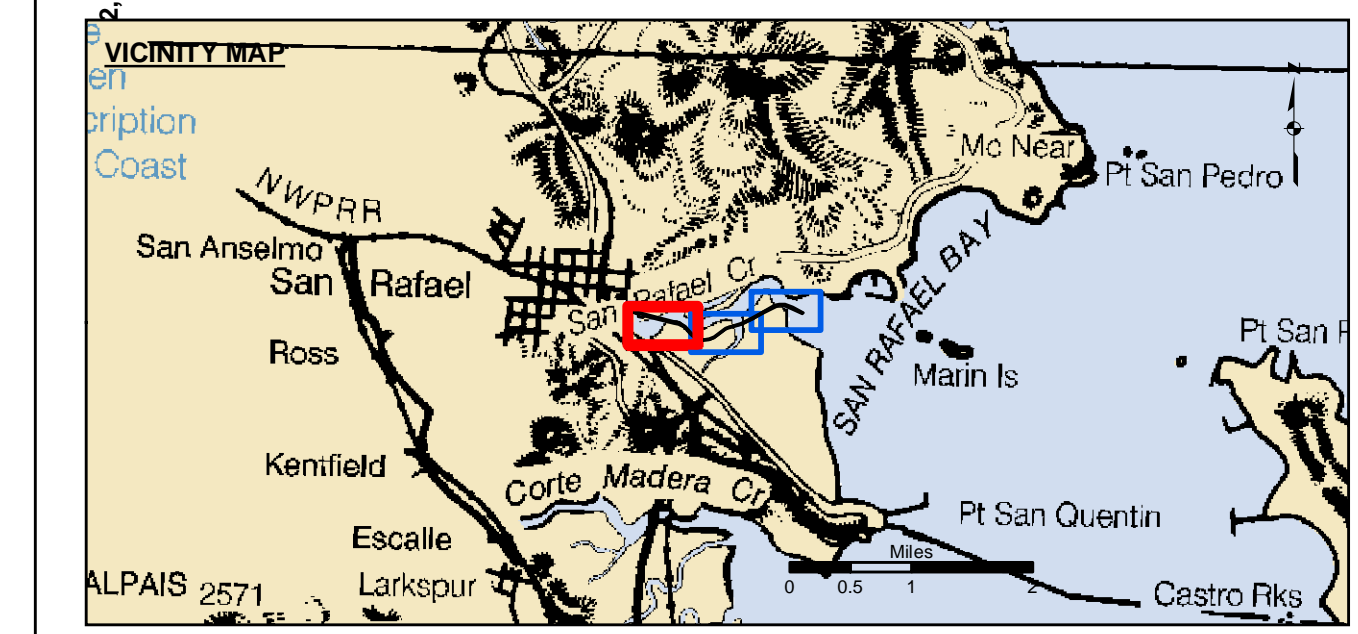


NAD 1983 CENTERLINE ANGLE POINTS		
ANGLE PT	X	Y
CO1	5987089.37	2181692.15
CO2	5986334.07	2182035.55
CO3	5986088.27	2182054.45
CO4	5985885.57	2181993.85
CO5	5985380.77	2181729.75
CO6	5984935.97	2181458.25
CO7	5984421.07	2181213.45
CO8	5983862.47	2181058.95
CO9	5983735.07	2181010.85
C10	5983242.97	2180634.65
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	5919679.07	2181750.05

NAD 1983 CHANNEL ANGLE POINTS		
ANGLE PT	X	Y
1	5987101.87	2181719.45
2	5986637.57	2181930.55
3	5986637.57	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 1983 CHANNEL ANGLE POINTS		
ANGLE 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	5984431.57	2181185.15
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	<b>Contours</b>
Shoaling Area	Obstruction Point	
Placement Area	Navigation Buoy	-5
Anchorage Area	Navigation Buoy	-4
Wreck Area	Shoalest Sounding*	-3
Submerged Wreck		-2
Angle Point		-1

**NOTES:**  
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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.  
 TIDE GAGE LOCATION: SAN RAFAEL YACHT HARBOR & MARIN YACHT HARBOR  
 STA. 119+00 TO 150+00 ... Marin Yacht Harbor  
 STA. 150+00 TO 200+87 ... San Rafael Yacht Harbor  
 FLOOD => SLACK => EBB TIDE SURVEY 5.2 Ft => 6.4 Ft.

