

Wave Barrier

Item	Qty	Unit	Cost/Unit	Cost	Notes
Furnish Barrier Pile	23	EA	\$ 15,000	\$ 345,000	80' long 20" pipe w/ 30' long PS31 wings (top half galv)
Drive Barrier Pile *	23	EA	\$ 4,000	\$ 92,000	Assume standard vibratory installation
Furnish & Install Cap	120	LF	\$ 300	\$ 36,000	W36, continuous including weld at each pile
			Subtotal	\$ 473,000	(\$3,950/LF)

Concrete Float

Item	Qty	Unit	Cost/Unit	Cost	Notes
Furnish Float	700	SF	\$ 80	\$ 56,000	Modular, no utilities, incl ship to contractor
Furnish Pile	4	EA	\$ 7,000	\$ 28,000	60' long 18" piles (top 40' galv)
Drive Pile *	4	EA	\$ 3,000	\$ 12,000	Assume standard vibratory installation
Install Float	1	LS	\$ 5,000	\$ 5,000	Assembly, etc
			Subtotal	\$ 101,000	(\$145/SF)

Aluminum Gangway

Item	Qty	Unit	Cost/Unit	Cost	Notes
Furnish Gangway	1	EA	\$ -	\$ -	assumes use of County's preowned gangway
Install Gangway	1	LS	\$ 4,000	\$ 4,000	Incl ramps, hangers, slider guides, etc.
			Subtotal	\$ 4,000	

New Approach Dock

Item	Qty	Unit	Cost/Unit	Cost	Notes
Construct Dock *	450	SF	\$ 120	\$ 54,000	Two driven piles, spread footing, glulams, etc.
			Subtotal	\$ 54,000	

Demolish & Remove

Item	Qty	Unit	Cost/Unit	Cost	Notes
Demolish & Remove	1	LS	\$100,000	\$ 100,000	Specified existing structures in/over water removed
			Subtotal	\$ 100,000	(1 week at \$10,000/day + Disposal)

Mob & Demob

Item	Qty	Unit	Cost/Unit	Cost	Notes
Mob & Demob	1	LS	\$ 70,000	\$ 70,000	
			Subtotal	\$ 70,000	

Construction Subtotal \$ 802,000

Engineering

Item	Qty	Unit	Cost/Unit	Cost	Notes
Concept/Wave Study	1	Est	\$ 10,000	\$ 10,000	
Surveys	1	Est	\$ -	\$ -	Completed in 2007
Geotechnical Investigation	1	Est	\$ 35,000	\$ 35,000	Assumes 3 day pile probe w/ local contractor
Permitting Assistance	1	Est	\$ 20,000	\$ 20,000	
Design	1	Est	\$ 70,000	\$ 70,000	
Construction Assistance	1	Est	\$ 30,000	\$ 30,000	
			Engineering Subtotal	\$ 165,000	

Total Cost Estimate \$ 967,000
 20% Contingency Allowance \$ 160,000
 WSST (8.2%) \$ 92,000

Recommended Budget \$ 1,200,000 Lower Bound

Recommended Budget \$ 2,000,000 Upper Bound (assumes drilling and rock sockets) *

* Note:

Depending on results of geotechnical program, piles may need to be drilled/socketed into bedrock, increasing pile installation costs.

Heavy Concrete Float

Item	Qty	Unit	Cost/Unit	Cost	Notes
Furnish Float	960	SF	\$ 200	\$ 192,000	Large monolithic concrete, no utilities, ship to contractor
Furnish Pile	4	EA	\$ 15,000	\$ 60,000	90' long 24" piles (top 40' galv)
Drive Pile, Weld Frame *	4	EA	\$ 15,000	\$ 60,000	Assume vibratory and/or impact
Install Float	1	LS	\$ 5,000	\$ 5,000	Assembly, etc
Subtotal				\$ 317,000	(\$300/SF)

Aluminum Gangway

Item	Qty	Unit	Cost/Unit	Cost	Notes
Furnish Gangway	1	EA	\$ -	\$ -	assumes use of County's preowned gangway
Install Gangway	1	LS	\$ 4,000	\$ 4,000	Incl ramps, hangers, slider guides, etc.
Subtotal				\$ 4,000	

New Approach Dock

Item	Qty	Unit	Cost/Unit	Cost	Notes
Construct Dock *	450	SF	\$ 120	\$ 54,000	Two driven piles, spread footing, glulams, etc.
Subtotal				\$ 54,000	

