



**DEPARTMENT OF THE ARMY**  
U.S. ARMY CORPS OF ENGINEERS, TULSA DISTRICT  
2488 EAST 81<sup>ST</sup> STREET  
TULSA, OKLAHOMA 74137-4290

Engineering and Construction Division  
Hydraulics and Hydrology Branch (12<sup>th</sup> Floor)  
Floodplain Management Services (12-32)

11 December 2025

Johnson & Associates  
Att: Mrs. Diana Phan, P.E.  
1 E Sheridan Ave., Suite 200  
Oklahoma City, OK 73104

RE: 35.273594<sup>O</sup> N, -97.480726<sup>O</sup> W – Gas Line  
NE ¼, NE ¼, Sec. 11 T9N R3W Indian Meridian  
Cleveland County, Oklahoma

Dear Mrs. Phan,

This is in response to your request to develop a Base Flood Elevation (BFE) for property located in the Northeast Quarter of the Northeast Quarter of Section 11 Township-9-North Range-3-West of the Indian Meridian, in Cleveland County, Oklahoma.

The current Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) 40027C0190K (community-panel 400046) effective January 15, 2021, indicates the property is in Zone A (the 100-year floodplain of an Unnamed Tributary of the Little River).

We have determined that the Base Flood Elevation for this property to be **1,142.3** feet NAVD 88 (North American Vertical Datum). This base flood elevation was determined using acceptable guidelines by the Oklahoma Department of Transportation, outlined in FEMA 265, but should not be considered a detailed hydraulic analysis. To officially remove structures from flood insurance requirements, a Letter of Map Change ([LOMC](#)) can be obtained from FEMA if the lowest floor elevation is above the BFE either by mail or online. Any development on this property must be constructed to local floodplain regulations.

Please retain this letter and a copy of the payment confirmation from [Pay.gov - United States Army Corps of Engineers Finance Center](#) for your records. The payment is valid for the life of property. If another BFE is needed or if you have any questions, please call Floodplain Management Services at 918-669-4360 or email [Travis.s.wilsey@usace.army.mil](mailto:Travis.s.wilsey@usace.army.mil).

