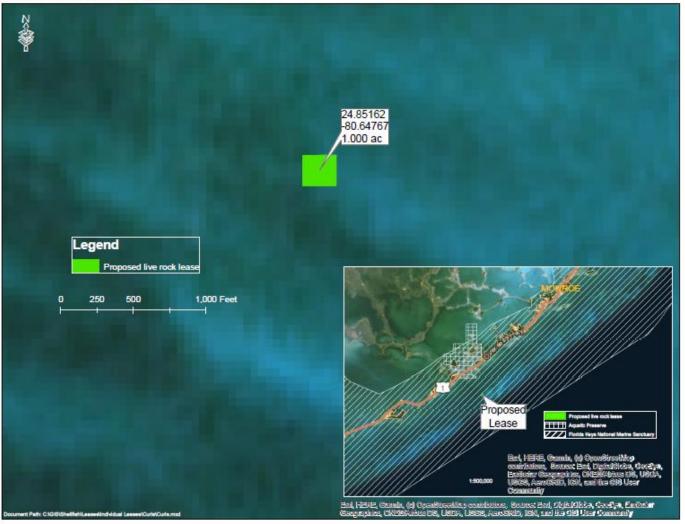
Proposed Live Rock Lease Area in Monroe County





Florida Keys National Marine Sanctuary 33 East Quay Road Key West, Florida 33040

Review comments and request for additional information

Aquaculture Submerged Land Lease Applicant: David Curls March 1, 2021

Allowable materials for deposit

 Staff remarks (page 2) state, "Only approved materials (artificial or natural) may be used in the lease area." However, no additional explanation is provided as to what artificial material may be used or how to seek approval for the same. FKNMS recommends that no artificial materials be authorized for use in the sanctuary. If artificial materials are proposed to be authorized, please explain the process by which review and approval for such materials would be granted and whether artificial materials are specifically authorized by SAJ-99.

Proposed site location vs. coordinates in application vs. survey location

- The central coordinates of the proposed site as shown in the unlabeled figure on page 4, figure 1 (page 5), figure 3 (page 6), and figure 4 (page 7) are all listed as 24.85162
 -80.64767. However, the coordinates listed in figure 5 (page 7) are 24.851203
 -80.647897, a difference of over 50 meters. Please explain.
- 3. Additionally, the coordinates provided on pages 10 and 14 (which appear to be photos of the original application) are listed as 24° 51' 01.0" N 80° 38' 08.6" W. This converts to 24.850278 -80.635722 (see <u>https://www.directionsmag.com/site/latlong-converter/</u>). The converted coordinate in decimal degrees is also shown in the image on page 16. This location is over 1200 meters (approximately 0.75 miles) from the location identified on page 5 as the center point of the proposed lease site and the center point of the location where the field survey was conducted. Please provide coordinates (in decimal degrees) for the center point and four corners or the center point and radius of the proposed lease area.
- 4. Based on the responses to items #2 and 3 above, please advise as to whether the correct lease location was surveyed.

Site survey

5. Based on the information in figure 3 (page 6), the area surveyed falls short of a one acre lease, which would be a circle with radius 117.75 feet, not 100 feet as was surveyed. Similarly a full 50-foot buffer around the one acre lease site was not surveyed; the buffer area surveyed falls short by approximately 20-foot radius. In addition to clarifying whether the correct location was surveyed (item #4, above), the full proposed lease area and 50-foot buffer should be surveyed for the presence and characterization of marine flora and fauna and data presented to agency reviewers.

FKNMS RAI – Curls application Page 2 of 3

- 6. The site assessment (page 5) states no seagrass, hardbottom or critical habitat were present and further states that the substrate consisted of sand throughout the site. However, no data is presented. In the hand written application (page 10) the applicant states the area is "all sandy hard bottom." It is therefore not clear whether the site consists of sand or hardbottom with a layer of sand, and whether there is in fact any colonization by seagrasses or other organisms. The Unified Florida Reef Tract Map and Google Earth imagery show patchy and continuous seagrass in areas immediately adjacent to the two sets of coordinates listed in the application. Please provide data on any flora or fauna present within the proposed lease area and buffer, e.g., macroalgae, mobile fauna, sponges, octocorals. Data on the distance to the closest nearest biological resources should also be provided. Please also provide photo documentation of points along transects.
- 7. The survey does not present data on sediment consistency and depth; however, this will greatly affect the success of the site. Please provide this information if it is available.
- 8. Please provide information on the qualifications and experience of the field reviewers and their knowledge of sanctuary habitats and species identification. Please further clarify the methods used to survey the site and whether the area surveyed provides a statistical representation of the entire lease and buffer areas. Were linear or circular transects conducted, and if the latter, why was the distance of 50 meters apart chosen? What was the total area surveyed compared to the one acre parcel plus 50 meter buffer (i.e., percent of area surveyed)? Were random points (e.g., quadrats) surveyed in greater detail? Were any data collected or additional photos taken besides the one photo in figure 2 (page 6)? Per item #6 above, please share all raw data and photos from the site survey.

Lease site location

- 9. FKNMS staff is familiar with the area where the proposed lease site is located and has conferred with live rock aquaculture permit and lease holders in the Florida Keys that have been successfully engaged in this business for decades. Staff opinion is that the selected site will not trend towards success due to connectivity with Florida Bay through the passes at Lignumvitae, Indian Key, and Teatable Key Channels, which may potentially introduce degraded water quality and nutrient inputs to the site, leading to excessive growth of macroalgae/turf algae. Sand burial may also be a problem given the "sand waves" that are shown in figure 2 (page 6) and which are visible from satellite imagery (Google Earth). Other attempts at establishing live rock aquaculture sites in the Islamorada area have not been successful, as some have been buried or scoured during repeated storms from the south.
- 10. If a live rock aquaculture site were established in this area, it is possible that it could provide habitat for spiny lobsters migrating to the offshore reef from the backcountry.

