

## ENGINEERING CONDITIONS

1. Work must comply with *SWFP 1150-2-1, Criteria for Design and Construction Within the Limits of Existing Federal Projects, (USACE 2013)*, or applicable future update or replacement document.
2. The requester shall include the following in construction plans: *General Notes for Project Construction Plans Altering a Federal Civil Works Project (Appendix C.)*.
3. The alteration must not adversely impact the Civil Works project hydraulic capacity, integrity, easement access, and operation and maintenance, inspection, and flood fighting procedures.
4. No temporary staging, stockpiles of materials, temporary buildings, or equipment can remain within the project during construction unless approved in writing by the non-federal sponsor.
5. Construction or other work must be coordinated with other work in the area.
6. All structures, facilities, equipment, and other appurtenances must be properly anchored to prevent flotation in the event of high water.
7. All companies/agencies whose existing utilities are located in the intended construction area(s) must be contacted to determine whether those utilities need to be relocated or modified to accommodate the proposed alteration, or whether they would pose any hazards to alteration construction workers or equipment.
8. Appropriate property rights must be acquired as needed for construction, operation, and maintenance of the alteration.
9. Areas disturbed during construction or other work associated with an alteration must be restored to pre-construction conditions once the work is complete.
10. Damage caused by removal or modification of an alteration must be repaired as part of the removal or modification activity.
11. Excavations and drilling must meet federal, state, and local criteria, USACE standards, and Office of Safety and Occupational Health standards.
12. The requester is responsible for removal and disposal of trees or brush cleared during construction to areas outside the limits of the federal project easement.
13. The requester is responsible for protecting levees from damage by construction vehicles, equipment, construction activities, and storage of materials.
14. The requester shall avoid and minimize, to the maximum extent practicable,

impacts to recreational facilities - if trails, or public access points, parking lots, or other recreational facilities are blocked to accommodate construction, the requester shall, to the maximum extent practicable, provide for temporary access. Permanent impacts to recreational facilities must comply with Chapter 26 of the Texas Parks and Wildlife Code (PWC) and the Land and Water Conservation Fund Act.

## ENVIRONMENTAL CONDITIONS

1. Proposed alterations must avoid and minimize, to the maximum extent practicable, impacts to federally listed threatened or endangered species including their critical habitat, proposed threatened and endangered species, candidate species, and proposed critical habitat in accordance with the Endangered Species Act (ESA). The requester will provide an Official Species List from the U.S. Fish and Wildlife Service online Information from Planning and Consultation website <https://ecos.fws.gov/ipac/> for each Section 408 request. Additionally, if suitable habitat is likely in the area, the USACE may require the requester to prepare an assessment of potential impacts to listed species or habitat. USACE will review the Official Species List, and assessment report prepared by the requester if necessary, to assist in making a Section 7 of the ESA effects determination for each individual Section 408 request.
2. Proposed alterations must avoid and minimize, to the maximum extent practicable, the “take” of migratory birds as defined by the Migratory Bird Treaty Act. The requester is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The requester 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.
3. Proposed alterations must avoid and minimize, to the maximum extent practicable, impacts to aquatic resources. Proposed alterations requiring a Section 404 of the Clean Water Act and or Section 10 of the Rivers and Harbors Act of 1899 permit must be covered under applicable Nationwide or Regional General Permits, or Individual Permits. The requester is required to comply with all general, regional, and special conditions. The requester is required to follow all compensatory mitigation requirements.
4. Proposed alterations must avoid and minimize, to the maximum extent practicable, impacts to fish and wildlife habitat, including bottomland hardwood habitat. Proposed alterations must not result in a net loss of significant fish and wildlife habitat. If appropriate mitigation to offset losses is required, the requester will be responsible for providing documentation regarding acquisition of the real estate interest necessary for the mitigation and reports on the progress and

fulfillment of the required mitigation. USACE may require the requester to conduct surveys, prepare and/or provide reports, and other investigations, for USACE to determine the quality and nature of potential fish and wildlife habitat present and the suitability of compensatory mitigation sites.

