### Design Data

**Structural Steel:**
- $f_y = 30,000$ psi

**Concrete:**
- $f_c = 4,000$ psi, $f_y = 40,000$ psi, $f_{cd} = f_y$

### General Notes

1. Reference or series std. chgs.
2. Use coated deformed carbon reinforcing steel, bars conforming to AASHTO M 244-00 or M 111 and M 135, Grade 60, respectively.
3. Field cut and bend reinforcing steel as necessary to clear pipes and maintain 2 inch cover.
4. Use Class A (AA) concrete.
5. Use Type II cement (low alkali).
6. Provide 2 inch concrete cover to reinforcing steel.
7. Provide 24 inch chamfer on all exposed concrete corners.
8. Refer to each full line in table for quantities for one wall or slab of the type specified. Use the drawing in conjunction with the summary plan and profile, and roadway summary schedule to determine the specifics concerning each diversion box.
9. Use cover plate only in applications that will not carry traffic.

### Notes

- All dimensions are rounded to the nearest whole inch.
- All dimensions shown for reinforcing bars are to clear anchor bolts.
- Use $w$ and $d$ dimensions, average length of rebar when laying out set rebar.
- Use standards 180-degree hook for 22 bar as noted.
- Use #2 rebar for K1, K2, G1, and G2 and #1 rebar for K2.
- Use #2 bar size is required for both metal pipe and concrete pipe.

### Table: Diversion Box Sizes

<table>
<thead>
<tr>
<th>Flume Size</th>
<th>Dimensions</th>
<th>Screw Gate</th>
<th>Hand Slide</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>h</th>
<th>L</th>
<th>G1</th>
<th>H1</th>
<th>V1</th>
<th>G2</th>
<th>H2</th>
<th>V2</th>
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### Diagram: Screw Gate Installation Diagram

[Diagram of screw gate installation with labels and dimensions]