



# Public Notice Revised

**U.S. Army Corps  
Of Engineers**

**Galveston District**

Permit Application No: SWG-2012-00153

Date Issued: 2 August 2016

Comments

Due: 17 August 2016

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**U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT  
AND  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

**PURPOSE OF PUBLIC NOTICE:** To inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest.

**AUTHORITY:** This application will be reviewed pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (CWA).

**APPLICANT:** Texas Department of Transportation (TxDOT)  
P.O. Box 1386  
Houston, Texas 77251-1386  
POC: Pat Henry (713-802-5241)

**AGENT:** HNTB Corporation  
2950 North Loop West, Suite 900  
Houston, Texas 77008  
POC: Mike Carothers (713-354-1582)

**LOCATION:** The proposed highway, Grand Parkway (State Highway 99) Segments H & I-1 will consist of fill of wetlands for the purpose of constructing a 37.5-mile new location, four-lane controlled access road with intermittent frontage roads with a 400-foot right-of-way (ROW) between US-59/I-69 and I-10. The project would include bridges, culverts, and all required stormwater detention facilities. The study area for Segments H and I-1 is located on the northeast side of the greater Houston metropolitan area and spans the area from United States Highway (US 59 North (N)) to Interstate Highway (IH) 10 East (E), generally between US 59 N, Farm-to-Market Road (FM) 2100 on the west, and SH 146 on the east, in Montgomery, Harris, Liberty, and Chambers Counties, Texas. The northern terminus of the project is at US 59 N, approximately 28 miles north of downtown Houston. The southern terminus of the project is at IH 10, approximately 32 miles east of downtown Houston. The project can be located at: US 59 Crossing: Latitude: 30.1295° N, Longitude: 95.2290° W; at FM 1960 Crossing: Latitude: 30.0459° N, Longitude: 94.9762° W; at US 90 Crossing: Latitude: 30.0083° N, Longitude: 94.9386° W; at IH 10 Crossing: Latitude: 29.8245° N, Longitude: 94.8661° W.

**PROJECT DESCRIPTION:**

Texas Department of Transportation (TxDOT) proposes to build an approximately 37.5-mile-long, controlled-access toll road with intermittent frontage roads within a 400-foot ROW beginning at US 59/IH 69 and terminating at IH 10 E. The proposed project would be located in the northeast section of the planned State Highway 99 (Grand Parkway), an approximately 184-mile circumferential facility around the Houston metropolitan area. The proposed action is the portion of the Grand Parkway known as Segments H and I-1 and is included in the Houston-Galveston Area Council's 2040 Regional Transportation Plan (approved 11 September 2015) and the area's 2013-2016 Transportation Improvement Plan. The ultimate design for this facility consists of a four-lane at-grade controlled-access tollway with grade separations (overpasses) at major intersections within a 400-foot ROW width. Traversing part of Montgomery, Harris, Liberty, and Chambers Counties, the proposed new highway would provide access to IH 10 E and US 59/IH 69 (radial freeways). The activity would include the discharge of fill material into waters of the United States (U.S.) associated with the construction of roads, embankments, bridges, culverts, drainage ditches, outfall channels, and detention ponds.

**Alignment Shift in Mont Belvieu:**

The alignment shift, subsequent to the Record of Decision (ROD), has occurred as a result of requests from the property owners and to minimize impacts to the utilities in the area between SH 146 and FM 565. The alignment of Segment I-1 was shifted approximately 460 feet to the northeast near the SH 146 overpass. This resulted in approximately 132 acres of previously unevaluated property to be added to the proposed ROW. A reevaluation of the ROD was performed by TxDOT Houston District and approved 24 March 2016. It was determined that the change did not require a revision to the ROD.

**Changes in Permitting/Mitigation Requirements Due to the Alignment Shift:**

In total, the area of potentially jurisdictional waters of the U.S., including wetlands, identified in the project area was reduced from 107.15 acres to 104.30 acres.

**Streams:** The Mont Belvieu alignment shift did not result in changes to the stream acreage impacts or proposed mitigation.

**Wetlands:** Due to the Mont Belvieu shift, the wetland acres identified within the project boundaries was reduced from 101.90 to approximately 99 acres and 8 wetland areas were avoided.

**Mitigation:** Mitigation requirements changed very little due to the alignment shift. Since the shift occurred within the TxDOT Beaumont District boundary, the mitigation needs at the Blue Elbow Mitigation Bank changed slightly from 373.86 mitigation acres to 374.69 mitigation acres. The shift did not change the mitigation requirements at the Gin City Mitigation Bank.

