment of proposed facilities as directed by the Owner's Project Manager. Where conflicts are determined to be unavoidable by the Owner's Project Manager, the utility shall be relocated.

1508.2 The Contractor shall notify the utility owner at Notice to Proceed. The Contractor shall be responsible for coordinating this work and paying invoiced cost to the utility owner. The Contractor may be required by the utility owner to pay for such relocation work prior to the actual relocation work being performed. Cost of coordination with utility owners will be incidental to the cost of relocating the utility.

1508.3 The utility allowance price for each utility shall be measured on a per each basis. The Contractor shall submit a utility relocation estimate from the utility owner plus contractor's coordination fee to the Project Manager for review and approval prior to the actual direction from SSCAFCA to relocate the utility. The fee per each will be based upon receipt of invoices submitted from the utility company after work is performed plus a contractor's fee for coordination. All invoices and other necessary documentation must be submitted prior to any payment being made on a particular utility allowance item.

1508.4 Payment will be made as a lump sum per each utility relocation required and as directed by SSCAFCA, completed, installed and operational, to be billed against overall project utility allowance. This price shall include the cost of all labor, material, equipment, utility charges, excluding coordination with utility owners, and all incidentals necessary to complete this item in accordance with all requirements of the utility company. The utility relocation allowance price may be paid as a percentage of utility relocation allowance completed. The percentage shall be computed by dividing the total of utility company invoices by the total price included in this bid for utility relocation allowance.

1508.5 Contractor will be required to coordinate with all utility companies including, but not limited to Cable 1, CenturyLink, NM Gas, and PNM. Coordination with the Utility companies is included in the cost of the project and no additional compensation shall be made. Coordination with utility companies shall begin at Notice to Proceed. Any unknown or unidentified utility conflicts shall be paid per items 2-4 above.

AL

<u>Pay Item</u> Utility Allowance <u>Pay Unit</u>

END OF ITEM SPECIFICATION

SECTION 551 (Added Section)



#### **SECTION 551 (Added Section)**

#### REMOVAL AND DISPOSAL OF STRUCTURAL CONCRETE AND REINFORCING

#### 551.1 GENERAL

551.1.1 The work covered by this section consists of furnishing all labor, equipment, materials, and incidentals necessary for the removal and disposal of existing structural concrete as specified below.

551.1.2 Removal of existing structural concrete shall only be performed at the locations within the limits shown on the drawings or as directed by the ENGINEER.

#### 551.2 STRUCTURAL CONCRETE

551.2.1 Prior to any cutting of structural concrete, the perimeter of the proposed cut shall be suitably outlined and shall consist of smooth, regular lines approved by the ENGINEER.

551.2.2 The concrete shall be cut along the marked perimeter of the area to be removed with such equipment as to produce a cut carried in a vertical plane through the concrete along a smooth horizontal line. Saw cutting only may be required by the ENGINEER if other methods of cutting leave an irregular or unsightly cut line. For saw cutting, a power saw or steel-type cutter mounted on a motor grader or an air hammer equipped with a suitable cutting spade or other approved equipment which will score a smooth continuous line in the concrete to correct depth shall be used.

551.2.3 The depth of cut made in structural concrete shall be sufficient to permit removal without damaging adjacent concrete. For Portland cement concrete, a concrete saw which will score a continuous line in the concrete to a minimum depth of from 1 1/2 to 1 inches shall be used. Any unnecessary irregular breakage caused by the CONTRACTOR through inexperience or careless workmanship or otherwise shall be replaced by the CONTRACTOR at no additional expense. Any irregular breakage regardless of the cause shall be trimmed back as directed by the ENGINEER.

551.2.4 After the perimeter cut is made, any convenient and effective equipment may be used to break up and remove the pavement within, provided the following conditions are met:

551.2.4.1 The surrounding concrete and concrete perimeter shall not be damaged.

551.2.4.2 Any existing structures at the perimeter and/or within the vicinity of concrete removal shall not be damaged, whether they be surface or subsurface, as indicated on the drawings.

