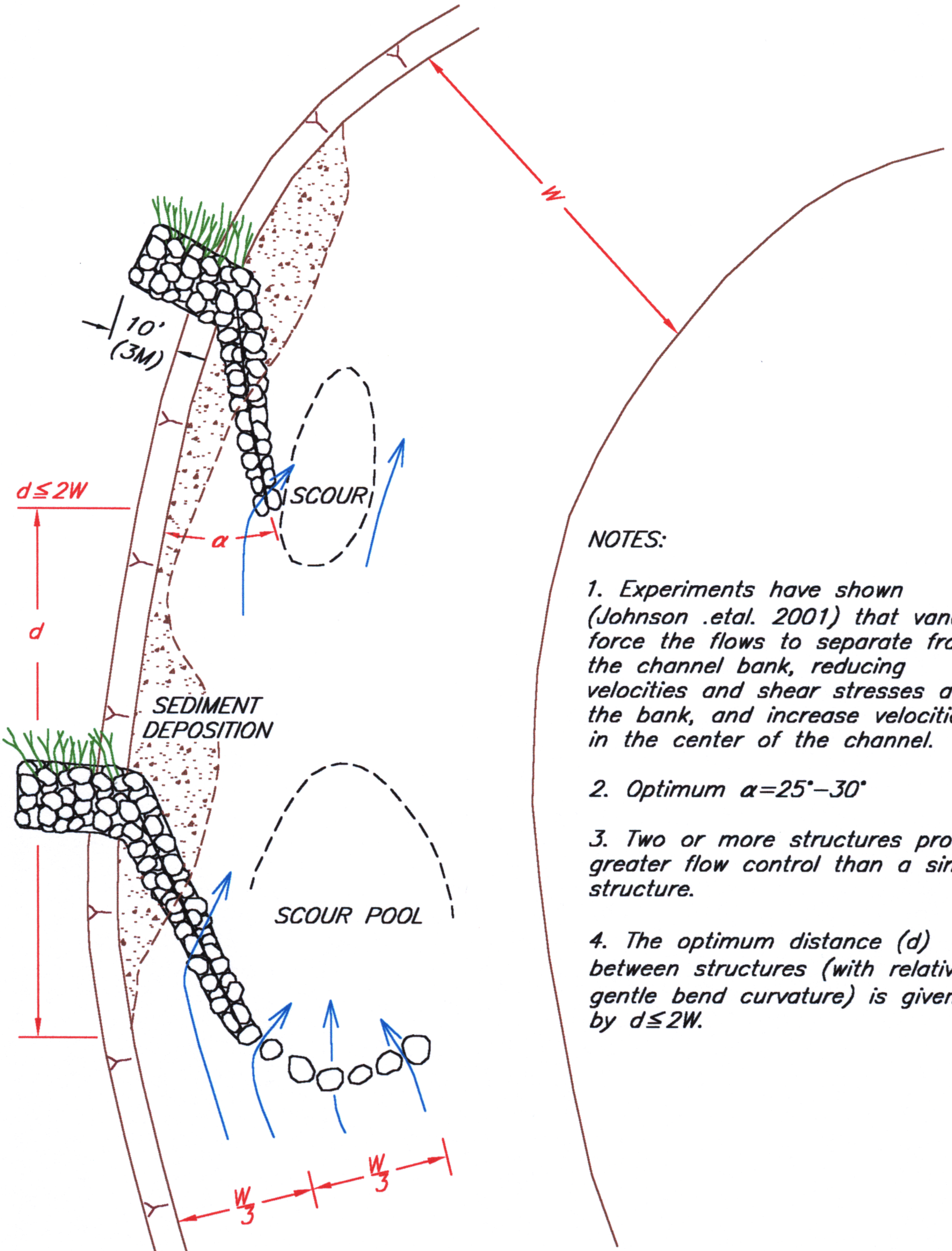


NOTES:

1. Experiments have shown (Johnson .etal. 2001) that vanes force the flows to separate from the channel bank, reducing velocities and shear stresses at the bank, and increase velocities in the center of the channel.

