

Reef Ball Foundation, Inc.
Athens, GA

Oct. 18, 2010

Dear Sirs,

The Town of Oriental, North Carolina, is sending this informational package for review. It wishes to be considered for a reef ball matching grant from your organization. Included are a short history of the AR-396 artificial reef project, a review of local and N.C. Division of Marine Fisheries support, a list of up to date expenditures and materials that have been deployed, and material field charts. The necessary requirements for this program will be addressed with supporting documentation included.

The town has played a very supportive roll in the two year quest for obtaining the Major Deployment and Filling Permit, (# 07-10), to rebuild and enlarge the artificial reef off its shore on the Neuse River. The Division of Marine Fisheries Artificial Reef Coordinator, Mr. Jim Francesconi and Mr. Gregg Bodnar, a Marine Biologist, assumed the meticulous tasks of research and planning on its enlargement and compiling the materials list for the expanded 63 acre site. Their field application was accepted and signed in January 2010. This permit expires on December 6, 2014.

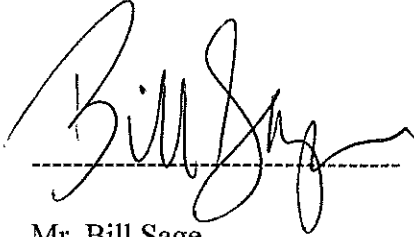
Phase one of the proposed deployments has been completed. About 5 ½ acres of material was added near the original reef site, giving anglers at least 15 acres to fish over. Two more major deployments are planned on a projected 10 additional acres of bottom. About 1500 tons of structural material for attracting fin fish and providing habitat for oysters has been placed within the new buoyed site to date, the majority of which was provided the N.C. Division of Marine Fisheries. This included an estimated 1000 tons of concrete pipe from 1' to 4' in diameter, wet well risers, hollowed pilings and 50 pallet balls. Additionally, 450 tons of Class B Rip Rap (marl) was set in mounds along the east border.

The original AR-396 site was built between 1973 and 1985, covering about 10 acres of bottom. Since its completion, corrosion, sediment, and hurricanes have contributed to the reef's destruction. Most of the vertical structure has decomposed, reducing the reef's fish-holding attraction. Local residents, visitors, and charter captains have enjoyed fishing the site. It has had the reputation of being a fish haven. Given the N.C. Division of Marine Fisheries involvement in obtaining the permit and deploying the material, AR-396 will continue to be available for public use and benefit.

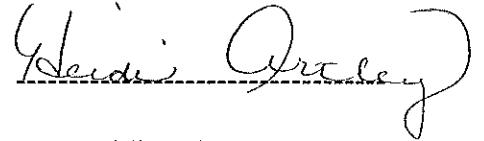
Monitoring of any grant- acquired reef balls will be photographed as requested. Ralph Evey, owner of the Oriental Dive Company, letter of intent included, has visited the old reef site to gather information for material selection and to check the oyster population. The N.C.D.M.F will also be monitoring the deployed materials on their schedule to determine how well they are working. This information will guide them for future planned additions to AR-396 and other inland projects.

The Town of Oriental's local news papers, The Pamlico News and The County Compass have willingly written and accepted articles to print on the AR-396 reef since the proposal of a rebuilding project in 2007. There has been a commitment from the editor Jeff Aydelette of The County Compass to continue printing worthy news of the progress on this site. An article is included on the history and completed work of AR-396 as of June 2010. This was written by volunteer coordinator and fund raiser Ron Zielinski. It was selected for the 2010 Oriental Rotary Tarpon Tournament Magazine.

From many fund raisers, personal and corporate contributions, committee and club donations and a grant of \$10,000 from the Harold Bate Foundation, \$19,850 has been collected to date. The majority of this was used to purchase 32 pallet balls and 300 tons of marl that were deployed during phase one of the rebuilding project. The Town of Oriental wishes to continue partnering with the N.C. Division of Marine Fisheries by allocating additional similar or better materials until the project is finished. Other grant applications are being considered to help with the financial requirements of this commitment. Our goal is to raise an additional \$25,000. Qualifying for a matching grant would be a tremendous help, enabling the town to contribute more reef balls and marl for the AR-396 site. Guidance for innovative selection of above mentioned materials would be appreciated.



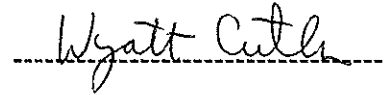
Mr. Bill Sage
Town of Oriental Mayor



Ms Heidi Artley
Interim Town Manager



Mr. Ron Zielinski
Coordinator/ Fund Raiser



Mr. Wyatt Cutler
Former Town Manager



North Carolina Department of Environment and Natural Resources
Division of Coastal Management

Beverly Eaves Perdue, Governor

James H. Gregson, Director

Dee Freeman, Secretary

25 January 2010

CERTIFIED MAIL 7009 0080 0000 5655 3594
RETURN RECEIPT REQUESTED

Mr. Greg Bodnar
NC Division of Marine Fisheries
P. O. Box 769
Morehead City, North Carolina 28557

Dear Mr. Bodnar:

The enclosed permit constitutes authorization under the Coastal Area Management Act, and where applicable, the State Dredge and Fill Law, for you to proceed with your project proposal. The original (buff-colored) form is retained by you and it must be available on site when the project is inspected for compliance. Please sign both the original and the copy and return the copy to this office in the enclosed envelope. Signing the permit and proceeding means you have waived your right of appeal described below.

