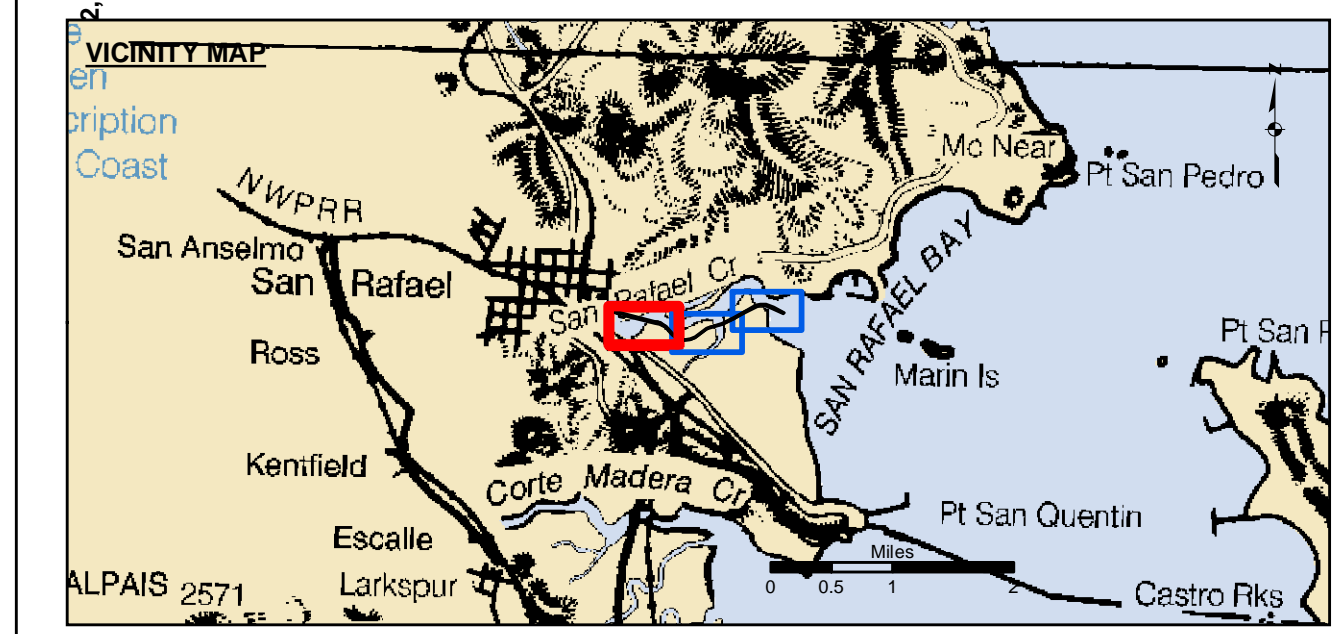


NAD 83 CENTERLINE ANGLE POINTS			
Δ PT	X	Y	
C1	5987089.37	2181692.15	
C2	5986334.07	2182035.55	
C3	5986088.27	2182054.45	
C4	5985885.57	2181993.85	
C5	5985380.77	2181729.75	
C6	5984935.97	2181458.25	
C7	5984421.07	2181213.45	
C8	5983862.47	2181058.95	
C9	5983735.07	2181010.85	
C10	5983242.97	2180634.65	
C11	5983023.37	2180542.35	
C12	5982759.17	2180513.25	
C13	5982475.57	2180605.75	
C14	5982265.37	2180760.35	
C15	5981973.07	2181089.55	
C16	5981896.67	2181147.35	
C17	5981723.17	2181235.75	
C18	5981476.77	2181276.25	
C19	5980172.77	2181612.05	
C20	5979679.07	2181750.05	

