

13. **CITY MANAGER**

a. Informational Items

- iii. Approved Department of Environmental Protection (DEP) permit for Red Drift Algae clean-up pilot program



**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
 Bureau of Beaches and Coastal Systems  
 3900 Commonwealth Blvd - MS 300  
 Tallahassee, FL 32399-3000  
 (850) 488-7708

Permit Number: -8023520-LE

No. of Pages Attached: 3

**FIELD PERMIT PURSUANT TO SECTION 161.053 or 161.052, FLORIDA STATUTES**

**FINDINGS OF FACT AND CONCLUSIONS OF LAW:** The request for a permit was considered by the staff designee of the Department of Environmental Protection and found to be in compliance with the requirements of Chapter 62B-33, Florida Administrative Code (F.A.C.). Approval is specifically limited to the activity in the stated location and by the project description, approved plans (if any), attached standard conditions, and any special conditions stated below pursuant to Paragraph 161.053(5), Florida Statutes. This permit may be suspended or revoked in accordance with Section 62.4.100, F.A.C.

**PROJECT LOCATION:** Tarpon Bay Road beach between R-145.4 and R-150.5; Donof Street Beach access between R-1101 and R-1102.7; and, Light-House Beach between R-172.7 and 175.15 all in Lee County on Sanibel

**PROJECT DESCRIPTION:** a pilot program to test best methods for mechanical removal of mass accumulation of red drift algae. Various methods may be used within the wet, sandy area between the wrack line and low tide line. Testing to be done during a time when algae accumulate to the degree which warrants removal. Collected debris to be removed to an upland disposal site, nothing to be buried on beach.

**SPECIAL PERMIT CONDITIONS:** This permit is valid only after all applicable federal, state, and local permits are obtained and does not authorize contravention of local setback requirements or zoning or building codes. This permit and public notice shall be posted on the site immediately upon issuance and shall remain posted along with local approval until the completion of any activity authorized by this permit. Other special conditions of this permit include:

Test methods and equipment to be used are as per a written proposal by City of Sanibel. See attached special permit conditions for Sea Turtle and Shorebird Protection. This authorization supersedes field permit #8022080-LE which has expired.

**STANDARD PERMIT CONDITIONS:** The permittee shall comply with the attached standard field permit conditions.

**APPLICANT INFORMATION:** I hereby certify that I am either: (1a) the owner of the subject property or (1b) I have the owner's consent to secure this permit on the owner's behalf; and that (2) I shall obtain any applicable licenses or permits which may be required by federal, state, county, or municipal law prior to commencement of the authorized work; (3) I acknowledge that the authorized work is what I requested; and (4) I accept responsibility for compliance with all permit conditions.

Applicant's Signature Gates D Castle Date 9/18/08 Telephone No. 238 472-6397  
 Applicant's Printed Name City of Sanibel Address 800 Dunlop Road, Sanibel, FL  
 If applicant is an agent: G D Gates Castle, Public Works Dir. 33957  
printed name of property owner property owner's address property owner's telephone no.

**DEPARTMENT FINAL ACTION AND FILING AND ACKNOWLEDGMENT:** This field permit is approved on behalf of the Department of Environmental Protection by the undersigned staff designee, and filed on this date, pursuant to section 120.52, F.S., with the undersigned designated Deputy Clerk, receipt of which is hereby acknowledged.

Jennifer P. Gwart Jennifer P. Gwart 9-17-08  
Staff Designee/Deputy Clerk Printed Name of Designee/Deputy Clerk Date

**PUBLIC NOTICE IS ON THE BACK OF THIS PERMIT.** EXPIRATION DATE: Feb 15, 2009  
 (Emergency permits issued pursuant to Section 62B-33.014, F.A.C., are valid for no more than ninety days and other field permits are valid for no more than 12 months. The staff designee may specify a shorter time limit.)

EMERGENCY PERMIT:  YES  NO Approved plans are attached:  YES  NO

**AND PUBLIC NOTICE CONSPICUOUSLY ON THE SITE**

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
COASTAL CONSTRUCTION CONTROL LINE PROGRAM**

**FIELD PERMIT NUMBER: - 8023520-LE**

**Project Location:** Tarpon Bay Road Beach between R-149.4 and R-150.5, Donax Street Beach Access between R-161 and R-162.7 and Lighthouse Beach between R-172.7 and 175.5, all in Lee County, City of Sanibel.

