DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
P. O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

October 5, 2020

Regulatory Division
West Branch
Tampa Permits Section

PUBLIC NOTICE

Permit Application No. SAJ-2017-03488 (SP-KRD)

TO WHOM IT MAY CONCERN: The Jacksonville District of the U.S. Army Corps of Engineers (Corps) has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403) as described below:

APPLICANT:
Neil A. Sims
Ocean Era, LLC (formally known as Kampachi Farms, LLC)
PO Box 4239
Kailua-Kona, Hawaii 96740

WATERWAY AND LOCATION: The project would affect waters of the United States associated with Gulf of Mexico. The project site is located approximately 40-45 miles west, southwest offshore of Longboat Pass, Sarasota Bay, Florida. The proposed project would be placed in the Gulf of Mexico at an approximate water depth of 40 m (130 feet) and within an area that contains unconsolidated sediments that are 3-10 feet deep and within the 1,000 square meter (0.25-acre) area shown in Table 1 below.

Table 1: VE Project Area with 3-ft to 10-ft Unconsolidated Sediments (0.25-acre)

LOCATION	LATITUDE	LONGITUDE
Upper Left Corner	27.128435	-83.204502
Upper Right Corner	27.126837	-83.194280
Lower Right Corner	27.112962	-83.195897
Lower Left Corner	27.114605	-83.207005

Directions to the site are as follows: N/A.

APPROXIMATE CENTRAL COORDINATES: See Table 1, above.

PROJECT PURPOSE:

Basic: Installation of a temporary pilot-scale single net pen aquaculture system in the Gulf of Mexico.

Overall: Installation of a temporary pilot-scale single net pen aquaculture system to demonstrate the potential for future open ocean aquaculture systems in the Gulf of Mexico.

EXISTING CONDITIONS: The proposed project would be placed in the Gulf at an approximate water depth of 130 feet (40 m), generally located 45 miles west, southwest of Longboat Pass-Sarasota Bay, Sarasota County, Florida. The proposed aquaculture system would be placed within an area that contains unconsolidated sediments (sandy bottom habitat only), see Table 1 above for location coordinates. The Applicant would select the specific location within that area based on diver-assisted assessment of the sea floor when the cage and anchoring system are deployed. The proposed area is located on a portion of the west Florida Shelf that is heavily trawled by the shrimp fishing industry. Additionally, large portions of the west Florida Shelf are designated as military special use airspace. To avoid user conflicts in this area, the Applicant coordinated closely with the military and the shrimping industry during the site selection process.

CORPS JURISDICTIONAL AUTHORITY AND LEAD FEDERAL AGENCY DESIGNATION: Please note that the Corps only has the authority to evaluate the proposed action pursuant to Section 10 of the Rivers and Harbors Act (RHA) approved March 3, 1899, (33 U.S.C. 403) (hereinafter referred to as Section 10). Pursuant to 33 CFR 320.2(b), Section 10 prohibits the unauthorized obstruction or alteration of any navigable water of the United States (U.S.). The construction of any structure in or over any navigable water of the U.S., the excavating from or depositing of material in such waters, or the accomplishment of any other work affecting the course, location, condition, or capacity of such waters is unlawful unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army. The instrument of authorization is designated a permit. The authority of the Secretary of the Army to prevent obstructions to navigation in navigable waters of the United States was extended to construction of artificial islands, installations, and other devices located on the seabed, to the seaward limit of the outer continental shelf, by section 4(f) of the Outer Continental Shelf Lands Act of 1953 as amended (43 U.S.C. 1333(e)). (See 33 CFR part 322.3(b)).

For this project, the U.S. Environmental Protection Agency (EPA) served as the lead federal agency with assistance from U.S. Army Corps of Engineers, Jacksonville District (Corps) and the National Marine Fisheries Service (NMFS) as cooperating agencies under the National Environmental Policy Act (NEPA). Cooperating agencies have jurisdiction by law or special expertise with respect to the potential environmental impacts resulting from this project. All three federal agencies jointly prepared the Environmental Assessment (EA) in compliance with the requirements of the NEPA Title 40 CFR Parts 1500-1508 regulations, and each Agencies' implementing regulations to evaluate the potential environmental impacts of the construction and operation of the proposed project. Currently, the operator of an offshore aquaculture facility must obtain required federal permits and authorizations prior to beginning operations (e.g., Corps Section 10 permit is required before anchoring any structures into federal waters of the Gulf of Mexico and EPA's NPDES permit required before stocking animals into those structures).

National Pollutant Discharge Elimination System (NPDES) permits protect water quality by regulating point source discharges to waters of the United States. Point sources are any discernable, confined, and discrete conveyance from which pollutants are or may be discharged (40 CFR § 122.2). Net-pen systems are a stationary, suspended, or floating system of nets, screens, or cages that are anchored offshore in open waters of the United States (40 CFR § 451.2(j)). Aquaculture facilities produce and discharge wastes (excess fish feed and fecal material) that contain pollutants, which are defined as including solid waste, biological materials, and industrial waste. (40 CFR § 122.2). Accordingly, marine finfish aquaculture operations are point sources that discharge pollutants and are required to obtain NPDES permits.

