

Options for:

From:

To:

Units: ▾

Timezone: ▾

Datum (datum_options.html): ▾

Shift dates:

Interval:

Update:

These raw data have not been subjected to the National Ocean Service's quality control or quality assurance procedures and do not meet the criteria and standards of official National Ocean Service data. They are released for limited public use as preliminary data to be used only with appropriate caution. ✕

Products available at 8665530 Charleston, SC

- TIDES/WATER LEVELS**
- Water Levels (/waterlevels.html?id=8665530)
 - NOAA Tide Predictions (/noaatidepredictions.html?id=8665530)
 - Harmonic Constituents (/harcon.html?id=8665530)
 - Sea Level Trends (/sltrends/sltrends_station.shtml?id=8665530)
 - Datums (/datums.html?id=8665530)
 - Bench Mark Sheets (/benchmarks.html?id=8665530)
 - Extreme Water Levels (/est/est_station.shtml?stnid=8665530)
 - Reports (/reports.html?id=8665530)

- METEOROLOGICAL/OTHER**
- Meteorological Observations (/met.html?id=8665530)
 - Water Temp/Conductivity
- PORTS®**
- Charleston Harbor PORTS® (/ports/index.html?port=ch)
 - PORTS® product page for Charleston (/ports/ports.html?id=8665530)

- OPERATIONAL FORECAST SYSTEMS**
- This station is not a member of OFS
- INFORMATION**
- Station Home Page (/stationhome.html?id=8665530)
 - Data Inventory (/inventory.html?id=8665530)
 - Measurement Specifications (/measure.html)

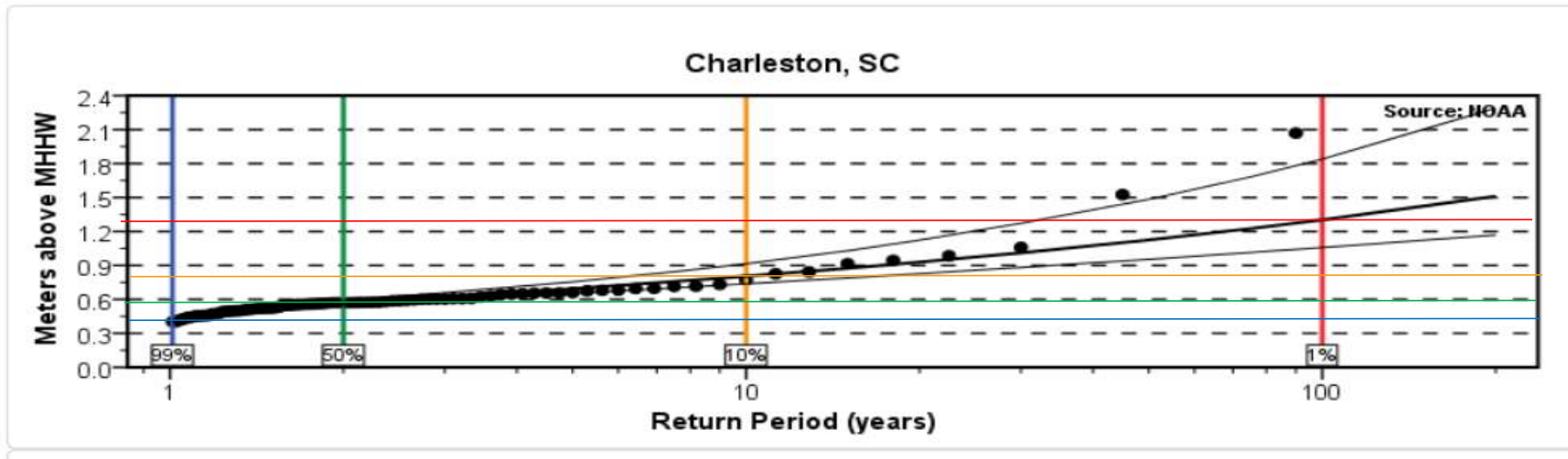
**City of Isle of Palms
Waterway Blvd. Path - Elevation Study
Charleston Harbor Historic Maximum Tides (POR)**

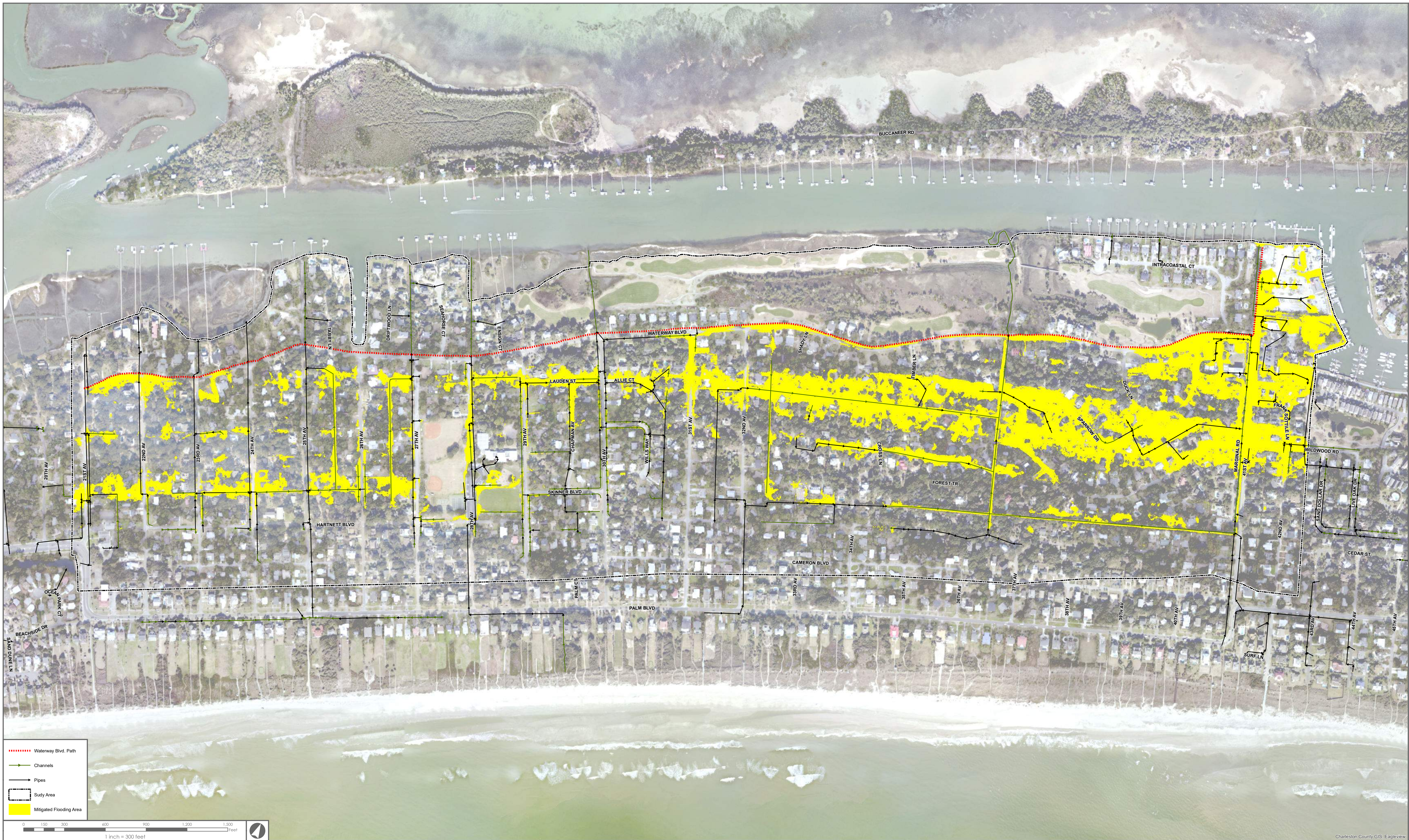
Historic Crests (MLLW)	Elev. (ft.)		
	MLLW	NGVD88	
(1) 12.52 ft on 09/22/1989	12.52	9.38	
(2) 10.23 ft on 08/11/1940	10.23	7.09	
(3) 9.92 ft on 09/11/2017	9.92	6.78	← December 17, 2024 - 6.72 ft. NAVD88
(4) 9.29 ft on 10/08/2016	9.29	6.15	tidal flooding above target protection
(5) 8.81 ft on 01/01/1987	8.81	5.67	
(6) 8.76 ft on 11/24/2018	8.76	5.62	
(7) 8.69 ft on 10/27/2015	8.69	5.55	
(8) 8.64 ft on 05/28/1934	8.64	5.50	
(9) 8.64 ft on 09/04/1979	8.64	5.50	
(10) 8.46 ft on 11/02/1947	8.46	5.32	
(11) 8.29 ft on 10/03/2015	8.29	5.15	
(12) 8.27 ft on 10/28/2015	8.27	5.13	
(13) 8.21 ft on 10/04/2015	8.21	5.07	
(14) 8.15 ft on 10/15/1947	8.15	5.01	
(15) 8.14 ft on 11/23/2018	8.14	5.00	tidal protection from sealing drainage
(16) 8.14 ft on 09/29/1959	8.14	5.00	
(17) 8.12 ft on 09/20/2020 (P)	8.12	4.98	
(18) 8.11 ft on 06/22/2009	8.11	4.97	
(19) 8.09 ft on 09/15/2020 (P)	8.09	4.95	
(20) 8.08 ft on 08/30/2019	8.08	4.94	
(21) 8.07 ft on 09/19/2020 (P)	8.07	4.93	
(22) 8.06 ft on 12/24/2019	8.06	4.92	
(23) 8.06 ft on 06/23/2009	8.06	4.92	
(24) 8.05 ft on 12/09/2018	8.05	4.91	
(25) 8.05 ft on 09/29/2015	8.05	4.91	
(26) 8.03 ft on 02/20/2019	8.03	4.89	
(27) 8.03 ft on 09/21/2020 (P)	8.03	4.89	
(28) 8.02 ft on 08/29/2019	8.02	4.88	
(29) 8.01 ft on 06/18/1982	8.01	4.87	
(30) 8.01 ft on 07/21/2001	8.01	4.87	
(31) 8.01 ft on 12/31/1994	8.01	4.87	
(32) 8.01 ft on 09/28/2015	8.01	4.87	
(33) 8.00 ft on 01/30/2010	8.00	4.86	
	9.14	6	

