

**SPECIFICATIONS FOR REINFORCED CONCRETE FOR  
SHOTCRETE APPLICATION**

**Concrete batching and delivery shall meet requirements and specifications ASTM C94 and ACI304R as applicable, and the following specifications:**

- (A) Application: Pumpable mix for shotcrete application of 2 or more inches of canal pavement**
- (B) Cement: 7 sack minimum Type I/II low alkali cement content per cubic yard**
- (C) Fly Ash: Class F fly ash content of 20% to 30% per cubic yard**
- (D) Specified Strength: 4,000 PSI at 28 days**
- (E) Fiber: 3 lbs per yard of 3/4" fibrillated polypropylene fiber**
- (F) Superplasticizer: 1 to 2%**
- (G) Application: Pumpable mix for shotcrete application to include super plasticizer**
- (H) Air Entrainment: 6% air plus or minus 1.5%**
- (I) Slump: Maximum of 5 inch and determined at the time of pour**
- (J) Final mix design to be submitted to the engineer for approval 48 hours prior to delivery**