If you object to the permit or any of the conditions, you may request a hearing pursuant to NCGS 113A-121.1 or 113-229. Your petition for a hearing must be filed in accordance with NCGS Chapter 150B with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27611-6714, (919) 733-2698 within twenty (20) days of this decision on your permit. You should also be aware that if another qualified party submits a valid objection to the issuance of this permit within twenty (20) days, the matter must be resolved prior to work initiation. The Coastal Resources Commission makes the final decision on any appeal.

The project plan is subject to those conditions appearing on the permit form. Otherwise, all work must be carried out in accordance with your application. Modifications, time extensions, and future maintenance require additional approval. Please read your permit carefully prior to starting work and review all project plans, as approved. If you are having the work done by a contractor, it would be to your benefit to be sure that he fully understands all permit requirements.

From time to time, Department personnel will visit the project site. To facilitate this review, we request that you complete and mail the enclosed Notice Card just prior to work initiation. However, if questions arise concerning permit conditions, environmental safeguards, or problem areas, you may contact Department personnel at any time for assistance. By working in accordance with the permit, you will be helping to protect our vitally important coastal resources.

Very sincerely,

David W. Moyer
Interim District Manager
252-948-3852

Enclosure

Permit Class
NEW

Permit Number
07-10

STATE OF NORTH CAROLINA
Department of Environment and Natural Resources
and
Coastal Resources Commission

Permit

for

Major Development in an Area of Environmental Concern
pursuant to NCGS 113A-118

Excavation and/or filling pursuant to NCGS 113-229

Issued to NC Division of Marine Fisheries, PO Box 769, Morehead City, NC 28557

Authorizing development in Pamlico County on the Neuse River off Whitehurst Point, near the Town of Oriental, as requested in the permittee's application dated 10/08/09, including the attached workplan drawings (6 total), all dated 10/06/09

This permit, issued on January 25, 2010, is subject to compliance with the application (where consistent with the permit), all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to fines, imprisonment or civil action; or may cause the permit to be null and void.

Authorized Development

- 1) Unless specifically altered herein, this permit authorizes the expansion of the boundaries of artificial reef AR-396, located between Pierce Creek and Whitaker Creek off Whitehurst Point in the Neuse River near Oriental, to encompass ± 63 acres of which ± 5.32 acres will be filled with new structure as depicted in the attached permit application and workplan drawings.

(See Attached Sheets for Additional Conditions)

This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date. An appeal requires resolution prior to work initiation or continuance as the case may be.

This permit must be accessible on-site to Department personnel when the project is inspected for compliance.

Any maintenance work or project modification not covered hereunder requires further Division approval.

All work must cease when the permit expires on

December 6, 2014

In issuing this permit, the State of North Carolina agrees that your project is consistent with the North Carolina Coastal Management Program.

Signed by the authority of the Secretary of DENR and the Chairman of the Coastal Resources Commission.

David W. Moye (Express Permit Coordinator)
for James H. Gregson, Director
Division of Coastal Management

This permit and its conditions are hereby accepted.

[Signature]
Signature of Permittee

ronald zielinski

From: "ronald zielinski" <reellucky@pamlico.net>
To: <wyatt442@gmail.com>
Sent: Friday, August 13, 2010 1:46 PM
Subject: Draft Town Manager 2

August 13, 2010

Town Manager
Town of Oriental
PO Box 472
Oriental, NC
28571

To the Town of Oriental

The Division of Marine Fisheries is grateful to the Town of Oriental in your support of the Oriental Artificial Reef enhancement project. Through your help these past two years the reef has seen the fruits of yours and the local project supporters labors. This year through your help, the reef received its first installment of material during Phase One. The addition of 32 reef balls and 300 tons of limestone marl material is because you allow funding to move through you. Over five acres of bottom is now host to habitat forming reef building materials.

In the remaining four (at least) years of this project we will need to continue with a similar level of reef development on an annual basis. We are calling each deployment period a Phase in consecutive enumeration. Planned for this reef site is more limestone marl of similar size and we are excited about using a larger boulder size class limestone marl. More reef balls of varying sizes both smaller and larger than used this Spring is planned to create alternative habitat types. Of course the continued use of concrete pipe is also planned.

This year also included the additional enhancement of the limestone marl mounds with seeded oyster shell. A seeded oyster shell is where oyster larvae have been attached (set) to oyster shell through aquaculture methods. This was made possible through a Coastal Recreational License Fund grant and the UNC-Institute of Marine Sciences. If this form of enhancement jump starts the oyster growth on the mounds a more directed effort in oyster seeding is hoped for this reef site. Oyster habitat is key to improved water quality.

