



APPLICATION FOR FLOODPLAIN DEVELOPMENT PERMIT

Type of work proposed (check all boxes that apply)

ACTIVITY

- New structure
- Addition
- Alteration
- Relocation
- Demolition

STRUCTURE TYPE

- Residential
- Commercial

OTHER DEVELOPMENT ACTIVITIES

- Clearing
- Demolition
- Grading, including fill and/or excavation
- Relocation
- Watercourse alteration, including dredging
- Drainage improvements, including culverts
- Road, street, or bridge construction
- Water, sewer, or septic system change

1. NAME OF OWNER: _____

CONTACT PERSON: _____ EMAIL: _____

MAILING ADDRESS: _____

PHONE NO: _____ EMAIL: _____

2. NAME OF ENGINEER: _____

CONTACT PERSON: _____ EMAIL: _____

MAILING ADDRESS: _____

PHONE NO: _____ EMAIL: _____

3. NAME OF CONTRACTOR: _____

CONTACT PERSON: _____ EMAIL: _____

MAILING ADDRESS: _____

PHONE NO: _____ EMAIL: _____

4. LOCATION OF PROPERTY (complete as appropriate)

If located in a subdivision: _____
Subdivision Name Section No. Block No Lot No.

If NOT located in subdivision: _____
Name & No. of Survey/Abstract Acreage.

Location Description – Attach Vicinity Map

_____ City _____ State TX Zip _____

4a. ADDRESS APPLICANT SHALL OBTAIN ADDRESS NUMBER DESIGNATION FROM MC911, AND RETURN A CERTIFIED COPY OF THE 911 ADDRESS REQUEST INFORMATION FORM TO ACCOMPANY THIS APPLICATION. (§ ORDINANCE NO. 1800-07)

INFORMATION REGARDING RELATED PERMIT APPLICATIONS (if applicable)

5. Name of Plat: _____

6. Commercial or Residential Development Plan Permit Number _____

7. Clearing Permit Number: _____

8. Info regarding other associated permits obtained or pending: _____



FLOODPLAIN DETERMINATION The proposed development is located on FIRM Panel No. _____

Check all boxes that apply.

- The development is partially located in the regulatory Special Flood Hazard Area (SFHA).
- Proposed buildings or structures are located in the regulatory SFHA.
- The entire development is located in the regulatory SFHA.

“100-Year” flood elevation at the site is: _____ ft. or Unavailable

ATTACHMENTS TO INCLUDE WITH THE APPLICATION FOR A FLOODPLAIN DEVELOPMENT PERMIT

**** For large developments with multiple phases, the requirements for these items will be triggered when cumulative development reaches these amounts.**

1. Two (2) hard copies (and one electronic copy) of a site plan showing and labeling the location of all existing structures, water bodies, adjacent streets, lot dimensions, proposed development, proposed elevation of lowest floor, and top of new compacted fill elevation.
2. Show and label the existing and proposed floodway and Special Flood Hazard Area (SFHA) boundaries as shown on the current effective flood insurance rate map (FIRM). Show and label FIS cross-section locations and existing base flood elevations, if provided on the FIRM.
3. If no fill is proposed in the SFHA AND work includes less than 5 acres of development and less than 50 lots,** no other attachments to this permit are required. If the project requires a Commercial or Residential Development Plan permit, the application for that permit must include the calculations and plans for any required storm water detention. The floodplain permit class will be A. Sign the acknowledgement below and submit fee of \$20 (per table on Page 3 of this application).
4. If fill is proposed in the floodplain OR work includes 5 acres or 50 lots or more of development**, additional attachments to this application are required as listed in the table on Page 3 of this application. To determine the class of floodplain permit required, the additional attachment(s) and fee to be provided, start at the left side of the table on Page 3 and, if the project does not meet ALL requirements in the vertical column, move to the next column to the right. Continue until reaching a floodplain permit class for which all requirements are met.