(P): Preliminary values subject to further review.
Period of Record (POR): approx. 1980 to present

City of Isle of Palms
 Waterway Blvd. Path - Elevation Study
 Charleston Harbor Tidal Return Frequencies

Meters MHHW	Feet MHHW	Feet NAVD88	Annual Prob. Of Exceed.	Return Period	
1.33	4.4	7.0	>1%	+100-yr	
1.18	3.9	6.5	1.7%	~59-yr	
1.03	3.4	6.0	3.7%	~27-yr	Proposed Target
0.88	2.9	5.5	6.7%	~15-yr	
0.72	2.4	5.0	20%	~5-yr	
0.44	1.44	4.1	99%	~1-yr	
0.59	1.94	4.6	50%	2-yr	
0.78	2.56	5.2	10%	10-yr	
1.29	4.23	6.9	1%	100-yr	





Job Number:	Produced:	Produced by:	Modified:	Modified by:
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Target Tidal Flood Inundation Mitigation (Path Elev. 6.0 ft. NAVD88)

City of Isle of Palm, SC

Waterway Blvd. Elevation Study

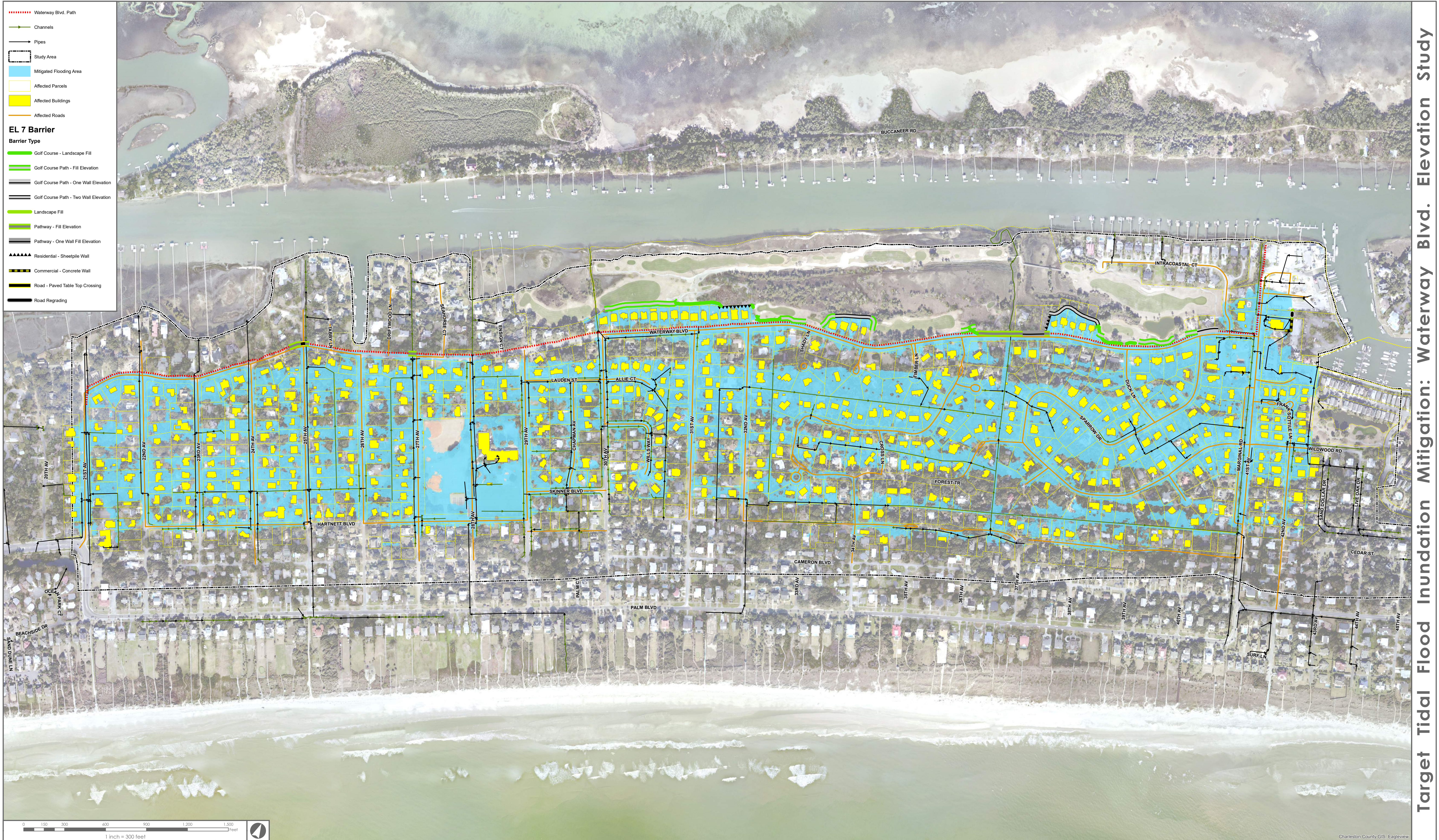


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Charleston County GIS, Eagleview



