

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT:

8-STEP PROCESS - FLOODPLAIN

Project Name: DD6 MIT MOD Corley Diversion Project

State/Local Identifier: 24-065-004-E161 / B-18-DP-48-0002

Project Location:

All work will occur in the City of Beaumont, Jefferson County, Texas at the following locations:

- S 5th Street from 75 l.f. north of Blanchette St. to 195 l.f. south of Terrell Ave.
- Prairie Ave. from S 5th St. to 90 l.f. east of Ave. D
- Ave. D from 150 l.f. south of Terrell Ave. to 200 l.f. northwest of Irma St.
- Irma St. from Ave. D to 90 l.f. east of Neches St.
- Jones St. from Irma St. northwest 225 l.f.
- Gary St. from Irma St. north 240 l.f.
- Neches St. from 115 l.f. south of Irma St. to 106 l.f. north of Blanchette. St.
- Blanchette St. from 130 l.f. southwest of Nechest St.to 115 l.f. northeast of Pearl St.
- ROW From Blanchette St. and Pennsylvania Ave. southeast 315 l.f. to the Neches River.

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:

Contractor shall install 18,300 LF of Concrete Box Culverts within a ROW. Construction activities shall also include:

- Outfall - 1 LS
- Ancillary Drainage Improvements - 1 LS
- Remove/Replace Pavement – 14,470 LF
- Water/Sanitary Sewer Relocation – 1 LS

Acquisition:

Grantee shall acquire easements as needed to accommodate construction and carry out all acquisition of needed easements and/or rights-of-way in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601 et seq

Step 1: Determine whether the action is located in a Federal Flood Risk Management Standard (FFRMS) floodplain.

Exemptions to Part 55:

Actions listed in the revised 24 CFR 55.12 that are exempt from the floodplain management requirements of Part 55 include:

- *Exempt activities and actions that are Categorically Excluded Not Subject to 50.4 or 58.5*
- *Restoration or preservation of floodplains, acquisition of floodplains property provided the site is used for flood control or open space but only if structures are cleared and improvements are specifically limited*
- *Receivership or foreclosure and related actions*
- *Policy-level actions not involving site-based work*
- *Issuance of non-project-based housing vouchers*
- *A minor amendment to a previously approved action*

The project is subject to Part 55 because it meets the criteria for none of the exemptions.

Critical Actions:

Critical action means any activity for which even a slight chance of flooding would be too great because such flooding might result in loss of life, injury to persons, or damage to property.

Critical actions include activities that create, maintain, or extend the useful life of those structures or facilities that:

- *Produce, use, or store highly volatile, flammable, explosive, toxic, or water-reactive materials*
- *Provide essential and irreplaceable records or utility or emergency services that may become lost or inoperative during flood and storm events (e.g., community stormwater management infrastructure, water treatment plants, data storage centers, generating plants, principal utility lines, emergency operations centers including fire and police stations, and roadways providing sole egress from flood-prone areas)*
- *Are likely to contain occupants who may not be sufficiently mobile to avoid loss of life or injury during flood or storm events, e.g., persons who reside in hospitals, nursing homes, convalescent homes, intermediate care facilities, board and care facilities, and retirement service centers; housing for independent living for the elderly is not considered a critical action*

Because the project meets is considered “community stormwater management infrastructure”, it is considered a critical action.

How FFRMS was determined:

The FFRMS is determined by utilizing a tiered approach:

- *Climate-Informed Science Approach (CISA) - **Preferred Method***
- *0.2-Percent-Annual Chance Floodplain Approach (0.2PFA)*
- *Freeboard Value Approach (FVA)*

Climate-Informed Science Approach (CISA)

- *Federal CISA data must be equal to or greater than base flood elevation (BFE) to be used.*

According to the Federal Flood Standard Support Tool (FFSST), it was concluded that no CISA data is available for the project area. As such, this approach could not provide a determination as to whether the project was in the FFRMS floodplain. The next tiered approach, 0.2PFA (500-year floodplain method), was therefore considered.