NAD 83 CHANNEL ANGLE POINTS			
Δ PT	X	Y	
1	5987101.87	2181719.45	
2	5986637.57	2181930.55	
3	5986341.67	2182065.05	
4	5986084.97	2182084.85	
5	5985874.27	2182021.75	
6	5985365.97	2181755.85	
7	5984921.77	2181484.65	
8	5984410.57	2181241.65	
9	5983853.17	2181087.55	
10	5983720.27	2181037.35	
11	5983227.77	2180660.75	
12	5983015.77	2180571.65	
13	5982762.27	2180543.75	
14	5982489.47	2180632.75	
15	5982285.67	2180782.65	
16	5981993.57	2181111.65	
17	5981912.57	2181172.85	
18	5981732.57	2181264.65	
19	5981482.97	2181305.55	
20	5980180.57	2181641.55	
21	5979689.27	2181778.35	
22	5979668.87	2181721.75	

NAD 83 CHANNEL ANGLE POINTS			
Δ PT	X	Y	
23	5979972.37	2181637.25	
24	5979945.57	2181540.95	
25	5980138.27	2181487.25	
26	5980165.07	2181583.65	
27	5981470.57	2181246.85	
28	5981713.67	2181206.95	
29	5981880.67	2181121.75	
30	5981952.57	2181067.35	
31	5982244.97	2180738.05	
32	5982461.67	2180578.65	
33	5982755.97	2180482.65	
34	5983030.97	2180512.95	
35	5983258.17	2180608.45	
36	5983749.77	2180984.35	
37	5983871.87	2181030.45	
38	5984431.57	2181185.15	
39	5984950.27	2181431.85	
40	5985395.57	2181703.65	
41	5985896.97	2181965.95	
42	5986091.47	2182024.15	
43	5986326.57	2182006.05	
44	5987076.97	2181664.85	



Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	
Placement Area	Navigation Buoy	-6
Anchorage Area	Navigation Buoy	-5
Wreck Area	Shoalest Sounding*	-4
Submerged Wreck		-3
Angle Point		-2

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 VERTICAL CONTROL: BENCHMARK, MLLW ELEV., AGENCY B.M. TIDAL 17 (1951), USCGS DISK, 9.73 MLLW HARBOR ST. PUMPHOUSE, EAST FRANCISCO BLVD. B.M. L 551 (1956), USCGS DISK, 15.61 MLLW SAN RAFAEL SANITARY DIST. PUMPHOUSE, PT. SAN PEDRO RD.
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 STA. 119+00 TO 150+00 ... Marin Yacht Harbor
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 FLOOD ⇒ SLACK ⇒ EBB TIDE SURVEY 5.2 Ft ⇒ 6.4 Ft.