0 150 300 600 900 1,200 1,500 Feet

1 inch = 300 feet

Job Number:	Produced:	Produced By:	Modified:	Modified By:
File: 2\27670\27670.0010\GIS\Mxd\TargetInundation_7.0.mxd			5/31/2024	
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Target Tidal Flood Inundation Mitigation (Path Elev. 7.0 ft. NAVD88)

City of Isle of Palm, SC

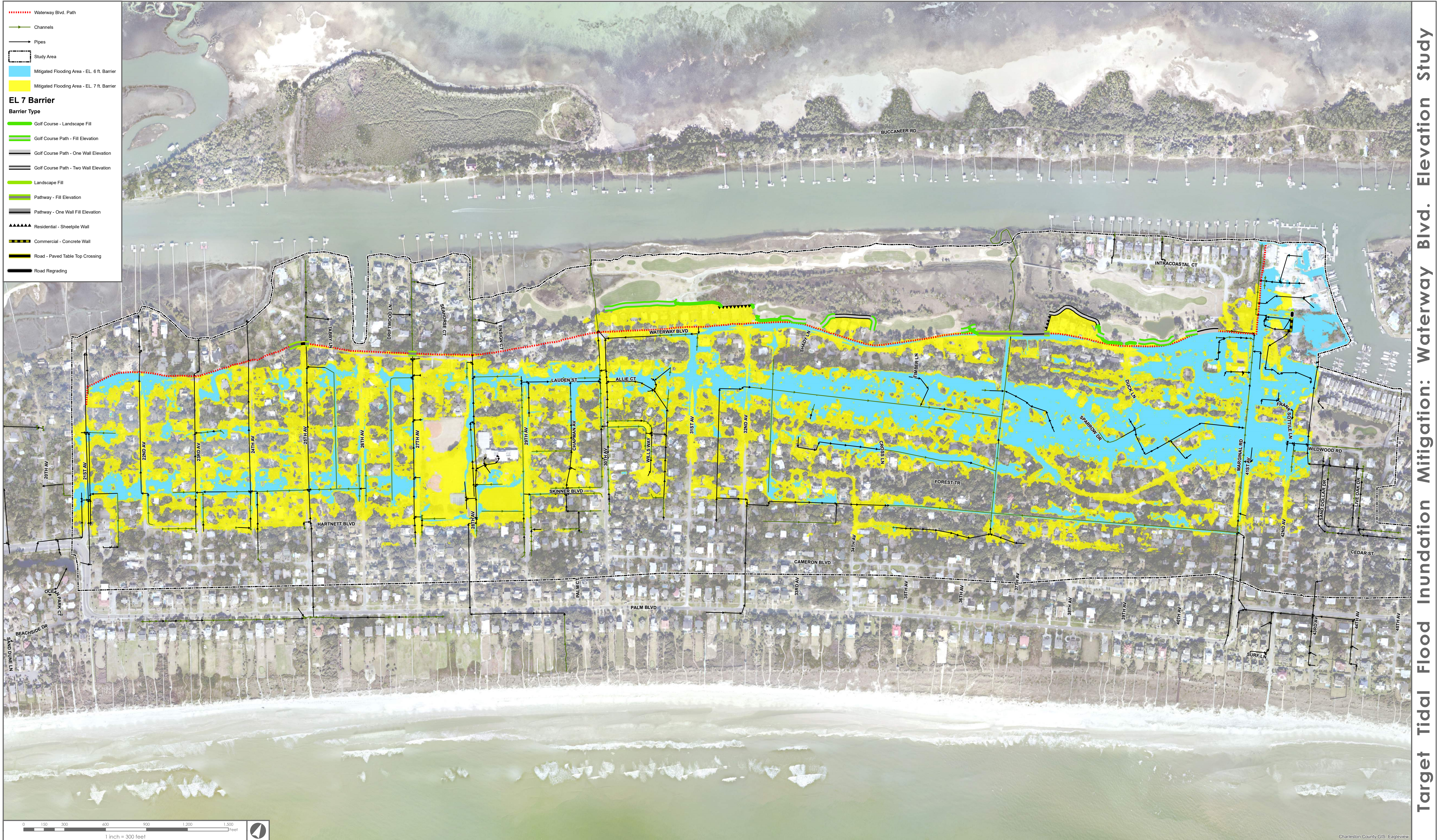
Waterway Blvd. Elevation Study



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- Waterway Blvd. Path
 - Channels
 - Pipes
 - Study Area
 - Mitigated Flooding Area - EL 6 ft. Barrier
 - Mitigated Flooding Area - EL 7 ft. Barrier
- EL 7 Barrier**
- Barrier Type**
- Golf Course - Landscape Fill
 - Golf Course Path - Fill Elevation
 - Golf Course Path - One Wall Elevation
 - Golf Course Path - Two Wall Elevation
 - Landscape Fill
 - Pathway - Fill Elevation
 - Pathway - One Wall Fill Elevation
 - Residential - Sheetpile Wall
 - Commercial - Concrete Wall
 - Road - Paved Table Top Crossing
 - Road Regrading

0 150 300 600 900 1,200 1,500 Feet


1 inch = 300 feet

Job Number:	Produced:	Produced By:	Modified:	Modified By:
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Target Tidal Flood Inundation Mitigation (Elev. 6.0 ft. vs. Elev. 7.0 ft. NAVD88)