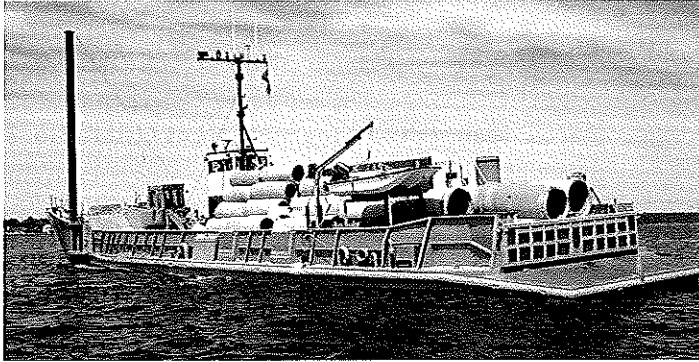
8/27/2010

By the completion of this project, three to four times the footprint of material placed this Spring is anticipated throughout the life of the project. Along the way, the various materials of the kind mentioned above will be evaluated by the Division of Marine Fisheries and Universities. This evaluation of materials is essential to furthering the enhancement of our coastal habitat. From the oysters that reside year round to the seasonal tarpon, this reef will support marine life and provide recreational fishing opportunities for your residents indefinitely. We look forward to the Town of Oriental's continued support in improving this project with the best reef building material available. We are now planning Phase Two construction activities and developing our deployment schedule to include Oriental Reef in this year's work.

Sincerely,

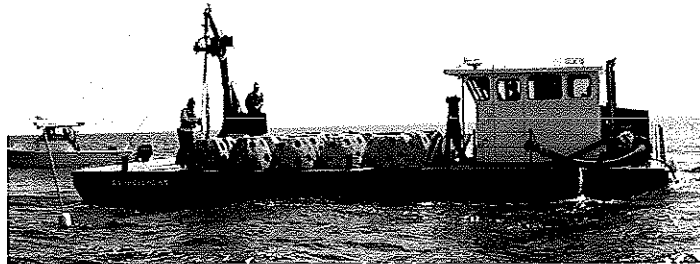
Jim Francesconi

The Rebuilding of the Oriental Artificial Reef AR-396 Has Begun



About ½ mile off the shore of Dolphin Point, located between Pierce Creek and Whittaker Creek, at least 1500 tons of selected material has been deployed, covering about 5 ½ acres within the new 63 acre site. This marks the completion of Phase One which is a fraction of the entire project. The large yellow buoys marking the perimeter are easily visible from Lou-Mac Park and along South Avenue in Oriental.

Oysters are expected to set and grow on the 450 tons of limestone marl positioned toward the east end. Specific fish attracting material, concrete reef balls, sections of concrete pipe from 1 to 4 feet in diameter, wet well risers and hollowed pilings were placed in designated areas as shown on the printed enhanced view of the reef site.



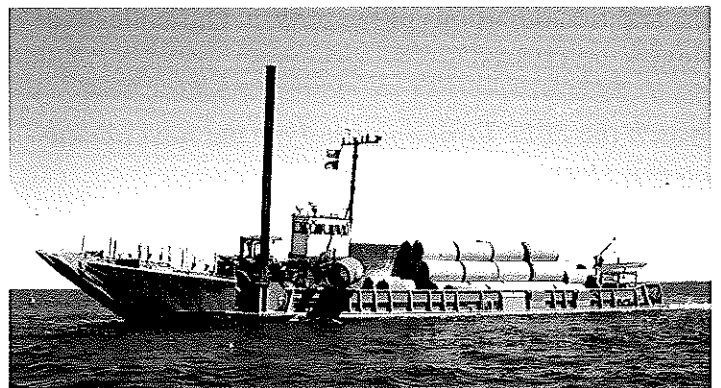
Over two years have passed since this project was brought before an Oriental Town Board meeting by Mr. Jim Francesconi, the Artificial Reef Coordinator for the Division of Marine Fisheries which is based in Morehead City, N.C.. The enthusiastic response by all the Town Officials present enabled Mr. Francesconi to start planning the rehabilitation in earnest. With this incentive, several Oriental residents initiated a local fund raising campaign with a goal of contributing to the expected material costs. Initially a booth was set up at Oriental's 2007 Croaker Fest to provide informa-