5. Proposed alterations must avoid, minimize or mitigate any significant impacts to cultural resources, to include any adverse effects to historic properties under Section 106 of the National Historic Preservation Act. Additionally, the USACE may require the requester to conduct surveys, prepare and/or provide reports, and other investigations, for USACE to determine the presence of historic properties or the project's effects to historic properties.
6. Proposed alterations must minimize, to the maximum extent practicable, emissions of criteria pollutants for areas subject to General Conformity within the State of Texas as regulated under the Clean Air Act, reference 40 CFR, Part 93, Subpart B. USACE may require requesters to provide emission projections to USACE, to aid in determining if the alteration is expected to meet or exceed de minimis thresholds.
7. Proposed alterations must be designed to minimize the introduction of exotic species (both plant and animal). Seed mixes used in site restoration must consist only of native species. Use of grass or vegetation species applicable for turfing or sodding requirements for flood risk management projects is acceptable for use on levees and embankments. Preference will be given to utilization of native species in seed mixes. For activities within streams or waterbodies, an Aquatic Invasive Species transfer prevention plan will be required which outlines Best Management Practices (BMPs) for preventing inadvertent transfer of aquatic invasive plants and animals on equipment and materials.
8. Proposed alterations must incorporate BMPs to control storm water runoff, erosion, and contaminant spills (e.g., diesel fuel spills).
9. Upland areas may be temporarily cleared for staging of equipment and materials during construction. Site restoration, including use of seed mixes for applicable USACE project purposes, is required.
10. Vegetation may be removed during construction, however, the alteration should be designed to minimize the amount of woody vegetation removal. Site restoration, including use of seed mixes for applicable USACE project purposes, is required.
11. Excess material from construction must be removed from the project and disposed in an area outside the federal project easement.
12. In the event of an environmental spill, the requester must notify the USACE, the non-federal sponsor and the appropriate state agency immediately. Cleanup and

repair are the requester's responsibility. If fish and wildlife resources are impacted by the spill, contact the Texas Parks and Wildlife Department (TPWD) Kills and Spills Team (KAST) immediately, KAST 24 Hour Hotline 512-389-4848.

13. If human remains, archaeological sites, or other cultural resources are encountered during construction, the requester shall immediately stop work and notify the non-federal sponsor.
14. Proposed alterations will be reviewed for compliance with the 1988 Regional Environmental Impact Statement Trinity River and Tributaries Record of Decision Criteria. These criteria apply to a geographic area within the Dallas/Fort Worth metropolitan area. These criteria require USACE to review development within the floodplain.
15. Proposed alterations must avoid and minimize, to the maximum extent practicable, impacts to federal mitigation areas, including mitigation areas associated with USACE projects, and Permittee Responsible Mitigation areas and Mitigation Banks associated with the USACE Regulatory Program. Only minimal impacts to mitigation areas associated with USACE projects will be allowed. Some mitigation areas associated with USACE projects may have existing easements or rights of way (e.g., utility or transportation) within the real property acquired for the mitigation areas, and in these cases, proposed alterations within these existing easements or rights of way will need to minimize impacts to the mitigation area. Proposed alterations to Permittee Responsible Mitigation areas or Mitigation Banks shall be the responsibility of the requester to contact the Fort Worth District Regulatory Division. The Fort Worth District Regulatory Division shall make determinations and decisions regarding impacts to Permittee Responsible Mitigation areas. Mitigation may be required to offset long-term or permanent adverse effects.
16. Proposed alterations must avoid and minimize, to the maximum extent practicable, impacts to USACE Ecosystem Restoration Projects, or Ecosystem Restoration features of multi-purpose USACE projects which may include Ecosystem Restoration as an authorized project purpose. Some USACE Ecosystem Restoration Projects may have existing easements or rights of way (e.g., utility or transportation) within the real property acquired for the USACE Ecosystem Restoration Project, and in these cases, proposed alterations within these existing easements or rights of way will need to minimize impacts to the USACE Ecosystem Restoration Project. Mitigation may be required to offset long-term or permanent adverse effects.
17. Requesters and non-federal sponsors will identify the presence of Hazardous, Toxic, and Radioactive Waste (HTRW) located within the portion of the USACE project where the proposed alteration would occur, and all adjacent properties from which HTRW could migrate onto the USACE project as result of disturbance from the proposed alteration. Non-federal sponsors will notify USACE regarding

remediation or response actions in accordance with ER 1165-2-132.

18. Proposed alterations must avoid and minimize, to the maximum extent practicable, impacts to State of Texas Species of Greatest Conservation Need (SGCN) and State of Texas designated threatened or endangered species. The requester is responsible for compliance with State Law, the Texas Administrative Code, and TPWD regulations. The requester is responsible for contacting the TPWD for compliance. The requester is responsible for preparation of any surveys, reports, and other investigations, which may be required to comply with State of Texas Laws. More information may be found at

[https://tpwd.texas.gov/huntwild/wild/wildlife\\_diversity/nongame/tcap/sqcn.phtml](https://tpwd.texas.gov/huntwild/wild/wildlife_diversity/nongame/tcap/sqcn.phtml)

and

[https://tpwd.texas.gov/huntwild/wild/wildlife\\_diversity/nongame/listed-species/](https://tpwd.texas.gov/huntwild/wild/wildlife_diversity/nongame/listed-species/)