**Project Description:** A pilot program to test mechanical equipment for the removal of red drift algae from Tarpon Bay Road Beach (+/- 1000 linear feet), Donax Street Beach (+/- 1500 linear feet) and Lighthouse Beach (+/- 2200 linear feet). Equipment authorized for experimentation under this permit are: 1. John Deere Tractor (model #4520) with TR3 Rake (model #300); 2. Takeuchi TC130 rubber track loader with rake/fork attachment; 3. Barber Surf Rake (model 600HD) with Morooka rubber track dump bed trucks; 4. 4-wheel drive tractor with hay rake, baler and flat bed; 5. 4-wheel drive tractor with Cherrington Model 4700 XL Beachcleaner; 6. 4-wheel drive tractor (John Deere model # 5520 or Kubota model M-900) with rake and front end loader; and, 7. John Deere 544J Loader, Case 580 SL Backhoe/Loader, and Caterpillar 416C Backhoe/Loader.

**Special Permit Conditions for Sea Turtle Protection**

1. Prior to commencement of experimental beach cleaning activities authorized by this permit, a preconstruction conference shall be held at the site among the contractor, the owner or authorized agent, the local avian authority and a staff representative of the Bureau of Beaches and Coastal Systems to establish an understanding among the parties as to the items specified in the special and general conditions of the permit. Contact Ms. Jennie Cowart at toll free message center (1-877-314-1329) to schedule an appointment. The proposed experimental beach cleaning sites, access and staging areas shall be staked out for the conference.
2. Only existing access sites shall be used. Access sites shall be controlled to restrict access at night and between construction events. Construction fences shall be constructed as necessary to protect remnant beach dune vegetation and property. Fences shall remain in place until the construction authorized by this permit is complete. The temporary construction fence locations and construction shall be subject to approval from the staff representative. Existing dune vegetation shall be disturbed only to the minimum extent necessary for completion of the authorized work. All vegetated areas disturbed by construction activities shall be re-vegetated with native salt-tolerant plant species.
3. No activities shall be conducted seaward of or below the mean high water line onto sovereignty owned lands of the State of Florida.
4. Burial or storage of any collected abiotic debris is prohibited. Burial of biotic debris (consisting primarily of red drift algae) is prohibited within the dune system or sea turtle nesting habitat. Disposal of accumulated debris from the beach must occur immediately after cleaning has been performed but must not result in the net removal of sandy material from the beach.
5. Operators of experimental beach cleaning equipment shall avoid all native, salt tolerant dune vegetation by a minimum of ten (10) feet.
6. To the degree possible, experimental beach cleaning activities shall be conducted outside the marine turtle nesting season (May 1 through October 31). Work may occur on the nesting beach (seaward of existing coastal armoring structures or the dune crest) under the following additional conditions.
7. During the marine turtle-nesting season (May 1 to October 31), experimental beach cleaning activities shall be confined to daylight hours (sunrise to sunset).

