Threshold and Prioritization Criteria for Drainage Projects

Threshold Criteria

Question 1: Does the County have an obligation to complete the project because of a minute order, interlocal agreement, or other State or Federal directive?

Question 2: Is the candidate project within the unincorporated area of Travis County?

Question 3: Is the candidate project’s purpose consistent with the Programs provided by Travis County?

- Subdivision development: Maintenance of accepted roadway drainage within subdivisions. Subdivision plats now have to meet county standards for street and drainage design when they are constructed. There were no standards adopted in the 1960’s and 1970’s therefore there are older subdivisions where retrofitting of drainage infrastructure may be required.
- Floodplain program: This program is implemented by Travis County in accordance with Federal Emergency Management Agency (FEMA) flood rules and is designed to protect insurable structures.
- Road & Bridge program: Included in this program is the maintenance and rehabilitation of the County drainage system.

Question 4: Is the proposed project being considered at a point in time where it is a positive step in view of all other activities?

A project passing the Threshold Criteria may be ranked under the Prioritization Criteria below.

Prioritization Criteria -Stream Crossings

Impacts to Emergency Access Routes During Flood Conditions (Weight 40%)

The number of habitable structures to which access would be impacted if restricted due to flooding at a particular crossing, as well as the number of alternative routes that exist to the structures.

Score: 0 Multiple alternative access routes not subject to flooding.

Score: 1 One alternative access route not subject to flooding.

Score: 2 Complete access to one habitable structure is cut off by flooding. Alternative route(s) also subject to flooding.

Score: 3 Complete access to more than one habitable structure is cut off by flooding. Alternative route(s) also subject to flooding.
Score: 4  Complete access to one or more habitable structure is cut off by flooding. No alternative access exists.

**Road Overtopping Depth Relative to Minimum Depth for Emergency Access (Weight 30%)**
Assesses the frequency that a roadway is impassible by emergency vehicles during given storm events.

- Score: 0  100-year overtopping less than 12 inches.
- Score: 2  100-year overtopping greater than 12 inches.
- Score: 4  2-year overtopping greater than 12 inches.

**Flooding of Upstream Habitable Structures (Weight 20%)**
Improvement to a crossing would reduce flooding of upstream habitable structures.

- Score: 0  No structures below 100-year flood elevation.
- Score: 2  Structures with lowest floor elevation less than 1-foot below 100-year flood elevation.
- Score: 4  Structures with lowest floor elevation 1-foot or more below 100-year flood elevation.

**Average Overtopping Depth from Annual Peak Event (Weight 10%)**
The minimum depth of overtopping that could be expected to occur once a year on average.

- Score: 0  Average annual overtopping is less than 6 inches
- Score: 1  Average annual overtopping is 6 inches to 1 foot
- Score: 2  Average annual overtopping is 1.1 feet to 2 feet
- Score: 3  Average annual overtopping is 2.1 feet to 3 feet
- Score: 4  Average annual overtopping is more than 3 feet.

**Prioritization Criteria –Subdivision Areas**

**Flooding of Habitable Structures (Weight 40%)**
Improvements in drainage infrastructure may reduce or eliminate flooding of habitable structures.

- Score: 0  Habitable Structures Impacted
- Score: 1  1 to 9 Habitable Structures Impacted
- Score: 2  More than 10 Habitable Structures Impacted
Score : 3  1 to 9 Habitable Structures Impacted in the mapped floodplain
Score : 4  10 or more Habitable Structures Impacted in the Mapped Floodplain.

**Impact on Emergency Access (Weight 30%)**
The number of habitable structures to which access would be impacted due to flooding at a particular crossing, as well as the number of alternative routes that exist to the structures.

Score : 0  Multiple alternative access routes not subject to flooding.
Score : 1  One alternative access route not subject to flooding.
Score : 2  Complete access to one habitable structure is cut off by flooding. Alternative route(s) also subject to flooding.
Score : 3  Complete access to more than one habitable structure is cut off by flooding. Alternative route(s) also subject to flooding.
Score : 4  Complete access to one or more habitable structure is cut off by flooding. No alternative access exists.

**Level of Roadway Flooding (Weight 20%)**
Excessive inundation or ponding of roadways can restrict access, cause hydroplaning, cause damage to pavement, and be a general nuisance to property owners.

Score : 0  No Inundation
Score : 2  Moderate Inundation
Score : 4  Severe Inundation.

**Inundation of Private Property (Weight 10%)**
The level of flooding on vacant land.

Score : 0  No Inundation
Score : 2  Moderate Inundation
Score : 4  Severe Inundation.