**General Notes:**

1. Payment for work and materials for stubbing a pipe culvert into a box culvert or concrete pipe shall be paid for as a branch connection of the appropriate size, type, and description.
2. The table on this sheet indicates the number and lengths of additional reinforcing steel bars required for box culverts constructed for a double row of reinforcement. Double the number of bars shown. The additional reinforcing steel shall be included in the cost for this type of branch connection. The quantities shown in the table are for the most common sizes of pipe.
3. The reinforcement of the intersected box or pipe shall be cut as necessary to accommodate the stubbed pipe.
4. The contractor may insert the intersecting pipe into the form at the proper location in lieu of forming by blocking out.

**Elevation Showing Circular Pipe Stubbed into Box Culvert Barrel or Wing-Wall**

1. A 24" diameter pipe is the maximum size that may be stubbed into a 48" diameter pipe.
2. A 48" diameter pipe is the minimum size that a 30" diameter pipe may be stubbed into.

**Elevation Showing Arch Pipe Stubbed into Box Culvert Barrel or Wing-Wall**

**Typical Plan of Branch Connection to Box Culvert Wing-Wall**

- Note: Typical installation for median stub to crossing drain with minimum cover.

**Bar List**

<table>
<thead>
<tr>
<th>Pipe Size</th>
<th>No. of Bars</th>
<th>Length</th>
</tr>
</thead>
</table>
| 30" x 15"| 2 | 5'-6"
| 24" x 15"| 2 | 4'-9"
| 18" x 15"| 2 | 3'-10"
| 15" x 15"| 2 | 6'-3"
| 12" x 15"| 2 | 4'-6"
| 9" x 15" | 2 | 3'-3"