FEMA 0.2PFA (500-year floodplain)

- *FEMA maps must show a 500-year floodplain in order to be used*
- *Critical Actions require both the 0.2PFA and the Freeboard Value Approach (FVA) be used to determine which elevation is higher, the 0.2PFA or FVA.*

According to FEMA Map #485470020 C (effective date 8/6/02), the portion of the project that occurs on the south side of Blanchette St. and the east side of S Sabine Pass Ave and occurs within the Neches River is located in a 100-year floodplain (Zone AE). Since projects which occur within a 100-year floodplain are considered within a FFRMS floodplain, **the 8-step process is required for this project.**

Area of Disturbance in the FFRMS floodplain: 0.110 acres

Further, according to FEMA Map #485470020 C (effective date 8/6/02) and #485470025 C (effective date 8/6/02) the majority of the project is located in Zone X which is not considered a special flood hazard area. However, because no 500-year floodplains were identified on the maps, these maps could not be used to determine whether these sections of the project are located in a FFRMS floodplain. The map also showed the highest floodplain base elevation at 10 feet.

In order to ensure that all appropriate FEMA floodplain data was considered and the most stringent data source was used for the comparable flood data, all available effective, preliminary and pending FIRMS were reviewed:

Effective Maps - 40

Preliminary Maps - 44

Pending Maps - 0

Upon completion of this review, it was discovered that two (2) Preliminary Maps showed the majority of the project was in Zone X which represents no changes from the Effective FEMA maps previously mentioned:

- #48245C0165F (Effective Date - TBD)
- #48245C0155F (Effective Date - TBD)

Because the 0.2FA method could not be used to determine if all elements of the project are located in the FFRMS floodplain, the Freeboard Value Approach (FVA) was also considered.

Freeboard Value Approach (FVA):

FVA defines the FFRMS floodplain as the elevation and flood hazard area that results from:

- 1. Adding two (2) feet to the base flood elevation (BFE) for non-critical actions or*
- 2. Adding three (3) feet to the BFE for critical actions.*

Based on the FEMA Flood Elevation Tool, the highest Floodplain Base Elevation in the project area, which must be used in the FVA calculation, is 21 feet.

According to the FVA, because the project is a critical action, **the FFRMS floodplain elevation would be the Floodplain Base Elevation (21 feet) plus three (3) feet or 24 feet.** In addition, the tool showed that the majority of the project is in a High risk (1%) zone. **Therefore, the entire project is considered to be in an FFRMS floodplain and is therefore subject to the 8-step process.**

- Total Area of FFRMS Floodplain Disturbance: 24.9 acres
- **FVA FFRMS = 24 feet**

Step 2: Notify the public for early review of the proposal and involve the affected and interested public in the decision making process.

There are designated floodplains associated with the proposed project sites. An early floodplain notice was published regarding the project, affording the opportunity for public input. No comments were received.

Posting Date: 2/20/25

Step 3: *Identify and evaluate practicable alternatives.*

The project site selection criteria are:

- (a) The project cannot cause current residents to become displaced;
- (b) The project must be within the City in order for grant proceeds to be used;
- (c) The project must address infrastructure which was damaged due to recent flooding.

The City considered several alternative sites and actions:

1. **Do only work outside the floodplain.** - It is not possible to complete the project outside the floodplain.
2. **Obtain a Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR).** - The General Land Office also considered applying for a LOMA Map Amendment or Letter of Map Revision but it was determined that this site would not be a good candidate for such action and the time required to request such action could not be justified.
3. **Other infrastructure considered.** - Other infrastructure projects were also considered within the City Jurisdictional limits. However, the Jefferson County Drainage District No. 6 concluded that this project was the highest priority of any eligible projects.
4. **No Action or Alternative Actions that Serve the Same Purpose.** - A no-action alternative was considered but the infrastructure to be addressed is currently not functioning properly which could pose a health hazard to the community.

Step 4: *Identify Potential Direct and Indirect Impacts of Associated with Floodplain Development.*

1. Preventing loss of life and property as a result of flooding is the highest priority. A flood could damage the new infrastructure.
2. In addition to concerns for life and property, the General Land Office has considered the natural values of the floodplain. The natural resources of the floodplain include water, biological, and societal resources. The proposed project will have minimal impacts to the floodplains because appropriate mitigation will be in place.
3. After review an Endangered Species Assessment and consultation with the USFWS and TPWD, it was concluded that the construction of the facilities will have no quantifiable impact on plant and animal life. Only native plants are to be used in the floodplain, and on the site.
4. Societal resources should also be considered during the design process. The designs are meant to complement the natural features of the area and to offer an aesthetically pleasing structure. The site will not have an effect on agricultural lands.

