

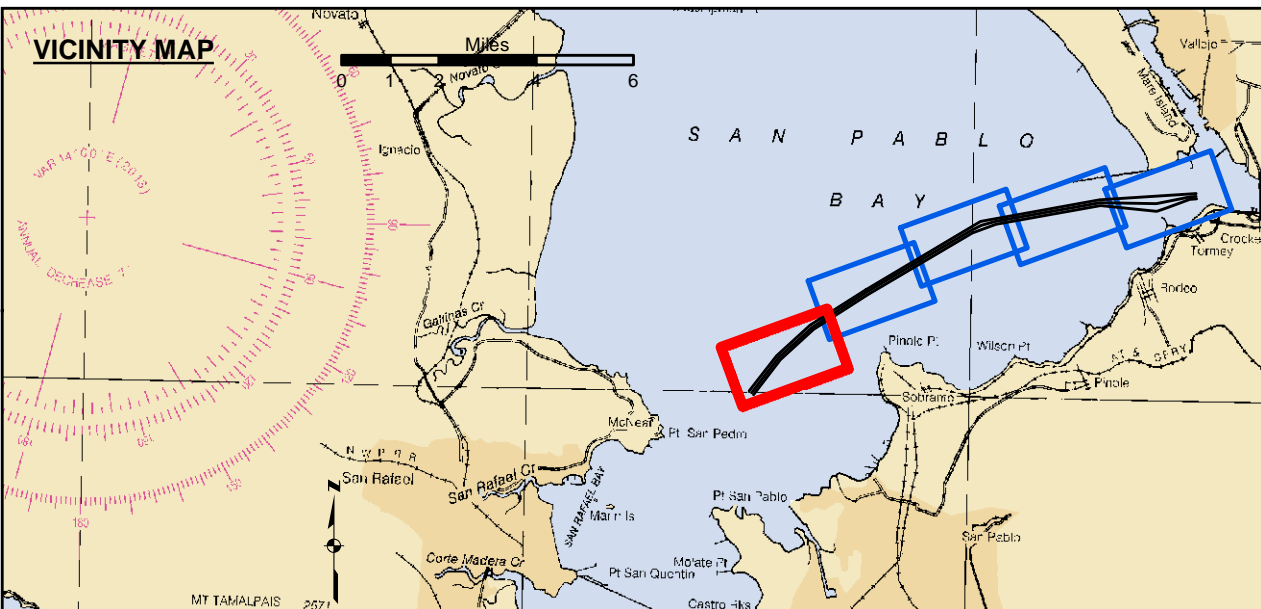
**US Army Corps of Engineers**  
 San Francisco District  
 450 Golden Gate Ave.  
 San Francisco, CA 94102

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|  |                          |
|--|--------------------------|
| Prepared Under the Direction of<br><b>LT COLONEL C.E. RAYFIELD</b> | Chart Date: Feb 28, 2019 |
| Submittal: Hydro Survey Team Leader                                | Designed by: PDT         |
| Recommendation: Chief, Hydro Survey Section                        | Floted By: PDT           |
| Approval: Chief, Construction Branch                               | Checked By: PDT          |
|  | Drawn by: PDT            |