On September 30, 2020, EPA issued the final NPDES permit, including the above referenced EA, which can be found here: https://www.epa.gov/npdes-permits/ocean-era-inc-velella-epsilon-aquatic-animal-production-facility-national-pollutant.

To date, the Corps and/or EPA have not received permit applications for a commercial or industrial scale marine aquaculture facility from Ocean Era or any other company. However, if commercial or industrial scale project is applied for in the future, each applicant will have to go through the same extensive pre-application and permitting process. Before a decision is made, applicants will be required to provide a complete application and any other data needed to support the application and permitting process. Additionally, prior to receiving a permit, future projects will undergo consultations and/or evaluations in order to comply with other statutory requirements under the ESA, EFH, CZMA, NHPA, and NEPA. There is no guarantee that these projects will be permitted by the Corps or EPA or allowed by other federal agencies with permitting or authorization responsibilities.

PROPOSED WORK: The Applicant, Ocean Era, LLC (formally known as Kampachi Farms, LLC), is seeking authorization for the Velella Epsilon (VE) Pilot Aquaculture Project which is a small, pilot-scale (single net pen) marine aquaculture system where up to 20,000 Almaco jack (Seriola rivoliana) fingerlings would be reared in federal waters (i.e. Gulf of Mexico (GOM)) approximately 45 miles west, southwest of Longboat Pass-Sarasota Bay, Sarasota County, Florida. The project would involve the temporary anchoring of a marine aquaculture system consisting of one (1) tender/support vessel, one (1) offshore-strength net pen, mooring and marker buoys, and the associated multi-anchor swivel (MAS) mooring system with three (3) 3-ton drag embedded anchors. The proposed aquaculture system would be deployed for one (1) period of 12-18 months, which will represent one production cycle including a 12-month rearing timeframe and 6 months for initial cage deployment and water quality and benthic sampling, time between stocking and harvesting, and the removal of gear at the project conclusion.

A single offshore-strength net pen (net pen) would be deployed on an engineered multi-anchor swivel (MAS) mooring system. The design provided by the Applicant for the engineered MAS would use three 3-ton drag embedment anchors for the mooring system. The installation (method) would likely be performed using a work barge or ship, with a heavy-duty lift crane for over-boarding and assisted by a winch for controlled lowering and

raising. The operation would be camera and/or diver assisted to ensure accurate placement of the moorings in the desired targeted mooring locations consisting of 4 to 10 feet deep of unconsolidated sediments (sand).

The net pen material for the proposed project is constructed with rigid and durable materials (copper mesh net with a diameter of 4-millimeter (mm) wire and 40 mm by 40 mm mesh square). The mooring lines for the proposed project would be constructed of steel chain (50mm thick) and thick rope (36mm) that would be attached to a floating net pen and would rotate in the prevailing current direction; the floating net pen position would be influenced by the ocean currents to maintain the mooring rope and chain under tension at all times during operation. The bridle line that connects from the swivel to the cage would be encased in a rigid pipe.

The net pen design is very flexible and self-adjusts to suit the constantly changing wave and current conditions. As a result, the system can float on the surface of the ocean most of the time at an operational position. When a storm approaches the area, a valve would be opened to flood the system with water, causing the entire net pen array to submerge but be maintained several meters above the sea floor and still able to rotate around the MAS and adjust to the currents. A buoy would remain on the surface, marking the net pen's position. After the storm, air would be pumped back into the system via a hose to make the net pen buoyant again and to resume normal operational conditions. Global positioning system (GPS) transponders would be installed on the net pen to provide regular automated reporting to the VE Project staff of the net pen's position. Video feeds from security and in-water cameras would be available for monitoring from the tender vessel 24 hours a day. VE Project staff would access the video feed to monitor the systems at least twice a day. If staff detect that the net pen is outside of the expected operating area, they would use GPS information to launch an emergency response in a timely manner.

At the conclusion of the deployment cycle, the net pen and all mooring equipment would be removed from the site and hauled to shore for proper cleaning and storage.

The VE Project has been proposed in order to support, promote, and invigorate marine aquaculture in the GOM by directly addressing the constraints, barriers, or hurdles, and often misperceptions of, U.S. domestic aquaculture development that currently limit increased production. The VE Project will provide information on data collection related to growth of a federally managed species in the offshore environment and information on open ocean aquaculture systems that can be used to inform other pilot-scale and commercial-scale operations, seafood product development, and market research.

