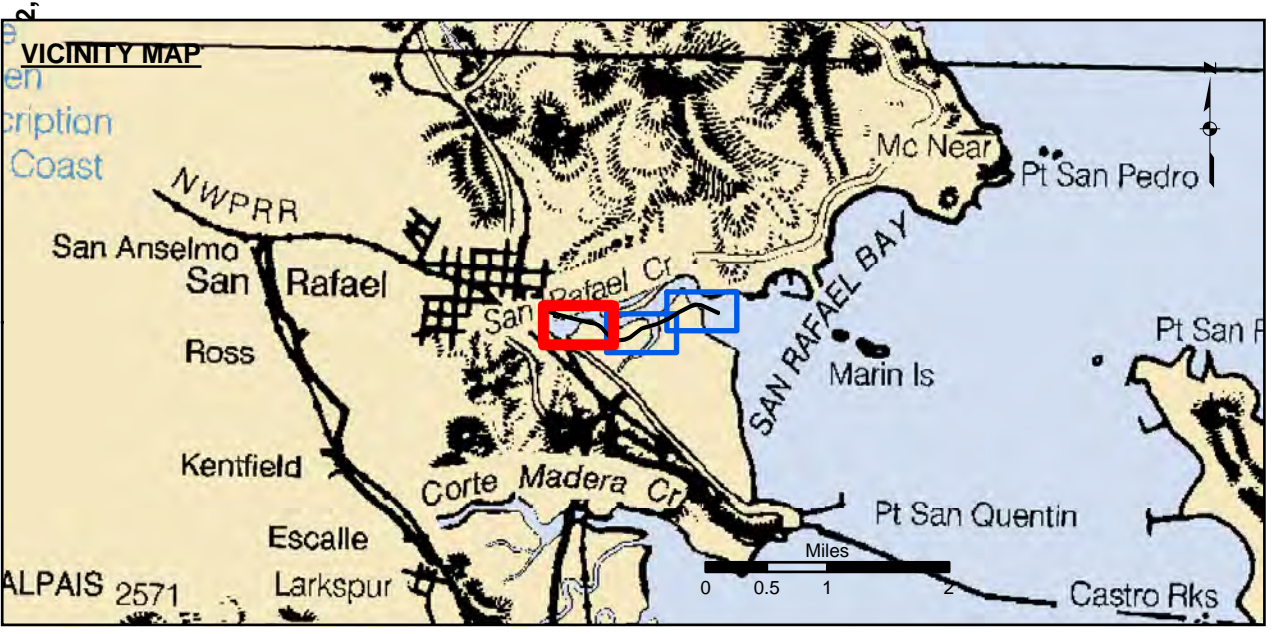


PRELIMINARY ISSUE
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NAD 1983 CENTERLINE ANGLE POINTS			NAD 1983 CHANNEL ANGLE POINTS			NAD 1983 CHANNEL ANGLE POINTS		
ANGLE PT	X	Y	ANGLE PT	X	Y	ANGLE PT	X	Y
CO1	5987089.37	2181692.15	1	5987101.87	2181719.45	23	5979972.37	2181637.25
CO2	5986334.07	2182035.55	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



Federal Navigation Channel	Beacon, General	Contours
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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SURVEYED BY THE CORPS OF ENGINEERS.

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SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.

PLANE GRID AND COORDINATES ARE BASED ON LAMBERT PROJECTION, ZONE III NAD 83, CALIFORNIA, AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY NATIONAL OCEAN SURVEY.

THE PROJECT DEPTH IS 5 FEET.

HORIZONTAL CONTROL: DESIGNATION, SOURCE, XYZ COAST GUARD D-BEACON

VERTICAL CONTROL: BENCHMARK, MLLW ELEV., AGENCY B.M. TIDAL 17 (1951), USC&GS DISK, 9.73 MLLW HARBOR ST. PUMPHOUSE, EAST FRANCISCO BLVD. B.M. L 551 (1956), USC&GS 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.