****When a large development with multiple phases has submitted floodplain development permits for enough phases that cumulative fill proposed in the floodplain for the entire development exceeds 16,000 CY, a floodplain development permit application is required which addresses the next phase and all planned future phases. This requires a sufficiently developed master plan to prepare a drainage analysis for the proposed ultimate development, including all existing phases and any proposed future phases.**

Please read and acknowledge (To be signed by Applicant)

I certify that all statements herein and in attachments to this application are, to the best of my knowledge, true and accurate. I (we) understand and voluntarily agree that any engineering drawings, calculations, designs, and/or works submitted to the City of Conroe in connection with this application, including copies of such submittals, will be deemed to be public information subject to release in accordance with the Texas Public Information Act.

I acknowledge that the flood hazard boundary map and other flood data used by The City of Conroe Floodplain Administrator in evaluating flood hazards to proposed developments are considered reasonable and accurate for regulatory purposes and are based on the best available scientific and engineering data. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. Issuance of a Floodplain Permit shall not create Liability on the part of The City of Conroe Floodplain Administrator or any employee of the City of Conroe in the event of flooding or damage caused by flooding.

APPLICANT’S SIGNATURE _____ **DATE** _____



CONROE FLOODPLAIN PERMIT CLASSIFICATIONS, INCLUDING FEE AND ADDITIONAL REQUIRED ATTACHMENTS FOR EACH CLASS
Underlined terms in this table are provided with Definitions on following page

PERMIT CLASS	A	B	C	D	E	F
Size of development	< 5 acres & < 50 lots*	< 5 acres & < 50 lots*	5 acres or 50 lots or more*	< 5 acres & < 50 lots*	5 acres or 50 lots or more*	ANY
Location in the <u>SFHA</u> of the proposed fill or structure	no proposed fill or structure in <u>SFHA</u>	<u>Ineffective flow areas</u> only. Ineffective flow areas are where water is determined by a licensed engineer to be prevented from moving in a downstream direction. Some hydraulic models associated with FIRM maps have ineffective flow areas already delineated and shown on cross sections.		In SFHA beyond <u>ineffective areas</u> , but not in <u>floodway</u> . Includes structures or bridges elevated but with supporting element(s) in SFHA.		In <u>floodway</u> , includes structures or bridges elevated but with supporting element(s) in <u>floodway</u>
Maximum <u>fill depth</u> BFE to natural ground	not applicable	less than 2' maximum		2' or more maximum		ANY
Total <u>fill volume</u>	not applicable	less than 16,000 CY		16,000 CY or more		ANY
ADDITIONAL ATTACHMENTS REQUIRED WITH THIS APPLICATION- submit two (2) hard copies and one electronic copy of required attachments. Provide electronic copies of HEC-HMS and RAS models for permit types F, E, D, and C (with <u>Flood Study</u>).	NONE	1. Site plan with <u>ineffective flow areas</u> , proposed fill areas and existing and proposed contours. 2. Fill quantity calculations 3. Statement of intent to submit LOMR-F application and 4. Written statement signed by a licensed professional engineer certifying proposed development will not increase the <u>BFE</u> or adversely affect other properties.	All additional attachments required for B permit (see block to left), and if <u>FIRM</u> does not provide <u>BFEs</u> and floodway, provide 5. <u>Flood study establishing BFEs and floodway</u> per FEMA requirements	1. Site plan with proposed fill areas and existing and proposed contours 2. Fill quantity calculations 3. Statement of intent to submit LOMR-F application 4. <u>Drainage Impact Analysis</u> sealed by a licensed professional engineer demonstrating proposed development will not increase the BFE or adversely affect other properties, and 5. Letter certifying compliance with all state and federal permitting requirements, including those associated with the Endangered Species Act and Corp of Engineers requirements	All additional attachments required for D permit (see block to left) and, if FIRM does not provide BFEs and floodway, provide 6. <u>Flood study establishing BFEs and floodway</u> per FEMA requirements	1. <u>CLOMR application with accompanying study</u> per FEMA requirements. 2. Additionally, permit application to City should address measures to assure current proposed development will not increase base flood elevations due to time of concentrations changes, increase in impervious areas, or any other changes.
FEE REQUIRED WITH APPLICATION	\$20	\$300	\$500	\$550	\$750	\$1,000
OTHER REQUIREMENTS	NONE	LOMR-F	LOMR-F	LOMR-F	LOMR-F	LOMR
PERMIT CLASS	A	B	C	D	E	F

DEFINITIONS FOR REFERENCE WHEN COMPLETING FLOODPLAIN PERMIT APPLICATION

1% annual chance flood: The expected flood flows from a storm with a 1% statistical likelihood of occurring each year. The FEMA effective flows, those used to develop the FIRMs, were calculated for the drainage basin(s) with development at the time the most recent FEMA hydrologic model was created.

