



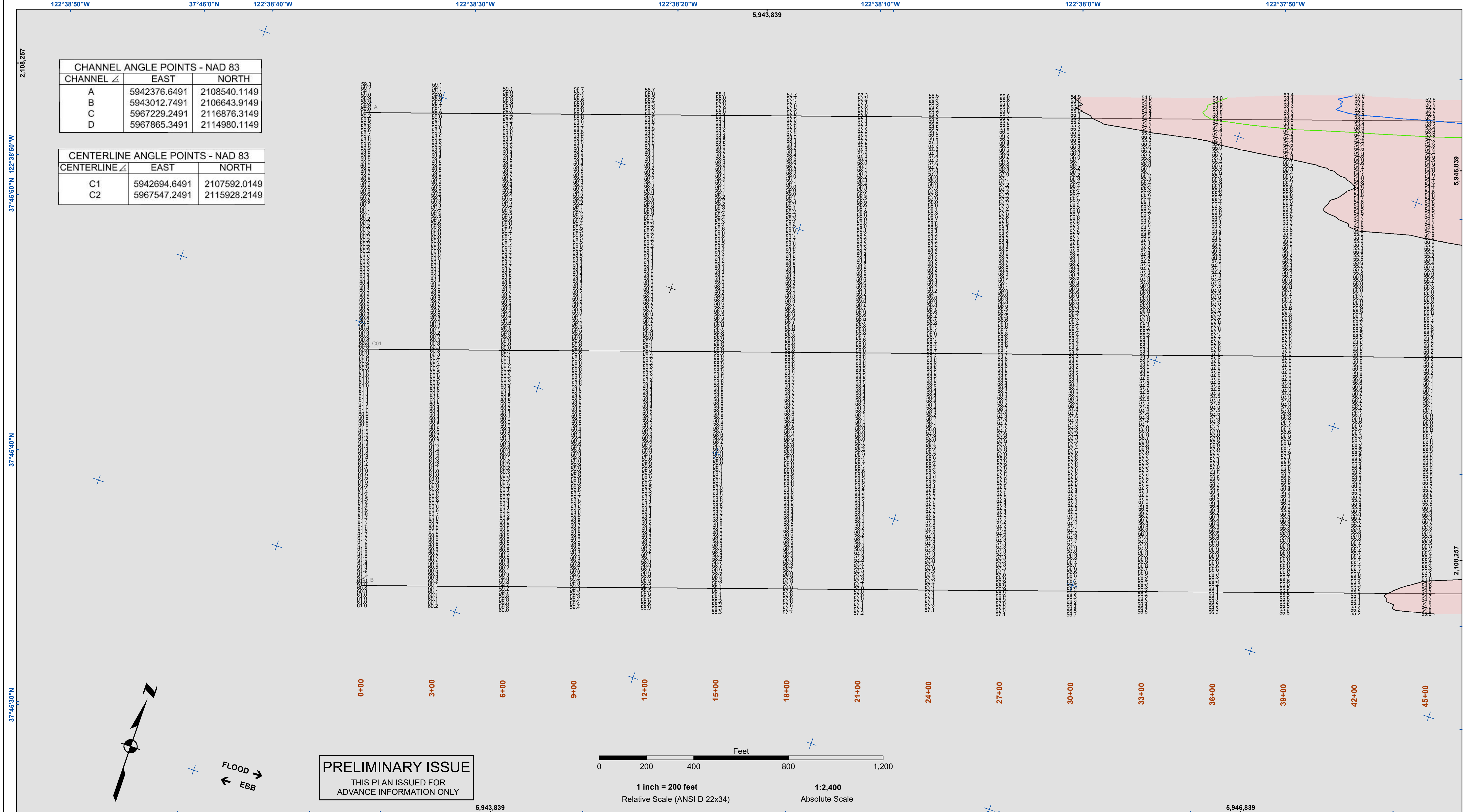
US Army Corps of Engineers  
San Francisco District  
1455 Market Street  
San Francisco, CA 94103

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Prepared Under the Direction of <b>TRAVIS J. RAYFIELD</b> LT Colonel, C.E., District Engineer	Chart Date: Apr 26, 2018
Submittal: Hydro Survey Team Leader	Designed by: PDT
Recommendation: Chief, Hydro Survey Section	Checked by: PDT
Approval: Chief, Construction Branch	Drawn by: PDT

