



FEDERAL FISH AND WILDLIFE PERMIT

2. AUTHORITY-STATUTES	
16 USC 1539(a)(1)(B) 16 USC 703-712 REGULATIONS (Attached)	
50 CFR §§ 13 & 17, & 21	
3. NUMBER	
TE 126078-0	
4. RENEWABLE	5. MAY COPY
<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/> YES
<input type="checkbox"/> NO	<input type="checkbox"/> NO
6. EFFECTIVE	7. EXPIRES
12/8/2006	12/8/2036

1. PERMITTEE

NORTON AND TRUDE BOND
1063 HARBORVIEW CIRCLE
PENSACOLA, FLORIDA 32507

TELEPHONE: 850/457-0708

8. NAME AND TITLE OF PRINCIPAL OFFICER (If #1 is a business) NORTON AND TRUDE BOND	9. TYPE OF PERMIT ENDANGERED SPECIES – INCIDENTAL TAKE
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10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED
BOND: APPROXIMATELY 1.05 ACRES OF LAND, CONSISTING OF ONE LOT IN SECTION 6, TOWNSHIP 4 SOUTH, RANGE 32 WEST, PARCEL NUMBER 06-4S-32-1000-001-014, PERDIDO KEY DRIVE, ESCAMBIA COUNTY, FLORIDA.

11. CONDITIONS AND AUTHORIZATIONS:

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE, AND AUTHORIZED AGENTS.

D. ACCEPTANCE OF THIS PERMIT SERVES AS EVIDENCE THAT THE PERMITTEE AND ITS AUTHORIZED AGENTS UNDERSTAND AND AGREE TO ABIDE BY THE TERMS OF THIS PERMIT AND ALL SECTIONS OF TITLE 50 CODE OF FEDERAL REGULATIONS, PARTS 13 AND 17, PERTINENT TO ISSUED PERMITS. SECTION 11 OF THE ENDANGERED SPECIES ACT OF 1973, AS AMENDED, PROVIDES FOR CIVIL AND CRIMINAL PENALTIES FOR FAILURE TO COMPLY WITH PERMIT CONDITIONS.

BLOCK 11 OF THIS PERMIT CONSISTS OF ITEMS A – X (11 PAGES TOTAL).

12. REPORTING REQUIREMENTS

REPORTS WILL BE PROVIDED TO THE U.S. FISH AND WILDLIFE SERVICE OFFICES APPEARING IN CONDITION W OF THIS PERMIT.

ISSUED BY	TITLE	DATE
	DEPUTY REGIONAL DIRECTOR, FWS, SOUTHEAST REGION	

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E. The Permittee/Owner owns a 1.05 acre tract as described in Block 10 above, and proposes to construct a single family residence ("the Project"). The Project is shown on the site plan with the areas that are pertinent to this Permit attached hereto as Appendix A. This Permit authorizes the incidental take of the Perdido Key beach mouse *Peromyscus polionotus trissyllepsis* (PKBM) associated with the construction of the Project and associated infrastructure, and subsequent human habitation of the Project, as conditioned herein and subject to the continued validity of the Permit.

F. The Permittee/Owner shall incorporate as deed restrictions this Permit and all terms and conditions of this Permit and be recorded in the appropriate real estate records of Escambia County, Florida. The Permittee/Owner shall be defined as Norton and Trude Bond.

G. At such time as the Permittee/Owner shall sell the Project and so long as such Permittee/Owner is not then in default under this Permit, such Permittee/Owner shall be automatically released from all obligations, conditions, and liability of this Permit and any purchaser of the Project shall, upon purchase thereof, become responsible for the future compliance therewith but not for any prior or then existing defaults, violations, or deficiencies.

H. The Permittee/Owner and its authorized agents and assigns are authorized for the following types of take of PKBM incidental to the site preparation, development, construction, operation and human occupancy of the Project, subject to compliance with all the terms and conditions of this Permit.

Harassment, harm, injury, and/or death of PKBM resulting from the loss of 0.17 acre of PKBM habitat, including critical habitat on the 1.05-acre Project site for demolition, site preparation, construction, operation and human occupancy of the Project substantially as shown on Appendix A (including the house, deck, parking, driveway, and dune walkover) and from indirect impacts due to the development, construction and human occupancy of residential land use at the Project.

I. Within ninety (90) days after the effective date of this Permit and the date on which Permittee/Owner receives the fully executed Permit from USFWS, the Permittee/Owner shall ensure that this Permit and all terms and conditions of this Permit are recorded as deed restrictions for the property in the real estate records in Escambia County, Florida. A copy of the recorded deed restrictions shall be sent to the U.S. Fish and Wildlife Service within thirty (30) days of the deed restrictions being recorded.

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J. The deed restriction shall further stipulate that no changes shall be made to the recorded deed restrictions that would cause noncompliance with the requirements of this Permit. Dissolution constitutes grounds for suspension or revocation of the Permit and will subject the Permittee/Owner to enforcement action.

K. The Permittee/Owner shall maintain a copy of the Permit in the residence for use by the residents, renters, lessees, or others.

