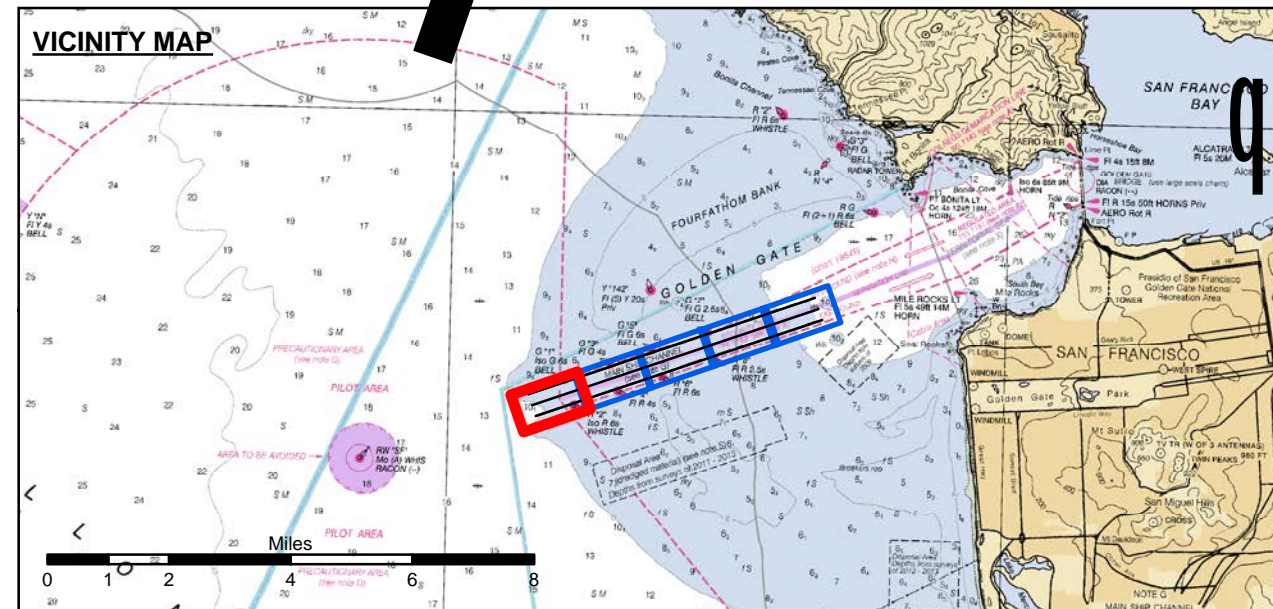


CHANNEL ANGLE POINTS - NAD 83		
CHANNEL ∠	EAST	NORTH
A	5942376.6491	2108540.1149
B	5943012.7491	2106643.9149
C	5967229.2491	2116876.3149
D	5967865.3491	2114980.1149

CENTERLINE ANGLE POINTS - NAD 83		
CENTERLINE ∠	EAST	NORTH
C1	5942694.6491	2107592.0149
C2	5967547.2491	2115928.2149



	Federal Navigation Channel		Beacon, General		51
	Shoaling Area		Obstruction Point		52
	Placement Area		Navigation Buoy		53
	Anchorage Area		Navigation Buoy		54
	Wreck Area		Shoalest Sounding*		55
	Submerged Wreck				
	Angle Point				

NOTES:
 HORIZONTAL COORDINATE SYSTEM: NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CALIFORNIA ZONE III. DISTANCE UNITS IN U.S. SURVEY FEET.
 VERTICAL DATUM: SOUNDINGS ARE SHOWN IN FEET AND INDICATE DEPTHS BELOW MEAN LOWER LOW WATER.
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 VERTICAL CONTROL: BENCHMARK "Q-481" USC&GS DISK ELEV. 19.54 FT MLLW.
 HORIZONTAL CONTROL: COAST GUARD D-BEACON.

