U.S. Department
of Homeland Security

United States Coast Guard

LOCAL NOTICE TO MARINERS

District: 11 Week: 32/15

CORRESPONDENCE TO:
COMMANDER
DISTRICT ELEVEN (DPW)
COAST GUARD ISLAND BUILDING 50-2
ALAMEDA, CA 94501-5100

REFERENCES: COMDTPUB P16502.6, Light List Volume VI, 2015 Edition, U.S. Chart No.1 12th Edition, and Coast Pilot Volume 7 46th Edition. These publications, along with corrections, are available at: http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm.

BROADCAST NOTICE TO MARINERS - Information concerning aids to navigation and waterway management promulgated through BNM HB-0012-15, SF-0144-15, LA-0114-15, and SD-0089-15 have been incorporated in this notice, or will continue if still significant.

SECTION I - SPECIAL NOTICES

This section contains information of special concern to the Mariner.

SUBMITTING INFORMATION FOR PUBLICATION IN THE LOCAL NOTICE TO MARINERS

A complete set of guidelines with examples and contact information can be found at http://www.uscg.mil/D11/DP/LnmRequest.asp or call BM1 Alfred Albert at 510-437-2980 or e-mail D11LNM@uscg.mil. Please provide all Local Notice to Mariners submissions 14 days prior to the start of operations.

SUBMITTING REGULATORY AND CONCURRENT PROJECT INFORMATION

Information or requests regarding regulatory items or concurrent projects should be directed to the U.S. Coast Guard Eleventh District Waterways Management Branch at D11waterways@uscg.mil.

LNM: 11/15

BRIDGE INFORMATION-DISCREPANCIES AND CORRECTIONS

For all bridge related issues, including lighting, operation, obstructions, construction, demolition, etc. contact the Eleventh Coast Guard District Bridge Administrator 24 hour cell phone at 510-219-4366. Flotsam may accumulate on and near bridge piers and abutments. Mariners should approach all bridges with caution. A vessel delay at a drawbridge may be reported to the District Bridge Administrator by telephone, or by using the DelayRept0207.pdf included in the Enclosures section of this Local Notice to Mariners.

AUTOMATIC IDENTIFICATION SYSTEMS-REVISED AIS ENCODING GUIDANCE

U.S. regulations require all Automatic Identification Systems (AIS) to be maintained in effective operating condition, which includes the accurate input and upkeep of all AIS data fields (33 CFR 164.46(d)). The U.S. Coast Guard has developed a Guide, to assist AIS users in performing this task, which provides guidance and examples on how to properly encode each AIS data parameter. See the AIS_Encoding_Guidance.pdf in the enclosure section for more detailed information. The enclosed guide is also available on the U.S. Coast Guard Navigation Center website at http://www.navcen.uscg.gov/AIS.

LNM: 29/15

COAST GUARD LIGHT LISTS-CHANGE IN DISTRIBUTION METHOD

Coast Guard Light Lists are a means for communicating aids to navigation information to the maritime public. Effective immediately, the Coast Guard will no longer print hardcopy Light Lists. The last government printed Light Lists were the 2014 editions.

Based on emerging technology and the ability to update Light Lists on a weekly basis, the cost and time for printing the Light List on an annual basis has reached obsolescence. Technology now allows us to provide the Light List in a timelier and less costly manner via the Internet. A Federal Register Notice announcing this change was issued on 1 April 2015. The notice can be viewed at http://www.gpo.gov/fdsys/pkg/FR-2015-04-01/pdf/2015-07501.pdf.

Electronic Light Lists are available on the Coast Guard Navigation Center's (NAVCEN) website at

http://www.navcen.uscg.gov/?pageName=lightLists. Complete versions of the Light Lists are updated weekly on the NAVCEN website at http://www.navcen.uscg.gov/?pageName=lightListWeeklyUpdates. Mariners should download applicable copies and updates as needed. Electronic nautical publications are authorized for use on commercial vessels. While the Light Lists will no longer be available in government printed form, commercial reproductions may be available in the future. Local Notices to Mariners will continue to advertise Light List corrections and NAVCEN will continue to publish a compilation of corrections.

LNM: 15/15

SAN FRANCISCO BAY-ENTRANCE TSS-SPEED REDUCTION

NOAA Sanctuaries request a voluntary Vessel Speed Reduction from 01 May 15 through 30 Nov 15 within the SF TSS. Vessels 300 gross registered tons or larger transiting the Offshore San Francisco Traffic Separation Scheme (33 CFR 167.400) are encouraged to transit at speeds not in excess of 10kts. These areas contain concentrations of endangered Blue, Humpback, and Fin Whales that are protected under the Federal Endangered Species Act (16 U.S.C. 1538 et seq.), the Marine Mammal Protection Act (16 U.S.C. 1361 et seq.), and the National Marine Sanctuaries Act (16 U.S.C. 1431 et seq.). See SpeedReductionZone.pdf in the enclosures section for a charted diagram of the specified areas.

Chart 18645

LNM: 17/15

SCHEDULED REALIGNMENT OF BROADCAST SERVICES

U.S. Coast Guard Communication Stations Chesapeake, Boston, New Orleans, Charleston, Miami, Pt Reyes, Honolulu, Cambria, Astoria, Kodiak, San Juan and Guam MF and HF broadcast services may be impacted by scheduled realignment of system infrastructure. The Coast Guard is realigning technical service delivery to enhance information assurance and increase cybersecurity. Mariners are advised that this realignment may impact broadcast services including search and rescue information, weather forecasts, and notice to mariners that are delivered via NAVTEX, SITOR, and HF automated voice broadcast. While the Coast Guard has made significant efforts to ensure continued service delivery, we are advising mariners of potential service disruptions in order to enable reporting by mariners of any suspected loss that is experienced by a mariner. Mariners are requested to report suspected instances of non-receipt to the Coast Guard.

LNM: 31/15

USCG NATION-WIDE AUTOMATIC IDENTIFICATION SYSTEM (NAIS) NETWORK TESTING

On August 10, 2015, the U.S. Coast Guard will begin AIS Application Specific Message (AIS-ASM) testing. The test transmissions will occur between 0001-2359Z, 7 days/week. The test messages can be identified by their Maritime Mobile Service (MMSI) number: 300669139 or 00366613 and by the words “USCG TEST” within the contents of the message. Mariners are requested to contact the USCG Navigation Center at 1-703-313-5900 or TIS-PF-NISWS@uscg.mil with any questions, comments, or to report any safety and/or operational impacts caused by this testing.

Application Specific Messages to be tested include: messages 6, 8, 25, and 26, DAC=367, FI’s=22, 29, 33, 35; AIS Safety Related Text (SRM) messages: 8 (DAC=001, FI=0) and 14. The messages will be of various lengths, using repetitions of the text “USCG TEST”. For further information on AIS messages, DACs, and FI’s visit http://www.navcen.uscg.gov/?pageName=AISMessages

LNM: 31/15

SECTION II - DISCREPANCIES

This section lists all reported and corrected discrepancies related to Aids to Navigation in this edition. A discrepancy is a change in the status of an aid to navigation that differs from what is published or charted.

DISCREPANCIES (FEDERAL AIDS)

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
1	Dart Tsunami Warning Lighted Buoy Station 46412	OFF STA	18022	0407-13	37/13	
5	Point Loma Light	REDUCED INT	18773		52/14	
365	Mile Rocks Light	LT EXT	18649	0585-13	52/13	
365	Mile Rocks Light	SS INOP	18649	SF-0096-14	25/14	
510	NOAA Environmental Lighted Buoy 46006	ADRIFT	501	0013-13	02/13	
1500	San Diego Bay Entrance Range Front Light	DAYMK DMGD	18773	SD-0062-15	24/15	
2805	Anaheim Bay East Jetty Light 6	TRLB/STRUCT DEST	18749	LA-0108-14	35/14	
4245	Mile Rocks Light	LT EXT	18649	0585-13	52/13	
4245	Mile Rocks Light	SS INOP	18649	SF-0096-14	25/14	
6165	Napa River Light 8	MISSING/TRLB	18654	SF-0123-14	34/14	
6325	Suisun Bay North Channel Light 2	TRLB/STRUCT DMGD	18657	SF-0004-14	01/14	

6557	Suisun Bay Channel Light 24A	TRLB/STRUCT DEST	18666	0389-13	35/13
6630	New York Slough Light 7	TRLB/STRUCT DMGD	18659	0468-13	42/13
6645	New York Slough Light 11	TRLB/STRUCT DEST	18659	SF-0014-14	02/14
6760	San Joaquin River Light 25	TRLB/STRUCT DMGD	18660	SF-0083-15	21/15
6855	San Joaquin River Light 46	TRLB/STRUCT DMGD	18660	0351-13	32/13
6865	San Joaquin River Light 47	TRLB/STRUCT DEST	18660	SF-0113-15	26/15
7510	Sacramento River Deep Water Ship Channel Light 67	TRLB/DAYMK MISSING	18662	0565-13	50/13
7885	Bodega Harbor Channel Daybeacon 22	TRUB/STRUCT DEST	18643	0669-12	01/13
8320	Hookton Channel Light 8	TRLB/STRUCT DEST	18622	HB-0036-14	47/14

DISCREPANCIES (FEDERAL AIDS) CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
5	Point Loma Light	WATCHING PROPERLY	18773	SD-0087-15	32/15	32/15
2445	Newport Bay East Jetty Light 4	WATCHING PROPERLY	18754	LA-0112-15	31/15	32/15
3107	Los Angeles Approach Channel Lighted Whistle Buoy 3	WATCHING PROPERLY	18749	LA-0111-15	31/15	32/15
5990	Petaluma River Entrance Channel Light 4	WATCHING PROPERLY	18654	SF-0130-15	30/15	32/15
7200	Sacramento River Deep Water Ship Channel Light 8	WATCHING PROPERLY	18659	SF-0120-15	28/15	32/15

DISCREPANCIES (PRIVATE AIDS)

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
1654	Shelter Island East Shoal Light	MISSING	18773	SD-0070-15	28/15	
2060	Coronado Cays Channel Light 1	LT EXT	18773	SD-0078-15	30/15	
3380	El Segundo Lighted Bell Buoy 2ES	LT IMCH	18744	LA-0091-15	29/15	
4401	Richardson Bay Daybeacon 8	DAYMK IMCH	18653	SF-0125-15	29/15	
4411	Richardson Bay Daybeacon 20	DAYMK IMCH	18649	SF-0126-15	29/15	

DISCREPANCIES (PRIVATE AIDS) CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End

None

PLATFORM DISCREPANCIES

Name	Status	Position	BNM Ref.	LNM St	LNM End

None

PLATFORM DISCREPANCIES CORRECTED

Name	Status	Position	BNM Ref.	LNM St	LNM End

None

SECTION III - TEMPORARY CHANGES and TEMPORARY CHANGES CORRECTED

This section contains temporary changes and corrections to Aids to Navigation for this edition. When charted aids are temporarily relocated for dredging, testing, evaluation, or marking an obstruction, a temporary correction shall be listed in Section IV giving the new position.

TEMPORARY CHANGES

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End
296	NOAA Environmental Lighted Buoy 46044	DISCONTINUED	18680	SF-0068-15	18/15	
382	NOAA Environmental Lighted Buoy 46059	DISCONTINUED	18007		22/12	
448	Dart Tsunami Warning Lighted Buoy Station 46411	DISCONTINUED	18010	HB-0001-15	01/15	
562	NOAA Environmental Lighted Buoy 46027	DISCONTINUED	18603	HB-0038-14	50/14	
2289.3	Scripps Del Mar Lighted Research Buoy	DISCONTINUED	18765	NONE	17/15	

3420	Hyperion Lighted Gong Buoy 10 ES	TRUB	18744	LA-0106-15	30/15

TEMPORARY CHANGES CORRECTED

LLNR	Aid Name	Status	Chart No.	BNM Ref.	LNM St	LNM End

None

PLATFORM TEMPORARY CHANGES

Name	Status	Position	BNM Ref.	LNM St	LNM End

None

PLATFORM TEMPORARY CHANGES CORRECTED

Name	Status	Position	BNM Ref.	LNM St	LNM End

None

SECTION IV - CHART CORRECTIONS

None

SECTION V - ADVANCE NOTICES

This section contains advance notice of approved projects, changes to aids to navigation, or upcoming temporary changes such as dredging, etc. Mariners are advised to use caution while transiting these areas.

SUMMARY OF ADVANCED APPROVED PROJECTS

Approved Project(s)	Project Date	Ref. LNM

None

Advance Notice(s)

LA/LB-POINT CONCEPTION-LED CONVERSION

The U.S. Coast Guard is planning to change Point Conception Light (LLNR 200) to an LED with a 14nm nominal range during the week of 10 Aug 15. Direct any questions to LTJG Leslie Stenkamp at 510-437-3801 or Leslie.A.Stenkamp@uscg.mil.

Chart 18720 LNM: 06/15

POINT ARENA-LED CONVERSION

The U.S. Coast Guard is planning to change Point Arena Light (LLNR 420) to an LED with a 14nm range. Advanced notice of implementation will be provided once scheduled. Direct any questions to LTJG Leslie Stenkamp at 510-437-3801 or Leslie.A.Stenkamp@uscg.mil.

Charts: 501 530 18007 18010 18620 18640 LNM: 03/15

SACRAMENTO RIVER-ATON DISCONTINUANCE

The U.S. Coast Guard is planning to discontinue Sacramento River Deep Water Ship Channel Light 67 (LLNR 7510). Advanced notice of implementation will be provided once scheduled. Direct any questions to LTJG Leslie Stenkamp at 510-437-3801 or Leslie.A.Stenkamp@uscg.mil.

Chart 18662 LNM: 33/14

SAN DIEGO-MARINER RADIO ACTIVATED SOUND SIGNALS

The U.S. Coast Guard is planning to install a Mariner Radio Activated Sound Signal (MRASS) devices on Ballast Point Light B (LLNR 1570), San Diego Bay Entrance Range Front Light (LLNR 1500) and San Diego Bay Pier B Sound Signal (LLNR 1800). This device will allow the mariner to activate the installed sound signal by keying on a VHF-FM radio microphone five times at the designated frequency for the AtoN (81A) during the week of 05 Oct 15. Direct any questions to LTJG Leslie Stenkamp at 510-437-3801 or Leslie.A.Stenkamp@uscg.mil.

Charts: 18765 18772 18773 LNM: 03/15

SAN FRANCISCO BAY-CARQUINEZ STRAIGHT-ATON DISCONTINUANCE

The U.S. Coast Guard is planning to discontinue Carquinez Light 22 (LLNR 6235). Advanced notice of implementation will be provided once scheduled. Direct any questions to LTJG Leslie Stenkamp at 510-437-3801 or Leslie.A.Stenkamp@uscg.mil.

Charts: 18652 18656 18657 LNM: 09/15

SAN FRANCISCO BAY-LED CONVERSION

The U.S. Coast Guard is planning to change San Francisco Approach Lighted Whistle Buoy SF (LLNR 360) to an LED with a 4nm range. Advanced notice of implementation will be provided once scheduled. Direct any questions to LTJG Leslie Stenkamp at 510-437-5984 or Leslie.A.Stenkamp@uscg.mil.

Charts: 18007 18020 18022 18640 18645 18649 LNM: 07/15

SAN FRANCISCO BAY-MARINER RADIO ACTIVATED SOUND SIGNALS

The U.S. Coast Guard is planning to install a Mariner Radio Activated Sound Signal (MRASS) devices on Point Bonita Light (LLNR 370) and Alcatraz North Fog Signal (LLNR 4325). This device will allow the mariner to activate the installed sound signal by keying on a VHF-FM radio microphone five times at the designated frequency for the AtoN. Advanced notice of implementation will be provided once scheduled. Direct any questions to LTJG Leslie Stenkamp at 510-437-3801 or Leslie.A.Stenkamp@uscg.mil.

Charts: 18007 18010 18020 18640 18645 18649 18650 18652 18680 LNM: 03/15

SAN FRANCISCO-LED CONVERSION

The U.S. Coast Guard is planning to change San Francisco Bay North Channel Lighted Buoy A (LLNR 5410) to an LED with a 4nm range. Advanced notice of implementation will be provided once scheduled. Direct any questions to LTJG Leslie Stenkamp at 510-437-5984 or Leslie.A.Stenkamp@uscg.mil.

Charts: 18649 18652 LNM: 13/15

SAN JOAQUIN RIVER-AID ESTABLISHMENT

The U.S. Coast Guard is planning to permanently establish a lighted buoy on the east side of San Joaquin River across from San Joaquin River Light 56 (LLNR 6890). This will be established in the following approximate position: 38-04-07.54N, 121-33-31.76W. Direct any questions to LTJG Leslie Stenkamp at 510-437-3801 or Leslie.A.Stenkamp@uscg.mil.

Charts: 18660 18661 LNM: 16/15

SECTION VI - PROPOSED CHANGES

Periodically, the Coast Guard evaluates its system of aids to navigation to determine whether the conditions for which the aids to navigation were established have changed. When changes occur, the feasibility of improving, relocating, replacing, or discontinuing aids are considered. This section contains notice(s) of non-approved, proposed projects open for comment. SPECIAL NOTE: Mariners are requested to respond in writing to the District office unless otherwise noted (see banner page for address).

PROPOSED WATERWAY PROJECTS OPEN FOR PUBLIC COMMENT

Proposed Project(s)	Closing	Docket No.	Ref. LNM
None			

Proposed Change Notice(s)

None

SECTION VII - GENERAL

This section contains information of general concern to the Mariners. Mariners are advised to use caution while transiting these areas.

CALIFORNIA COAST-WHALES

Mariners are advised that groups of gray whales are traveling near the coast from November to June as part of their annual migration. Mariners should keep a sharp lookout and exercise caution as approximately 19,000 animals migrate along the coast during this period.

NOAA is asking for the public's help in tracking whales. If you see whales, record the date and location, number of whales, species (if known) and a description of the animals. Please email the information to whales@noaa.gov.

Please report collisions with whales, any observed injured whales, or dead whales to NOAA at 877-SOS-WHALe (877-767-9425) or to the U.S. Coast Guard on VHF-FM Chan. 16.

Whales are federally protected under the Endangered Species Act (16 U.S.C. 1538 et seq.), the Marine Mammal Protection Act (16 U.S.C. 1361 et seq.), and the National Marine Sanctuaries Act (16 U.S.C. 1431 et seq.).

Charts: 18007 18022 LNM: 49/14

DELTA & RIVERS-DISCOVERY BAY-WERNER DREDGER CUT-BRIDGE

ORWOOD RD BRIDGE REPLACEMENT-A temporary trestle is being erected to facilitate construction of the replacement bridge. A temporary boom has been placed on the south side of the existing bridge to the north side of the EBMUD pipeline bridge. The piers of the pipeline bridge and the piers of the existing Orwood Rd Bridge will be lit at night with steady burning red lights (see Orwood Lighting Diagram in enclosure section). A 17ft wide navigation channel has been established on the eastern portion of the project site for the transit of vessels. For more details or comments contact the Coast Guard Bridge Office at 510-437-3515.

Chart 18661 LNM: 25/15

DELTA & RIVERS-MOKELUMNE RIVER-BRIDGE

HIGHWAY 12 DRAWBRIDGE- The drawspan will be secured in the closed-to navigation position from 0600, 17 Aug 15 through 2200, 19 Aug 15 due to the installation of lift motors. The bridge provides 7ft vertical clearance above mean high water when closed. Vessels that can transit through the bridge in the closed position may continue to do so at any time. Little Potato Slough can be used as an alternate route for vessels unable to pass through the bridge. For more details or comments contact the Coast Guard Project Manager at 510-437-3461.

Chart 18661 LNM: 32/15

DELTA & RIVERS-SACRAMENTO RIVER-BRIDGE

RIO VISTA DRAWBRIDGE: Caltrans will be conducting dive operations during daylight hours, 17-21 Aug 2015, inspecting various piers at the bridge. Caltrans dive operations will contact Coast Guard Vessel Traffic Service each morning to provide diving location. The dive vessel is a 10ft X 33ft aluminum landing craft. Diver's umbilical hose may be floating on the surface adjacent to the vessel. All vessels are requested to contact the Caltrans vessel OFFICIAL BUSINESS on VHF-FM Chan. 16, 14, 09 or by cell at 916-715-4284 or 916-798-7148 approximately 30 minutes prior to transiting the bridge dive site. Mariners are requested to transit the area with caution. For further information, mariners can contact the Coast Guard Bridge Office at 510-437-3515.

Chart 18661 LNM: 31/15

DELTA & RIVERS-SACRAMENTO RIVER-BRIDGE

FREEPORT DRAWBRIDGE- One leaf of the double bascule drawspan will be secured in the closed-to-navigation position from 17 Aug 15 through 10 Sep 15 due to bridge repairs. The bridge provides 29ft vertical clearance above mean high water when closed. Vessels that can transit the bridge while in the closed position may continue to do so at any time. For more details or comments contact the Coast Guard Project Manager at 510-437-3461.

Chart 18662 LNM: 32/15

DELTA & RIVERS-SACRAMENTO RIVER-BRIDGE

TOWER DRAWBRIDGE- The drawspan will be secured in the closed-to-navigation position from 0750-1000, 16 Aug 15, due to the Arches Run event. In the event of an emergency, the drawspan can operated normally. The bridge provides 30ft vertical clearance above mean high water when closed. Vessels that can transit the bridge while in the closed position may continue to do so at any time. For more details or comments contact the Coast Guard Project Manager at 510-437-3461.

Chart 18664 LNM: 31/15

DELTA & RIVERS-SACRAMENTO RIVER-ISLETON-DREDGING

Aquatic Environments will be conducting dredging operations in the vicinity of Vieira's Resort (also known as Ida Island) and Long Island Property Owner's Association approximately 1 nm south of the Isleton bridge until 31 Oct 15. Ellicott dredger KATHLEEN ROSE, a push tug, and a work boat will be on site monitoring VHF-FM Chan. 09 and 16. Mariners are requested to transit the area with caution. For more details or comments contact Project Manager Jeff McCormick at 925-765-1494.

