Fontenelle Dam Outlet Works Flow Deflectors 10-11-07

The following parameters describe the upper and lower rows of deflector panels (see figures 1 and 2):

- 1) **Upper deflector** The upper deflector row (three separate panels with 2 piers for support) is oriented vertically, with a vertical dimension of 11.33 ft, and positioned at elevation 6384.5 ft (or 27.5 ft from the basin floor to the bottom elevation of the deflector) and at a lateral location 13.33 ft upstream from the end of the stilling basin walls (from the end of the basin walls to the upstream face of the deflector).
- 2) **Lower deflector** The lower deflector (three separate panels with 2 piers for support) is positioned vertically, with a vertical dimension of 6.75 ft and positioned at elevation 6369.5 ft (or 12.5 ft from the basin floor to the bottom of the deflector), and at a lateral location 20 ft upstream from the end of the stilling basin walls (from the end of the basin walls to the upstream face of the deflector).

Each deflector panel will most likely consist of an upstream and downstream skin plate with ribbing in between the plates for structural support.

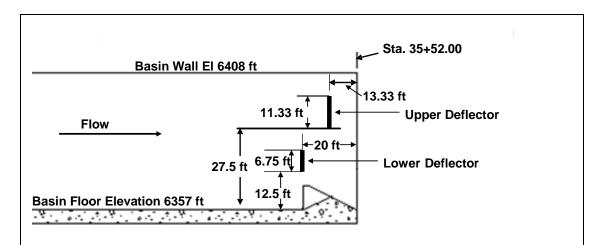


Figure 1. Elevation sketch showing approximate positions for Fontenelle stilling basin staggered flow deflectors



Figure 2. Looking upstream at the Fontenelle model stilling basin with staggered upper and lower 3-panel flow deflectors.