CALIFORNIA  
**PINOLE SHOALS**  
 CONDITION SURVEY  
 6-7, 12 & 21 FEBRUARY 2019

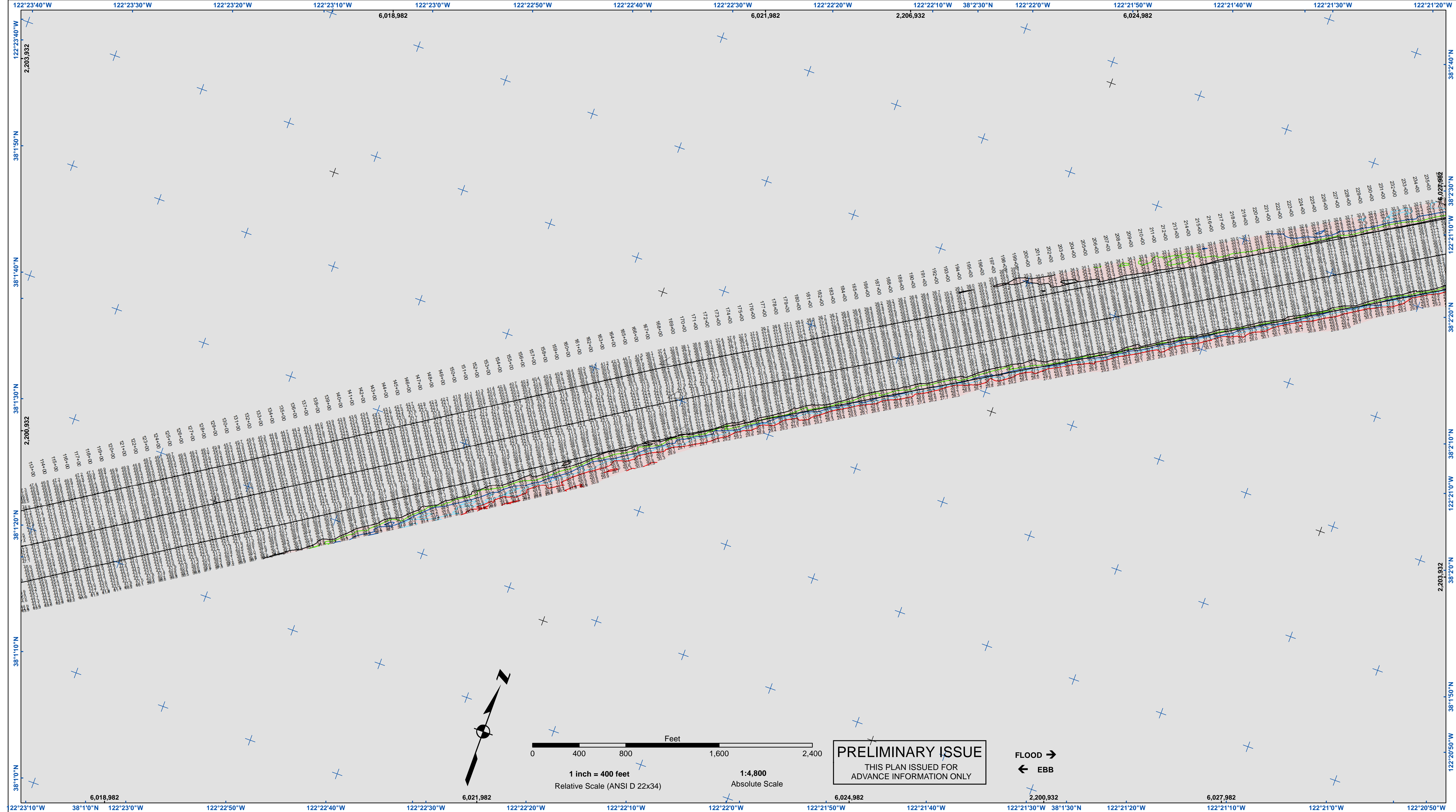
**Sheet Reference Number**  
 1 of 5



- 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\*
- Contours**
- 35
- 34
- 33
- 32
- 31

**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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 BASE MAPS ARE USDA NAIP 2010.  
 \*SHOALEST SOUNDING PER QUARTER PER REACH