551.2.4.3 The normal functions of any utilities which may exist at the perimeter and/or within the area of concrete removal shall not be damaged, whether they be surface or subsurface, as indicated on the drawings.

551.2.4.4 Any reinforcement found along the perimeter cut shall be preserved as necessary for tie-in purposes to the proposed structure. If reinforcement cannot be preserved, it is the CONTRACTOR's responsibility to ensure that the existing structure is adequately connected to the proposed structure, for example, using dowels and epoxy. Any modifications to reinforcement shall be approved prior to construction by the ENGINEER and shall be incidental to the project.



551.3.1 Measurement shall be made as follows:

551.3.1.1 Removal and Disposal of Existing Structural Concrete--Measurement shall be made to the nearest square yard on the top surface of the pavement removed as directed by the ENGINEER. Structural Concrete shall be defined as Portland cement concrete surfacing with the respective underlying base course of whatever character, including but not limited to concrete rubble.

551.3.2 Payment will be made at the contract unit price per unit for the applicable item of removal, which payment shall be full compensation for performing all removal and disposal of the item and for furnishing all labor, equipment, and incidentals necessary to complete the work in the manner specified.

551.4 ALTERNATE METHOD OF MEASUREMENT AND PAYMENT

If a removal item does not appear as a bid item in the Bid Proposal, then no direct payment will be made for removal and disposal of existing structural concrete. All costs for such work shall be included in the lump sum price for site preparation.

END OF ITEM SPECIFICATION



#### 553.1 GENERAL

553.1.1 This work shall consist of construction of the shotcrete lining utilizing the shotcrete process, including mixing, placing, finishing, testing and curing, as shown in the contract in compliance with these specifications:

553.1.2 The requirements of Section 101 (Portland Cement Concrete) and Section 510 (Concrete Structures), of APWA Standard Specifications are not expressly modified by these specifications. Fly ash shall be used in all concrete and shotcrete per Section 101 (Portland Cement Concrete).

#### 553.2 MATERIALS

553.2.1 All requirements of Section 101 (Portland Cement Concrete) shall apply except as modified herein. Shotcrete shall have a minimum compressive strength of 4,000 psi at 28 days, 5-8% air content at the pump and a slump of 1-1/2" to 3" at the pump.

553.2.1.1 Shotcrete shall be tinted prior to placement. Tinted concrete will be made by the addition of an approved concrete coloring agent to the concrete mix. The coloring agent will be added in addition to other concrete ingredients and no reductions to other ingredients will be made. The concrete coloring for use on this project shall be:

### DAVIS COLOR OR EQUAL AS APPROVED BY OWNER LBS./SACK OF CONCRETE COLOR NUMBER

SAN DIEGO BUFF 1LB.

The design mixes must be submitted by the contractor for approval by the project manager prior to placement. Coordination with the general contractor, shotcrete contractor, and SSCAFCA Project Manager will be required prior to any shotcrete placement.

#### 553.2.2 COARSE AGGREGATE

Coarse aggregate shall meet the following gradation requirements.

SIEVE SIZE	PERCENT PASSING
1/2 INCH	100
3/8 INCH	85-100
NO. 4	10-30
NO. 8	0-10
NO. 16	0-5

#### 553.2.3 PROPORTIONING

Shotcrete shall be mixed and pneumatically applied by the wet-mix process. The concrete shall meet the minimum requirements set forth in Section 101 (Portland Cement Concrete) including the addition of air entrainment, fly ash, and tint.

553.2.4 The design mixes must be submitted by the contractor for approval by the project manager.

SOUTHERN SANDOVAL COUNTY ARROYO FLOOD CONTROL AUTHORITY (SSCAFCA) • LISBON CHANNEL IMPROVEMENTS • BID AND CONTRACT DOCUMENTS



#### 553.2.5 PRECONSTRUCTION TESTING

Test panels simulating actual field conditions shall be fabricated prior to start of construction. Text panels shall be colored shotcrete for color approval prior to construction.