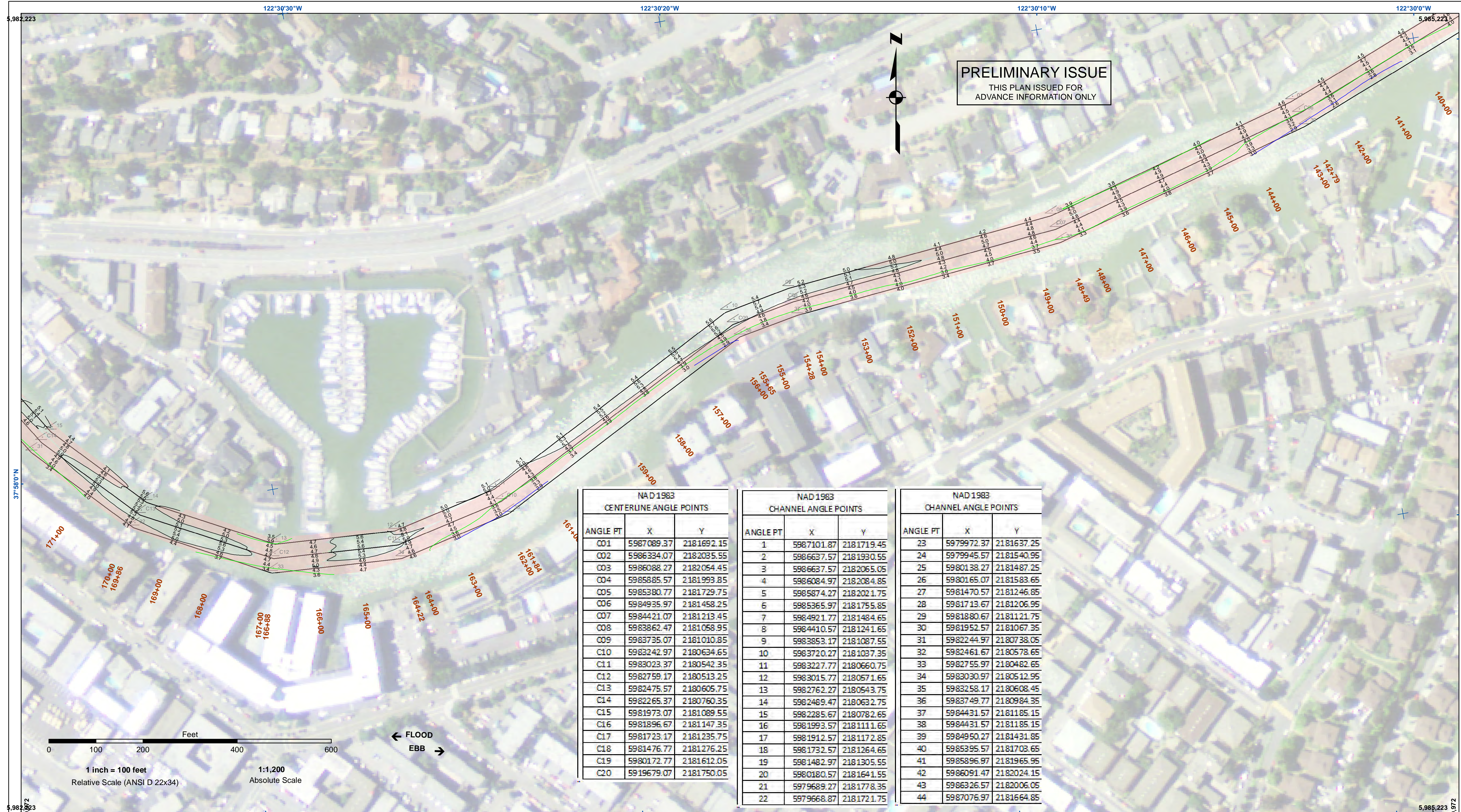
**US Army Corps of Engineers**  
 San Francisco District  
 450 Market Street  
 San Francisco, CA 94102