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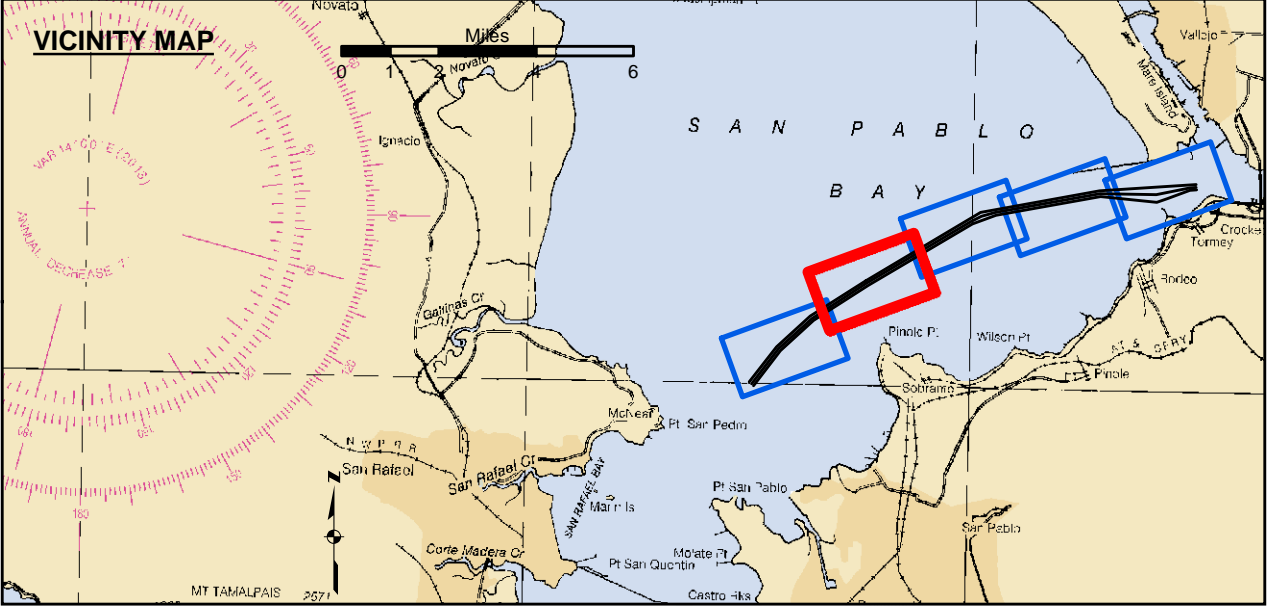


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|              |                    |
|--------------|--------------------|
| Chart Date:  | Feb 28, 2019       |
| Surveyed By: | Travis J. Rayfield |
| Plotted By:  | PDT                |
| Checked By:  | PDT                |
| Drawn By:    | PDT                |