FKNMS RAI – Curls application Page 3 of 3

Site configuration

11. The site configuration should be required to consist of traditional base rock piles vs. the clock shape as proposed (pages 12 and 14). There is no evidence that the clock shape will enhance settlement and based on the experience of other, long-term live rock lease/permit holders, this configuration may result in more base rock being dispersed from the site due to wave action because the piles of rock would be smaller. As noted in item #9, storm surge at this location is known to be strong, further exacerbating the chance of dispersing rock culture material. Furthermore, this applicant notes he is affiliated with lease no. 44-AQ-1000, under which the "peace reef project" was created (https://www.facebook.com/ThePeaceReefProject/). The activities under that lease are promoting purposes other than aquaculture and as such it is questionable whether they fall within the FKNMS regulatory exemption for live rock aquaculture activities, or are

Quantity of rock placed

12. The applicant provides a schedule for placing and harvesting limestone over the ten year lease period (page 12) that involves deploying 1,170,000 lbs. of rock over this period. However, the applicant states he would harvest 560,000 lbs. over this same duration. What is the fate of the remaining 610,000 lbs. of rock that would be placed in the sanctuary?

Critical habitat at the proposed lease site

 The comments section (page 5) and figure 6 (page 8) indicate that the site is located only within designated critical habitat for *Acropora* species corals. The location is also within Loggerhead Turtle Northwest Atlantic Ocean DPS Critical Habitat (<u>https://www.fisheries.noaa.gov/resource/map/loggerhead-turtle-northwest-atlanticocean-dps-critical-habitat-map</u>).

Monuments, temporary surface buoys, vessel mooring pins

authorized by the state lease or SAJ-99.

14. The proposed bottom monuments and any attachment points for temporary surface buoys (draft lease condition #44, page 21), as well as anchor bolts for vessel mooring as proposed in the application, should be required to be placed in pieces of live rock aquaculture base material itself. The installation of such items directly into the seafloor, such as with embedment anchors, would be prohibited by FKNMS regulations.

Site compliance and monitoring

15. NOAA FKNMS believes it is critical that a plan be implemented to routinely monitor activities at this and other lease sites in state waters of the sanctuary to ensure natural resources are not being impacted (e.g., from storm-dispersed rock) and that the terms of the lease are being followed. SAJ-99 also requires that sites be inspected by FDACS to ensure compliance with the conditions of that federal permit. Please advise as to what level of compliance monitoring is planned for this (and other) lease sites in sanctuary waters.

Division of Aquaculture (850) 617-7600 (850) 617-7601 Fax



The Holland Building, Suite 217 600 South Calhoun Street Tallahassee, Florida 32399-1300

FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES COMMISSIONER NICOLE "NIKKI" FRIED

March 8, 2021

Ms. Joanne Delaney Florida Keys National Marine Sanctuary 33 East Quay Road Key West, FL 33040

Dear Ms. Delaney,

The Florida Department of Agriculture and Consumer Services, Division of Aquaculture (the Division) appreciates your comments on the live rock lease application in Monroe County. Below are responses to your questions and comments.

1. Staff remarks (page 2) state, "Only approved materials (artificial or natural) may be used in the lease area." However, no additional explanation is provided as to what artificial material may be used or how to seek approval for the same. FKNMS recommends that no artificial materials be authorized for use in the sanctuary. If artificial materials are proposed to be authorized, please explain the process by which review and approval for such materials would be granted and whether artificial materials are specifically authorized by SAJ-99.

-The lease applicant plans to use natural limestone rock (see page 11) for this live rock lease. No artificial materials will be used.

Proposed site location vs. coordinates in application vs. survey location 2. The central coordinates of the proposed site as shown in the unlabeled figure on page 4, figure 1 (page 5), figure 3 (page 6), and figure 4 (page 7) are all listed as 24.85162 -80.64767. However, the coordinates listed in figure 5 (page 7) are 24.851203 -80.647897, a difference of over 50 meters. Please explain.

-The coordinates on page 7 (24.851203, -80.647897) indicate where the photograph was taken. The boat was anchored approximately 50 meters south of the center point, which is indicated in the photo with the orange float. The correct center coordinate for the proposed lease area is 24.85162, -80.64767, as listed in Figures 1, 3, and 4.

3. Additionally, the coordinates provided on pages 10 and 14 (which appear to be photos of the original application) are listed as 24° 51′ 01.0″ N 80° 38′ 08.6″ W. This converts to 24.850278 -80.635722 (see https://www.directionsmag.com/site/latlong-converter/). The converted coordinate in decimal degrees is also shown in the image on page 16. This location is over 1200 meters (approximately 0.75 miles) from the location identified on page 5 as the center point of the proposed lease site and the center point of the location where the field survey was conducted. Please provide coordinates (in decimal degrees) for the center point and four corners or the center point and radius of the proposed lease

1-800-HELPFLA

www.FDACS.gov

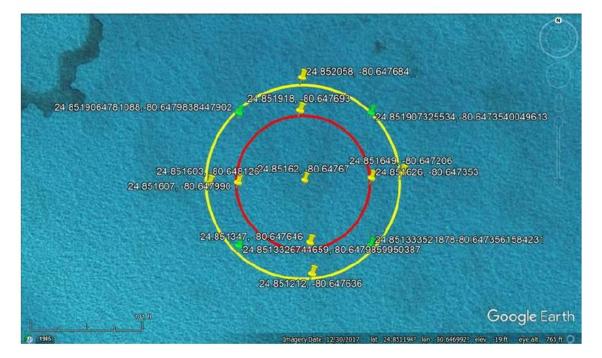
area.

-The lease applicant provided staff with the above coordinates prior to the resource assessment and the coordinates were changed during the assessment at the lease applicant's request.

The resource assessment was conducted at:

Center: 24.85162, -80.64767

Northwest corner: 24.8519064781088, -80.6479838447902 Northeast corner: 24.851907325534, -80.6473540049613 Southwest corner: 24.8513326744659, -80.6479859950387 Southeast corner: 24.851333521878, -80.6473561584231



4. Based on the responses to items #2 and 3 above, please advise as to whether the correct lease location was surveyed. -Yes.

0.8.9894.8995

Site assessment

5. Based on the information in figure 3 (page 6), the area surveyed falls short of a one acre lease, which would be a circle with radius 117.75 feet, not 100 feet as was surveyed. Similarly a full 50-foot buffer around the one acre lease site was not surveyed; the buffer area surveyed falls short by approximately 20-foot radius. In addition to clarifying whether the correct location was surveyed (item #4, above), the full proposed lease area and 50-foot buffer should be surveyed for the presence and characterization of marine flora and fauna and data presented to agency reviewers.

-Staff swam a circle search pattern out 50, 100, and 150 feet from the center point. The entire proposed lease area was assessed. The visibility was 25 feet at depth, which enabled staff to visually assess an area of 175 feet from the center point.