AVOIDANCE AND MINIMIZATION INFORMATION: The applicant has provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment:

To avoid impacts to waters of the U.S., the proposed project has been designed in such a way that no discharge of dredged or fill material would be required for the installation of the

structure. To further minimize impacts to waters, as well as prevent adverse effects to endangered species, best management practices (BMPs) are proposed to prevent detrimental impacts to the aquatic resources present in the open-ocean environment adjacent to the proposed project site. BMPs listed in the NPDES permit include requirement pertaining to feed management, waste collection and disposal, transport or harvest discharge, carcass and waste removal, material storage, structural maintenance, record-keeping, and training requirements. In addition, the Applicant would have to adhere to environmental monitoring standards.

The facility potential locations were selected with assistance from NOAA's National Ocean Service National Centers for Coastal Ocean Science (NCCOS). The Applicant and the NCCOS conducted a site screening process over several months to identify an appropriate project site. Some of the criteria considered during the site screening process included avoidance of corals, coral reefs, submerged aquatic vegetation, hard bottom habitats, and avoidance of marine protected areas, marine reserves, and habitats areas of particular concern (HAPC). This siting assessment was conducted using the Gulf AquaMapper tool developed by NCCOS.

The Applicant conducted a Baseline Environmental Survey (BES) in August 2018 based on guidance developed by the NMFS and EPA. The BES included a geophysical investigation to characterize the sub-surface and surface geology of the sites and identify areas with a sufficient thickness of unconsolidated sediment near the surface while also clearing the area of any geohazards and structures that would impede the implementation of the aquaculture operation. The geophysical survey for the proposed project consisted of collecting single beam bathymetry, side scan sonar, sub-bottom profiler, and magnetometer data within the proposed area. The BES report noted that were no physical, biological, or archaeological features within the surveyed area that would preclude the siting of the proposed aquaculture facility within the area.

COMPENSATORY MITIGATION: The applicant has offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment: Compensatory mitigation is not required because the activity consists of the temporary anchoring of a single vessel and net pen aquaculture system that would be sited so that it would not adversely impact aquatic resources. The activity would not involve the discharge of dredged or fill material, so it would not result in a permanent loss of waters of the U.S. or any special aquatic sites within the Gulf of Mexico or coastal habitats.

CULTURAL RESOURCES: The Corps has determined the permit area the activity is of such limited scope there is little likelihood of impact upon a historic property; therefore, the proposed project would have "No Potential to Cause Effect". For this project, the EPA served as the lead federal agency with assistance from the NMFS and Corps as cooperating agencies under the NEPA. All consultations with the Florida State Historic Preservation Office (SHPO) were previously completed by EPA and it was determined that based upon the project location, design, and BES, the project was determined to have no effect on historic properties. Per a February 8, 2019 letter, the Florida SHPO found that the proposed project would not affect historic properties if the facility anchors are placed within

50 feet of the surveyed lines on the seafloor. The Florida SHPO recommended that the permit include a “unexpected discovery protocol” condition. Since the appropriate permitting agency with jurisdictional oversight for an unexpected discovery protocol permit provision is the Corps, the DA permit would include this provision.

ENDANGERED SPECIES: For this project, the EPA served as the lead federal agency with assistance from the NMFS and Corps as cooperating agencies under the NEPA. EPA conducted the required ESA consultations with the National Marine Fisheries Service (NMFS) Protected Resources Division (NMFS-PRD) and U.S. Fish and Wildlife Service (USFWS). A biological evaluation (BE) was jointly prepared by the EPA and the Corps to consider the potential direct, indirect, and cumulative effects that the proposed actions may have on listed and proposed species as well as designated and proposed critical habitat, and to assist the action agencies in carrying out their activities for the proposed action pursuant to ESA § 7(a)(2) and ESA § 7(a)(4).

The BE determined that issuance of the federal permits for the proposed project was not likely to adversely affect (NLAA) any listed species or critical habitat as defined under ESA. The EPA concluded the required consultations with the USFWS on August 27, 2019 and NMFS-PRD on September 20, 2019. Completion of the informal consultation with the USFWS and NMFS satisfies Corps’ obligations under ESA § 7(a)(2).

ESSENTIAL FISH HABITAT (EFH): An EFH assessment was prepared jointly by the EPA and the Corps. The EFH assessment determined that the minimal short-term impacts associated with the discharge will not result in substantial adverse effects on EFH, HAPC, or managed species within the facility area. Within the EFH assessment, impacts to shrimp, red drum, snapper, reef fish, and coastal migratory pelagic fish were evaluated. On March 8, 2019, the EPA, as the lead federal agency, provided the EFH assessment to the NMFS and initiated abbreviated consultation with the NMFS. On March 12, 2019, the NMFS concurred with the EFH determination made by the EPA and the USACE. After completion and concurrence of the assessment, minor changes were made to the EFH document, though the updates did not change the findings of the assessment. On August 2, 2019 EPA provided an updated EFH assessment that included minor modifications and clarifications to NMFS for concurrence. The minor revisions did not change the EFH determination or EPA-required mitigation measures that were sent to NMFS previously. On August 23, 2019, NMFS concurred with the determination made within the EFH assessment and did not make any conservations recommendations. Completion of the abbreviated consultation with NMFS satisfies the Corps’ obligations under MSA § 305(b)(2).