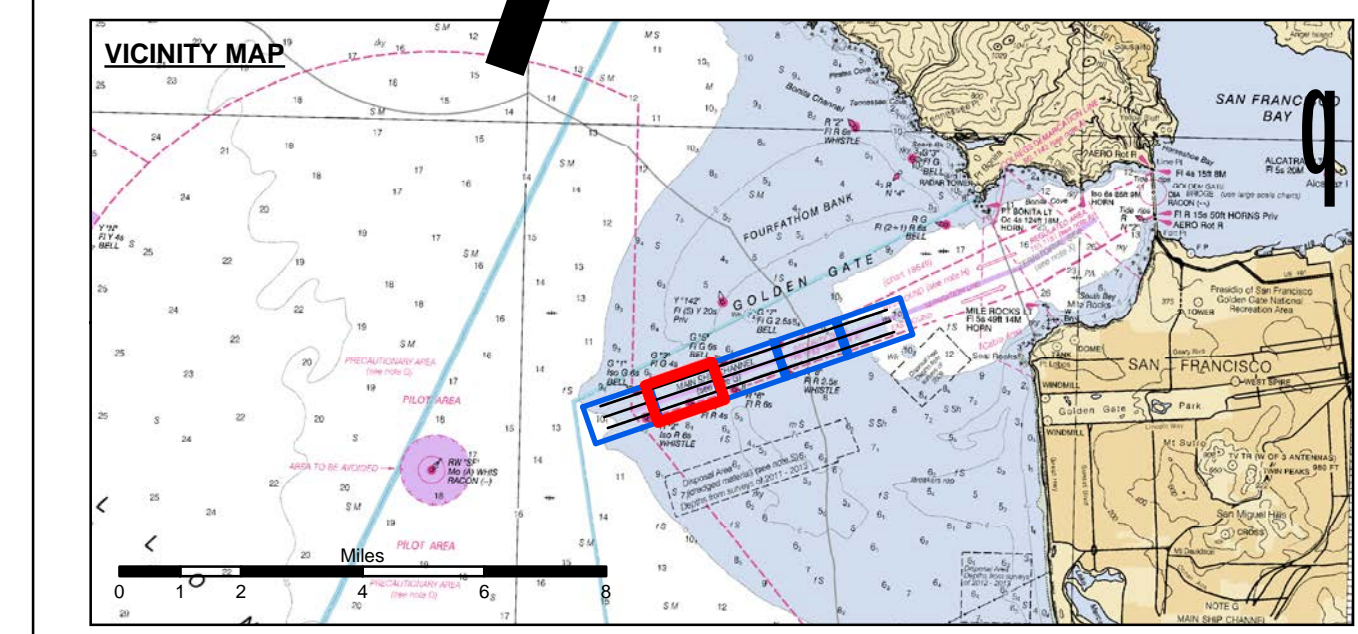
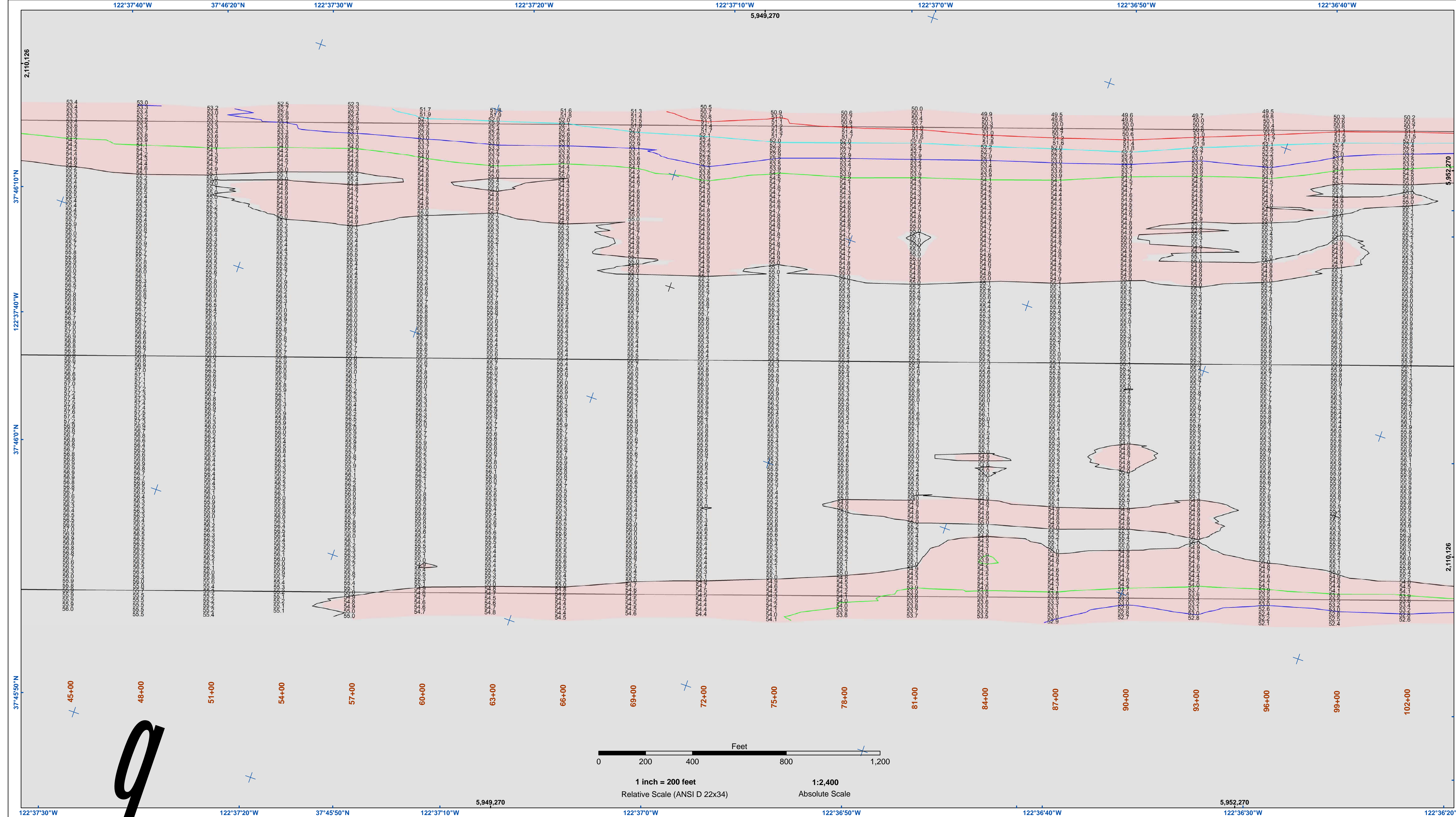
US Army Corps of Engineers
 San Francisco District
 1455 Market Street
 San Francisco, CA 94103