6. The site assessment (page 5) states no seagrass, hardbottom or critical habitat were present and further states that the substrate consisted of sand throughout the site. However, no data is presented. In the hand written application (page 10) the applicant states the area is "all sandy hard bottom." It is therefore not clear whether the site consists of sand or hardbottom with a layer of sand, and whether there is in fact any colonization by seagrasses or other organisms. The Unified Florida Reef Tract Map and Google Earth imagery show patchy and continuous seagrass in areas immediately adjacent to the two sets of coordinates listed in the application. Please provide data on any flora or fauna present within the proposed lease area and buffer, e.g., macroalgae, mobile fauna, sponges, octocorals. Data on

the distance to the closest nearest biological resources should also be provided. Please also provide photo documentation of points along transects.

-No seagrass or hard bottom habitat was observed during the assessment. As noted in the lease assessment sketch (Figure 3) the bottom type was sand throughout the area assessed. Please see Figure 2 for a photo of the bottom type found throughout the assessment area. No flora or fauna were found within the lease area or buffer. The closest seagrass clump we found was approximately 84' from the 50' buffer line. The larger line of grass, seen on aerials to the west of the proposed site is approximately 224' from the buffer line.

7. The survey does not present data on sediment consistency and depth; however, this will greatly affect the success of the site. Please provide this information if it is available.

-The site consisted of a fine sandy substrate, consistent throughout the entire site and buffer. Sediment depth data was not collected.

8. Please provide information on the qualifications and experience of the field reviewers and their knowledge of sanctuary habitats and species identification. Please further clarify the methods used to survey the site and whether the area surveyed provides a statistical representation of the entire lease and buffer areas. Were linear or circular transects conducted, and if the latter, why was the distance of 50 meters apart chosen? What was the total area surveyed compared to the one acre parcel plus 50 meter buffer (i.e., percent of area surveyed)? Were random points (e.g., quadrats) surveyed in greater detail? Were any data collected or additional photos taken besides the one photo in figure 2 (page 6)? Per item #6 above, please share all raw data and photos from the site survey.

-The staff reviewers (Environmental Supervisor II and Environmental Specialist II) have over 20 years of combined experience identifying marine habitats and species. Both hold an MS in Marine Science with an emphasis in Coastal, Marine and Wetland Studies. The Environmental Supervisor II has been with FDACS for 9 years and held previous positions with Florida Department of Environmental Protection (3 years) and Florida Fish and Wildlife Conservation Commission (1 year). She has 12 years of experience with Florida coastal habitats and has Scientific Diver certification. The Environmental Specialist II has worked for FDACS for 2 years and held previous positions with Florida Department of Environmental Protection (4 years) and Florida Fish and Wildlife Conservation Commission (4 years). She has 4 years of experience with seagrass and oyster reef habitat surveys, and has certifications as an Advanced Open Water, Rescue, Nitrox, Dry Suit, AAUS, and EPA Scientific Diver.

A circular transect was conducted. 50 feet was chosen due to the extremely good visibility of the site on the day of assessment. The entire lease area was surveyed. No other data or photos are available.

Lease site location

9. FKNMS staff is familiar with the area where the proposed lease site is located and has conferred with live rock aquaculture permit and lease holders in the Florida Keys that have been successfully engaged in this business for decades. Staff opinion is that the selected site will not trend towards success due to connectivity with Florida Bay through the passes at Lignumvitae, Indian Key, and Teatable Key Channels, which may potentially introduce degraded water quality and nutrient inputs to the site, leading to excessive growth of macroalgae/turf algae. Sand burial may also be a problem given the "sand waves" that are shown in figure 2 (page 6) and which are visible from satellite imagery (Google Earth). Other attempts at establishing live rock aquaculture sites in the Islamorada area have not been successful, as some have been buried or scoured during repeated storms from the south.

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chance of dispersing rock culture material. Furthermore, this applicant notes he is affiliated with lease no. 44-AQ-1000, under which the "peace reef project" was created

(https://www.facebook.com/ThePeaceReefProject/). The activities under that lease are promoting purposes other than aquaculture and as such it is questionable whether they fall within the FKNMS regulatory exemption for live rock aquaculture activities, or are authorized by the state lease or SAJ-99. -597.003 Powers and duties of Department of Agriculture and Consumer Services.—

(1) The department is hereby designated as the lead agency in encouraging the development of aquaculture in the state and shall have and exercise the following functions, powers, and duties with regard to aquaculture:

(a) Issue or deny aquaculture certificates that identify aquaculture producers and aquaculture products, and collect all related fees. The department may revoke an aquaculture certificate of registration issued pursuant to s. 597.004 upon a finding that aquaculture is not the primary purpose of the certified entity's operation.

Quantity of rock placed

12. The applicant provides a schedule for placing and harvesting limestone over the ten year lease period (page 12) that involves deploying 1,170,000 lbs. of rock over this period. However, the applicant states he would harvest 560,000 lbs. over this same duration. What is the fate of the remaining 610,000 lbs. of rock that would be placed in the sanctuary?

-Live rock leases are renewable for additional 10-year terms so he may plan to continue harvesting product into a consecutive ten-year term.

Per term 22 of the Live Rock lease agreement:

Lessee shall remove all works, equipment, structures and improvements from the sovereign lands described in this lease within 60 days following the date of expiration or termination of this lease. Lessee shall also provide to the Department an attestation statement from a third party, acceptable by the lessor, verifying that all works, equipment, structures and improvements have been removed. Failure to remove all equipment and improvements within 60 days and provide the attestation statement may result in cancellation of all other aquaculture submerged land leases held by lessee and lessee will be prohibited from executing, acquiring, subletting, or the authorized use of any state owned aquaculture submerged land lease for ten years from date of cancellation of the lease in which the works, equipment, structures and improvements were not removed.

Critical habitat at the proposed lease site

13. The comments section (page 5) and figure 6 (page 8) indicate that the site is located only within designated critical habitat for Acropora species corals. The location is also within Loggerhead Turtle Northwest Atlantic Ocean DPS Critical Habitat

(https://www.fisheries.noaa.gov/resource/map/loggerhead-turtle-northwest-atlantic-ocean-dpscritical-habitat-map).

-Correct, and we will include this information in any additional reports. New leases are allowed within loggerhead critical habitat under the conditions of PGP SAJ-99. Staff will require the lease applicant to abide by the "Sea Turtle and Smalltooth Sawfish Construction Conditions"

(https://www.saj.usace.army.mil/Portals/44/docs/Planning/EnvironmentalBranch/EnviroCompliance/Se aTurtleAndSawfishConstructionConditions23mar2006.pdf) as required by conditions of SAJ-99.

