

KONERU RESIDENCE

DETAILS A & B

3'-6" MAX DEPTH):

Depth (ft) =	3.5
Equivalent Fluid Density (pcf) =	40
OTM= $1/6 \times (w) \times H^3$ (lb ft) =	285.8333
Moment Resistance (lb ft) =	ϕM_n
Shear Resistance (lbs) =	ϕV_c
A_s (#4 @10" OC)=	0.235 in ²
F_s =	60 ksi
F_c =	4 ksi
a (in) =	0.345588 in
D (in) =	5.5
Dt (in) =	11
Cover (in) =	5.25
Bar Diameter (in) =	0.5
Moment Reduction Factor (ϕ) =	0.9
Shear Reduction Factor (ϕ) =	0.75

ϕM_n (ft lbs) = 5633.52

ϕV_c (lbs) = 12522.62

Moment Resistance FOS 19.70911