

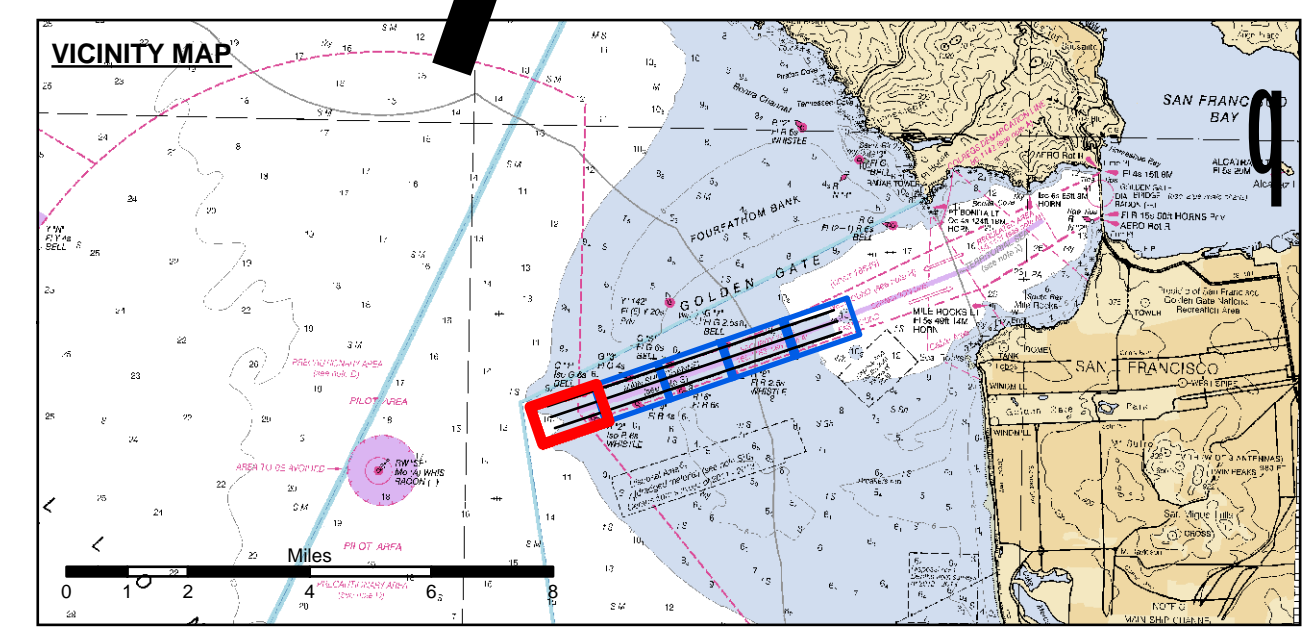
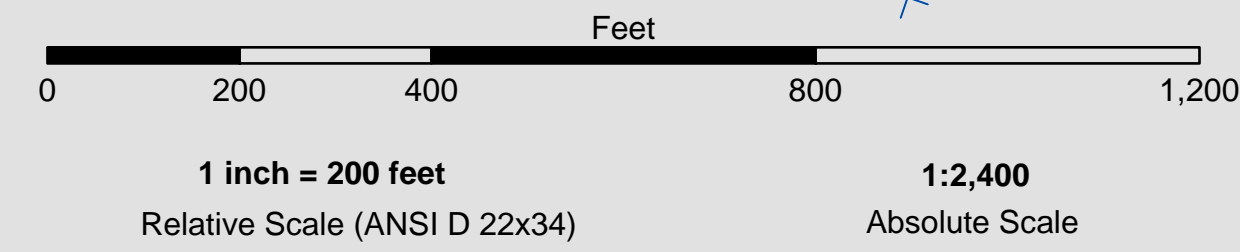
**CHANNEL ANGLE POINTS - NAD 83**

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

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



- 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:**  
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.  
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\*SHOALEST SOUNDING PER QUARTER PER REACH

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VERTICAL CONTROL:  
BENCHMARK "Q-481" US&GS DISK ELEV. 19.54 FT MLLW.  
HORIZONTAL CONTROL:  
COAST GUARD D-BEACON.



