



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT
1325 J STREET
SACRAMENTO CA 95814-2922

PUBLIC NOTICE

SECTION 408 CATEGORICAL PERMISSION FOR ACTIVITIES RELATED TO THE MIDDLE MILE BROADBAND NETWORK INITIATIVE SACRAMENTO, SAN FRANCISCO, AND LOS ANGELES DISTRICTS U.S. ARMY CORPS OF ENGINEERS

PUBLIC NOTICE COMMENT PERIOD:

Begins: September 29, 2023

Ends: October 29, 2023

AUTHORITY: The authority to grant permission for temporary or permanent use, occupation, or alteration of any U.S. Army Corps of Engineers (USACE) civil works project is contained in Section 14 of the Rivers and Harbors Act of 1899, as amended, codified at 33 U.S.C. 408 ("Section 408"). Section 408 authorizes the Secretary of the Army, on the recommendation of the Chief of Engineers, to grant permission for the alteration or occupation or use of a USACE project if the Secretary determines that the activity will not be injurious to the public interest and will not impair the usefulness of the project. The Secretary of Army's authority under Section 408 has been delegated to the USACE, Chief of Engineers. The USACE Chief of Engineers has further delegated the authority to the USACE, Directorate of Civil Works, Division and District Commanders, and supervisory Division Chiefs depending upon the nature of the activity.

INTRODUCTION: The State of California proposes to undertake the Middle-Mile Broadband Network Initiative (MMBN), installing approximately 10,000 miles of fiber optic cable to support high-speed broadband service to unserved and underserved communities throughout California. The MMBN will span California and will cross numerous USACE federally authorized civil works projects ("USACE federal projects" or "USACE projects") within the Sacramento, San Francisco, and Los Angeles Districts ("Districts") in California. The California Department of Technology is managing the MMBN and will be utilizing California Department of Transportation (Caltrans) existing infrastructure and rights-of-way to implement activities (alterations) that would be in service of the proposed MMBN. The alteration requests in service of the MMBN would either come from the requester directly to the pertinent District or through the non-federal sponsor of the USACE project to the pertinent District. Most of the alteration requests would come from Caltrans; however, there is potential for alteration requests in service of the MMBN to come from entities outside of Caltrans.

When the Districts receive a request to alter a USACE project, they follow a review and approval process outlined in the 2018 Engineering Circular (EC) 1165-2-220, *Policy and Procedural Guidance for Processing Requests to Alter US Army Corps of Engineers Civil Works Projects Pursuant to 33 USC 408*. To help streamline the review process,

EC 1165-2-220 states that USACE districts can develop categorical permissions for Section 408 alterations that are similar in nature and that have similar effects to a USACE project and to the environment. USACE is proposing to implement a categorical permission process for alterations in service of the MMBN.

ALTERNATIVES: The decision options are: 1) No Action Alternative: continue with the current process of reviewing and making decisions on Section 408 requests individually, as described in EC 1165-2-220, or 2) Preferred Alternative: approve a categorical permission to streamline the review process of proposed Section 408 alteration requests that would be in service of the MMBN, that are similar in nature and that would result in similar effects to a USACE project and to the environment.

SCOPE OF THE DECISION: The Districts' area of responsibility typically covers a wide geographic area and includes portions of the states of Arizona, California, Colorado, Idaho, Nevada, Oregon, Utah, and Wyoming. The geographic scope would be limited to each Districts' boundary within the State of California (Attachment 1). The geographic scope of the decision to be made is further limited to USACE federal projects under the responsibility of the Districts. The decision only applies to federally authorized levees, channels, flood walls, ecosystem restoration, recreation, and navigation features. The Districts shall determine, on a case by case basis, whether this categorical permission may be applied where MMBN activities result in impacts to the real property interests of USACE, USACE managed reservoirs, USACE projects under construction, or any other USACE projects which may require USACE's Section 408 approval. The temporal scope of this categorical permission is 10 years; after 10 years the categorical permission will be reevaluated and may be renewed or revised, if appropriate. While there is a definite plan for a comprehensive review of the categorical permission at 10 years, nothing precludes USACE from reevaluation after a shorter time period if conditions so warrant.

PROPOSED CATEGORICAL PERMISSION: The proposed categorical permission would apply to proposed alterations in service of the MMBN that are similar in nature and that would result in similar effects to a USACE project and to the environment. If an environmental assessment (EA) or environmental impact statement (EIS) is needed for the National Environmental Policy Act (NEPA) documentation of a proposed alteration, then the proposed categorical permission would not apply, and the Section 408 request would be reviewed, and a decision made, following the current process described in EC 1165-2-220.