Project plans are enclosed as 62 sheets. Also included, are vicinity map, stream assessment, secondary wetland impacts analysis, and wetlands tables. A Stream Mitigation Plan will be provided when it is available.

As shown in Tables 1 and 2, a total of approximately 99 acres of waters of the U.S., including wetlands, ditches, ponds, canals, and agricultural wetlands, and 9,198 linear feet of streams were identified within the project ROW. All of the wetlands within the project ROW may be filled. Of the 9,198 linear feet of streams within the ROW, the proposed design would result in impacts to 1,642 linear feet of streams by the discharge of less than 75 cubic yards of fill material. This fill is associated with the placement of riprap around bridge columns where it is not possible to completely span the stream, and the installation of culverts in one area under a proposed feeder road. Linear Feet of Stream Impacted = 1,642 linear feet; Acres of Wetland Impacted = 99 acres.

Temporary and permanent discharge of fill material will take place within waters of the U.S., including wetlands, streams, and other waterbodies during the construction of the proposed project. Whenever feasible, impacts to waters of the U.S. were avoided and minimized by bridging. Unavoidable impacts from the proposed project will result from construction of the facility, bridge structures, culverts, drainage ditches, drainage and detention basins, and temporary work spaces. All work will be within the proposed ROW. Permanent fill will be placed into waters of the U.S. to allow for the construction of the toll facility and accompanying ROW.

**AVOIDANCE AND MINIMIZATION:** The applicant has stated that they have avoided and minimized the environmental impacts by evaluating preliminary alternative project corridors and selecting the corridor which best avoids environmental impacts.

Prior to development of any alternatives, initial public scoping meetings were held on 28 February and 1 March 2006, to present study area information to members of the public, governmental and agency officials, in order to receive feedback on resource mapping, schedule, and methodologies to be used in the development and analysis of alternatives. The proposed project location and design were chosen as a balance between social, economic, and environmental aspects and was designed with consideration to minimizing potential environmental impacts, including potential impacts to waters of the U.S. An additional public meeting was conducted on 9 June 2015, for the purpose of presenting proposed design modifications.

Avoidance and minimization measures, such as bridging over streams and implementing a Stormwater Pollution Prevention Plan, and proposals for compensatory mitigation for unavoidable impacts, were incorporated into and addressed in the Segments H and I-1 FEIS, located: <http://www.grandpky.com/Segment-H>

During the development of the Grand Parkway Segments H and I-1 FEIS pursuant to the National Environmental Policy Act (NEPA), the U.S. Department of Transportation, Federal Highway Administration (FHWA), the TxDOT, and the Grand Parkway Association evaluated reasonable alternative corridors and alternative alignments to determine the alignment with the least number of environmental and social impacts that would meet the project purpose and need. Public meetings, workshops, and a public hearing were held to gather input from the public and from resource agencies including the Texas Parks and Wildlife Department, the Texas Commission on Environmental Quality, the U.S. Fish and Wildlife and from cooperating agencies such as the Corps and the U.S. Environmental Protection Agency. The selected alternative was based on public and agency input and on a thorough evaluation of available data and site investigations. The corridor and alternative alignment analysis detailed in the Segments H and I-1 FEIS resulted in the choice of the Preferred Alternative as described in FHWA's ROD, signed on 24 June 2014. After the ROD was issued, minor shifts in alignment were made in response to public comments and private landowners' requests, and were based on multiple meetings with local officials, landowners and members of the public. To document and analyze the proposed modifications, TxDOT has initiated a reevaluation of the FEIS for the proposed alignment shifts to the Selected Alternative. The minor alignment shifts do not affect the conclusion of the ROD that the Selected Alternative provides the best approach to avoid impacts to environmental and social resources while meeting the project purpose and need.

In addition to complying with NEPA, Department of the Army permit actions must comply with the CWA Section 404(b)(1) Guidelines (40 CFR 230) (the 404(b)(1) Guidelines) and the Department of the Army Public interest review (33 CFR 320.4[a]). Therefore, for the Corps permit actions, the range of practicable alternatives is typically a subset of reasonable alternatives under NEPA. The Segments H and I-1 FEIS and the preceding draft EIS provide a detailed description and analysis of the development of reasonable alternatives and the narrowing of the reasonable alternatives down to FHWA's Preferred Alternative.