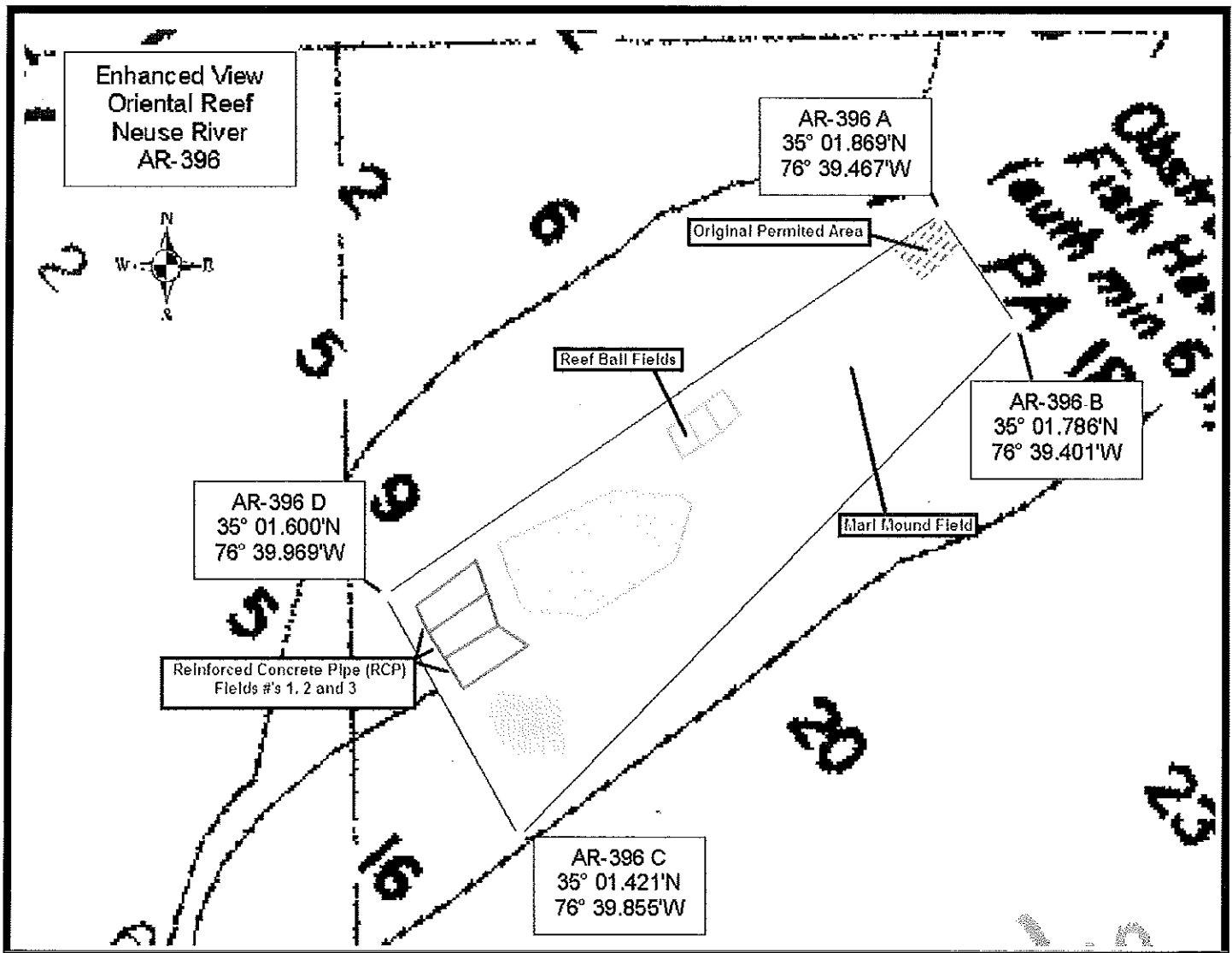
tion about the reef rebuilding project, collect donations and sell raffle tickets for the many items that were given toward helping this cause. A portable generator and hats provided by the Yamaha Corporation garnered the most funds.

A rain barrel project was organized and operated out of the bays of the Town Hall building. Large used 50 gal. pickle barrels were purchased from the Mount Olive Pickle Company. Once cleaned, screened, and plumbed, they were sold with all proceeds, except material expenses, going to the artificial reef fund. There are still about a dozen barrels looking for new homes.

Generous donations from local clubs, organizations, supportive residents and businesses helped raise the contributions to almost \$10,000 as of May 2010. To augment this fund, 2008 Town Manager Mr. Wyatt Cutler sent out several grant applications. Fortunately, the Harold H. Bate Foundation considered this project a worthy cause and awarded a grant of \$10,000, matching the local fund raising campaign.

All the required permit applications were filed in late 2009 by the Division of Marine Fisheries, under





the guidance of fisheries biologist Gregg Bodnar of the Division's Reef Program. Once approved, a March start was scheduled with the new buoys being deployed first followed by the 50 reef pallet balls before month's end. Working around weather and sea conditions, the completion of Phase One took about three weeks.

Most of the locally collected contributions, \$17, 638, has purchased 32 pallet reef balls and 300 tons of marl for oysters which are on the site now. The remaining monies will be spent on structural materials for the next scheduled deployment. The 1000 tons of concrete pipe, wet well risers, pilings, 18 reef balls and 150 tons of marl were provided by the Division of Marine Fisheries.

Additional programs or grant applications are being considered to add to the AR-396 reef fund. This would

increase the local contributions toward future rebuilding efforts by the Division of Marine Fisheries.

