

APPENDIX H

Blue Anchor Cay



APPROX. SCALE: 1"=100'

SOURCE: GOOGLE INC., JUNE 9, 2021
 GOOGLE EARTH [SOFTWARE]
 IMAGERY DATE: 11-17-2018
 AVAILABLE FROM: <http://www.google.com/>



LEGEND

2021 BERM SURVEY

Elevation Datum:
MSL, ft

- -2 to -3
- -3 to -4
- -4 to -5
- -5 to -6
- -6 to -7
- -7 to -8
- -8 to -9
- <-9

- LEGEND (2021 BULKHEAD SURVEY)**
- 4.3 * APPROXIMATE LOCATION & ELEVATION (MSL) OF BERM MEASUREMENT
 - 7.2 * BERM ELEVATION FALLING WITHIN CAUTIONARY ZONE
 - SD — STORM DRAIN

AREA	SHEET PILE LENGTH	CAUTIONARY	SERIOUS
B	20.0 FT (including Cap)	-7 TO -8 MSL	< -8 MSL
C	17.5 FT (including Cap)	-6 TO -7 MSL	< -7 MSL

Elevation of top of Pile Cap: 7.1' MSL

Field Survey Dates: May 18, 19, & 20, and June 25, 2021

TERRACOSTA CONSULTING GROUP 3800 MURPHY CANYON ROAD, SUITE 200 SAN DIEGO, CA 92131 (858) 973-8900	FIGURE NUMBER H-1
CORONADO CAYS BULKHEADS	PROJECT NUMBER T2904.070.001
BLUE ANCHOR CAY (BLUE ANCHOR CAY HOA)	



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LEGEND
 2021 BERM SURVEY

Elevation Datum:
 MSL, ft

- -2 to -3
- -3 to -4
- -4 to -5
- -5 to -6
- -6 to -7
- -7 to -8
- -8 to -9
- < -9

Residence Address (typ.)

2021 Reading of berm elevation (typ.)

LEGEND (2021 BULKHEAD SURVEY)

- APPROXIMATE LOCATION & ELEVATION (MSL) OF BERM MEASUREMENT
- BERM ELEVATION FALLING WITHIN CAUTIONARY ZONE
- SD — STORM DRAIN

AREA	SHEET PILE LENGTH	CAUTIONARY	SERIOUS
C	17.5 FT. (including Cap)	-6 TO -7 MSL	< -7 MSL

Elevation of top of Pile Cap: 7.1' MSL

If present, elevation of architectural cap varies.