The panels shall be at least 36" square and 6" thick with a back form of heavy plywood. The forms should be set for each shooting position to be encountered in the structure. Part of the panel should contain the same reinforcement as the proposed shotcrete design mix, including all materials and additives, to simulate actual field conditions. Curing will be field cured as specified. Cores shall be obtained for compression test and tested at 7, 14, and 28 days.

Prior to gunning the mixture three concrete test cylinders shall be taken from the design mix and tested at 7, 14, and 28 days. Cylinders to be field cured.

#### 553.2.6 QUALITY ACCEPTANCE TESTS:

A minimum of three cores shall be taken for each 500 linear feet of channel. Cores shall be obtained and tested in accordance with ASTM C-42-90 One core shall be removed and tested at 7 days, one at 14 days, and one at 28 days. Minimum compression strengths shall be as follows:

<u>7 DAY</u>	<u>14 DAY</u>	<u>28 DAY</u>
2,400 PSI	3,000 PSI	4,000 PSI

If shotcrete cores at 28 days show deficient strength, additional cores shall be taken at the contractor's expense from adjacent areas. Two cores shall be required for each deficient core. Should either additional core prove deficient, the defective shotcrete shall be removed and replaced at the contractor's expense. No additional shotcreting shall be done until the shotcrete mixture is revised and approved by the project manager.

Should a strength deficiency be evident in 7-day or 14-day cores, on approval of project manager, the contractor may proceed with the work on his own responsibility until 28-day cores are tested. These cores shall also be used for determining shotcrete thickness.

#### 553.3 CONSTRUCTION

#### 553.3.1 EQUIPMENT AND WORKMEN

Shotcreting shall be done only be experienced personnel. When requested by the project manager, the contractor shall furnish evidence that each foreman, nozzle operator and delivery equipment operator has done satisfactory work in a similar capacity elsewhere and is fully qualified to perform the work.

#### 553.3.1.1 PREMIXED SHOTCRETE

The mixing equipment shall be capable of thoroughly mixing the specified materials in sufficient quantity to maintain continuous placing.

#### 553.3.2 SURFACE PREPARATION

The foundation for areas to receive shotcrete shall be evenly graded to the required elevation before the shotcrete is applied. The areas shall be thoroughly compacted with sufficient mixture to provide a firm foundation and to prevent absorption of water from the shotcrete, no high subgrade will be permitted.



Surfaces shall not contain free surface water, loose material or frozen material at the time of shotcrete application.

### 553.3.3 FORMS AND REINFORCEMENT

Forms, headers, and shooting strips shall be provided and rigidly braced as required for backing. Ground or gaging wires and depth gages shall be used where necessary to establish and insure thickness, surface and finish lines.

Steel reinforcement shall be rigidly supported in the position shown in the contract. Metal chairs shall be used to properly anchor and place the reinforcement. All reinforcement shall be clean and free from loose mill scale, loose rust, overspray from previous shotcrete application, soil and other undesirable materials that interfere with bonding.

#### 553.3.4 PLACING

Each layer of shotcrete shall be built up by making several passes of the nozzle over the working area. When enclosing steel reinforcement, the nozzle shall be held so as to direct the material around the bars. The shotcrete shall emerge from the nozzle in a steady, uninterrupted flow. The nozzle shall be directed so as to result in minimum rebound. The velocity of the material as it leaves the nozzle shall be maintained uniform and at a rate determined for the given job conditions.

Contractor shall use appropriate form work to separate areas of different tinting and shall prevent adjacent areas from being discolored by overspray and rebound. Rebound shall not be worked back into the construction or salvaged.