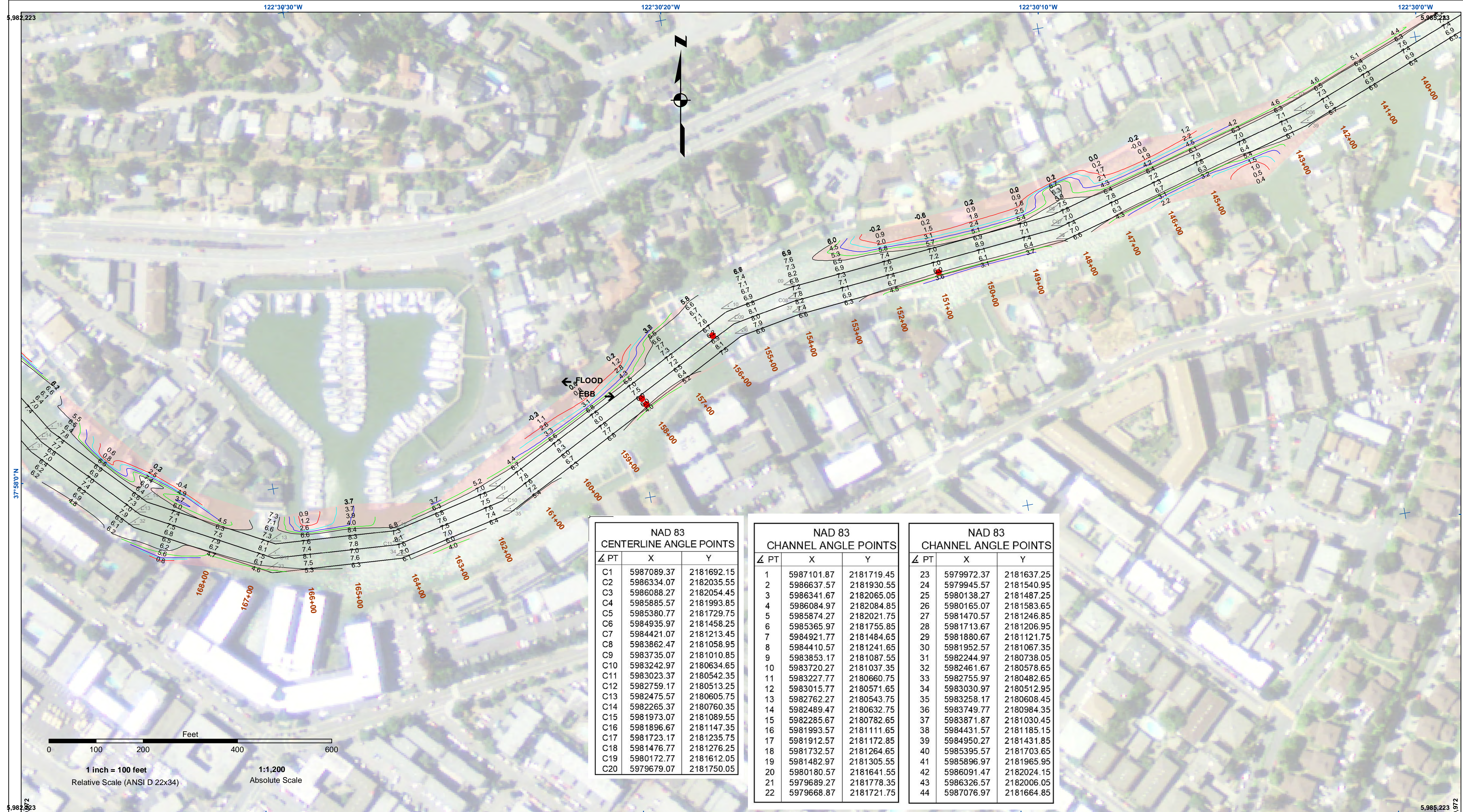
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Chart Date:	Feb 28, 2023
Designed by:	
Drawn by:	PDT
Surveyed By:	KEVIN P. ARNETT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

CALIFORNIA
 MARIN COUNTY
SAN RAFAEL CREEK
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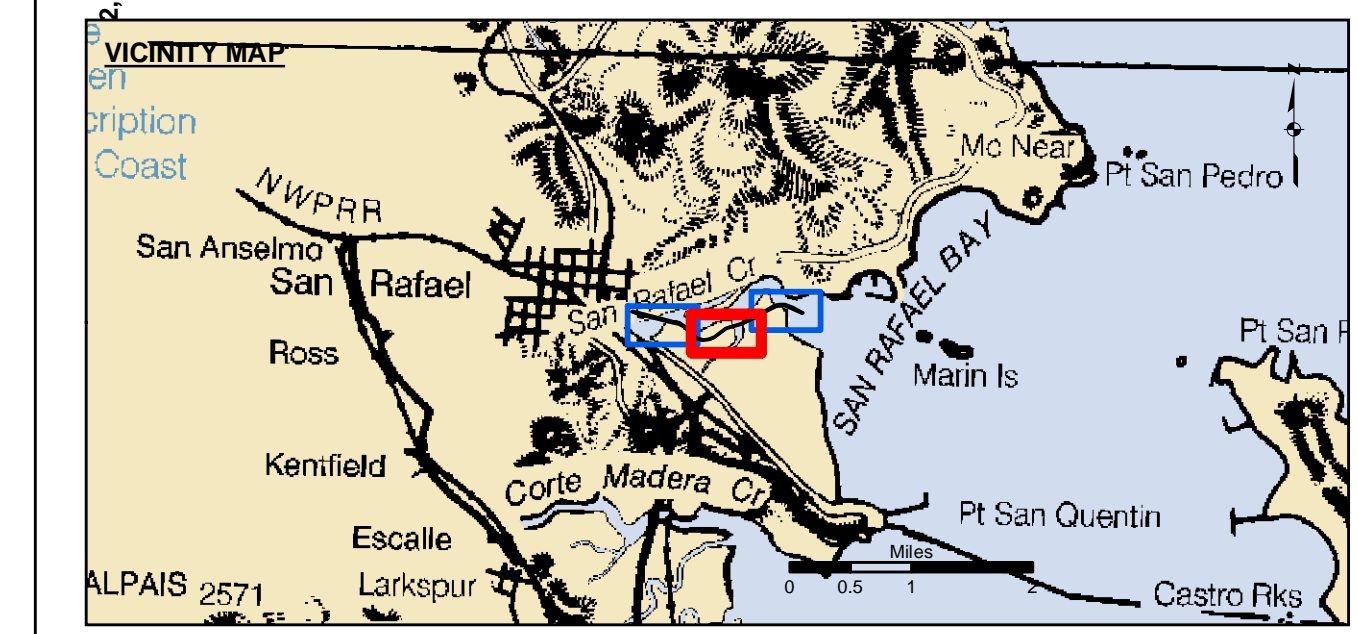
Sheet
Reference
Number
1 of 3