The proposed Phase Two might begin as soon as this coming fall using similar materials. There is talk of an outside organization contributing a good number of smaller reef balls to augment what has been planned. Monitoring of AR-396 is expected to be handled by the Division of Marine Fisheries. They would appreciate input from anglers about what's being caught and when. The gathered information will be studied to determine which material or physical configuration best attracts and holds fish. Over the course of the 5 year permit, additional phased in deployments are expected. These will include similar materials to Phases One and Two with an emphasis on materials that prove best for oyster habitat.



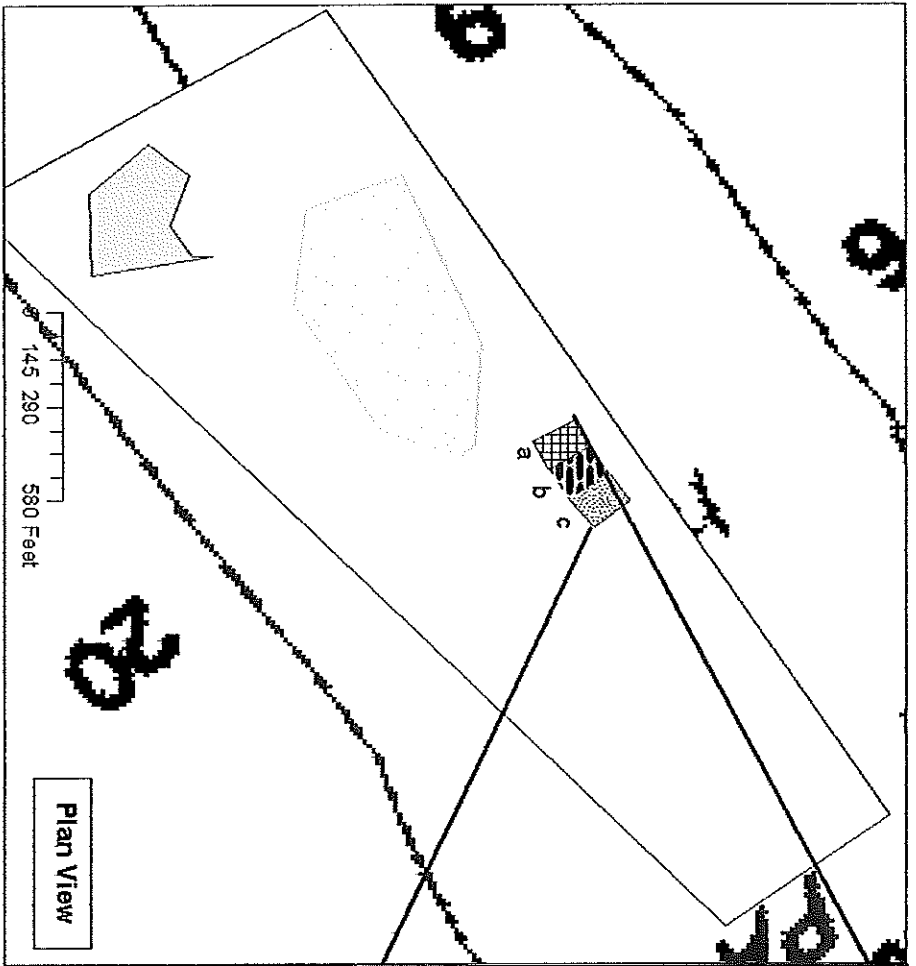


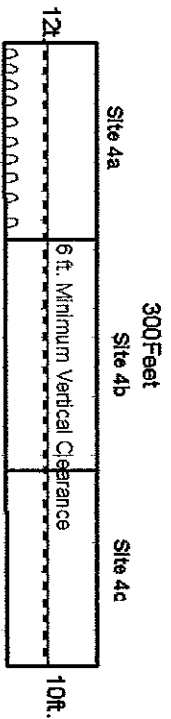
Chart 4
Proposed Reef Ball Material Field
AR-396 Oriental