Monuments, temporary surface buoys, vessel mooring pins

14. The proposed bottom monuments and any attachment points for temporary surface buoys (draft lease condition #44, page 21), as well as anchor bolts for vessel mooring as proposed in the application, should be required to be placed in pieces of live rock aquaculture base material itself. The installation of such items directly into the seafloor, such as with embedment anchors, would be prohibited by FKNMS regulations.

-The lease applicant stated in his lease application (page 12) that he plans to have anchor bolts installed into the live aquaculture base material (limestone rock) and not directly attached to the seafloor.

Site compliance and monitoring

15. NOAA FKNMS believes it is critical that a plan be implemented to routinely monitor activities at this and other lease sites in state waters of the sanctuary to ensure natural resources are not being impacted (e.g., from storm-dispersed rock) and that the terms of the lease are being followed. SAJ-99 also requires that sites be inspected by FDACS to ensure compliance with the conditions of that federal

permit. Please advise as to what level of compliance monitoring is planned for this (and other) lease sites in sanctuary waters.

-Lease sites are inspected and audited for compliance and are subject to inspection should noncompliance information be received.

Thank you for your comments and please do not hesitate to contact me if you need further information.

Sincerely,

Portia Sapp

Portia Sapp Division Director, Division of Aquaculture

Division of Aquaculture Aquaculture Parcel Resource Assessment Monroe County 1/22/2021

Introduction

David Curls has proposed a one-acre parcel to be utilized for live rock aquaculture. The site is in the Matecumbe Keys in the Atlantic Ocean. The site was assessed on January 20, 2021 and the applicant was present during the assessment.

Site Location

The site is offshore Islamorada in the Matecumbe Keys, Atlantic Ocean (Figure 1).





Site Assessment

Proposed Site

The proposed site encompasses approximately one acre. The center point was established using the GPS coordinates provided by the applicant. Visibility from the surface was 20 feet. The substrate consisted of sand throughout the site (Figure 2). The assessment was conducted by boat utilizing diving. Circular transects were conducted, starting from the center of the site (Figure 3). The depth of the site was approximately twenty feet throughout the site. No seagrass, hard bottom or critical habitat were found within the site or within a fifty-foot buffer (Figure 4). The closest shoreline is approximately 2.8 nautical miles away (Figure 5).

Site GPS Coordinates and Depth: Center Point: 24.85162 / -80.64767 20 feet

Recommendations:

After review of the pertinent information, Division staff recommends the proposed site.

Comments:

The Division seeks to preclude impacts to seagrass beds and other sensitive habitats. Division staff could make an accurate assessment of the proposed lease area as well as adjacent areas. There was no hard-bottom or seagrass found within or adjacent to the site. The only critical habitat designated was Acropora, and no coral was found within or adjacent to the site (Figure 6).





Figure 3. Site Assessment

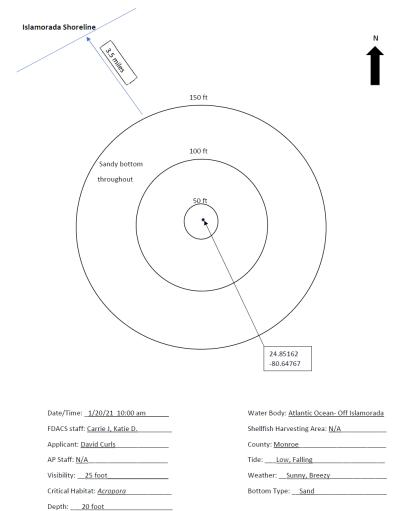


Figure 4. Satellite image

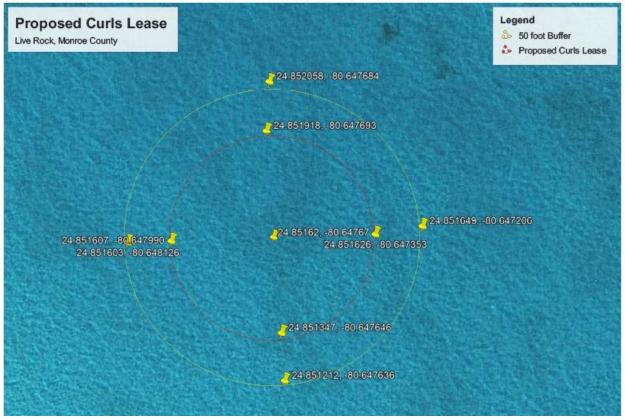
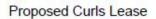
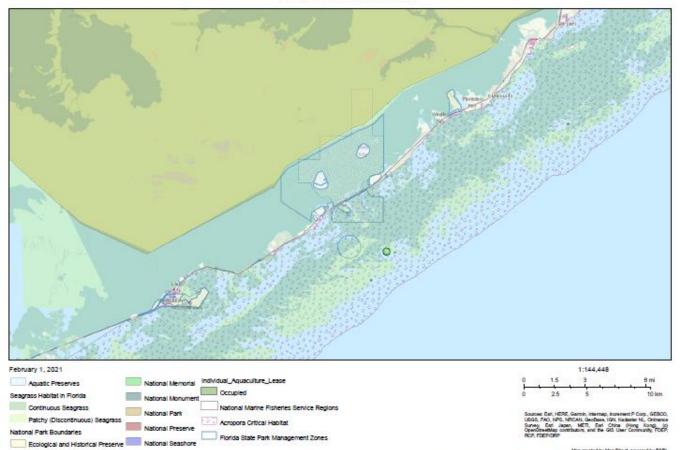


Figure 5. Proposed live rock site, looking North towards Islamorada.