NAVIGATION: The project is not located within or adjacent to existing federal navigational channels or any designated shipping channels.

SECTION 408: The applicant will not require permission under Section 14 of the Rivers and Harbors Act (33 USC 408) because the activity, in whole or in part, would not alter, occupy, or use a Corps Civil Works project.

NOTE: This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with laws and regulation governing the regulatory program. A jurisdictional determination is not required for this project since it is in navigable waters of the U.S. pursuant to the RHA (Section 10).

AUTHORIZATION FROM OTHER AGENCIES: Under Section 401 of the Clean Water Act, a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the U.S. until the state or tribe where the discharge would originate has granted or waived Section 401 certification. The proposed facility is located approximately 45 miles west, southwest of Longboat Pass-Sarasota Bay, Florida. For purposes of the CWA, state waters extend three (3) miles from shore. Accordingly, CWA Section 401 certification is not required because the proposed discharge does not originate in any state or tribal waters.

COMMENTS regarding the potential authorization of the work proposed should be submitted in writing to the attention of the District Engineer through the Tampa Permits Section, 10117 Princess Palm Avenue, Suite 120, Tampa, Florida 33610-8302 or preferably by electronic mail at: OceanEra_VEAquaculture@usace.army.mil within 30 days from the date of this notice (i.e. November 4, 2020).

The decision whether to issue or deny this permit application will be based on the information received from this public notice and the evaluation of the probable impact general navigation pursuant to Section 10 of the RHA.

QUESTIONS concerning this application should be directed to the project manager, Katy Damico, in writing at the Tampa Permits Section, 10117 Princess Palm Avenue, Suite 120, Tampa, Florida 33610-8302 or preferably by electronic mail at : OceanEra_VEAquaculture@usace.army.mil or, by telephone at (813) 769-7076 or (813) 467-6603.

IMPACT ON NATURAL RESOURCES: Coordination with U.S. Fish and Wildlife Service (USFWS), Environmental Protection Agency (EPA), the National Marine Fisheries Services (NMFS), and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral

needs, considerations of property ownership, and in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

The US Army Corps of Engineers (Corps) is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other Interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this determination, comments are used to assess impacts to endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

COASTAL ZONE MANAGEMENT CONSISTENCY: In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan. Issuance of the EPA NPDES permit and a Section 10 authorization for the VE project is a federal action that requires compliance with the Coastal Zone Management Act (CZMA), therefore the Applicant is required to certify that their proposed project complies with the State of Florida's Coastal Zone Management Program.

On January 3, 2019, the applicant submitted a CZMA consistency determination to the Florida State Clearinghouse with the Florida Department of Environmental Protection. On January 15, 2019, the Florida Department of Agriculture and Consumer Services (FDACS) documented that the coastal consistency determination submitted by the applicant was consistent with all FDACS statutory responsibilities for aquaculture. On February 18, 2019, the Florida Fish and Wildlife Conservation Commission (FWC) found that the applicant's coastal consistency determination was consistent with Florida's CMP. Therefore, Corps has determined that the action covered by this permit is consistent with the CZMA and Florida's CMP.

REQUEST FOR PUBLIC HEARING: Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.