Step 5: *Where practicable, design or modify the proposed action to minimize the potential adverse impacts to lives, property, and natural values within the floodplain and to restore, and preserve the values of the floodplain.*

Mitigation Requirements:

CFR 55.20 (e)(1):

For actions in the FFRMS floodplain, the required elevation described in this section must be documented on an Elevation Certificate or a Floodproofing Certificate in the Environmental Review Record prior to construction, or by such other means as HUD may from time to time direct, provided that notwithstanding any language to the contrary, the minimum elevation or floodproofing requirement for new construction or substantial improvement actions shall be the elevation of the FFRMS floodplain as defined in this section.

Non-Critical Actions

CFR 55.7(d)(1):

- The FFRMS floodplain includes those areas that result from adding an additional two feet to the base flood elevation based on best available information.

Critical Actions

CFR 55.7(d)(2):

- The FFRMS floodplain includes those areas that result from adding an additional three feet to the base flood elevation based on best available information.

Applicable Projects

According to the HUD Exchange on Floodplain Management (Complying with 24 CFR Part 55 (2)), if a project involves new construction or substantial improvement, elevation requirements apply.

Substantial Improvement:

A substantial improvement is any repair, reconstruction, modernization or improvement of a structure, including one of the following:

1. The cost of which equals or exceeds 50 percent of the market value of the structure either before the improvement or repair is started, or, if the structure has been damaged and is being restored, before the damage occurred
2. That results in an increase of more than 20 percent in the number of dwelling units in a residential project or in the average peak number of customers and employees likely to be on-site at any one time for a commercial or industrial project

Certain types of projects are specifically not considered substantial improvement under Part 55.

- Any project solely for improvement of a structure to comply with existing state or local health, sanitary or safety code specifications that is solely necessary to assure safe living conditions
- Any alteration of a structure listed on the National Register of Historical Places or on a State Inventory of Historic Places
- Structural repairs, reconstruction, or improvements not meeting the definition for substantial improvement are considered "minor improvements."

The project is not considered a structure which is subject to elevation requirements. As such, elevation requirements do not apply.

- Structure Elevation: NA
- Elevation Requirement: NA

Mitigation Measures:

1. Preserving Property: Project designs should, to the best extent possible, incorporate measures to reduce the risk of damage to the new infrastructure via a flood.
2. Preserving Natural Values and Minimizing Impacts: After construction is completed, the disturbed area will need to be immediately re-vegetated with native grasses. Only native plants are to be used in the floodplain and on the site.
3. Deposition and excavation of materials will need to be performed in such a manner that erosion and sedimentation will be controlled.
4. Precautions will need to be taken in the handling of fuels or other hazardous materials to prevent discharge or spillage resulting in lower groundwater quality.
5. Erosion control measures such as hay bales or silt screen barriers will need to be implemented and maintained during construction as required.
6. The project engineer will need to incorporate best management practices into the specifications and plans.

Step 6: *Reevaluate the Alternatives.*

1. **Do only work outside the floodplain.** - Because the infrastructure to be addressed is located within the FFRMS floodplain and must be addressed, it is not possible to complete this project outside of the floodplain. (Not Viable)
2. **Obtain a Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR).** - It was determined that neither a LOMA nor a LOMR was likely nor practical for the project area. (Not Viable)
3. **Other infrastructure considered.** - After considering other potential projects in the City, it was determined that of the eligible projects, this project was of the highest priority. (Not Viable)
4. **No Action or Alternative Actions that Serve the Same Purpose.** - The infrastructure to be addressed is inadequate for the area and must be addressed to prevent public health hazards. (Not Viable)

Step 7: *Determination of No Practicable Alternative*

It is our determination that there are no practical alternatives for locating the project in the floodplain.

A final notice was published detailing the reasons why the project must be located in the floodplain, a list of *alternatives* considered, and all mitigation measures taken to minimize adverse impacts and preserve natural and beneficial floodplain values. No concerns were expressed by the public concerning this notice.

Posting Date: 3/13/25

Step 8: *Implement the Proposed Action*

The General Land Office will ensure that this plan, as modified and described above, is executed and necessary language will be included in all agreements with participating parties. The Office will also take an active role in monitoring the construction process to ensure no unnecessary impacts occur nor unnecessary risks are taken.