Shotcrete shall not be placed when the air temperature is below forty degrees (40°) F unless the air temperature is at least thirty-five degrees (35°) F and rising.

The mixing, transporting, and placement time for shotcrete materials, shall not exceed two hours or 250 revolutions of the mixer drum, whichever comes first. Additional water may be added at job site only if requested by the project manager. When additional water is added, the drum shall be rotated a minimum of 30 additional revolutions. The ready-mix plant shall certify the material for weight, water, admixtures and mixing time.

#### 553.3.5 FINISHING

After the shotcrete has been placed as nearly as practical to the required thickness, the ground wires may be removed, the surfaces shall be checked with a straight edge, and low spots or depressions shall be corrected by placing additional shotcrete in such a manner that the finished surface is natural as left by the nozzle and will be reasonably smooth and uniform. Loose areas of shotcrete shall be removed and replaced by the contractor at no additional cost.

#### 553.3.6 CURING

In all cases, the period of protection shall be not less than 7 days.

553.3.7 TOLERANCE IN SHOTCRETE THICKNESS.



Acceptance of the finished channel lining with respect to thickness shall be on the basis of random core sampling, as designated by the project manager. A minimum of two core samples will be taken from longitudinal lengths of lining not exceeding 500 linear feet. If deficiencies are noted the project manager may require additional core samples. All coring required by the project manager shall be at the owner's expense. Should the contractor desire to have additional core samples taken, these samples would be taken at the contractor's expense.

Deduction for a deficiency in thickness shall be made according to the following: thickness deficiency shall be based on the average thickness of the number of samples taken within each 500 or less linear feet of lining.

THICKNESS DEFICIENCY	PERCENT OF CONTRACT PRICE ALLOWED
0 - 1/2"	100%
GREATER THAN ½"	REJECT

Any 500 linear foot span of channel lining that is noted to be deficient in thickness by more than the reject level shall be removed and replaced at the contractor's expense. It shall be the responsibility of the contractor to have the core holes immediately filled with fresh shotcrete. This shotcrete shall be of the same mix and of equal compressive strength as the original.

For quality acceptance, the project manager may have the core samples tested for compressive strength. All cores will be measured in accordance with ASTM C-174.

#### 553.3.8 METHOD OF MEASUREMENT AND PAYMENT

Shotcrete will be measured by the square yard parallel to the surface. The accepted quantities of shotcrete will be paid for at the contract unit price per square yard. Such payment shall constitute full reimbursement for all materials, labor and equipment used in the placement of all shotcrete, thickened edges, steel reinforcement, support chairs, forms, joints, drilling, epoxy, tinting, finishing, curing, and all other necessary operations to complete the shotcrete in place. No extra payment will be made for additional shotcrete placed in excess of that shown on the plans unless directed by the project manager.

The contractor shall furnish the project manager with copies of the manufacturer's specifications and operating instructions for the equipment used. No shotcrete shall be placed until the type of equipment and method of operation have been approved by the project manager.

END OF ITEM SPECIFICATION



# Supplemental Technical Specifications

# Additional Requirements

SOUTHERN SANDOVAL COUNTY ARROYO FLOOD CONTROL AUTHORITY (SSCAFCA) • LISBON CHANNEL IMPROVEMENTS • BID AND CONTRACT DOCUMENTS



#### SUPPLEMENTAL TECHNICAL SPECIFICATION

#### SECTION 201 (APWA)

## SITE CLEARING AND GRUBBING

1. Add the following to the end of Subsection 201.1 GENERAL.:

Clearing, grubbing, and stripping will be required over the foundation areas of all proposed improvements within the channel. Stumps, matted roots, or rocks larger than 2 inches in diameter should be removed from within 18 inches of the foundation areas. Stripping should be achieved only by cutting, i.e., ground depressions or narrow sections of tributary arroyos should not be inadvertently filled during the foundation preparation.