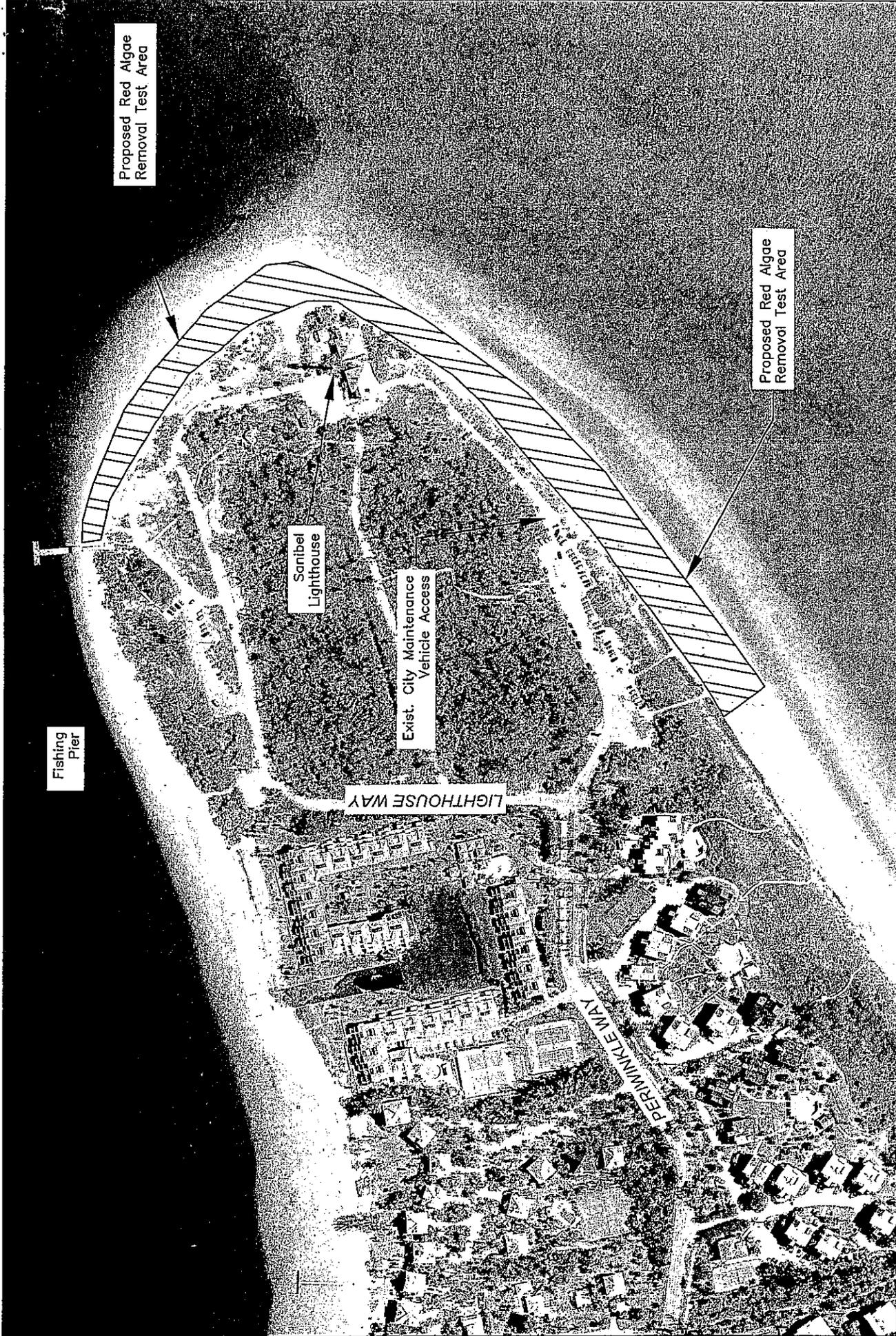
8. During marine turtle nesting season (May 1 to October 31), the permittee is responsible for ensuring that a daily marine turtle nest survey, protection, and monitoring program is conducted throughout the permitted beach cleaning area. Such surveys and associated conservation measures shall be completed after sunrise and prior to the commencement of any experimental beach cleaning. The marine turtle survey, protection, and monitoring program shall be conducted only by individuals possessing appropriate expertise in the protocol being followed and a valid F.A.C. Rule 68E-1 Permit issued by the Florida Fish & Wildlife Conservation Commission (FWC).
9. In the event that experimental beach cleaning occurs prior to completion of the marine turtle nest survey, protection, and monitoring program, experimental beach cleaning shall not occur landward of the wrack or debris line on that beach until 65 days have passed or after November 30, whichever is earlier. The permittee shall contact the Marine Turtle Permit Holder prior to reinitiating experimental beach cleaning in that area.
10. Any nests deposited in an area not requiring relocation for conservation purposes (as determined by the marine turtle permit holder) shall be left in situ. The marine turtle permit holder shall install an on-beach marker at any nest site and a secondary marker located at a point as far landward as possible to ensure that future location of the nest will be possible should the on-beach marker be lost. A series of stakes and survey ribbon or string shall be installed to establish an area of 3 feet radius surrounding the nest. Nest sites shall be inspected daily to ensure nest markers have not been removed.
11. All nests left in place shall be marked with a circle of tape or string having a radius of at least three (3) feet, centered at the approximated location of the clutch. An additional marker shall be placed at the base of the dune or seawall to ensure that future location of the nests will be possible should the on-beach markings be lost. No experimental cleaning equipment is allowed inside of this circle; however, careful removal of material by hand is allowed. All equipment operators should be briefed on the types of marking utilized and should be able to easily contact the individual responsible for the nest survey to verify any questionable areas.
12. In the event that on-beach nest markers are lost for any reason, including vandalism or high water conditions, no experimental beach cleaning shall be conducted until the marine turtle permit holder identifies the nest and restores the markers. In the event that the nest cannot be found and may have been lost during high water conditions, the permittee shall contact FWC staff at (850) 922-4330 to determine if experimental beach cleaning can resume. All marine turtle protection conditions shall remain in effect unless specifically waived in writing by FWC.
13. Experimental beach cleaning shall be accomplished to cause minimal disturbance to the beach such that ruts are not formed or sand compaction levels are not significantly increased above background levels.
14. In the event a nest is disturbed or uncovered during beach cleaning activities, the permittee shall cease all work and immediately contact the person(s) responsible for marine turtle conservation measures within the project area. If a nest(s) can not be safely avoided during construction, all activity within the affected project area shall be delayed until complete hatching and emergence of the nest.
15. Permittee shall submit quarterly progress reports and a final project report. Reports shall describe the results of experimental activities, provide locations and quantities of seaweed removal and assess impacts on project access, staging and cleaning areas in comparison to non-cleaned beaches, including the changes in beach topography, vegetation, soil compaction and sea turtle nesting.