Datum: NAD83
 Projection: NAD 83 State Plane
 Approximate: 100000
 49

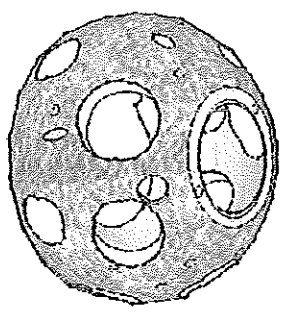


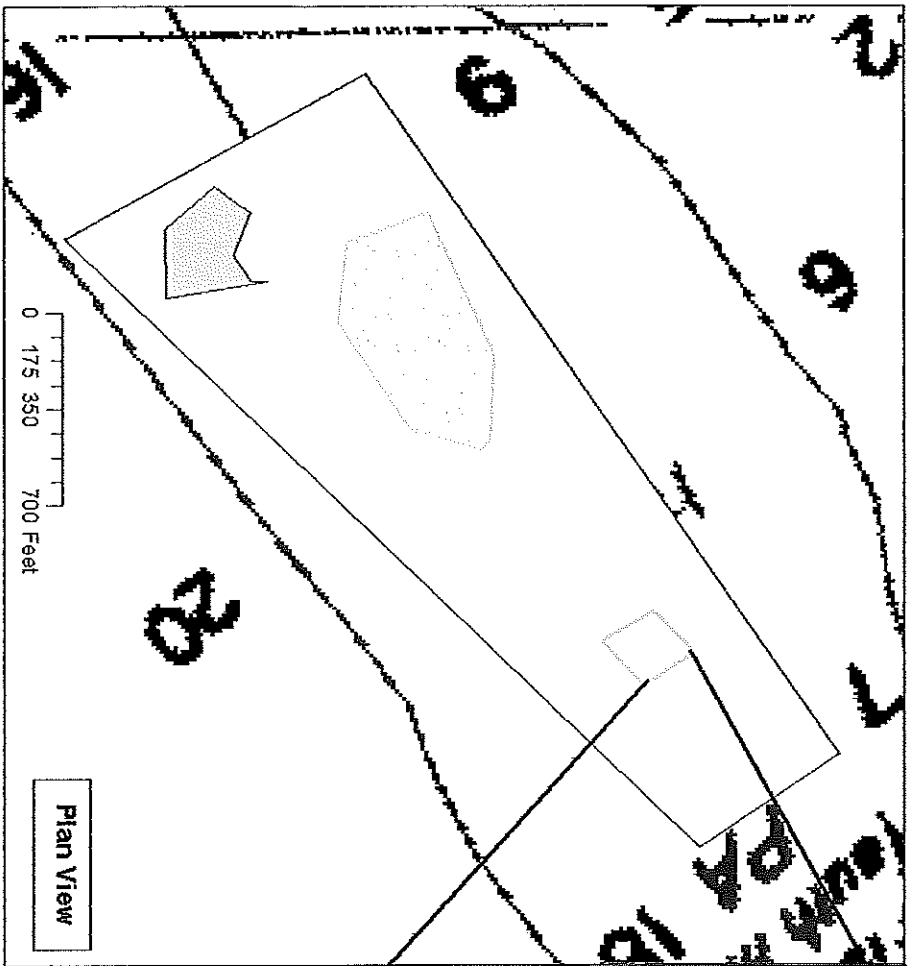
Site 4a has been designated for present enhancement.
 Sites 4b & 4c have been designated for future enhancement.
 Depth of all three sites is 10-12 ft. Maximum profile of a Reef Ball
 in use is 3ft. This profile is well below minimum vertical clearance.



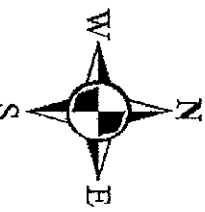
Cross Section
Material Field Dimensions
 300 ft. x 134 ft.

"Palmetto" Reef Ball Metrics		Material Description	
Width	4ft.	Reef Ball Breakdown by Site Site 4a (0.33 acre) Present deployment of a maximum of 50 Reef Balls Site 4b (0.33 acre) Future deployment of a maximum of 50 Reef Balls Site 4c (0.33 acre) Future deployment of a maximum of 50 Reef Balls	
Height	2.9ft.		
Surface Area	75 sq. ft.		

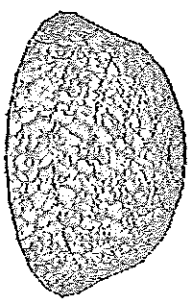
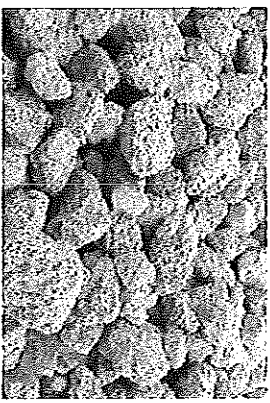
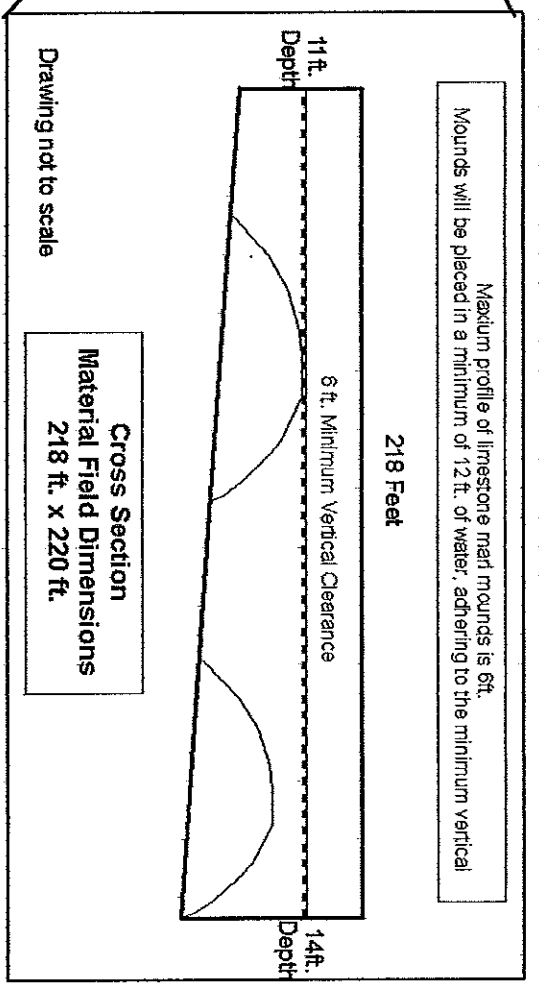