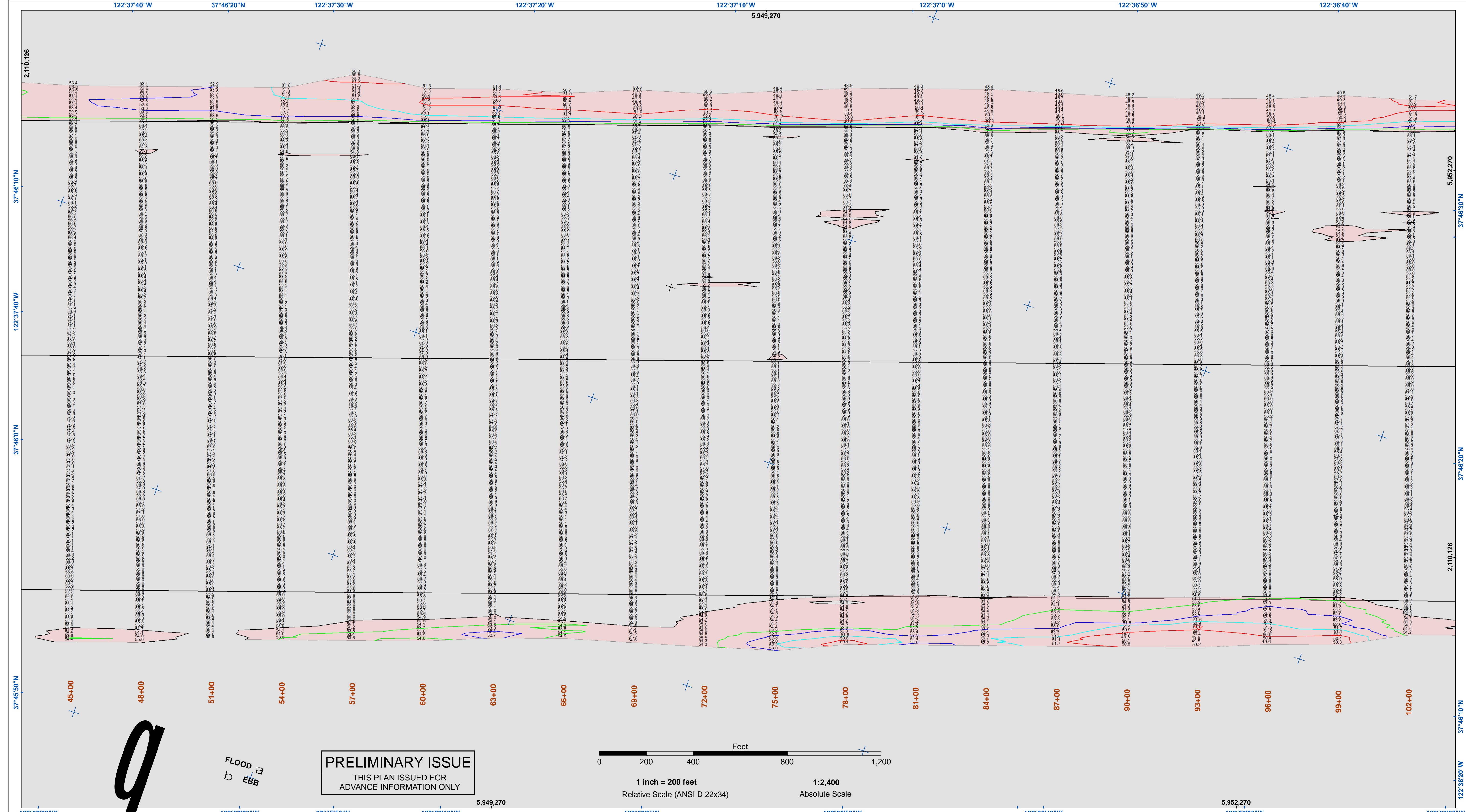
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Prepared Under the Direction of <b>JOHN C. MORROW</b> LT. COLONEL, C.E., DISTRICT ENGINEER	Surveyed By:	Chart Date:
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Jun 11, 2015
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Designed by:
Approved: Chief, Construction Branch	Drawn by: PDT	Drawn by:

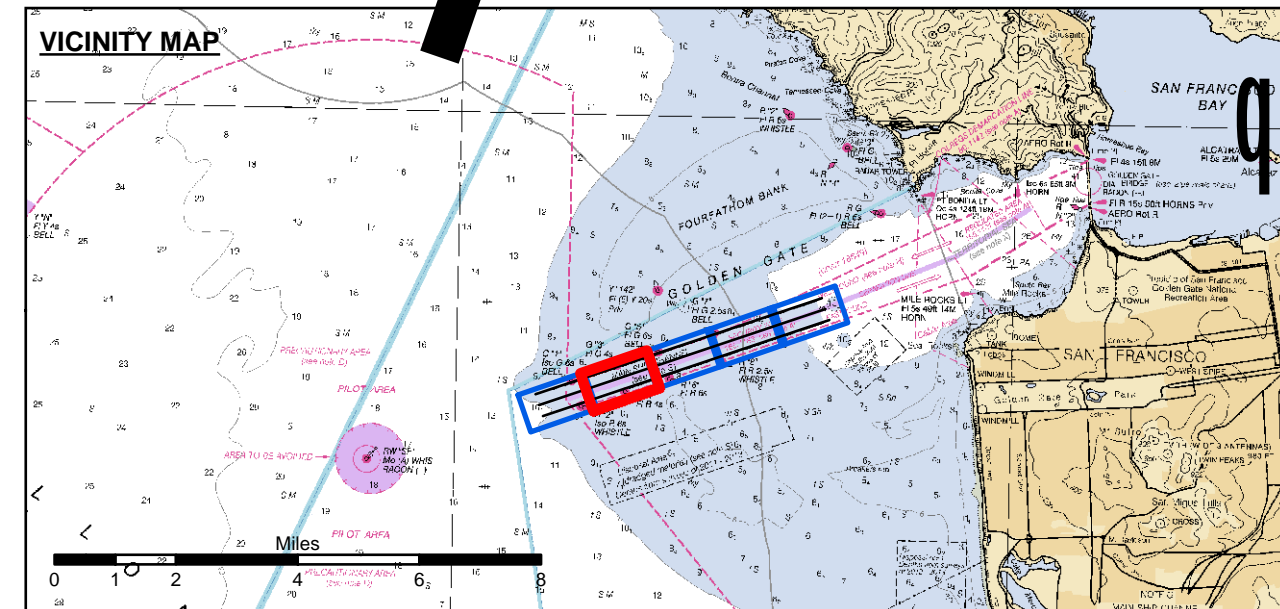
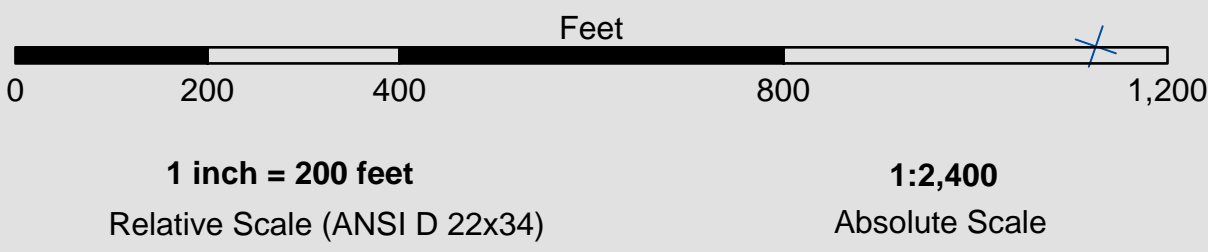
CALIFORNIA  
**SAN FRANCISCO**  
MAINSHIP CHANNEL  
POST-DREDGE SURVEY  
27 MAY 2015

**Sheet Reference Number**  
1 of 5





**PRELIMINARY ISSUE**  
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 ADVANCE INFORMATION ONLY



	Federal Navigation Channel		Beacon, General	<b>Contour Lines</b>		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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 VERTICAL CONTROL:  
 BENCHMARK "Q-481" USCGS 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	Jun 11, 2015
Submitted by	Hydro Survey Team Leader	Surveyed By	PDT
Recommended by	Chief, Hydro Survey Section	Plotted By	PDT
Approved by	Chief, Construction Branch	Checked By	PDT
		Drawn by	PDT