Field Survey Dates: May 18, 19, & 20, 2021

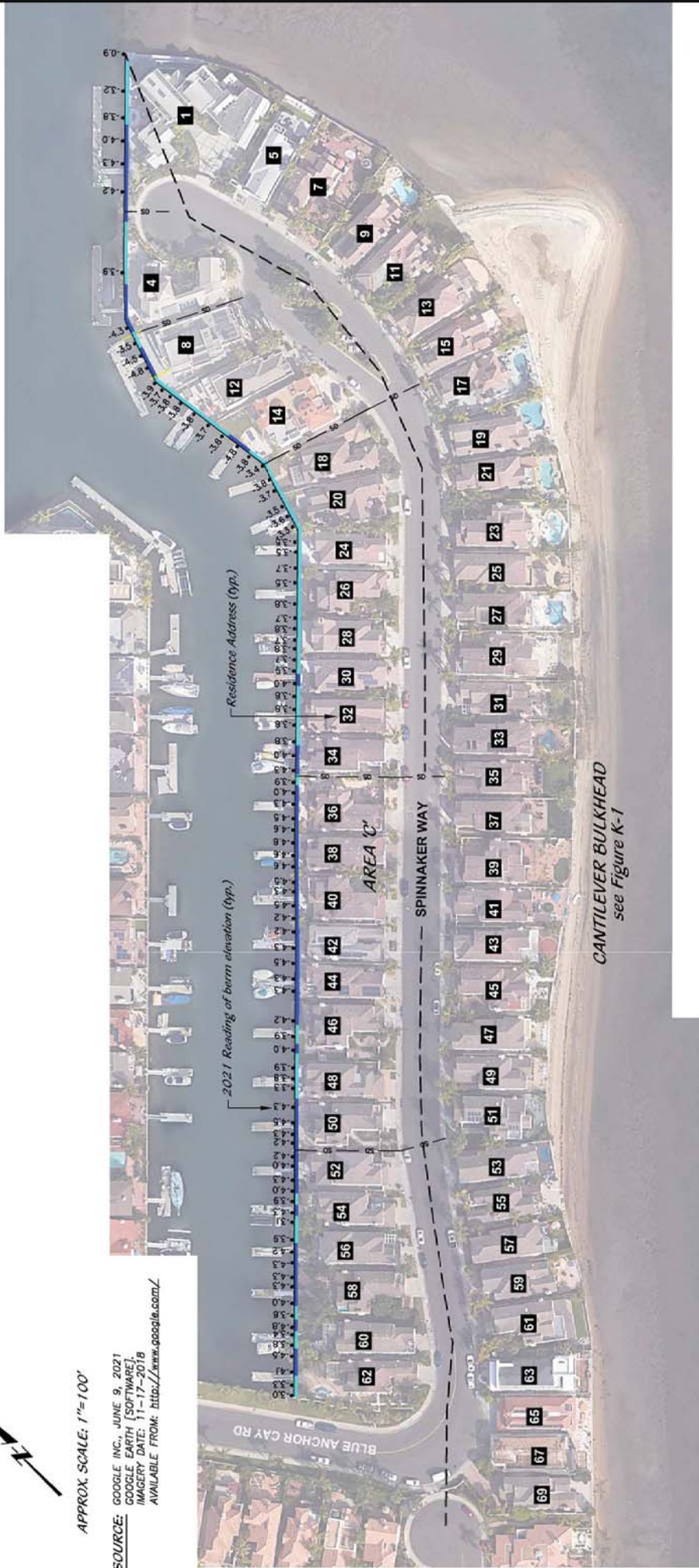


TERRACOSTA CONSULTING GROUP 3800 MURPHY CANYON ROAD, SUITE 200 SAN DIEGO, CA 92131 (858) 973-8900	FIGURE NUMBER H-2
PROJECT NAME CORONADO CAYS BULKHEADS	PROJECT NUMBER T2904.070.001
BUCCANEER WAY (BLUE ANCHOR CAYS HOA)	



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LEGEND
 2021 BERM SURVEY

- Elevation Datum:
 MSL, ft
- -2 to -3
 - -6 to -7
 - -3 to -4
 - -7 to -8
 - -4 to -5
 - -8 to -9
 - -5 to -6
 - <-9

LEGEND (2021 BULKHEAD SURVEY)

- 0.2 • APPROXIMATE LOCATION & ELEVATION (MSL) OF BERM MEASUREMENT
- 7.2 • BERM ELEVATION FALLING WITHIN CAUTIONARY ZONE
- 9.0 — STORM DRAIN

AREA	SHEET PILE LENGTH	CAUTIONARY	SERIOUS
C	17.5 FT (including Caps)	-6 TO -7 MSL	< -7 MSL

Elevation of top of Pile Cap: 7.1 MSL

Field Survey Dates: May 18, 19, & 20, and June 25, 2021

TerraCosta
 an ENGeo company

TERRACOSTA CONSULTING GROUP 3890 MURPHY CANYON ROAD, SUITE 200 SAN DIEGO, CA 92131 (619) 973-8990	FIGURE NUMBER H-3
CORONADO CAYS BULKHEADS	PROJECT NUMBER T3904-070-001
SPINNAKER WAY WEST (BLUE ANCHOR CAY HOA)	