CALIFORNIA  
**PINOLE SHOALS**  
 CONDITION SURVEY  
 6-7, 12 & 21 FEBRUARY 2019

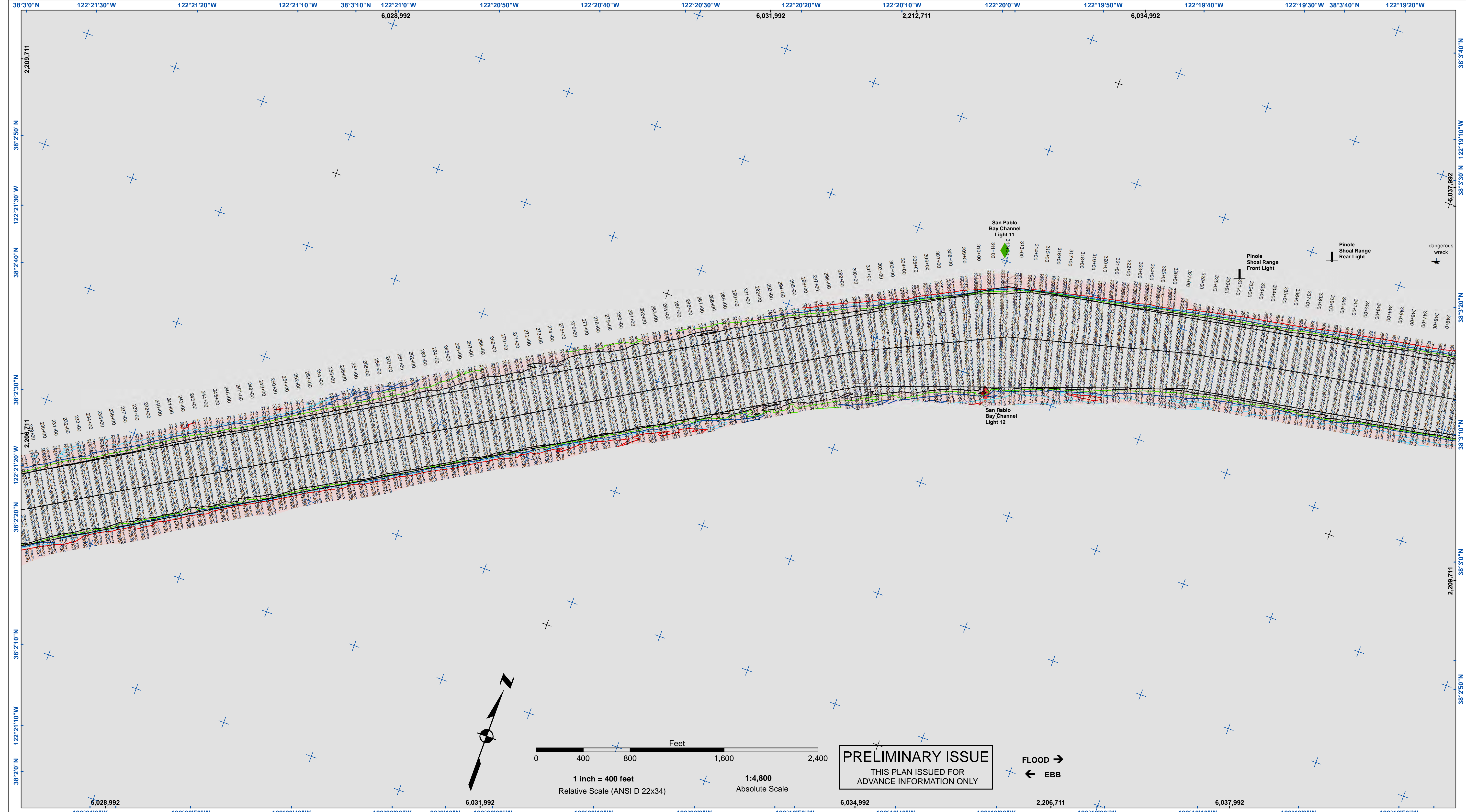


- Federal Navigation Channel
- Shoaling Area
- Placement Area
- Anchorage Area
- Wreck Area
- Submerged Wreck
- Angle Point
- Beacon, General
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- Navigation Buoy
- Navigation Buoy
- Shoalest Sounding\*
- Countours
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 HORIZONTAL GPS CONTROL:  
 COAST GUARD D-BEACON  
 VERTICAL CONTROL:  
 BENCHMARK '5058 C' (1976) USC&GS DISK, ELEV. 34.75 MLLW,  
 TIDE GAUGE LOCATED AT POINT PINOLE PIER  
 BENCHMARK '5218 L' (1976) USC&GS DISK, ELEV. 11.00 MLLW,  
 TIDE GAUGE LOCATED AT MARE ISLAND PIER 35.

**Sheet Reference Number**  
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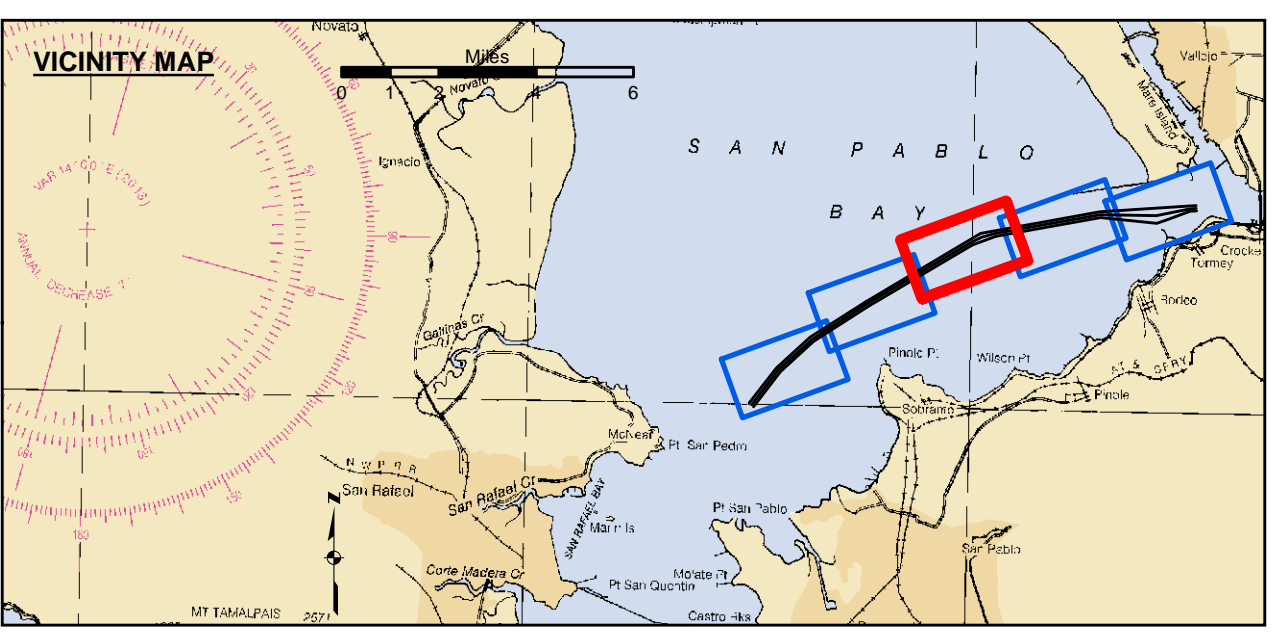
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| Prepared Under the Direction of<br><b>TRAVIS J. RAYFIELD</b><br>LT COLONEL, C.E., DISTRICT ENGINEER | Chart Date: Feb 28, 2019 |
| Submittal: Hydro Survey Team Leader   | Designed by: PDT         |
| Recommendation: Chief, Hydro Survey Section   | Plotted By: PDT          |
| Approved: Chief, Construction Branch  | Checked By: PDT          |
|   | Drawn by: PDT            |