As presented in the Segments H and I-1 FEIS, all reasonable alternatives were located to minimize encroachment on regulatory floodways and floodplains and to maintain a transverse encroachment to the maximum extent possible. Each of the alternative alignments was shifted to some degree to avoid wetlands and longitudinal encroachments. Restoration and preservation of the natural and beneficial values associated with the floodplains will be based on a detailed hydraulic analysis as well as minor alignment modifications during final design. The Segments H and I-1 FEIS presents detailed analyses and results assessing potential environmental impacts by the Preferred Alternative (Volume I, Chapter 4), as well as measures taken to minimize or mitigate for those impacts (Volume 1, Chapter 7). The ROD provides a summary of the impacts, the measures taken to minimize harm, and the commitments to continue to minimize potential harm.

During the final design phase of the project and the subsequent minor alignment shifting for the reevaluation, ROW was reduced and roadway was modified where possible to reduce impacts to environmental and social resources. Additionally, alternative locations for potential stormwater runoff detention and floodplain fill mitigation areas were assessed. All detention basins are proposed to be located within the proposed ROW. Once the proposed ROW was identified, site visits were made and wetland delineations were conducted to determine the presence of wetlands and waters of the U.S. Hydraulic analysis of the Preferred Alternative resulted in the proposed bridging across all floodways and bridges or box culverts across waterways to ensure downstream flows are maintained. Twelve streams were proposed for bridging at some level, while box culverts were initially proposed for six streams. Based on site visits, the width of the proposed bridging was expanded wherever possible and the box culverts were changed to bridges to avoid impacts to an additional 3,450 feet of streams. Subsequently, the reevaluation alignment shifts resulted in the avoidance of 3 of the original 18 stream crossings, leaving 15 crossings within the ROW. The final design proposes to bridge 14 of the stream crossings within the ROW, while a culvert would be placed within 1 streambed under a proposed feeder road.

### Best Management Practices (BMPs)

The use of BMPs will be selected by their effectiveness in the impacted area (wetland or stream) including fabric filter fence, rock check dams and/or detention ponds. These will be used to minimize turbidity to waters of the U.S. BMPs will be utilized wherever possible to minimize impacts including: fencing to restrict contractor access to sensitive areas; implementation of a stormwater management plan including an erosion control plan and specifications to prevent/minimize sediment laden runoff from entering the surrounding aquatic ecosystem; an erosion control plan that may include, but is not limited to, the use of silt fence, inlet protection barriers, hay bales, sediment traps and/or basins, and seeding or sodding of excavated soil; minimizing exposure of the soil surface during any clearing activities in order to maintain soil integrity; utilization of both temporary and permanent erosion control practices from TxDOT's manual, 2004 Standard Specifications for Construction of Highways, Streets, and Bridges (TxDOT, 2004); at the completion of construction, the specifications in "Seeding for Erosion Control" (TxDOT, 2004) would be followed to restore and reseed all disturbed areas. Other BMPs would be provided on a location-by-location basis. These practices would be in place prior to and during the construction period, and would be maintained throughout the construction of the project. Additional minimization measures may include the placement of outfall channels to avoid stream impacts. Where required, material excavated from road cuts would be used as fill material to the maximum extent possible.

**MITIGATION:** The goals of the compensatory mitigation are to maintain the aquatic ecosystem functions and hydrologic conditions within the San Jacinto River, Lower Trinity, and Galveston Bay-Sabine Lake watersheds. Compensatory mitigation would replace the chemical, physical, and biological functions of wetlands and other aquatic resources that are lost or degraded as a result of the proposed project. A total of 1,642 linear feet of stream impacts and 99 acres of wetlands will require mitigation.

**Streams:** In order to assess impacts and corresponding compensatory mitigation requirements, streams were assessed within the proposed project area utilizing the guidelines of the USACE-Galveston District SWG Stream Condition Assessment Standard Operating Procedure for Level 1, as applicable. TxDOT proposes to mitigate for the loss of functions and values of 1,642 linear feet of ephemeral, intermittent, and perennial streams through the use of an USACE authorized mitigation bank (Houston-Conroe Mitigation Bank), as described in 33 CFR PART 332 Compensatory Mitigation for losses of Aquatic Resources.

**Wetlands:** The proposed project alignment results in the permanent loss of 28.99 acres of jurisdictional wetlands within the TxDOT Houston District and the permanent loss of 70.03 acres of jurisdictional wetlands within the TxDOT Beaumont District. Unavoidable impacts to wetlands within the TxDOT Beaumont District would be offset at TxDOT's Blue Elbow Swamp Mitigation Bank. Unavoidable impacts to wetlands within the TxDOT Houston District would be offset through the purchase of mitigation banking credits at the Gin City Mitigation Bank.