**SAN FRANCISCO BAY**  
**CALIFORNIA**  
**SAN FRANCISCO MAINSHIP CHANNEL**  
**POST-DREDGE SURVEY**  
**27 MAY 2015**

**Sheet Reference Number**  
**2 of 5**





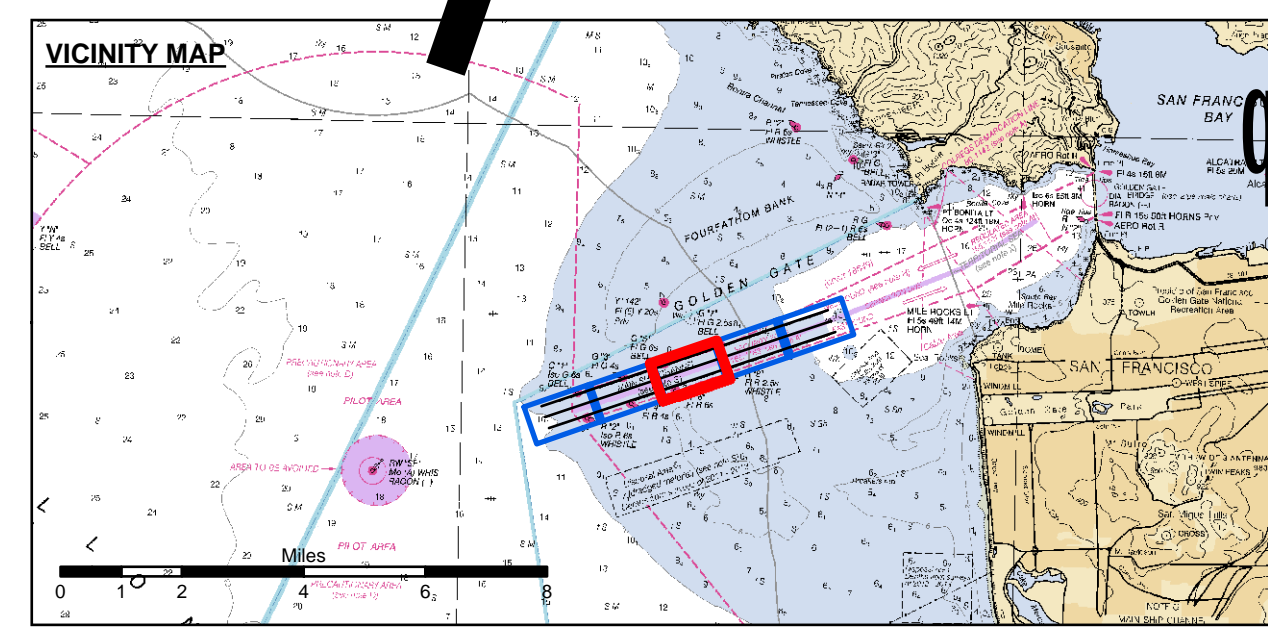
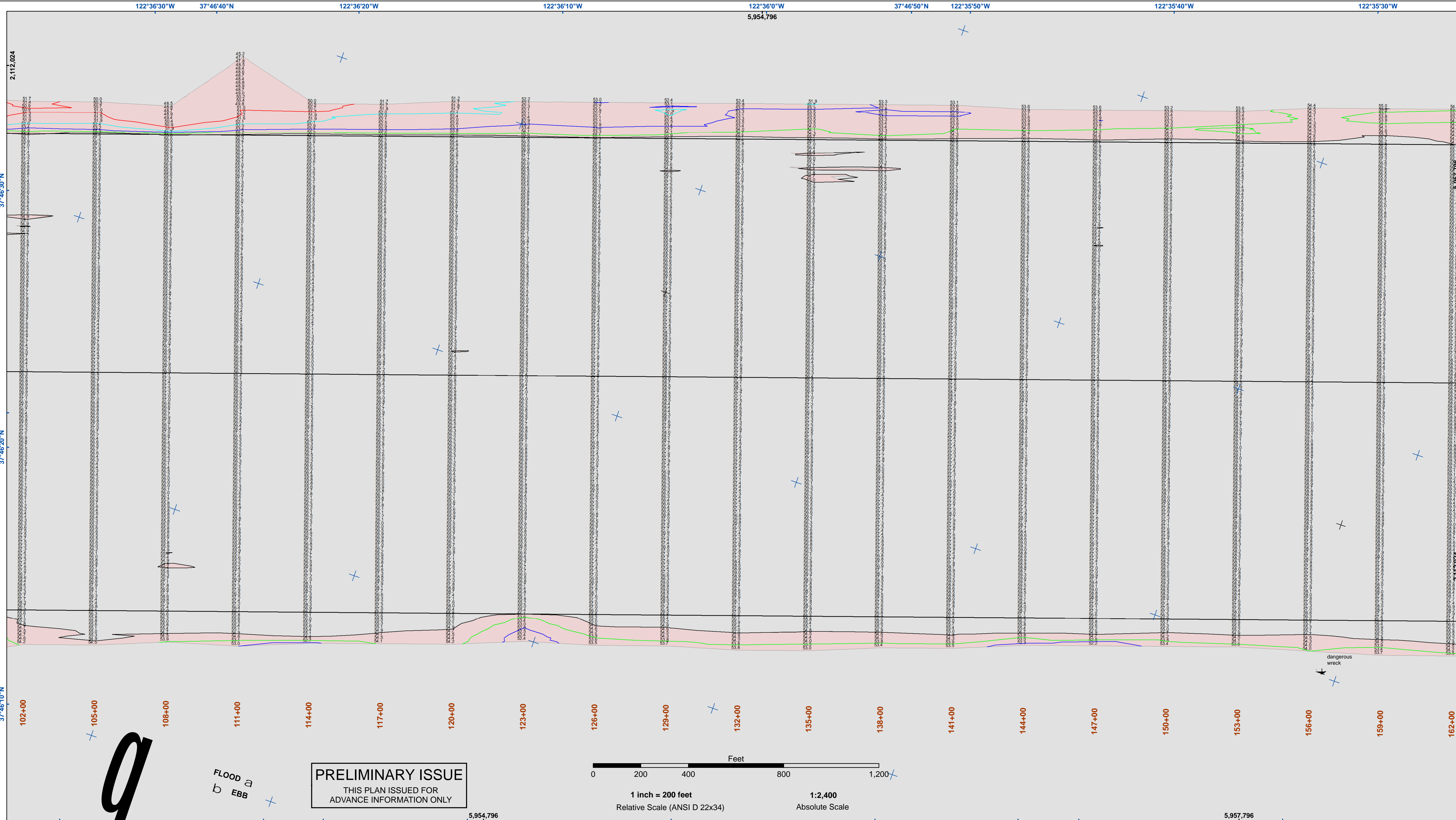
US Army Corps of Engineers  
San Francisco District  
1455 Market Street  
San Francisco, CA 94103