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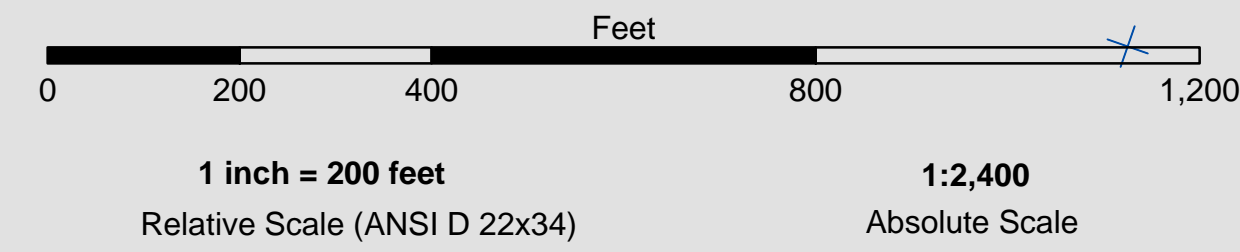
Prepared Under the Direction of JOHN C. MORROW LT. COLONEL, C.E., DISTRICT ENGINEER	Surveyed By:	Chart Date:
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Mar 23, 2017
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Designed by:
Approved: Chief, Construction Branch	Drawn by: PDT	

CALIFORNIA
 SAN FRANCISCO BAY
SAN FRANCISCO MAINSHIP CHANNEL
 CONDITION SURVEY
 9 & 20 MARCH 2017

Sheet
 Number
1 of 5



	Federal Navigation Channel		Beacon, General	Contour Lines		51
	Shoaling Area		Obstruction Point			52
	Placement Area		Navigation Buoy			53
	Anchorage Area		Navigation Buoy			54
	Wreck Area		Shoalest Sounding*			55
	Submerged Wreck					
	Angle Point					



NOTES:
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VERTICAL CONTROL:
 BENCHMARK "Q-481" USC&GS DISK ELEV. 19.54 FT MLLW.

HORIZONTAL CONTROL:
 COAST GUARD D-BEACON.