CORONADO CAYS BULKHEADS

Blue Anchor Cay

Project Number T2904.070.001

LOCATION	BERM ELEV. (MSL)	OBSERVATION / COMMENTS
Lot 56 Panel 1	-3.8	
Lot 56 Panel 2		Horizontal cracking ~1' above waterline
Lot 56 Panel 3		Horizontal cracking ~1' above waterline
Lot 56 Panel 4	-4.1	Minor separation between Panel 3&4; 4th panel has horizontal cracks ~1/2' above waterline
Lot 56 Panel 5	-4.0	Cracking
Lot 56 Panel 6	-4.1	Minor cracking
Lot 56 Panel 8	-3.9	Minor cracking
Lot 50 Panel 1	-3.8	Horizontal cracking visible on most Lot 50 panels ~1' above waterline
Lot 50 Panel 2	-4.2	
Lot 50 Panel 3	-4.0	
Lot 50 Panel 4	-4.2	Minor cracks across panels 3 and 4
Lot 48 Panel 1	-4.3	Horizontal cracking visible on most Lot 48 panels ~1' above waterline
Lot 48 Panel 2	-4.5	
Lot 48 Panel 3	-4.6	Panel 3 extends approx 4' to Lot 46
Lot 46 Panel 2	-4.7	
Lot 46 Panel 3	-4.5	Spalling between panels 3&4
Lot 44 Panel 1	-4.3	
Lot 44 Panel 2	-4.4	Spalling at top between panels 1&2
Lot 44 Panel 3	-4.7	
Lot 42 panel 1	-4.3	
Lot 42 Panel 2	-4.1	Minor vertical crack
Lot 40 Panel 1	-4.7	
Lot 40 Panel 2	-4.6	Spall at east end of panel
Lot 40 Panel 3	-4.2	
Lot 38 Panel 1	-4.4	
Lot 38 Panel 2	-4.2	
Lot 38 Panel 4	-4.2	Some separation between panels 3&4
Lot 36 Panel 2	-4.4	Minor horizontal cracks
Lot 36 Panel 3	-4.2	
Lot 34 Panel 1	-4.0	Horizontal cracks, spalling between lots 36 and 34
Lot 34 Panel 2	-4.3	Spalling between panels 1&2, vertical crack
Lot 34 Panel 3	-4.2	Minor cracks
Lot 32 Panel 1	-4.3	Some separation between panels 1&2
Lot 32 Panel 3	-4.4	Some separation between panels 2&3
Lot 32 Panel 4	-5.3	
Lot 30 Panel 1	-5.7	Spalling between Lot 32 and 30
Lot 30 Panel 2	-4.5	
Lot 30 Panel 3	-4.3	Minor horizontal cracks panels 2&3
Lot 28 Panel 2	-3.9	Panel 2 separation
Lot 26 Panel 1	-4.2	
Lot 26 Panel 3	-4.3	