END OF ITEM SPECIFICATION



#### SUPPLEMENTAL TECHNICAL SPECIFICATION

#### SECTION 501 (APWA)

#### **EXCAVATION AND BACKFILL FOR STRUCTURES**

1. Added the following after Subsection 501.3.4

501.3.5 After clearing, grubbing, and required excavations, the existing site soils throughout the foundation areas shall be over-excavated to such an extent as to provide for at least 2 feet of properly compacted structural fill beneath the structures. All clean, coarse grained soils underlying the proposed structure should be removed in their entirety as determined the by the GEOTECHNICAL ENGINEER. The over-excavation limits should extend laterally a minimum of 2 feet, or as far as practical, beyond the structure limits. The soils exposed at the base of over-excavation should be densified before placement of structural fill.

2. Subsection 501.4.5. Delete the wording in this subsection in its entirety and substitute with the following:

The results of the geotechnical investigation indicate that most of the native soils are suitable for use as structural fill; however, some blending may be required to meet the structural fill specifications below. Should imported fill be required, it should also meet the specifications for structural fill. All structural fill and backfill should be free of vegetation and debris and contain no rocks larger than 3 inches. Gradation of the backfill material, as determined in accordance with ASTM D-422, should be as follows:

Size	Percent Passing
3 inch	100
No. 4	60 - 100
No. 200	10 - 35

Tests for degree of compaction should be determined in accordance with ASTM D-1556 or ASTM D-6938. Continuous full-time observation and field tests should be conducted during fill and backfill placement by a representative of the GEOTECHNICAL ENGINEER to assist the contractor in evaluating the required degree of compaction. If less than the required compaction is required, additional compaction effort should be made with adjustment of the moisture content as necessary until 95 percent compaction is obtained.

3. Added the following after Subsection 501.4.6

501.4.7 The results of the geotechnical investigation indicate that the surficial soils can be readily excavated using normal earth moving and excavation equipment. Temporary construction excavations should be maintained at slopes of 1.5:1 (H:V) or flatter. Surcharge loads including construction traffic and excavated spoil materials should be maintained at least 15 feet from the crest of any excavation slope. Surface water should be routed such that it does not flow down the face of the excavation slopes. Where insufficient space exists for open cut excavations, a shoring system will be required. All excavations should comply with all applicable safety regulations.

501.4.8 Stripping, subgrade preparation, hauling and wind losses, and ground compaction, both in the borrow (reservoir) areas and within the embankment foundation areas are all factors in shrinkage.

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4. Subsection 501.6.2.1. Delete the wording in this subsection in its entirety and substitute with the following: This item will be paid on a Cubic Yard (CY) basis. This work consists of excavating, grading, stockpiling, moisture conditioning, placing and compacting onsite backfill, constructing banks and miscellaneous fill areas, and wasting of material related to the construction. Work shall be performed in accordance with Section 501 (Excavation and Backfill of Structures) of the Standard Specifications as amended by the Supplemental Technical Specifications. Payment is to be made at neat line and no extra payment will be made for shrinking or swelling of

<u>Pay Item</u>	<u>Pay Unit</u>
Excavation, Backfill, and Compaction, including relocation of material and finished grading, CIP	CY
Borrow, includes haul, placement, compaction and all related work, complete	CY

END OF ITEM SPECIFICATION



# Supplemental Specifications

# **Geotechnical Report**

GEOTECHNICAL REPORT WAS INCLUDED IN THE ORIGINAL BID DOCUMENTS

SOUTHERN SANDOVAL COUNTY ARROYO FLOOD CONTROL AUTHORITY (SSCAFCA) • LISBON CHANNEL IMPROVEMENTS • BID AND CONTRACT DOCUMENTS



#### DEPARTMENT OF THE ARMY ALBUQUERQUE DISTRICT, U.S. ARMY CORPS OF ENGINEERS 6200 JEFFERSON STREET ALBUQUERQUE, NM 87109