Torista Department of Environmental Protection makes no warranty suppressed or implied or assumes any legal lability or majorability for the accuracy completenees of any information apparetus product or possess divolved or impleed or assumes any legal lability or majorability for the accuracy completenees of any information apparetus product or possess divolved or impleed or assumes any legal lability or majorability for the accuracy completenees of any information apparetus product or possess divolved or impleed or assumes any legal lability or majorability for the accuracy completenees of any information apparetus product or possess divolved or impleed or assumes any legal lability or majorability for the accuracy completenees of any information apparetus product or possess divolved or impleed or assumes any legal lability or majorability for the accuracy completenees of any information apparetus product or possess divolved or impleed or assumes any legal lability or majorability for the accuracy completenees of any information apparetus product or possess divolved or impleed or assumes any legal lability or majorability for the accuracy completenees of any information apparetus product or possess divolved or impleed or assumes any legal lability or majorability for the accuracy completenees of any information apparetus product or possess divolved or impleed or assumes any legal lability or majorability for the accuracy completenees of any information apparetus product or possess divolved or impleed or assumes any legal lability or majorability for the accuracy completenees of any information apparetus product or possess divolved or impleed or assumes any legal lability or majorability for the accuracy completenees of any information apparetus product or assumes any information apparetus product or assumes any legal lability or majorability for the accuracy completenees of any information apparetus product or assumes any information apparetus product or assumes any information apparetus product or assumes any

| APPLICATION FOR A STATE-O SOVEREIGNTY SUBMERGED AQUACULTURE LEASE Section 253.69, Florida Statutes - Rule 18-21.021. Application No(Official Use Only) Please Type or Print Legibly PART I - Applicant Information Name:A | E Lease Title: A lease C |
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| Address: 119 W. PIOZA DEL SOL City. ISLA MORADA State: FI Telephone Number: 305-894-0747 Fax Number: N E-Mail Address: <u>CIVC/CAVC14Egmail</u> (OW I certify that I am 18 years old or older (please initial): <u>ME</u> | A |
| Describe your capability to conduct your proposed aquaculture activity you have obtained or will obtain) IO NR. RET RED ODRE 30+ YR, MARINE COLLECTIONS OF MA MULTI REE FWL LICENSES FOR COLLEC MULTI REE FWL LICENSES FOR COLLEC INI COLLECTION OF SITE ROCK, I. MY LONIG KEY & US LIVE ROCK LLO Y 44-1 PART IL-Parcel/Bite Information Bottom Lease (use of up to 8 inches off the bottom) UNITE Column Lease (use of the full water column) Please col | ARINE LIFE, HOLDING OF TIONIS, IDH URS EXPERIENS PRIOR OWNED SITE INI AQ-1000 FL 5265 CT. |

| B. New Site (for newly proposed areas, complete : CountyMON R.0E | section B) For newly proposed site, mail completed application to: Division of Aquaculture |
|--|---|
| Water body ATLANTIC | Attention: Portia Sapp 600 South Calhoun Street, Suite 217 |
| Size of Proposed Lease Area 1 acr | Tallahassee, Florida 32399-1300 or transmit via email to Portia SapotDFDACS.gov |
| Shallowest water depth at mean low water 17,5 | feet NO APPLICATION FEE IS DUE AT THIS TIM |
| Deepest water depth at mean low water 201 | feet For the SHA code, please visit our websit |
| Average tidal range in area | feet at https://www.FDACS.gov/Apriculture- |
| Shellfish Harvesting Area (SHA) | Industry/Aquaculture/Shellfish-Harvesting Area-Classification/Shellfish-Harvesting |
| Do you own the riparian upland property? | Area-Maps Proposed shellfish leases must be sited in Approved or Conditionally Approved waters. |
| 500 feet of the proposed area, as shown on the lates | |
| Approx. distance to nearest shoreline | <u>WILES</u> reet st of the names and addresses of each owner of property lying within t county tax assessment roll is required to be included in this |
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Briefly describe your reasons for selecting the proposed site (i.e., substrate type, location, water quality, etc.). The proposed area selected should have minimum environmental, social and use impacts (e.g., seagrasses, natural shellfish resources, navigation, recreation and commercial uses, etc.).

WATER QUAITY AND OPEN WATER. KNOW AREA TO UNIVER IST OF MIAMI AS PLACES CLOSE WITH OTHER AQUACULTURE SITES NEAR BY, WITH NO ENVIRONMENTAL IMPACT.

List any recreational and commercial uses of the proposed area (e.g., fishing, tourism, etc.). AREA DPEN WATER, KNOWN BOAT TRAFPIC, THREE AREA

Describe the potential impacts of the proposed use on the ecology of the area (including fish habitat, threatened and endangered species and other natural resources)

NO IMACT TO AREA. THIS STE WILL PROMOTE ADDITIONAL MARINE LIFE TO THE AREA.

Provide a statement explaining why the lease is in the public interest or is not contrary to the public interest.

THE BAN OF ILLEGALLY HARVESTING OF "DRY ROCK" PROMOTES THE BAN OF ILLEGALLY HARVESTING COEAL ROCK AND PROTECTING OUR REEFS.

For dock applications, describe any aquaculture-related structures proposed (a detailed and dimensioned site plan is required pursuant to subsection 18-21.021(1) (d) (3), Florida Administrative Code).

PART III-Lease Development Plan (complete this section for all applications)

Proposed aquaculture activities are (check only one);

Commercial

MA

Experimental

Product(s) to be cultivated: (Piease check all that apply) Hard Clam (Mercenaria spp.) Sunray Venus Clam (Macrocallista nimbosa) Eastern Oyster (Crassostrea wirginica) Cive Rock Other

FDACS-15102 Rev. 8/16 Page 3 of 8 DESCRIBE the aquaculture activities to be conducted including planting and harvesting activities. OBTAINING HIGH QUALTY DRY ROCK FROM KNOWN QUARRIE TO THE INDUSTRY, PLACEMENT OF ROCK, CURING THEN HARVESTING FOR SALE TO MARINE INDUSTRY.

Effective cultivation is required to be performed on all aquaculture leases. Minimum effective cultivation is the planting of 100,000 seed clams or 70,000 seed oysters per acre per year. Provide below a detailed business development plan including the amount of product to be planted and harvested each year throughout the term of the lease (Year 1-Year 10).

| Year 1 | PLACEMENIT | 80,000 1bs - | HARVEST | ¢ |
|---------|--|--------------|---------|-------------|
| Year 2_ | 13 | 80,000 1bs - | | 40,00016S |
| Year.3_ | 11 | 100,000 165. | | 50,00 lbs |
| Year 4_ | 15 | 100,000 lbs | - 0 | 50,000 1bs |
| Year 5_ | 1i | 120,000 lbs | - 0 | 40,000 155 |
| Year 6_ | 1. | 120,000 lbs | - 12 | 60,000 lbs |
| Year 7_ | | 130,000 165 | - 11 | 70,000 lbs. |
| Year8_ | The second s | 140,000 lbs | ~ µ | 70,000 100 |
| Year 9_ | | 150,000 lbs | - 11 | 80,000 100 |
| Year 10 | | 150,000 lbs | - " | 80,000 lbs. |

Describe the supply source of seed stock or rock products.