CORONADO CAYS BULKHEADS

Blue Anchor Cay

Project Number T2904.070.001

Lot 26 Panel 4	-4.3	
Lot 24 Panel 1	-4.9	
Lot 24 Panel 3	-5.3	
Lot 24 Panel 4	-4.1	
Lot 24 Panel 5	-3.2	
Lot 16	-3.2	
Lot 12	-3.7	
Lot 8 Panel 1	-3.7	Rust at joint
Lot 8 Panel 4	-3.7	Rust at joint between panel 3&4
Lot 6	-3.7	Rust between panels 1&2
Lot 4	-3.8	Minor cracking between lots 2&4
Lot 4 southeast corner	-3.9	Minor spalling, west side of corner panel
Lot 4 Panel 1 east of corner	-3.6	Cracking and repairs panels 1&2, SE facing, 4th panel cracked SE facing, lot 3/4 panel cracked and rust
Lot 3	-3.7	Storm drain outlet
Lot 3 Panel 5 from NE corner	-4.0	Some wall separation at joint
Lot 3 SE wall last gangway	-5.3	
Lot 3 Panel 1 NE wall	-4.9	
Lot 3 Panel 1 N wall	-5.2	
Lot 3 N wall gangway	-4.0	Contractor damaged anchor during demolition at Lot 3. Anchors will need to be replaced in proposed pool area
Lot 5 east PL	-4.4	Two sink holes reported by contractor during demolition work; one at north dock GW, one at corner GW
Lot 5 west PL	-4.2	
Lot 7	-4.5	
Lot 9	-4.7	
Lot 11	-4.8	
Lot 13 Gangway	-4.7	
Lot 15 east PL	-3.7	
Lot 15 gangway	-3.9	
Lot 15/17 PL	-5.1	
Lot 17 N corner	-5.8	Large vertical crack
Lot 17 Panel 14 S of PL	-5.6	
Lot 17 Panel 13 S of PL	-5.9	
Lot 17 Panel 12 S of PL	-5.8	
Lot 17 Panel 11 S of PL	-5.5	
Lot 17 Panel 10 S of PL	-5.2	
Lot 17 Panel 9 S of PL	-5.1	
Lot 17 Panel 8 S of PL	-4.9	
Lot 17 Panel 7 S of PL	-4.9	
Lot 17 Panel 6 S of PL	-4.8	
Lot 17 Panel 5 S of PL	-4.4	
Lot 17 Panel 4 S of PL	-4.3	
Lot 17 Panel 3 S of PL	-4.5	
Lot 17 Panel 2 S of PL	-4.3	
Lot 17/19 PL	-5.3	

CORONADO CAYS BULKHEADS

Blue Anchor Cay

Project Number T2904.070.001

Lot 19 Gangway	-4.5	
Lot 19 SW PL	-4.9	
Lot 21 Gangway	-5.2	
Lot 21/23 PL		Storm drain outlet; wide joints; no soil leakage observed
Lot 23 Gangway	-4.7	
PL of lot 25&23	-4.1	
PL of lot 27&25	-5.3	Minor corrosion on pile cap
PL of lot 29&27	-5.3	
PL of lot 31&29	-5.4	
PL of Lot 33&31	-5.8	
PL of Lot 33&35	-5.3	
PL of Lot 35&37	-5.5	
PL of lot 37&39	-5.6	
PL of Lot 41&39	-4.6	Storm drain outlet with minor sediment, minor corrosion at bottom of pile cap and panel joints at vertical crack
PL of Lot 41&43	-4.6	
PL of Lot 45&43	-5.0	Minor corrosion on bottom of pile cap; minor corrosion at PL panel joint
PL of Lot 47&45	-5.9	Corrosion on bottom of pile cap
PL of Lot 49&47	-5.7	Chipped pile cap
PL of Lot 51&49	-5.6	
PL of Lot 55&53	-5.8	Minor horizontal cracking
PL of Lot 55&57	-5.7	Minor horizontal cracking
PL of 59&57	-4.9	Storm drain outlet w/ noted debris and sediment inside
PL of lot 61&59	-5.5	Horizontal cracking and vertical cracking at pile cap
dock at lot 61	-5.9	Minor horizontal cracking
PL of lot 61&63	-5.8	Vertical cracking and rust
Dock at 63	-5.8	Vertical crack and rusting at 4th panel in north of lot 63 corner
Lot 63 5th panel E of corner		Cracks at both edges of panel
Lot 63 4th panel E of corner		Significant crack
Lot 63 corner	-5.1	Panel 1 at corner; minor vertical cracking; 1" separation at panel joint