Chart 18661 LNM: 29/15

DELTA & RIVERS-SAN JOAQUIN RIVER-SALT WATER BARRIER

The Department of Water resources (DWR) has installed a rock barrier at False River to stop the salt water intrusion that has resulted from the drought condition. The barrier consists of 40ft of sheet pile extending into the channel from both banks and a rock barrier constructed to an elevation of 7ft extending from bank to bank effectively blocking the channel to all marine traffic. The Department also needs to monitor the water quality parameters upstream and downstream of the rock barrier, in order to achieve this objective a set of piles has been driven into the bed of the channel at specified locations for mounting the monitoring equipment. The tempory barrier is anticipated to remain in place until 15 Nov 15. For a detailed diagram of the rock barrier and associated piling layout see False_River_Barrier.pdf in the enclosure section.

Chart 18660 LNM: 16/15

DELTA & RIVERS-SAN JOAQUIN RIVER-STOCKTON-TURNER CUT-BRIDGE

TURNER CUT DRAWBRIDGE- The Drawspan is secured in the closed-to-navigation position until further notice due to mechanical failure.

Chart 18663 LNM: 32/15

DELTA & RIVERS-SNODGRASS SLOUGH-BRIDGE

TWIN CITIES ROAD DRAWBRIDGE- Secured closed-to-navigation due to damage from land traffic. The bridge provides approximately 17ft vertical clearance above mean high water when closed. ETR is unknown. For more details or comments contact the District Bridge Administrator at 510-437-3516.

Chart 18662 LNM: 37/14

ESTERO BAY-CAYUCOS-MARINE CONSTRUCTION

Associated Pacific Constructors Inc. will conduct marine construction at the Cayucos Pier in Cayucos, CA until December 2015. The project will consist of rehabilitation of the pier pilings, bracing, and decking. Mariners are requested to transit the area with caution. For more details or comments contact Mark Niggle at 805-234-2925.

Chart 18703 LNM: 39/14

HUMBOLDT BAY TO MORRO BAY-CABLE SURVEY

Global Marine Systems Limited will conduct underwater cable burial survey work off the northern California coast until 28 Aug 15. Cables to be inspected run from Morro Bay seaward out to approximately 50nm offshore and from Point Arena seaward to the northwest and southwest out to approximately 30nm offshore. M/V WAVE VENTURE will utilize a ROV suspended down to the seabed directly below the vessel. WAVE VENTURE will monitor VHF-FM Chan. 16. See Wave_Venture_Survey_Routes.pdf in the enclosure section for coordinates and a charted diagram of the survey

HUMBOLDT BAY TO MORRO BAY-CABLE SURVEY

routes. Mariners are requested to transit the area with caution and maintain a minimum CPA of 1nm from WAVE VENTURE.

Charts: 18010 18022 LNM: 28/15

LOMPOC-RESEARCH BUOYS

Scripps Institution of Oceanography has deployed two miniature research buoys in the vicinity of Vandenberg Air Force Base at the following positions:

34-52-53.2N 120-39-35.7W - Yellow - 24 inch diameter - Fl Y 4s

34-52-43.9N 120-39-24.6W - Orange - 15 inch diameter

The buoys will be disestablished on or around 30 Sep 15. For more details or comments contact Scripps Tony DePaolo at tdepaol@ucsd.edu.

Chart 18721 LNM: 24/15

LONG BEACH-ANAHEIM BAY-TEMPORARY BUOY

The U.S. Coast Guard has established a temporary lighted buoy at 33-43-33.809N 118-06-02.318W to mark the end of the damaged Anaheim Bay East Jetty. The buoy displays a FL Red 2.5s characteristic. It will be discontinued when Anaheim Bay East Jetty Light 6 (LLNR 2805) is reestablished. Direct any questions to LTJG Leslie Stenkamp at 510-437-3801 or Leslie.A.Stenkamp@uscg.mil.

Chart 18749 LNM: 48/14

LONG BEACH-CERRITOS CHANNEL-BRIDGE

REPLACEMENT SCHUYLER HEIM BRIDGE CONSTRUCTION-The temporary falsework has been removed from the completed northbound portion of the replacement bridge. The two temporary eastern trestles remain in place. The main navigation span of the bridge, between the temporary trestles, provides 48.5 feet of vertical clearance from the edge of the trestles to the lowest hittable part of the bridge and 75ft of horizontal clearance. The temporary trestles are lighted at night with steady burning red lights (See trestle lighting diagram enclosure at the end of this notice). Portions of the eastern fenders on the existing bridge have been removed. The western portions of the fenders remain in place. Construction activities will take place from 0700 to 1530, Mon-Fri until May 2017. For conditions at the bridge mariners can contact Caltrans at 213-792-5518, MCM Construction at 714-305-2725, or MCM Construction at 714-330-5370. Mariners are requested to transit the area with caution.

Chart 18749 LNM: 10/15

LONG BEACH-MARINE CONSTRUCTION

John S. Meek Company will conduct wharf concrete repairs along with the removal and installation of new fender system at Pier F berth 209 until approximately 15 Aug 15. Dock floats will be transported across Queensway Bay from South Shore Launch Ramp. A Flexifloat barge will be on site at Dock 10, and two skiff boats will haul concrete dock sections across Queensway Bay. All participating vessels and equipment will monitor VHF-FM Chan. 16. Mariners are requested to transit the area with caution. For more details or comments contact Jeremiah Jilk at 310-505-7515.

Chart 18749 LNM: 17/15

LONG BEACH-MIDDLE HARBOR-DEMOLITION

As part of the Middle Harbor Pier E Slip 1 Fill and D28 Demolition project, Manson Connolly Joint Venture (MCJV) has constructed an underwater containment dike in the East Basin of Middle Harbor at the Port of Long Beach. This dike is marked by two 5ft diameter yellow buoys placed approximately 200ft off of the centerline of the dike in 42.5ft of water. The dike will remain in place until further notice. See Long Beach Containment Dike.pdf in the enclosures section for a detailed diagram of dike layout. For more details or comments contact Project Manager Randy Maddox at 206-303-7186.

Chart 18751 LNM: 40/14

LONG BEACH-SAN PEDRO BAY- DIVE OPERATIONS

Aqueos Corporation will be utilizing divers for pipeline work on the DCOR platforms Eva at 33-39-42N 118-03-43W and Esther at 33-43-07N 118-06-50W until 15 Aug 15. Work will be performed during daylight hours on the pipelines extending from each platform to shore. A temporary lighted mooring buoy has been established at 33-41-06.381N 118-03-59.327W. M/V DANNY C will monitor VHF-FM Chan. 16, and can also be contacted via cell phone at 805-895-9005. Mariners are requested to transit the area with caution. For more details or comments contact Jason Smith at 805-205-3156.

Chart 18749 LNM: 24/15

MARINA DEL REY–MARINE CONSTRUCTION

Bellingham Marine Industries will be conducting marine construction activities within Basin G, Parcel 47 and 44, and Parcel 55 from 24 Aug 15 through 01 Jun 16. Project work will consist of pile driving and floating dock installation. Dock sections and piles will be transported to Basin G from the Marina del Rey Boat Launch Facility. A John S. Meek Barge will be on scene monitoring VHF-FM Chan 16. Mariners are requested to transit the area with caution. For more details or comments contact Mark Secrest at 360-904-0535.

Chart 18748

MORRO BAY TO SAN PEDRO BAY-SUBMARINE CABLE SURVEY

T.E. SubCom LLC will be conducting underwater cable burial survey work off the California coast between Morro Bay and San Pedro Bay out to approximately 30nm offshore through August 2015. M/V GLOBAL SENTINEL will be conducting a survey of submarine telecommunication cables utilizing an ROV suspended down to the seabed directly below the vessel. The cables make landfall at Hermosa Beach and Gover Beach. GLOBAL SENTINEL will monitor VHF-FM Chan. 13 and16, and can also be contacted via sat phone at 206-274-8989. See Cable_Survey_Routes.pdf in the enclosure section for coordinates and a charted diagram of the survey routes. Mariners are requested to transit the area with caution and maintain a minimum CPA of 1nm from GLOBAL SENTINEL.

MORRO BAY TO SAN PEDRO BAY-SUBMARINE CABLE SURVEY

Chart 18022 LNM: 25/15

NORTHERN CALIFORNIA-LAKE TAHOE LOW WATER LEVEL

Drought conditions have resulted in unusually low water levels on Lake Tahoe. All mariners transiting upon Lake Tahoe are advised to use extreme caution while navigating within a half nautical mile of shore and near any charted hazards.

Chart 18665 LNM: 25/15

PETALUMA RIVER-BRIDGE

U.S. 101 BRIDGE REPLACEMENT PROJECT-Construction of the replacement bridge continues Mon-Fri during daylight hours, and should be completed by February 2016. Caltrans has installed cofferdams behind the existing pier protection to facilitate substructure construction. The southeast cofferdam encroaches approximately 1ft into the navigation channel. The southeast and northwest cofferdams protrude upstream and downstream of the existing pier protection and the corners are lighted at night with fixed red lights (see enclosure CofferdamLighting_US101_Petaluma.pdf at the end of this notice). For more details or comments please contact the Coast Guard Project Manager at 510-437-3515.

Chart 18654 LNM: 26/13

PETALUMA RIVER-BRIDGE

HAYSTACK LANDING RAILROAD BRIDGE REPLACEMENT PROJECT- The drawspan will be secured in the closed-to-navigation position from 0600-1800, 18 Aug 15 to allow for lowering and installation of the replacement bridge. The bridge provides 3ft vertical clearance above mean high water when closed. Vessels that can transit the bridge while in the closed position may continue to do so at any time. For more details or comments contact the Coast Guard Project Manager at 510-437-3515. For information on on-site work mariners can contact the Sonoma Marin Area Rail Transit District at 415-717-2547.

Chart 18654 LNM: 32/15

POINT ARGUELLO TO DANA POINT-WHALES

NOAA recommends vessels transiting the area between Point Arguello and Dana Point, including the Traffic Separation Schemes in the Santa Barbara Channel and San Pedro Channel, from May through November, should exercise caution and reduce speed. These areas contain populations of endangered blue, humpback and fin whales which are federally protected under the Endangered Species Act (16 U.S.C. 1538 et seq.), the Marine Mammal Protection Act (16 U.S.C. 1361 et seq.), and the National Marine Sanctuaries Act (16 U.S.C. 1431 et seq.). See Whale_Advisory_Zone.pdf in the enclosure section for more details.

NOAA strongly recommends that vessels 300 gross registered tons or larger transiting the Santa Barbara Channel traffic separation scheme in the area between Point Conception and San Pedro Point, Santa Cruz Island do so at speeds not in excess of 10 knots due to endangered whales in this area.

Additional information can be found at: http://channelislands.noaa.gov/management/resource/ship_strikes.html

NOAA is asking for the public's help in tracking whales. If you see whales, please record the date and location, the number of whales, the species (if known) and a description of the animals. Please email to whales@noaa.gov. Please report any collisions with whales or any observed injured or dead whales to NOAA at 877-SOS-WHALe (877-767-9425) or to the U.S. Coast Guard on VHF-FM Chan.16.

Chart 18741 LNM: 20/15

SAN CLEMENTE ISLAND-WATERWAY SURVEY ANNOUNCEMENT

The U.S. Coast Guard is conducting a Waterways Analysis Management System (WAMS) study for the waters surrounding San Clemente Island. The study focuses on the area's aids to navigation, waterborne commerce, marine casualty information, routing and communication capabilities, and military use of the waterway review. Any interested company or individual wishing to provide recommendations on existing or additional aids to navigation in this area should participate in the survey (San_Clemente_WAMS.pdf) in the enclosure section. Feel free to include additional comments in the space provided or on a separate page. Please scan and email the survey to Nick.G.Bateman@uscg.mil prior to 01 Sep 15. To receive further information, contact MST2 Nick Bateman or LT Robert Cole at 619-278-7656.

Chart 18740 LNM: 25/15

SAN DIEGO BAY-BRIDGE

CORONADO BRIDGE- Scaffolding installed at Span 14-15, west of the west main navigational channel, reduces the vertical clearance by not more than 9ft and is lighted at night with red lights.

Chart 18773 LNM: 21/14

SAN DIEGO BAY-SHIPYARD SEDIMENT SITE-DREDGING

R.E. Staite Engineering Inc. will be conducting sediment cleanup and dredging within the North Shipyard portion of the San Diego Shipyard Sediment Site until approximately 31 Mar 16.The project is located in the waterfront portion of San Diego Bay, eastward of 32-41-31N 117-08-51W and 32-41-27N 117-08-58W to the U.S. bulkhead line. Dredge DB PALOMAR, DB POINT LOMA and the RES 180 will be performing dredging operations with scows HAROLD M, CLARENCE D, WEEKS 261 and scows 3001 and 3002; utilizing tugs KATHA C, KILLEEN and METOLA as well as support vessels JEANNIE R and JOHN DRAKE to assist the material and equipment barges to the work site. All will monitor VHF-FM Chan. 16. Mariners are requested to make arrangements with project vessels prior to passing, and proceed at a no wake speed. For more project details or comments contact Chad Carpenter at 619-233-0178. For more information regarding the monitoring buoys contact Ryan Armijo at 619-233-0178.

Chart 18773 LNM: 34/14

DGPS testing will be conducted at the China Lake, CA site with an approximate center point of 36-08N 117-39W and possible impact radius of

SAN DIEGO TO MONTEREY-DGPS TESTING

253nm from center point on the following dates and times:
13 Aug 15, 1630Z-2000Z
18-20 Aug 15, 1800Z-2230Z
26-27 Aug 15, 1630Z-2330Z
Mariners transiting this area may experience a disruption in their GPS signal. Systems that rely on GPS, such as E-911, AIS and DSC, may be unreliable during the test periods. More information is available on the Coast Guard Navigation Center website WWW.NAVCEN.USCG.GOV. GPS users are encouraged to report any GPS service outages to the Navigation Information service (NIS) at 703-313-5900, or by using the NAVCEN website to submit a GPS problem report. For more details or comments contact the Navigation Information Service (NIS) watch stander at 703-313-5900.

Chart 18022 LNM: 31/15

SAN DIEGO TO MORRO BAY-DGPS TESTING

DGPS testing will be conducted offshore San Diego, CA with an approximate center point of 31-42N 118-27W and a possible impact radius of 172nm from 2000Z-2359Z, 13 Aug 15. Mariners transiting this area may experience a disruption in their GPS signal. Systems that rely on GPS, such as E-911, AIS and DSC, may be unreliable during the test periods. More information is available on the Coast Guard Navigation Center website WWW.NAVCEN.USCG.GOV. GPS users are encouraged to report any GPS service outages to the Navigation Information service (NIS) at 703-313-5900, or by using the NAVCEN website to submit a GPS problem report. For more details or comments contact the Navigation Information Service (NIS) watch stander at 703-313-5900.

Chart 18022 LNM: 30/15

SAN DIEGO-DEL MAR-LOS PEÑASQUITOS LAGOON-BRIDGE

NORTH COUNTY TRANSIT DISTRICT RAILROAD BRIDGE- Work has begun to replace the existing railroad bridge. A temporary bridge will be erected alongside the existing bridge to facilitate construction of the replacement bridge. For more details or comments contact the Coast Guard Project Manager at 510-437-3515.

Chart 18765 LNM: 31/15

SAN DIEGO-FIREWORKS

Fireworks America will sponsor a fireworks display from 2025-2045, 15 Aug 15. Fireworks will originate from a barge located approximately 1000ft southwest of USS MIDWAY. A 420ft radius safety zone centered around the barge will be in affect from 2000-2100. Mariners are directed to remain clear of the safety zone and transit the nearby area with caution. For more details or comments contact Fireworks America at 619-938-8277.

Chart 18773 LNM: 31/15

SAN DIEGO-FIREWORKS-SAFETY ZONE

Fireworks America will sponsor the San Diego Symphony Summer Pops fireworks displays on 14-15 and21-22 Aug 15; as well as periodically throughout the summer. Each display will occur from 2100-2200. There will be a tug and barge combination located off of South Embarcadero Marina Park at 32-42-16N 117-09-59W. A 400ft radius safety zone around the barge will be enforced during each event. Mariners are requested to remain outside the safety zone and transit the nearby area with caution. For more details or comments contact Ms. Britney Cutler at 619-938-8277.

Chart 18773 LNM: 30/15

SAN DIEGO-LA JOLLA-RESEARCH BUOY ARRAY

Scripps Institution of Oceanography has deployed an array of research buoys off of Point La Jolla. There are six white spheres and six green cylinders, all submerged to depths varying from 18 inches to 16ft. The array is located within an area marked by yellow, radar reflective surface buoys lighted with a Fl Y 4s characteristic. The surface buoys are located at the following positions:
32-52-54.08N 117-16-09.61W
32-52-52.06N 117-16-14.85W
32-52-39.50N 117-16-20.48W
32-52-28.20N 117-16-08.06W
32-52-30.37N 117-16.02.32W
32-52-43.63N 117-16-01.82W
The buoys will remain on scene until further notice. Mariners are requested to remain clear of the array and transit the nearby area with caution. For more details or comments contact Lisa Hazard at 858-822-2873.

Chart 18740 LNM: 06/15

SAN DIEGO-OFFSHORE-ROV OPERATIONS

Liquid Robotics, Inc. (www.liquidr.com) will conduct continuous, unmanned maritime vehicle data collection operations in the vicinity of 32-32-00N 120-30-00W until approximately 20 Nov 15. The Wave Glider is designed to conduct scientific data collection operations. It carries no fuel, lubricants, or hydrocarbons. It is wave powered, remotely attended from our Wave Glider Operations Center (WGOC), moving at speeds of around 1kt, and designed to give way or part if encountered by a vessel. The vehicle is approximately 7ft x 2ft (surfboard size), yellow in color, with a contact plaque and mast extending 1 meter above the water surface supporting a flag. Mariners are requested to transit the area with caution. For more details or comments contact Liquid Robotics 24/7 WGOC Operations Center at 888-574-4574, 408-636-4205, or email support@liquidr.com with your inquiries.

Chart 18765 LNM: 07/15

SAN DIEGO-POINT LOMA-MARINE CONSTRUCTION

Marathon Construction will conduct pile driving and floating dock installation operations from 17 Aug 15 through 01 November 15 in the vicinity of

SAN DIEGO-POINT LOMA-MARINE CONSTRUCTION

Naval Base Point Loma at 32-42-12.5N 117-14-09W. Mariners are requested to transit the area with caution. For more details or comments, contact Danny Kasik at 619-699-9639.

Chart 18773 LNM: 32/15

SAN FRANCISCO BAY- CARQUINEZ STRAIT-BENICIA MARINA-DREDGING

Salt River Construction Corporation will conduct dredging operations in Benicia Marina at 38-02-37N 122-09-26W during daylight hours until 30 Nov 15. The self contained dredge/dump barge DB1 and tug HAYDEN BAY will be on site monitoring VHF-FM Chan. 13, 14, and 77. Mariners are requested to transit the area with caution. For more details or comments contact Rick Moseley at 415-435-1024.

Chart 18657 LNM: 32/15

SAN FRANCISCO BAY-ALBANY-MARINE CONSTRUCTION

Dutra Construction Company will conduct marine construction operations at Albany Beach during daylight hours through October 2015. The construction work will consist of excavation and removal of existing concrete rubble revetment, construction of new rock revetment and installation of subtidal habitat enhancement features. The subtidal habitat enhancement features extend approximately 200ft beyond the new shoreline revetment and may be submerged at high tide. The work area will span approximately 1800ft of shoreline in an area bound by the following coordinates:

37-53-21N 122-19-24W
37-53-22N 122-18-57W
37-53-18N 122-19-24W
37-53-17N 122-18-57W

A turbidity curtain is in place encapsulating the boundaries of the revetment work. The turbidity curtain is anchored and equipped with lighted boom markers. Large Construction equipment along with miscellaneous work skiffs will be utilized on this
project. The shore-side crew will monitor VHF-Chan 07A and 16. Mariners are requested to transit the area with caution and minimize wake in the vicinity of the construction site. For more details or comments contact Jason Tse at 415-300-5336.

Chart 18649 LNM: 31/15

SAN FRANCISCO BAY-BRISBANE MARINA-DREDGING

Dutra will conduct continuous dredging operations in the Brisbane Entrance Channel and Marina at 37-40-21N 122-22-11W until 30 Nov 15. Dredging within the marina will be limited to the hours of 0700-1900 weekdays and 0900-1700 on weekends. Dredged material will be disposed of at the SF-11 disposal site. A temporary mooring buoy will be established at 37-40-36N 122-21-51W for the duration of the project. The mooring buoy is 10ft round, white with a blue stripe, and lighted at night with a Fl W 4s characteristic. Clamshell dredges DB 24 and DB 23; along with and tug BECKY T will monitor VHF-FM Chan. 13, 14, and 80. Mariners are requested to transit the area with caution. For more details or comments contact Operations Manager Dennis Salyers at 415-497-5289.

Chart 18649 LNM: 20/15

SAN FRANCISCO BAY-CARQUINEZ STRAIT-BRIDGE

BENICIA/MARTINEZ I-680 HIGHWAY BRIDGE- A 160ft wide paint scaffolding has been installed below low steel of the downstream Benicia/Martinez I-680 highway bridge, in the second over water span from the north bank, at approximate position 38-02-57N 122-07-38W. The scaffolding reduces vertical clearance by approximately 4ft and will be lighted at night with red lights. For more details contact the District Bridge Administrator at 510-437-3516.

Chart 18656 LNM: 09/14

SAN FRANCISCO BAY-CHINA BASIN-BRIDGE

THIRD STREET DRAWBRIDGE- The drawspan will be secured in the closed-to-navigation position from 0500-1130, 23 Aug 15, due to the San Francisco Giant Race event. The bridge can be opened for emergencies upon one hour advance notice to the bridge operator and provides 3ft vertical clearance above mean high water when closed. For more details or comments contact the Coast Guard Project Manager at 510-437-3461.

Chart 18650 LNM: 32/15

SAN FRANCISCO BAY-DETERIORATING CONCRETE PILINGS

Deteriorating concrete pilings above and below the waterline are present in the vicinity of the the south edge of the Southampton Shoal Light (LLNR 5480). Mariners are advised to use caution when transiting this area. Direct any questions to LTJG Leslie Stenkamp at 510-437-3801 or Leslie.A.Stenkamp@uscg.mil.