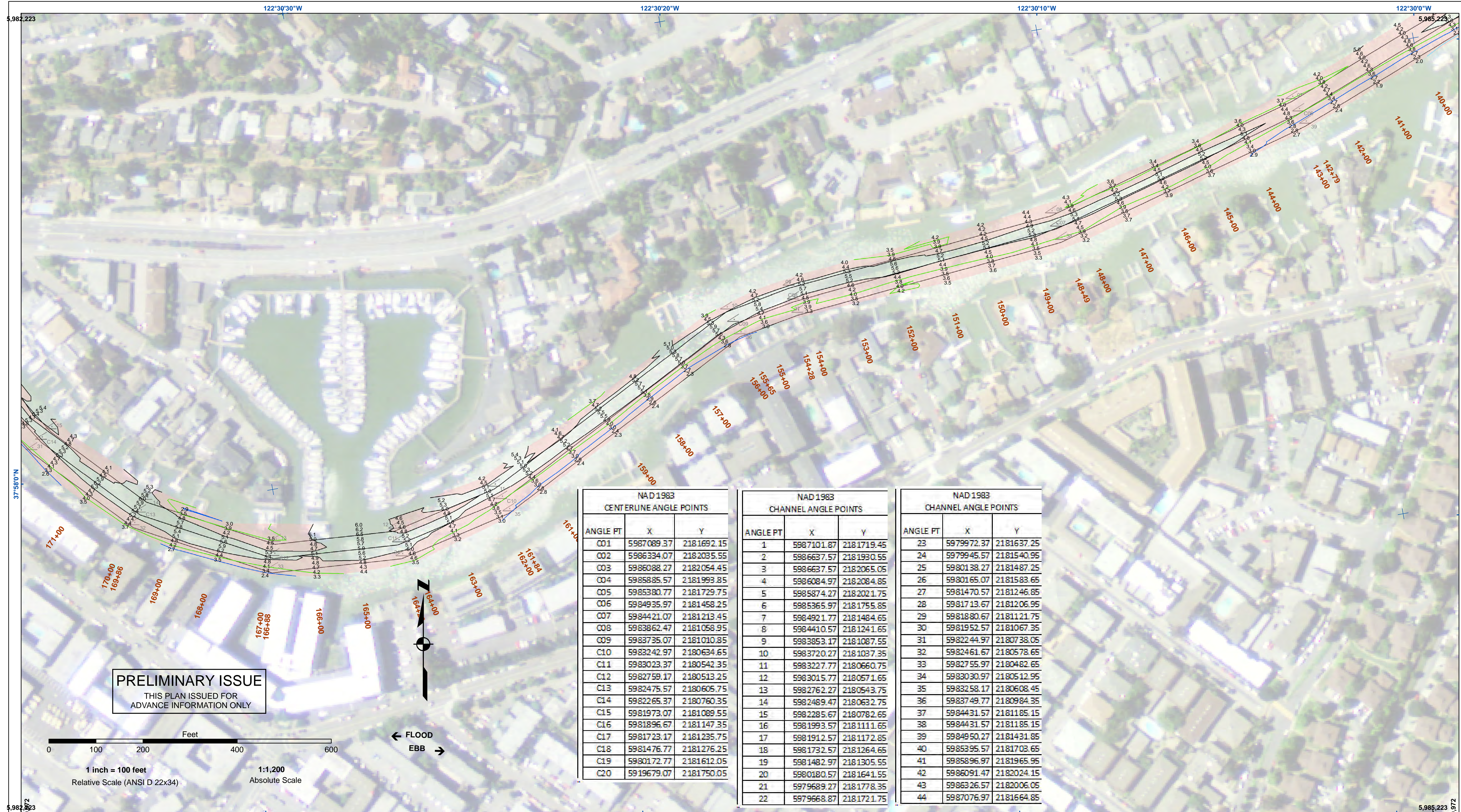
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Designed by:	
Drawn by:	PDT
Surveyed By:	TRAVIS J. RAYFIELD
Plotted By:	PDT
Checked By:	PDT