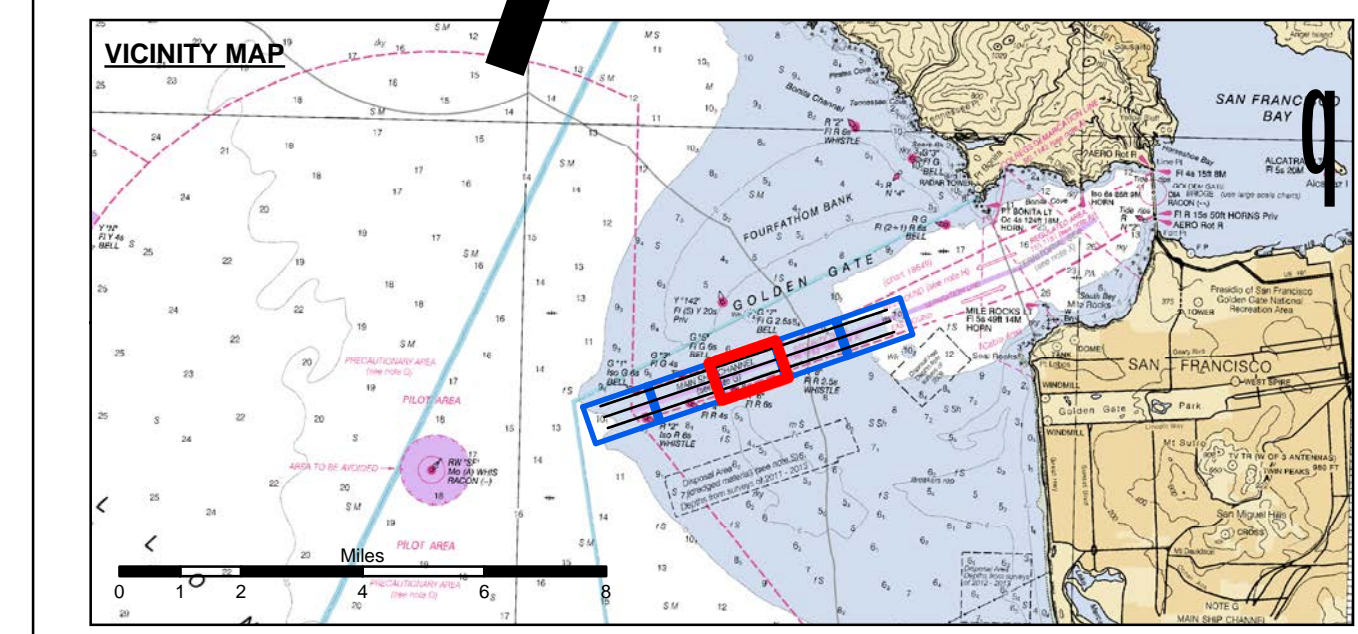
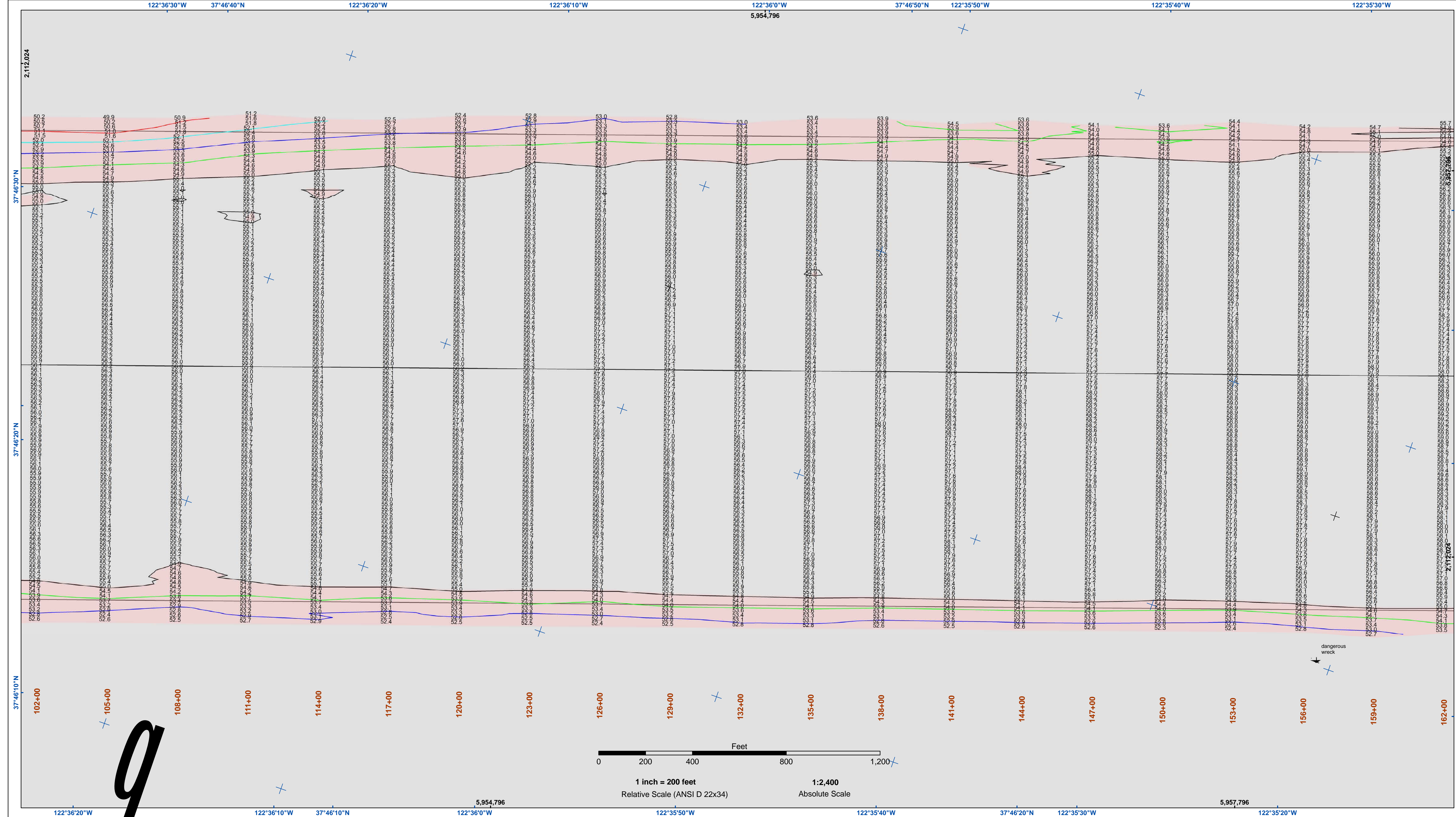
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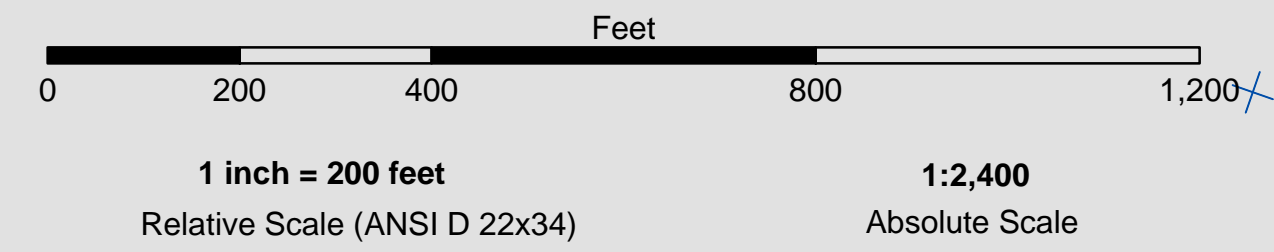
Chart Date:	Mar 23, 2017
Designed by:	PDT
Plotted By:	PDT
Checked By:	PDT
Drawn by:	PDT