Sincerely,

TRAVIS WILSEY E.I., C.F.M.  
USACE SWT Floodplain Management Services

# Estimated Base Flood Elevation (estBFE)

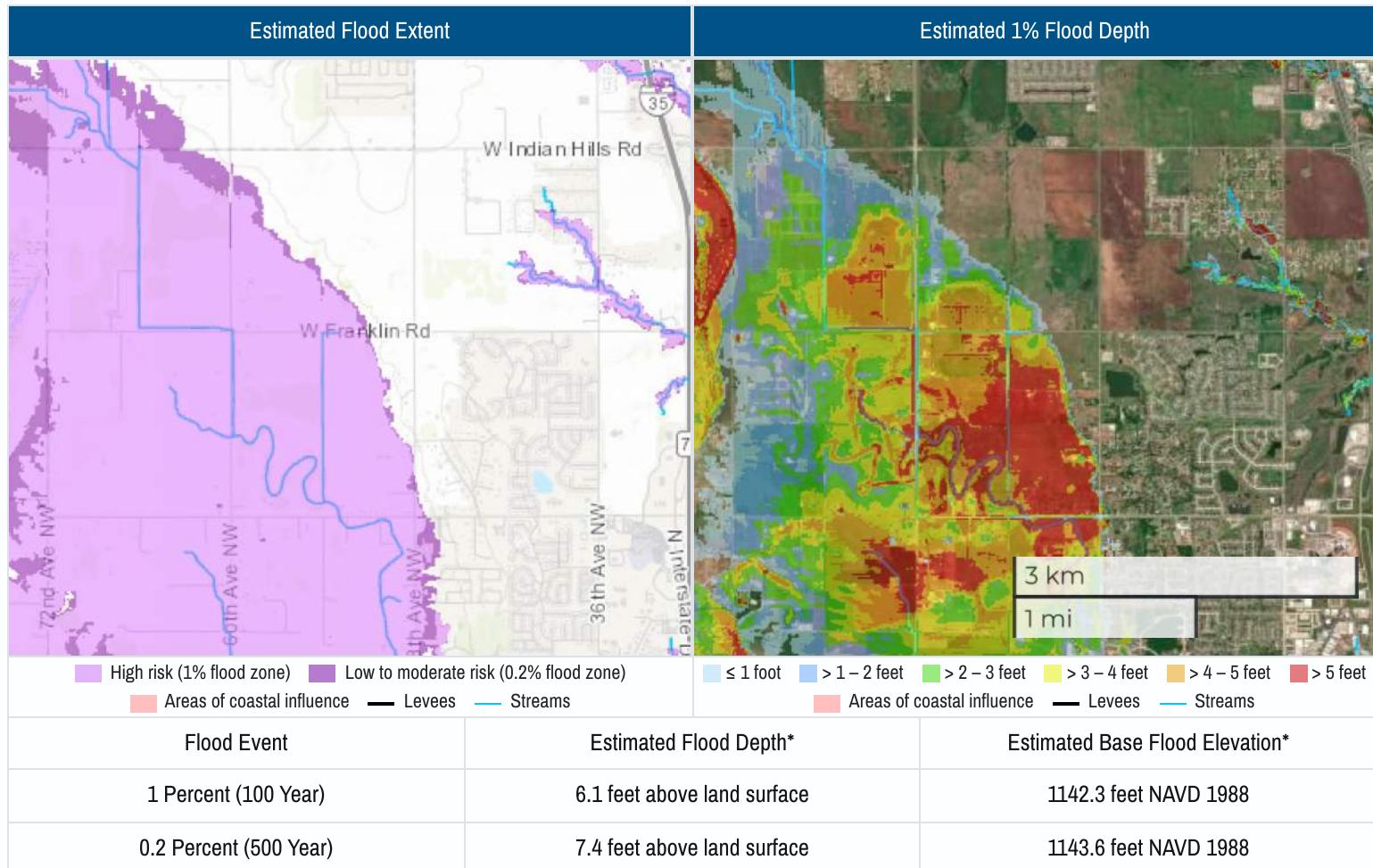


FEMA

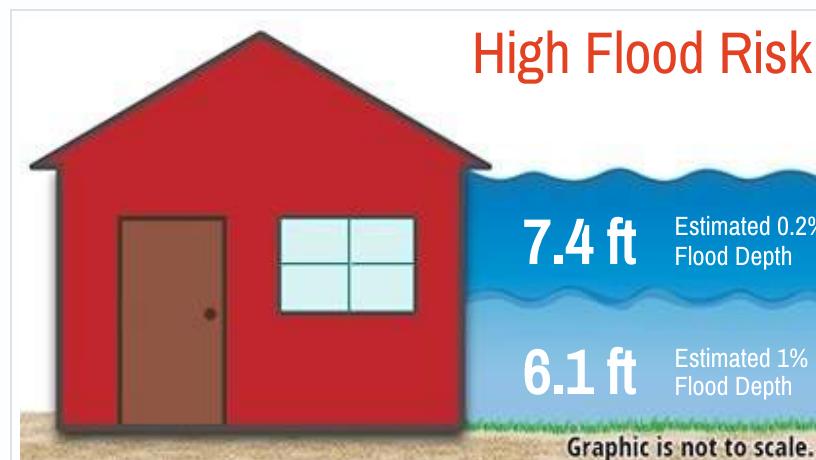
## Flood Risk Information Report

Latitude 35.2743, Longitude -97.4810 (Cleveland County, OK)

FEMA is providing a look at flood data availability and relative Base Level Engineering analysis through the Estimated Base Flood Elevation Viewer (Estimated BFE Viewer). Base Level Engineering uses high resolution ground elevation data, flood flow calculations, and fundamental engineering modeling techniques to define flood extents for streams. The viewer is an effective tool for property owners, community officials, and land developers to identify flood risk, estimated flood elevations, and flood depths for watersheds where Base Level Engineering has been prepared.