CALIFORNIA  
**PINOLE SHOALS**  
 CONDITION SURVEY  
 6-7, 12 & 21 FEBRUARY 2019  
 SAN PABLO BAY

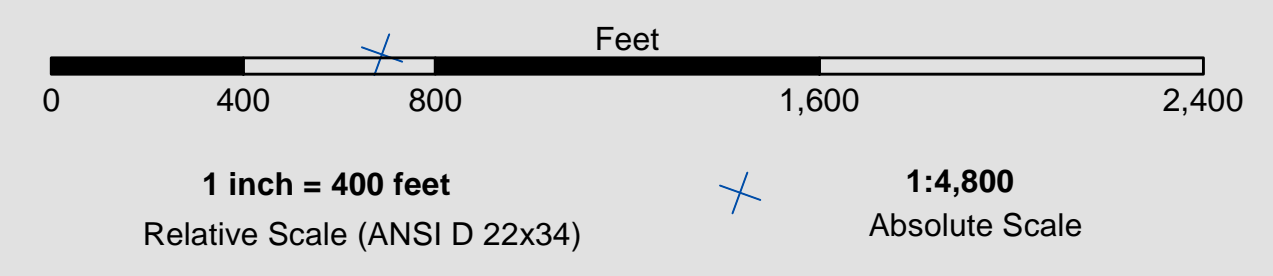
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- Federal Navigation Channel
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- Shoalest Sounding\*
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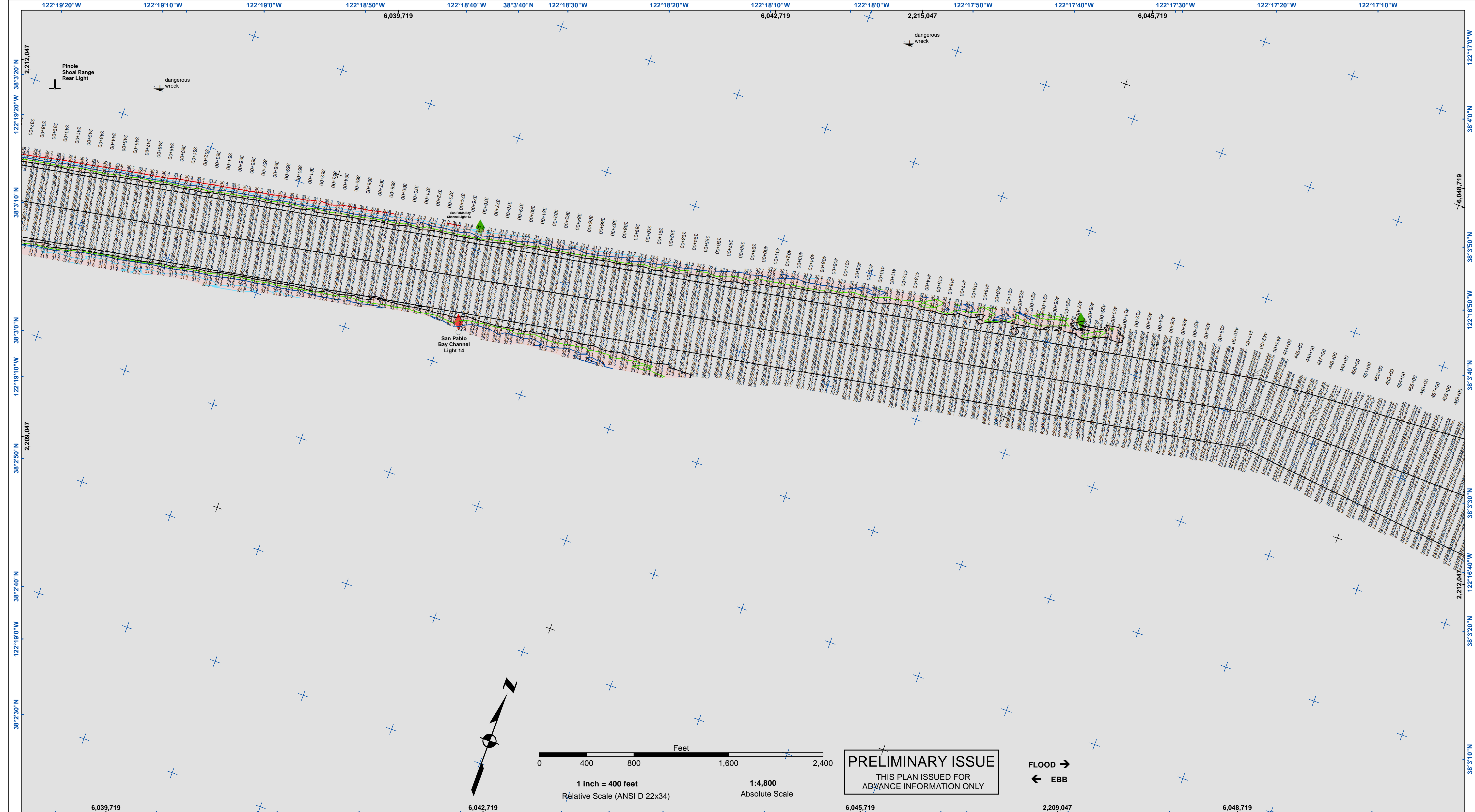
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**PRELIMINARY ISSUE**  