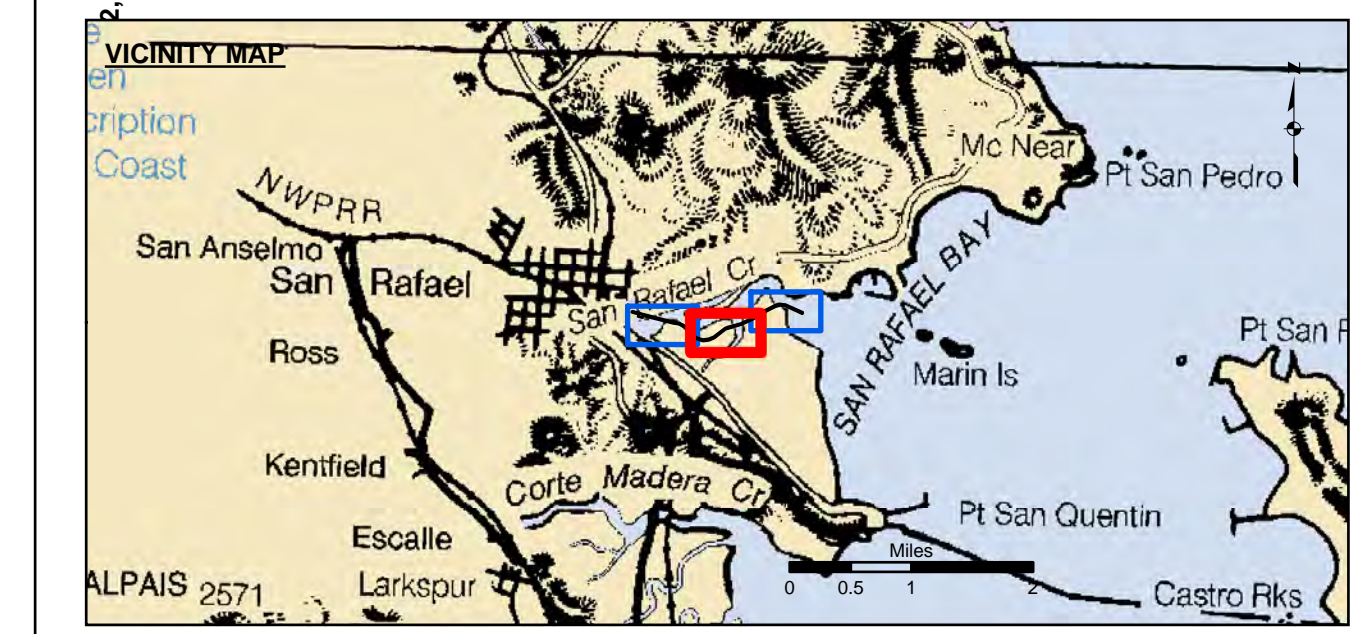
CALIFORNIA
MARIN COUNTY
SAN RAFAEL CREEK
CONDITION SURVEY
24 SEPTEMBER 2018

Sheet Reference Number
1 of 3



PRELIMINARY ISSUE
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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



Federal Navigation Channel	Beacon, General	Contours
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		

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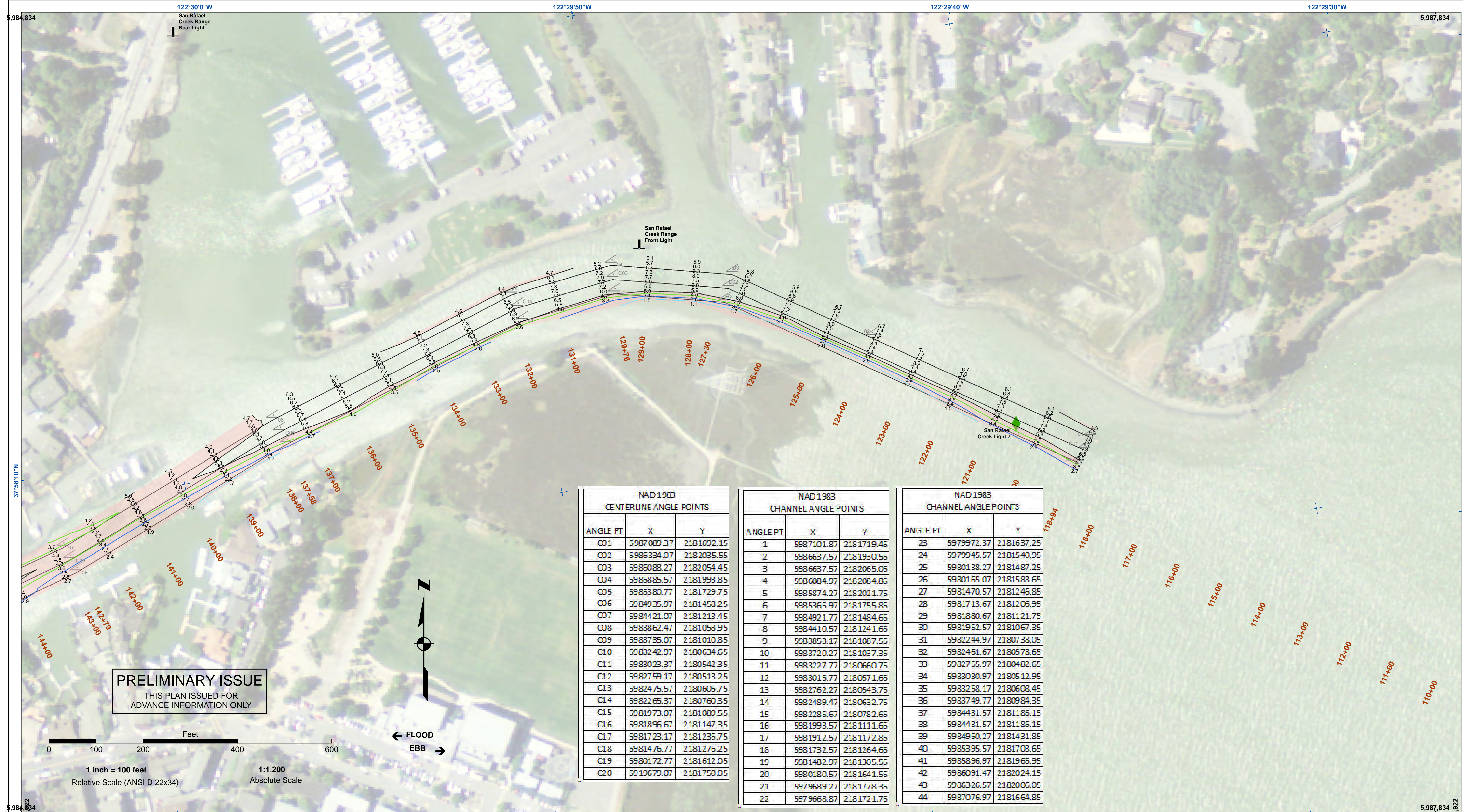
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Chart Date:	Sep 26, 2018
Designed by:	
Drawn by:	PDT
Checked by:	PDT
Approved by:	
Surveyed By:	
Plotted By:	