CORONADO CAYS BULKHEADS

Buccaneer Way

Project Number T2904.070.001

ADDRESS / LOCATION	BERM ELEV. (MSL)	OBSERVATION / COMMENTS
Lot 34 Corner	-4.0	Measured ~ 6" above top of pile cap
Lot 32/34 PL	-4.0	Measured ~5" above top of pile cap; Minor extrusion at panel 2
Lot 30/32 PL	-4.0	Measured ~5" above top of pile cap; minor cracking above joint at pile cap
Lot 24/28 PL	-4.0	Measured ~3" above top of pile cap, minor horizontal cracking on the panel joint to the left of storm drain outlet
Centerline 24	-4.0	Measured ~2" above top of pile cap, minor extrusion at panel joint
Lot 22/24 PL	-4.0	No space between measuring cane and top of pile cap, caulk at joint is peeling, minor cracking on pile cap above panel joint
Lot 22/20 PL	-4.1	Minor horizontal cracking
Lot 18/20 PL	-4.4	Minor panel extrusion
Dock at 18		Minor ~1" separation at panel joint
Lot 16/18 PL	-4.0	
Lot 16/14 PL	-4.2	
Lot 14/12 PL	-4.0	Minor ~1" separation at panel joints
Lot 12/10 PL	-4.2	1/2" separation at panel joints, panel joint left of lot 10 has 1" separation; minor sediment (1-2") in pipe
Lot 8/10 PL	-4.3	Storm drain outlet at PL; panels appear to be in good condition
Lot 6/8 PL	-4.2	Minor cracking and panel extrusion, minor cracking on pile cap above panel joint
Dock at lot 6	-4.0	Patched panel/major vertical cracking, minor cracking on pile cap above panel joint, 1 panel over from dock 6; rusting at panel joint and extrusion, rusted steel brace extending between lots 6&4
2nd panel east of Lot 4/6 PL		Vertical crack and spall
Lot 4/6 PL	-4.0	Measured ~4" above top of pile cap, glass panel above pile cap
North of Dock 4	-4.2	Measured ~4" above top of pile cap, 1/2" separation at panel joints
North side of Lot 4		Steel waler is badly corroded
Corner of lot 4	-4.1	No space at top of cap for measurement, metal brace rusted extends around lot 4, 1" separation at panel joint
E end of Lot 4	-4.2	Storm drain outlet w/ minor sedimentation at panel 2, minor separation at panel joints (1" near top); 3rd panel from east end has spall at west joint with significant crack in panel
W end of Lot 1	-4.2	Corrosion at panel joint (2 panels in from lot 1 corner)
Lot 1 Corner	-4.4	Minor 1" separation at panel joints,
Panel south of corner	-4.5	1 panel south of corner, spalling at panel joint (~2" by 4"), minor panel separation,
Lot 1 right of dock	-4.1	4 panels right of dock on Lot 1 minor cracking on pile cap above panel joint 3 panels right of dock on Lot 1
3 panels right of dock on Lot 1	-4.0	1" separation of panels, minor horizontal cracking
Lot 1 dock	-4.0	Corner of lot 1 to the left of dock has horizontal cracking
Panel left of corner	-4.4	Cracking at grout along panel joint, panel left of corner has minor horizontal and vertical cracking
Panel 2 from corner	-4.1	Panel 2 in from corner of lot 1, horizontal and vertical cracking, horizontal and vertical cracking
Lots 1&3 PL	-4.1	Minor horizontal cracking
Panel E of PL Lots 1/3		Cracks in eastern panel
Lots 3&5 PL	-4.1	Minor horizontal and vertical cracking, Minor corrosion, 1" separation of panels