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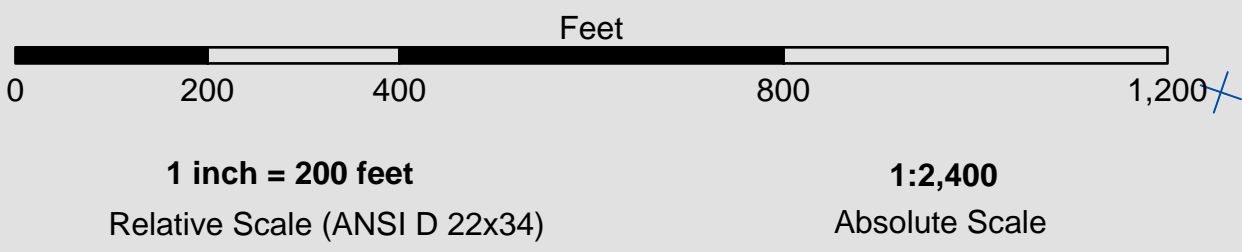
Prepared Under the Direction of <b>JOHN C. MORROW</b> LT. COLONEL, C.E., DISTRICT ENGINEER	Surveyed By:	Chart Date:
Submitted by: Hydro Survey Team Leader	Plotted By:	Jun 11, 2015
Recommended by: Chief, Hydro Survey Section	Checked By:	Designed by:
Approved by: Chief, Construction Branch	PDT	PDT
		Drawn by:
		PDT

CALIFORNIA  
SAN FRANCISCO BAY  
**SAN FRANCISCO MAINSHIP CHANNEL POST-DREDGE SURVEY**  
27 MAY 2015

Sheet  
Reference  
Number  
**3 of 5**



**PRELIMINARY ISSUE**  
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- |                            |                    |                      |
|----------------------------|--------------------|----------------------|
| Federal Navigation Channel | Beacon, General    | <b>Contour Lines</b> |
| Shoaling Area              | Obstruction Point  |                      |
| Placement Area             | Navigation Buoy    |                      |
| Anchorage Area             | Navigation Buoy    |                      |
| Wreck Area                 | Shoalest Sounding* |                      |
| Submerged Wreck            |                    | 51                   |
| Angle Point                |                    | 52                   |
|                            |                    | 53                   |
|                            |                    | 54                   |
|                            |                    | 55                   |

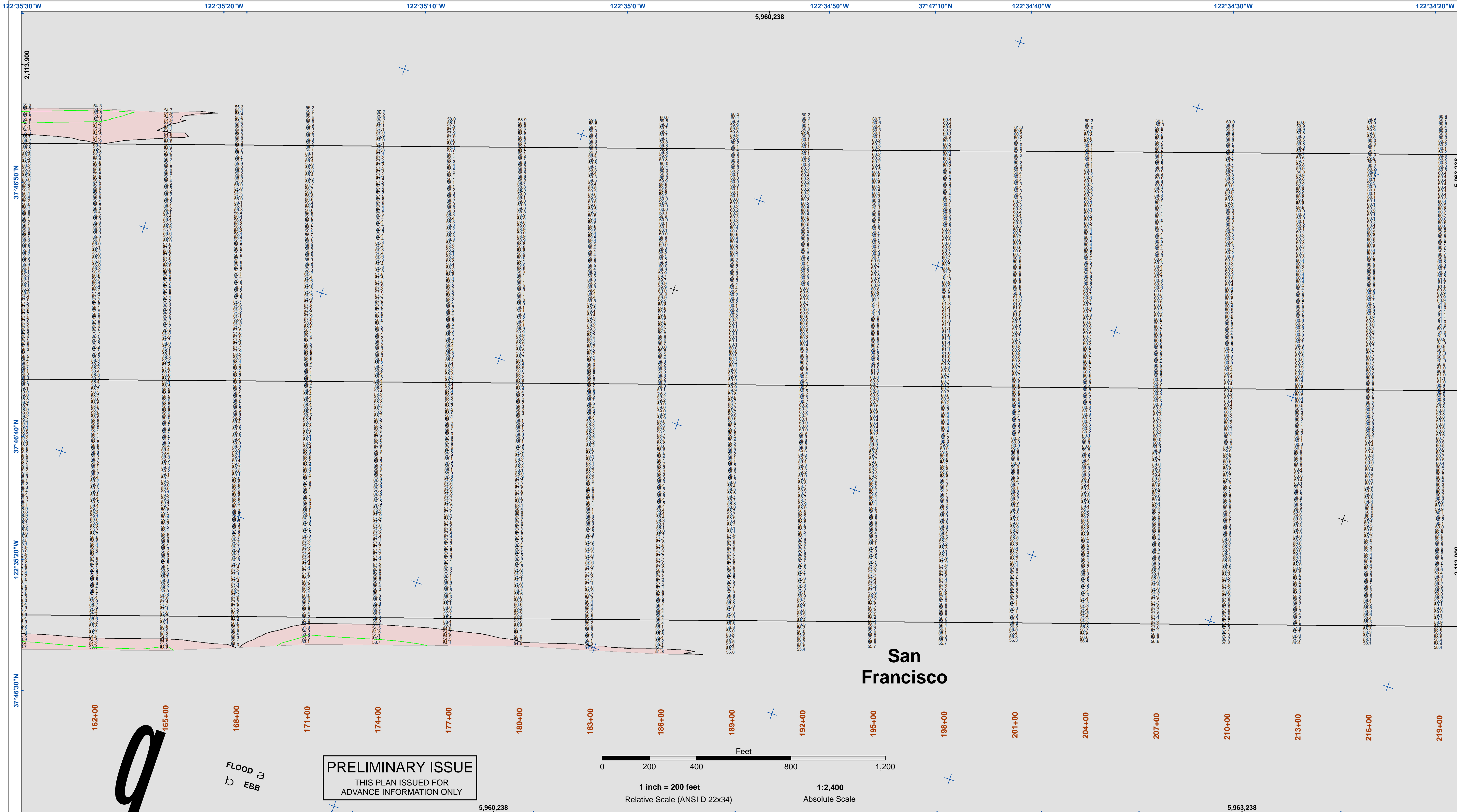
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VERTICAL CONTROL:  
BENCHMARK "Q-481" USC&GS DISK ELEV. 19.54 FT MLLW.  
HORIZONTAL CONTROL:  
COAST GUARD D-BEACON.