Charts: 18649 18652 LNM: 23/15

SAN FRANCISCO BAY-DREDGING

Salt River Construction will conduct dredging operations in the Paradise Cay Homeowners Channel at 37-54-53N 122-28-32W until 30 Nov 15. The dredge/dump barges DB1 and DB2, along with tug IRENE LAURITZEN will monitor VHF-FM Chan. 13, 14, and 77. There will be a 150ft silt curtain extending to the north from the Trinidad Drive Spit. Mariners are requested to transit the area with caution. For more details or comments contact Rick Moseley at 415-435-1024.

Chart 18653 LNM: 28/15

SAN FRANCISCO BAY-HUNTERS POINT-SAFETY ZONE

Underwater vessel testing will be conducted in the vicinity of Hunters Point on multiple occasions until 31 Oct 15. A safety zone has been established for the testing area bounded by the following coordinates:

37-43-30N 122-21-06W
37-43-53N 122-19-17W

SAN FRANCISCO BAY-HUNTERS POINT-SAFETY ZONE

37-41-34N 122-20-30W
37-41-56N 122-18-42W

The safety zone will only be activated during actual testing periods and will be announced via Broadcast Notice to Mariners. Mariners are requested to avoid the safety zone while activated and transit the nearby area with caution. See HuntersPointSafetyZone.pdf in the enclosures section for a charted diagram of the safety zone. For more details or comments contact Coast Guard Sector San Francisco at 415-399-7443.

Chart 18651 LNM: 27/15

SAN FRANCISCO BAY-ISLAIS CREEK CHANNEL-MARINE CONSTRUCTION

Dutra will conduct pile driving and concrete work on the south side of Islais Creek between the Illinois St. Bridge and the Third St. Bridge during daylight hours until April 2016. Crane barge KELSO will be on site monitoring VHF-FM Chan. 16. Mariners are requested to transit the area with caution. For more details or comments contact Valerie Daley at 415-686-9417.

Chart 18650 LNM: 48/14

SAN FRANCISCO BAY-ISLAIS CREEK-BRIDGE

ILLINOIS STREET DRAWBRIDGE- The navigational span may be obstructed during daylight hours on 14 Aug 15 due to a bottom contour survey and bridge inspection. Survey vessel FUGRO will move if requested for the safe passage of waterway traffic. Mariners are requested to contact FUGRO via VHF-FM Chan. 16 in advance to make passing arrangements.

Chart 18650 LNM: 32/15

SAN FRANCISCO BAY-ISLAIS CREEK-BRIDGE

THIRD STREET DRAWBRIDGE- The navigational span may be obstructed during daylight hours on 14 Aug 15 due to a bottom contour survey and bridge inspection. Survey vessel FUGRO will move if requested for the safe passage of waterway traffic. Mariners are requested to contact FUGRO via VHF-FM Chan. 16 in advance to make passing arrangements. The drawspan is secured in the closed-to-navigation position due to mechanical failure. The bridge provides 4ft vertical clearance above mean high water when closed. Vessels that can safely transit the bridge while in the closed position may continue to do so at any time.

Chart 18650 LNM: 32/15

SAN FRANCISCO BAY-LARKSPUR-DREDGING

Dutra will conduct continuous dredging operations in the Larkspur Ferry Terminal Berths and Larkspur Channel at 37-56-41N 122-30-29W until 30 Nov 15. A temporary mooring will be established at 37-55-47N 122-27-39W until 20 Oct 15. The mooring buoy is 10ft round, white with a blue stripe, and lighted at night with a Fl W 4s characteristic. Dredging within the berths will be limited to the hours of 0700-2100. Dredged material will be disposed of at the SF-11 and SF-DODS disposal sites. Clamshell dredges DB 24 and DB 3; along with tugs ARTHUR BRUSCO and HEIDI L will monitor VHF-FM Chan. 13, 14, and 80. Mariners are requested to transit the area with caution. For more details or comments contact Operations Manager Dennis Salyers at 415-497-5289.

Chart 18649 LNM: 25/15

SAN FRANCISCO BAY-MARINE CONSTRUCTION

Power Engineering Construction will conduct marine construction, dredging, and diving operations in the vicinity of Crissy Field until 22 Aug 15. Derrick barge DB ALAMEDA, crane barge CHALLENGER and two materials barges will monitor VHF-FM Chan. 16. Participating vessels and equipment will be anchored within 800ft of the shoreline; all anchors will be marked with buoys. Mariners are requested to transit the area with caution and minimize wake while transitting near the construction site. For more details or comments contact Wayne Stonecipher at 510-502-1510.

Chart 18649 LNM: 20/15

SAN FRANCISCO BAY-OAKLAND INNER HARBOR-BRIDGE

PARK STREET DRAWBRIDGE- Either bascule leaf will be secured closed for deck maintenance Sun-Thu from 2030-0500, until 14 Aug 15. During the specified times the opposite leaf will continue to open for vessels. Normal double leaf operation will occur all other times. If necessary for the safe passage of vessels, a minimum 2 hour advance notice will be required during the work day for double leaf operation, to remove crews and equipment from the bridge. Horizontal clearance in single leaf mode is approximately 120ft. The bridge provides 15ft vertical clearance above mean high water when closed. Vessels that can transit through the bridge in the closed position may continue to do so at any time. For more details or comments contact the Coast Guard Project Manager at 510-437-3461.

Chart 18649 LNM: 16/15

SAN FRANCISCO BAY-OAKLAND INNER HARBOR-SHOALING

Shoaling has been reported on the south side of the the Oakland Inner Harbor South Channel in the east passage through the Fruitvaile Ave bridge. Mariners are requested to transit the area with caution and report any observed changes in shoaling conditions to the San Francisco VTS on VHF-FM Chan. 14. For more details or comments contact U.S. Coast Guard Sector San Francisco Waterways Management at 415-399-7443.

Chart 18652 LNM: 16/15

SAN FRANCISCO BAY-OAKLAND-DREDGING

Dutra Construction Company will be conducting continuous dredging operations in the Port of Oakland at 37-48-38N 122-19-36W until 30 Sep 15. Dredged material will be disposed of at the Montezuma Upland and SFDODS disposal sites. Clamshell dredges DB 24 and/or BEAVER; along with tugs SARAH REED, POINT VICENTE, PHYLLIS T, and BECKY T will be on site monitoring VHF-FM Chan. 13, 14, and 82. Mariners are requested to transit the area with caution. For more details or comments contact Dredge Superintendent Dennis Salyers at 415-497-5289.

Chart 18649 LNM: 29/15

SAN FRANCISCO BAY-REDWOOD CITY HARBOR-DREDGING

SAN FRANCISCO BAY-REDWOOD CITY HARBOR-DREDGING

R.E. Staite Engineering Inc. will conduct continuous dredging operations in Redwood City Harbor Channel at 37-32-12N 122-11-24W until 20 Aug 15. Tugs HEIDI L and ARTHUR BRUSCO; derrick barges D/B PALOMAR and DB 24; along with six split hull scows will be on site monitoring VHF-FM Chan. 13, 14, 16, and 82. Dredged material will be disposed of at the SF-11 (Alcatraz) disposal site. Mariners are requested to transit the area with caution and minimize wake in vicinity of the dredge site. For more details or comments contact Walt Jellison at 619-571-1050 or John Boykin at 415-306-3297.

Chart 18651 LNM: 23/15

SAN FRANCISCO BAY-RESEARCH BUOYS

UC Davis is conducting a study in and around San Francisco Bay this spring and summer until approximately 31 Aug 15 that will consist of eleven lightweight moorings placed at the following locations.

37-45-18.0N 122-51-07.2W - Gulf
37-52-26.4N 122-37-37.2W - Rocky Point
37-46-37.2N 122-36-28.8W - Main Channel
37-49-22.8N 122-32-21.6W - Bonita Channel
37-48-54.0N 122-35-24.0W - Four Fathom
37-54-10.8N 122-26-39.1W - San Pablo near marker B
37-46-28.2N 122-21-55.8W - South Bay near marker SC
37-44-49.0N 122-34-55.2W - SW Bank
37-44-45.6N 122-32-09.6W - Zoo Bank
37-47-38.4N 122-30-14.4W - Mile Rock
37-49-07.4N 122-30-20.4W - Point Bonita

The moorings will consist of a 180lb steel anchor, a subsurface float, and 7/16 inch fabric line connecting everything together. These moorings will be marked on the surface with an orange float and 10ft spar buoy with orange flag and passive aluminum radar reflector. R/V MUSSLE POINT, R/V QUESTUARY, and/or R/V TED FRANTZ will be conducting the deployment and recovery of the moorings. For more details or comments contact Matt Robart at 541-231-9392.

Chart 18649 LNM: 13/15

SAN FRANCISCO BAY-RICHARDSON BAY-DREDGING

Salt River Construction Corporation will conduct dredging operations in Corinthian Yacht Club marina at 37-52-21N 121-27-19W during daylight hours until 14 Aug 15. A 350ft silt curtain /debris boom will be in place from the CYC breakwater across the entrance per regulatory requirements. The self contained dredge/dump barges DB1 and DB2; along with tugs IRENE LAURITZEN and HAYDEN BAY will be on site monitoring VHF-FM Chan. 13, 14, and 77. Mariners are requested to transit the area with caution. For more details or comments contact Rick Moseley at 415-435-1024.

Chart 18653 LNM: 29/15

SAN FRANCISCO BAY-SAN FRANCISCO MARINA-SHOALING

Shoaling has been reported extending from the south side of the North Jetty at the entrance to San Francisco Marina. An unlighted white buoy has been established at 37-48-30N 122-26-23W in 9ft of water to mark the shifting shoal. The northern entrance is subject to rapid shoaling and should be avoided due to unknown depths. It is recommended that vessels transiting the marina enter and exit from the south side of the floating wave attenuator. Mariners are requested to transit the area with caution. For more details or comments contact Lawrence O'Donnel at 415-831-6322.

Chart 18649 LNM: 11/15

SAN FRANCISCO BAY-SAN RAFAEL BAY-DREDGING

Salt River Construction Corporation will conduct dredging operations in Loch Lomond Marina at 37-58-15N 122-29-02W until 15 Oct 15. Self contained dredge/dump barges DB3, DB4, and PC-100; along with tugs; IRENE LAURITZEN and BRANDY BAR will be on site monitoring VHF-FM Chan. 13, 14, and 77. There will be two anchor balls placed in the marina entrance channel during operations. Mariners are requested to transit the area with caution. For more details or comments contact Rick Moseley at 415-435-1024.

Chart 18653 LNM: 21/15

SAN FRANCISCO BAY-SUBMARINE CABLE INSTALLATION

Kokosing Construction Company will conduct the installation of a submerged power cable in San Francisco Bay between Pier 28 and Potrero Point until approximately 31 Aug 15. Manson Construction Company barges; DB EINER, BARGE 47, and BARGE 71; along with Westar Marine tending tugs and crew boat will be anchored within the cable corridor during installaton. The cable corridor extends between 37-47-31N 122-23-20W and 37-45-05N 122-22-25W (see Cable_Corridor.pdf in the enclosure section for more details). Mariners are requested to transit the area with caution and minimize wake in the vicinity of the construction site. For more details or comments contact Mr. Tim Paquette at 231-420-4635.

Chart 18649 LNM: 20/15

SAN FRANCISCO BAY-SUISUN BAY

A 500ft section of unlighted floating dock has been reported adrift in Spoonbill creek between Van Sickle Island and Chips Island. Mariners are requested to transit the area with caution and report any sightings to the San Francisco Vessel Traffic Service via VHF-FM Chan. 14.

Chart 18659 LNM: 25/15

SAN FRANCISCO BAY-SUISUN BAY-MARINE CONSTRUCTION

Cherne Contracting Corporation will be conducting marine construction operations on the Tesoro Avon Wharf in Suisun Bay at 38-02-56N 122-05-27W until July 2016. The work will include the construction of a new Berth 1A and replacement of the existing trestle between the wharf and Land. Two temporary mooring buoys will be established at 38-03-5.76N 122-06-29.5W and 38-03-51.4N 122-06-32.6W. Derrick barges VANCOUVER and GENERAL; along with multiple flat barges will be on site monitoring VHF-FM Chan. 13 and 16. Mariners are requested to transit the area with

SAN FRANCISCO BAY-SUISUN BAY-MARINE CONSTRUCTION

caution and minimize wake in the vicinity of the construction site. For more details or comments contact Glenn Olson at 253-377-4078.

Chart 18656 LNM: 28/15

SAN FRANCISCO BAY-VALLEJO-MARE ISLAND STRAIT-MARINE CONSTRUCTION

Dutra Construction Company will conduct marine construction at the Mare Island Ferry Terminal at 38-06-06N 122-16-08W through April 2016. Project work will consist of pile driving and floating dock installation. Crane barge MORTY or KELSO will be on site monitoring VHF-FM Chan. 16. Mariners are requested to transit the area with caution and minimize wake when transiting near the construction site. For more details or comments contact Stephen Hutchison at 415-254-4410.

Chart 18655 LNM: 29/15

SAN FRANCISCO-OAKLAND BAY BRIDGE (EAST OF YBI)

SAN FRANCISCO/OAKLAND BAY BRIDGE-EAST OF YBI - The Coast Guard Safety Zone covering the main channel span between piers "G" & "H" has been discontinued. All vessels passing through the bridge east of YBI are now directed to use the "G-H" span until demolition of the rest of the bridge is complete. A new Safety Zone will be announced to prohibit vessel transit through the demolition area, east of Pier "H". This safety zone will be established to protect mariners from the dangers associated with over-head demolition and debris removal operations of the SFOBB. Unauthorized persons or vessels will be prohibited from entering into, transiting through, or remaining in the safety zone without permission of the Captain of the Port or their designated representative. Mariners are requested to avoid the demolition area of the old bridge by using the "G-H" main channel span or transiting west of YBI. The "I-J" span and the rest of the bridge under demolition are no longer safe for the general passage of vessels. Temporary falsework towers have been removed down to the base from span “H” –“I”. The removal of the bases of the towers should be completed by 31 Aug 2015. Red lights will mark the upstream and downstream portion of the bases until removal. (see temp falsework in enclosure section) Barges may be moored to piers “H”, and “I” with the outboard corners lit at night with red lights. (see barge lighting in enclosure section.) A 180 X 60 ft crane barge, 220 X 60 ft spud barge and 140 X 70 flexifloat may be anchored on any side of piers “H” and “I” with anchor lines extending up to 700 ft NW, SW, NE, and SE of the moorings. (see barge anchor diagram in enclosure section). For details at the work site, mariners may contact Caltrans at 510-385-7084 or the Contractor at 925-250-1298. For more details or comments contact the Eleventh Coast Guard District Bridge Office Project Manager at 510-437-3515.

Chart 18650 LNM: 43/08

SAN FRANCISCO-OAKLAND BAY BRIDGE (WEST OF YBI)

SAN FRANCISCO/OAKLAND BAY BRIDGE-WEST OF YBI- CALTRANS has installed a painting traveler in the "B-C" span until, 31 Aug 15, reducing vertical clearance by 5ft. The painting traveler is lighted at night with red lights. There is also a 36ft wide maintenance traveler approximately 105ft east of the center span green lights in the "D-E" span west of YBI that will be in place until 15 Aug 15, reducing vertical clearance by 5ft. A section of steel and plastic timber fendering is missing from the south east corner of Pier "C" and is presumed sunk at the base of the pier. Mariners are advised to avoid direct contact with the pier. Caltrans is performing fog signal and electrical work on the San Francisco/Oakland Bay Bridge, west of YBI, at piers A through E. The decorative white lighting around the pier bases may be affected. Mariners are requested to transit the area with caution. For more details or comments contact the Coast Guard Project Manager at 510-437-3515.

Chart 18649 LNM: 26/15

SAN FRANCISCO-OCEAN BEACH-GEOPHYSICAL SURVEY

The USGS Pacific Coastal and Marine Geology Science Center (PCMGSC) will be conducting a geophysical survey off of Ocean Beach during daylight hours until 30 Sep 15. The operations to be conducted will be a bathymetric survey using a 200 kHz single beam echo sounder mounted on a personal watercraft (jet ski). Two personal watercraft will be used to conduct cross shore transects from within the surf zone out to 12NM from shore. Up to three 1 day surveys will be conducted at approximately at monthly intervals, as weather and project scheduling permits. At a minimum, one survey will be conducted near the end of the time interval, with up to two additional surveys to document the effects of large wave events on seafloor morphology. For more details or comments contact George Tate at 831-460-7484.

Chart 18680 LNM: 07/15

SAN LUIS OBISPO BAY-DREDGING

The Port San Luis Harbor District will sponsor dredging operations at the Port San Luis trailer boat basin and mobile hoist pier at 35-10-25N 120-45-15W until 31 Aug 15. Dredging will be performed from a land based crane utilizing a submersible pump. Dredged material will be disposed of at Fishermans Beach or West Bluff Beach. Mariners are requested to transit the area with caution. For more details or comments contact Project Manager Bill Casella at 805-595-5449.

Chart 18704 LNM: 21/15

SANTA BARBARA CHANNEL-CABLE INSTALLATION OPERATIONS

Cable laying vessel CABLE ENTERPRISE will be retrieving and installing power cables from the near shore area to EXXM platforms Heritage at 34-21-20N 120-16-45W and Harmony at 34-22-15N 120-09-40W through 01 Sep 15. CABLE ENTERPRISE will monitor VHF-FM Chan. 16. See EXXON_CABLE.pdf in the enclosure section for a charted diagram of the work area. For more details or comments contact Prysmian PowerlinkServices Ltd. at ce.master@prysmiangroup.com.

Chart 18720 LNM: 26/15

SECTION VIII - LIGHT LIST CORRECTIONS

An Asterisk *, indicates the column in which a correction has been made to new information

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
3050	LONG BEACH BACK CHANNEL SOUTH SECTOR LIGHT	33-44-58.780N 118-12-47.900W		120		On 3 leg tower, Visible white light in center of the outbound channel (less than 0.1°)	Alternating red/white when left of outbound channel (156.5° - 156.0°)Fixed red light when left of outbound channel (154.5° - 156.0°): Flashing red light when left of outbound channel (154.0° - 154.5°). Alternating green/white light when right of outbound channel (156.5° -157.0°), Fixed green light when right of outbound channel (157.0° -158.5°), Flashing green light when right of outbound channel (158.5° - 159.0°). Private Aid. *	32/15

PUBLICATION CORRECTIONS

None

ENCLOSURES

REPORT OF DELAY AT DRAWBRIDGE

DelayRept0207.pdf

Use link above to Report a Delay at a Drawbridge.

LNM: 06/07

SAN FRANCISCO BAY-HUNTERS POINT-SAFETY ZONE

HuntersPointSafetyZone.pdf

See link above

LNM: 27/15

LONG BEACH-MIDDLE HARBOR-DEMOLITION

Long Beach Containment Dike.pdf

See link above.

LNM: 40/14

PETALUMA RIVER-BRIDGE

CofferdamLighting_US101_Petaluma.pdf

See link above for Cofferdam Lighting Diagram

LNM: 26/13

POINT ARGUELLO TO DANA POINT-WHALES

Whale_Advisory_Zone.pdf

See link above.

LNM: 20/15

SAN FRANCISCO BAY-ENTRANCE TSS-SPEED REDUCTION

SpeedReductionZone.pdf

See link above

LNM: 17/15

SAN FRANCISCO BAY-SUBMARINE CABLE INSTALLATION

Cable_Corridor.pdf

See link above.

LNM: 20/15

DELTA & RIVERS-SAN JOAQUIN RIVER-SALT WATER BARRIER

False_River_Barrier.pdf

See link above.

LNM: 16/15

POINT ARGUELLO-RESEARCH BUOYS

Research_Moorings.pdf

See link above.

LNM: 22/15

SAN FRANCISCO-OAKLAND BAY BRIDGE (EAST OF YBI)

temp_falsework.pdf barge_lighting.pdf Barge_Anchor_Diagram_02.pdf

See links above to view Westar crane barge location diagram, temporary falsework lighting, barge mooring diagram, and anchor diagram during demolition.

Chart 18649

LNM: 24/15

WERNER DREDGE CUT-ORWOOD BRIDGE REPLACEMENT PROJECT

Orwood_Lighting_Diagram.pdf

See Link Above

Chart 18661

LNM: 25/15

SAN CLEMENTE ISLAND-WATERWAY SURVEY ANNOUNCMENT

San_Clemente_WAMS.pdf

See link above

LNM: 25/15

MORRO BAY TO SAN PEDRO BAY-SUBMARINE CABLE SURVEY

Cable_Survey_Routes.pdf

See link above

LNM: 25/15

SAN DIEGO TO MORRO BAY-OCEANOGRAPHIC RESEARCH

SCRIPPS_RESEARCH_CRUISE.pdf

See link above

LNM: 26/15

SANTA BARBARA CHANNEL-CABLE INSTALLATION

EXXON_CABLE.pdf

See link above

LNM: 26/15

HUMBOLDT BAY TO MORRO BAY-CABLE SURVEY

Wave_Venture_Survey_Routes.pdf

See link above

LNM: 28/15

A. E. Wirts
U.S. Coast Guard
Waterways Management Branch

U.S. COAST GUARD
REPORT OF DELAY AT DRAWBRIDGE
PER 33 CFR 117.5

BRIDGE NAME_____ DATE _____

MILE _____ WATERWAY _____

1. Name/ Type of Vessel _____ Direction of Travel _____
2. Vessel Owner (Name) _____
   (Address) _____
3. Name of Pilot (if applicable) _____
   (Address) _____
4. Time vessel signaled for bridge opening _____
5. Location of vessel when signal was given _____
6. Time and location of vessel when delay began _____
7. Method of signal for bridge opening ( ) Radio ( ) Sound ( ) Visual
   (If sound or visual signal was used, specify _____)
8. Time bridge operator acknowledged signal _____
9. Method of bridge operator acknowledgement ( ) Radio ( ) Sound ( ) Visual
   (If sound or visual signal was used, specify _____)
10. Did bridge operator acknowledgement indicate the bridge
    ( ) Could be opened immediately
    ( ) Could not be opened immediately
11. If land traffic crossed the bridge:
    Time land traffic started across the bridge _____
    Time land traffic stopped crossing the bridge _____
    Did land traffic stop on the bridge? _____
    Duration land traffic stopped on the bridge _____
12. Time drawbridge opened for navigation _____
14. Additional comments _____

_____

_____

_____

I certify the above information is true to the best of my knowledge and understand this statement may be used by the U.S. Coast Guard in levying fines against the bridge owner.