### Conservation Recommendations for Shorebird Protection

1. Shorebird surveys should be conducted by trained, dedicated individuals using accepted, appropriate ecological survey procedures (for example, see "Breeding Season Population Census Techniques for Seabirds and Colonial Waterbirds Throughout North America" at URL: <http://www.mp2-pwrc.usgs.gov/cwb/manual/>).
2. The shorebird nesting season generally is 1 April – 1 September, but some nesting may occur through September. In addition, the imperiled snowy plover (*Charadrius alexandrinus*) may nest as early as February along the west coast and panhandle of Florida.
3. Nesting season surveys should begin on April 1 (or February 1 in snowy plover habitat) or 45 days prior to construction commencement, whichever is later, and be conducted daily throughout the construction period.
4. Within the project area, the permittee should establish a site-specific buffer around any location where shorebirds have been engaged in courtship or nesting behavior, or around areas where piping plovers occur or winter migrants congregate in significant numbers. Any and all construction activities, including movement of vehicles, should be prohibited in the buffer zone.
5. The width of the buffer zone should be increased if birds appear agitated or disturbed by construction or other activities in adjacent areas.
6. Designated buffer zones must be posted with clearly marked signs around the perimeter. These markings should be maintained until nesting is completed or terminated, the chicks fledge, or piping plovers or winter migrants depart.
7. No construction activities or stockpiling of equipment should be allowed within the buffer area.
8. In addition with the above mentioned conditions, the permittee shall adhere to the Federal Migratory Bird Treaty Act and the State Endangered and Threatened Species Act , Chapter 372.072, Florida Statute.

### Caveat

By approving this permit request, the Department does not endorse the authorized mechanical seaweed removal techniques, and does not in any way imply future approval of a beach cleaning permit for any of these techniques.



