Property Owner Notes Road Closures

on Old Alton Road

Lewisville Lake & Hickory Creek floodplains have no effect on the 18 acre property

The access gates installed on all roads leading into the Hickory Creek bottoms restrict vehicle access when the road surface crossing the bottoms has been overrun by Lake Lewisville or Hickory Creek flooding. When the Hickory Creek bottoms have flooded, the standing water has never come closer than 1/2 mile down Old Alton Road near the intersection with Copper Canyon Road.

The house foundation was built above the 500 year FEMA flood zone elevation. The foundation elevation is 548.7 ft. above sea level. This elevation is more than 11 ft. higher than the lake level has ever reached (537.0) in the 65 year history of Lake Lewisville.

Click on this link for the <u>FEMA Elevation Certificate and FEMA Letter of Map Amendment (LOMA)</u> providing evidence that the house structure has been removed from FEMA's base flood zone. <u>Flood Insurance is NOT required by the Mortgage Lenders with this LOMA</u>.

Loving Creek base floodplain - Zone AE (Specific to Loving Creek watershed only)

Temporary road closures sporadically occur when Loving Creek runoff exceeds the flow capacity of the culvert crossing underneath the railroad trestle. A flow restriction issue can temporarily create retention ponding upstream of the Old Alton Road when runoff is force to overrun the road surface. This will occur when debris blocks the tinhorn culverts. The shallow retention ponding temporarily backs up into the lowest parts of the pasture as the restricted creek flow recedes.

The property owner had a hydraulic engineer provide calculations for the culvert crossing's flow capacity and the open channel capacity. Comparing the capacity of the culverts to the open channel shows the crossing design creates an **85% blockage of water flow** during a full channel flow. In 2011, FEMA published a detailed study of flow volumes along the entire length of the Loving Creek watershed. The FEMA Study projects peak water volumes for potential 10, 50, 100 and 500 year flooding events. Applying the FEMA study data to the crossing hydraulic calculations indicates a span bridge would eliminate the crossing restriction issue.

The culvert restriction issue presents NO DANGER to the residence. The Red Barn is approx. 548 ft. above sea level and has never been susceptible to the retention ponding effects.

Over 34 years of property ownership, road closures due to culvert flow restriction typically occur once, maybe twice a year with many years experiencing no closures at all. Loving Creek flows in a northerly direction eventually merging into Hickory Creek. This seasonal creek originates near the intersection of FM407/Jeter Road in Bartonville, south of the property. The entire Loving Creek watershed encompasses only 7 square miles, primarily within the Lantana housing development which has many retention ponds.

The property owner has continually lobbied the County Commissioner and Road & Bridges to upgrade the Old Alton Road crossing. The seven bridges on Loving Creek above the Old Alton Road crossing are all span bridges or concrete box crossings that do not restrict water flow. The neighbors and property owner have met with Road & Bridges, the County Engineer and the Commissioner about upgrading this crossing.

With the adjacent residential development, Old Alton Road traffic and relocation of the Selwyn School (less than one mile away), the group has hopes that an upgrade will be scheduled in the near future.