Signature _____

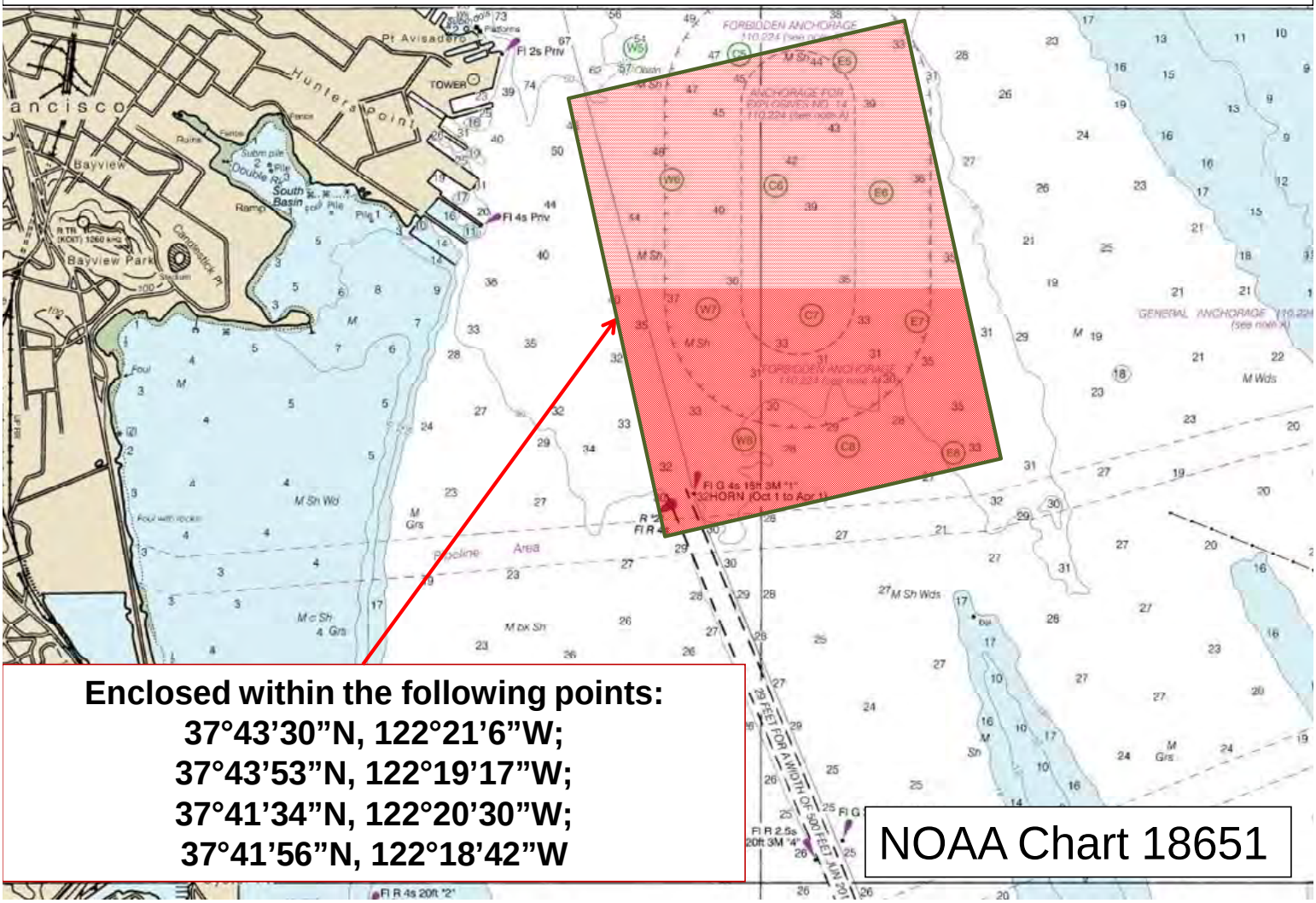
Telephone _____

Mariners may complete and send via fax or mail to:

USCG D11(dpw) Bridge Administration
Building 50-2
Coast Guard Island
Alameda, CA 94501-5100
Cellular: (510) 219-4366, Work Phone: (510) 437-3516
Work Fax: (510) 437-5836

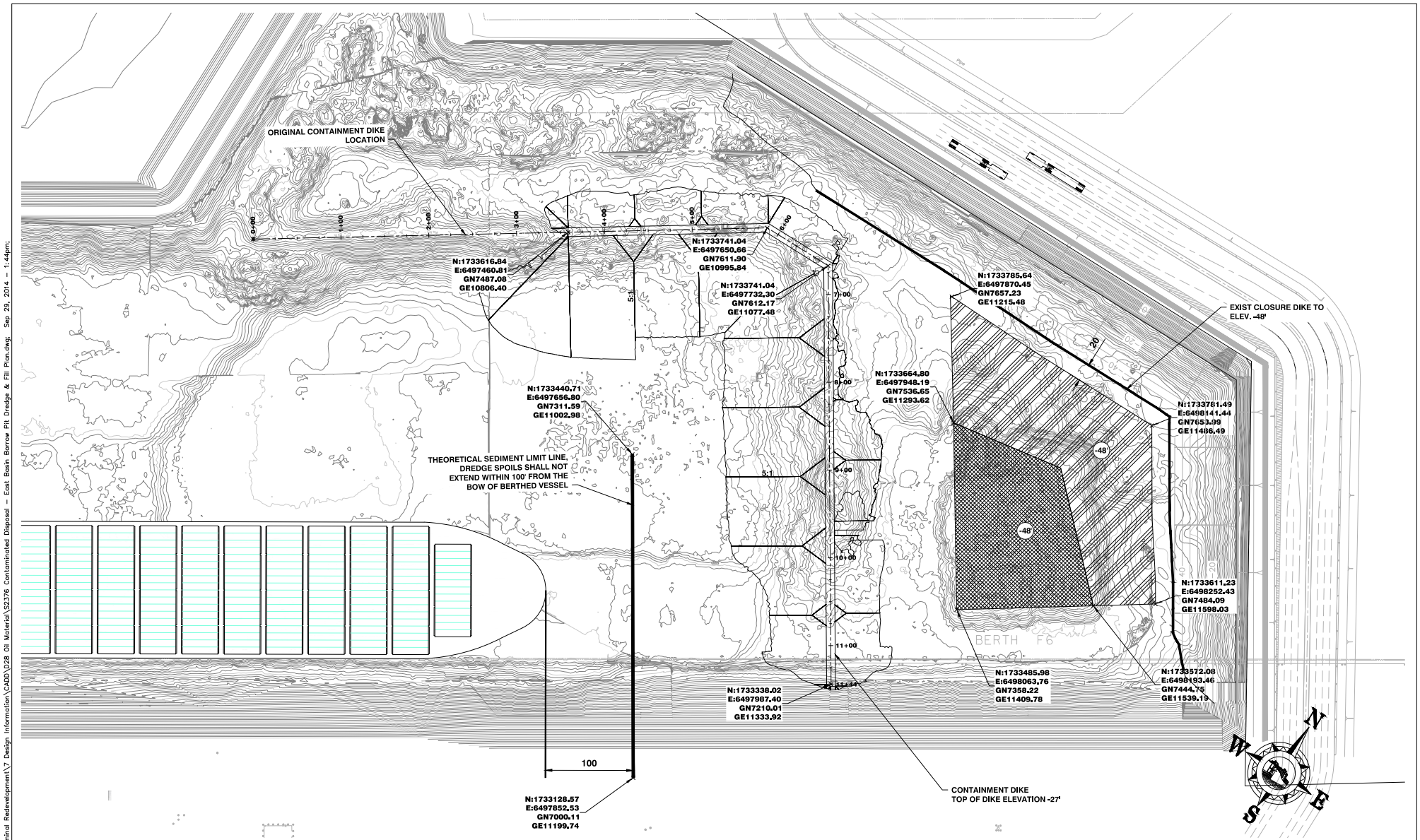
Mariners are reminded not to require bridge openings for appurtenances nonessential to navigation, per 33 CFR 117.11

Safety Zone; San Francisco, CA, 15JUL15-31OCT15
Underwater Vessel Testing



Enclosed within the following points:
37°43’30”N, 122°21’6”W;
37°43’53”N, 122°19’17”W;
37°41’34”N, 122°20’30”W;
37°41’56”N, 122°18’42”W

NOAA Chart 18651



LEGEND

(-48') PROPOSED DREDGE DEPTH

PROPOSED DREDGE LIMITS

ADDITIONAL DREDGE AREA

NOTE

DATE OF SURVEY 07/23/14, 08/14/14, 08/25/14, & 09/17/14

HORIZONTAL SCALE

50' 0' 50' 100'

SCALE: 1"=50'

The Port of LONG BEACH

925 HARBOR PLAZA, P.O. BOX 570
LONG BEACH, CALIFORNIA
TEL. (562)-427-0041

SEP 23, 2014

PIER E TERMINAL REDEVELOPMENT
SLIP NO. 1 FILL

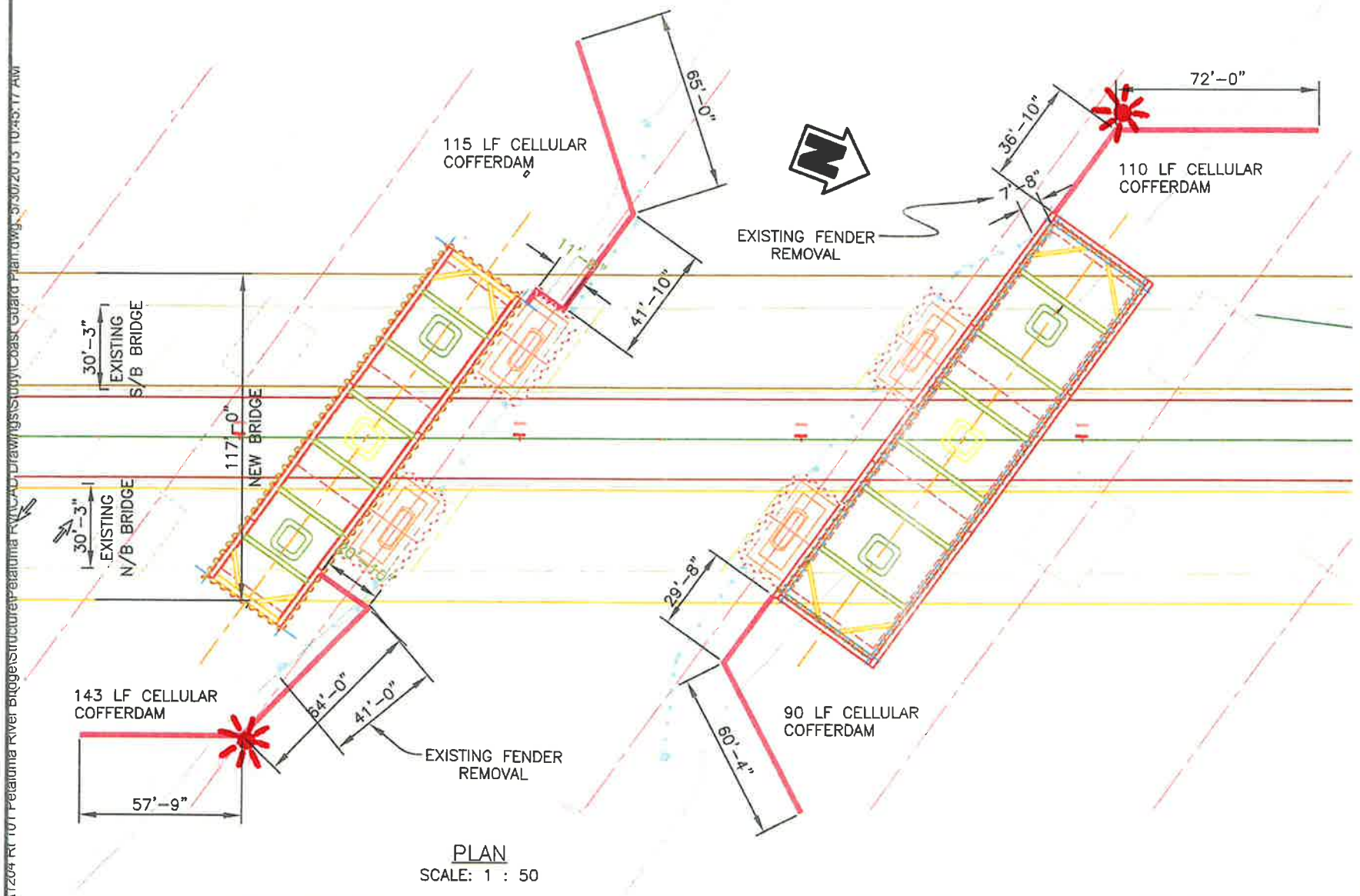
D28 CONTAINMENT AREA FOR
EAST BASIN BORROW SITE
AND
DISPOSAL AREA

FIG 1 of 1

P:\5469-01 Pier E Terminal Redevelopment\7 Design Information\CADD\D28 Oil Material\52376 Contaminated Disposal – East Basin Borrow Pit Dredge & Fill Plan.dwg, Sep 29, 2014 – 1:44pm;

Cofferdam Lighting Diagram
Replacement U.S. 101 Highway Bridge, Mile 12.5, Petaluma River

The corners of the northwest and southeast cofferdams shall be lighted at night with steady burning all round red lights, securely fastened, visible at 1,000 yards by approaching vessels.



PLAN
SCALE: 1 : 50

CC MYERS INC.
3286 Fitzgerald Road, Rancho Cordova, CA 95742
P.O. Box 2948, Rancho Cordova, CA 95741
916-635-9370 Fax 916-635-1527

PETALUMA RIVER BRIDGE
COAST GUARD GENERAL PLAN

PROJECT: PETALUMA RIVER BRIDGE (REPLACE)
MYERS JOB NUMBER: 1204
CONTRACT NO: 04-2640U4

SHEET NUMBER: 1 OF 1 SHEETS
Coast Guard Plan

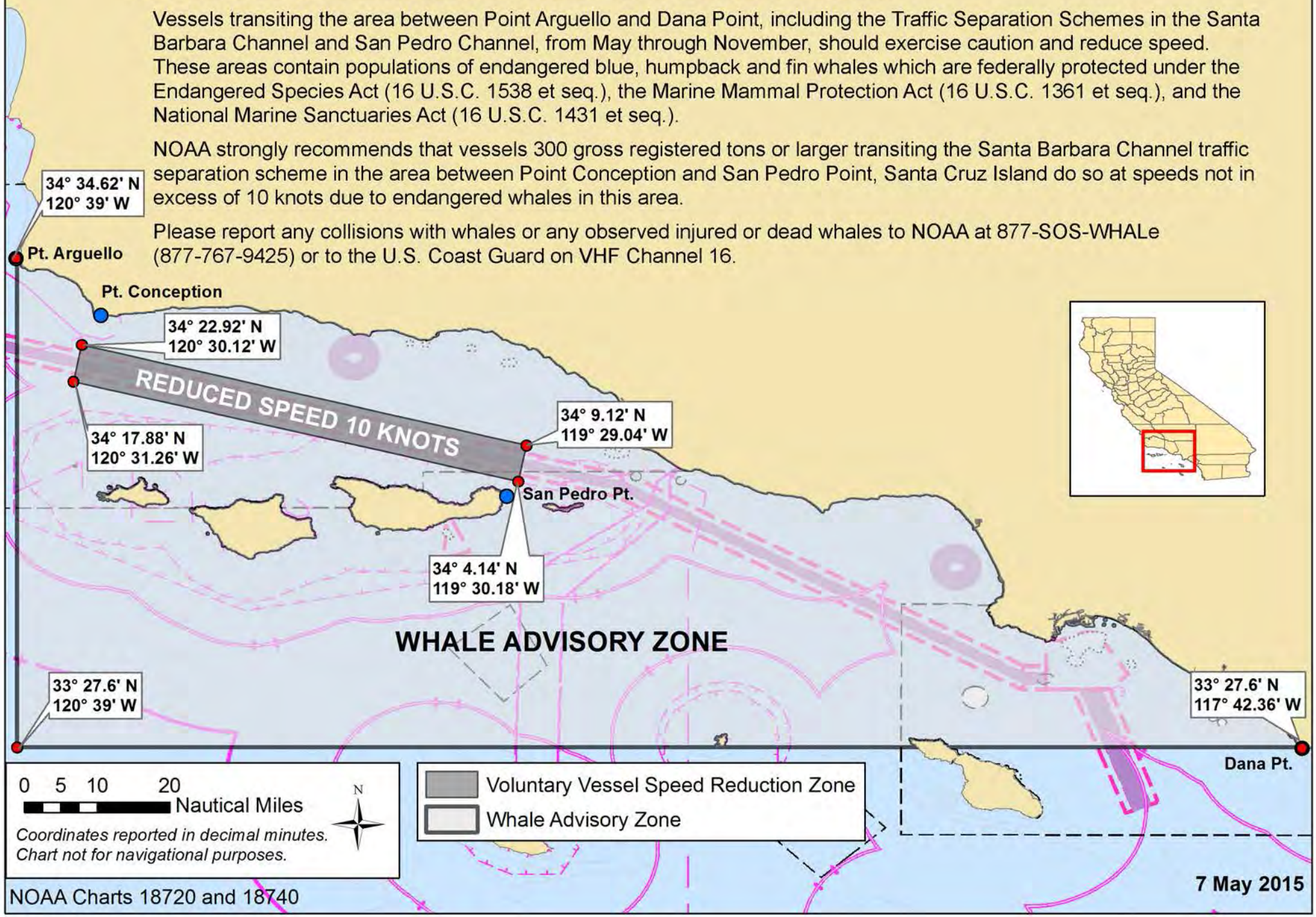
ENCLOSURE ( )

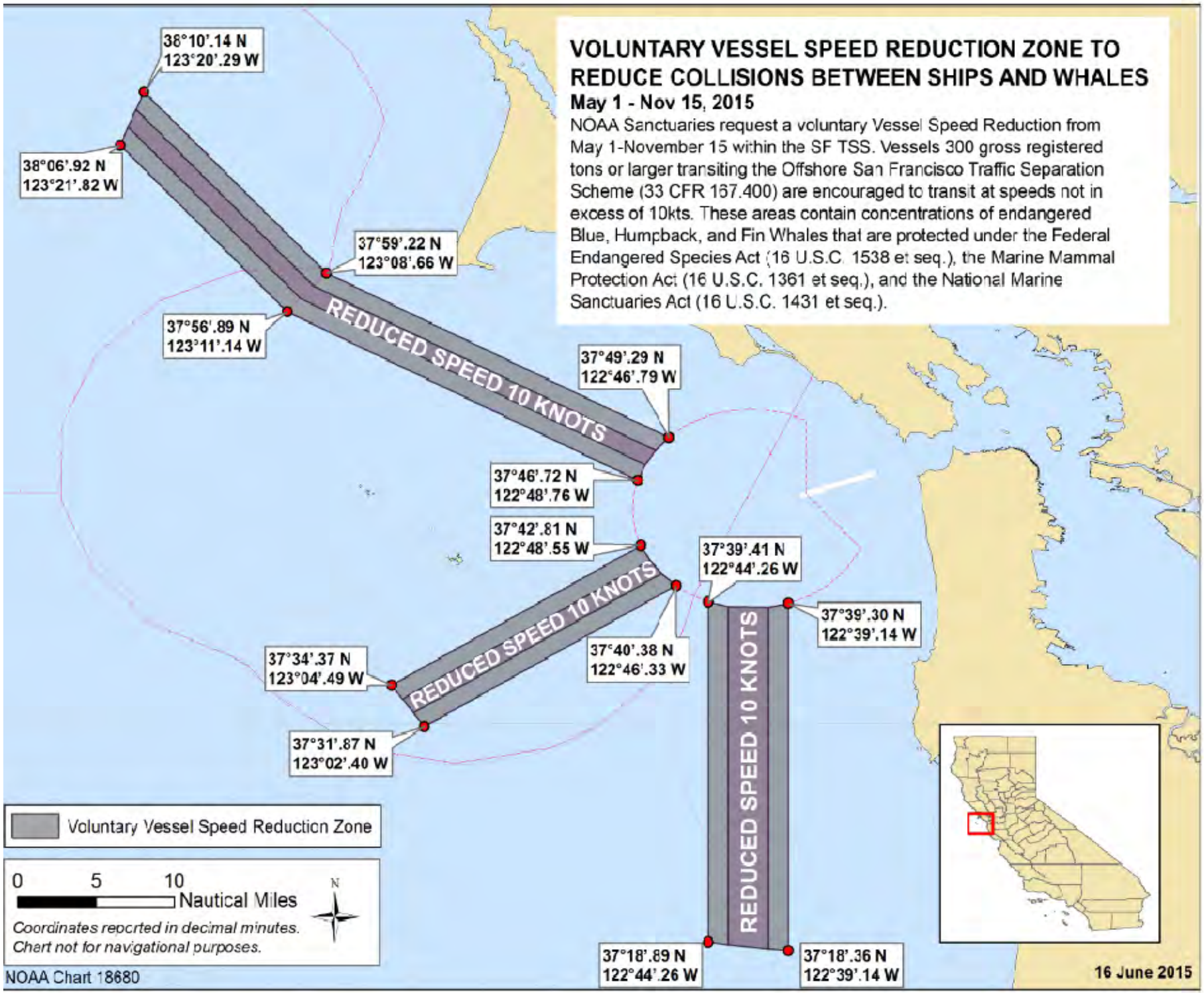
WHALE ADVISORY ZONE AND VOLUNTARY VESSEL SPEED REDUCTION ZONE TO REDUCE COLLISIONS BETWEEN SHIPS AND WHALES

Vessels transiting the area between Point Arguello and Dana Point, including the Traffic Separation Schemes in the Santa Barbara Channel and San Pedro Channel, from May through November, should exercise caution and reduce speed. These areas contain populations of endangered blue, humpback and fin whales which are federally protected under the Endangered Species Act (16 U.S.C. 1538 et seq.), the Marine Mammal Protection Act (16 U.S.C. 1361 et seq.), and the National Marine Sanctuaries Act (16 U.S.C. 1431 et seq.).

