



TAYLOR ENGINEERING, INC.

# Flagler County – Painters Hill Seawall Status



Presented by: Ken Craig, P.E.

March 8, 2017

# Topics

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- Existing conditions
- Alignment
- Materials
- Cost estimate
- Schedule

# Alignment

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## FDEP Siting Parameters

- 20 to 30 ft from existing structures
- Straight, minimize bends
- Return walls
- [Drawings](#)

# Materials

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Vinyl sheetpile

Concrete cap

Helical anchors

Backfill

[Drawings](#)

[Cross sections](#)

# Engineer's Estimate of Probable Cost

Client: Flagler County		Prepared by: M. Doll, E.I.
Project: Painter's Hill Seawall		Date: 3/6/2017
Project No: C2016-079		Reviewed by: H. Verkerk, P.E. K. Knight, P.E.
Engineer's Preliminary Estimate of Probable Cost Worksheet		

## PAINTER'S HILL SEAWALL

ITEM	DESCRIPTION	UNITS	QUANTITY	UNIT COST	TOTAL COST
<b>LUMP SUM</b>					
001	Insurance	LS	1	\$ 12,000	\$ 12,000
002	Mobilization and Demobilization	LS	1	\$ 76,000	\$ 76,000
003	Environmental Protection and Erosion Control	LS	1	\$ 46,000	\$ 46,000
004	Construction, Payment, and As-Built Surveys	LS	1	\$ 46,000	\$ 46,000
005	Backfill	LS	1	\$ 104,950	\$ 104,950
006	Vinyl Sheetpile	LS	1	\$ 499,200	\$ 499,200
007	Helical Anchors	LS	1	\$ 386,000	\$ 386,000
008	Concrete Cap	LS	1	\$ 231,100	\$ 231,100
009	Return Wall - Vinyl Sheetpile	LS	1	\$ 197,600	\$ 197,600
010	Return Wall - Concrete Cap	LS	1	\$ 91,500	\$ 91,500
011	Earthwork for Access Ramp	LS	1	\$ 10,000	\$ 10,000
<b>LUMP SUM TOTAL</b>					<b>\$ 1,700,350</b>
<b>Construction Cost (Items 5-10)</b>					<b>\$ 1,520,350</b>
-30%					<b>\$ 1,190,000</b>
<b>GRAND TOTAL</b>					<b>\$ 1,700,350</b>
30%					<b>\$ 2,210,000</b>

\*Items 1-4 were distributed between seawall and return wall based on ratio of respective lengths

# Engineer's Estimate of Probable Cost

## Construction Cost Per Linear Foot (HIGH)

001	Seawall	LF		\$	1,406.46
002	Return Wall	LF		\$	895.12

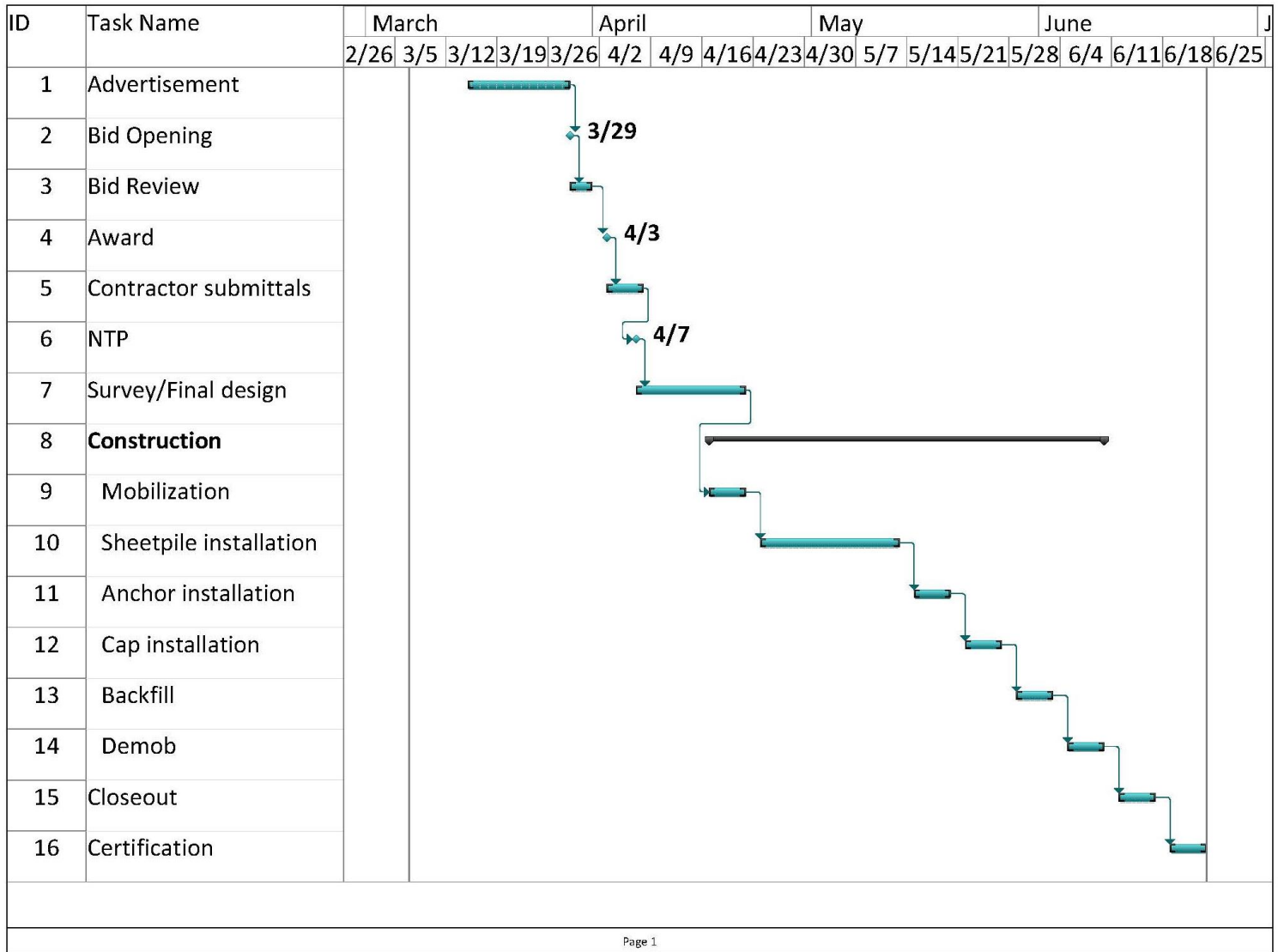
## Construction Cost Per Linear Foot

001	Seawall	LF	1	\$	1,081.90
002	Return Wall	LF	1	\$	688.55

## Construction Cost Per Linear Foot (LOW)

001	Seawall	LF	1	\$	757.33
002	Return Wall	LF	1	\$	481.99

# Schedule



# Schedule

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- Advertisement March 15, 2017
- Bid Opening March 29, 2017
- Award April 3, 2017
- NTP April 7, 2017
- Survey/Final Design April 21, 2017
- Construction April 17, 2017 through June 16, 2017
  - Mobilization 1 week
  - Sheetpile installation 1 day/property x 21 properties = 21 days ☐  
3 weeks
  - Anchor installation 1 week
  - Cap installation 1 week
  - Backfill 1 week
  - Demobilization 1 week
- Closeout June 23, 2017
- Certification June 30, 2017





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# *Questions?*