\* The information included in this report is based on the location marker shown in the map. Results are not considered an official determination.



## Knowing Your Risk

Information made available from the Estimated BFE Viewer provides hazard and risk awareness. Please consult your local Floodplain Administrator to better understand the estimated base flood elevation and how to take action.

Base Level Engineering data availability and analysis information is important because it can be used to:

- Inform floodplain management decisions and ordinance administration;
- Identify significant floodplain changes;
- Serve as base modeling for map revisions; and
- Support the Zone A BFE information for a Letter of Map Amendment (LOMA) request.

## Using This Data

**Consult the local floodplain manager and building department in your community before making any building or land modifications.** Local officials may use this information to regulate development near flooding sources to create more flood-resilient communities. Local building and permitting requirements vary by community and are based on local decisions and ordinances.

**Everyone is at risk.** The chances of experiencing a flood can vary due to unevaluated conditions, such as the unstudied effects of community growth and development or intense storms uncharacteristic to historical trends. Maintaining or obtaining a flood insurance policy is essential to ensure a property owner is covered if a flood occurs. Visit <http://FloodSmart.gov> for more information on the costs of flooding and to locate an insurance agent in your area.

**Base Level Engineering and the Estimated BFE Viewer tool help identify the BFE in effective Zone As.** If a property owner believes that a structure is above or outside of the base flood extent in an effective Zone A, a LOMA request may be submitted and the flood risk report from the Estimated BFE Viewer should be included. To complete an application, use the online web-based tool or download the paper forms (<https://www.fema.gov/letter-map-changes>). Items needed to apply include the following:

- Copy of a **plat map** that identifies the property and includes the locality's recording information
- OR –
- Copy of the **property** deed with both locality's recording information and

the property's written legal description and a **parcel or tax map** identifying the location.

- **Elevation information** indicating the lowest adjacent grade to the building certified by a licensed land surveyor or registered professional engineer, except for buildings **clearly** shown outside the SFHA. If built recently, building permit files may contain this information. Note the professional may use the estimated BFE (estBFE) results for the BFE value on the elevation form or certificate.
- The **Estimated BFE flood risk information report** relative to the property indicating the estimated flood level and model.
- **A letter of acceptance and support from your local floodplain administrator** for the Estimated BFE information included in your report.

Please note other types of development may require additional documentation and possibly an application fee. A LOMA may result in removal of the SFHA designation and the Federal requirement for flood insurance. However, maintaining a flood policy may still be required by the lender. Flood insurance coverage to repair damage caused by flooding is available for areas outside the SFHA.

## Taking Action

Floods can happen anywhere at any time, which is why it is important to be prepared and to take steps before a flood event to protect your property from costly damage. Mitigation measures to consider include the following:

- **Elevating.** Elevating the lowest floor of new or existing buildings above the BFE reduces risk and may lower flood insurance premiums.
- **Interior Modification.** Raising the equipment servicing the building or infilling basements susceptible to flooding.
- **Dry Floodproofing.** Sealing your structure to prevent floodwaters from entering. Residential property insurance is not reduced if dry floodproofing is used. Only commercial properties receive reduced flood insurance when dry floodproofing is used.
- **Wet Floodproofing and Flood Vents.** Making portion of a building more resistant to flood damage or, in some cases, allowing water to enter during a flood to prevent damages by equalizing pressure on walls and foundations.

Deciding on the right method to mitigate future damage and loss requires an assessment of various factors: the hazards to your home, permit requirements, the technical limitations of the methods, and cost.

**Discuss the potential mitigation options with your local floodplain administrator and building department to determine the next appropriate steps.**