SAN FRANCISCO BAY
SAN FRANCISCO
MAINSHIP CHANNEL
CONDITION SURVEY
9 & 20 MARCH 2017

Sheet Reference Number
2 of 5



- Federal Navigation Channel
 - Shoaling Area
 - Placement Area
 - Anchorage Area
 - Wreck Area
 - Submerged Wreck
 - Angle Point
 - Beacon, General
 - Obstruction Point
 - Navigation Buoy
 - Navigation Buoy
 - Shoalest Sounding*
- Contour Lines**
- 51
 - 52
 - 53
 - 54
 - 55



NOTES:
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 BENCHMARK "Q-481" USC&GS DISK ELEV. 19.54 FT MLLW.

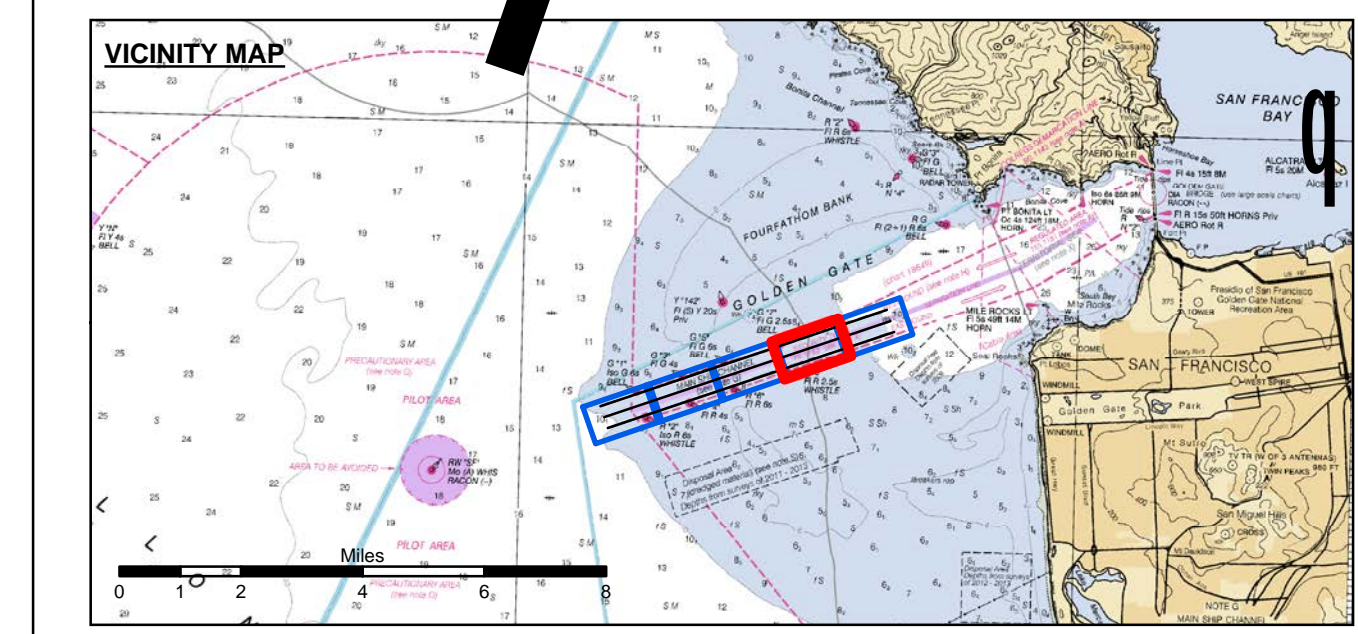
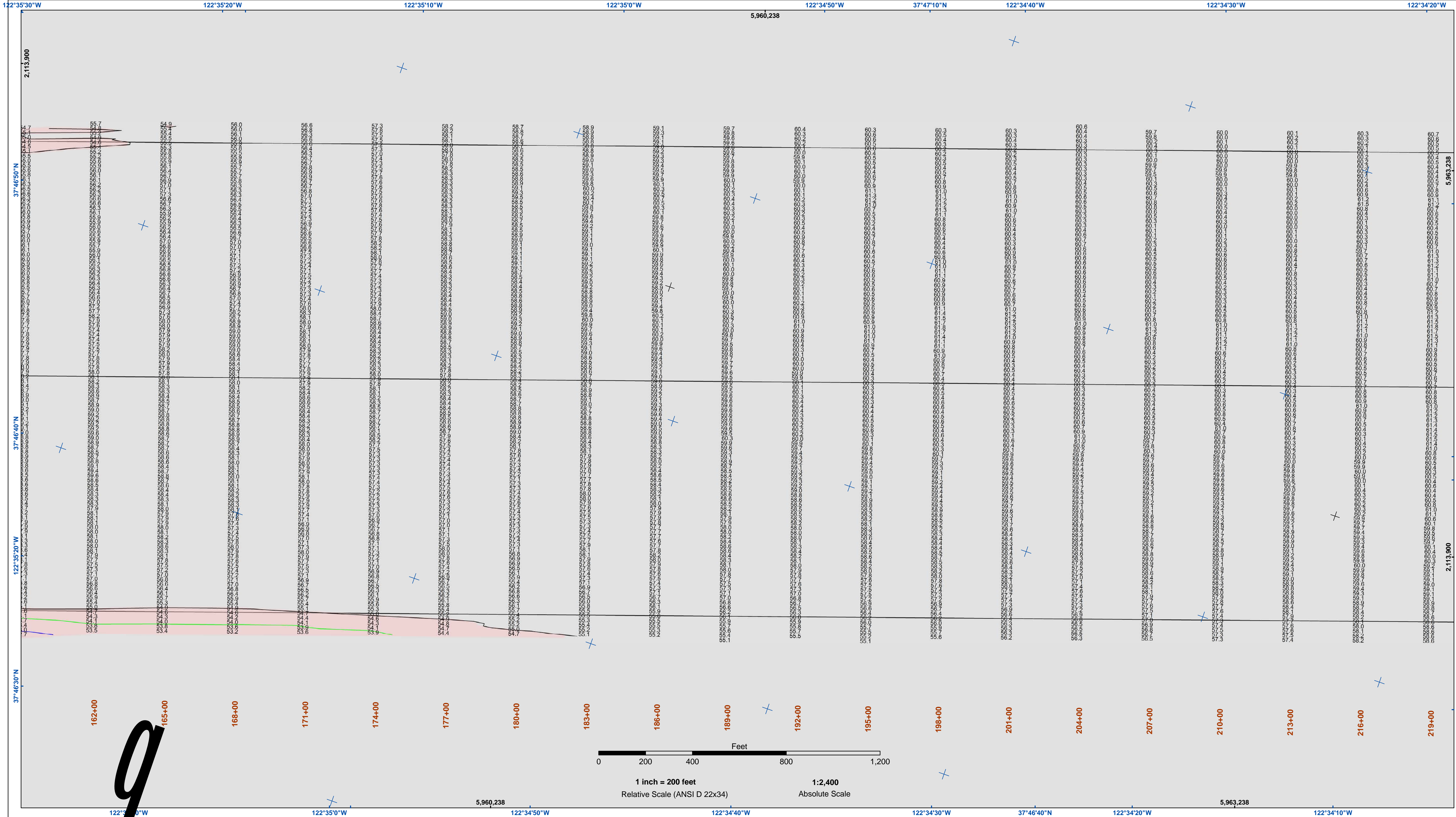
HORIZONTAL CONTROL:
 COAST GUARD D-BEACON.