CALIFORNIA
MARIN COUNTY
SAN RAFAEL CREEK
CONDITION SURVEY
24 SEPTEMBER 2018

Sheet
Reference
Number
2 of 3



PRELIMINARY ISSUE
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NAD 1983 CENTERLINE ANGLE POINTS			
ANGLE PT	X	Y	
C01	5987089.37	2181692.15	
C02	5986334.07	2182035.55	
C03	5986088.27	2182054.45	
C04	5985885.57	2181993.85	
C05	5985380.77	2181729.75	
C06	5984935.97	2181458.25	
C07	5984421.07	2181213.45	
C08	5983862.47	2181058.95	
C09	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	Contours
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Angle Point		

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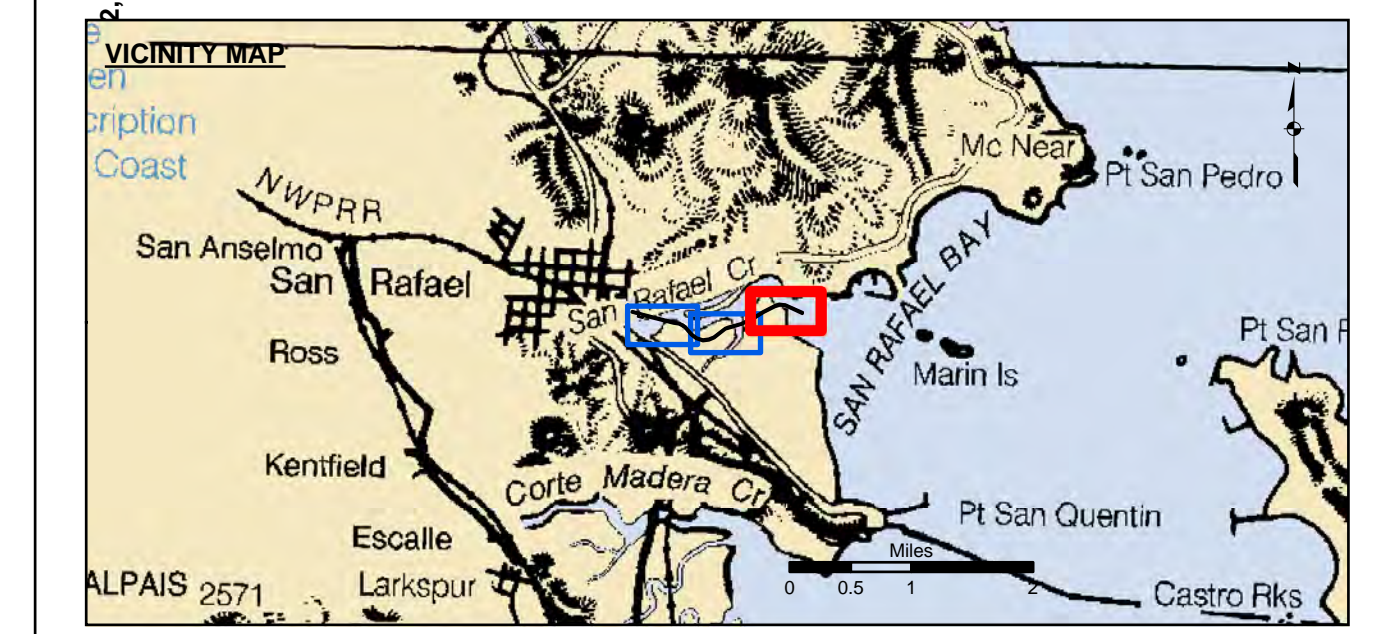
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3 of 3