Proposed alterations would be required to minimize disturbance to surrounding vegetation, return disturbed areas to pre-project conditions, remove spoils, control storm water runoff and erosion, and not exceed federal *de minimis* levels of criteria air pollutants or precursors.

USACE anticipates that the alterations in service of the MMBN will be designed to limit permanent features within USACE project limits. Authorization under Section 408 would be required at locations where the proposed work would alter a USACE project.

Therefore, for the purpose of this categorical permission, proposed fiber optic crossings have been categorized into alteration types associated with potential methods of crossing USACE projects (Attachment 2). Alteration types are summarized below:

1. **Installation by Attachment to Bridges and Other Structures:** This alteration type covers the installation of conduits within a USACE project by attachment to bridges or other structures subject to certain terms and conditions. This alteration type covers the installation of conduits and fiber optic lines as well as associated activities and infrastructure, including, but not necessarily limited to installation of conduits, vaults, markers, and other associated structures as well as temporary features and construction activities. This alteration type also covers installation of conduits via open trenching methods.
2. **Installation by Aerial Crossing:** This alteration type covers the installation of conduits across USACE projects by overhead crossing subject to certain terms and conditions. This alteration type covers the installation of conduits and fiber optic lines as well as associated activities and infrastructure, including, but not necessarily limited to installation of conduits, poles and anchors, vaults, markers, and other associated structures as well as temporary features and construction activities.
3. **Trenchless Installation:** This alteration type covers the installation of conduits across USACE projects by horizontal directional drilling or other trenchless methodology subject to certain terms and conditions. This alteration type covers the installation of conduits and fiber optic lines as well as associated activities and infrastructure, including, but not necessarily limited to installation of conduits, poles and anchors, vaults, markers, and other associated structures as well as temporary features and construction activities.
4. **Geotechnical Explorations:** This categorical permission would cover geotechnical, geo-environmental and any other exploratory activities, as well as instrumentation. Borings and levee explorations may include, but not limited to, conventional geotechnical borings, cone penetration testing, in-situ testing, hydrovac excavation, potholing, trenching, and delineating cultural inventories. Instrumentation such as piezometer or inclinometer installation, and associated equipment used to monitor or test the levee and/or floodway is included in this alteration.

ENVIRONMENTAL IMPACTS OF PROPOSED ACTION: The USACE South Pacific Division proposes to implement a categorical permission that, in accordance with EC 1165-2-220, would simplify the review process for Section 408 requests for minor alterations in service of the MMBN to USACE projects. The South Pacific Division has determined that, in compliance with NEPA, a programmatic EA will be prepared. As the implementation of the MMBN categorical permission would not involve any on-the-ground work, there are no anticipated explicit effects to environmental resources resulting from the programmatic decision at hand. It is important to note that the decision to be made on the MMBN categorical permission would not authorize any specific Section 408 requests or any on-the-ground work. If the proposed MMBN categorical

permission is approved, future Section 408 requests would be individually reviewed to determine if they fit under the categorical permission.

Each MMBN individual Section 408 request would be evaluated on a case-by-case basis for compliance with all applicable environmental laws under the proposed MMBN categorical permission. Additionally, adequacy of the existing NEPA documentation (a programmatic EA for the categorical permission) would be verified for each individual Section 408 request. A separate NEPA analysis would be conducted if the existing NEPA documentation is not adequate. Section 408 requests for alterations that are not described in the categorical permission (see descriptions above) or that do not adhere to the applied conditions would be evaluated using the current review process for an individual request as described in EC 1165-2-220.

Although the decision whether to implement the proposed categorical permission would not have explicit impacts on resources, the types of alterations described under the proposed categorical permission have the potential to impact a number of different resources. Resources that could potentially be affected by these types of alterations include aesthetics, air quality, cultural resources, fish and wildlife, floodplains, invasive species, noise, recreation, threatened and endangered species, transportation/traffic, vegetation, water quality, and wetlands. It is expected that the effects associated with the types of alterations covered by the categorical permission described above would be minor or negligible. If a proposed alteration is determined to involve more than minor impacts or would not meet the parameters identified in the project description - the MMBN categorical permission would not apply and a categorical exclusion, EA or EIS would be prepared, as appropriate.