**Determination of Wetland Credits:**

Required wetland mitigation for impacts within the Houston District was determined using the Galveston District's approved Interim Hydrogeomorphic (i-HGM) Assessment Method. For impacts within the Beaumont District, required wetland mitigation was calculated by assigning a functional value for each the impact site and multiplying this value by the acreage of the impact site. The assessment methods used were determined by the method used to permit the mitigation banks, as described in their respective mitigation banking instruments.

**TxDOT Houston District:** As previously stated, the proposed project alignment results in the permanent loss of 28.99 acres of jurisdictional wetlands within the TxDOT Houston District. The Functional Credit Units (FCUs) needed to offset the unavoidable wetland impacts were developed. The project will impact 28.16 acres of forested wetlands, 0.60 acre of emergent marsh, and 0.23 acre of ditches. The acreage of each impacted wetland was multiplied by the i-HGM score for the quality of the wetland features for three characteristics: FCU-1 (Water, Temporary Storage), FCU-2 (Habitat, Plant and Animal), and FCU-3 (Sedimentation, Removal of E&C). Because the impacts fall within the secondary service area of the Gin City Mitigation Bank, the calculated functional credit units were then multiplied by a factor of 1.5 to produce the mitigation credits required to offset the impacts. A total of 120.8 mitigation credits will be purchased from the Gin City Mitigation Bank.

While Gin City Mitigation Bank only has forested credits available, TxDOT proposes utilizing this bank to offset impacts within the Houston District. Allowing the offset of the 0.60 acre of emergent wetlands and 0.23 acre of ditches at Gin City Mitigation Bank will ensure full mitigation offset within the same watershed while ensuring offset of all wetland functions and values, aggregate wetland mitigation, and eliminate the need for a small permittee-responsible mitigation area.

**TxDOT Beaumont District:** The proposed project alignment also results in the permanent loss of 70.03 acres of jurisdictional wetlands and waters within the TxDOT Beaumont District. The project will impact 36.53 acres of forested wetlands, 8.09 acres of ditches, 14.17 acres of emergent marsh, 3.08 acres of agricultural wetlands, 2.39 acres of canal, and 3.51 acres of scrub-shrub wetlands.

At TxDOT's Blue Elbow Mitigation Bank, bank credit requirements are calculated by assessing the functions and values of the wetlands to be impacted using the following methodology: the acreage of each impacted wetland was multiplied by a factor assigned to wetland quality, with a ratio of 7 credits per acre assigned to each in-kind high quality wetland, or other water of the U.S.; a ratio of 5 credits per acre assigned to each in-kind medium quality wetland, or other water of the U.S.; and a ratio of 3 credits per acre assigned to each in-kind low quality wetland, or other water of the U.S.. In general, a high value was assigned to wetlands that had not undergone transformation from their natural habitat type (e.g., from forested to clear-cut), that consisted of plant communities dominated by native species, and that provided observable, beneficial wetland functions and values such as protecting and improving water quality, providing fish and wildlife habitat, storing floodwaters, and maintaining surface water flow during dry periods. A medium value was assigned to wetlands that provided at least some of the functions of high quality wetlands, but that had been invaded to some extent by non-native or undesirable plant species and that were at least partially altered by human land use activities. A low value was assigned to wetlands that, while still providing some beneficial wetland functions, were functionally limited due to habitat alteration and fragmentation and a proliferation of invasive or undesirable species. Features that were constructed for purposes that conflict with natural wetland functions (e.g., drainage ditches) were typically assigned a low value.

Applying value-based formulas to the project's wetland impacts, it was determined that a total of 374.69 mitigation acres will be required. As outlined in the mitigation banking instrument, while the vast majority of habitats within the Blue Elbow Swamp mitigation bank are forested credits, the bank is a mosaic of habitats and offsetting impacts for other habitat types is allowable with the Corps approval. Because mitigation is proposed for all wetlands within the ROW, regardless of whether impacts would occur, it follows that over-mitigation for all impacted wetland habitat types will occur. TxDOT is proposing to offset for all impacts within the Beaumont District at Blue Elbow Swamp Mitigation Bank in order to ensure full mitigation offset of all wetland functions and values, aggregate wetland mitigation, and reduce the need for a small permittee-responsible mitigation area.

**CURRENT SITE CONDITIONS:** The proposed project consists of primarily undeveloped, forested uplands. Vegetation within the proposed project includes upland forest, rangeland, palustrine emergent wetlands, palustrine scrub-shrub wetlands, and palustrine forested wetlands.

This public notice is being issued based on information furnished by the applicant. Some of the project information has not been verified by the Corps. The preliminary jurisdictional determination and stream assessment are currently under review.