**9**

FLOOD a  
EBB b

dangerous wreck



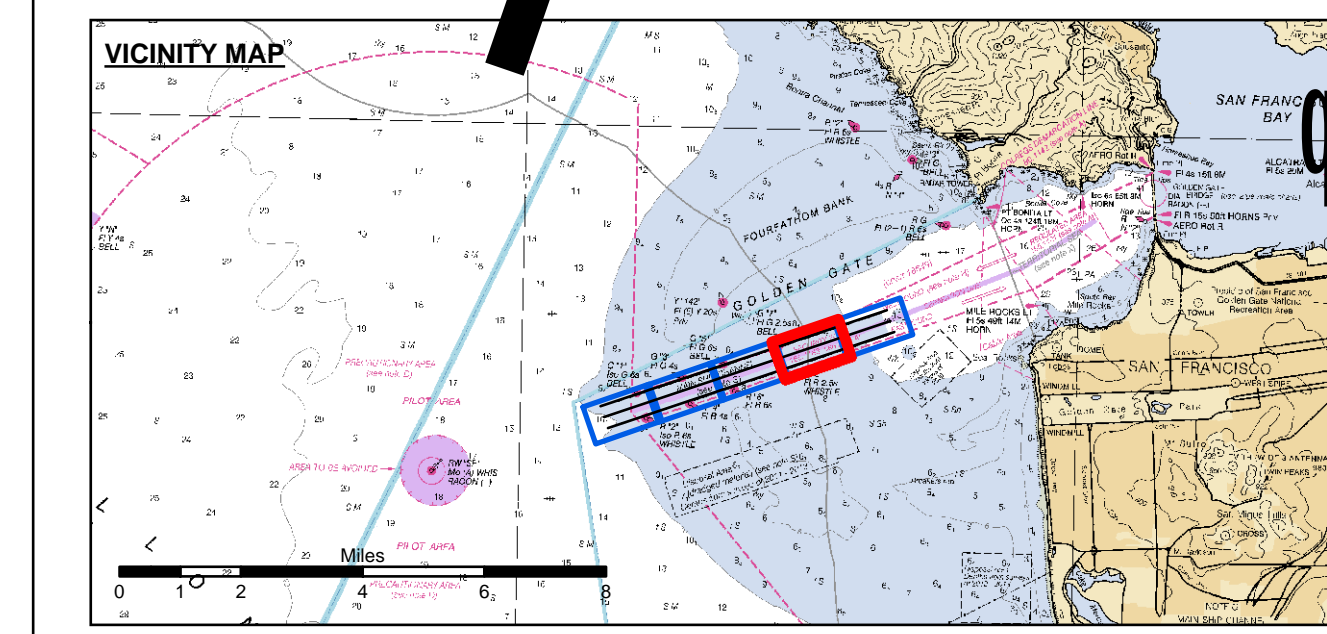


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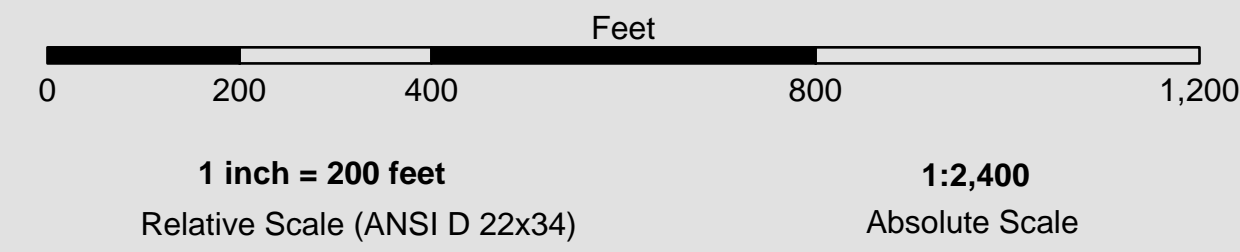
Prepared Under the Direction of <b>JOHN C. MORROW</b> LT. COLONEL, C.E., DISTRICT ENGINEER	Surveyed By: PDT	Chart Date: Jun 11, 2015
Submitted by: Hydro Survey Team Leader	Plotted By: PDT	Designed by: PDT
Recommended by: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved by: Chief, Construction Branch		