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Chart Date:	Jun 03, 2020
Designed by:	
Drawn by:	PDT
Surveyed By:	
Plotted By:	
Checked By:	PDT

CALIFORNIA  
 MARIN COUNTY  
**SAN RAFAEL CREEK**  
 CONDITION SURVEY  
 28 MAY 2020

**Sheet Reference Number**  
 1 of 3

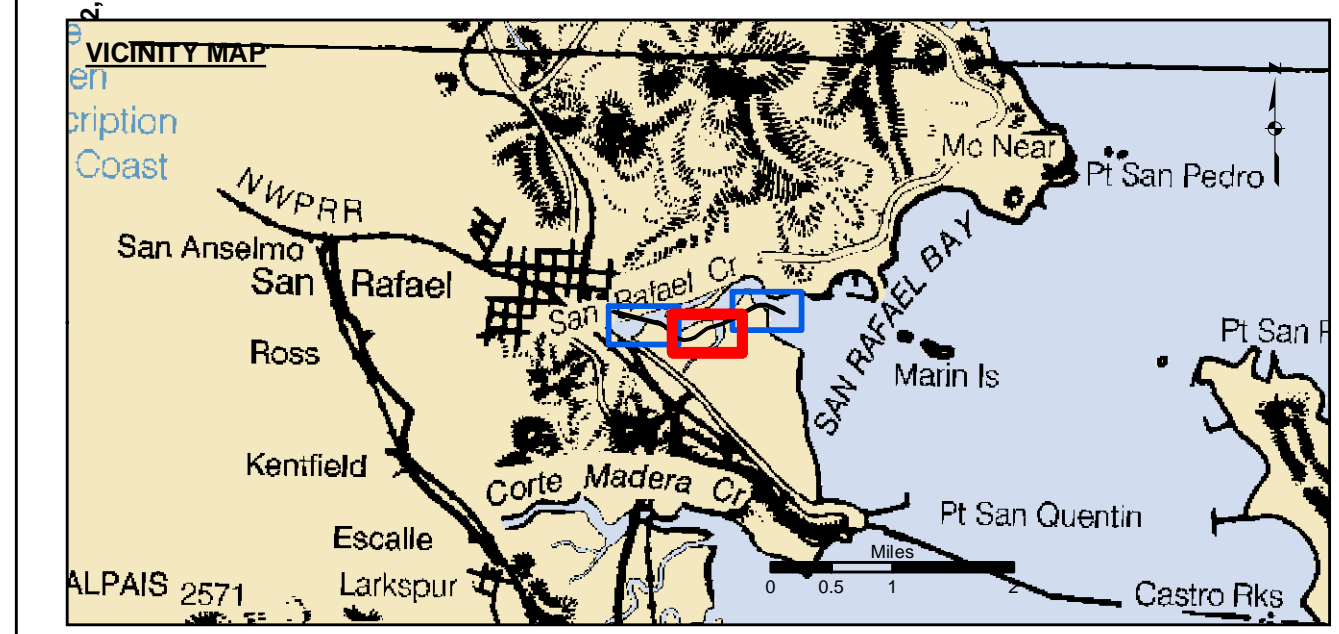


**PRELIMINARY ISSUE**  
THIS PLAN ISSUED FOR  
ADVANCE INFORMATION ONLY

NAD 1983 CENTERLINE ANGLE POINTS			NAD 1983 CHANNEL ANGLE POINTS			NAD 1983 CHANNEL ANGLE POINTS		
ANGLE PT	X	Y	ANGLE PT	X	Y	ANGLE PT	X	Y
CO1	5987089.37	2181692.15	1	5987101.87	2181719.45	23	5979972.37	2181637.25
CO2	5986334.07	2182035.55	2	5986637.57	2181930.55	24	5979945.57	2181540.95
CO3	5986088.27	2182054.45	3	5986637.57	2182065.05	25	5980138.27	2181487.25
CO4	5985885.57	2181993.85	4	5986084.97	2182084.85	26	5980165.07	2181583.65
CO5	5985380.77	2181729.75	5	5985874.27	2182021.75	27	5981470.57	2181246.85
CO6	5984935.97	2181458.25	6	5985365.97	2181755.85	28	5981713.67	2181206.95
CO7	5984421.07	2181213.45	7	5984921.77	2181484.65	29	5981880.67	2181121.75
CO8	5983862.47	2181058.95	8	5984410.57	2181241.65	30	5981952.57	2181067.35
CO9	5983735.07	2181010.85	9	5983853.17	2181087.55	31	5982244.97	2180738.05
C10	5983242.97	2180634.65	10	5983720.27	2181037.35	32	5982461.67	2180578.65
