Rectangular Sedimentation (Settling) Tank - Weir Configuration - Flow-through Discharges
Gravity Discharges

Tank dimensions (hypothetical): 8′ (W) x 9′ (H) x 40′ (L)
Working dimensions (hypothetical - at water level): 8′ (W) x 7.5′ (H) x 40′ (L) = 2,400 ft³ ≈ 18,000 gal

Maximum discharge rate at 90 minute retention time: 18,000 gal/90 min = 200 gal/min

(Based on empty tank working dimensions.)

Scale: NTS
Rectangular Sedimentation (Settling) Tank - Weir Configuration - Flow-through Discharges
Pumped Discharges

First Chamber
Working Volume

\[ V = 8' (W) \times 7.5' (H) \times 13' (L) \]
\[ = 780 \text{ ft}^3 \]
\[ \approx 5,800 \text{ gal} \]

Second Chamber
Working Volume

\[ V = 8' (W) \times 7.5' (H) \times 13' (L) \]
\[ = 780 \text{ ft}^3 \]
\[ \approx 5,800 \text{ gal} \]

Third Chamber
Working Volume

\[ V = 8' (W) \times 4.5' (H) \times 14' (L) \]
\[ = 504 \text{ ft}^3 \]
\[ \approx 3,800 \text{ gal} \]

Weir height 7.5' (estimated)

Working elevation set at pump intake elevation

CONSTRUCTION
DEWATERING
WASTEWATER

Sedimentation (Settling) Tank - Weir Configuration - Flow-through Discharges
Pumped Discharges

Tank dimensions (hypothetical): 8' (W) x 9' (H) x 40' (L)

Working dimensions (hypothetical - at water level): 5,800 gal + 5,800 gal + 3,800 gal = 15,400 gal

Maximum discharge rate at 90 minute retention time: 15,400 gal/90 min = 170 gal/min

(Based on empty tank working dimensions.)