SAN FRANCISCO BAY  
SAN FRANCISCO  
MAINSHIP CHANNEL  
CONDITION SURVEY  
05 APRIL 2018

Sheet  
Reference  
Number  
**1 of 5**

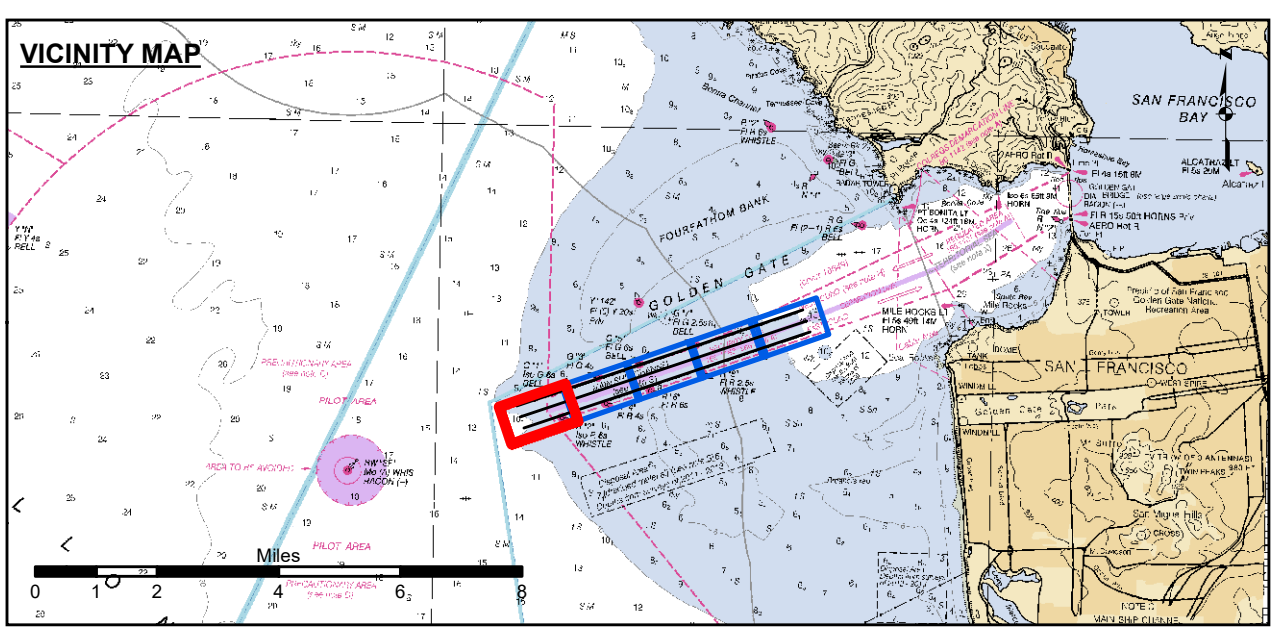


**CHANNEL ANGLE POINTS - NAD 83**

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

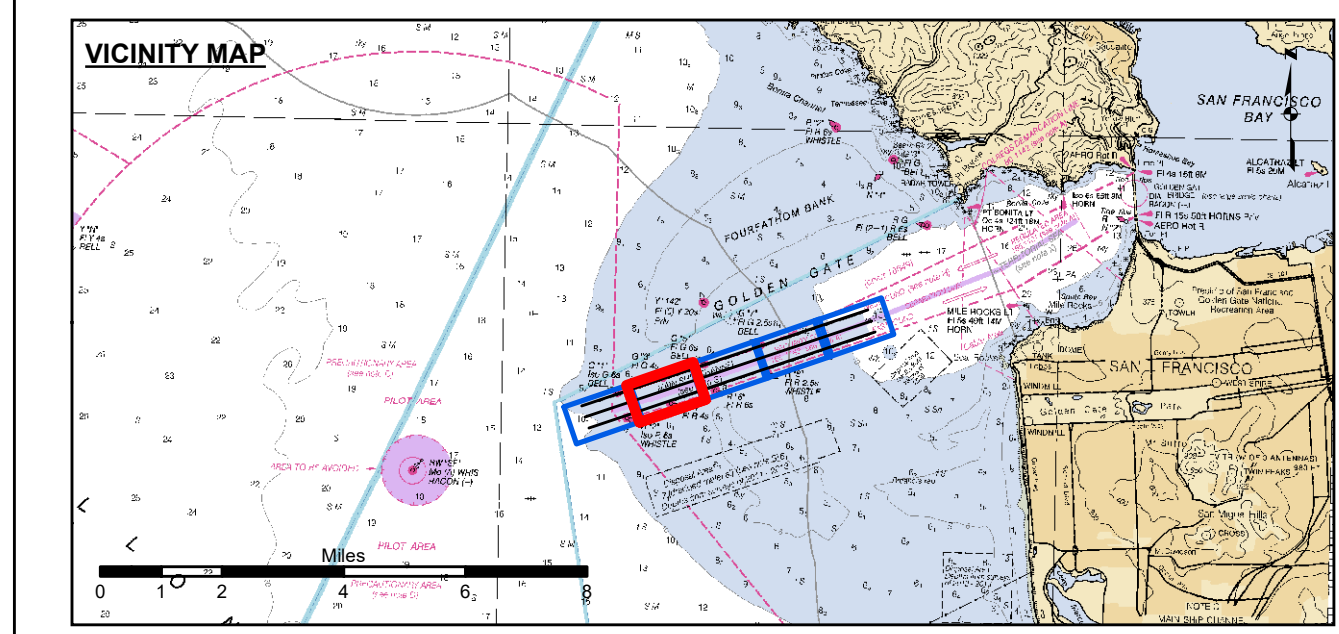