C11	5983023.37	2180542.35	11	5983227.77	2180660.75	33	5982755.97	2180482.65
C12	5982759.17	2180513.25	12	5983015.77	2180571.65	34	5983030.97	2180512.95
C13	5982475.57	2180605.75	13	5982762.27	2180543.75	35	5983258.17	2180608.45
C14	5982265.37	2180760.35	14	5982489.47	2180632.75	36	5983749.77	2180984.35
C15	5981973.07	2181089.55	15	5982285.67	2180782.65	37	5984431.57	2181185.15
C16	5981896.67	2181147.35	16	5981993.57	2181111.65	38	5984431.57	2181185.15
C17	5981723.17	2181235.75	17	5981912.57	2181172.85	39	5984950.27	2181431.85
C18	5981476.77	2181276.25	18	5981732.57	2181264.65	40	5985395.57	2181703.65
C19	5980172.77	2181612.05	19	5981482.97	2181305.55	41	5985896.97	2181965.95
C20	5919679.07	2181750.05	20	5980180.57	2181641.55	42	5986091.47	2182024.15
			21	5979689.27	2181778.35	43	5986326.57	2182006.05
			22	5979668.87	2181721.75	44	5987076.97	2181664.85



← FLOOD  
EBB →



	Federal Navigation Channel		Beacon, General	<b>Contours</b>	
	Shoaling Area		Obstruction Point		-5
	Placement Area		Navigation Buoy		-4
	Anchorage Area		Navigation Buoy		-3
	Wreck Area		Shoalest Sounding*		-2
	Submerged Wreck				-1
	Angle Point				

NOTES:  
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FLOOD ⇒ SLACK ⇒ EBB TIDE SURVEY 5.2 FT ⇒ 6.4 FT.