City of Isle of Palm, SC

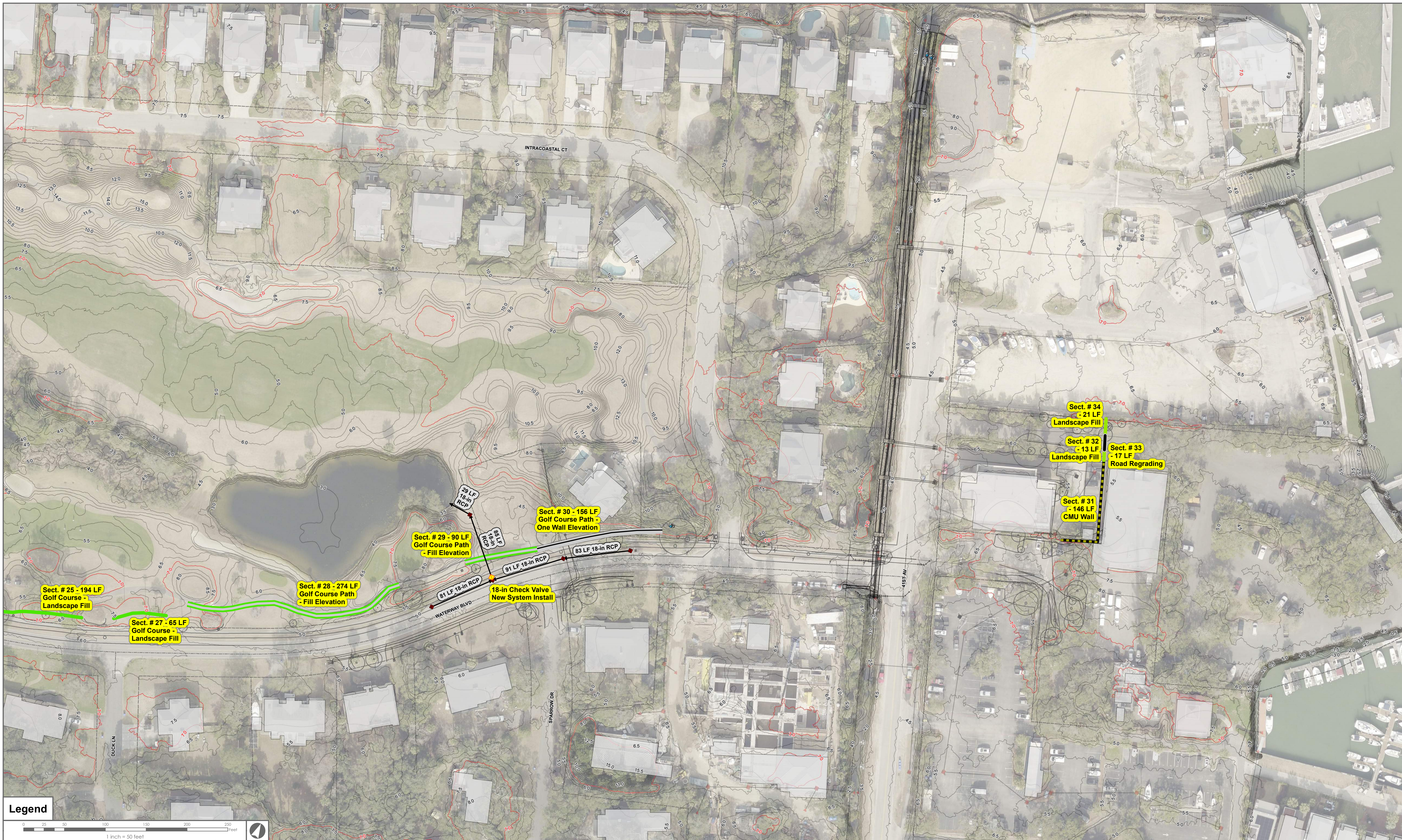
Waterway Blvd. Elevation Study



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Waterway Blvd. Pathway
Tidal Inundation Mitigation Project
 City of Isle of Palms, SC
Alternative Project Alignment (Proposed 7.0 ft. Protection Level)


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Legend


0 25 50 100 150 200 250 Feet

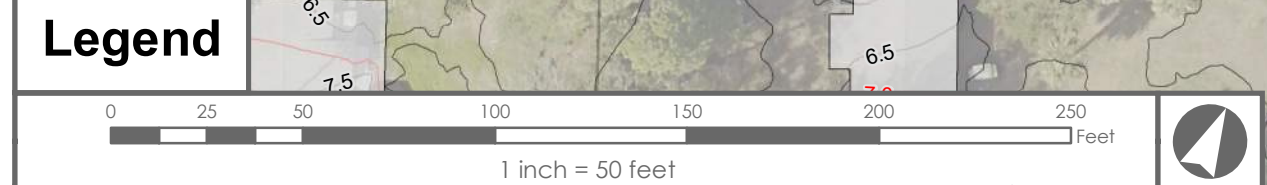
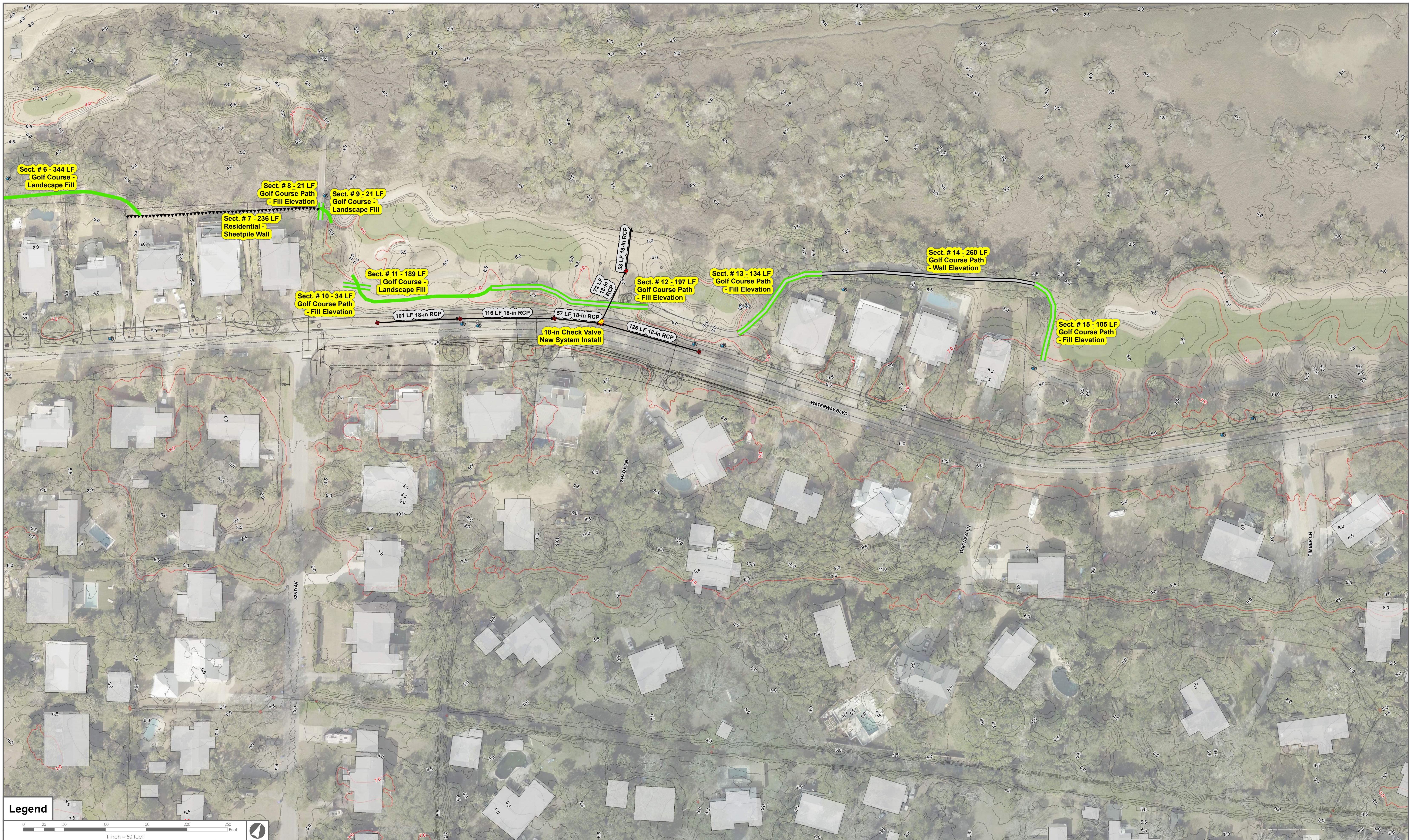
1 inch = 50 feet

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Waterway Blvd. Pathway
Tidal Inundation Mitigation Project
 City of Isle of Palms, SC
Alternative Project Alignment (Proposed 7.0 ft. Protection Level)

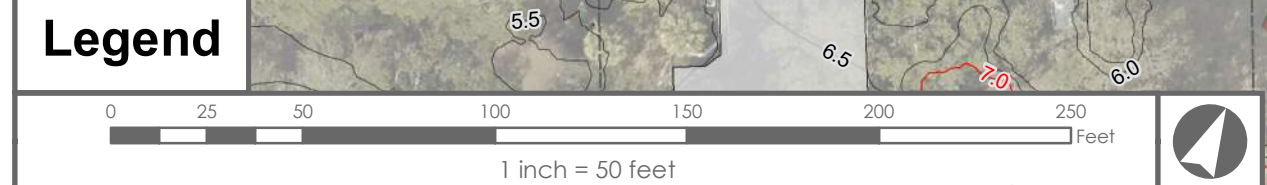

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Waterway Blvd. Pathway
Tidal Inundation Mitigation Project
 City of Isle of Palms, SC
Alternative Project Alignment (Proposed 7.0 ft. Protection Level)