BFE: Base Flood Elevation, also known as 1% or 100 year water surface elevation, the FEMA effective flood elevation, and/or the regulatory flood level. The elevation in a watercourse shown on a FIRM map is projected by FEMA to result from the 1% annual chance flood.

CLOMR application with accompanying study: Application for a Conditional Letter of Map Revision from FEMA. FEMA requires a CLOMR be approved prior to initiation of any work affecting regulatory floodway. Hence, development plans including work affecting floodway cannot be approved until a CLOMR is approved by FEMA. Reference FEMA requirements for information regarding required study to accompany CLOMR application. A LOMR application is required after construction is complete.

Conveyance: The ability of a channel to transmit flow downstream from one location to another. Conveyance depends on channel properties such as cross sectional geometry, bottom slope in direction of flow, and roughness and vegetation in channel.

Drainage Impact Analysis: A hydrologic and hydraulic analysis using numerical modelling techniques to demonstrate no net loss to conveyance capacity of the existing channel. The current effective FEMA models should *usually* be used as the basis for developing this analysis. The intent of the City requirements is to assure the cumulative effect of current proposed channel modifications in the SFHA leave a channel still capable of conveying the existing 1% annual chance flood without increasing BFEs. The analysis should also address measures to assure current proposed development will not increase BFEs due to time of concentrations changes, increase in impervious areas, etc. Applicant is encouraged to request a pre-development meeting to understand the requirements for the Drainage Impact Analysis. Development plans associated with projects requiring a Drainage Impact Analysis will not be approved until a floodplain permit application with the Analysis is approved.

Fill depth: Depth of material placed above existing natural ground to the BFE.

Fill volume: Material proposed to be placed above existing natural ground to the base flood elevation, calculated using average end area or other applicable engineering methods.

Floodway: The channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment to convey the existing FEMA effective 1% annual chance flood with more than a no more than a 1' increase in flood heights.

FIRM: Flood Insurance Rate Map, refers to the most recent maps published by FEMA as amended by letters of map change approved by FEMA after the maps' effective dates. The current regulatory FIRM can be accessed on FEMA's website <https://www.fema.gov/national-flood-hazard-layer-nfhl>

Flood study establishing BFEs and floodway: The development of BFEs must be certified by a licensed professional engineer. The City may require the applicant pursue a LOMR to incorporate newly established BFEs and floodway into the regulatory FIRM. Regardless of whether this is required, the floodplain permit application should include the data, report(s), and computer models required for a LOMR. Applicant is encouraged to request a pre-development meeting to understand the requirements for the Flood Study. Development plans associated with projects required to establish BFEs and floodway will not be approved until a floodplain permit application with the Flood Study is approved.

LOMR: A Letter of Map Revision documents a significant change approved by FEMA and considered to be a part of the FIRM for regulatory purposes. Shown on the National Flood Hazard layer after adoption, but not on current hard copies of FIRMs or on FIRMs accessed on-line.

LOMR-F: A Letter of Map Revision-Fill documents a lesser change approved by FEMA and considered to be a part of the FIRM for regulatory purposes. Not shown on the National Flood Hazard Layer or on FIRMs, but still considered a part of the FIRM for regulatory purposes.

SFHA: The SFHA or Special Flood Hazard Area is designated by FEMA on the FIRM and is the area subject to inundation by a flood from a storm that has a 1% chance of occurring each year. The SFHA is also known as the 1% or 100 year floodplain, the FEMA effective floodplain, and/or the regulatory floodplain. Zone AE in the SFHA has BFEs shown on the FIRM. In some AE zones floodway has been delineated and is shown on the FIRM with hatching or other distinct symbols. In the Special Flood Hazard Area, communities are required by FEMA to monitor and regulate proposed work which could affect flood carrying capacity.