Demolish & Remove

Item	Qty	Unit	Cost/Unit	Cost	Notes
Demolish & Remove	1	LS	\$100,000	\$ 100,000	Specified existing structures in/over water removed (1 week at \$10,000/day + Disposal)
Subtotal				\$ 100,000	

Mob & Demob

Item	Qty	Unit	Cost/Unit	Cost	Notes
Mob & Demob	1	LS	\$ 45,000	\$ 45,000	
Subtotal				\$ 45,000	

Construction Subtotal \$ 520,000

Engineering

Item	Qty	Unit	Cost/Unit	Cost	Notes
Concept/Wave Study	1	Est	\$ 10,000	\$ 10,000	
Surveys	1	Est	\$ -	\$ -	Completed in 2007
Geotechnical Investigation	1	Est	\$ 25,000	\$ 25,000	Assumes 2 day pile probe w/ local contractor
Permitting Assistance	1	Est	\$ 20,000	\$ 20,000	
Design	1	Est	\$ 50,000	\$ 50,000	
Construction Assistance	1	Est	\$ 15,000	\$ 15,000	
Engineering Subtotal				\$ 120,000	

Total Cost Estimate \$ 640,000
 20% Contingency Allowance \$ 104,000
 WSST (8.2%) \$ 61,000

Recommended Budget \$ 800,000 Lower Bound

Recommended Budget \$ 1,000,000 Upper Bound (assumes drilling and rock sockets) *

* Note:

Depending on results of geotechnical program, piles may need to be drilled/socketed into bedrock, increasing pile installation costs.

HDPE Pipe Float

Item	Qty	Unit	Cost/Unit	Cost	Notes
Furnish Float	720	SF	\$ 80	\$ 57,600	Steel pipe, grating deck, no utilities, ship to contractor
Furnish Pile	4	EA	\$ 7,000	\$ 28,000	60' long 18" piles (top 40' galv)
Drive Pile *	4	EA	\$ 3,000	\$ 12,000	Assume standard vibratory installation
Install Float	1	LS	\$ 5,000	\$ 5,000	Assembly, etc
Subtotal				\$ 102,600	(\$140/SF)

Aluminum Gangway

Item	Qty	Unit	Cost/Unit	Cost	Notes
Furnish Gangway	1	EA	\$ -	\$ -	assumes use of County's preowned gangway
Install Gangway	1	LS	\$ 4,000	\$ 4,000	Incl ramps, hangers, slider guides, etc.
Subtotal				\$ 4,000	

New Approach Dock

Item	Qty	Unit	Cost/Unit	Cost	Notes
Construct Dock *	450	SF	\$ 120	\$ 54,000	Two driven piles, spread footing, glulams, etc.
Subtotal				\$ 54,000	

Demolish & Remove

Item	Qty	Unit	Cost/Unit	Cost	Notes
Demolish & Remove	1	LS	\$100,000	\$ 100,000	Specified existing structures in/over water removed
Subtotal				\$ 100,000	(1 week at \$10,000/day + Disposal)

Mob & Demob

Item	Qty	Unit	Cost/Unit	Cost	Notes
Mob & Demob	1	LS	\$ 30,000	\$ 30,000	
Subtotal				\$ 30,000	

Construction Subtotal \$ 291,000

Engineering

Item	Qty	Unit	Cost/Unit	Cost	Notes
Concept/Wave Study	1	Est	\$ 10,000	\$ 10,000	
Surveys	1	Est	\$ -	\$ -	Completed in 2007
Geotechnical Investigation	1	Est	\$ 15,000	\$ 15,000	Assumes 1 day pile probe w/ local contractor
Permitting Assistance	1	Est	\$ 10,000	\$ 10,000	
Design	1	Est	\$ 50,000	\$ 50,000	
Construction Assistance	1	Est	\$ 15,000	\$ 15,000	
Engineering Subtotal				\$ 100,000	

Total Cost Estimate \$ 391,000
 20% Contingency Allowance \$ 58,000
 WSST (8.2%) \$ 37,000

Recommended Budget \$ 500,000 Lower Bound

Recommended Budget \$ 700,000 Upper Bound (assumes drilling and rock sockets) *

* Note:

Depending on results of geotechnical program, piles may need to be drilled/socketed into bedrock, increasing pile installation costs.