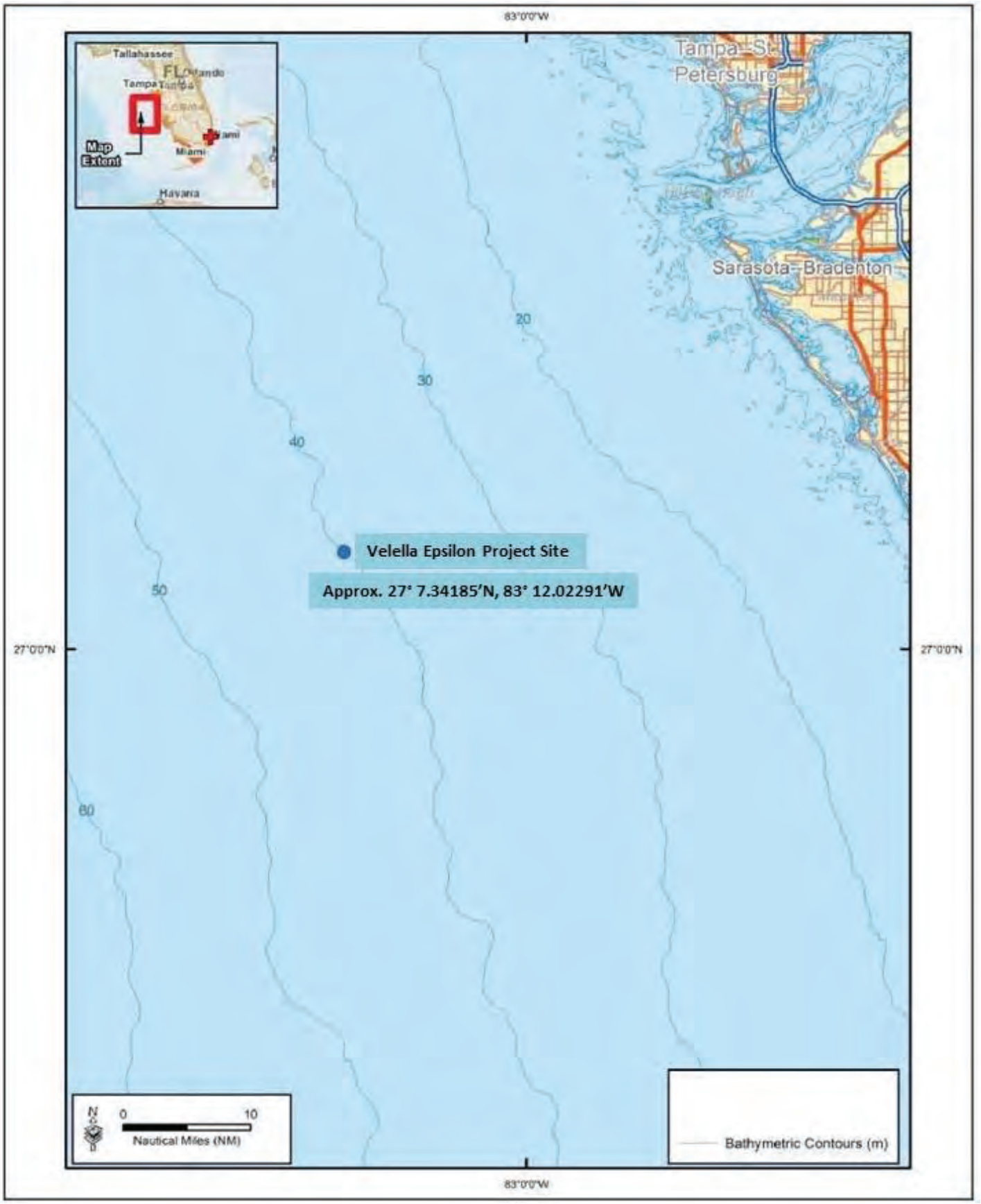
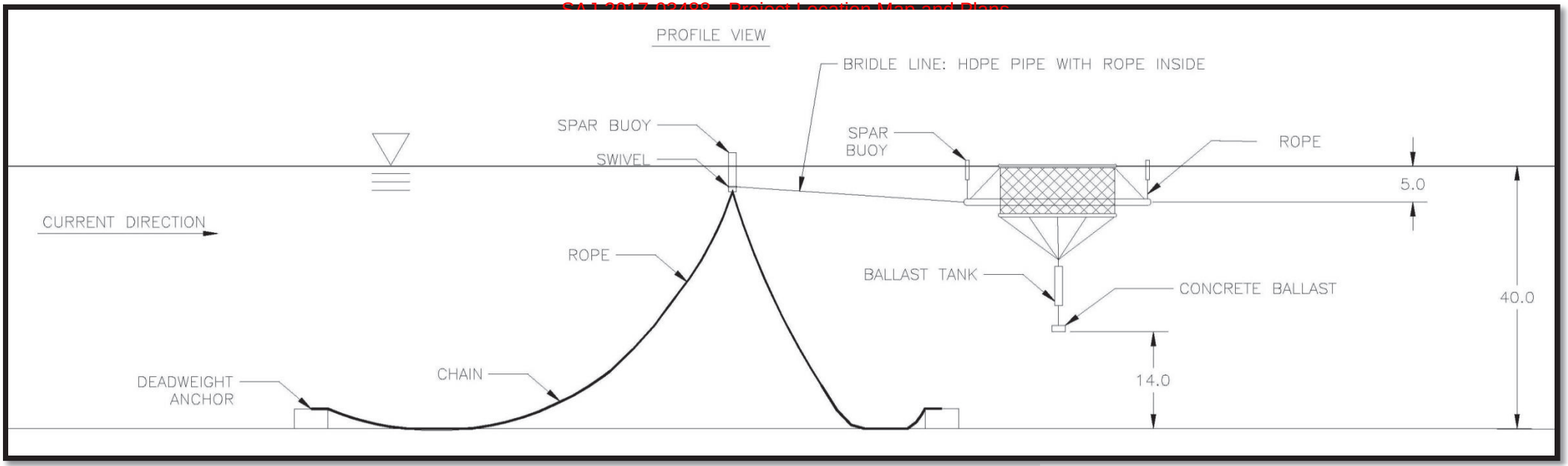


Figure 1-1. Approximate Location – 45 Miles Southwest of Sarasota, Florida



1) Deadweight Anchors (concrete):
- Three (3) anchors equally spaced @:
  - o 120m from mooring centerline
  - o 120 degrees from each other
- Each @ 3 ton Stevpris Mk-5 drag embedment anchor