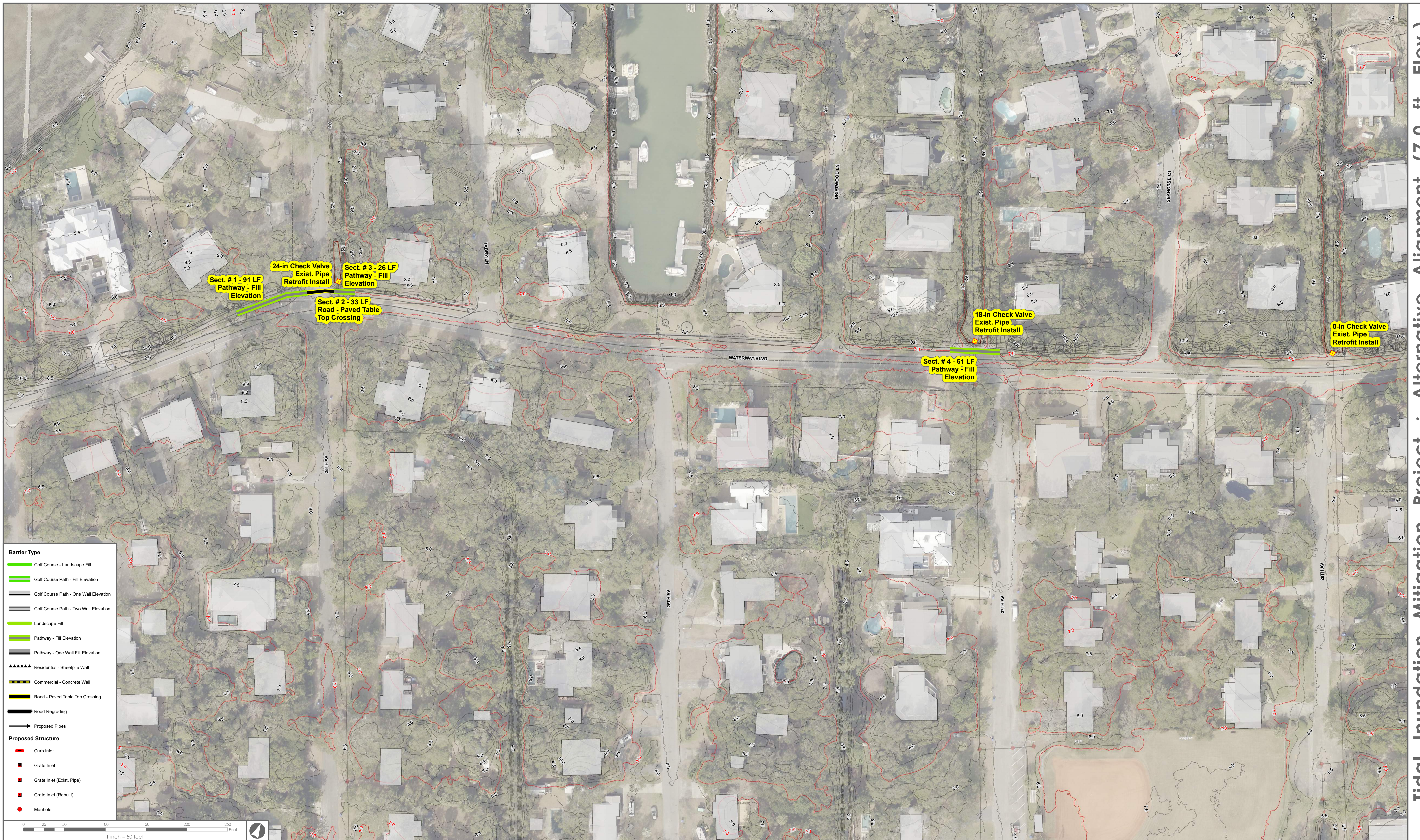

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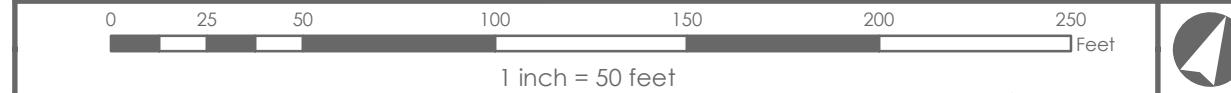
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Waterway Blvd. Pathway
Tidal Inundation Mitigation Project
 City of Isle of Palms, SC
Alternative Project Alignment (Proposed 7.0 ft. Protection Level)


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- Barrier Type**
- Golf Course - Landscape Fill
 - Golf Course Path - Fill Elevation
 - Golf Course Path - One Wall Elevation
 - Golf Course Path - Two Wall Elevation
 - Landscape Fill
 - Pathway - Fill Elevation
 - Pathway - One Wall Fill Elevation
 - ▲▲▲▲▲ Residential - Sheetpile Wall
 - ▬▬▬ Commercial - Concrete Wall
 - ▬▬▬ Road - Paved Table Top Crossing
 - ▬▬▬ Road Regrading
 - Proposed Pipes
- Proposed Structure**
- Curb Inlet
 - Grate Inlet
 - Grate Inlet (Exist. Pipe)
 - Grate Inlet (Rebuilt)
 - Manhole



Job Number:	Produced:	Produced By:	Modified: 4/19/2024	Modified By:
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Waterway Blvd. Pathway
Tidal Inundation Mitigation Project
 City of Isle of Palms, SC
Alternative Project Alignment (Proposed 7.0 ft. Protection Level)

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Tidal Inundation Mitigation Project : Alternative Alignment (7.0 ft. Elev.)

Legend


0 25 50 100 150 200 250 Feet

1 inch = 50 feet

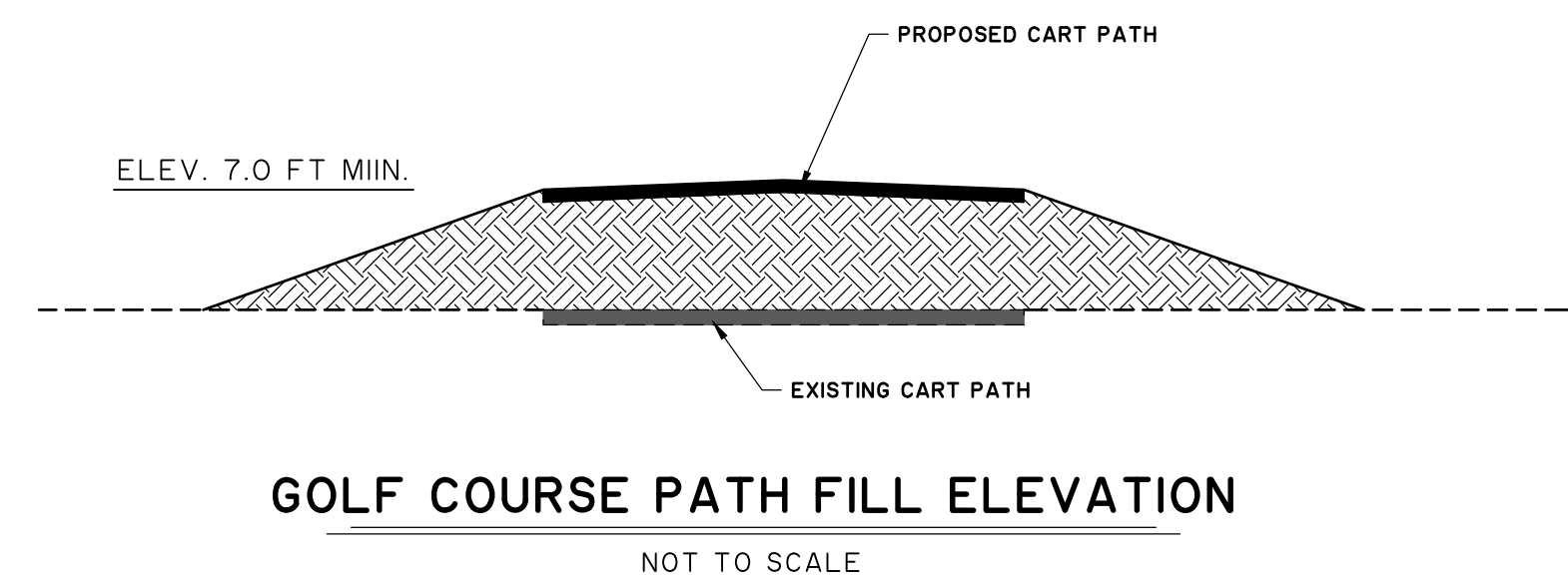
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Tidal Inundation Mitigation Project
 City of Isle of Palms, SC
Alternative Project Alignment (Proposed 7.0 ft. Protection Level)