CORONADO CAYS BULKHEADS

Buccaneer Way

Project Number T2904.070.001

Dock at lot 5	-4.4	Minor horizontal and vertical cracking, corrosion (1-2" separation at joint right of dock)
Lot 7 at gangway	-4.3	
Lot 9 at gangway	-4.0	
Lot 11 at gangway	-4.0	
Lot 13 at gangway	-3.8	
Lot 15 at gangway	-4.0	Joint separation greater at top
Lot 17 at gangway	-4.1	
Lot 19 at gangway	-3.8	Cracks
Lot 21 at gangway	-3.7	Rust center of panel
Lot 23 at gangway	-4.2	
Lot 25 at gangway	-4.2	Horizontal cracking and some spalling in all panels
Lot 29	-4.3	Horizontal cracks
Lot 29	-4.4	Large rust ball
Lot 29	-4.4	Horizontal cracks
Lot 31/29 PL	-4.5	Rust on panel and joints
20' from PL	-4.4	Horizontal cracking two easterly panels
10' from PL	-3.8	Cracks vertical and horizontal
Lot 35/33 PL	-4.3	Joint separation greater at top
30' from corner	-3.7	
20' from corner	-3.2	Joint separation spalling
10' from corner	-3.2	
Corner @ Lot 35	-3.1	Panel separation at joint

CORONADO CAYS BULKHEADS

Spinnaker Way West

Project Number T2904.070.001

ADDRESS / LOCATION	BERM ELEV. (MSL)	OBSERVATION / COMMENTS
Lot 62 panel 1	-3.0	
Lot 62 panel 2	-3.3	Minor spalling
Lot 62 panel 3	-4.1	
Lot 60 panel 3-4 joint	-4.5	Minor spalling at top
Lot 60 panel 4	-3.8	
Lot 60 panel 5	-3.4	
Lot 60 panel 6	-4.8	
Lot 58 panel 6-7 joint	-3.8	
Lot 58 panel 8	-4.0	
Lot 58 panel 8-9 joint	-4.3	
Lot 58 panel 9	-4.3	
Lot 56 panel 9-10 joint	-4.3	Horizontal hairline fracture middle of joint
Lot 56 panel 10	-4.2	
Lot 56 panel 11	-3.9	
Lot 54 11-12 Joint	-3.1	
Lot 54 panel 12-13 Joint	-4.3	Horizontal hairline fracture middle of joint
Lot 54 panel 14	-3.9	
Lot 52 panel 14-15 Joint	-4.0	
Lot 52 panel 15	-4.3	
Lot 52 panel 16	-4.0	Minor spalling, hairline fracture at top of pile cap
Lot 52 panel 16-17 Joint	-4.2	Storm drain outlet with hairline fractures
Lot 50 panel 17-18 Joint	-4.2	
Lot 50 panel 17-18-18	-4.3	
Lot 50 panel 17-18-19-20 Joint	-4.5	Large rust spot
PL @ Lots 50/48 panel 20-21 Joint	-4.3	
Lot 48 panel 21-22 Joint	-3.3	Large rust spot
Lot 48 panel 22-23 Joint	-3.8	
Lot 48 panel 23	-3.9	
Lot 46 panel 23-24 Joint	-4.0	Minor spalling at top
Lot 46 panel 24	-3.9	
Lot 46 panel 26	-4.2	
Lot 44 panel 27-28 Joint	-4.3	
Lot 44 panel 29	-4.3	
Lot 42 panel 30-31 Joint	-4.5	
Lot 42 panel 31-32 Joint	-4.3	
42 panel 32	-4.2	
PL @ 42/40 panel 32-33 Joint	-4.2	
Lot 40 panel 33-34 Joint	-4.5	Spalling and panel 34 hairline cracking at El. +0.5
Lot 40 panel 34-35 Joint	-4.3	
Lot 40 panel 35-36 Joint	-4.5	
Lot 38 panel 36-37 Joint	-4.6	Panel 36 large crack
Lot 38 panel 37-38 Joint	-4.6	Panel 37 hairline crack