19. State agencies and political subdivisions must notify the Texas Historical Commission of ground disturbing projects in accordance with the Antiquities Code of Texas (Texas Natural Resources Code, Title 9, Chapter 191). Chapter 26 of the Texas Administrative Code provides guidance on the process in addition to a list of categorical exclusions. The requester is responsible for ensuring compliance with the Antiquities Code of Texas, which may include but is not limited to, obtaining an Antiquities Code Permit, conducting cultural resources investigations and reports, and reporting any archaeological sites discovered during construction.
20. Proposed alterations must comply with State of Texas laws regarding protection of aquatic resources. Proposed alterations must avoid and minimize, to the maximum extent practicable, impacts to native fish and freshwater mussel species. If construction occurs during times when water is present and dewatering, trampling, dredging, trenching, or filling activities are involved, then relocating native aquatic resources, including fish and mussels, shall be in conjunction with a Permit to Introduce Fish, Shellfish or Aquatic Plants into Public Waters, and an Aquatic Resource Relocation Plan (ARRP). These are administered by the TPWD. The ARRP should be approved by the TPWD 30 days prior to activities within project waters or resource relocation and submitted with an application for a no-cost permit. ARRPs can be submitted to the appropriate Regional KAST member whose contact information is found on the TPWD KAST webpage. Copies of the Permit to Introduce Fish, Shellfish or Aquatic Plants into Public Waters and ARRP shall be provided to USACE for USACE to confirm the requester is complying with state law and is coordinating with TPWD. Requesters shall complete the appropriate mussel sampling protocol as determined by the Texas Freshwater Mussel Sampling Protocol Stream Grouping dataset and must coordinate with the TPWD KAST for appropriate authorization when a project involves dewatering or other harmful actions that may impact aquatic species, in

waters identified as Group 1 through Group 5 streams, as defined by TPWD. The requester is responsible for preparation of any surveys, reports, and other investigations, which may be required to comply with State of Texas Laws. More information may be found at

[https://tpwd.texas.gov/landwater/water/environconcerns/kills\\_and\\_spills/](https://tpwd.texas.gov/landwater/water/environconcerns/kills_and_spills/)

21. Proposed alterations must utilize as applicable, the following TPWD Recommended Beneficial Management Practices.

a. TPWD recommends utilizing the TPWD RTEST and known occurrence data from the Texas Natural Diversity Database (TXNDD) to identify species of SGCN, including state and federal listed SGCN, that may occur in a project area. RTEST provides SGCN lists and general habitat descriptions for each species potentially occurring in each county of Texas. The TXNDD provides known occurrences from a database of individual records for SGCN. Given the small proportion of public versus private land in Texas, the TXNDD does not include a representative inventory of rare resources in the state. Please note that absence of information in the database does not imply that a species is absent from that area. The data from the TXNDD do not provide a definitive statement as to the presence, absence, or condition of special species, natural communities, or other significant features within your project area. These data are not inclusive and cannot be used as presence/absence data. This information cannot be substituted for on-the-ground surveys. The TXNDD is updated continuously based on new, updated and undigitized records. For questions regarding a TXNDD record or to obtain digital data, please visit the TXNDD webpage for guidance.

b. A permit under PWC chapter 86 may be required for disturbance of marl, sand, gravel, shell, or mudshell within streams of the state, where applicable. Information regarding such permits can be found on the TPWD website. The Section 408 requester should contact Tom Heger, TPWD – Inland Fisheries at [Tom.Heger@tpwd.texas.gov](mailto:Tom.Heger@tpwd.texas.gov) to determine potential applicability of the TPWD permit to the proposed project and for permit application forms and additional information.

c. It is recommended that Section 408 requesters inform their employees and contractors of the potential for federal and state listed species and other SGCN to occur in the project area and to avoid impacts to all wildlife that are encountered. Wildlife observed during construction, operation, and maintenance should be allowed to safely leave the site. Wildlife in danger from project activities that will not readily leave the site, can be translocated to a nearby area with similar habitat. TPWD recommends that any translocations of reptiles be the minimum distance possible no greater than one mile, preferably within 100-200 yards from the initial encounter location. For purposes of relocation, surveys, monitoring, and research, terrestrial state listed species may only be handled by

persons with the appropriate authorization obtained through the TPWD Wildlife Permits Program. For more information on obtaining this authorization, please contact the Wildlife Permits Office at (512) 389-4647.

