**DESIGN CRITERIA**

**SUMMARY:**

<table>
<thead>
<tr>
<th>PRIMARY SPILLWAY:</th>
<th>TRAPEZOIDAL SPILLWAY WITH IMPERMEABLE MEMBRANE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAXIMUM DRAINAGE AREA:</td>
<td>10 ACRES</td>
</tr>
<tr>
<td>MINIMUM VOLUME:</td>
<td>1800 CUBIC FEET PER ACRE OF DISTURBED AREA</td>
</tr>
<tr>
<td>MINIMUM SURFACE AREA:</td>
<td>325 SQUARE FEET PER CFS OF Q25 PEAK INFLOW</td>
</tr>
<tr>
<td>MINIMUM L/W RATIO:</td>
<td>2:1</td>
</tr>
<tr>
<td>MAXIMUM L/W RATIO:</td>
<td>6:1</td>
</tr>
<tr>
<td>MINIMUM DEPTH:</td>
<td>2 FEET</td>
</tr>
<tr>
<td>DEWATERING MECHANISM:</td>
<td>SKIMMER</td>
</tr>
<tr>
<td>MINIMUM DEWATERING TIME:</td>
<td>2 DAYS</td>
</tr>
<tr>
<td>DESIGN BASIN LIFE:</td>
<td>3 YEARS OR LESS</td>
</tr>
<tr>
<td>DAM HEIGHT:</td>
<td>5 FEET MAXIMUM</td>
</tr>
<tr>
<td>BAFFLES REQUIRED:</td>
<td>★ 3 BAFFLES</td>
</tr>
</tbody>
</table>

SEE NC EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

*NOTE: BASINS LESS THAN 20' IN LENGTH MAY USE 2 BAFFLES.*

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**DESIGN LIFE OF FABRIC IS 6-12 MONTHS**

**NOTES:**

1. LOCATE SEDIMENT INFLOW TO THE BASIN AWAY FROM THE DAM TO PREVENT SHORT CIRCUITS FROM INLETS TO OUTLETS.
2. BASIN MUST BE STABILIZED IMMEDIATELY UPON CONSTRUCTION AND PRIOR TO SITE INSPECTION APPROVAL.

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**BAFFLE DETAIL**

**STABLE TRANSITION REQUIRED TO THE BASE OF THE SLOPE**

**INLET FLOW**

(Pipe or Ditch)

**EMERGENCY SPILLWAY**

**INLET ZONE 25% OF SURFACE AREA**

**FIRST CHAMBER 25% OF SURFACE AREA**

**SECOND CHAMBER 25% OF SURFACE AREA**

**OUTLET ZONE 25% OF SURFACE AREA**

**BAFFLE (TYP.)**

**SKIMMER**

**STONE ENERGY DISSIPATOR**

**STABILIZATION**

**BAFFLE**

**TETHER**

**EMBANKMENT**

**INLET ZONE 25% OF SURFACE AREA**

**FIRST CHAMBER 25% OF SURFACE AREA**

**SECOND CHAMBER 25% OF SURFACE AREA**

**OUTLET ZONE 25% OF SURFACE AREA**

**BAFFLE DETAIL**

**SUPPORT ROPE TO WIRE TO PREVENT SAGGING**

**SUPPORT POST 24" INTO BOTTOM OR SIDES**

**STAKE TO SUPPORT WIRE**

**COIR MESH OR JUTE, TRENCHED INTO BOTTOM AND SIDE**

**DESIGN LIFE OF FABRIC IS 6-12 MONTHS**