

- ii) *Alley Grades.* The minimum width of residential alleys in the City of Keller is fifteen feet (15') of pavement with a right-of-way of twenty feet (20'). Alleys are constructed with a 5-inch inverted crown for drainage. The maximum grades for alleys are eight percent (8%) within thirty feet (30') of an intersection with a street and fourteen percent (14%) elsewhere, unless otherwise approved by the Director of Public Works or City Engineer. The minimum grade for alleys is six and one-half tenths percent (0.65%). Changes in grade, including intersections with streets, may not exceed three percent (3%) without providing vertical curves.
- g) *Pavement Design.* All streets will be constructed of reinforced Class 'C' concrete with the minimum strength and thickness as shown in **Table No. 6 5** of this section. **Table No. 6 5** also calls for a minimum amount of lime or cement to be mixed with the subgrade soils for stabilization. A geotechnical investigation to determine the level of lime or cement to be added for soil stabilization may be required if deemed necessary by the Director of Public Works **or designee**. The Developer or Contractor will be responsible for all costs associated with this geotechnical investigation and tests.

Standard pavement sections are established and are included in this manual in Table **No. 6 5**, "Minimum Standard Street Pavement Design." Unusual design conditions may be encountered which will preclude the use of Table **No. 6 5**. The proposed pavement will be designed in accordance with the geotechnical investigation or Table **No. 6-5**, whichever is more restrictive.

Table No. 5  
MINIMUM STANDARD STREET PAVEMENT DESIGN

TYPE OF STREET	CONCRETE THICKNESS (IN)	COMPRESSIVE PAVEMENT STRENGTH AT 28 DAYS (PSI)	REBAR SIZE AND SPACING	MINIMUM SUBGRADE TREATMENT *
Alley	6	3,600	No. 3 18" longitudinal 12" traverse	6" lime or cement treated material
Driveway (Commercial Drive and Residential Approaches)	6	3,600	No. 3 18" longitudinal 18" traverse	6" lime or cement treated material
Fire Lanes	7	3,600	No. 4 18" longitudinal 18" traverse	8" lime or cement treated material
Residential (local)	6	3,600	No. 3 18" longitudinal 18" traverse	6" lime or cement treated material

Collector	7	3,600	No. 4 18" longitudinal 18" traverse	8" lime or cement treated material
Arterial	8	3,600	No. 4 18" longitudinal 18" traverse	9" lime or cement treated material

\* Site specific per geotechnical report, subject of review and approval by the Public Works Director.

The developer or contractor will be required to furnish a geotechnical report indicating soil tests on the subgrade soils at four hundred foot (400') intervals, or more frequently if material changes are encountered. Such data will include, but is not necessarily limited to Liquid Limit, Plasticity Index (P.I.), and Percent Passing No. 200 sieve. All soil tests will be performed by an independent testing laboratory, approved by the City of Keller, at the developer's or contractor's expense.

All subgrade soils will be stabilized with lime or cement treated base material to at least one foot behind the proposed curb, regardless of the type of soil encountered. The amount and type of stabilization will be in accordance with the geotechnical investigation recommendation or as shown in **Table No. 6 5**, whichever is more restrictive. Subgrade stabilization of residential driveways is recommended but shall be considered optional and the decision to comply with this recommendation shall be at the discretion of the builder or developer.

The street curb will not be more than six inches (6") wide at the top and seven and one-half inches (7-1/2") wide at the base and six inches (6") high. The gutter will be a minimum of twenty-four inches (24") wide. Mountable curbs do not create an acceptable side roadway barrier and will not be allowed.

**All new fire lanes shall be designed and constructed in accordance with the geotechnical investigation or per the specifications set forth in Table 5, whichever is more restrictive. Existing pavement and subgrade proposed for fire lane use shall be tested for compressive strength and performance specifications sufficient for supporting a minimum 85,000 pound gross vehicle weight. These test results shall be documented by a report signed and sealed by an engineer licensed in Texas.**

h) *Sidewalks.*

- i) The purpose of the public sidewalk is to provide a safe area for pedestrians to walk. The City of Keller requires that sidewalks be constructed with the paving of streets or when building construction occurs, in all residential areas and wherever pedestrian traffic may be generated and that all sidewalks conform to state laws for barrier free construction. Refer to Section 5.06 of this Unified Development Code and the Standard Construction Details for design requirements not covered in this section.
- ii) Concrete sidewalks will have a thickness of not less than four inches (4") and will be constructed of three thousand six hundred pounds per square inch (3,600 psi) compressive strength concrete on both sides of all streets and thoroughfares. Sidewalks will be constructed within the right-of-way