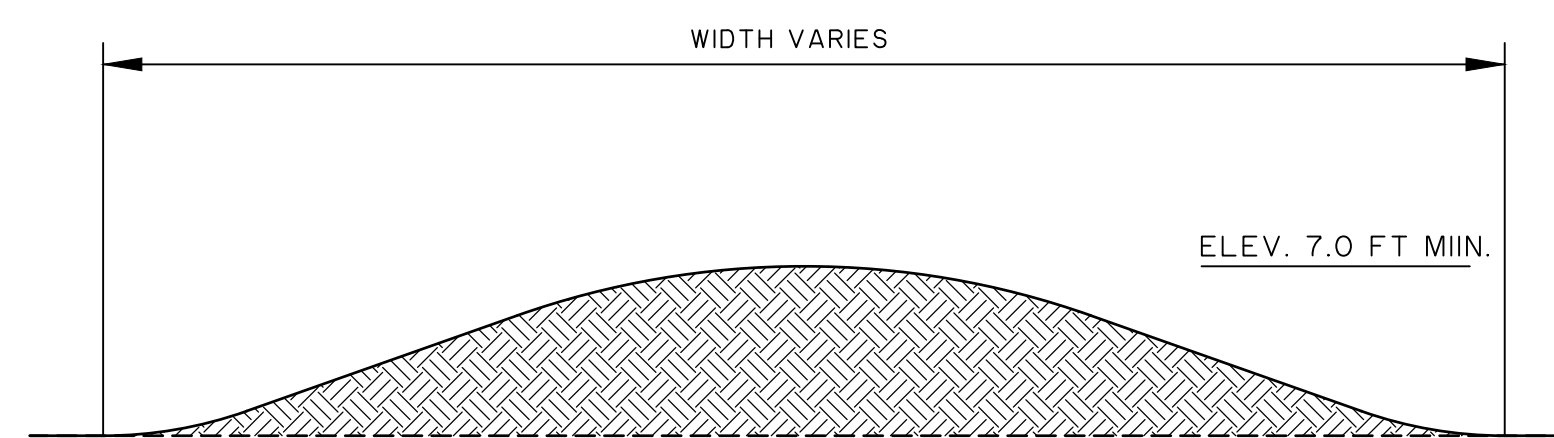


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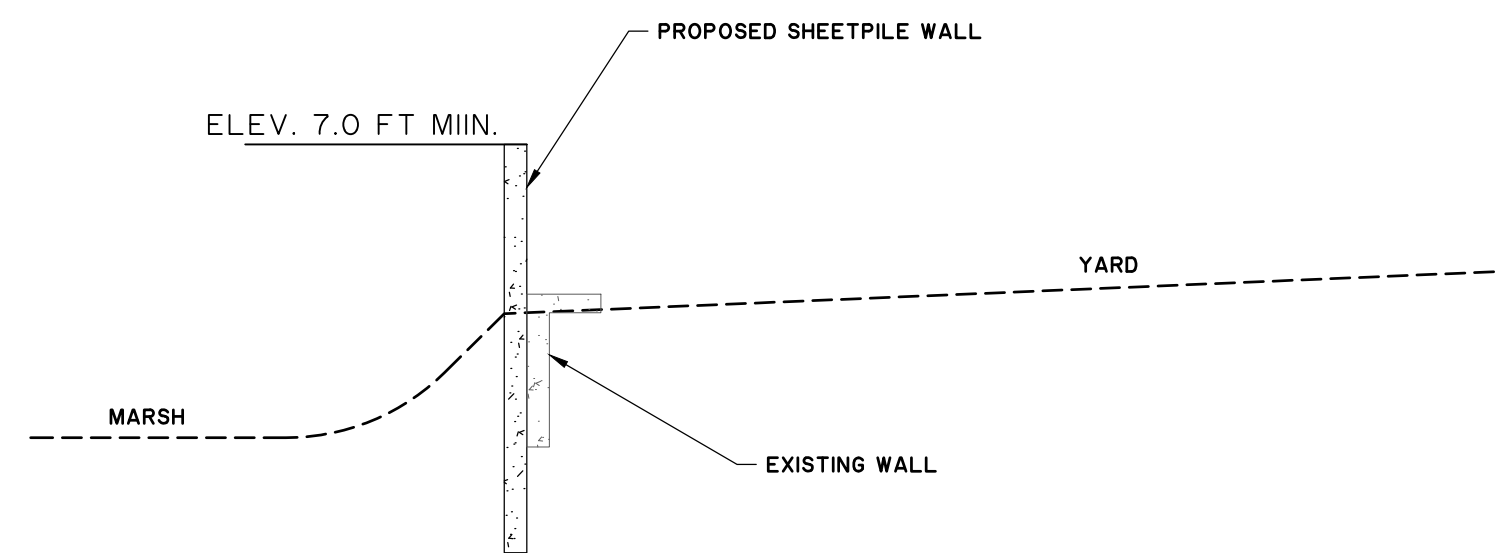
GOLF COURSE PATH FILL ELEVATION