Under the proposed MMBN categorical permission, the Districts would continue to individually evaluate each Section 408 request on a case-by-case basis for potential effects to threatened and endangered species (and their designated critical habitat) listed under the federal Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*) and, as appropriate, conduct (or adopt) consultation pursuant to Section 7 of the ESA with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service (NMFS). The Districts would also continue to individually evaluate each Section 408 request for potential adverse effects to Essential Fish Habitat (EFH). If adverse effects to EFH are anticipated, the Districts would conduct (or adopt) consultation with NMFS pursuant to the Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended (16 U.S.C. 1801 *et seq.*).

Under the proposed MMBN categorical permission, the Districts would continue to individually evaluate each Section 408 request on a case-by-case basis for the potential to affect cultural resources and, when there is the potential for effects, conduct or adopt consultation with the appropriate State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (54 U.S.C. 306108 *et seq.*). When a proposed alteration has the potential to affect cultural resources, the Districts would

coordinate (or adopt coordination), and consult as appropriate, with potentially interested Native American tribes.

PUBLIC INVOLVEMENT: The purpose of this notice is to solicit comments from the public; federal, state, and local agencies and officials; tribes; and other interested parties regarding the proposed Section 408 MMBN Categorical Permission. Comments received within 30 days of publication of this notice will be used in the evaluation of potential impacts of the proposed action on important resources.

SUBMITTING COMMENTS: Written comments, referencing “Section 408 Middle Mile Broadband Network (MMBN) Categorical Permission” must be submitted by email or mail to the pertinent office listed below on or before October 29, 2023.

Oren M. Ruffcorn
Project Manager
US Army Corps of Engineers
1325 J Street, Room 1460
Sacramento, California 95814-2922
Email: CESPK-408-PN@usace.army.mil

Attachments:

- 1) District Boundaries within the State of California
- 2) Categorical Permission Alteration Descriptions