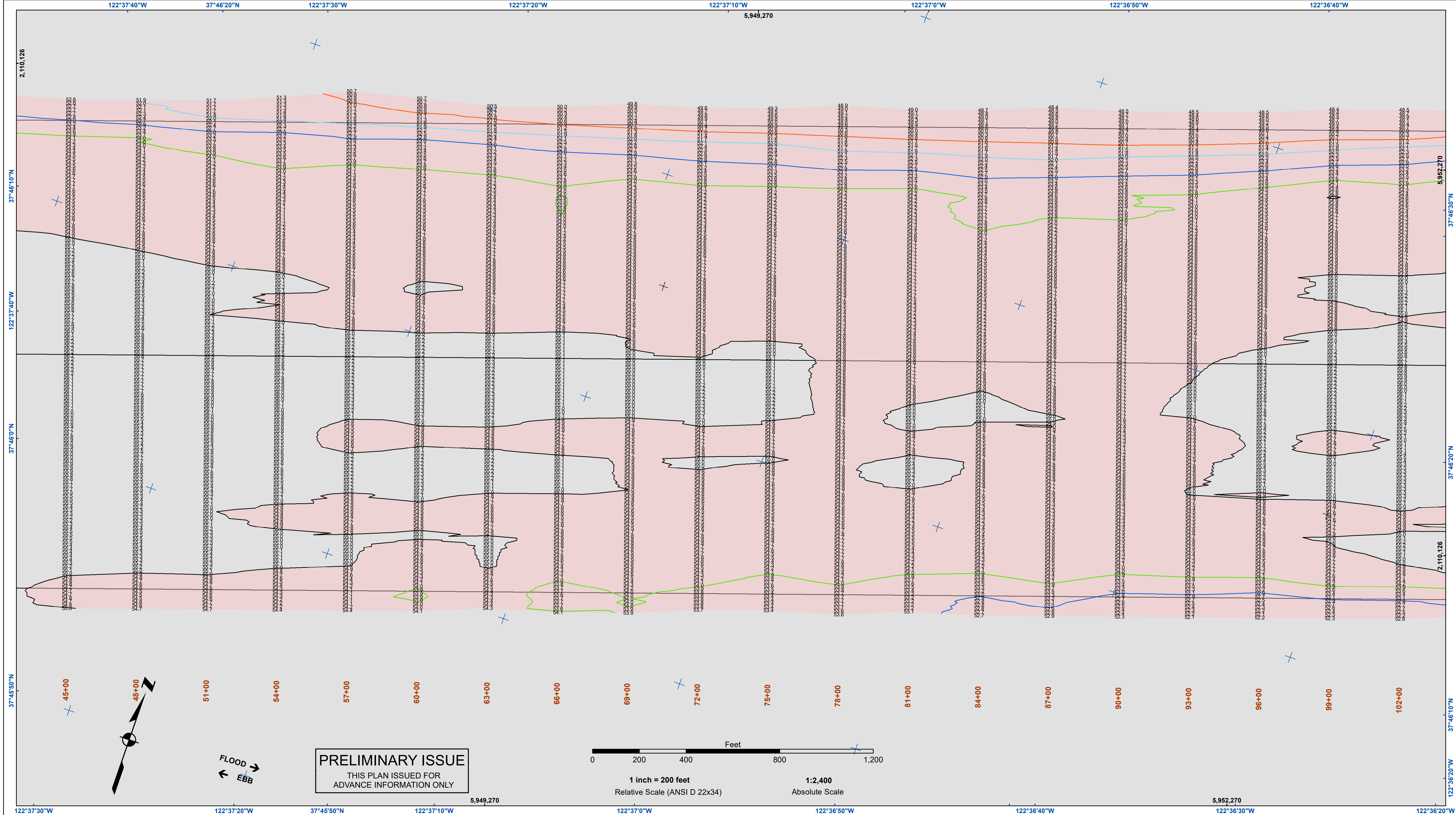


- Federal Navigation Channel
- Shoaling Area
- Placement Area
- Anchorage Area
- Wreck Area
- Submerged Wreck
- Angle Point
- Beacon, General
- Obstruction Point
- Navigation Buoy
- Navigation Buoy
- Shoalest Sounding\*
- Contour Lines**
- 51
- 52
- 53
- 54
- 55

