



# Williamson County Emergency Services District No. 4 Liberty Hill Fire Department [www.libertyhillfire.org](http://www.libertyhillfire.org)

## Private Driveways Construction Guidelines

### Will Emergency Services personnel be able to reach you when needed?

When planning the driveway access to your new construction, it is important to bear in mind the possibility that you may someday require help from emergency services. Most ambulances will be able to travel anywhere which is accessible by a 2-wheel drive car. Fire apparatus however, require additional consideration. *Large fire trucks such as the tenders which carry water to the scenes of rural fires are more than 8 feet wide, 11 feet tall, 35 feet long, and weigh over 60,000 pounds when loaded.* Even when operated by highly trained drivers, fire trucks can only be useful when they reach the scene of an emergency. Narrow driveways, steep grades, soft shoulders, and hairpin turns can all contribute to disastrous results if your home or business should catch on fire. These recommendations are also applicable to delivery trucks.

While Williamson County ESD No. 4 currently does not regulate the design and maintenance of private roads and driveways, each property owner would be prudent to consider emergency service access when designing, installing, and maintaining the access to their home or business in the time of an emergency. Here are some guidelines to follow:

### Design considerations-

**Access Point-** The access point from a public maintained roadway should be designed with a turning radius of at least 25 feet, this allows access by large vehicles. If you intend to gate your road, ensure that it is set back far enough from the entrance to provide adequate turning radius. Additionally, the gate itself should be a minimum of 12 feet in width. Finally, if you plan to lock your gate, ensure that fire and rescue departments have access. You can do this in a number of ways including; providing Williamson County Dispatch with your gate code or purchasing secured gate products through [www.Knox.com](http://www.Knox.com). Knox is a system that has been designed to allow fire departments quick access onto/into properties through a key that is maintained and possessed through your local fire department.



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*Width-* A large fire truck requires a minimum road width of 10 feet, with a recommended 12 feet. Even with a road this wide, no other vehicles can pass when a large fire truck is traveling the road. Trees should be trimmed back as to not hang over the width of the road.

*Overhead Height-* There should be no overhead obstructions of less than 13 feet, 6 inches over the drive.

*Curves/Turnarounds-* Adequate turning radius is crucial to allow long fire trucks to negotiate curves and turnarounds. Any curves should have a 25 foot turning radius at a minimum. If at all possible, there should be an adequate turnaround installed within 100 feet of the structure.

*Grade-* The grade of any driveway should not exceed 10%. Additionally, any sharp change in grade should be transferred over an adequate distance along the length of the road. This will prevent long, heavy laden trucks from getting their rear bumper stuck as they begin to climb or return to level.

*Bridges/Culverts-* Bridges and culverts should be designed to support at least 75,000 pounds and should provide a minimum of 10 feet of unrestricted width.

*Road material-* Road construction should provide an adequate base to support 75,000 pounds.

*Septic Tanks/Drain Fields-* Septic tanks and drain fields should be marked. The fire Department is not liable for damage to these areas if they are driven over.

## **Maintenance considerations-**

Roads should be periodically inspected for maintenance concerns. Surfaces should be checked for erosion and potholes and repaired as soon as possible. Trees and shrubbery should be maintained and cut back as needed.

**In summary, it is the responsibility of the property owner to provide suitable access for emergency vehicles. If the guidelines above are followed, you can be assured that the fire department should have little trouble reaching you during the time of need.**