USACE Districts within California

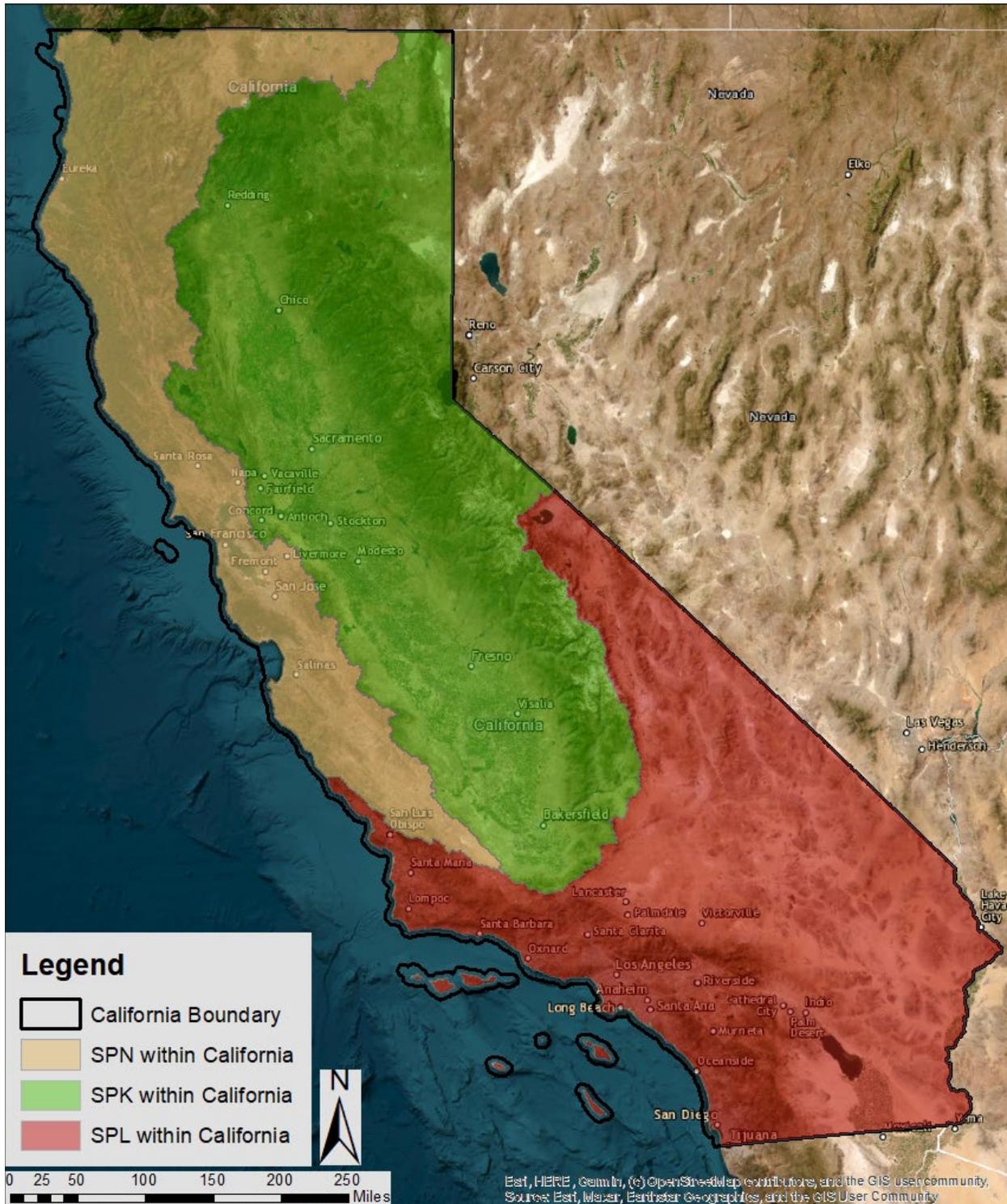


Figure. Map showing the USACE Sacramento District, San Francisco District, and Los Angeles District boundaries limited to California.



U.S. Army Corps
of Engineers

CATEGORICAL PERMISSION ALTERATION DESCRIPTIONS

CATEGORICAL PERMISSION FOR SECTION 408 REQUESTS RELATED TO MIDDLE-MILE BROADBAND NETWORK INITIATIVE U.S. ARMY CORPS OF ENGINEERS

September 29, 2023

Prepared by:
U.S. Army Corps of Engineers
Sacramento District
408 Permission Section
1325 J Street
Sacramento, California 95814-2922

Prepared for:
U.S. Army Corps of Engineers
South Pacific Division
450 Golden Gate Avenue
San Francisco, CA 94102-3406

Table of Contents

Installation by Attachment to Bridges and Other Structures 1
Installation by Aerial Crossing 4
Trenchless Installation..... 5
Geotechnical Explorations..... 6

INSTALLATION BY ATTACHMENT TO BRIDGES AND OTHER STRUCTURES

This categorical permission (CP) covers the installation of conduits within a USACE project by attachment to bridges or other structures subject to certain terms and conditions. This CP alteration type covers the installation of conduits and fiber optic lines as well as associated activities and infrastructure, including, but not necessarily limited to installation of conduits, vaults, markers, and other associated structures as well as temporary features and construction activities. This CP alteration type also covers installation of conduits via open trenching methods.

Conditions of Design and Construction

The alteration must comply with all USACE engineering design and construction requirements not expressly described below.

The alteration must not interfere with the integrity or hydraulic capacity of the flood risk management project; easement access; or maintenance, inspection, and flood fighting procedures.

The area in and around the construction site must be kept clear to prevent erosion and/or a reduction in channel capacity.

Conduits must be installed above the bridge soffit or within the bridge superstructure. New conduits must not result in a new source of hydraulic blockage. The preferred method of attachment is to install new conduits above the lowest elevation, on the downstream side of the existing bridge or structure.

If conduit is installed within a culvert, then the culvert must be able to pass the design flow. The installation must occur such that soil cannot penetrate into the culvert interior through holes left by installed fasteners.

Buried conduits installed parallel to a levee must be installed greater than 15 feet from the levee toe. Proposals to install buried conduits parallel to a levee within 15 feet of the landside toe will not be considered eligible for review and validation under this Categorical Permission.

Staging, storage areas, network hub shelters or other large structures, splice vaults, and pull vaults should be located outside of any USACE project levees and channels.

Materials and heavy equipment should not be stockpiled on the USACE Levees.

Conduit construction or modification may occur on the approach to the concrete structure. Conduit approaches to the concrete structure within the federal project limits should be installed using trenched methods per appropriate USACE technical guidance.

Conduits passing through federal levees must be backfilled with Controlled Low Strength Material (CLSM) or concrete under and around, to 1 foot over, the conduit. Sand backfill is not permitted for dry utility conduits in federal flood risk management projects. Conduits passing through federal levees must comply with requirements of Engineering Manual 1110-2-2902 *Conduits, Pipes, and Culverts associated with Dams and Levee Systems* and EM 1110-2-1913 *Design and Construction of Levees*.