March 12, 2019

**Regulatory Division** 

SUBJECT: Nationwide Permit (NWP) Verification – Action No. SPA-2018-00122, Lisbon Arroyo - SSCAFCA

Dave Gatterman Southern Sandoval County Arroyo and Flood Control Authority 1041 Commercial Drive, SE Rio Rancho, NM 87124

Dear Mr. Gatterman:

This letter responds to your January 8, 2019, pre-construction notification (PCN) for the proposed Lisbon Arroyo stream bank stabilization - SSCAFCA located at approximately latitude 35.25818, longitude -106.7024, Lisbon Arroyo, in Sandoval County, New Mexico. The work, as described in your PCN, will consist of stream bank stabilization constructed in two segments. The upper segment involves approximately 475 linear feet of channel being stabilized (both sides), and the lower segment involves approximately 400 linear feet of channel being stabilized the left side only. The total impacts for the 3 sites will be 0.12 acres. We have assigned Action No. SPA-2018-00122 to this project. Please reference this number in all future correspondence concerning the project.

Based on the information provided, we have determined that the project is authorized by NWP 13, Bank Stabilization. The Corps has made a case-specific determination that the limit on loss of greater than 300 linear feet of ephemeral stream channel is waived because the impacts are minimal individually and cumulatively. A summary of this permit and the New Mexico Regional Conditions are available on our website at www.spa.usace.army.mil/reg/nwp. Clean Water Act (CWA), Section 401, requires applicants of federal permits to obtain certification of compliance, or waiver thereof, with applicable water quality standards from the appropriate certifying authority. Please refer to our website at http://www.spa.usace.army.mil/Missions/Regulatory-Program-and-Permits/Water-Quality-Certification/ and the attached spreadsheet for information regarding CWA Section 401 water quality certification (WQC). The permittee must ensure that the work complies with the terms and conditions of the NWP(s), including New Mexico Regional Conditions and conditions of the applicable WQC, and the special condition listed below.  The permittee shall adhere to the stream stabilization activities as detailed on pages 6 - 8 of the Lisbon Channel Plans submitted with the January 9, 2019 PCN. This NWP verification letter does not authorize the activities associated with the detention pond, as detailed on pages 4 – 5 of the Lisbon Channel Plans submitted with the January 9, 2019 PCN.

Based on the information provided, we understand FEMA is the lead agency for compliance with the Endangered Species Act and the National Historic Preservation Act. FEMA has determined, and the Corps concurs, that this project will not affect any federally listed threatened or endangered species or any historic properties. However, please note that the permittee is responsible for meeting the requirements of general condition 18 on endangered species and general condition 20 on historic properties.

This letter does not constitute approval of the project design features, nor does it imply that the construction is adequate for its intended purpose. This permit does not authorize any injury to property or invasion of rights or any infringement of federal, state or local laws or regulations. The permittee and/or any contractors acting on behalf of the permittee must possess the authority and any other approvals required by law, including property rights, in order to undertake the proposed work.

This permit verification is valid until March 18, 2022 (33 CFR 330.6), unless the NWP is modified, suspended, revoked or reissued prior to that date. Continued confirmation that an activity complies with the terms and conditions, and any changes to the NWP, is the responsibility of the permittee. Activities that have commenced, or are under contract to commence, in reliance on a NWP will remain authorized provided the activity is completed within 12 months of the date of the NWPs expiration, modification, or revocation.

Within 30 days of project completion, the permittee must fill out the enclosed Certification of Compliance form and return it to our office. The landowner must allow Corps representatives to inspect the authorized activity at any time deemed necessary to ensure that it is being, or has been, accomplished in accordance with the terms and conditions of the NWP. If you have any questions, please contact Forrest Luna at (505) 342-3678 or by email at Forrest.Luna@usace.army.mil. At your convenience, please complete a Customer Service Survey on-line available at http://corpsmapu.usace.army.mil/cm\_apex/f?p=136:4:0.