Proposed Red Algae Removal Test Area

Fishing Pier

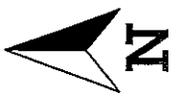
Sanibel Lighthouse

LIGHTHOUSE WAY

Exist. City Maintenance Vehicle Access

PERMINETTE WAY

Proposed Red Algae Removal Test Area

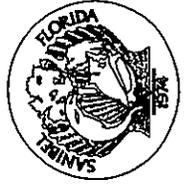


**LIGHTHOUSE BEACH PROPOSED PILOT PROGRAM LOCATION MAP**

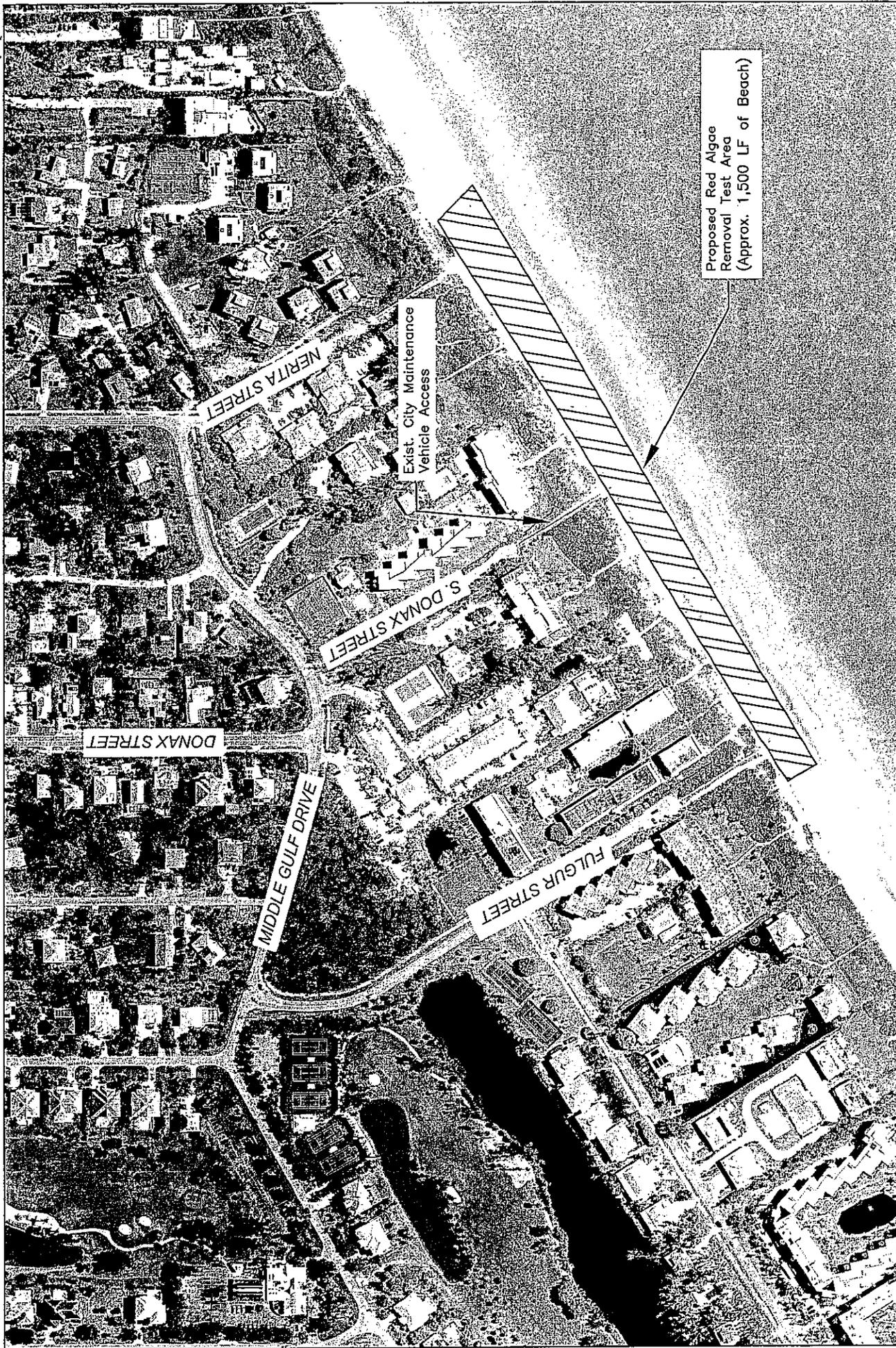
EXHIBIT 2 (SHT 1 OF 3)

MAY 2007

SCALE: 1" = 300'



**City of Sanibel, FL**  
 800 Dunlop Road, Sanibel, FL 33957  
 (941) 472-3700



Proposed Red Algae  
Removal Test Area  
(Approx. 1,500 LF of Beach)

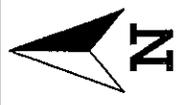
Exist. City Maintenance  
Vehicle Access

**DONAX STREET AREA PROPOSED  
PILOT PROGRAM LOCATION MAP**

EXHIBIT 2 (SHT 2 OF 3)