SOT QUARRY (FORMORELY LARRY'S CAP ROCK) 15400 SW 288TH ST STE 310 HOMESTEAD FT 33033

Describe the distribution of the product after harvest.

LIVE ROCK WILL BE FRACED IN 8'X2' ROUND TANICS W/ SACT FILTRATION SUSTEMS WAITIL SHIPPED FOR PURCHASE.

PART IV- Proposed Gear (complete this section for all applications)

Describe the maximum dimension (length x width x height) and characteristics of the gear to be used (material type, wire gauge, brand, etc.).

THE ROLL SITE WILL BE IN A "CLOCK" FOR MATION STARTING FROM THE CENTER OF THE SITE. CENTER WILL HAVE A LARG BOUDER W/ANI I BOLT ATTACHED TO ANICHOR ON THE SITE. ROCK WILL BE DISBURSED 5'W X 50'L X2'H WITH ADDITION MAX MARKERS W/ BOLDERS P 12-3-6-9 O'CLOCK @ 105?

FDACS-15102 Rev. 8/16 Page 4 of 8 A cross section diagram of the proposed area is required to be included in this application package. See Attachment 2 for guidance and at a minimum include the following items in the diagram:

Excegend with applicant name, county, water body and date.

Cabel the dimensions of the proposed area with GPS coordinates in Decimal Degrees.

Water depth at Mean High Water and Mean Low Water.

Images or sketches of proposed structures for aquaculture production are required to be included in this application package. This includes all cages, bags, anchors etc. See Attachment 3 for guidance.

The leaseholder is responsible and liable for equipment and gear placed on the lease. All off bottom gear must be permanently and individually marked with the name of the leaseholder. Additionally all gear must be properly disposed of following use or displacement off the lease. Please provide a description of marking methods for off bottom gear and a gear recovery plan to meet these requirements.

CENTER MARKED W/ BOUDER AND I-BOLD FOR ANCHORING AND WILL HAVE SITE NAME & NUMBER ATTACHED TO EBOLT.

Additional Information

Inderstand prior to signing the lease agreement, it is my responsibility to read and comply with all terms and conditions of the lease agreement.

I understand that upon final approval of a new lease area, I will be responsible to provide two prints of a survey of the parcel pursuant to section 18-21.021(1)(i)8(j). Florida Administrative Code.

I understand that I will be responsible to install and maintain lease markers pursuant to an approved U.S. Coast Guard Private Aids to Navigation permit.

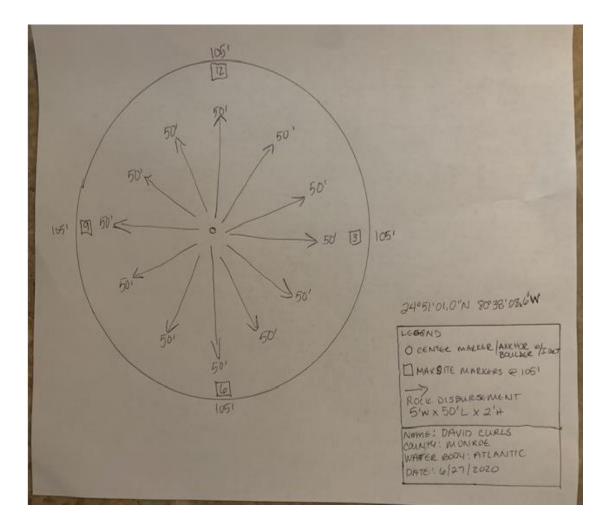
LA D For existing parcels, an application fee of \$200.00 is required to be submitted with the lease application

For new site nominations, do not include the application fee at this time. However, upon review and approval of an application for a newly proposed area, the division will contact you for the required \$200 application fee.

For questions regarding this form or the application process, please call the Division of Aquaculture at (850) 617-7600

Applicant's Signature 627 1707

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Florida Department of Agriculture and Consumer Services Division of Aquaculture

SOVEREIGNTY SUBMERGED LAND LIVE ROCK AQUACULTURE LEASE

Section 253.71, Florida Statutes

This Instrument Prepared by:

Division of Aquaculture

NICOLE "NIKKI" FRIED COMMISSIONER

600 South Calhoun Street, Suite 217 Tallahassee, Florida 32399

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

No.

THIS LEASE is hereby issued by the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida, hereinafter referred to as the "Lessor".

WITNESSETH: That for and in consideration of payment of the lease fees hereinafter provided, and the faithful and timely performance of and compliance with all terms and conditions stated herein, the Lessor does hereby lease to , hereinafter designated as the "Lessee," the sovereignty submerged lands described as follows:

A parcel () of sovereignty, submerged lands lying in , near , in County, containing acres, more or less, of sovereignty submerged lands, within the following latitude and longitude coordinates, representing the center of the proposed lease area:

Latitude -- Longitude --

TO HAVE THE USE OF the hereinabove described premises for a period of ten years from , the effective date of this lease. The terms and conditions upon and for which this lease is granted are as follows:

1. The Lessee is hereby authorized to undertake live rock aquaculture activities on the lands described above.

2. Lessee shall pay to Lessor an annual lease fee of $\$, representing a base annual rental fee of 33.46 per acre or fraction thereof and an annual surcharge of 10.00 per acre or fraction thereof, pursuant to rule 18-21.022, Florida Administrative Code (F.A.C.). The annual lease fee collected will be deposited into the General Inspection Trust Fund, pursuant to sections 597.010(5)(b) and 597.010(7), Florida Statutes (F.S.). The first year's base rent and surcharge shall be paid to Lessor before execution of this lease. Thereafter, the base rent and surcharge shall be paid annually to Lessor on or before January 1 of each succeeding year of the lease term. Lessee understands that from time to time the lease fee may be increased by the Lessor, and the Lessee agrees to pay the increased lease fee, as adopted by the Board of Trustees.

3. Failure of the lessee to pay rent within 30 days of January 1 shall constitute ground for cancellation of the lease and forfeiture to the state of all works, improvements, and animal and plant life in and upon the leased land and water column.

4. Failure of the Lessee to perform effective cultivation, or otherwise comply with the terms of this lease, shall constitute cause for termination of the lease and forfeiture to the State of all the works, improvements, and animal and plant life in and upon the leased land and water column.