NOAA strongly recommends that vessels 300 gross registered tons or larger transiting the Santa Barbara Channel traffic separation scheme in the area between Point Conception and San Pedro Point, Santa Cruz Island do so at speeds not in excess of 10 knots due to endangered whales in this area.

Please report any collisions with whales or any observed injured or dead whales to NOAA at 877-SOS-WHALe (877-767-9425) or to the U.S. Coast Guard on VHF Channel 16.




VOLUNTARY VESSEL SPEED REDUCTION ZONE TO REDUCE COLLISIONS BETWEEN SHIPS AND WHALES
May 1 - Nov 15, 2015
NOAA Sanctuaries request a voluntary Vessel Speed Reduction from May 1-November 15 within the SF TSS. Vessels 300 gross registered tons or larger transiting the Offshore San Francisco Traffic Separation Scheme (33 CFR 167.400) are encouraged to transit at speeds not in excess of 10kts. These areas contain concentrations of endangered Blue, Humpback, and Fin Whales that are protected under the Federal Endangered Species Act (16 U.S.C. 1538 et seq.), the Marine Mammal Protection Act (16 U.S.C. 1361 et seq.), and the National Marine Sanctuaries Act (16 U.S.C. 1431 et seq.).
38°10'.14 N
123°20'.29 W
38°06'.92 N
123°21'.82 W
37°59'.22 N
123°08'.66 W
37°56'.89 N
123°11'.14 W
REDUCED SPEED 10 KNOTS
37°49'.29 N
122°46'.79 W
37°46'.72 N
122°48'.76 W
37°42'.81 N
122°48'.55 W
37°39'.41 N
122°44'.26 W
37°39'.30 N
122°39'.14 W
37°40'.38 N
122°46'.33 W
37°34'.37 N
123°04'.49 W
REDUCED SPEED 10 KNOTS
37°31'.87 N
123°02'.40 W
REDUCED SPEED 10 KNOTS
37°18'.89 N
122°44'.26 W
37°18'.36 N
122°39'.14 W
Voluntary Vessel Speed Reduction Zone
0 5 10 Nautical Miles
N
Coordinates reported in decimal minutes.
Chart not for navigational purposes.
NOAA Chart 18680
16 June 2015

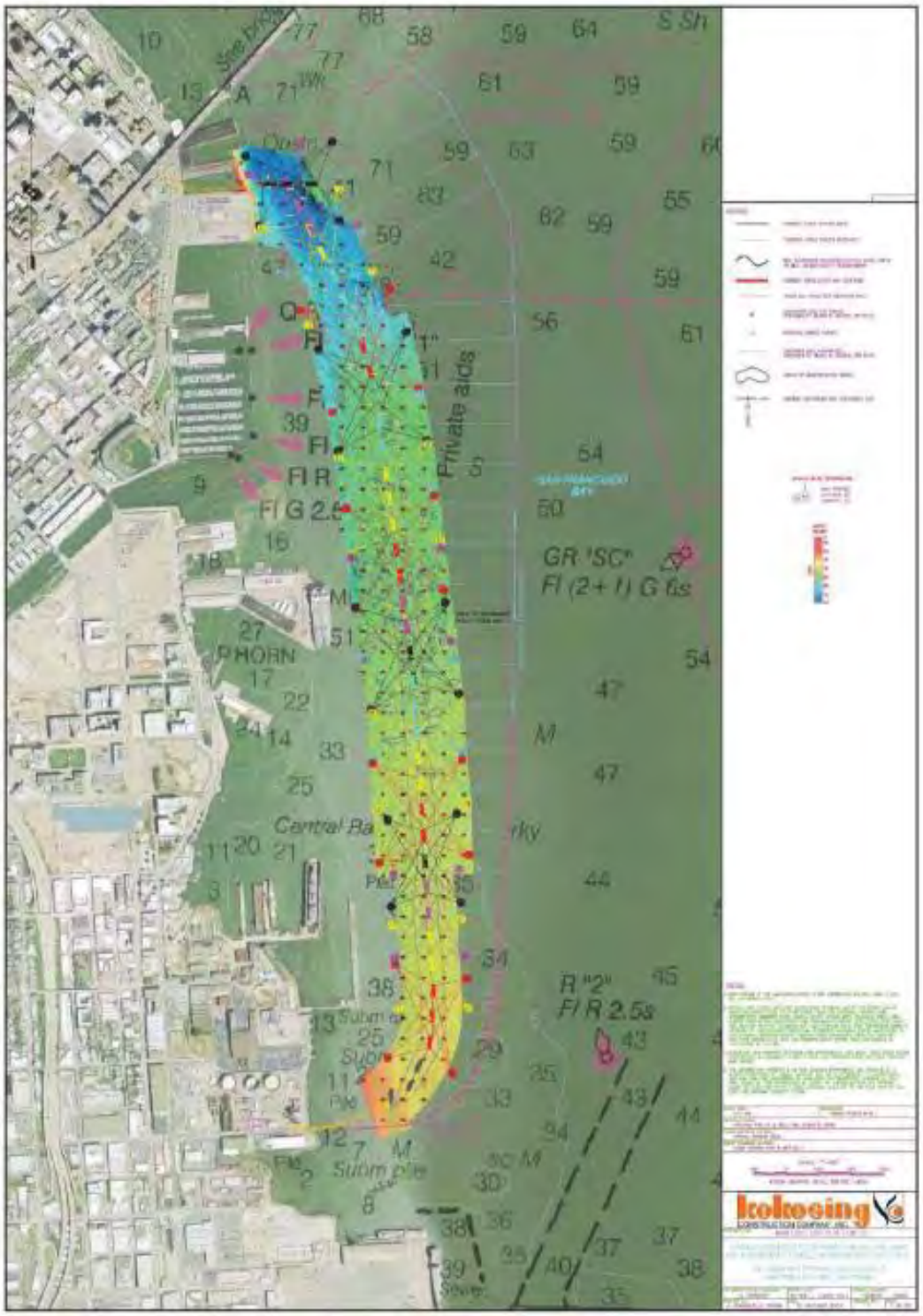
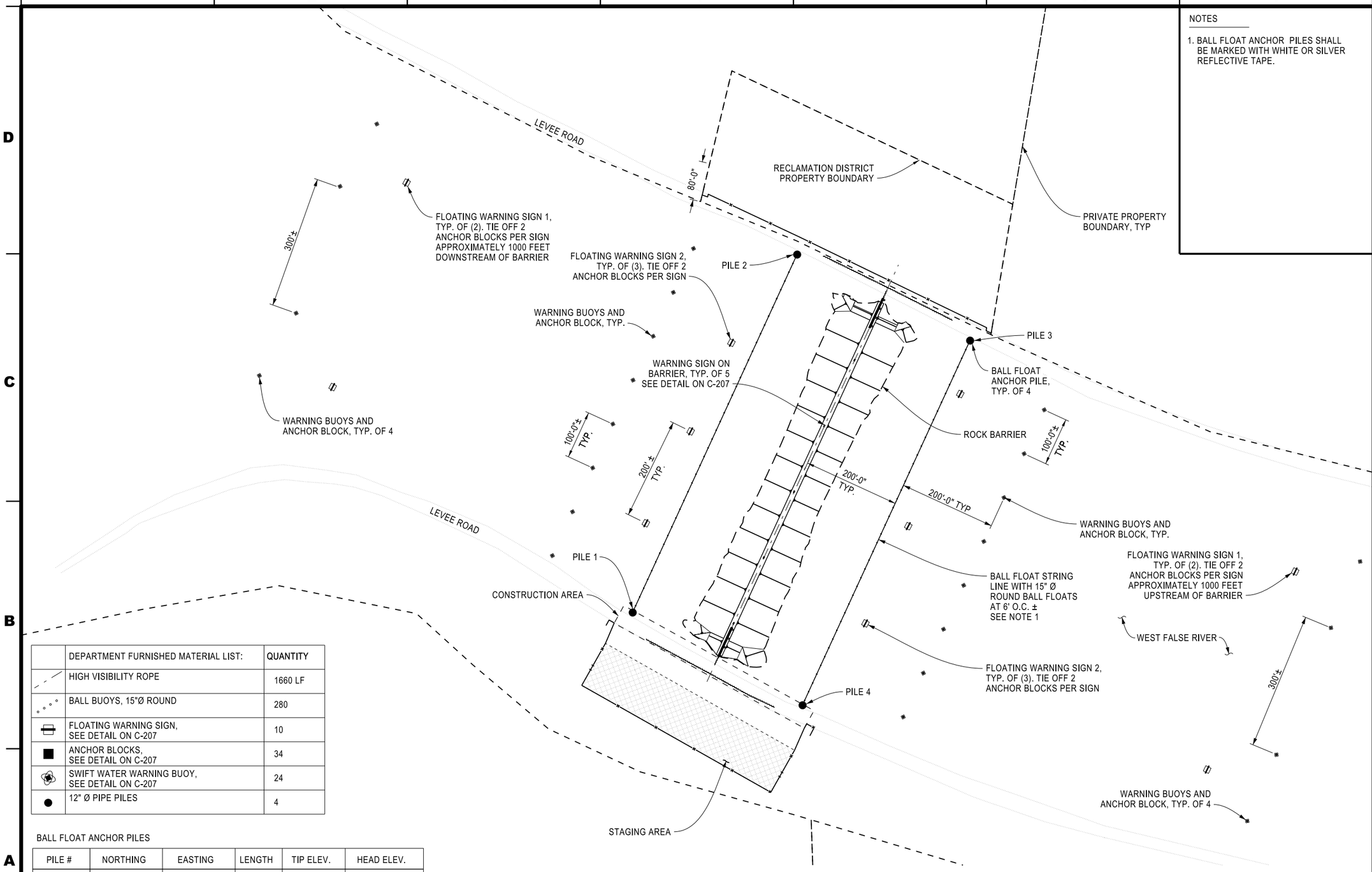


Figure 3: Drawing showing anchor and/or spud locations during cable lay/burial operations.



BUOY LAYOUT PLAN

SCALE: 1"= 100'

0 50 100

NOTES

1. BALL FLOAT ANCHOR PILES SHALL BE MARKED WITH WHITE OR SILVER REFLECTIVE TAPE.

	DEPARTMENT FURNISHED MATERIAL LIST:	QUANTITY
	HIGH VISIBILITY ROPE	1660 LF
	BALL BUOYS, 15"Ø ROUND	280
	FLOATING WARNING SIGN, SEE DETAIL ON C-207	10
	ANCHOR BLOCKS, SEE DETAIL ON C-207	34
	SWIFT WATER WARNING BUOY, SEE DETAIL ON C-207	24
	12" Ø PIPE PILES	4

BALL FLOAT ANCHOR PILES

PILE #	NORTHING	EASTING	LENGTH	TIP ELEV.	HEAD ELEV.
PILE 1	2209416.92	6224078.77	40'	-28.0'	+12'
PILE 2	2210158.26	6224419.52	40'	-28.0'	+12'
PILE 3	2209980.06	6224777.84	40'	-28.0'	+12'
PILE 4	2209224.89	6224430.73	40'	-28.0'	+12'

STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
STATE WATER FACILITIES

REV.	DESCRIPTION	SUB.	APP.

REGISTERED PROFESSIONAL ENGINEER JAMES M. LOPES No. 62184 Exp. 9-30-15 CIVIL STATE OF CALIFORNIA

DESIGNED:	CHECKED:
DOMINIC TONEL REG. C.E. No. 76498	KARI M. BIANCHINI REG. C.E. No. 73648
DRAWN:	REVIEWED:
DOMINIC TONEL REG. C.E. No. 76498	JAMES M. LOPES REG. C.E. No. 62184

SUBMITTED:
JAMES M. LOPES
REG. C.E. No. 62184

APPROVAL RECOMMENDED: DATE:
TRU VAN NGUYEN
CHIEF, GENERAL ENGINEERING SECTION, REG. C.E. No. 55947

APPROVED: DATE:
JOSEPH W. ROYER
CHIEF, GEOTECH, SERVICES BRANCH, REG. C.E. No. 52754

THINK SAFETY - ACT SAFELY

STATE WATER FACILITIES
DROUGHT EMERGENCY

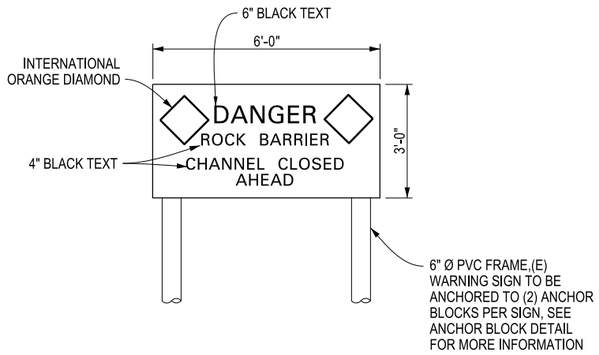
TEMPORARY ROCK BARRIER
2015

WEST FALSE RIVER

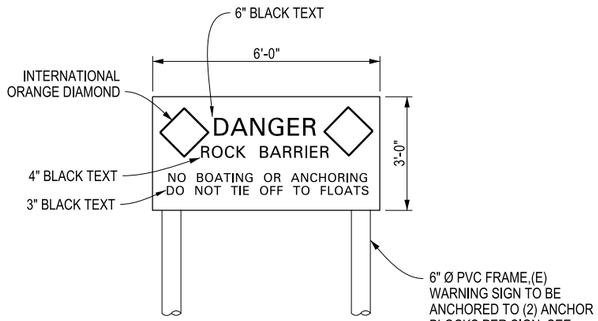
BUOY LAYOUT PLAN

SPEC. NO.	SHEET NO.	REVISION	DRAWING NO.
15-04	007		C-206

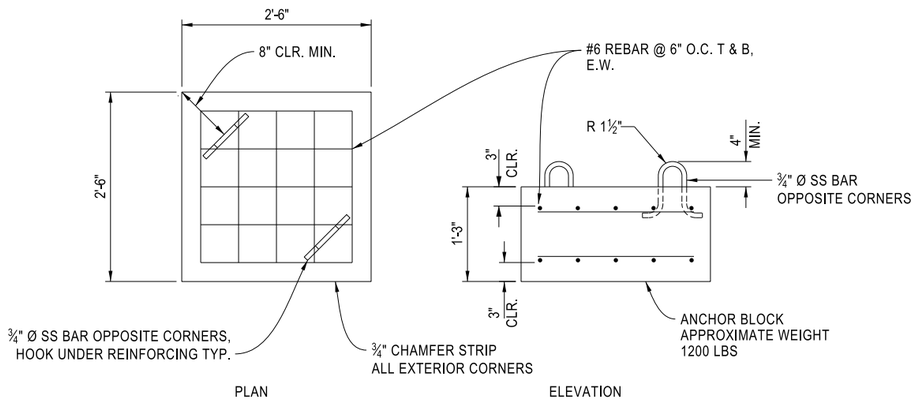
VP: PlotBW,11x17.PEN
4/17/2015



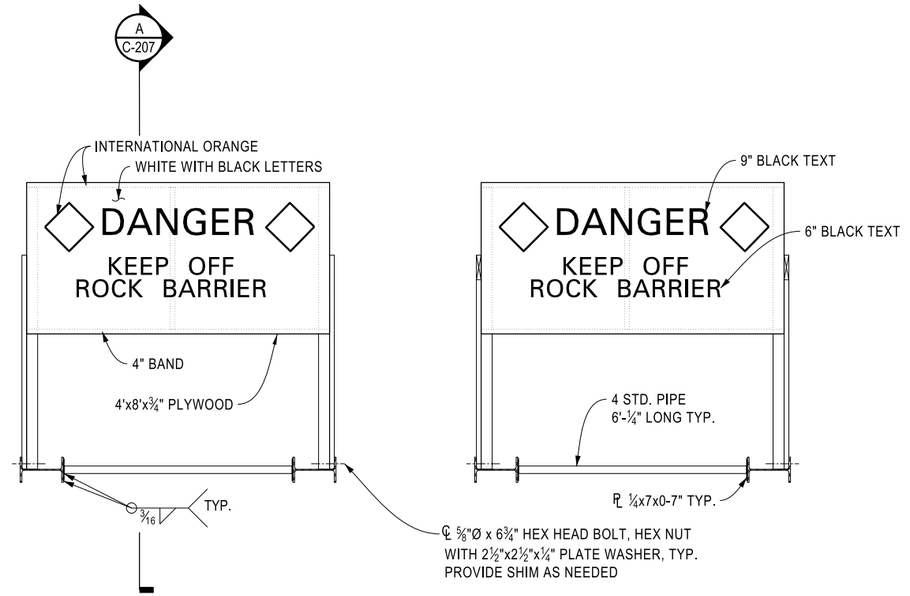
FLOATING WARNING SIGN 1
SCALE 1":2'



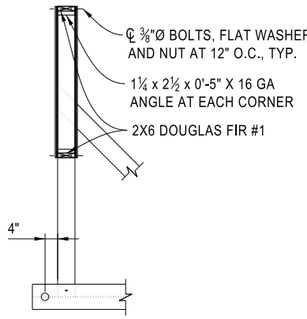
FLOATING WARNING SIGN 2
SCALE 1":2'



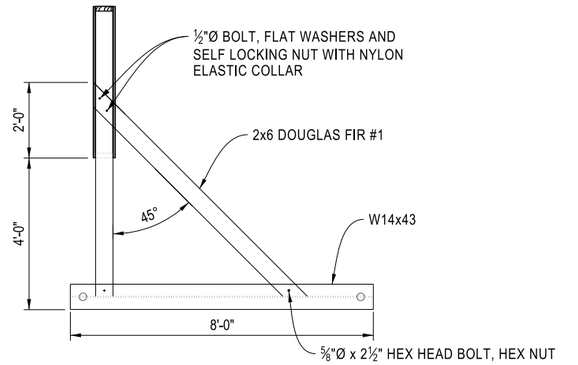
ANCHOR BLOCK
SCALE 1":1'



DOWNSTREAM FACE OF SIGN
SCALE 1":2'



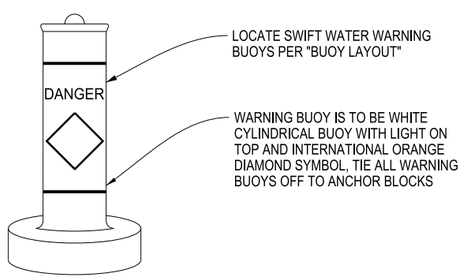
UPSTREAM FACE OF SIGN
SCALE 1":2'



A SECTION
SCALE 1":2'

B SECTION
SCALE 1":2'

WARNING SIGN ON BARRIER
TOTAL 5 SIGNS



WARNING BUOY
SCALE 1":1'

STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING
STATE WATER FACILITIES

REV.	DESCRIPTION	SUB.	APP.

REGISTERED PROFESSIONAL ENGINEER JAMES M. LOPES No. 62184 Exp. 9-30-15 CIVIL STATE OF CALIFORNIA

DESIGNED:	CHECKED:
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APPROVED: DATE:
JOSEPH W. ROYER
CHIEF, GEOTECH. SERVICES BRANCH, REG. C.E. No. 52754

THINK SAFETY - ACT SAFELY

STATE WATER FACILITIES
DROUGHT EMERGENCY

TEMPORARY ROCK BARRIER
2015

WEST FALSE RIVER

DETAILS

SPEC. NO.	SHEET NO.	REVISION	DRAWING NO.
15-04	008		C-207

V:\ Plot.BW.11x17.PEN
4/17/2015

Exhibit 1, Proposed Locations of the Science Monitoring Piles for Water Quality and Water Level Upstream and Downstream of West False River

Table for the locations of the piles

Priority	Station Name	Latitude	Longitude
1	Fisherman's Cut near Franks Tract	38.0656	-121.6479
1	Frank's Tract, mid tract	38.046417	-121.5981
1	Steamboat Slough below barrier	38.191267	-121.637881
1	Sacramento @Steamboat	38.172167	-121.64735
2	San Joaquin River at Twitchell Island	38.0969	-121.6691
2	Miner Slough near Sacramento River	38.236029	-121.666072
2	Liberty Island	38.243006	-121.684267
2	Sac Pair 1 (shore)**	38.074147	-121.761742
2	Old River	37.967951	-121.57443
2	Middle River	37.941951	-121.532427
2	Cutoff near Ryer*	38.085783	-121.995833
2	Grizzly Bay*	38.12425	-122.038117
2	Honker Bay	38.0724	-121.9392
	preferred Sacramento River pile	38.17548	-121.656863
	Alternate location	38.172458	-121.644087

*One site or the other not both of these

**This location may move slightly, this is as close as we can get for now

Navigational Aid Anchorage Pile Locations at the Barrier Site

Exhibit 2, Location of piles anchoring the float lines and the alignment of the West False River Emergency Drought Barrier

Exhibit 3, Shows a typical Installation of a 12-inch Diameter Pile with Monitoring Equipment Mounted.

SANTA MARIA RIVER to VANDENBERG AFB - Oceanographic Research

A group of oceanographic institutions will be conducting oceanographic research along the coast from the Santa Maria River to Vandenberg AFB. Moorings will be deployed from R/V Oceanus and a 25 ft RHIB from 11 June until 15 June. R/V Oceanus will also conduct survey operations during this time. The moorings will remain in place until recovered by R/V Oceanus and a 25 ft RHIB on or about 02 August to 06 August. The vessels will monitor VHF FM Channels 13, 14, and 16. Mariners are requested to keep a safe distance from research vessels and moorings. For additional information, contact John Colosi (831.431.0118) or Jamie MacMahan (831.656.2379), Naval Postgraduate School.