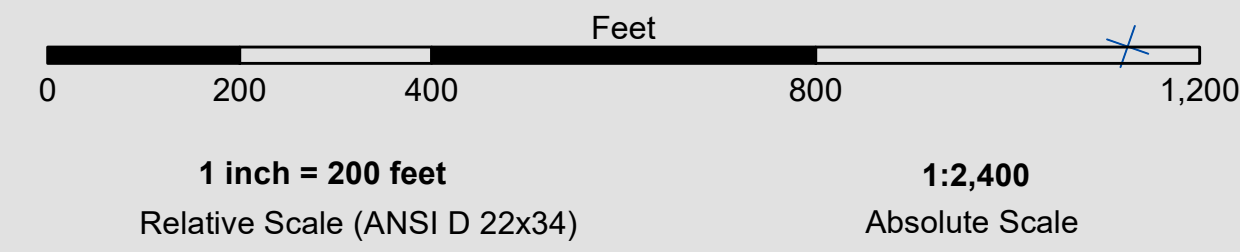
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VERTICAL CONTROL:  
BENCHMARK "Q-481" USCGS DISK ELEV. 19.54 FT MLLW.  
HORIZONTAL CONTROL:  
COAST GUARD D-BEACON.





**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            |  |                    |                      |
|  | Angle Point                |  |                    |                      |

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Prepared Under the Direction of <b>LT COLONEL C.E. DISTRICT ENGINEER</b>	Surveyed By: PDT	Chart Date: Apr 26, 2018
Submitted: Hydro Survey Team Leader	Plotted By: PDT	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		