An Environmental Impact Statement (EIS) has already been performed and approved by the Federal Highway Administration. A preliminary review of this application indicates that an additional EIS is not required. Our evaluation will also follow the guidelines published by the U.S. Environmental Protection Agency pursuant to Section 404 (b)(1) of the CWA.

**OTHER AGENCY AUTHORIZATIONS:** The project site is not located within the Texas Coastal Zone and therefore, does not require certification from the Texas Coastal Management Program.

This project incorporates the requirements necessary to comply with the Texas Commission on Environmental Quality's (TCEQ) Tier II project criteria. Tier II projects are those which result in a direct impact of three acres or more of waters of the state or 1,500 linear feet of streams (or a combination of the two is above the threshold) for which the applicant has incorporated best management practices and other provisions designed to safeguard water quality. The Corps has received a completed checklist and signed statement fulfilling Tier II criteria for the project. Accordingly, a request for 401 certification is necessary and there will be additional TCEQ review.

**NATIONAL REGISTER OF HISTORIC PLACES:** The staff archaeologist will review the latest published version of the National Register of Historic Places, lists of properties determined eligible, and other sources of information. The following is current knowledge of the presence or absence of historic properties and the effects of the undertaking upon these properties:

In accordance with the Programmatic Agreement among FHWA, the Texas Historical Commission (THC), the Advisory Council on Historic Preservation (ACHP), and TxDOT, and in accordance with the Memorandum of Understanding (MOU) between TxDOT and THC, TxDOT consulted with the State Historic Preservation Officer (SHPO) regarding the project's potential to affect nonarcheological historic properties. It has been determined that the Selected Alternative will not impact any previously-recorded NRHP-listed or eligible historic properties. Furthermore, the Selected Alternative will not impact any Recorded Texas Historic Landmarks. The study team evaluated the potential for the proposed undertaking to affect archeological historic properties (36 CFR 800.16(l)) or SALs (13 TAC 26.12) in the Area of Potential Effect (APE). The APE comprises the existing ROW within the project limits and areas of new ROW or easements. Section 106 review and consultation proceeded in accordance with the First Amended Programmatic Agreement among the FHWA, TxDOT, the SHPO, and the ACHP regarding the implementation of Transportation Undertakings (PA-TU), as well as the MOU between the THC and TxDOT. The laws and regulations (36 CFR 800.16(l)) require the consideration of the impacts of the proposed project on cultural resources, such as archeological sites and historic structures. TxDOT operates under several formal agreements that expedite its compliance with these laws and regulations.

**THREATENED AND ENDANGERED (T&E) SPECIES:** The following is current knowledge of the presence or absence of T&E species upon these properties:

The FEIS evaluated two state-listed threatened species, three state-listed species of concern, and two rare plant communities that had been documented within a 1.5-mile radius of the study area. The project ROW impacts are not anticipated to risk the continued existence of any federally threatened and endangered species or their preferred habitat.

**PUBLIC INTEREST REVIEW FACTORS:** This application will be reviewed in accordance with 33 CFR 320-332, the Regulatory Programs of the Corps, and other pertinent laws, regulations and executive orders. The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal, will be considered: among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and, in general, the needs and welfare of the people.

**SOLICITATION OF COMMENTS:** The Corps is soliciting comments from the public, Federal, State, and local agencies and officials, Indian tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Impact Assessment and/or an EIS pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

This public notice is being distributed to all known interested persons in order to assist in developing facts upon which a decision by the Corps may be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition.

**PUBLIC HEARING:** The purpose of a public hearing is to solicit additional information to assist in the evaluation of the proposed project. Prior to the close of the comment period, any person may make a written request for a public hearing, setting forth the particular reasons for the request. The District Engineer will determine if the reasons identified for holding a public hearing are sufficient to warrant that a public hearing be held. If a public hearing is warranted, all known interested persons will be notified of the time, date, and location.

**CLOSE OF PUBLIC COMMENT PERIOD:** All comments pertaining to this public notice must reach this office on or before **17 August 2016**. Extensions of the comment period may be granted for valid reasons provided a written request is received by the limiting date. **If no comments are received by that date, it will be considered that there are no objections.** Comments and requests for additional information should reference our file number, **SWG-2012-00153**, and should be submitted to:

Dwayne Johnson  
Regulatory Branch, CESWG-RD-P  
U.S. Army Corps of Engineers  
P.O. Box 1229  
Galveston, Texas 77553-1229  
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DISTRICT ENGINEER  
GALVESTON DISTRICT  
CORPS OF ENGINEERS