Chart 18700

Oceanographic Research Moorings					
	Position	Instrument Type	Surface Marker	Light	Deploy/Recovery Date
A.	34-52-44.14 N 120-39-9.64 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
B.	34-53-44.96 N 120-38-54.13 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
C.	34-53-48.82 N 120-40-16.78 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
D.	34-53-44.71 N 120-40-34.13W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
E.	34-54-2.85 N 120 40 40.37 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
F.	34-54-36.79 N 120-40-34.70 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
G.	34-55-7.40 N 120-40-23.19 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
H.	34-55-38.83 N 120-41-3.72 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
I.	34-55-39.21 N 120-40-16.10 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
J.	34-55-52.18 N 120-40-22.53 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
K.	34-56-22.43 N 120-40-6.98 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
L.	34-56-16.95 N 120-39-49.97 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
M.	34-56-3.17 N 120-39-57.63 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15

Oceanographic Research Moorings cont'd					
	Position	Instrument Type	Surface Marker	Light	Deploy/Recovery Date
N.	34-55-49.00 N 120-40-8.56 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
O.	34-55-39.17 N 120-40-1.44 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
P.	34-55-29.11 N 120-40-1.28 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
Q.	34-55-10.91 N 120-40-4.19 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
R.	34-54-56.31 N 120-40-8.29 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
S.	34-54-39.61 N 120-40-14.08 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
T.	34-54-23.66 N 120-40-19.37 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
U.	34-54-7.77 N 120-40-24.34 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
V.	34-55-21.69 N 120-39-58.45 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
W.	34-55-22.03 N 120-39-59.92 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
W.	34-55-22.03 N 120-39-59.92 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
X.	34-55-22.88 N 120-40-2.82 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
Y.	34-55-23.50 N 120-40-5.72 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
Z.	34-55-23.87 N 120-40-7.14 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
AA.	34-55-25.24 N 120-40-13.08 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
BB.	34-55-29.10 N 120-40-27.05 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
CC.	34-55-31.86 N 120-40-35.23 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
DD.	34-55-35.97 N 120-40-50.71 W	Bottom Mooring	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15

Oceanographic Research Moorings cont'd					
	Position	Instrument Type	Surface Marker	Light	Deploy/Recovery Date
EE(1).	34-52-45.12 N 120-41-33.82 W	Bottom Mooring	Yellow-green Polyform LD-1 buoy	Unlighted	11 Jun 15 / 06 Aug 15
EE(2).	34-52-45.12 N 120-41-33.82 W	Bottom Mooring	12in Orange Buoy	Unlighted	11 Jun 15 / 06 Aug 15
FF(1).	34-56-12.39 N 120-43-52.51 W	Bottom Mooring	Yellow-green Polyform LD-1 buoy	Unlighted	11 Jun 15 / 06 Aug 15
FF(2).	34-56-12.39 N 120-43-52.51 W	Bottom Mooring	12in Orange Buoy	Unlighted	11 Jun 15 / 06 Aug 15
GG(1).	34-52-46.12 N 120-43-35.94 W	Bottom Mooring	Yellow-green Polyform LD-1 buoy	Unlighted	11 Jun 15 / 06 Aug 15
GG(2).	34-52-46.12 N 120-43-35.94 W	Bottom Mooring	12in Orange Buoy	Unlighted	11 Jun 15 / 06 Aug 15
HH(1).	34-55-52.11 N 120-41-47.29 W	Bottom Mooring	Yellow-green Polyform LD-1 buoy	Unlighted	11 Jun 15 / 06 Aug 15
HH(2).	34-55-52.11 N 120-41-47.29 W	Bottom Mooring	12in Orange Buoy	Unlighted	11 Jun 15 / 06 Aug 15
II(1).	34-57-29.33 N 120-41-15.01 W	Bottom Mooring	Yellow-green Polyform LD-1 buoy	Unlighted	11 Jun 15 / 06 Aug 15
II(2).	34-57-29.33 N 120-41-15.01 W	Bottom Mooring	12in Orange Buoy	Unlighted	11 Jun 15 / 06 Aug 15
JJ(1).	34-58-2.87 N 120-43-53.87 W	Bottom Mooring	Yellow-green Polyform LD-1 buoy	Unlighted	11 Jun 15 / 06 Aug 15
JJ(2).	34-58-2.87 N 120-43-53.87 W	Bottom Mooring	12in Orange Buoy	Unlighted	11 Jun 15 / 06 Aug 15
KK(1).	34-53-54.78 N 120-43-39.13 W	Bottom Mooring	Yellow-green Polyform LD-1 buoy	Unlighted	11 Jun 15 / 06 Aug 15
KK(2).	34-53-54.78 N 120-43-39.13 W	Bottom Mooring	12in Orange Buoy	Unlighted	11 Jun 15 / 06 Aug 15
LL(1).	34-53-57.86 N 120-41-35.26 W	Bottom Mooring	Yellow-green Polyform LD-1 buoy	Unlighted	11 Jun 15 / 06 Aug 15
LL(2).	34-53-57.86 N 120-41-35.26 W	Bottom Mooring	12in Orange Buoy	Unlighted	11 Jun 15 / 06 Aug 15
MM(1).	34-55-57.19 N 120-42-35.64 W	Bottom Mooring	Yellow-green Polyform LD-1 buoy	Unlighted	11 Jun 15 / 06 Aug 15
MM(2).	34-55-57.19 N 120-42-35.64 W	Bottom Mooring	12in Orange Buoy	Unlighted	11 Jun 15 / 06 Aug 15

Oceanographic Research Moorings cont'd					
	Position	Instrument Type	Surface Marker	Light	Deploy/Recovery Date
T1.	34-55-21.74 N 120-39-59.99 W	Bottom Tripod, 1m high	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
T2.	34-55-22.57 N 120-40-2.85 W	Bottom Tripod, 1m high	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
T3.	34-55-23.12 N 120-40-5.72 W	Bottom Tripod, 1m high	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
T4.	34-55-23.52 N 120-40-7.14 W	Bottom Tripod, 1m high	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
T5.	34-55-28.45 N 120-40-27.03 W	Bottom Tripod, 1m high	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15
T6.	34-55-35.34 N 120-40-50.55 W	Bottom Tripod, 1m high	14in Crab Float	Unlighted	11 Jun 15 / 06 Aug 15

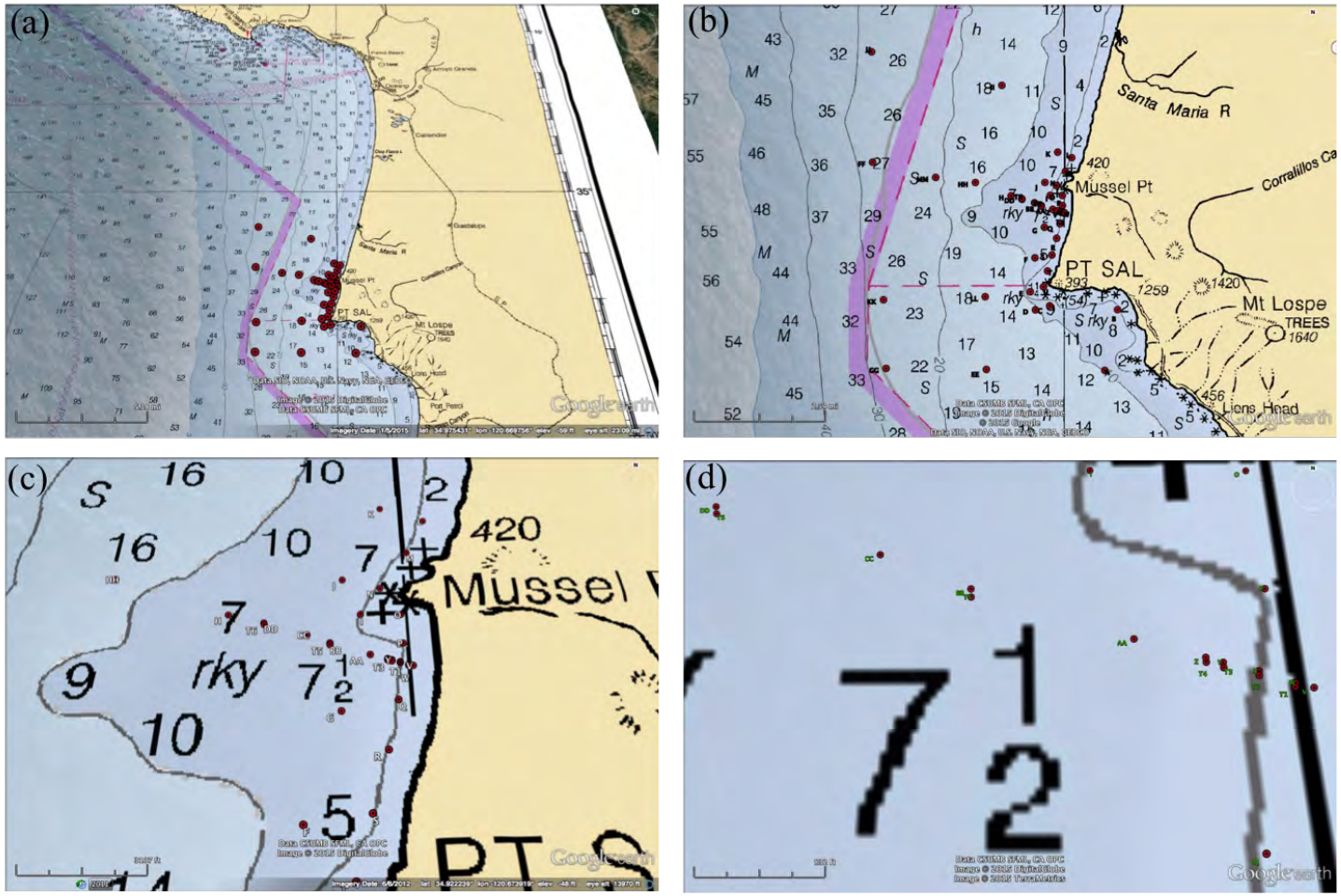
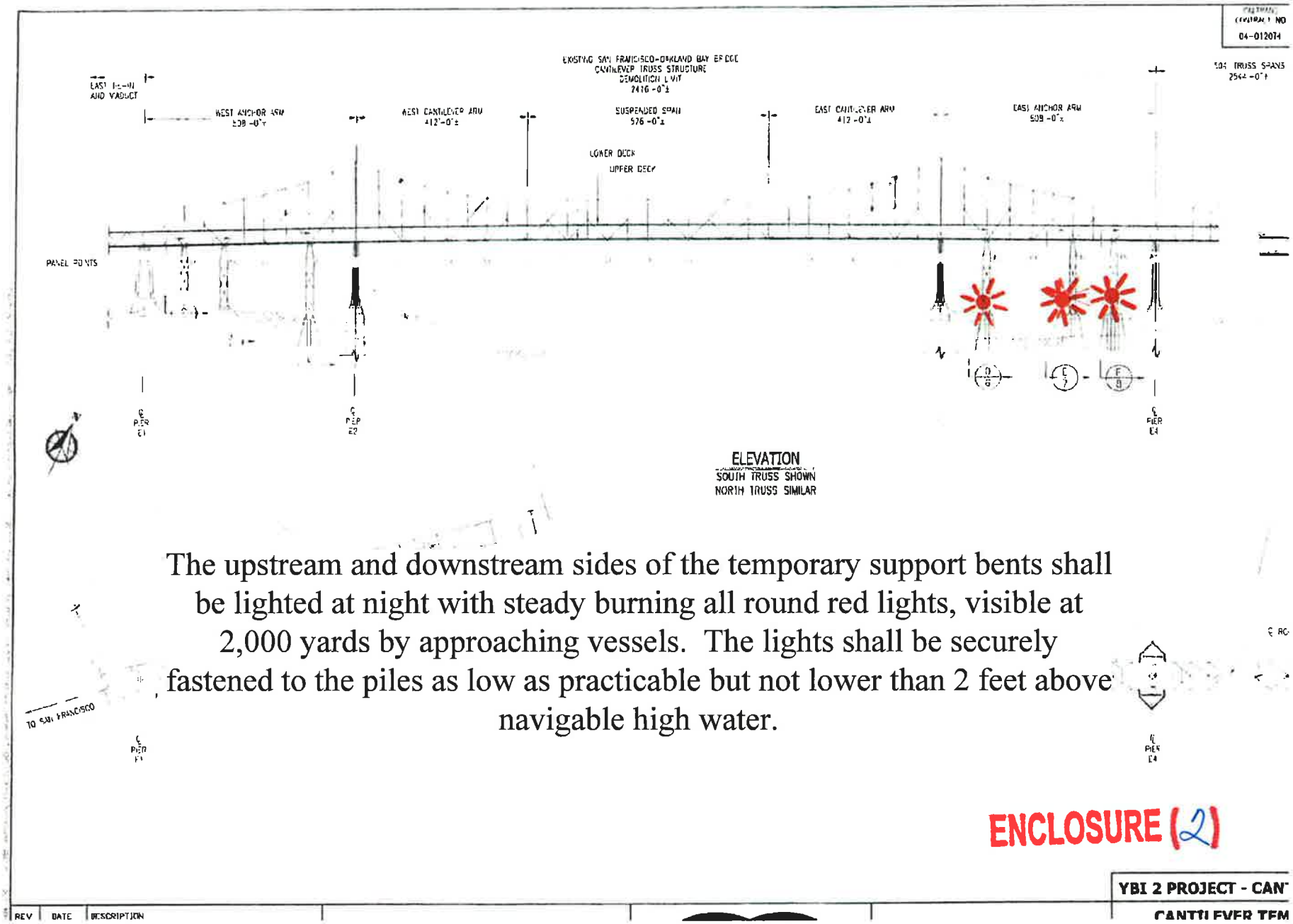


Figure 1: Mooring locations overlaid on NOAA Chart 1800. (a) Chart from Avila Beach to Vandenberg AFB. (b) Overview of research location near Pt. Sal. (c) Region showing mooring locations near Mussel Point. (d) Detail of cross shore mooring south of Mussel Point.

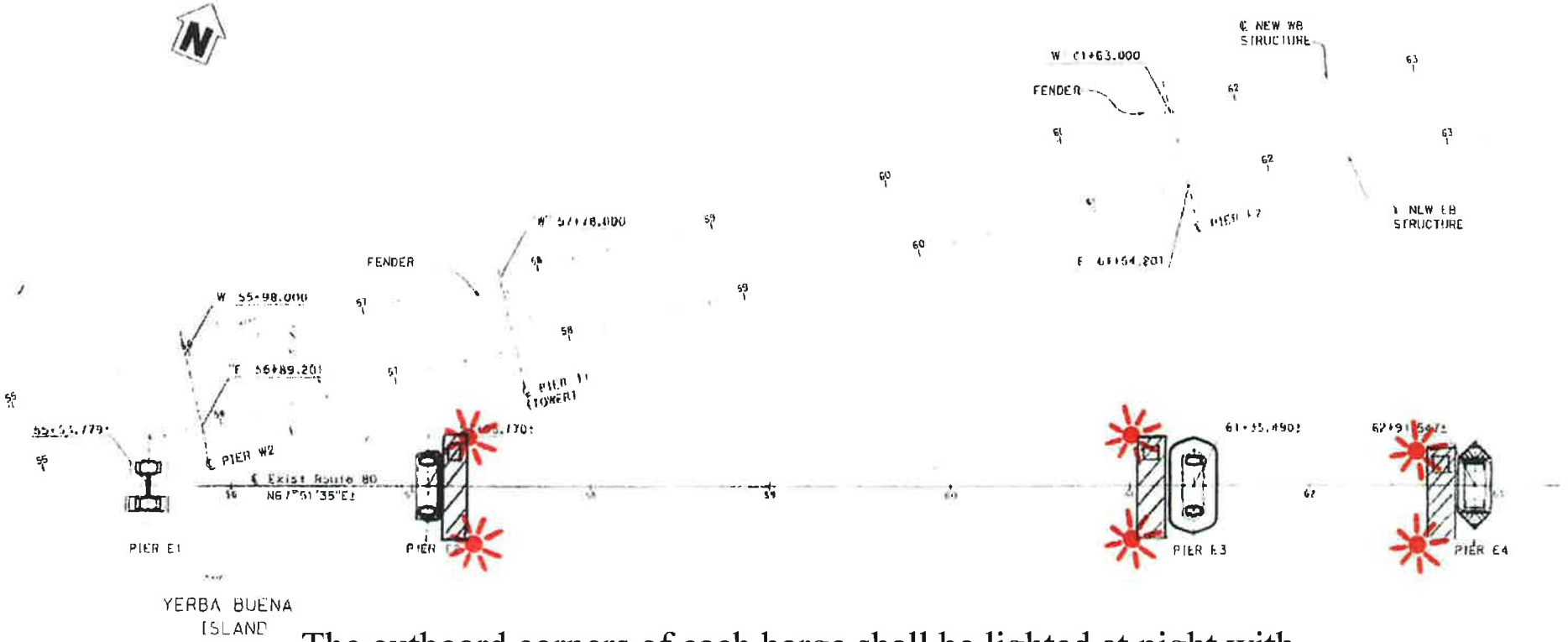
Lighting Diagram - Temporary Support Bents
Eastern Span San Francisco Oakland Bay Bridge
Mile 8.9, San Francisco Bay



The upstream and downstream sides of the temporary support bents shall be lighted at night with steady burning all round red lights, visible at 2,000 yards by approaching vessels. The lights shall be securely fastened to the piles as low as practicable but not lower than 2 feet above navigable high water.

ENCLOSURE (2)

Lighting Diagram - Equipment Barges
Eastern Span San Francisco Oakland Bay Bridge
Mile 8.9, San Francisco Bay



The outboard corners of each barge shall be lighted at night with steady burning all round red lights, visible at 2,000 yards by approaching vessels.

ENCLOSURE (1)

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTRO
BEFORE ORDERING OR FABRICATING ANY MATE

PRELIMINARY INVESTIGATION SECTION

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
TOLL BRIDGE DESIGN

33-0025
13.2/13.9

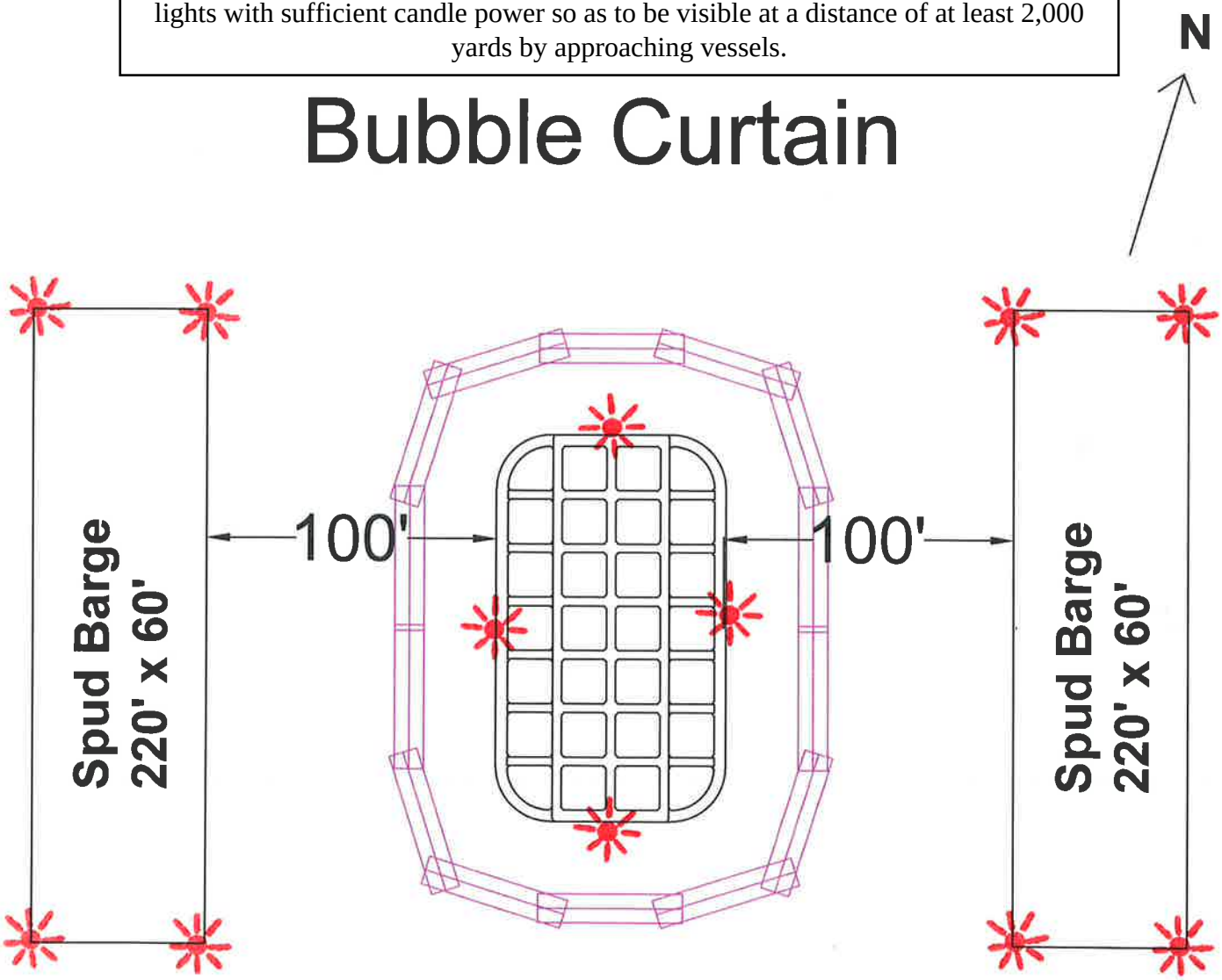
SAN FRANCISCO-OAKLAND
EAST SPAN SEISMIC SAFET

EXISTING CANTILEVER TRU
FOUNDATION

Eastern Span SFOBB
Pier "H" (E-3)
Lighting Plan

Each corner of each barge shall be lighted at night with steady burning all-round red lights with sufficient candle power so as to be visible at a distance of at least 2,000 yards by approaching vessels.

