

----(Retaining Wall Report Included with BFI Report)----

**Downdrag Protection-** PSC piles at endbents 1 and 3 within the MSE wall backfill should be fitted with downdrag protection (yellow jackets or equivalent).

**Retaining Wall-** The following soil design parameters are recommended for use for the proposed MSE walls at bents 1 and 3:

Cohesion, C:	0 kN per square meter
Angle of Internal Friction, $\Phi$ :	28°
Soil Unit Weight, $\delta$ :	19 kN per cubic meter
Coefficient of Sliding Friction, $\mu$ :	0.45

The maximum allowable soil bearing pressure is 190 kPa. If the wall design bearing pressure exceeds the maximum allowable bearing pressure, the wall should be built to a height equivalent to the allowable bearing pressure, and then a 30-day waiting period enforced. After this time, the wall may be constructed to its final height. Temporary walls or shoring will be required adjacent to the existing bridge at bents 1 and 3 for the stage construction of the new abutment walls.