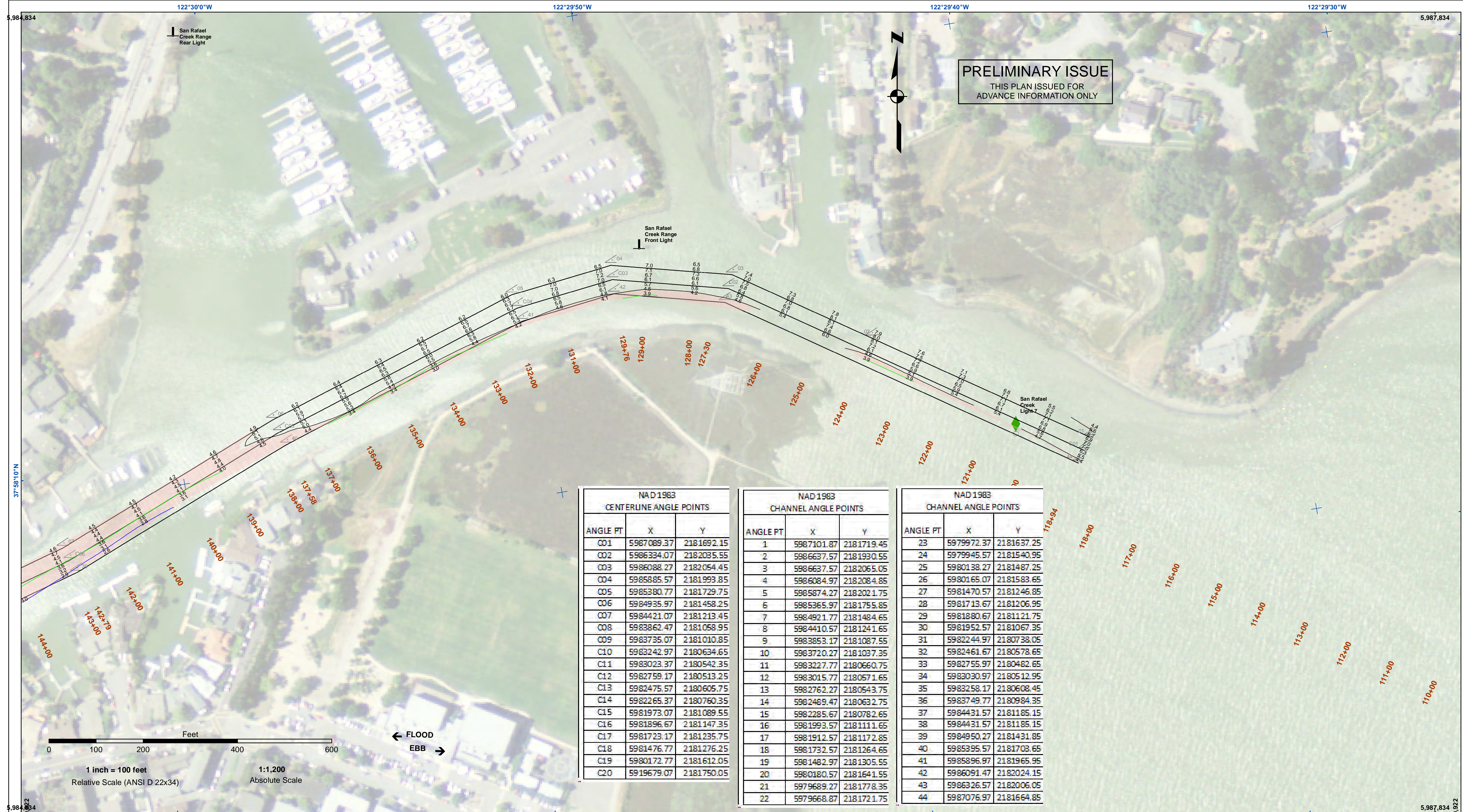
**US Army Corps of Engineers**  
San Francisco District  
450 Market Street  
San Francisco, CA 94102

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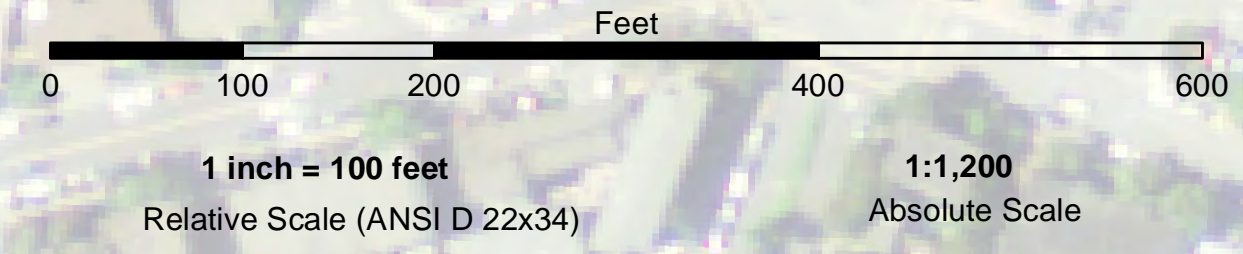
Prepared Under the Direction of	Chart Date:	Jun 03, 2020
JOHN D. CUNNINGHAM	Designed by:	
LT COLONEL, C.E., DISTRICT ENGINEER	Plotted by:	
Submittal:	Hydro Survey Team Leader	
Recommended:	Chief, Hydro Survey Section	
Approved:	Chief, Construction Branch	
Surveyed by:	PDT	
Checked by:	PDT	
Drawn by:	PDT	