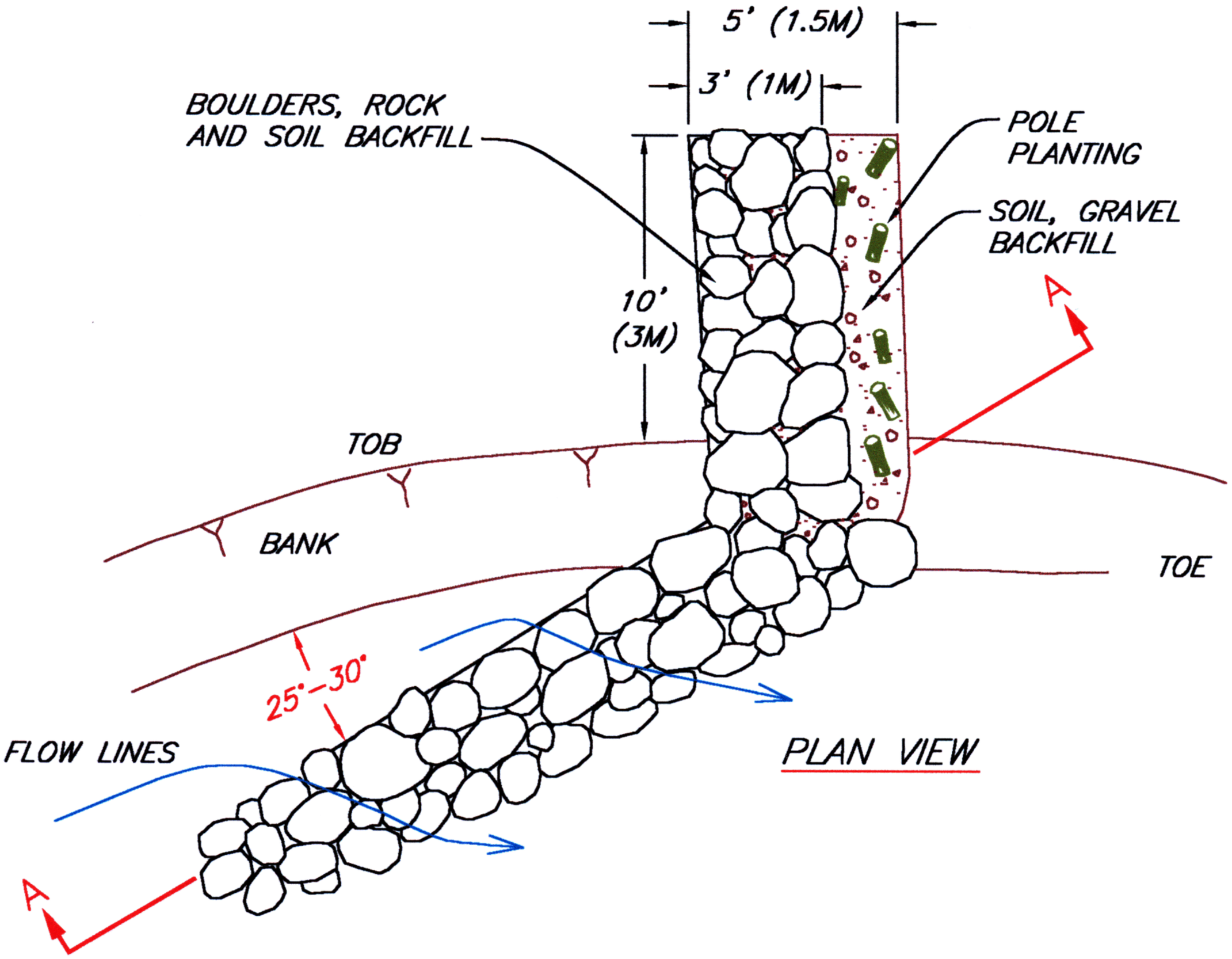
2. Optimum $\alpha = 25° - 30°$

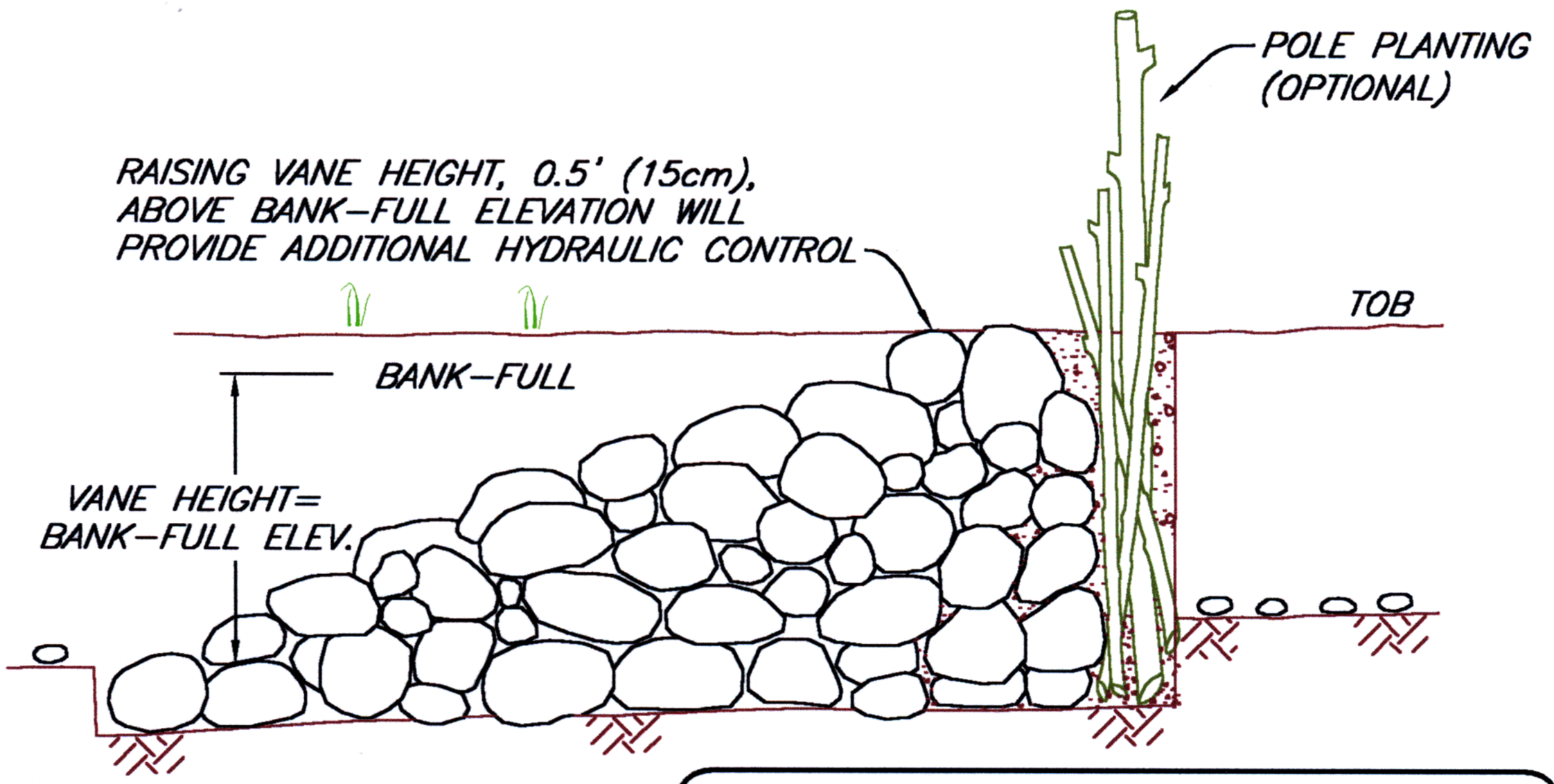
3. Two or more structures provide greater flow control than a single structure.

4. The optimum distance (d) between structures (with relatively gentle bend curvature) is given by $d \leq 2W$.

TYPICAL ROCK VANE AND ROCK VANE WITH J-HOOK

FILE: ROCK VANE





SECTION A-A

TYPICAL ROCK VANE BANK KEY DETAIL (WITH POLE PLANTING)

FILE: ROCK VANE-BANK KEY DETAIL