2) Mooring Chain (Grade 2 steel):
- 80m length on each anchor
- 50mm (2") thick links
- No load = 70m length of each on seafloor
- Design load = some entirely off seafloor/ others completely on seafloor

3) Mooring Lines (rope):
- 40m length on each chain
- AMSTEEL®-BLUE
- 36mm (1 1/2") thick lines

4) Spar Buoy w/ Swivel (steel):

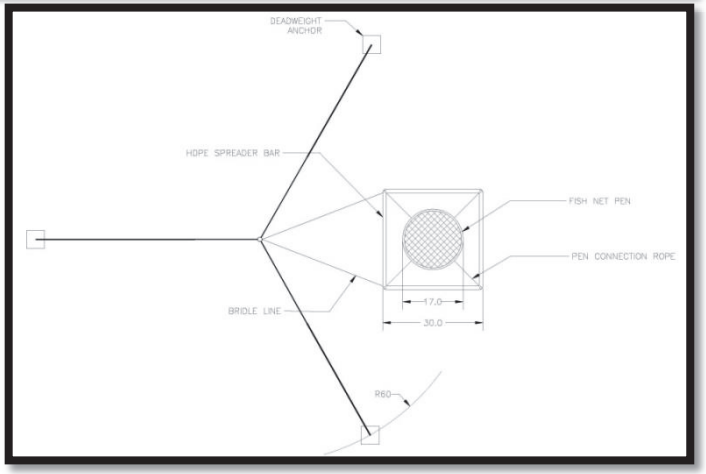
5) Bridle Lines (rope inside HDPE pipe):
- Three (3) ~30m bridle lines (rope) from swivel to spreader bar
- AMSTEEL®-BLUE
- 33.3mm (1 5/16") lines inside HDPE pipe

6) Spreader Bar (HDPE):
- Header Bar (load bearing) connected to Bridle Lines
  - o 30m in length
  - o 0.36m OD DR 11 HDPE pipe
- Side and Rear Bars (smaller load bearing)
  - o 30m in length
  - o 0.36m OD DR 17 HDPE pipe
- Four (4) corner spar buoys

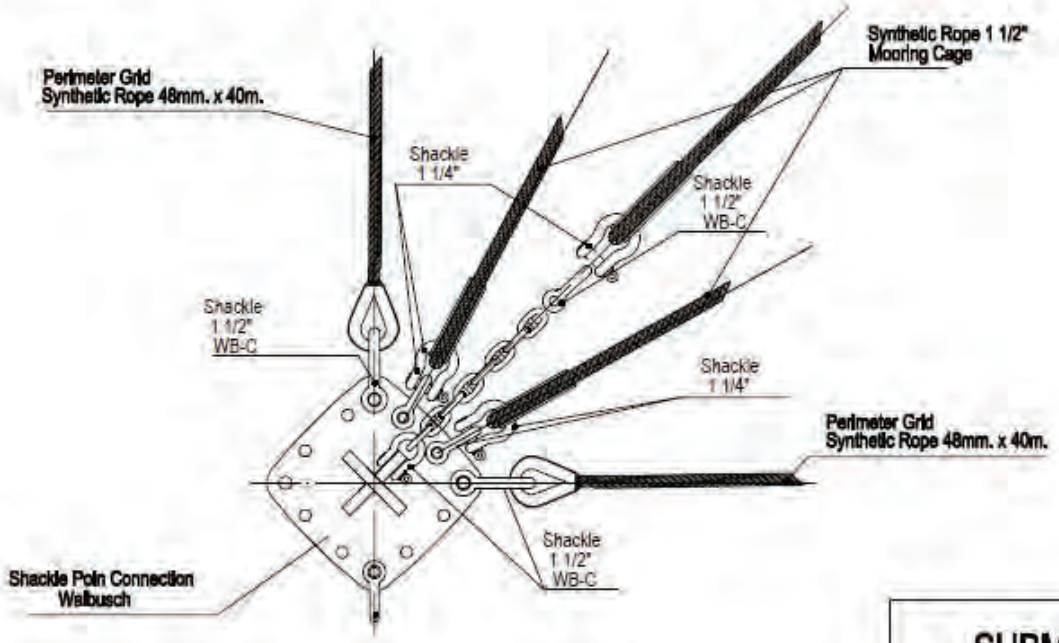
7) Net Pen Connection Lines (rope):
- Four (4) ~13m connection lines (rope)
- Connected from Spreader Bar to Net Pen Float Rings
- AMSTEEL®-BLUE
- 33.3mm (1 5/16") lines