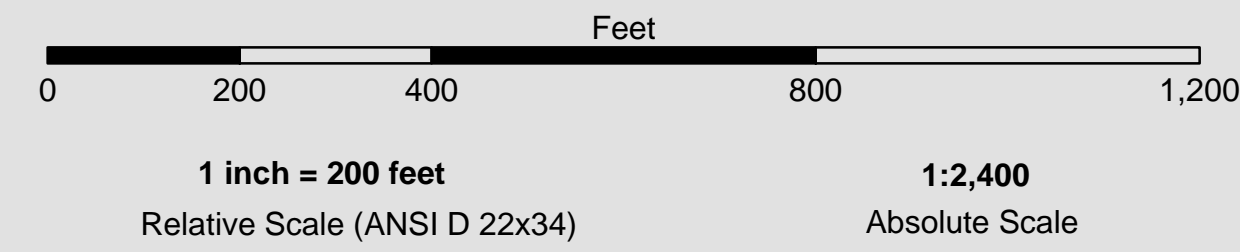
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Prepared Under the Direction of	JOHN C. MORROW	Chart Date	Mar 23, 2017
LT Colonel, C.E., District Engineer		Designed by:	
Hydro Survey Team Leader	PDT	Plotted By:	PDT
Chief, Hydro Survey Section		Checked By:	PDT
Approved:	Chief, Construction Branch	Drawn by:	PDT

CALIFORNIA
 SAN FRANCISCO BAY
SAN FRANCISCO MAINSHIP CHANNEL
 CONDITION SURVEY
 9 & 20 MARCH 2017



	Federal Navigation Channel		Beacon, General		51
	Shoaling Area		Obstruction Point		52
	Placement Area		Navigation Buoy		53
	Anchorage Area		Navigation Buoy		54
	Wreck Area		Shoalest Sounding*		55
	Submerged Wreck				
	Angle Point				