CALIFORNIA  
MARIN COUNTY  
SAN RAFAEL CREEK  
CONDITION SURVEY  
28 MAY 2020

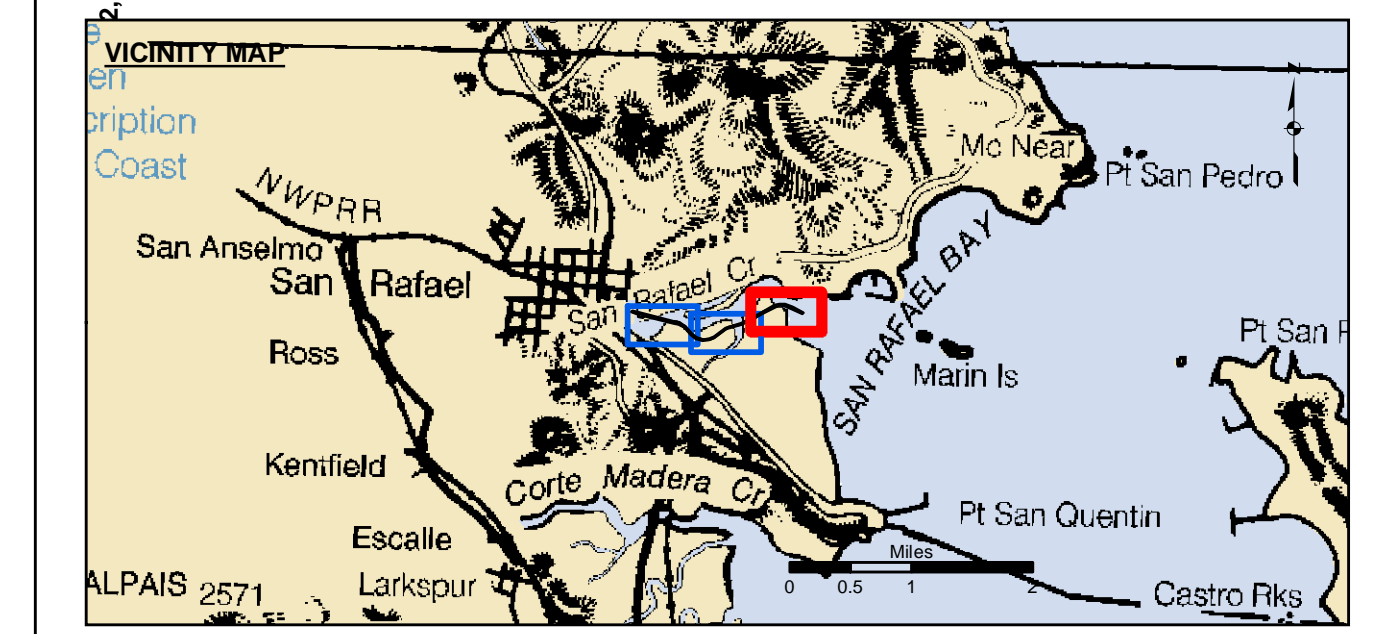
Sheet  
Reference  
Number  
**2 of 3**



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ANGLE PT	X	Y	ANGLE PT	X	Y	ANGLE PT	X	Y
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CO2	5986334.07	2182035.55	2	5986637.57	2181930.55	24	5979945.57	2181540.95
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C15	5981973.07	2181089.55	15	5982285.67	2180782.65	37	5984431.57	2181185.15
C16	5981896.67	2181147.35	16	5981993.57	2181111.65	38	5984431.57	2181185.15
C17	5981723.17	2181235.75	17	5981912.57	2181172.85	39	5984950.27	2181431.85
C18	5981476.77	2181276.25	18	5981732.57	2181264.65	40	5985395.57	2181703.65
C19	5980172.77	2181612.05	19	5981482.97	2181305.55	41	5985896.97	2181965.95
C20	5919679.07	2181750.05	20	5980180.57	2181641.55	42	5986091.47	2182024.15
			21	5979689.27	2181778.35	43	5986326.57	2182006.05
			22	5979668.87	2181721.75	44	5987076.97	2181664.85



FLOOD ←  
EBB →



Federal Navigation Channel	Beacon, General	<b>Contours</b>
Shoaling Area	Obstruction Point	
Placement Area	Navigation Buoy	-5
Anchorage Area	Navigation Buoy	-4
Wreck Area	Shoalest Sounding*	-3
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Drawn by:	PDT
Checked by:	PDT
Surveyed By:	
Plotted By:	

CALIFORNIA  
MARIN COUNTY  
**SAN RAFAEL CREEK**  
CONDITION SURVEY  
28 MAY 2020

**Sheet**  
**Reference**  
**Number**  
**3 of 3**