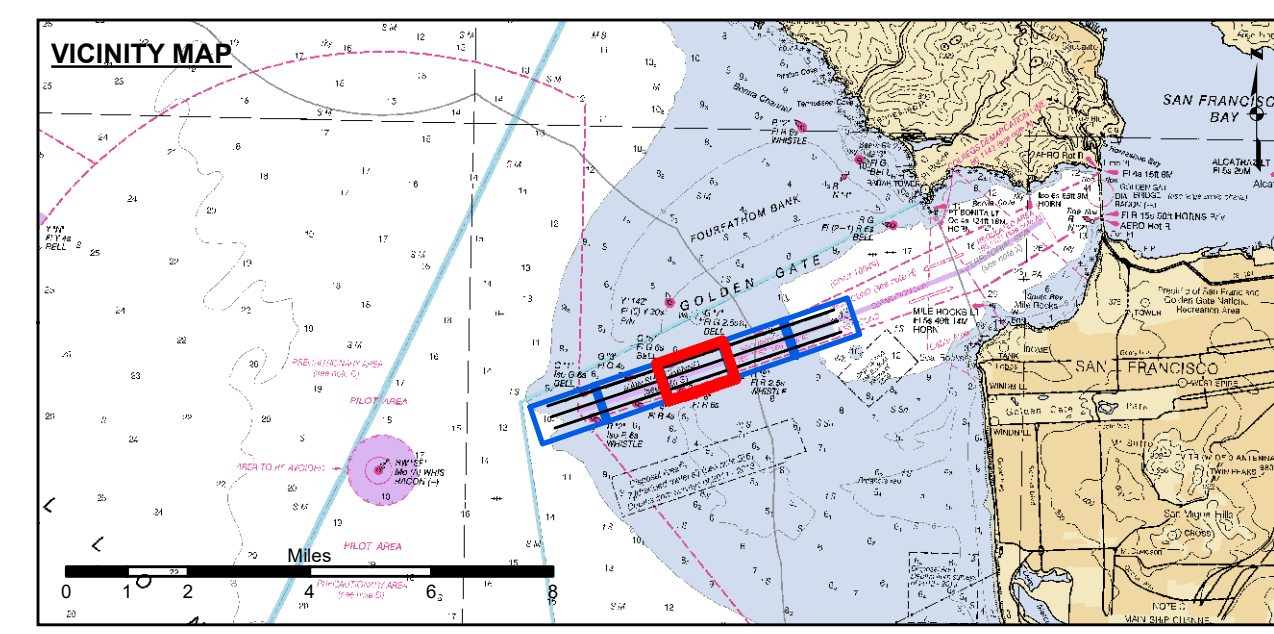
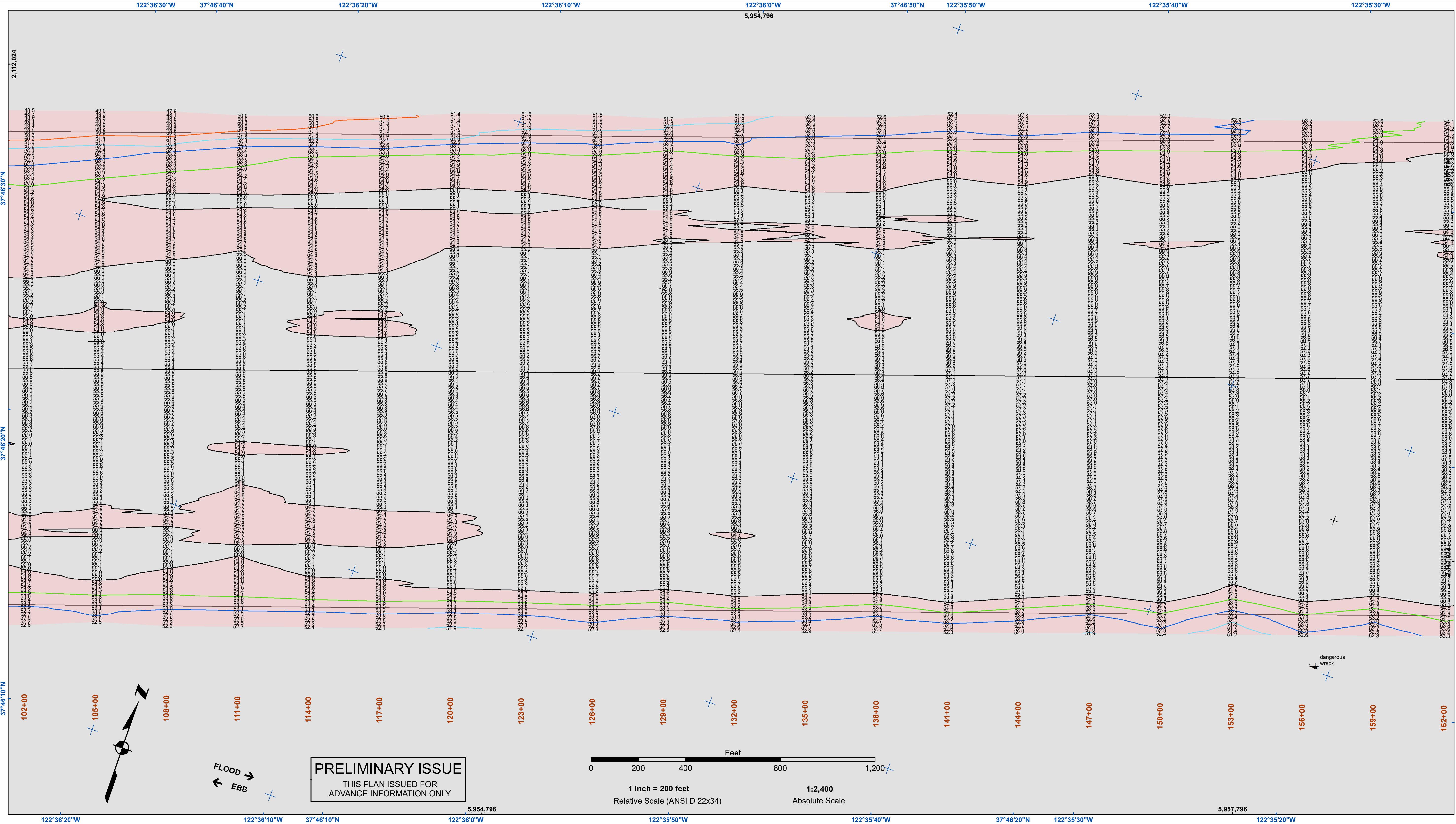
**SAN FRANCISCO BAY**  
**SAN FRANCISCO**  
**MAINSHIP CHANNEL**  
**CONDITION SURVEY**  
05 APRIL 2018

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**2 of 5**

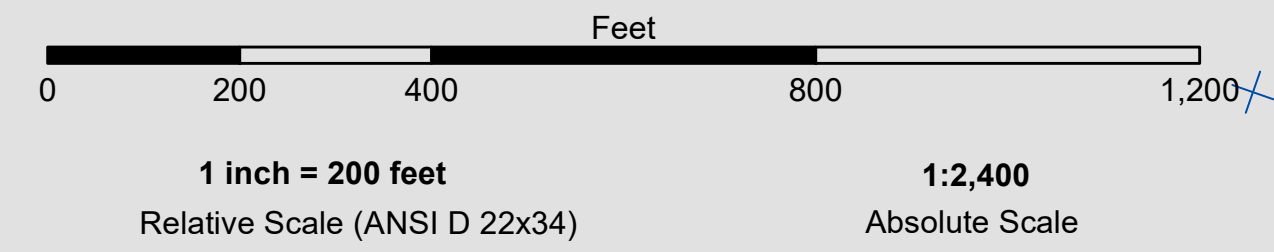




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|  | Federal Navigation Channel |  | Beacon, General    | <b>Contour Lines</b> |
|  | Shoaling Area              |  | Obstruction Point  |                      |
|  | Placement Area             |  | Navigation Buoy    |                      |
|  | Anchorage Area             |  | Navigation Buoy    |                      |
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|  | Submerged Wreck            |  |                    |                      |
|  | Angle Point                |  |                    |                      |