Sincerely,

Kelly Allen

Kelly E. Allen NM/TX Branch Chief

Enclosures



# Nationwide Permit Summary

## US Army Corps of Engineers® Albuquerque District

**NATIONWIDE PERMIT 13 Bank Stabilization** Effective Date: March 19, 2017

Expiration Date: March 18, 2022 (NWP Final Notice, 82 FR 1860, para. 3)

**Bank Stabilization**. Bank stabilization activities necessary for erosion control or prevention, such as vegetative stabilization, bioengineering, sills, rip rap, revetment, gabion baskets, stream barbs, and bulkheads, or combinations of bank stabilization techniques, provided the activity meets all of the following criteria:

(a) No material is placed in excess of the minimum needed for erosion protection;

(b) The activity is no more than 500 feet in length along the bank, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects (an exception is for bulkheads – the district engineer cannot issue a waiver for a bulkhead that is greater than 1,000 feet in length along the bank);

(c) The activity will not exceed an average of one cubic yard per running foot, as measured along the length of the treated bank, below the plane of the ordinary high water mark or the high tide line, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects;

(d) The activity does not involve discharges of dredged or fill material into special aquatic sites, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects;

(e) No material is of a type, or is placed in any location, or in any manner, that will impair surface water flow into or out of any waters of the United States;

(f) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored native trees and treetops may be used in low energy areas);

(g) Native plants appropriate for current site conditions, including salinity, must be used for bio-engineering or vegetative bank stabilization;

(h) The activity is not a stream channelization activity; and

(i) The activity must be properly maintained, which may require repairing it after severe storms or erosion events. This NWP authorizes those maintenance and repair activities if they require authorization.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the bank stabilization activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After construction,

temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

<u>Notification</u>: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if the bank stabilization activity: (1) involves discharges into special aquatic sites; or (2) is in excess of 500 feet in length; or (3) will involve the discharge of greater than an average of one cubic yard per running foot as measured along the length of the treated bank, below the plane of the ordinary high water mark or the high tide line. (See general condition 32.) (<u>Authorities</u>: Sections 10 and 404)

## NATIONWIDE PERMIT GENERAL CONDITIONS

<u>Note</u>: 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 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 NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

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

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

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

9. **Management of Water Flows**. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, 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 agency with direct management responsibility for 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 that are 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 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 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 permitteeresponsible 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 permitteeresponsible 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(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the 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) <u>Timing</u>. 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 necessary to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or 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) <u>Contents of Pre-Construction Notification</u>: 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) <u>Form of Pre-Construction Notification</u>: 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) <u>Agency Coordination</u>: (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.

## **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 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 activityspecific 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.

## **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).

## **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 pla **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 nonemergent, 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.

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**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 course 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 nonlinear 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 NWPs, 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

For additional information concerning the nationwide permits or for a written determination regarding a specific project, please contact the office below:

In New Mexico:

Chief, Regulatory Division Albuquerque District, US Army Corps of Engineers 4101 Jefferson Plaza, NE Albuquerque, NM 87109-3435 Telephone: (505) 342-3282

In Southeastern Colorado:

Southern Colorado Regulatory Office 201 W 8th St, Suite 350 Pueblo, CO 81003 Telephone: (719) 744-9119

In Southern New Mexico and Western Texas: Las Cruces Regulatory Office 200 E. Griggs Ave. Las Cruces, NM 88001 Telephone: (505) 554-7943

In Northwestern New Mexico and within the San Luis Valley of Colorado: Durango Regulatory Office 1970 E. 3rd Avenue, Suite 109 Durango, CO 81301 Telephone: (970) 259-1582

Information about the U.S. Army Corps of Engineers regulatory program, including nationwide permits, may also be accessed on our Internet page: http://www.spa.usace.army.mil/reg/

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

Summary Version: March 19, 2017