The exposed pier structure shall be lighted at night with steady burning all-round red lights with sufficient candle power so as to be visible at a distance of at least 2,000 yards by approaching vessels.

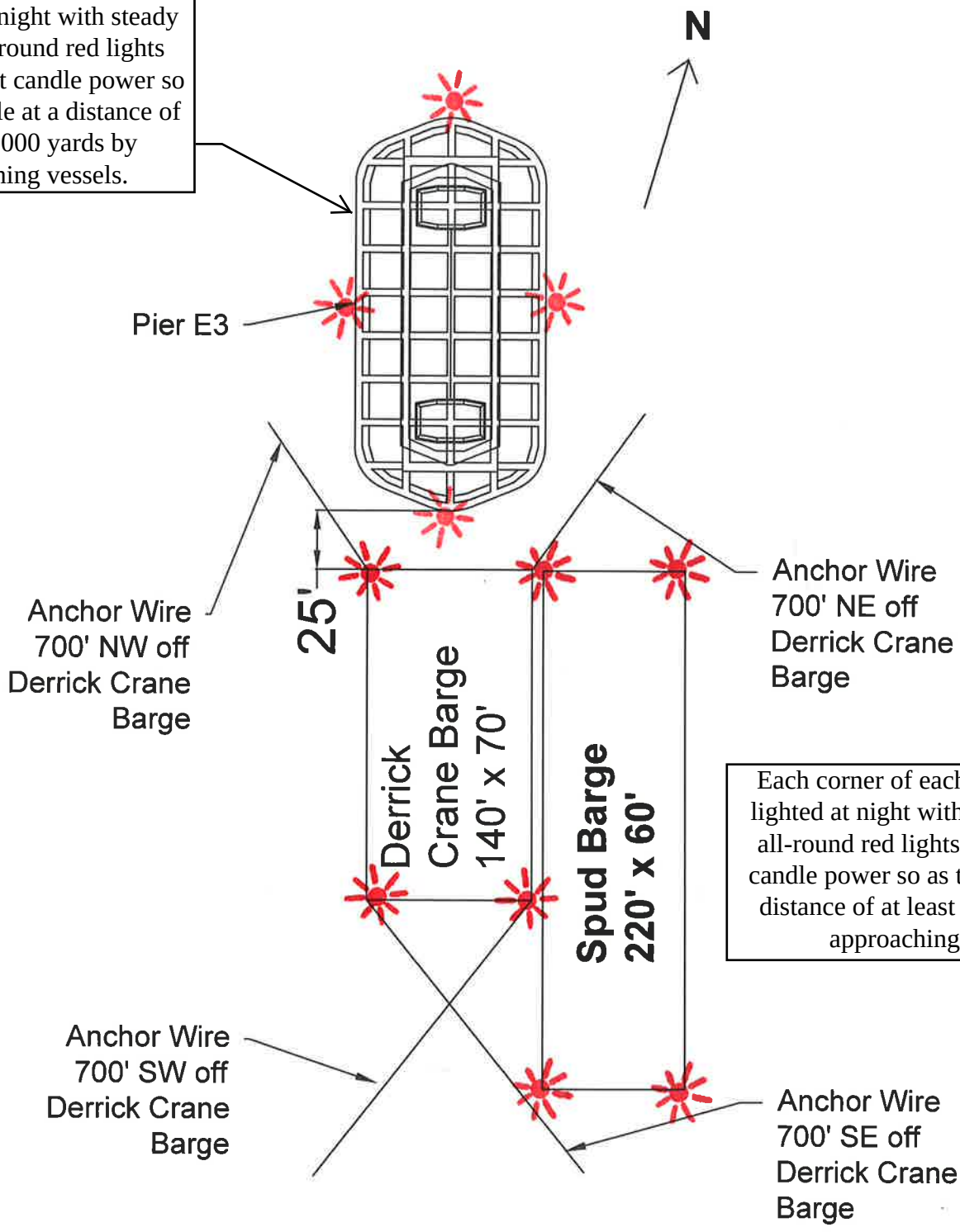


ENCLOSURE ( )

Eastern Span SFOBB
Pier "H" (E-3)
Lighting Plan

Fender Removal

The exposed pier structure shall be lighted at night with steady burning all-round red lights with sufficient candle power so as to be visible at a distance of at least 2,000 yards by approaching vessels.

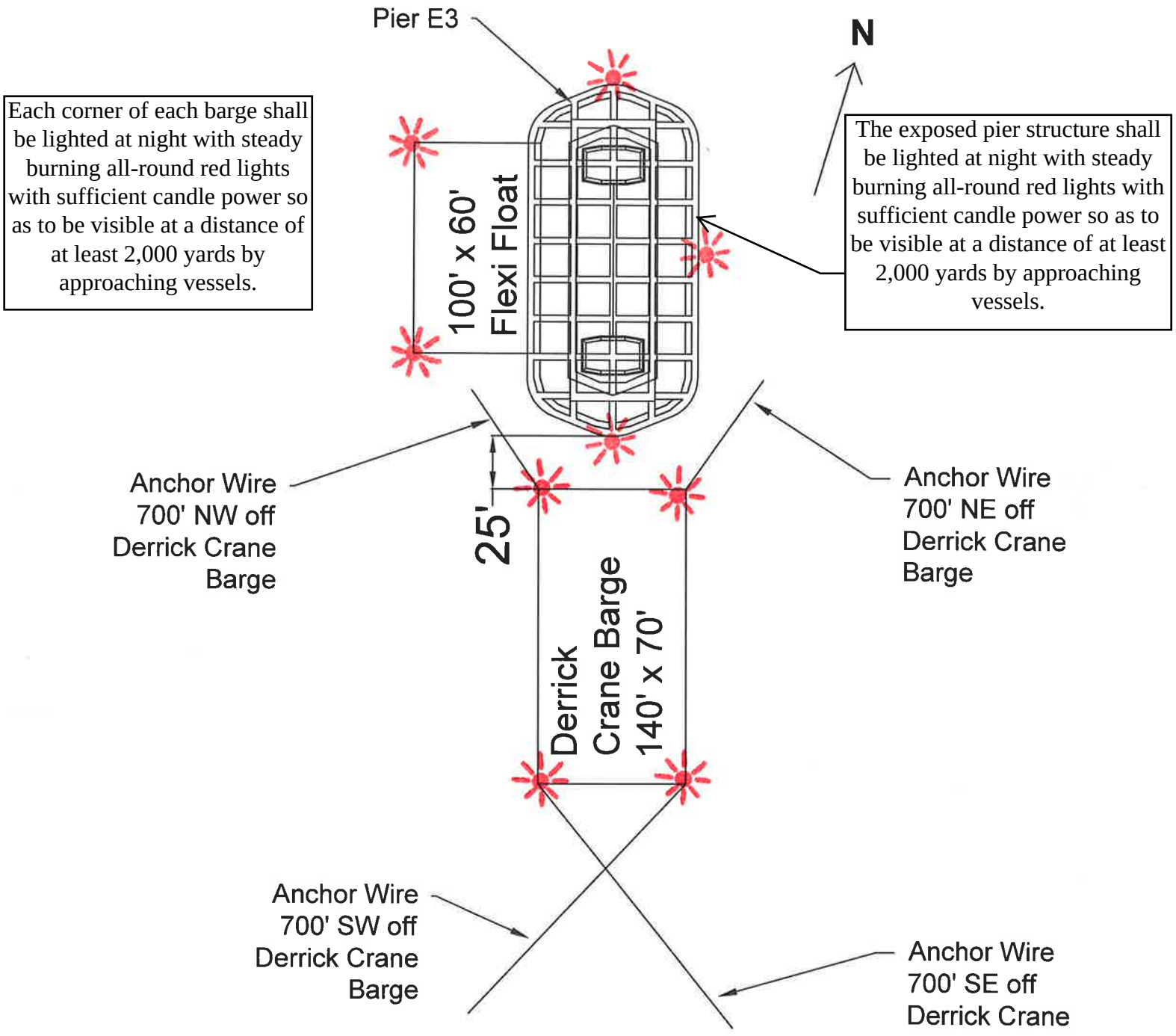


Each corner of each barge shall be lighted at night with steady burning all-round red lights with sufficient candle power so as to be visible at a distance of at least 2,000 yards by approaching vessels.

ENCLOSURE ( )

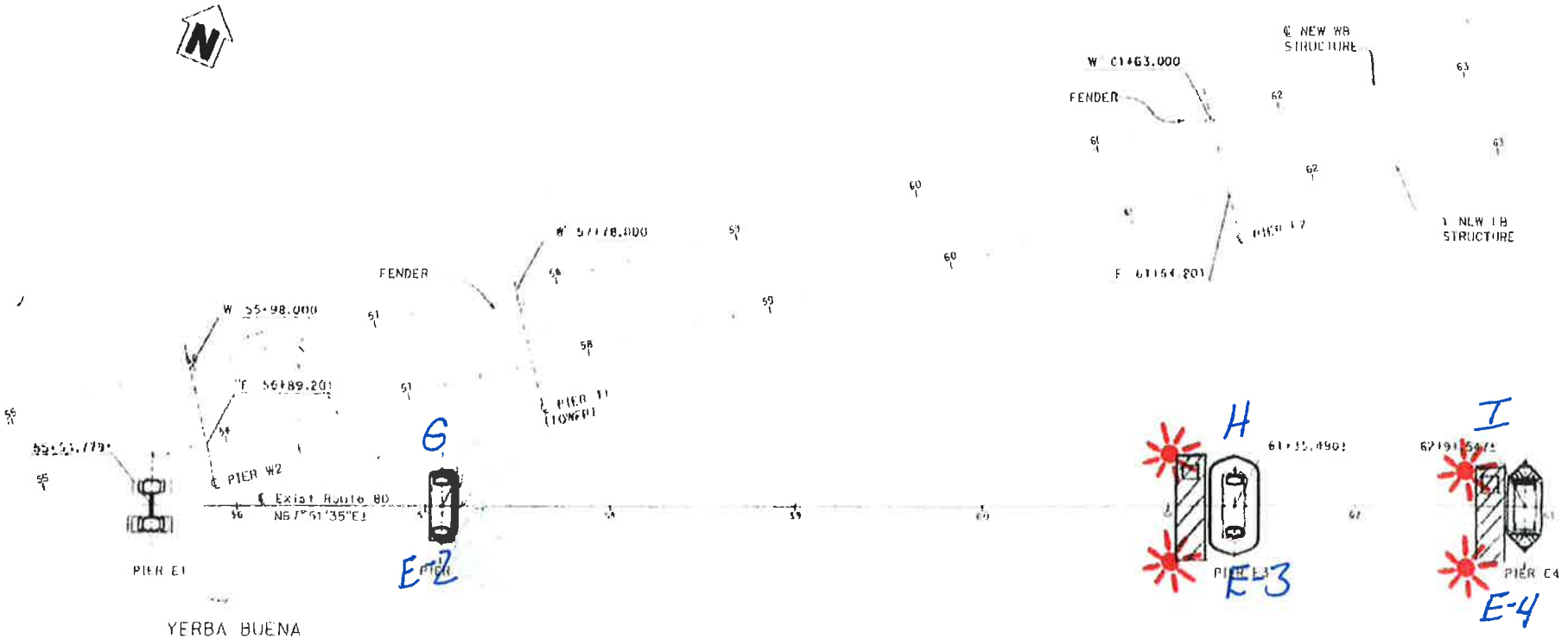
Eastern Span SFOBB
Pier "H" (E-3)
Lighting Plan

Curtain Demo



ENCLOSURE ( )

Lighting Diagram - Equipment Barges
Eastern Span San Francisco Oakland Bay Bridge
Mile 8.9, San Francisco Bay



The outboard corners of each barge shall be lighted at night with steady burning all round red lights, visible at 2,000 yards by approaching vessels.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTRO
BEFORE ORDERING OR FABRICATING ANY MATE

PRELIMINARY INVESTIGATION SECTION

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

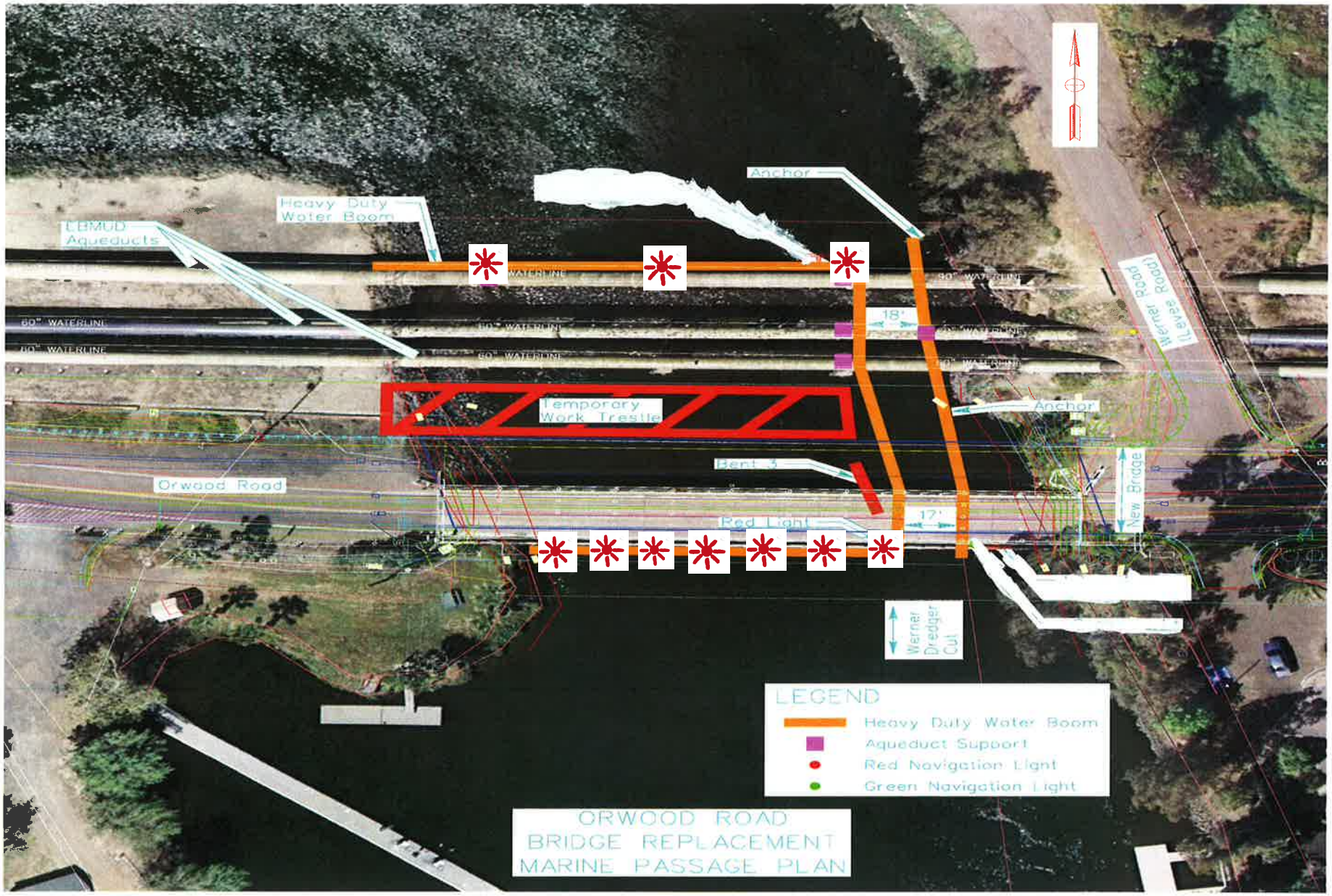
TOLL BRIDGE DESIGN

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

SAN FRANCISCO-OAKLAND
EAST SPAN SEISMIC SAFET

EXISTING CANTILEVER TRU
FOUNDATION

Orwood Bridge Replacement Project
Mile 1.5, Werner Cut.
Temporary Trestle and Lighting Plan



The temporary trestle will be placed between the existing Orwood Bridge and the EBMUD pipelines. A temporary boom will surround the entire project area leaving mariners with 17 feet of horizontal clearance at the eastern bank of Werner Cut. The in-water piers on the upstream pipeline and downstream existing Orwood Bridge will be lit at night with steady burning red lights.

	WATERWAY MANAGEMENT QUESTIONAIRE **San Clemente Island**	

The following is a survey developed to provide important information to U.S. Coast Guard Sector San Diego on the overall safety of the waters surrounding San Clemente Island. Survey information provides the Coast Guard data on waterway safety concerns and specifically information on the Aids to Navigation System for San Clemente Island and associated waters, in order to ensure that the aids are serving their intended purpose. It also aids future waterway management decisions to reflect concerns of the waterway users.

Please add any additional comments to help us with this assessment and feel free to share this survey with anyone you feel is applicable and would provide value to our review. Results of the study will be available upon completion.

Please return this questionnaire by 1 September 2015.

Email: Nick.G.Bateman@uscg.mil

Mail: *USCG Waterways Management Branch*
Coast Guard Sector San Diego
2710 North Harbor Drive
San Diego CA, 92101
Attn: LT Robert Cole

Should you have questions concerning this questionnaire or about the study please contact Sector San Diego Waterways Management at (619) 278-7656.

Name (optional):_____ **Email (optional)# :** _____

VSL(s) Name (optional): _____ **VSL type(s):**_____

Vessel Info (length, beam, draft: if over 25') : _____

Please provide some other general information about your vessel(s) and/or vessel operations :

_____

Number of days operating around San Clemente Island annually:

o	<20	o	21-50	o	51-99	o	>100

How many years of experience do you have working offshore, in/around San Clemente Island?

o <2	o 2-4	o 5-10	o >10

Primary vessel use? (choose all that apply)

- ☐ Recreational boating (diving/fishing)
- ☐ Passenger excursions (sight seeing, (whale watching, fishing)
- ☐ Fishing - recreational
- ☐ Fishing – commercial
- ☐ Other
- o Military

Are the aids to navigation deemed sufficient? YES NO

If no, what other aids to navigation or changes would you like to see added to these areas and why?

_____

What aids, private or federal, if any, do you consider irrelevant and could be discontinued?

_____

Do you feel that the aids effectively mark navigational hazards and best water routes?

_____

Overall, do you feel the existing low visibility sound signals are sufficient and/or necessary?

_____

Are there marine hazards to navigation that are not designated on nautical charts or Coast Pilot?

_____

Do military operations, reported on the website https://www.scisland.org with your navigation? _____

_____

Have you ever been impacted by heavy weather, causing temporary or unplanned anchorage? If yes, how many times in the past 5 years? YES NO

If no: _____

Are you aware of any collisions or groundings within the past 5 years that have occurred? Please include where and when they took place.

_____

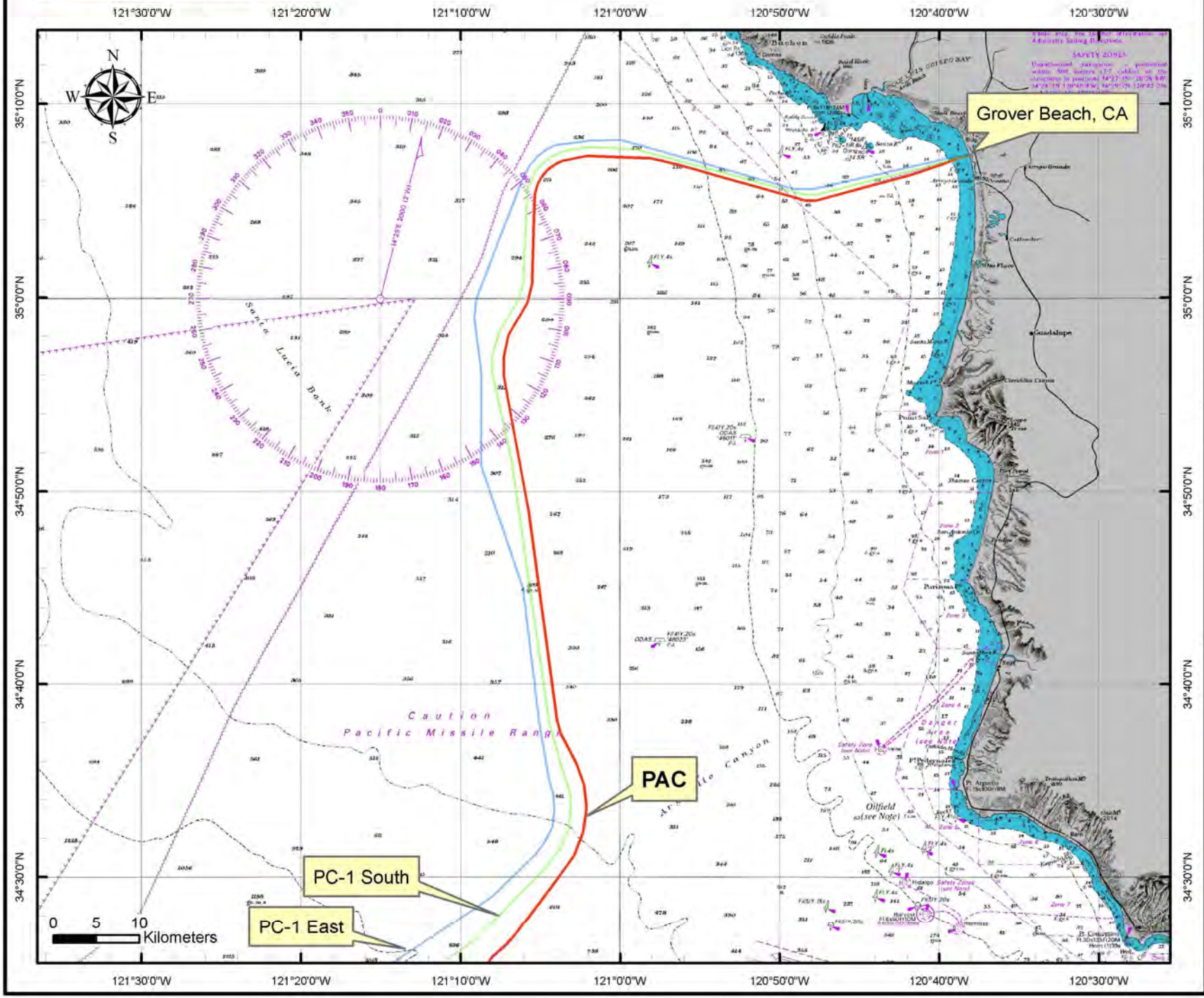
_____

Any final thoughts or comments? This is your opportunity to note problems you see with this waterway / navigation aids, and present any suggestions you may have for improvement.