CALIFORNIA  
**SAN FRANCISCO**  
**MAINSHIP CHANNEL**  
**POST-DREDGE SURVEY**  
 27 MAY 2015

**Sheet Reference Number**  
**4 of 5**



**PRELIMINARY ISSUE**  
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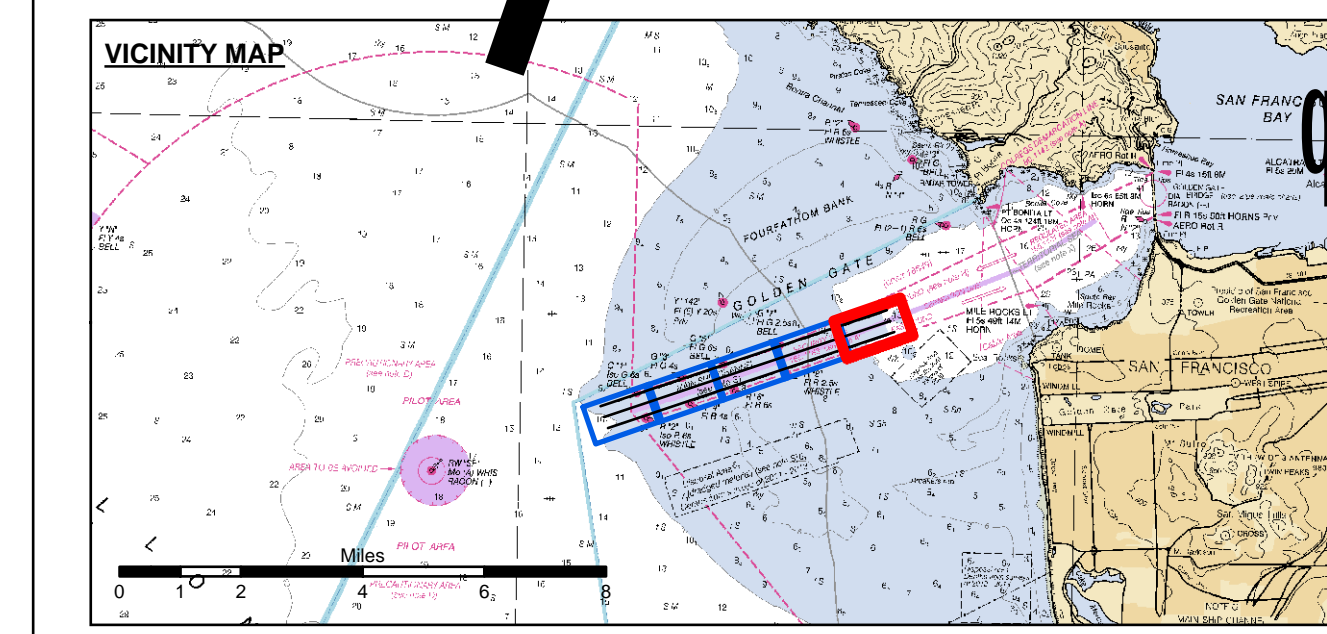
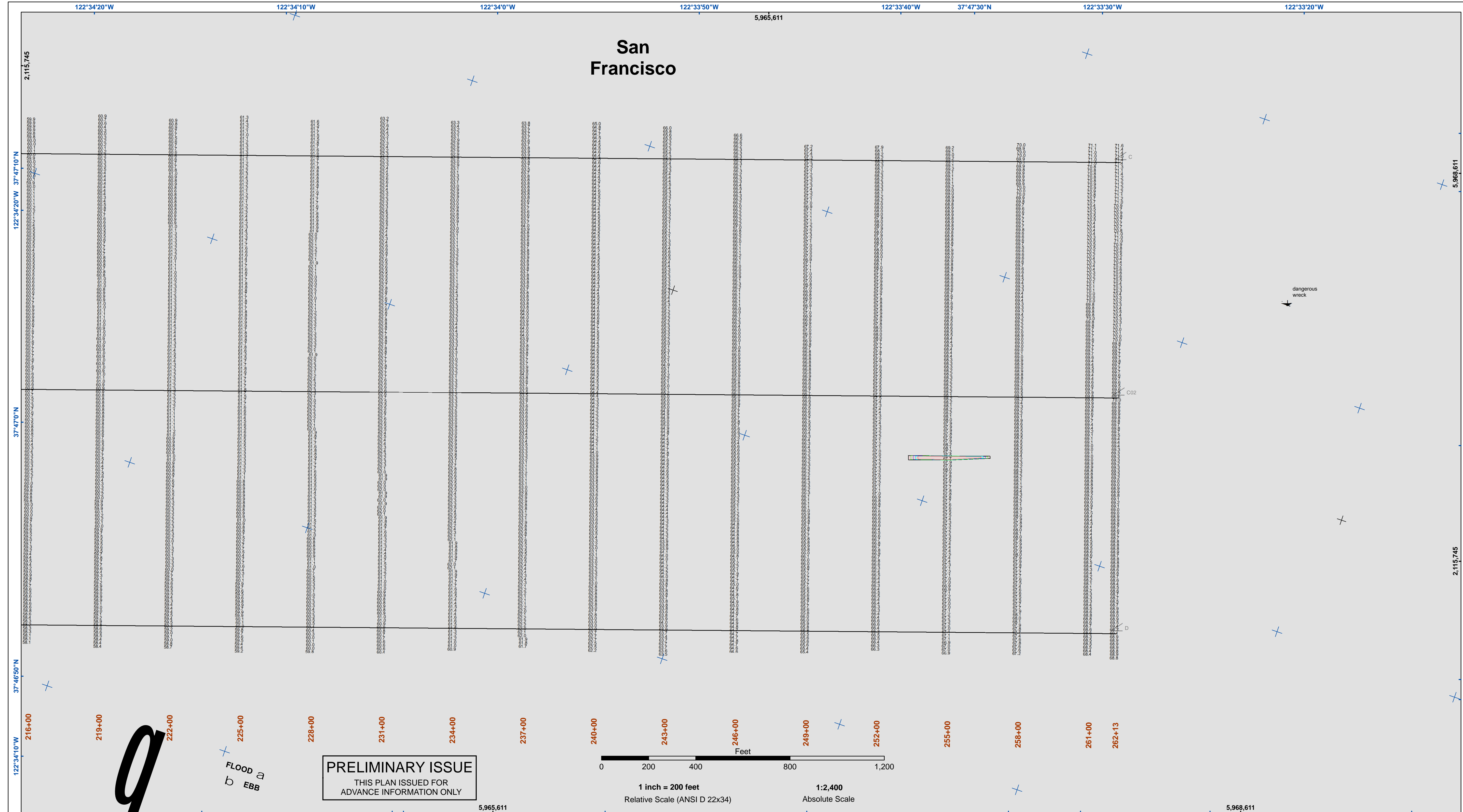


- |                            |                    |                      |
|----------------------------|--------------------|----------------------|
| Federal Navigation Channel | Beacon, General    | <b>Contour Lines</b> |
| Shoaling Area              | Obstruction Point  | 51                   |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

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 HORIZONTAL CONTROL:  
 COAST GUARD D-BEACON.





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- |  |                            |  |                    |                      |    |
|--|----------------------------|--|--------------------|----------------------|----|
|  | Federal Navigation Channel |  | Beacon, General    | <b>Contour Lines</b> |    |
|  | Shoaling Area              |  | Obstruction Point  |                      | 51 |
|  | Placement Area             |  | Navigation Buoy    |                      | 52 |
|  | Anchorage Area             |  | Navigation Buoy    |                      | 53 |
|  | Wreck Area                 |  | Navigation Buoy    |                      | 54 |
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Prepared Under the Direction of <b>JOHN C. MORROW</b> LT. COLONEL, C.E., DISTRICT ENGINEER	Surveyed By:	Chart Date:
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Jun 11, 2015
Recommended: Chief, Hydro Survey Station	Checked By: PDT	Designed by: PDT
Approved: Chief, Construction Branch	Drawn by: PDT	

CALIFORNIA  
**SAN FRANCISCO**  
MAINSHIP CHANNEL  
POST-DREDGE SURVEY  
27 MAY 2015

Sheet  
Reference  
Number  
**5 of 5**