8) Net Pen Frame Structure (HDPE):
- Top Frame Structure
  - o 18m in diameter
  - o One (1) HDPE side-by-side Float Rings
    - ▪ On the sea surface
    - ▪ ~ 0.36m OD DR 11 HDPE pipe
  - o One (1) HDPE net ring (railing)
    - ▪ Connected ~ 1.0m above Float Rings
    - ▪ Connected to Net Pen Mesh
    - ▪ ~ 0.15m OD DR 17 HDPE pipe
- Bottom Frame Structure
  - o 18m in diameter
  - o One (1) HDPE sinker ring
    - ▪ 7.0m below Float Rings
    - ▪ Connected to Net Ring
    - ▪ ~ 0.36m OD DR 11 HDPE pipe
  - o One (1) HDPE net ring
    - ▪ 7.0m below float rings
    - ▪ Connected to copper alloy mesh
    - ▪ ~ 0.15m OD DR 17 HDPE pipe

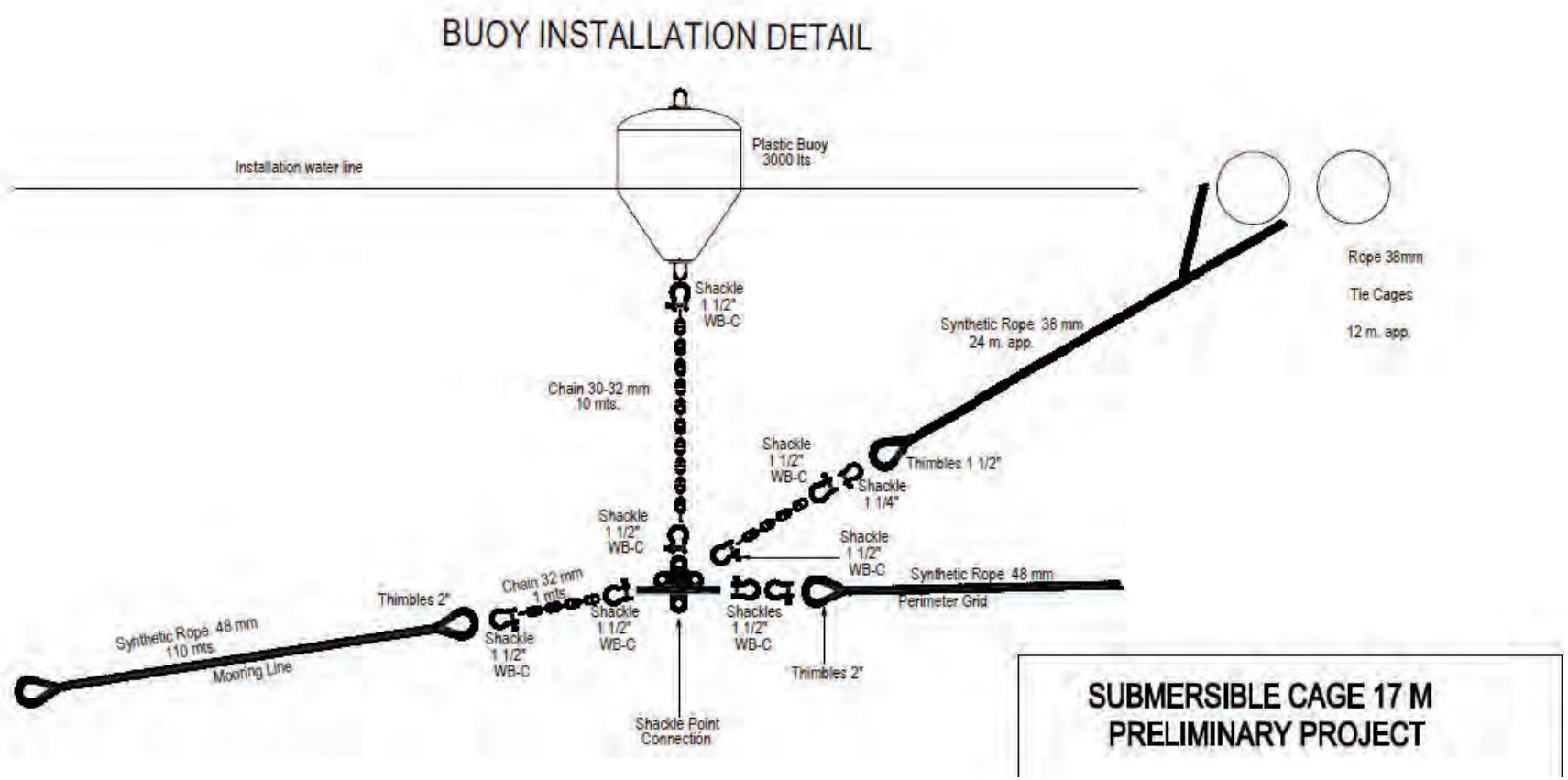
9) Net Pen Mesh (copper alloy):
- 17m diameter x 7m depth
- Top connected to top net ring (railing)
- Bottom connected to bottom net ring
  - o 4mm wire diameter
  - o 40mm x 40mm mesh square
- Effective volume of 1,600m^3