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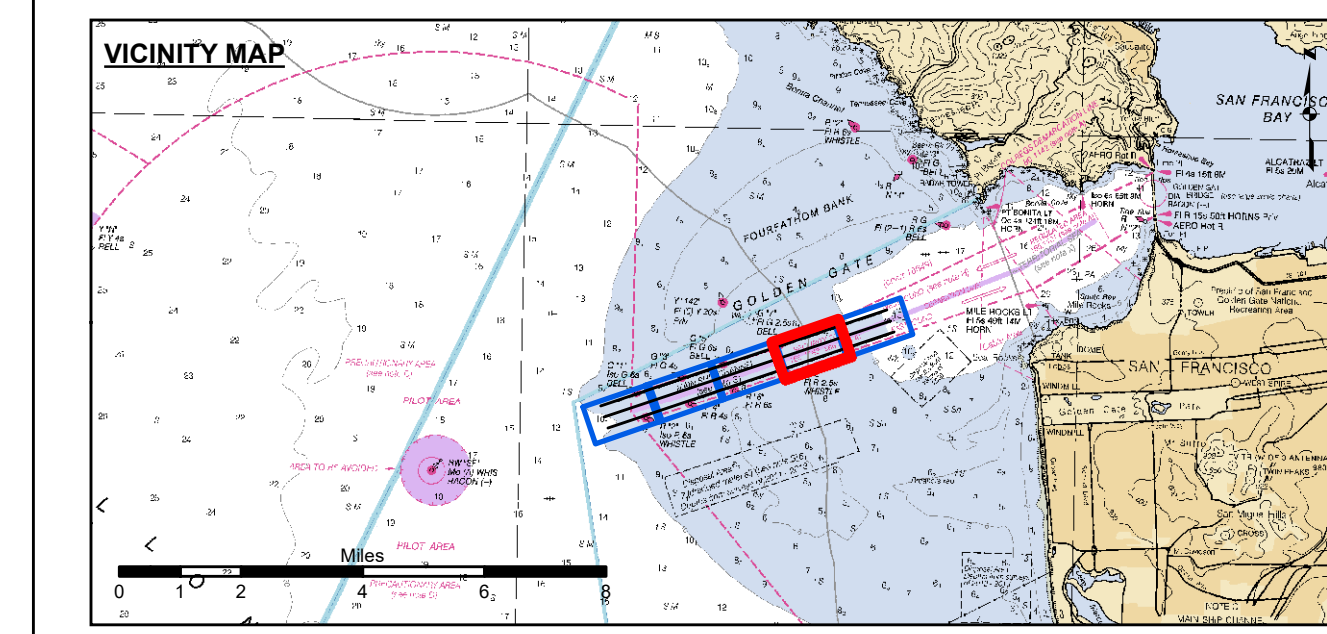
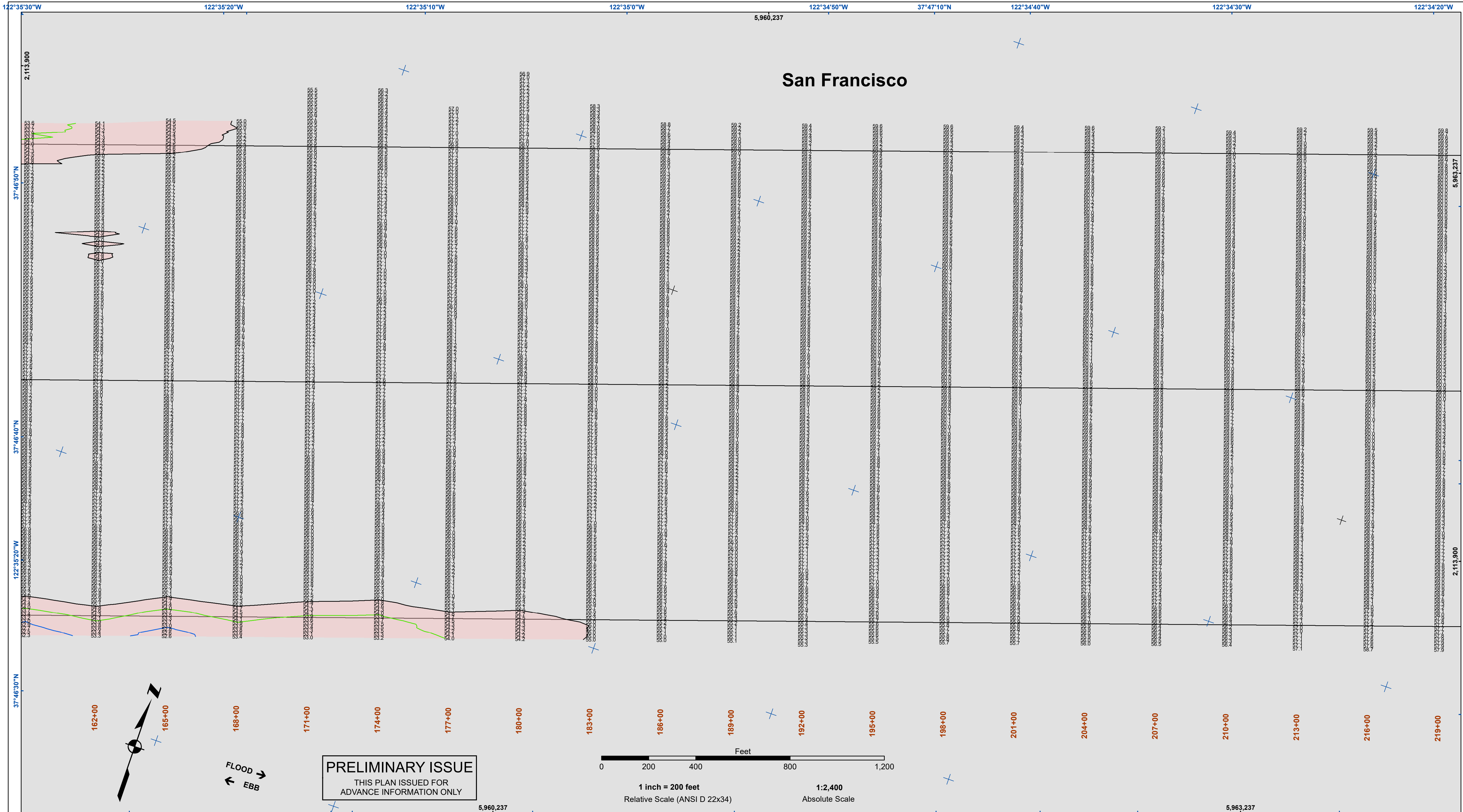
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Prepared Under the Direction of	Surveyed By:	Chart Date:
LT COLONEL C.E. DISTRICT ENGINEER	Plotted By:	Apr 26, 2018
Hydro Survey Team Leader	PDT	Designed by:
Chief, Hydro Survey Section	PDT	Drawn by:
Aggret:	PDT	PDT
Chief, Construction Branch		