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FLOOD →  
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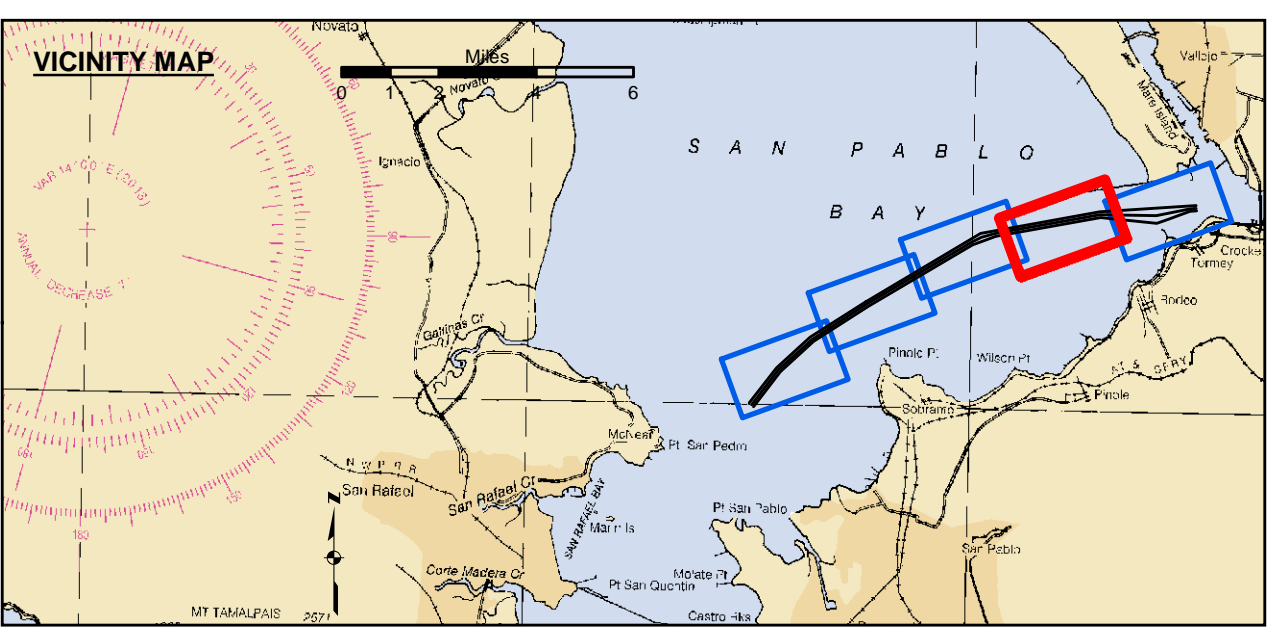
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| Submittal:<br>Hydro Survey Team Leader  | Designed by:<br>PDT      |
| Recommendation:<br>Chief, Hydro Survey Section  | Checked by:<br>PDT       |
| Approval:<br>Chief, Construction Branch   | Drawn by:<br>PDT         |