Utility conduits should be designed to prevent (1) flotation from uplift, (2) scour or erosion, (3) damage from debris on the waterside, particularly during flood flows, (4) leakage, (5) seepage along proposed conduits, (6) corrosion, and (7) damage from vehicular loads. All new dry utility conduits installed by open trench methods must go up and over the design water surface elevation (DWSE).

An under seepage and slope stability analyses must be submitted to support proposed project work that will alter the geometry of an existing levee. Representative cross sections for both existing and proposed final grades must be developed for model runs using site specific subsurface soil profiles.

Conduits installed through the levee should be as close to right angles to the levee centerline as practicable.

All conduits and related structures that cross the levee foundation at a depth less than or equal to two times the height of the levee should be analyzed for uplift; conduits crossing the levee surface must be designed to counteract buoyant forces at the DWSE.

Conduit location and orientation must be clearly marked in the field so they can be easily identified for flood fighting crews or maintenance (e.g., electrical conduits).

Fiber optic markers must be installed less than 3 feet into the levee crown and less than 1 foot into levee slopes.

No plastic conduits (HDPE, PVC, etc.) are allowed in the levee embankment or its foundation unless they are embedded in concrete, or CLSM, or encased in a steel conduit with the annular space completely grouted.

Conduits located within or beneath a levee must have watertight joints that can accommodate movement.

Minimum Slope Requirements. Excavate all temporary construction slopes no steeper than 2.0H (Horizontal):1.0V (Vertical) within 15 feet of either levee toe. All excavations must also meet Federal, State, local, and OSHA requirements.

Fill and Compaction Requirements. The below backfill and compaction requirements apply for all alterations involving excavation in the levees:

- i. Backfill under and around (to one foot over) the proposed conduit near or on the levees must be Controlled Low-Strength Material (CLSM). Conduits that pass above the DWSE must have 2 feet of cover (low permeability or CLSM) to prevent damage by vehicles and equipment. Cover material on the levee crown must be placed at a ratio of 10H:1V, in the upstream/downstream direction of the levee. Conduits on the sides of the levee should be covered with a minimum of 1 foot of low permeability material, compacted in 4- to 6-inch lifts or CLSM to protect them from debris during high water (waterside) or to keep them from interfering with or being damaged by operations or maintenance of the levee (landside).
- ii. Fill must be free of deleterious materials and construction debris and placed in 4- to 6-inch-thick loose lifts and compacted to not less than 95% of the maximum density at moistures between -2 and +3 percent of optimum moisture content obtained from ASTM D698 (USACE preferred method), or alternately, 90% of the maximum density at moistures between 0 and +4 percent of optimum moisture content obtained from ASTM D1557. At the sponsor and levee maintaining agency's discretion, conduits on the levee slopes may be left exposed.
- iii. Only suitable material must be used as levee fill materials. Fill must be free from: roots and other organic matter, contaminated hazardous or toxic material, trash, debris, and frozen materials. Satisfactory fill material must have a plasticity index between 8 and 25, have a liquid limit less than 50, a minimum fines content of 20%, and 100% passing the 3-inch sieve.

The proponent is responsible for the restoration of a levee damaged by trenching or other conduit installation methods. Plans for restoration or repair work must be approved before the work begins.

The preferred method for abandoning conduits that pass through or over a levee is complete removal. If removal is not feasible, the conduits and other structures may be filled with a cement/bentonite-based grout or flowable fill. The grout needs to be sufficiently fluid so that it can be pumped to completely fill the conduit leaving no voids.

INSTALLATION BY AERIAL CROSSING

This categorical permission (CP) covers the installation of conduits across USACE projects by overhead crossing subject to certain terms and conditions. This CP alteration type covers the installation of conduits and fiber optic lines as well as associated activities and infrastructure, including, but not necessarily limited to installation of conduits, poles and anchors, vaults, markers, and other associated structures as well as temporary features and construction activities.

Conditions of Design and Construction

The preferred method of installation of overhead crossing is to locate all utility poles outside of the levee embankments and/or foundations and at least 15 feet from levee or berm toe.

When there is no alternative to placing a pole within the levee embankment and/or foundation, proponents must submit a seepage and stability analysis for USACE review that supports the request. The analysis should include boring logs of the area adjacent to the proposed pole location identifying the stratigraphy.