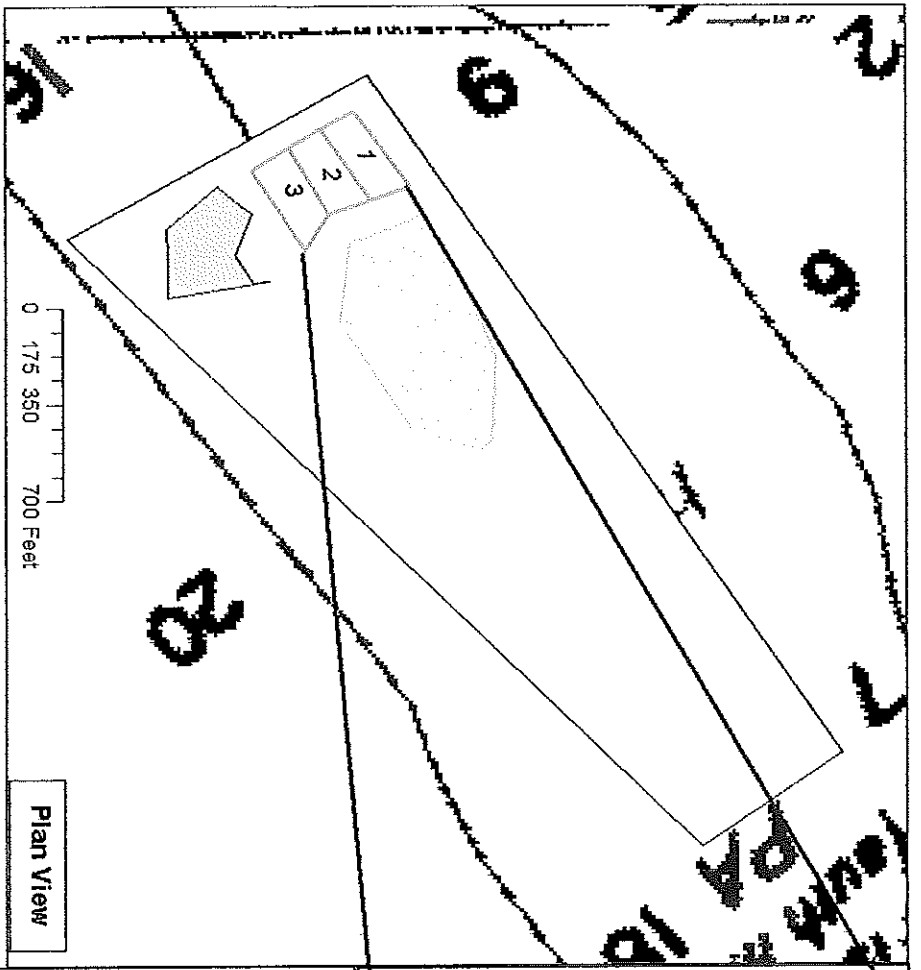
Proposed Limestone Marl Mound Material Field
AR-396 Oriental



Datum: NAD83
 Projection: NC State Plane
 Application: topobro
 00



Material Description	Limestone Marl Mound Site	1 acre
	Maximum mounds per acre :	8
Material Description	Limestone Marl Mound Metrics	
	150 tons Class B rip rap	
	25' radius	
	6' height	
		32,000-33,000 cubic ft. volume
		Mound spacing 75' from center