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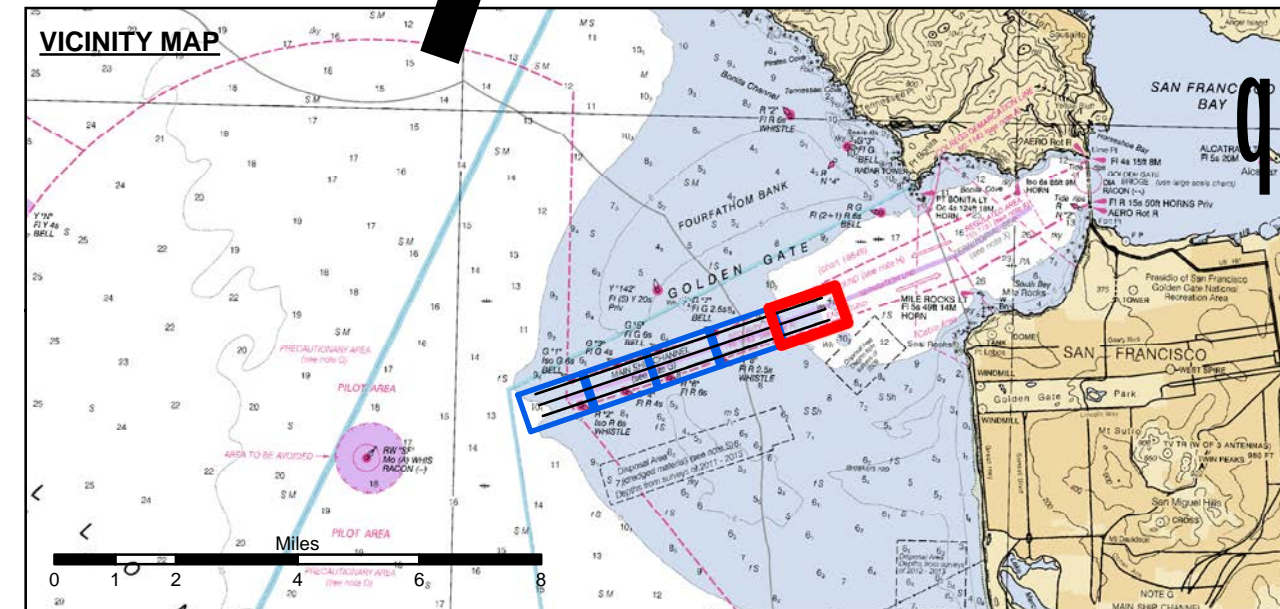
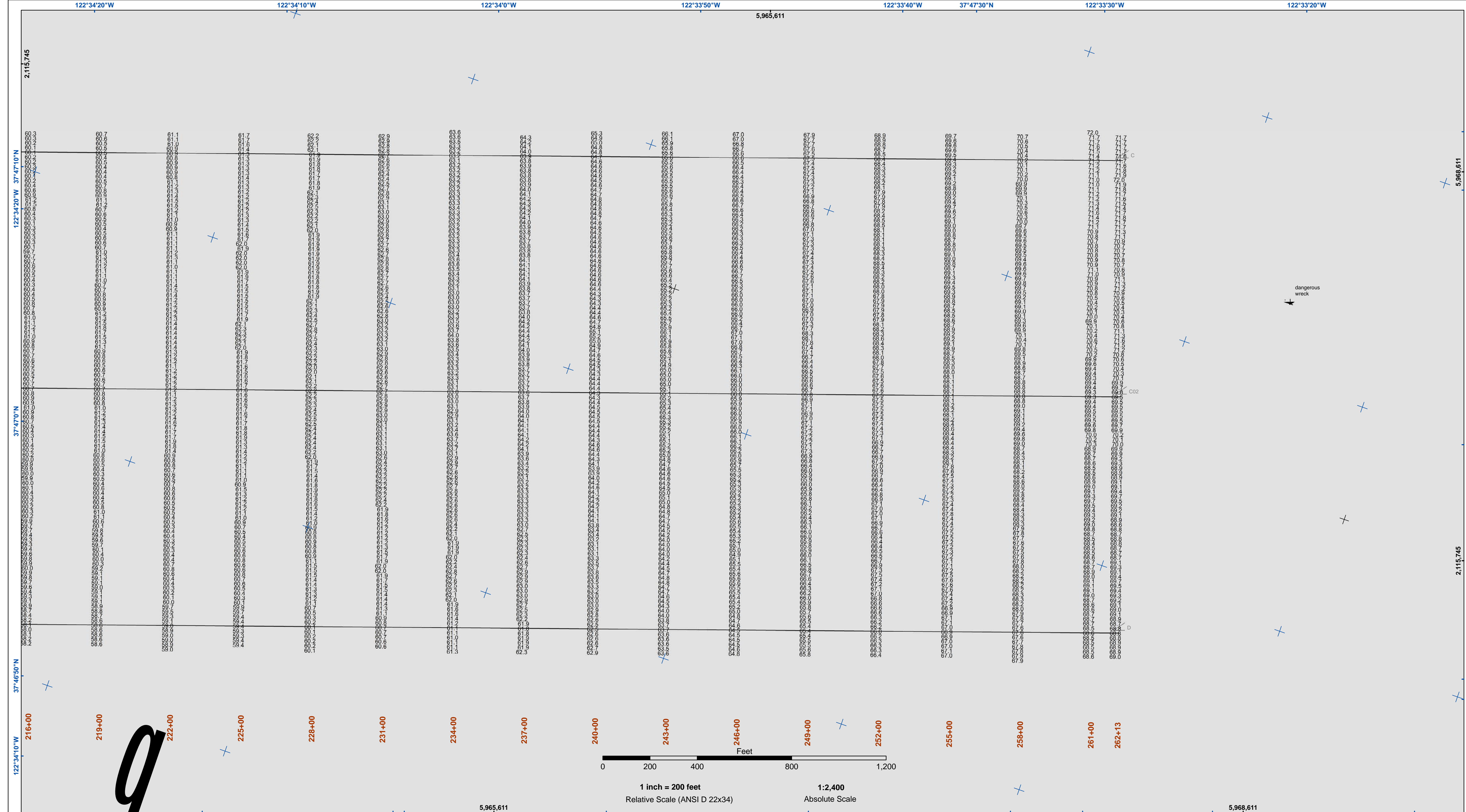
HORIZONTAL CONTROL:
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Prepared Under the Direction of JOHN C. MORROW LT. COLONEL, C.E., DISTRICT ENGINEER	Surveyed By: PDT	Chart Date: Mar 23, 2017
Subject: Hydro Survey Team Leader	Plotted By: PDT	Designed by:
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		

CALIFORNIA
SAN FRANCISCO
MAINSHIP CHANNEL
 CONDITION SURVEY
 9 & 20 MARCH 2017



- Federal Navigation Channel
- Shoaling Area
- Placement Area
- Anchorage Area
- Wreck Area
- Submerged Wreck
- Angle Point
- Beacon, General
- Obstruction Point
- Navigation Buoy
- Navigation Buoy
- Shoalest Sounding*
- Contour Lines**
- 51
- 52
- 53
- 54
- 55

NOTES:
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HORIZONTAL CONTROL:
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Prepared Under the Direction of JOHN C. MORROW LT. COLONEL, C.E., DISTRICT ENGINEER	Surveyed By: PDT	Chart Date: Mar 23, 2017
Subject: Hydro Survey Team Leader	Plotted By: PDT	Designed by:
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		

CALIFORNIA
SAN FRANCISCO MAINSHIP CHANNEL
 CONDITION SURVEY
 9 & 20 MARCH 2017

Sheet
 Reference
 Number
5 of 5