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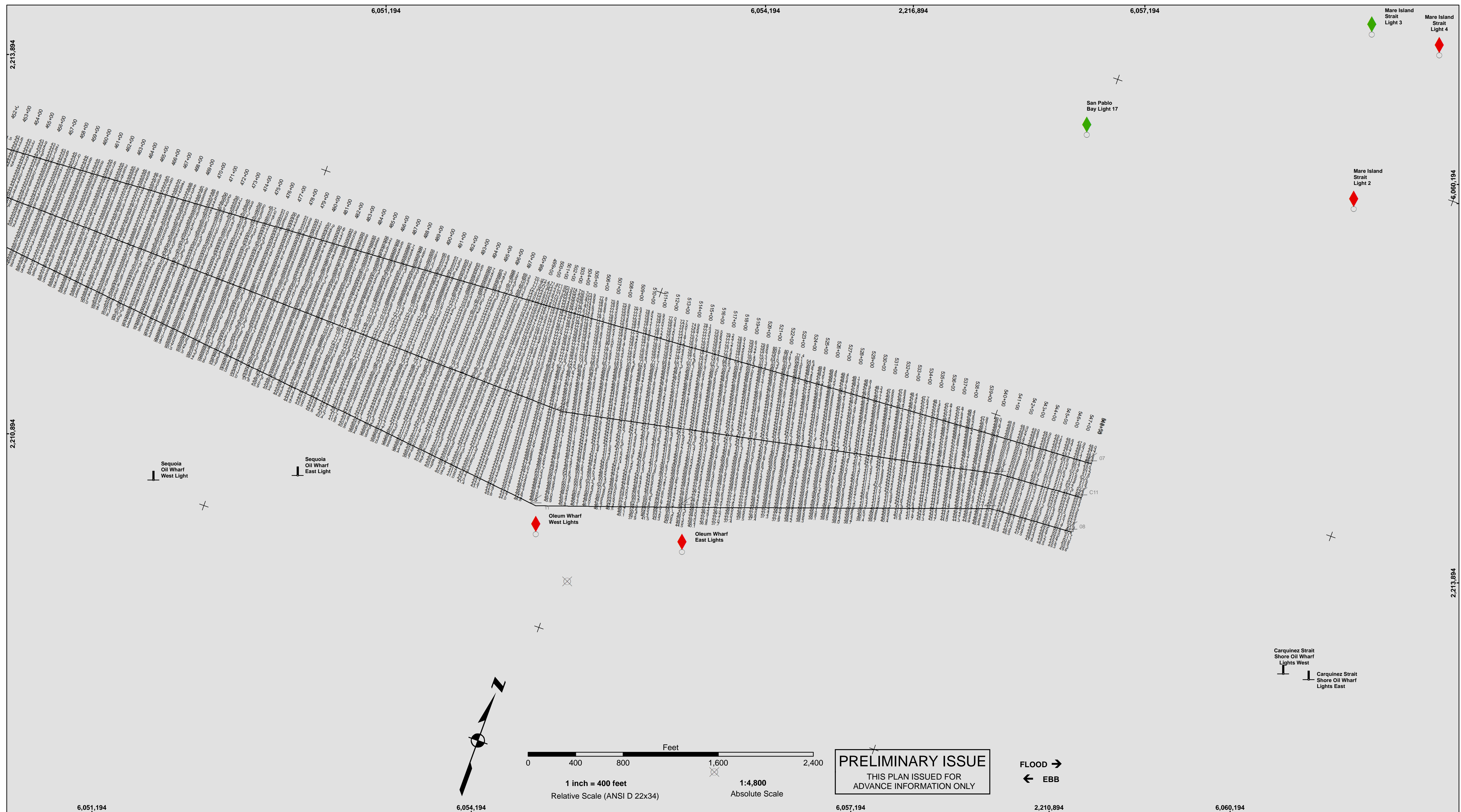
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- |                            |                    |                 |
|----------------------------|--------------------|-----------------|
| Federal Navigation Channel | Beacon, General    | <b>Contours</b> |
| Shoaling Area              | Obstruction Point  | -35             |
| Placement Area             | Navigation Buoy    | -34             |
| Anchorage Area             | Navigation Buoy    | -33             |
| Wreck Area                 | Shoalest Sounding* | -32             |
| Submerged Wreck            |                    | -31             |
| Angle Point                |                    |                 |

