Notes:
1. Overland Park Municipal Code (OPMC) and Overland Park Design and Construction Standards Manual (OPDCSM) are incorporated, except as otherwise noted.
2. Clearing and excavation of the stream bed and banks shall be kept to a minimum.
3. Place one pipe, sized 6", into the stream bottom just above the lowest point of the channel to allow the passage of aquatic organisms. Additional pipes shall be placed along the remainder of the stream channel pattern such that ordinary high water flow will pass through the pipes without overlapping the crossing. (See Specification for more information.)
4. Sediment shall be placed on the channelbed and channelbank prior to placement of the slab, culvert, and aggregate. The aggregate shall be placed in lift sections not exceeding 8 inches and a maximum of 1 foot beyond the end of culvert and bedding material. Lift shall reduce settlement and improve crossing stability.
5. The culvert shall extend a minimum of 1 foot beyond the upstream and downstream ends of the aggregate placed around culvert. However, in no case shall the culvert exceed 40 feet in length.
6. The culvert shall be covered with a minimum of 1 foot of aggregate. If multiple culverts are used, they shall be separated by at least 12" of compacted aggregate.
7. As soon as crossing is no longer required, all structure including culverts, linings, and grading materials shall be removed. Removal of the crossing shall be done without construction equipment working in the channel.
8. Upon removal of the structure, the stream and banks shall immediately be shaped to its original configuration and properly stabilized. Take care to minimize the amount of sediment load into the stream.

Maintenance:
Riprap stream bank designs by stabilizing with erosion control BMPs such as erosion control blankets. For stream degradation, repair the stream bank(s) with riprap as necessary.
If a stream or ditch is occurring upstream of the crossing, remove or replace to maintain the functionality of the crossing. If a temporary crossing is required, necessary maintenance, replacement with a larger culvert or alternate design may be necessary.