NOT TO SCALE



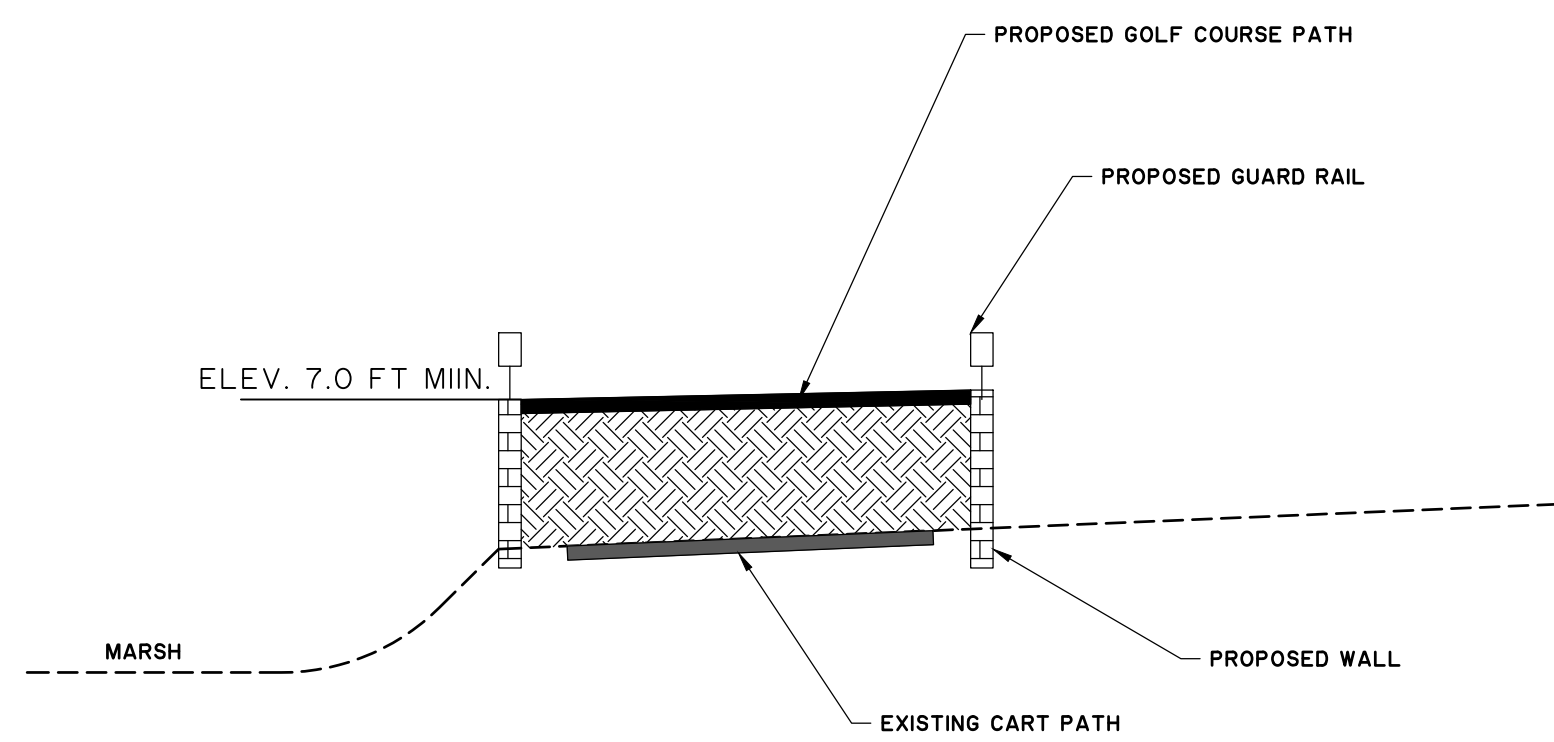
GOLF COURSE LANDSCAPE FILL

NOT TO SCALE



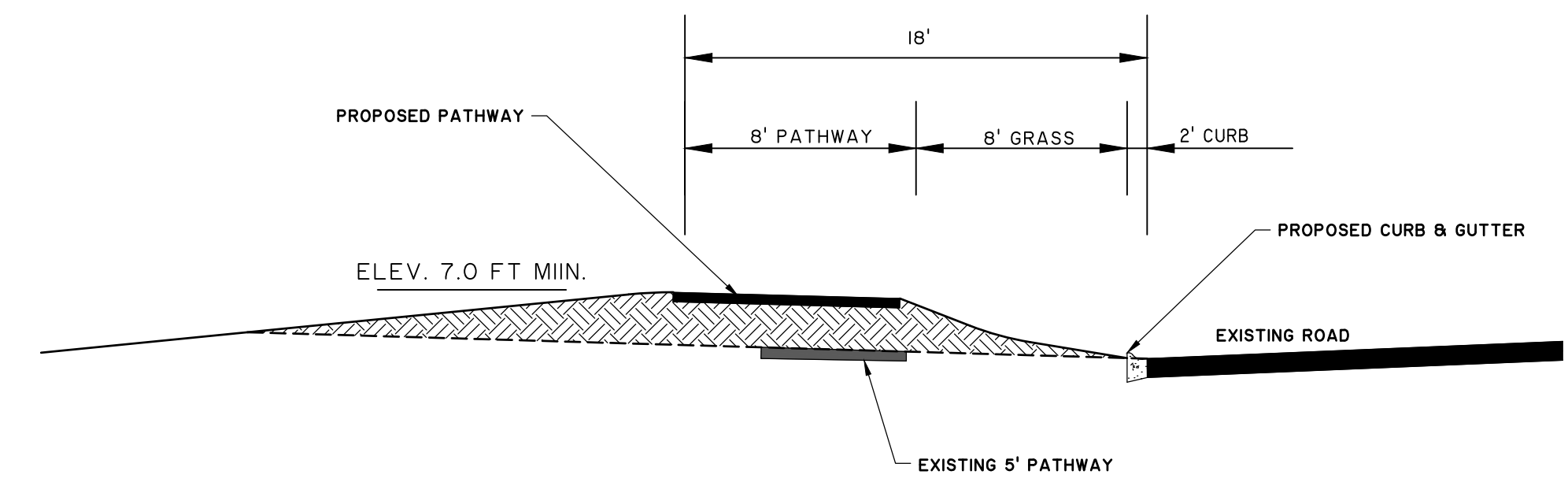
RESIDENTIAL SHEET PILE WALL

NOT TO SCALE



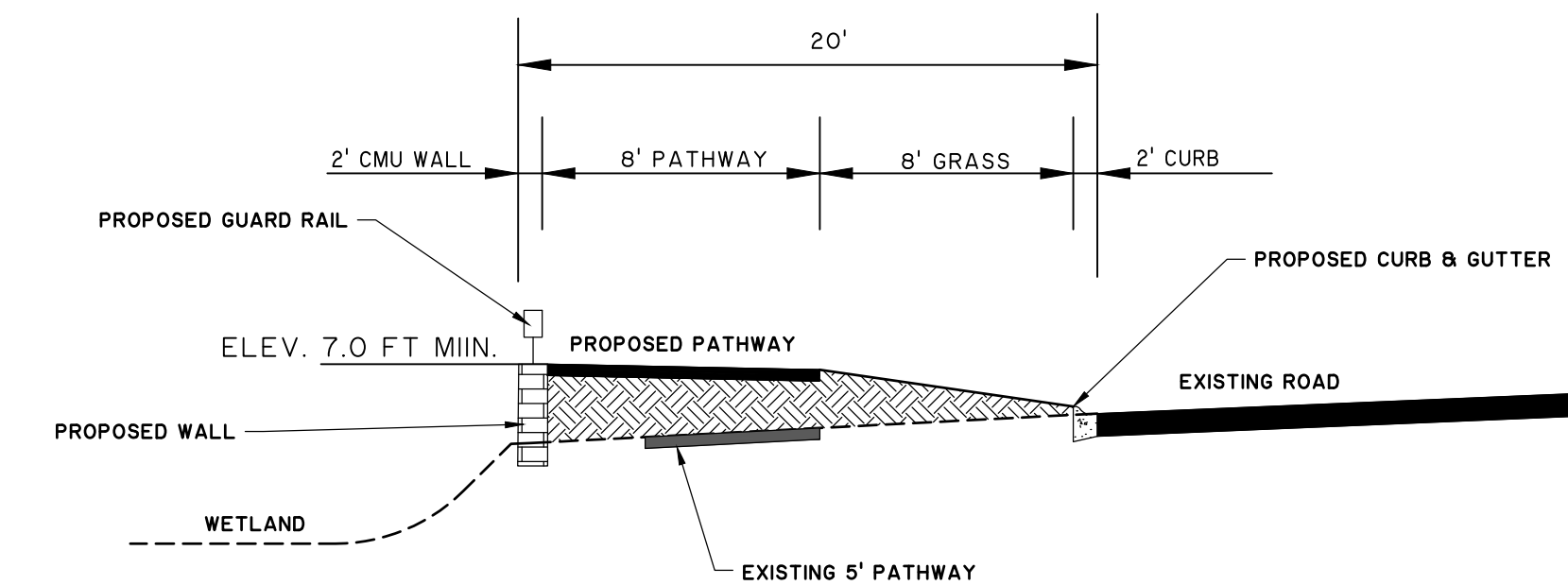
GOLF COURSE PATH TWO WALL ELEVATION

NOT TO SCALE



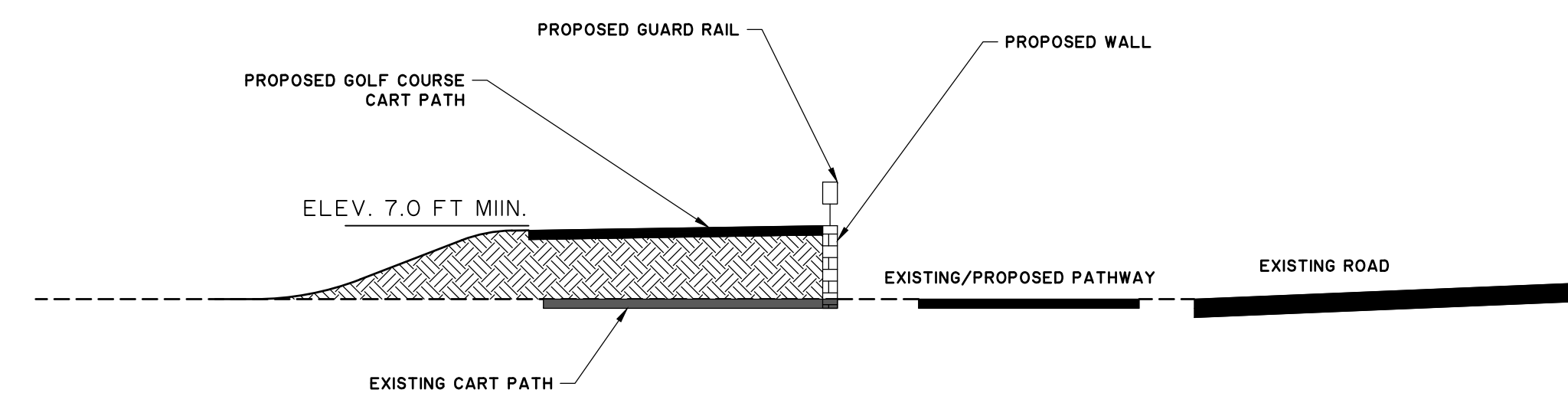
PATHWAY FILL ELEVATION

NOT TO SCALE



PATHWAY ONE WALL ELEVATION

NOT TO SCALE



GOLF COURSE PATH ONE WALL ELEVATION

NOT TO SCALE

TYPICAL CROSS-SECTIONS

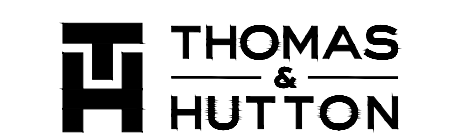
WATERWAY BLVD

ISLE OF PALMS, CHARLESTON COUNTY, SC

PREPARED FOR:

CITY OF ISLE OF PALMS

PREPARED BY:



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Mt. Pleasant, SC 29464 • 843.849.0200

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JOB NO: J-27670.0010
DRAWN: MCV
REVIEWED: RPK

DATE: 4/19/2024
SCALE: NOT TO SCALE
SHEET: N/A

Isle of Palms, SC
Waterway Blvd. Pathway Tidal Inundation Mitigation Project
Section Implementation and Cost Estimate

Total Project Cost (to achieve 7.0 ft. NAVD88 protection level)		Implement as part of Pathway Project
Section Description	Est. Cost	Est. Cost
1 Pathway - Fill Elevation	\$ 11,155	\$ 11,155
2 Road - Paved Table Top Crossing	\$ 2,449	\$ 2,449
3 Pathway - Fill Elevation	\$ 3,187	\$ 3,187
4 Pathway - Fill Elevation	\$ 7,684	\$ 7,684
5 Golf Course Path - Fill Elevation	\$ 52,739	\$ 52,739
6 Golf Course - Landscape Fill	\$ 9,810	\$ 9,810
7 Residential - Sheetpile Wall	\$ 944,000	X
8 Golf Course Path - Fill Elevation	\$ 2,010	X
9 Golf Course - Landscape Fill	\$ 436	X
10 Golf Course Path - Fill Elevation	\$ 3,254	\$ 3,254
11 Golf Course - Landscape Fill	\$ 1,225	\$ 1,225
12 Golf Course Path - Fill Elevation	\$ 18,856	\$ 18,856