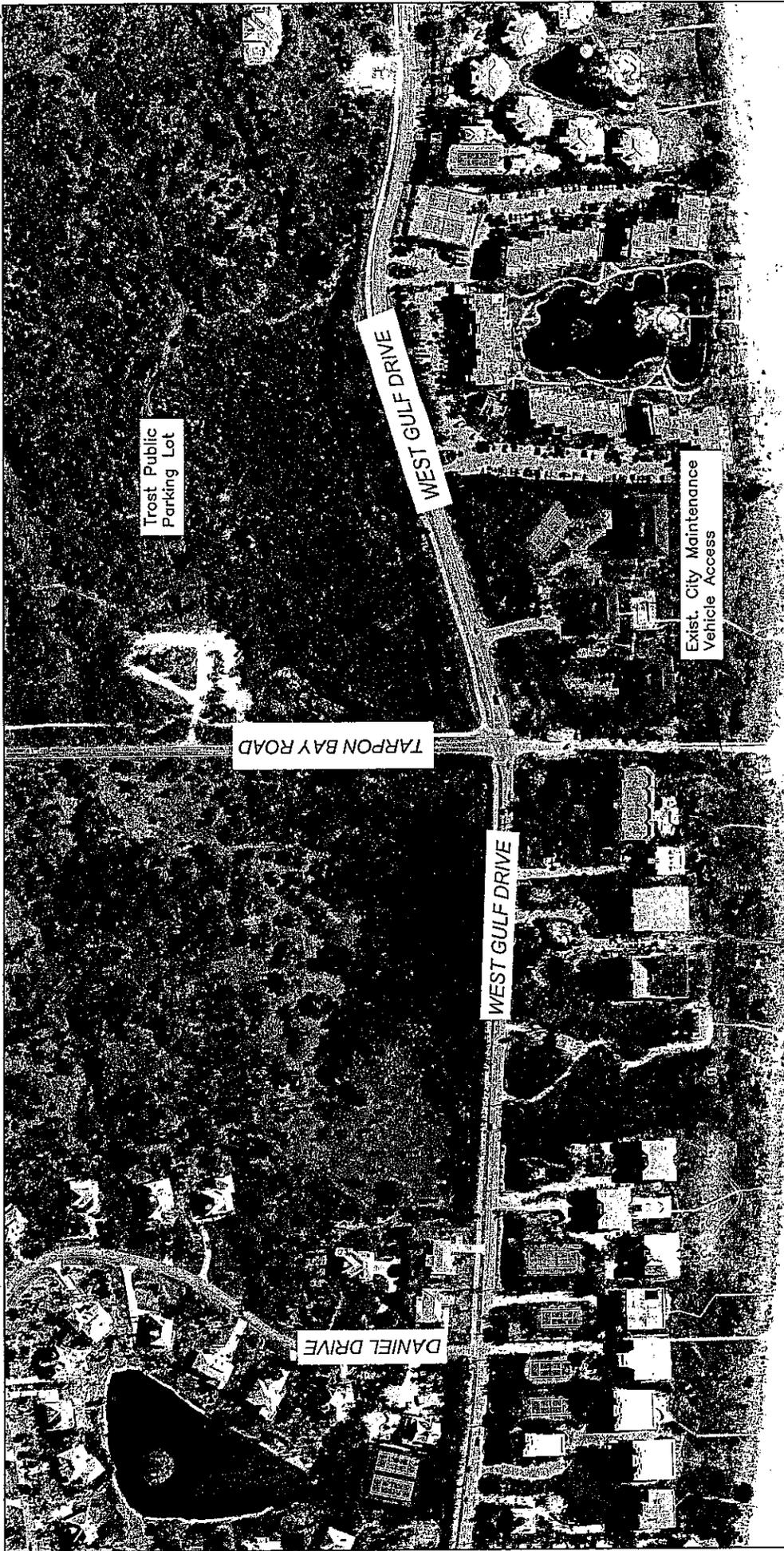
MAY 2007

SCALE: 1"=300'



**City of Sanibel, FL**  
800 Dunlop Road, Sanibel, FL 33957  
(941) 472-3700





Trost Public Parking Lot

TARPON BAY ROAD

WEST GULF DRIVE

Exist. City Maintenance Vehicle Access

WEST GULF DRIVE

DANIEL DRIVE

Proposed Red Algae Removal Test Area (Approx. 1,000 LF of Beach)



**TARPON BAY BEACH PROPOSED PILOT PROGRAM LOCATION MAP**

EXHIBIT 2 (SHT 3 OF 3)

MAY 2007

SCALE: 1"=300'



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