In order to avoid vibration that can cause cracking, new poles within the levee embankment and within 15 feet of the levee toe must be installed in pre-drilled holes. After installation, the entire hole should be filled with a cement-bentonite grout slurry. The slurry should fill the hole to the surrounding ground surface. When poles are removed the holes must be backfilled with concrete or CLSM. Alternatively, the upper 2 feet may be compacted soil. Soil should be mounded immediately adjacent to the pole to direct the water away from the pole. Guy wires should be anchored with concrete. Exceptions and alternate pole installation techniques may be approved by USACE under some circumstances, but only after appropriate engineering review.

In general, 25 feet is the minimum clearance allowed between the levee crown and the lowest point of the proposed utility wire crossing.

Poles near the levee must not deteriorate and create holes in the impervious layer.

Poles near the levee must not lean or fall over and cause utility lines or poles to interfere with levee inspections, operations, maintenance, or flood-fighting.

The bases of the poles must be kept clear of debris.

Any necessary supports or anchors are maintained to prevent overturning by wind or water.

When installation occurs on existing poles, any needed repairs must be completed before using the pole.

TRENCHLESS INSTALLATION

This categorical permission (CP) covers the installation of conduits across USACE projects by HDD or other trenchless methodology subject to certain terms and conditions. This CP alteration type covers the installation of conduits and fiber optic lines as well as associated activities and infrastructure, including, but not necessarily limited to installation of conduits, poles and anchors, vaults, markers, and other associated structures as well as temporary features and construction activities.

Conditions of Design and Construction

In general, the entry and exit points of the HDD pipe should be located no less than 300 feet from the landside toe of the levee. The pipeline should pass no less than 50 feet beneath the levee's landside toe. If the top of the pipe is less than 50 feet beneath the current channel invert, a scour analysis is required. This analysis must show that the maximum scour depth will not expose the buried pipe. HDD activities shall comply with EM 1110-2-1913 *Design and Construction of Levees*.

For HDD and other trenchless installations in locations without levees, the pipeline should be located at a depth at which the maximum scour depth will not expose the buried pipe.

For any drilling beneath the levee embankment a Drilling and Invasive Program Plan must be prepared and approved in accordance with Engineering Regulation 1110-2-1807 (*June 2023*).

Detailed subsurface investigations should be performed along the proposed directional drilling alignment to determine soil stratigraphy.

The pumping rate, pressure at the drill rig, pressure in the annular space behind the drill bit and viscosity of drilling fluid must be monitored during drilling. In addition, as appropriate, density during the pilot bore, back reaming, and/or pipe installation stages must be monitored. Drilling mud pressure in the borehole should not exceed levels that can be supported by the levee foundation soils to prevent heaving or hydraulic fracturing of the soil.

The proponent is responsible for the restoration of a levee damaged by hydrofracture or any other aspect of the directional drilling operation. Plans for restoration or repair work must be approved before the work begins.

If a drill hole beneath a levee must be abandoned, the hole should be backfilled in accordance with all appropriate technical guidance, and federal, state, and local requirements.

GEOTECHNICAL EXPLORATIONS

The categorical permission covers geotechnical, geo-environmental and any other exploratory activities, as well as instrumentation.

Conditions of Design and Construction

Work may be conducted within the levee embankment, adjacent to the levee toe, and/or in the floodway. Borings and levee explorations may include, but not limited to, conventional geotechnical borings, cone penetration testing, in-situ testing, hydrovac excavation, potholing, trenching, and delineating cultural inventories. Instrumentation such as piezometer or inclinometer installation, and associated equipment used to monitor or test the levee and/or floodway is included in this alteration as well as other geotechnical instrumentation to measure deformation, seismic loading, groundwater pressure and stress changes in soil.

All drilling should be designed to minimize the need for drilling fluid in the levee embankment and/or the levee foundation to reduce the risk of damage. Requests for geotechnical explorations should include all anticipated exploratory and construction related explorations.

Borings in the levee embankment and/or the levee foundation will require a Drilling and Invasive Program Plan to be prepared and approved in accordance with ER 1110-1-1807 *Drilling and Invasive Activities at Dams and Levees (June 2023)*.

The requester must discontinue drilling and place grout or bentonite seals in all open borings, trenches, and other excavations if the river approaches flood monitoring stage.

Drilling or other explorations should not begin if the river is approaching flood monitoring stage.

The requester must keep borehole sealing materials and equipment at the site before drilling begins, in preparation for unexpected river stage increases.

Open boreholes and excavations cannot be left unattended for more than 24 hours and all open boreholes should be sealed before leaving the construction site at the end of a work week.

Boreholes that are awaiting backfill should be covered to prevent entry by small animals. The requester must verify that drilling equipment will not disrupt overhead wires.