13 Golf Course Path - Fill Elevation	\$ 14,411	\$ 14,411
14 Golf Course Path - Wall Elevation	\$ 280,442	X
15 Golf Course Path - Fill Elevation	\$ 10,050	\$ 10,050
16 Golf Course Path - Fill Elevation	\$ 12,261	\$ 12,261
17 Pathway - Fill Elevation	\$ 48,576	\$ 48,576
18 Golf Course - Landscape Fill	\$ 1,882	\$ 1,882
19 Pathway - One Wall Fill Elevation	\$ 100,557	\$ 100,557
20 Pathway - Fill Elevation	\$ 5,901	\$ 5,901
21 Residential - Sheetpile Wall	\$ 1,560,000	X
22 Golf Course Path - Wall Elevation	\$ 247,072	X
23 Golf Course Path - Fill Elevation	\$ 2,181	X
24 Golf Course - Landscape Fill	\$ 531	X
25 Golf Course - Landscape Fill	\$ 4,024	\$ 4,024
26 Golf Course Path - Fill Elevation	\$ 5,377	\$ 5,377
27 Golf Course - Landscape Fill	\$ 421	\$ 421
28 Golf Course Path - Fill Elevation	\$ 29,468	\$ 29,468
29 Golf Course Path - Fill Elevation	\$ 9,679	\$ 9,679
30 Golf Course Path - One Wall Elevation	\$ 99,284	\$ 99,284
31 CMU Wall	\$ 73,000	\$ 73,000
32 Landscape Fill	\$ 169	\$ 169
33 Road Regrading	\$ 1,730	\$ 1,730
34 Landscape Fill	\$ 272	\$ 272
Sub-Total	\$ 3,564,094	\$ 527,423
Drainage Improvement (Sparrow Dr.)	\$ 133,875	\$ 133,875
Drainage Improvement (Forest Trail Outfall)	\$ 106,375	\$ 106,375
Drainage Improvement (Shady Ln.)	\$ 242,425	\$ 242,425
Drainage Improvement (23rd Ave.)	\$ 47,350	\$ 47,350
Drainage Improvement (22rd Ave.)	\$ 66,275	\$ 66,275
Sub-Total	\$ 596,300	\$ 596,300
Check Valves (7) - Exist. Pipes/Outfalls	\$ 84,000	\$ 84,000
Other Pathway Widening/Paving	\$ 517,511	\$ 517,511
Sub-Total	\$ 601,511	\$ 601,511
Total	\$ 4,761,905	\$ 1,725,233
Contingency (25%)	\$ 1,190,476	\$ 431,308
Grand Total	\$ 5,952,381	\$ 2,156,542