5. This lease may be terminated upon the Lessee's written request.

6. The Lessee, in accepting this lease, does hereby agree that no claim to title or interest to said lands hereinbefore described shall be made by reason of the occupancy or use thereof and that all title interest to said land hereinbefore described is vested in the Lessor.

7. The Board of Trustees will not approve lease transfers or assignments during the first five years of the lease term. However, after five years from the effective date, Lessee, upon written consent from the Lessor, may sublease, assign or otherwise transfer the lease granted to the lessee.

8. The Lessee shall neither permit the sovereign lands described in this lease nor any part thereof to be used or occupied for any purpose or business other than herein specified; nor shall the Lessee knowingly permit or suffer nuisances or illegal operations of any kind on the sovereign lands described in this lease.

9. The Lessee agrees to maintain the sovereign lands described in this lease in good condition in the interest of public health, safety and welfare. The Lessee agrees that the sovereign lands described in this lease are subject to inspection by the Lessor or its designated agent at any reasonable time.

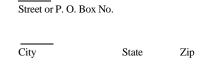
10. The Lessee hereby covenants and agrees to investigate all claims of every nature at its expense, and to indemnify, defend, hold, and save harmless the Board of Trustees of the Internal Improvement Trust Fund and/or the State of Florida, and the Florida Department of Agriculture and Consumer Services (hereafter "Department") from all claims, actions, lawsuits and demands arising out of this lease or any activity conducted hereunder. The Lessee further agrees to be solely responsible for any injury or property damage resulting from any property conditions or activity on the lease area.

11. The Lessee agrees that upon expiration or termination of this lease all permission granted to undertake the activities, as described in paragraph one (1) of this lease, shall cease and terminate, and Lessee shall immediately vacate and surrender possession of the premises to Lessor subject to the provisions of paragraph 23.

12. If requested by Lessee, this lease shall be renewable for one additional ten-year term upon such terms and conditions as are acceptable to the parties hereto. The request for renewal must be in writing and delivered by Lessee to Lessor no later than 90 days before the expiration date of the initial term.

13. Neither failure, or successive failures, on the part of the Lessor to enforce any provision, nor any waiver or successive waivers on its part of any provision herein, shall operate as a discharge thereof or render the same inoperative or impair the right of the Lessor to enforce the same upon any renewal thereof or in the event of subsequent breach or breaches.

14. The Lessee, by acceptance of this lease, binds itself to abide by the provisions and conditions herein set forth, and said provisions and conditions shall be deemed covenants of the Lessee. In the event the Lessee fails or refuses to comply with the provisions and conditions herein set forth, or in the event the Lessee violates any of the provisions and conditions herein set forth, or in the event the Lessee violates any of the provisions and conditions herein set forth, or in the event the Lessee violates any of the provisions and conditions herein, this lease may be terminated by the Lessor after notice in writing by certified mail to the Lessee. Upon receipt of such notice, the Lessee shall undertake to correct such noncompliance or violation for which the Lessor has given notice to correct within 30 days of receipt of notice. In the event Lessee fails or refuses to timely correct the violation, the Lessor, at its option, shall be entitled to terminate this lease and, if terminated, all rights of Lessee hereunder shall cease. All costs, including attorneys' fees, incurred by the Lessor to enforce this provision shall be paid by the Lessee. The Lessee, by acceptance of this lease, agrees to accept service by certified mail of any notice required by this lease or Chapter 253, F.S., in addition to Chapter 18-14, F.A.C. at the following address:



The Lessee agrees to notify the Lessor by certified mail of any change in this address at least ten (10) days before the change is effective. If Lessee's mail is returned for any reason (unclaimed, unable to deliver, no longer at address, etc.), and Lessor is unable to locate Lessee, Lessor has the option of canceling the lease.

15. The Lessee agrees to assume all responsibility for liabilities that accrue to the subject property or to the improvements thereof, including any and all special assessments or taxes of every kind and description which are now or may be hereafter lawfully assessed and levied against the subject property during the effective period of this lease.

16. Unless the mooring of a security vessel is specifically approved in writing by Lessor, no security vessels shall be moored on or adjacent to the lease area. Lessee further agrees that no vessel required to be registered or titled under Florida law shall be allowed to moor or dock within or adjacent to, or otherwise use the area described within this lease unless such vessel is registered or titled in accordance with Chapter 327 and 328, F.S. Lessee agrees that no vessel of any description shall be moored on or adjacent to the leased premises for a period exceeding twenty-four hours, irrespective of whether the vessel is periodically moved, unless authorized by the terms of this lease.

17. NOTICE: The undertaking of any unauthorized activities, including the erection or placement of any permanent or temporary structures, shall constitute a violation of Chapter 253, F.S., and subject the Lessee to administrative fines under Chapter 18-14, F.A.C., and the terms of this lease. Any such violation may result in the imposition of administrative fines, judgment for damages, and/or the termination of this lease.

18. As a condition to obtaining this lease, the Lessee hereby agrees not to discriminate against any individual because of that individual's race, color, religion, sex, national origin, age, handicap, or marital status with respect to any activity occurring within the area subject to this lease or upon lands adjacent to and used as an adjunct of the area described within this lease.

19. Lessor and Lessee agree that Lessor has venue privilege as to any litigation arising from matters relating to this lease. Therefore, any such litigation between Lessor and Lessee shall be initiated and maintained only in Leon County, Florida.

20. This lease is the entire and only lease between the parties. Its provisions are not severable. Any amendment or modification to this lease must be in writing and must be accepted, acknowledged and executed by the Lessee and Lessor.

21. This lease shall be deemed to have been executed and entered into in the State of Florida. Any dispute arising hereunder shall be governed by the laws of the State of Florida. This lease shall be binding on and shall inure to the benefit of the heirs, executors, administrators and assigns of the parties hereto, but nothing contained in this paragraph shall be construed as a consent by Lessor to any assignment of this Lease or any interest therein by Lessee.

22. Lessee shall remove all works, equipment, structures and improvements from the sovereign lands described in this lease within 60 days following the date of expiration or termination of this lease. Lessee shall also provide to the Department an attestation statement from a third party, acceptable by the lessor, verifying that all works, equipment, structures and improvements have been removed. Failure to remove all equipment and improvements within 60 days and provide the attestation statement may result in cancellation of all other aquaculture submerged land leases held by lessee and lessee will be prohibited from executing, acquiring, subletting, or the authorized use of any state owned aquaculture submerged land lease for ten years from date of cancellation of the lease in which the works, equipment, structures and improvements were not removed.