_____

Thank You for your time.
Coast Guard Sector San Diego

Emergency Contact Number :
1-877-881-9205



Legend

- PC-1 East As-Laid Route
- PC-1 South As-Laid Route
- PAC Survey Route

This chart is provided for the purpose of depicting the location of these cables and should not be used for navigational purposes.

Projection : MERCATOR

CGS_WGS_1984
Datum: D_WGS_1984
Prime Meridian: 0

CABLE NETWORK SYSTEM

PAC Cable Survey Area

UKHO ARC Chart 778
Issue Date : 12/08/2010

Prepared by

Alcatel Submarine Network

Marine Operations Department
Christchurch Way
Greenwich
SE10 0AG

ALDA MARINE S.A.S

28, Quai Galienni
92158 SURESNES CEDEX
Tel : +33 (0)1 7038 6000
Fax : +33 (0)1 7079 1502

PC-1 East 132 Km	Lat / Lon	Estimated Timeline
# 1	N35 07.2420 W120 38.9060	15-Jul-15
# 2	N35 05.6016 W120 48.2883	15-Jul-15
#3	N35 07.8906 W121 03.8843	16-Jul-15
#4	N34 33.1817 W121 04.1532	17-Jul-15
#5	N34 25.3717 W121 15.7756	19-Jul-15

PC-1 South 128Km	Lat / Lon	Estimated Timeline
# 1	N34 24.6139 W121 12.6429	21-Jul-15
# 2	N34 33.5463 W121 03.1301	23-Jul-15
#3	N35 07.0791 W121 04.6096	23-Jul-15
#4	N35 05.2941 W120 48.0200	24-Jul-15
#5	N35 07.2420 W120 38.9060	26-Jul-15

PAC Seg1 132 Km	Lat / Lon	Estimated Timeline
# 1	N35 07.2420 W120 38.9060	27-Jul-15
# 2	N35 04.9836 W120 48.0515	28-Jul-15
#3	N35 06.8463 W121 04.1059	29-Jul-15
#4	N34 33.5593 W121 02.1385	31-Jul-15
#5	N34 21.3020 W121 11.0383	31-Jul-15

TGN G5 267Km	Lat / Lon	Estimated Timeline
# 1	N32 51.6700 W120 24.0860	2-Aug-15
# 2	N33 14.6804 W118 38.1625	9-Aug-15
#3	N33 27.9795 W118 46.4247	10-Aug-15
#4	N33 48.6774 W118 38.0188	11-Aug-15
#5	N33 51.3630 W118 24.5610	13-Aug-15

118°35'0"W 118°30'0"W 118°25'0"W

33°50'0"N

SubCom

Undersea Communications Cables
TGN 24-hour hotline 1-800-583-9150
UNITY 24-hour hotline 1-888-777-9583
Questions: 1-973-656-8228
scdrew@subcom.com
NOT FOR NAVIGATION
NOT FOR SALE
June 24, 2010

TGN PACIFIC Segment G5

UNITY

Redondo Canyon

COMMERCIAL ANCHORAGES

ES-1

ES-2

Pilot Boarding Area

Oil and gas seepage

SAFETY ZONE (see note A)
165.1156

DANGER AREA

THREE NAUTICAL MILE (see note A)

MAGNETIC

VAR 13°15'E (2006)

ANNUAL DECREASE 6'

NOTF G
Numerous submerged pipelines, sewer li
uncharted buoys and other potential hazard
navigation exist within this area. Anchor
dredging, seining, fishing, and similar activi
within this area may foul, rupture, or other
disturb the submerged pipelines; risking se
environmental damage. If circumstances ne
sitate a transit through this region, proceed
the most direct route without undue delay
extreme caution, as there are numero
unlighted buoys.

MANHATTAN BEACH

HERMOSA BEACH

REDONDO B

Clifto

Malaga Cove

Flat Rock Pt

Bluff Cove

King Harbor

Palos Verdes Pt

Lunada Bay

Resort Pt

PALOS VERDES

Fl 5s 165ft Priv

Fl R 4s 20ft 6M "2" HORN

Fl G 4s 35ft 4M "3"

R "10PV" Fl R 4s BELL

RW "RB" Mo (A) BELL

Fl (5) Y 20s Priv

Fl Y 6s Priv

HORN Priv

Obstn Fish Haven (auth min 7 fms)

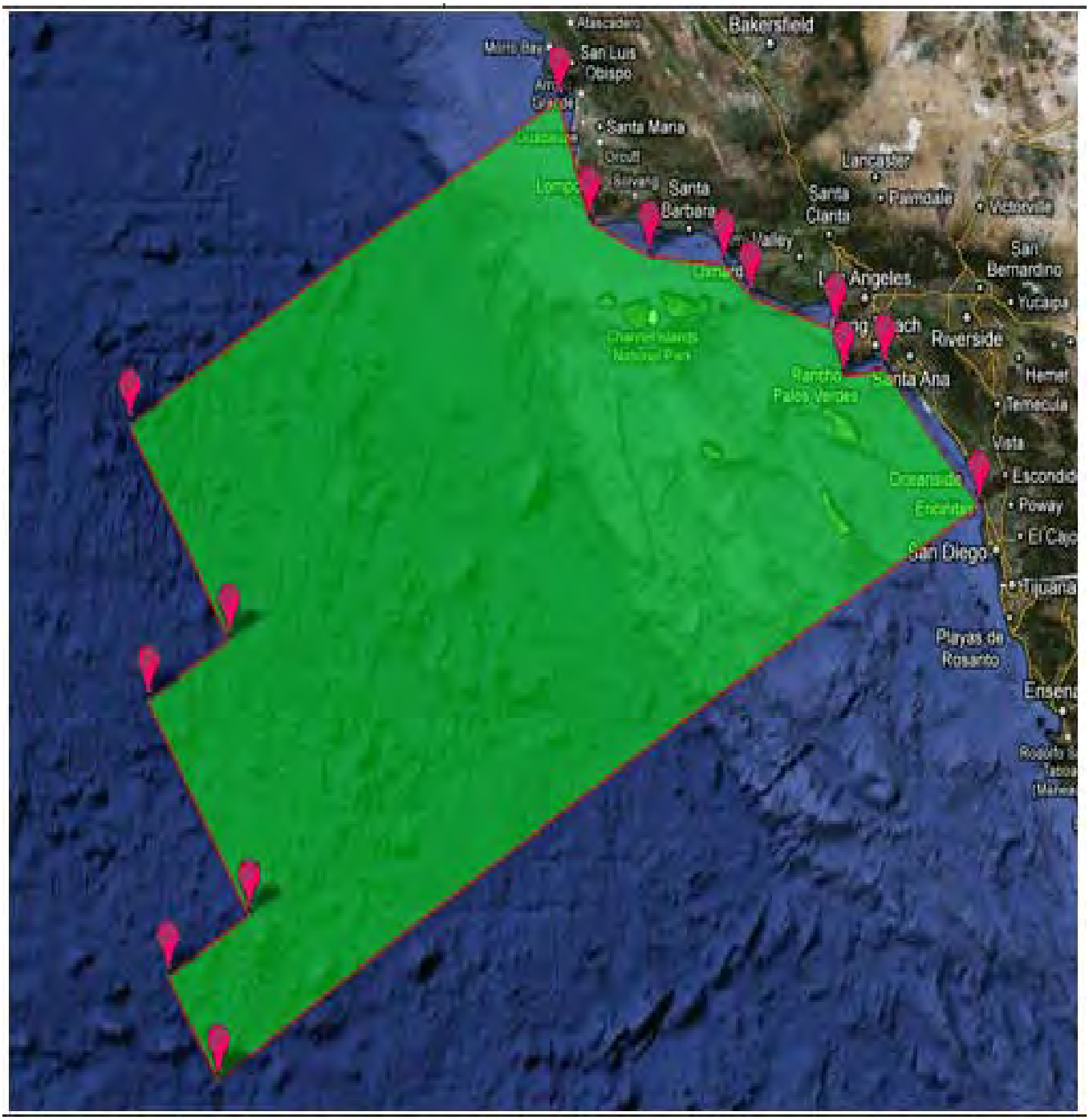
Obstn Fish Haven (auth min 10 fms)

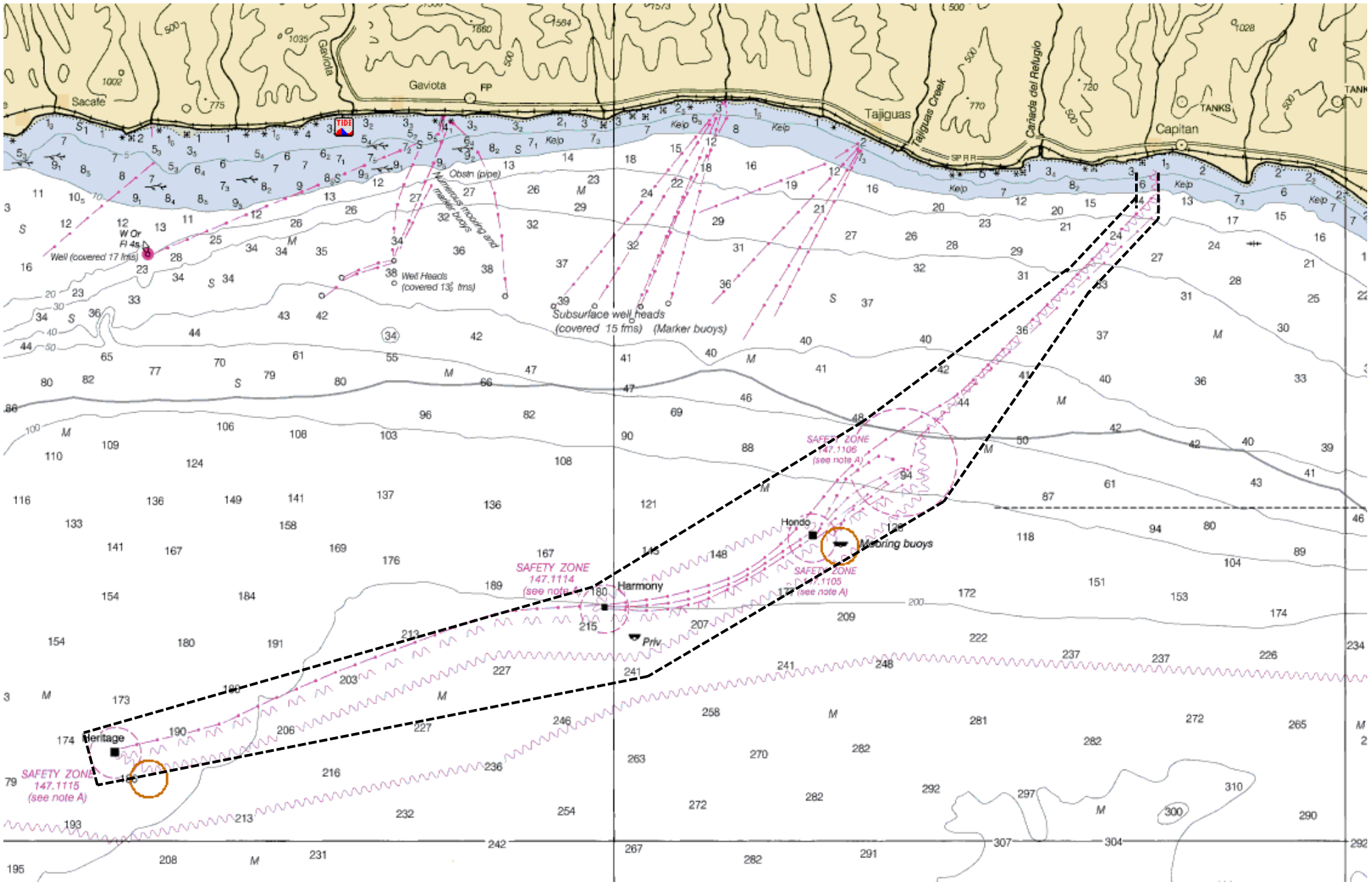
Obstn Fish Haven (auth min 12 fms)

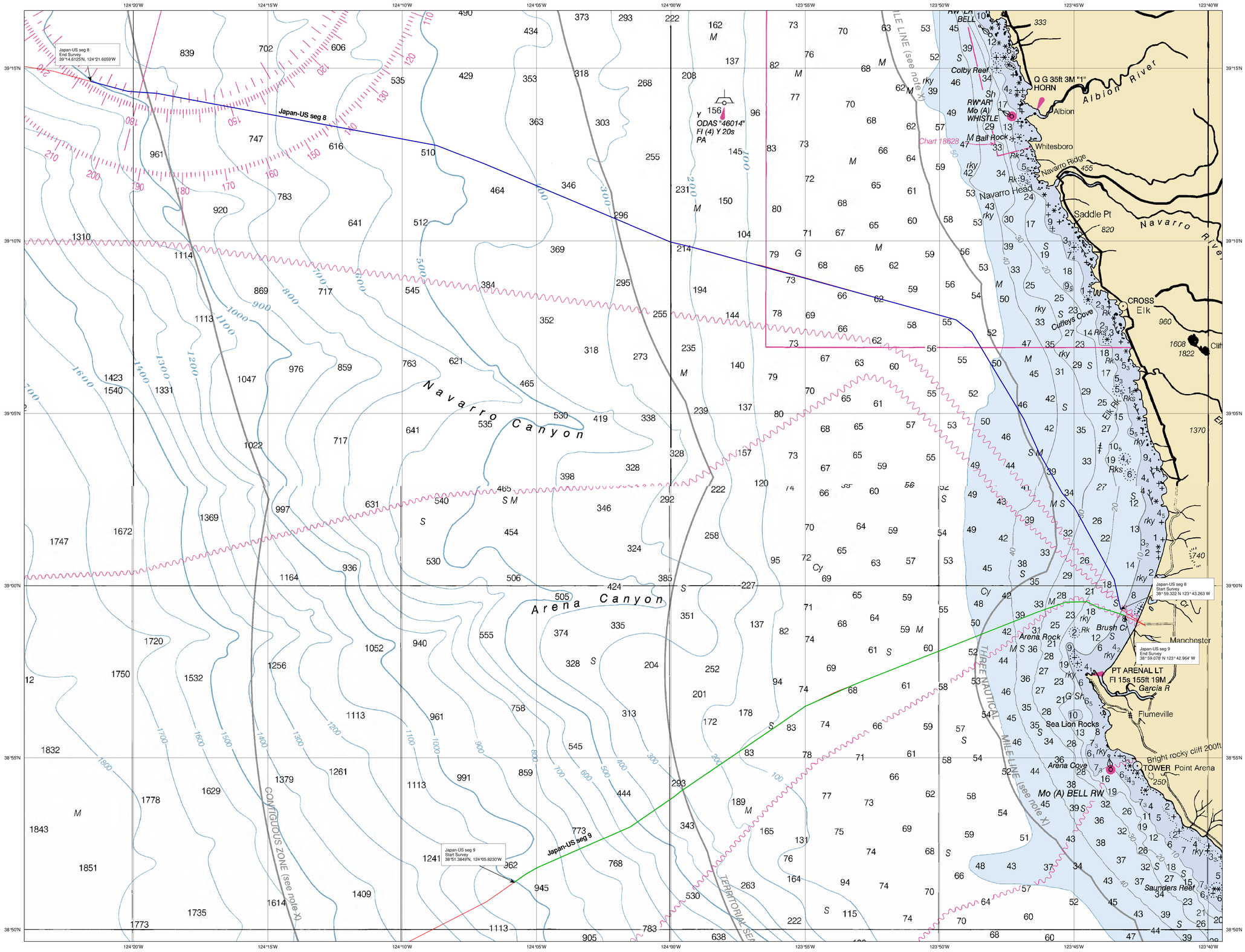
Kelp

Oil seepage

33°50'0"N


Bakersfield
San Luis Obispo
Santa Maria
Santa Barbara
Santa Clarita
Lancaster
Palmdale
Victorville
San Bernardino
Yucaipa
Riverside
Hemet
Temecula
Santa Ana
Rancho Palos Verdes
Channel Islands National Park
Oceanside
Escondido
Poway
El Cajon
San Diego
Tijuana
Playas de Rosarito
Ensenada


Sacate
Gaviota
FP
Gaviota
Tajiguas
Tajiguas Creek
Cañada del Refugio
Capitan
TANKS
TIDE
Well (covered 17 fms)
W Or
Fl 4s
Well Heads
(covered 13½ fms)
Numerous mooring and marker buoys
Obstn (pipe)
Subsurface well heads
(covered 15 fms) (Marker buoys)
Kelp
SP R R
Hondo
Mooring buoys
Harmony
Priv
Heritage
SAFETY ZONE
147.1106
(see note A)
SAFETY ZONE
147.1114
(see note A)
SAFETY ZONE
147.1105
(see note A)
SAFETY ZONE
147.1115
(see note A)



Legend

- Cable to be surveyed (Direction of survey: Offshore to Shore)
- Cable to be surveyed (Direction of survey: Shore to Offshore)
- Fibre Optic cable

0 2 4 6 8 10
Kilometres at 39°N

SPHEROID & DATUM : WGS84

PROJECTION : MERCATOR

Notes:

This chart is intended for general reference only and
NOT FOR NAVIGATION PURPOSES.

SOUNDINGS IN FATHOMS
AT MEAN LOW WATER

Global Marine Systems

Global Marine Systems Limited
New Saxon House
1 Winsford Way
Boreham Interchange
Chelmsford
Essex CM3 5PD
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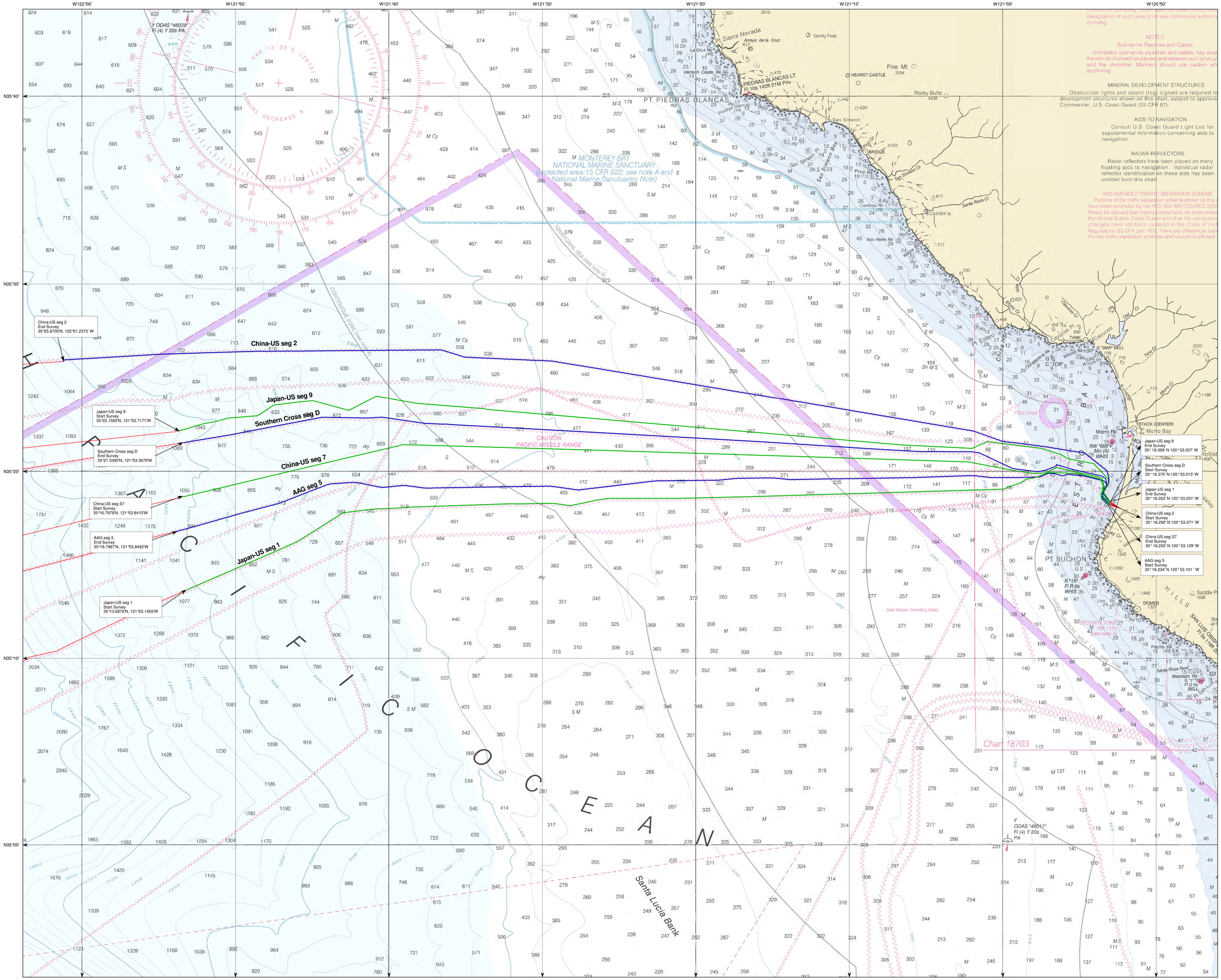
2015 Cable Burial Verification Survey

Survey Locations

California- Northern Chart



Legend

- Cable to be surveyed (Direction of survey: Offshore to Shore)
- Cable to be surveyed (Direction of survey: Shore to Offshore)
- Fibre Optic cable

0 2 4 6 8 10
Kilometres at 35°20'N

SPHEROID & DATUM : WGS84

PROJECTION : MERCATOR

Notes:

This chart is intended for general reference only and **NOT FOR NAVIGATION PURPOSES.**

SOUNDINGS IN FATHOMS
AT MEAN LOW WATER

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Survey Locations

California- Southern Chart