NAD 83 CENTERLINE ANGLE POINTS		
Δ PT	X	Y
C1	5987089.37	2181692.15
C2	5986334.07	2182035.55
C3	5986088.27	2182054.45
C4	5985885.57	2181993.85
C5	5985380.77	2181729.75
C6	5984935.97	2181458.25
C7	5984421.07	2181213.45
C8	5983862.47	2181058.95
C9	5983735.07	2181010.85
C10	5983242.97	2180634.65
C11	5983023.37	2180542.35
C12	5982759.17	2180513.25
C13	5982475.57	2180605.75
C14	5982265.37	2180760.35
C15	5981973.07	2181089.55
C16	5981896.67	2181147.35
C17	5981723.17	2181235.75
C18	5981476.77	2181276.25
C19	5980172.77	2181612.05
C20	5979679.07	2181750.05

NAD 83 CHANNEL ANGLE POINTS		
Δ PT	X	Y
1	5987101.87	2181719.45
2	5986637.57	2181930.55
3	5986341.67	2182065.05
4	5986084.97	2182084.85
5	5985874.27	2182021.75
6	5985365.97	2181755.85
7	5984921.77	2181484.65
8	5984410.57	2181241.65
9	5983853.17	2181087.55
10	5983720.27	2181037.35
11	5983227.77	2180660.75
12	5983015.77	2180571.65
13	5982762.27	2180543.75
14	5982489.47	2180632.75
15	5982285.67	2180782.65
16	5981993.57	2181111.65
17	5981912.57	2181172.85
18	5981732.57	2181264.65
19	5981482.97	2181305.55
20	5980180.57	2181641.55
21	5979689.27	2181778.35
22	5979668.87	2181721.75

NAD 83 CHANNEL ANGLE POINTS		
Δ PT	X	Y
23	5979972.37	2181637.25
24	5979945.57	2181540.95
25	5980138.27	2181487.25
26	5980165.07	2181583.65
27	5981470.57	2181246.85
28	5981713.67	2181206.95
29	5981880.67	2181121.75
30	5981952.57	2181067.35
31	5982244.97	2180738.05
32	5982461.67	2180578.65
33	5982755.97	2180482.65
34	5983030.97	2180512.95
35	5983258.17	2180608.45
36	5983749.77	2180984.35
37	5983871.87	2181030.45
38	5984431.57	2181185.15
39	5984950.27	2181431.85
40	5985395.57	2181703.65
41	5985896.97	2181965.95
42	5986091.47	2182024.15
43	5986326.57	2182006.05
44	5987076.97	2181664.85



Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Obstruction Point	
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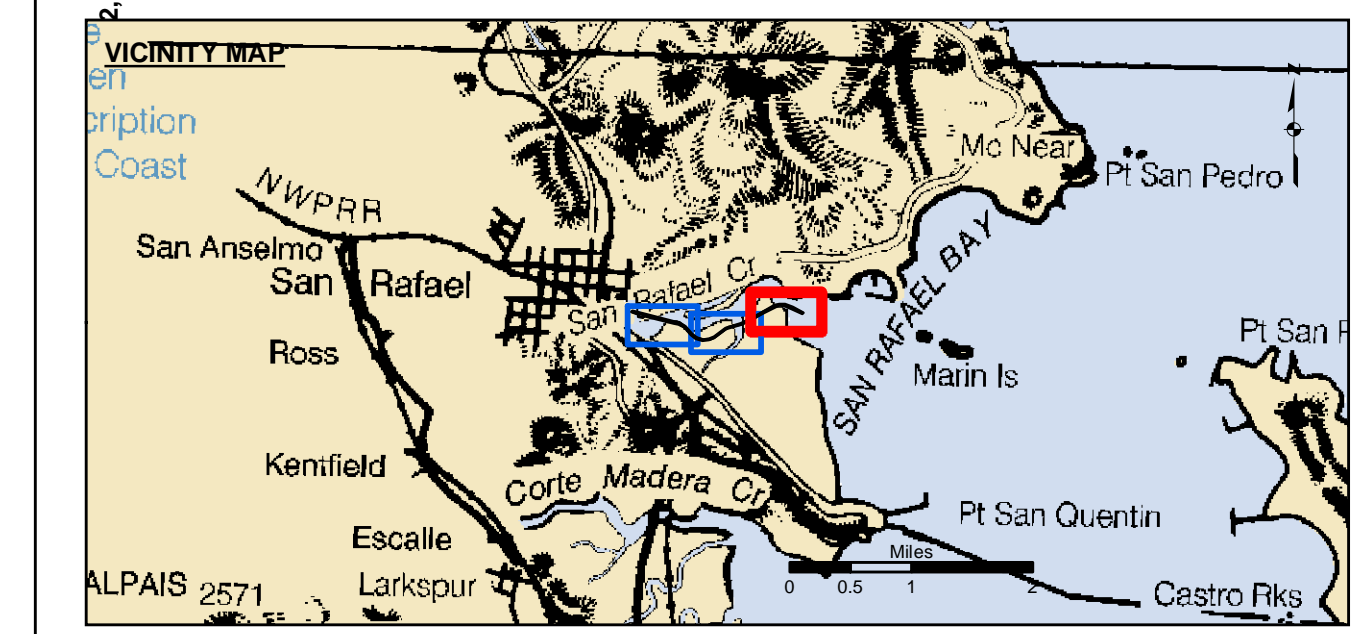
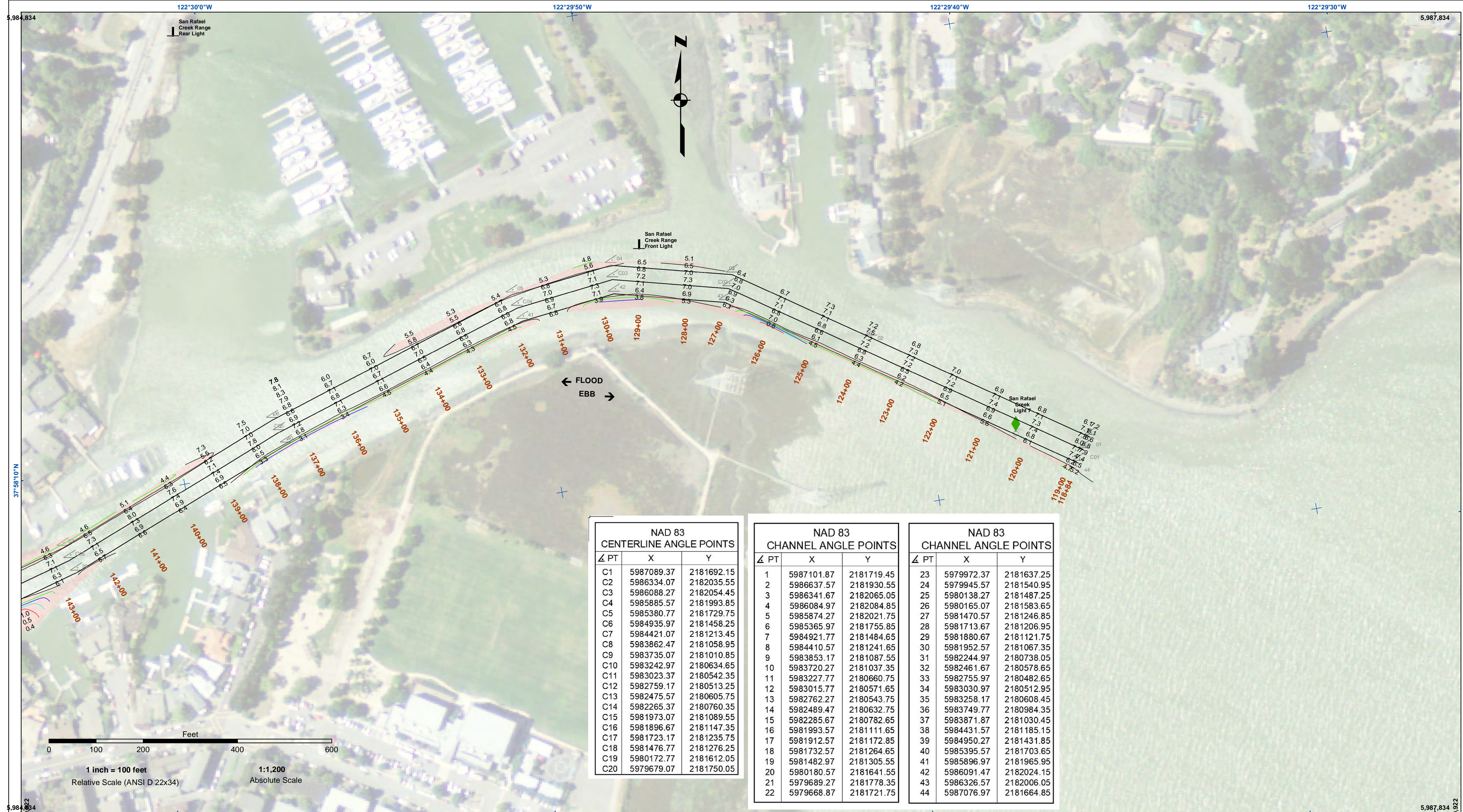
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Prepared Under the Direction of	Chart Date:	Feb 28, 2023
KEVIN P. ARNETT	Surveyed By:	
LT Colonel, C.E., District Engineer	Plotted By:	
Subject: PDT	Checked By:	PDT
Hydro Survey Team Leader	Drawn By:	
Recommendation:	Checked By:	PDT
Chief, Hydro Survey Section	Drawn By:	PDT
Approved:	Checked By:	PDT
Chief, Construction Branch	Drawn By:	PDT

CALIFORNIA
 MARIN COUNTY
 SAN RAFAEL CREEK
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Sheet Reference Number
 2 of 3



Federal Navigation Channel	Beacon, General	Contours
Shoaling Area	Navigation Buoy	
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18	5981732.57	2181264.65	
19	5981482.97	2181305.55	
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26	5980165.07	2181583.65	
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38	5984431.57	2181185.15	
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KEVIN P. ARNETT	Feb 28, 2023
LT Colonel, C.E., District Engineer	Designed by:
Submitted:	Plotted by:
Hydro Survey Team Leader	
Recommended:	Checked by:
Chief, Hydro Survey Section	
Approved:	Drawn by:
Chief, Construction Branch	PDT

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