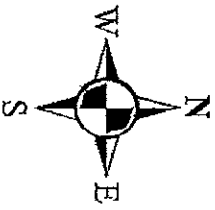


**Proposed Concrete Pipe Material Field
AR-396 Oriental**

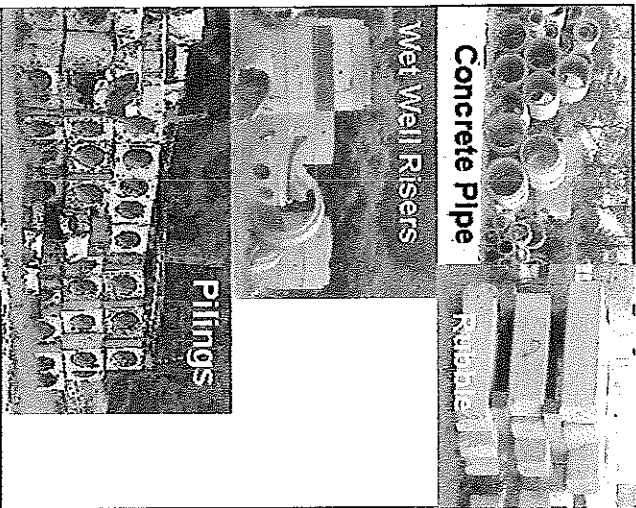
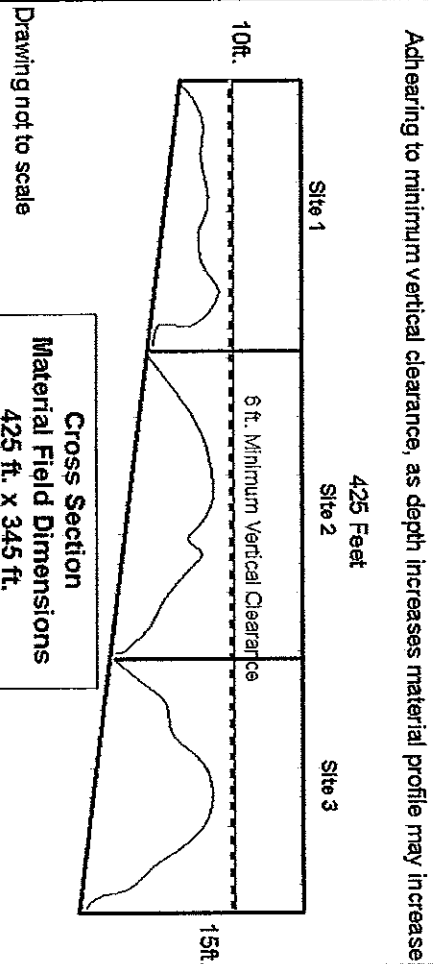
Chart 5

0 175 350 700 Feet

Plan View



Datum: NAD83
Projection: NC State Plane
Applicator: 100000
86



Material Description

**Concrete Pipe Material
Breakdown by Site**

Site 1 (1 acre)
272 tons 12", 15", 18", x 8"
12" x Various Concrete Pillings

Site 2 (1 acre)
398 tons 24", 30", x 8' Concrete
Pipe

Site 3 (1 acre)
242 tons Concrete rubble
42" x 8' Concrete pipe
Various Concrete Wet Well
Risers

The County Compass
P.O. Box 460
Bayboro, North Carolina 28515
(252) 745-3155

September 13, 2010

Town of Oriental
Town Hall
Oriental, N.C. 28571

Attention: Ron Zielinski

Subject: Artificial Reef off the shoreline of Oriental

Greetings:

I am the editor and publisher of The County Compass newspaper. As you know, we have reported on the rehabilitation and expansion of the reef numerous times over the past 18 months.

I am happy to say that our readers enjoy this coverage, and I can assure you that we will continue with our news articles as development of the reef continues over the next several months, and even years.

Please use this letter as part of your documentation to apply for any and all grants that may be available for this fine project. I will be happy to respond to written, e-mail, or telephone inquiries. My e-mail address here at the newspaper is:
jeff@thecountycompass.com

Sincerely,

THE COUNTY COMPASS

Jeff Aydelette
Editor and Publisher

Ron Zielinski

From: "Ralph Evey" <divemaster@orientaldivecompany.com>
To: <townhall@townoforiental.com>
Cc: <reellucky@centurylink.net>
Sent: Monday, September 20, 2010 1:16 PM
Subject: AR-396 Reef Grant Assistance
To: Town Hall of Oriental & whom it may concern

Reference- AR-396 and required underwater monitoring of the same.

Hello

I am the owner and Dive Master of Oriental Dive Company. We are commercial divers with a vested interest in our local waters and its sustainable eco system. For the past 5 years, my divers and I have dove on AR-396 and many unknown natural reefs in our area. Some of our diving was for recreation but mostly for environmental research and documentation. AR-396 has proved to be one of our most active reefs in the area. The amount of marine life, year long, has been unprecedented in the Neuse River and Pamlico Sound.

Several years ago, a campaign started to rebuild and explain the reef. We came on board after the state did their study using sonar. With the sonar information on hand, we dove on the site. It was wintertime, very cold with a north wind all too equal 13 foot visibility (Great for this work). At that time, we mapped out most of the reef and passed it along to the state. Now the reef has expanded and I hope will continue to grow.

There is a need for divers after the Reef Balls are installed It was brought to my attention. I would be willing and able to provide a minimum of two digital photos per year for three years after installation. This is only the minimum and of course, my company and I will do much more then this. Please consider this offer if it will help.

Yours truly,

Ralph Evey

ODC Divemaster

(252) 671-9468

divemaster@orientaldivecompany.com

www.orientaldivecompany.com

Post Office Box 667

Oriental, North Carolina 28571

9/20/2010