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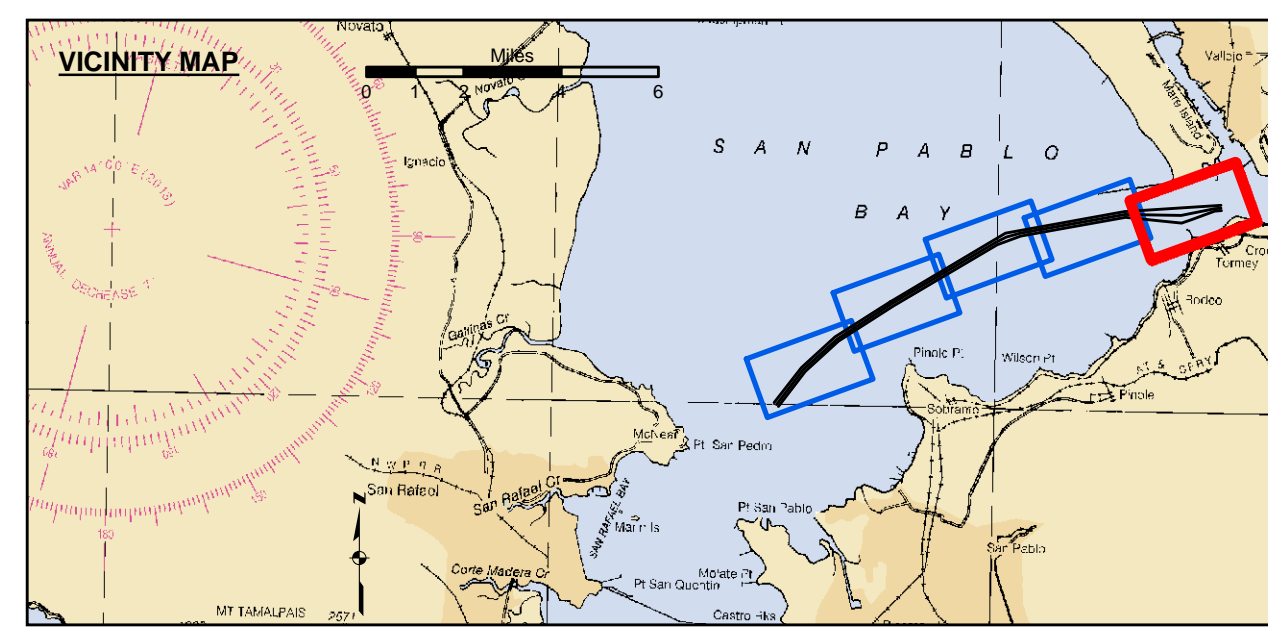
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| Chart Date:     | Feb 28, 2019  |
| Designed by:    | PDT   |
| Drawn by:       | PDT   |
| Checked by:     | PDT   |
| Approved:       | Chief, Construction Branch                                |
| Plotted by:     | PDT   |
| Surveyed by:    | TRAVIS J. RAYFIELD<br>LT COLONEL, C.E., DISTRICT ENGINEER |
| Submittal:      | Hydro Survey Team Leader                                  |
| Recommendation: | Chief, Hydro Survey Section                               |

CALIFORNIA  
**PINOLE SHOALS**  
 CONDITION SURVEY  
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**Sheet Reference Number**  
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