

LIBERTY COUNTY

Permitting and Inspection Department

624 Fannin Street, Liberty, Texas 77575
Phone: (936) 336-4560
David Douglas, Administrator,
Flood Plain Manager, Grants Coordinator

To: The Honorable Jay Knight and Liberty County Commissioners

From: David Douglas

Re: Culvert installation information

Date: August 3, 2022

Enclosed for the Court's consideration and action is a proposed set of documents that address the strengthening of Liberty County's instructions and requirements associated with the installation of culverts. This item was tabled at your last meeting pending further instructions. To date the changes made to the document are the material approval of stabilized sand, limestone road base and/or crushed concrete. Item N has also been added.

RESOLUTION

A Resolution By The Commissioners' Court Of Liberty County, Texas; Said Resolution updating Specifications For Culverts And Driveways That Are Placed On Public Right-Of-Way,

WHEREAS, the Liberty County Commissioners' Court did act in 2020 to adopt certain regulations relating to subdivision development; and

WHEREAS, storm water handling was a critical component of this document; and

WHEREAS, storm water drainage has always been a major concern of the County; and

WHEREAS, the Commissioners" Court perceives a need to strengthen requirements relating to culverts, driveways and storm water ditches located on public right-of-way; and

WHEREAS, the Commissioner's Court deems this subject essential to ensure adequate drainage and does herein authorize that all culvert installations require a permit, same to be issued by the Liberty County Permitting Department.

NOW, THERFORE, Be It Resolved By The Commissioners' Court of Liberty County, Texas that:

- (a) Culvert installations shall comply with the specifications contained in this Resolution and/or an equivalent as determined by the respective County Commissioner.
- (b) All **residential driveways** located on public right-of-way shall have a Twenty Foot (20') minimum width and **must be installed in advance** of any lot development.
- (c) The maximum length of a **residential culvert** shall be Twenty Eight (28) Feet. The maximum length of **commercial driveways** shall be Fifty (50) Feet. Driveways exceeding Thirty (30) Feet shall have a clean out box at their center point.
- (d) Culvert sizing shall be performed by the Liberty County Permitting Department or the Precinct Commissioner in whose precinct the work is located.
- (e) Culvert installers are cautioned to establish a flowline elevation that will allow a minimum of eight (8) inches of surface cover and still produce a driveway surface that is flush to the adjoining road.
- (f) Culverts shall be bedded atop a twelve (12) inch thick layer of stabilized sand, limestone road base or crushed concrete. Similarly, the front slope, back slope and surface of the installation shall be back filled with stabilized sand, limestone road base or crushed concrete. The flowline of the culvert must conform to the flowline elevation of the ditch. Sidewall ditch excavation shall allow for a minimum backfill width of twelve (12) inches on either side. Culvert sidewall backfill and driving surface layer must conform to those materials specified above in this line item.

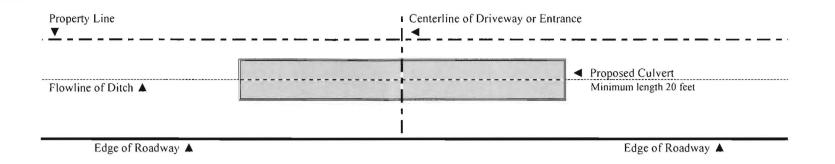
- (g) Driveway vertical sidewall construction shall conform to the width that will allow the proper installation of bedding material, said material to conform with that specified above.
- (h) An adjoining land owner shall not in any way obstruct culverts or storm water ditches and shall exercise caution to ensure that wash sand, trash, building materials and/or other foreign materials are not allowed to accumulate in storm water ditches.
- (i) Individuals may elect to install their own driveway culvert. This is allowable but a permit must be secured and the Commissioner of the precinct must approve this type of installation.
- (j) The proposed culvert must be sized by the Liberty County Engineering Department or by a representative from the appropriate Commissioner's precinct. Persons who elect to install their own culvert must comply with the bedding, backfill and driving surface materials specifications above.
- (k) Culverts shall be corrugated Polyethylene dual wall pipe with plain black end. Other types of culvert pipe may be used If approved by the Precinct Commissioner.
- (I) Liberty County Commissioners reserve the right to remove culverts that are unpermitted and/or do not comply with installation methods or materials.
- (m) Failure to comply with this resolution shall be a Class C Misdemeanor that is punishable by a fine of up to \$250.00. Each day of non-compliance shall constitute a new and separate offense.
- (n) The above shown details (A M) are subject to change with permission from the precinct Commissioner

PASSED AND APPROVED this the 9th day of Angust

Chambers, County Clerk

Jay Knight, Liberty County Judge





**IF CONCRETE IS TO BE INSTALLED A TEMPORARY BRACE
MUST BE USED IN BOTH ENDS OF CULVERT FOR
SUPPORT DURING POURING TO PREVENT COLLAPSE**
RESIDENTIAL

- 1. MUST CALL PERMITTING DEPARTMENT OR COMMISSIONER
 TO VERIFY SIZE REQUIREMENTS PRIOR TO ANY INSTALLATION
- 2. MINIMUM length of culvert is 20 feet, and the maximum length is 28 feet.
- 3. Culverts must be corrugated polyethylene dual wall pipe with plain end.
- 4. Placement of the bedding must be at least 12 inches into the bottom of the ditch Bedding, backfill and top cover material shall be from end to end (whole length of culvert)
- 5. Culverts shall be bedded atop a 8-inch-thick layer of stabilized sand, limestone road base or crushed concrete. Flowline must conform to the Flowline elevation of the ditch. Sidewalls shall allow for a minimum backfill of 12 inches of stabilized sand, limestone road base or crushed concrete on both sides. Culvert sidewall backfill and surface layer fill shall be of like material. Surface coverage will be 8 inches thick and of a like material.
- 6. Liberty County reserves the right to remove culverts that are un-permitted and/or do not comply with installation methods or materials.

COMMERCIAL - NON-SUBDIVISION

- 1. MUST have sizing inspection prior to any installation.
- 2. Culverts 30 feet wide or longer must have a clean out in the center.

NOTE there is a re-inspection fee of \$50.00

CULVERT INSTALLATION
Plan View for all Materials

Liberty County Engineering Dept. 624 Fannin Street Liberty, TX 77575 936-336-4560

Please Call
To Verify Culvert Size

Edge of Roadway ▼

Please see the attached Resolution for complete information on the requirements for culvert installations

End View

INSPECTORS

Alfredo Franco 409-277-0399 Claribeth Macias 936-334-4829

bedding & backfill

Property Line ▼