d. Sky glow because of light pollution can have negative impacts on wildlife and ecosystems by disrupting natural diurnal and nocturnal behaviors such as migration, reproduction, nourishment, rest, and cover from predators. TPWD recommends utilizing the minimum amount of night-time lighting needed for safety and security for on ground facilities and lighted structures. TPWD recommends minimizing the project's contribution to skyglow by focusing light downward, with cutoff luminaires to avoid light emitting above the horizontal, and to use dark-sky friendly lighting that is illuminated only when needed, fully shielded, as bright as needed, and minimizes blue light emissions. Appropriate lighting technologies, BMP, and other dark sky resources can be found at the International Dark-Sky Association and McDonald Observatory websites.

e. Waterways, floodplains, riparian corridors, lakes, and wetlands provide valuable wildlife habitat, and TPWD recommends protecting them to the maximum extent possible. TPWD recommends avoiding unnecessary temporary or permanent access roads or culverts within creeks, boring under streams for utilities, retaining riparian and stream bank vegetation, and establishing disturbance-free buffers contiguous to wetlands or aquatic systems to preserve wildlife cover, food sources, and travel corridors. TPWD recommends avoiding disturbance to inert microhabitats in waterways such as snags, brush piles, fallen logs, creek banks, pools, and gravel stream bottoms, as these provide habitat for a variety of fish and wildlife species and their food sources. Erosion control measures should be installed prior to construction and maintained until disturbed areas are permanently revegetated using site-specific native vegetation.

f. Where trenching or other excavation is involved in construction, TPWD recommends that contractors keep trenching, excavation, and backfilling crews close together to minimize the number of trenches or excavation areas left open at any given time during construction. Any trenches or holes left open for more than two daylight hours should be inspected for the presence of trapped wildlife prior to backfilling. TPWD recommends that any open trenches or excavation areas be covered overnight and inspected every morning to ensure no wildlife species have been trapped. If trenches and excavation areas cannot be backfilled the day of initial excavation or covered overnight, then escape ramps should be installed, if feasible, at least every 90 meters (approximately 295 feet). Escape ramps consist of short lateral trenches made of soil or wooden planks sloping to the surface at an angle less than 45 degrees (1:1).

g. For soil stabilization and revegetation of disturbed areas within the project area, TPWD recommends erosion control and seed and mulch stabilization materials that avoid entanglement hazards to snakes and other wildlife species. Because the mesh found in many erosion control blankets or mats pose an

entanglement hazard to wildlife, TPWD recommends the use of no-till drilling, hydromulching, or hydroseeding rather than erosion control blankets or mats due to a reduced risk to wildlife. If erosion control blankets or mats will be used, the product should contain no netting or contain loosely woven, natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic mesh matting and hydromulch containing microplastics should be avoided.

h. Reductions in native floral resources has led to widespread concern about significant declines in the population of migrating monarch butterflies and other native insect pollinator species. To support pollinators and migrating monarchs, TPWD encourages the establishment of native wildflower habitats on private and public lands. TPWD encourages projects to restore or revegetate impacted areas with vegetation that provides habitat for monarch butterflies and other pollinator species. Species appropriate for establishment within the project area can be found by accessing the Lady Bird Johnson Wildflower Center, working with TPWD biologists to develop an appropriate list of species, or utilizing resources found at the Monarch Watch website or the Xerces Society's Guidelines webpage. For areas of the site that already exhibit floral resources and for areas that are planted with floral resources, TPWD recommends incorporating pollinator conservation into maintenance plans for the project area to promote and sustain the availability of flowering species throughout the growing season. TPWD recommends scheduling vegetation maintenance to occur once the seed from pollinator plants has been released and avoiding herbicides that affect floral resources.

i. To aid in the scientific knowledge of a species' status and current range, TPWD encourages reporting encounters of SGCN to the TXNDD according to the data submittal instructions found at the *TPWD Texas Natural Diversity Database: Submit Data* webpage,

[https://tpwd.texas.gov/huntwild/wild/wildlife\\_diversity/txndd/submit.phtml](https://tpwd.texas.gov/huntwild/wild/wildlife_diversity/txndd/submit.phtml).

An additional method for reporting observations of species is the iNaturalist community app in which plant and animal observations are uploaded from a smartphone. The observer adds the observation to specific TPWD Texas Nature Tracker Projects appropriate for the taxa observed, including Herps of Texas, Birds of Texas, Texas Eagle Nests, Texas Whooper Watch, Mammals of Texas, Rare Plants of Texas, Bees & Wasps of Texas, Terrestrial Mollusks of Texas, Texas Freshwater Mussels, Fishes of Texas, and Texas Milkweeds for Monarchs.