CORONADO CAYS BULKHEADS

Spinnaker Way West

Project Number T2904.070.001

Lot 38 panel 38	-4.8	Horizontal cracks to 1/8", rust stains from cracks
PL @ Lots 38/36 panel 38-39 Joint	-4.6	Rust below El. +0.4
Lot 36 panel 39-40 Joint	-4.5	Minor hairline fractures
Lot 36 panel 40-41 Joint	-4.3	Minor hairline fractures
Lot 36 panel 41-42 Joint	-4.0	
Lot 36 panel 42-43 Joint	-3.9	
Lot 36/34 PL		Storm drain outlet, 1/8" wide horizontal crack
Lot 34 panel 43	-4.3	
Lot 34 panel 44-45 Joint	-4.0	
Lot 34 panel 45-46 Joint	-3.8	
Lot 32 panel 46-47 Joint	-3.8	
Lot 32 panel 47-48 Joint	-3.8	
Lot 30 panel 48-49 Joint	-3.8	
Lot 30 panel 49	-4.0	
Lot 30 panel 49-50 Joint	-3.9	
Lot 30 panel 50-51 Joint	-3.7	Fracture with rust below El. +1.3
Lot 28 panel 51	-3.8	
Lot 28 panel 52-53 joint	-3.7	
Lot 28 panel 53	-3.8	Thin fracture on panel 53
Lot 26 panel 54-55 Joint	-3.7	
Lot 26 panel 55-56 Joint	-3.8	
Lot 26 panel 56-57 Joint	-3.5	Minor hairline fractures
Lot 24 panel 57	-3.7	
Lot 24 panel 58	-3.5	
Lot 24 panel 61	-3.5	2' panel between lots 24/20
Lot 20 panel 61-62 Joint	-3.3	
Lot 20 panel 62	-3.6	
Lot 20 panel 63	-3.5	2' panel between lots 20/18, panel 63 is 8'
Lot 18 panel 65	-3.7	
Lot 18 panel 66	-3.8	
PL @ Lots 18/14 panel 68	-3.4	Storm drain outlet, 4' panel near lot boundary
Lot 14 panel 69-70 Joint	-3.8	Bulkhead appears to have new anchors and plates installed
Lot 14 panel 70	-4.8	
Lot 14 panel 71-72 Joint	-3.8	
Lot 12 panel 73	-3.7	Bulkhead appears to have new anchors and plated installed
Lot 12 panel 74	-3.8	Rust below El. +1.2
Lot 12 panel 75	-3.8	
Lot 12 panel 76	-3.8	
Lot 8 panel 76-77 Joint	-3.7	Minor spalling at El. +1.3, major spalling below El. +1.3
Lot 8 panel 77-78 Joint	-3.9	Diagonal crack
Lot 8 panel 78	-4.8	Panel 78 is 2'
Lot 8 panel 79	-4.5	Spalling along joint panels 78-79
Lot 8 panel 6	-3.5	Minor rusted joints

CORONADO CAYS BULKHEADS

Spinnaker Way West

Project Number T2904.070.001

Lot 8/4 PL	-4.3	Horizontal cracking, Storm drain outlet
Lot 4	-3.9	
Lot 4/1 PL	-4.2	Storm drain outlet
Lot 1	-4.3	
Lot 1	-4.0	
Lot 1	-3.8	
Lot 1	-3.2	
Lot 1 @ corner	-0.9	

Blue Anchor Cay



Photo 1: Blue Anchor Cay, Lot 36, Panel 3.
Horizontal cracks, spalling between Lots 36 and 34.



Photo 2: Blue Anchor Cay, Lot 30, west edge of west panel.
Cracking and spalling.

Blue Anchor Cay



Photo 3: Blue Anchor Cay, Lot 28, Panel 2.
Separation between panels.



Photo 4: Blue Anchor Cay, Lot 8 Panel 1.
Rust at joint.

Blue Anchor Cay



Photo 5: Blue Anchor Cay, Lot 4 southeast corner.
Minor spalling, west side of corner panel.