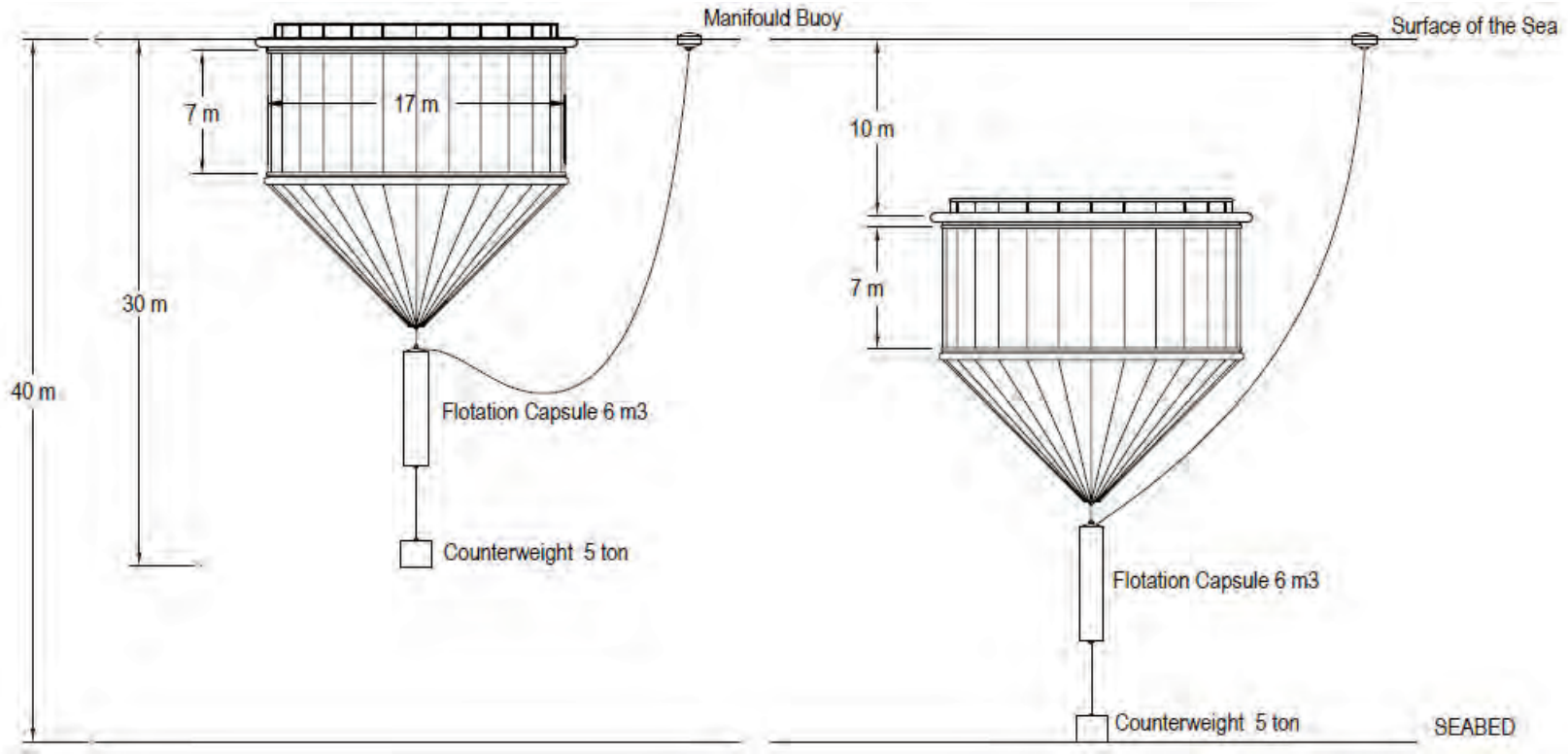


Detail 1
(Shackle Point Connection Accorging to Grid and Mooring Cage)



SUBMERSIBLE CAGE 17 M
PRELIMINARY PROJECT


BUOY INSTALLATION DETAIL
Installation water line
Plastic Buoy
3000 lts
Shackle
1 1/2"
WB-C
Chain 30-32 mm
10 mts.
Synthetic Rope 38 mm
24 m. app.
Rope 38mm
Tie Cages
12 m. app.
Shackle
1 1/2"
WB-C
Thimbles 1 1/2"
Shackle
1 1/4"
Shackle
1 1/2"
WB-C
Shackle
1 1/2"
WB-C
Synthetic Rope 48 mm
Perimeter Grid
Thimbles 2"
Chain 32 mm
1 mts.
Synthetic Rope 48 mm
110 mts.
Mooring Line
Shackle
1 1/2"
WB-C
Shackle
1 1/2"
WB-C
Shackles
1 1/2"
WB-C
Thimbles 2"
Shackle Point
Connection
SUBMERSIBLE CAGE 17 M
PRELIMINARY PROJECT


Manifould Buoy
Surface of the Sea
7 m
17 m
10 m
7 m
30 m
40 m
Flotation Capsule 6 m3
Counterweight 5 ton
Flotation Capsule 6 m3
Counterweight 5 ton
SEABED