23. The Lessee shall be bound by present and future enactments in Florida law as expressed in Chapter 253, F.S., or elsewhere in Florida Statutes, and by present and future provisions of the Florida Administrative Code promulgated thereunder, including the payment of all required lease fees, and by any present and future enactments adopted by the Board of Trustees pertaining to this lease agreement.

24. The Lessee and any sublessee and/or authorized user, must possess and maintain a valid Aquaculture Certificate of Registration from the Department of Agriculture and Consumer Services pursuant to Chapter 597.004, F.S. As aquaculture certificate holders, the Lessee, sublessee and authorized user shall implement the Best Management Practices adopted in Chapter 5L-3, F.A.C.

25. Conviction of a violation of Chapter 597, F.S., and/or rule 5L-1, F.A.C., or other rules promulgated by the Department, or the Florida Fish and Wildlife Conservation Commission, may be cause for this lease to be terminated without further notice to Lessee and shall result in the forfeiture to lessor of the works, improvements, and product in and upon the leased premises.

26. Lessee shall not prohibit boating or fishing directly over the lease site.

27. Any vessel used for the purposes of this aquaculture operation shall be operated and/or moored in a manner to avoid impacts to bottom communities and water quality.

28. No predator control (i.e. fences, chemicals, etc.) shall be utilized outside of traditional legal fishing methods.

29. The Lessee shall submit an annual production report to the Department describing the type and quantity of rock materials/products deposited and harvested within the lease area no later than 45 days from the date of the request for the information contained in the Affidavit for Audit (FDACS Form 15126).

30. For the purpose of stipulating an effective cultivation performance standard, required under Chapter 253.71(4), F.S., the Lessee shall make a reasonable and bona fide attempt to harvest a minimum of tons of rock by the close of the third year of the lease term. By the close of the fifth year of the lease term, and each year thereafter, Lessee shall make a reasonable and bona fide attempt to harvest a minimum of tons of rock on the lease site.

31. The lease shall be used for the specific purpose of live rock aquaculture. Any activities that are not associated with aquaculture are strictly prohibited.

32. Only approved materials (artificial or natural) may be used in the lease area. No marine life harvested from wild stocks shall be approved. The Lessee must submit samples of each type of all proposed culture material (artificial or quarry substrate) for approval prior to the deposition of said rock materials within the lease area. If natural, it must be of readily distinguishable geological character from rock native to the area where the lease is located, or shall be securely marked or tagged so as to differentiate the cultured rock from naturally occurring live rock. A lithologic description, sufficient to determine the geologic formation and fossil and abiotic constituents of the rock is required to be submitted by the Lessee to the Department. The nature of the culture material, the marking, or lithologic description must be approved by the Department prior to deposition.

33. The Lessee shall comply with the specifications set forth in this lease agreement regarding the placement, type, height, density, and function of materials and equipment used in culture practices. All culture material that are approved for live rock culture operations shall be nontoxic, free and clean of preservatives, oil and greases, debris, litter or other pollutants and must exceed 5" in at least one dimension.

34. In no case shall turbidity levels in the lease area and in a 50-foot buffer zone be greater than 29 NTU's above background levels. Turbidity cannot exceed <u>ambient</u> background levels, outside a zone not to exceed 50 feet from the outside boundaries of the lease area as described in the Division of Aquaculture site survey report, during any phase of the aquaculture activity.

35. To minimize possible turbidity, culture material shall be placed in approved containers at the associated landbased facility prior to transport to the lease site.

36. Deposition of culture material may be facilitated by use of a hydraulic davit to assist in lowing culture material to the bottom in cargo nets; material will then be hand placed by divers. Harvest of culture material from the bottom must be by hand and not by any mechanical means.

37. Culture material must provide a minimum of -foot clearance at mean low water and preempt no more than 25% of the water column.

38. Total coverage of culture material may not exceed 75% of the lease area.

39. The Division of Aquaculture must be notified of deposition activities or provided with deposition schedules so that inspections for compliance may be conducted.

40. The Lessee must monitor potential storm displacement of culture material and report such occurrences to the Department for further documentation.

41. The lease must be open to inspection for periodic evaluation of lease activities.

42. The business plan submitted for approval of the lease shall become part of the lease agreement; however, if any

conflicts exist between the business plan and the special lease conditions, the latter will prevail. Reasonable compliance with the development plan and minimum production requirements is mandatory.

43. Lessee shall perform the aquaculture activities in such a manner that will not have an adverse effect on sensitive marine habitats or on endangered species, such as manatee and sea turtles. Any hard bottom and sea grass resources in adjacent areas must remain in their natural condition, with no encroachment or damage from the aquaculture operation.

44. The lease area shall be marked with surface buoys during deposition and upon notice of all site inspections. The lease site shall also be marked with permanent bottom monuments approved by the Department; bottom markers shall not extend over two feet above the seafloor. A vessel up to 40 feet in length may be securely moored on the site during deposition. Any vessel used of the purposes of this aquaculture operation shall be operated and/or moored in a manner to avoid impacts to bottom communities and water quality.

45. All operations at the associated land-based facility shall be conducted so as to avoid navigation congestion or introduction of deleterious substances into waters of the state.

46. <u>SPECIAL LEASE CONDITIONS</u>:

(Remainder of page intentionally left blank)

| | "LESSEE": | | |
|-----------------------|---|--|--|
| | By Original Signature of Lessee or Executing Authority | | |
| | Typed/Printed Name of Lessee or Executing Authority | | |
| | As: (If Lessee is a corporation, please enter capacity in which Executing Authority is authorized to sign, i.e, President, Vice President, etc.) | | |
| STATE OF COUNTY OF | | | |
| | l before me this day of, , who is personally known to me, or who as identification. | | |

Notary Public

(SEAL)

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

(SEAL)

By: ____

Joey B. Hicks, Director, Division of Administration (or his designee) Department of Agriculture and Consumer Services, Designee For the Board of Trustees of the Internal Improvement Trust Fund

"LESSOR"

STATE OF FLORIDA COUNTY OF LEON

The foregoing instrument was acknowledged before me this ______ day of ______ 20 _____, by Joey B. Hicks, Director, (or his designee), Division of Administration, who is personally known to me.

Notary Public

(SEAL)