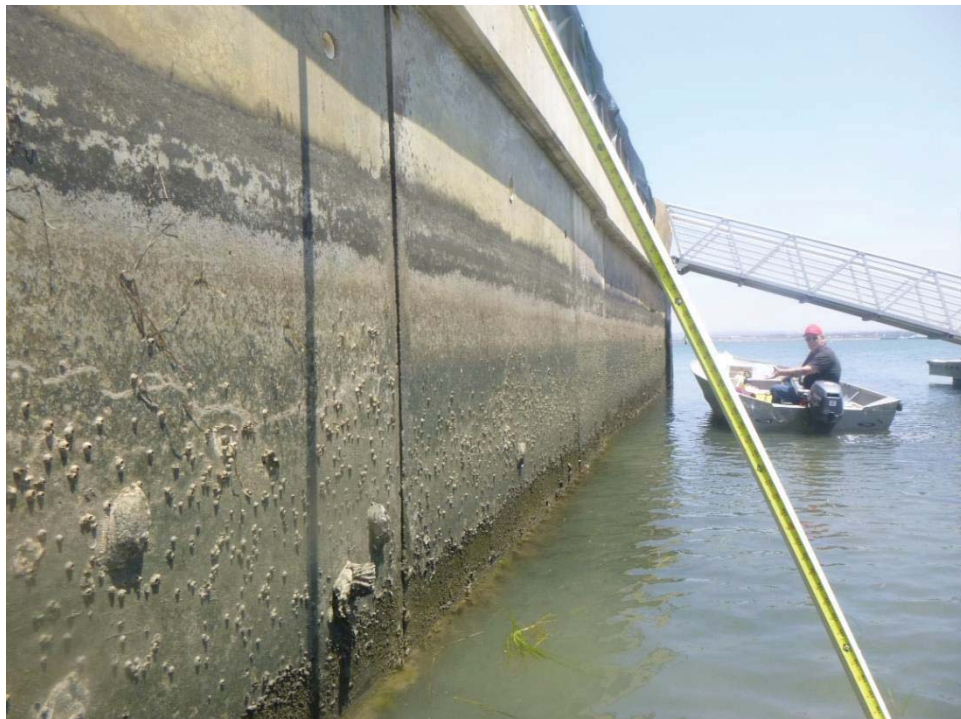


Photo 6: Blue Anchor Cay, Lot 3, Panel 5 from northeast corner.
Some wall separation at joint.

Blue Anchor Cay



Photo 7: Blue Anchor Cay, large vertical crack along the northerly panel angle point on Lot 17. Northwesternly panel separating from adjacent easterly panel.



Photo 8: Spinnaker Way, second panel east of Lot 4/6 P/L. Vertical crack and spall.

Blue Anchor Cay



Photo 9: Spinnaker Way, north side of Lot 4.
Steel whaler on north side.

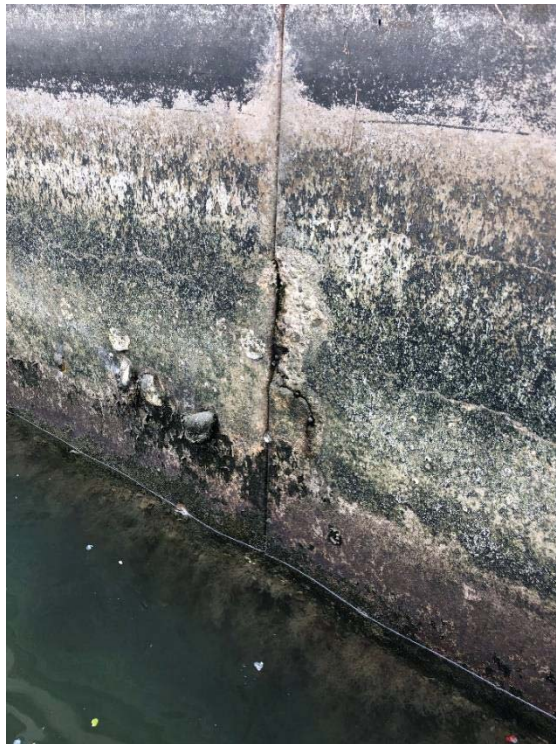


Photo 10: Spinnaker Way, north side of Lot 4.
Cracking and spalling

Blue Anchor Cay



Photo 11: Spinnaker Way, north side of Lot 4.
Steel whaler is badly corroded.