SAN FRANCISCO BAY  
 SAN FRANCISCO  
 MAINSHIP CHANNEL  
 CONDITION SURVEY  
 05 APRIL 2018

Sheet  
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 Number  
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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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**SAN FRANCISCO BAY**  
**SAN FRANCISCO**  
**MAINSHIP CHANNEL**  
 CONDITION SURVEY  
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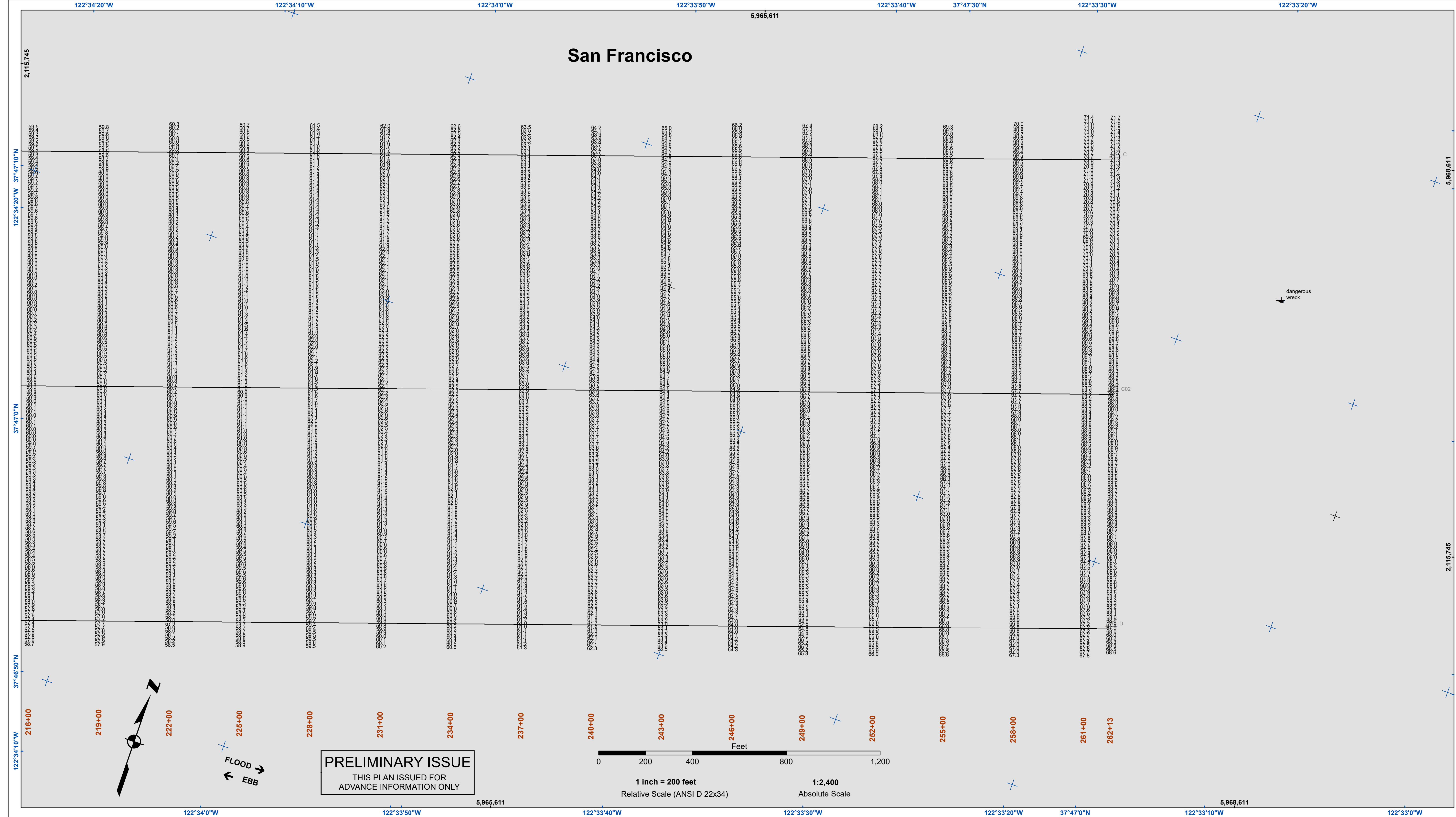


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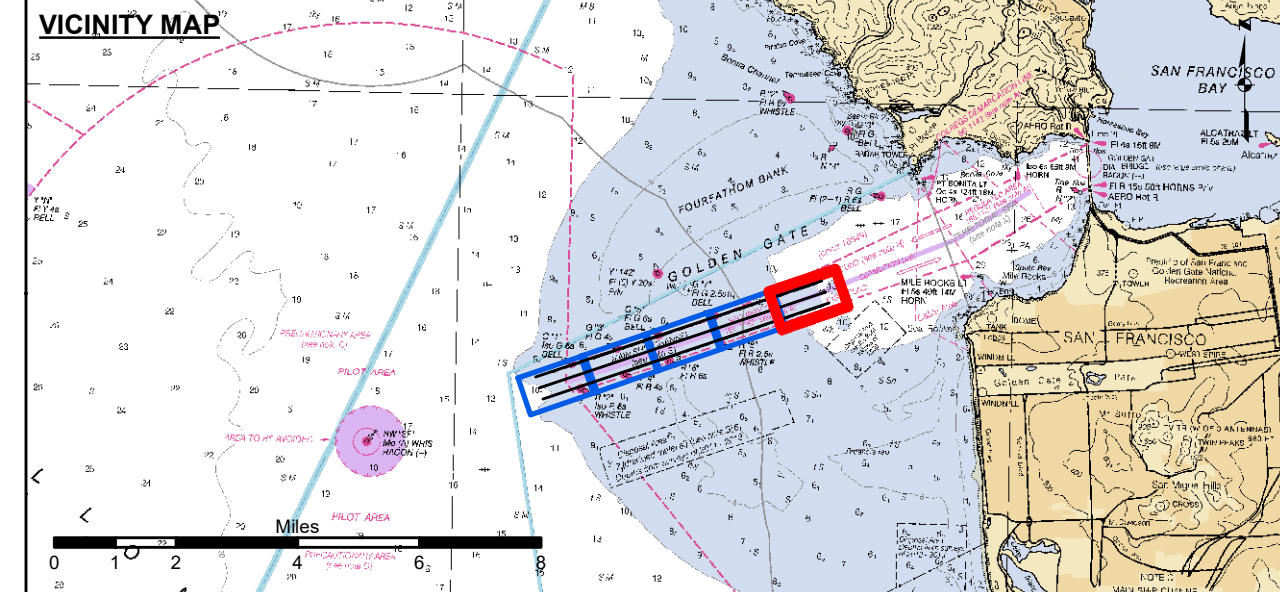
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- Federal Navigation Channel
- Shoaling Area
- Placement Area
- Anchorage Area
- Wreck Area
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