L. The Permittee/Owner shall allow U.S. Fish and Wildlife Service personnel, State of Florida Fish and Wildlife Conservation Commission personnel, Escambia County personnel, or other properly permitted and qualified persons designated by these agencies to enter the Project boundaries at reasonable hours and times for the general purposes specified in Part 50 Code of Federal Regulations §13.21(e)(2).

M. The following measures from the Permittee's/Owner's HCP, as modified by this Permit, will be put into effect by the Permittee/Owner to ensure that the incidental take of PKBM is minimized and mitigated:

Construction (and site preparation)

1. All construction on the beach shall be conducted outside the sea turtle nesting season (May 1 through October 31).
2. A copy of the Permit shall be provided to the general contractor and included in all sub-contracts for the Project. The construction contract documents entered into by the Permittee/Owner shall include a stipulation that conservation objectives of the Permit shall be communicated to and agreed upon by all sub- contractors.
3. During construction, impacts to PKBM shall be avoided or minimized by: (a) placing sediment barriers and flagging to restrict access and avoid impacts to habitat; (b) storing materials at appropriate staging sites and on previously disturbed areas outside of PKBM habitat; (c) keeping the construction site clean and free of debris, keeping trash out of habitats; (d) limiting disturbance from site preparation and construction grading by clearly indicating on all construction plans and onsite with silt fence or other barrier fence installation. The foregoing are subject to the provision in paragraph 4 below allowing for temporary disturbance of an additional 10 feet outside the Project footprint.
4. Permanent alteration of the Project site shall not exceed 0.19 acre (structure/deck/parking/driveway and dune walkover) for the Project footprint.

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An additional 10 feet outside of the 0.19 acre project footprint may be temporarily disturbed during site demolition, site preparation, and Project construction. The 10-foot area outside of the footprint will be restored upon completion of the construction.

5. All exterior and interior lighting for the Project shall conform to the specifications outlined in Appendix B – Project Lighting Restrictions for Conservation of Protected Species or to the Fish and Wildlife Conservation Commission Approved Lighting Plan as part of the FDEP CCCL permit number ES-567 and subsequent approval by the Service.
6. All of the Project’s components (e.g. house footprint, parking area, driveway, deck, and dune walkover) constructed shall conform to the configuration/design plans as specified in Appendix A.
7. The dune restoration and project landscaping shall incorporate the following:
 - a) all vegetation planting must be completed by May 1 of each year;
 - b) all vegetation planted would be from the indigenous plant list, Appendix C to the BO - Species Plant List for Coastal Dune and Beaches in Escambia County, FL. Changes to the plant list shall be considered upon written request; request for changes shall provide information that provides verification that the plant is a coastal native dune plant species in Escambia County, Florida.;
 - c) irrigation of planted dune vegetation would be by backpack or handheld sprayers only for the duration of the permit;
 - d) all dune restoration material would meet State of Florida requirements for beach quality material;
 - e) the use of mulch and landscape fabric is prohibited on the Project site areas.
 - g) the dune restoration and landscape plans must be approved by the Service; the plans shall be provided to the Service for review no later than 120 days prior to restoration or landscape installation.
8. Undeveloped areas along the east and west sides of the building shall be maintained post-construction to provide connectivity of PKBM habitat to other onsite and off-site habitat including to the north across SR 292. These areas will be a minimum of 10 feet wide as shown on Appendix A and will be planted with native vegetation selected from an indigenous plant list in Appendix C - Species Plant List for Coastal Dune and Beaches in Escambia County, Florida.

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9. One dune walkover (size: 125 feet long by 4 feet wide) shall be constructed as permitted under the State of Florida Coastal Construction Control Line permit ES-567 and: 1) using top-down techniques; 2) on raised pilings a minimum elevation of 3 feet above grade to allow natural dune growth and formation; 3) with hand rails at least 44 inches high installed on 4 inch centers intended to prevent pedestrians access into dune habitat; and 4) with no lighting on the walkover seaward of the landward toe of the dune. The walkover shall be the only method of access provided to and from the beach for the Project.
10. The deck shall be constructed as permitted under the State of Florida Coastal Construction permit ES-567 and hand-rails shall be installed around the deck to prevent pedestrians from entering the dune habitat.
11. During construction a barrier shall be installed along the east and west property boundaries to prevent access to beach mouse habitat by pedestrians and allow movement of beach mice. All debris/refuse shall be regularly removed from these areas with a minimum of disturbance to the natural vegetation.
12. No permanent fences or privacy walls shall be constructed that would restrict beach mouse movements.
13. Sand fence shall be installed seaward of the frontal dune to both enhance sand retention and prevent pedestrian access to the dune habitat on the Project. The sand fence shall be installed in a sea turtle compatible configuration Appendix D - Sand Fence Installation Configuration for Sea Turtle Nesting Beaches Northwest Florida.

Monitoring

1. The Permittee/Owner shall, at its expense, be responsible for contracting with a qualified consultant to monitor the status of PKBM for three (3) years following issuance of the first certificate of occupancy by Escambia County, Florida covering any portion of the Project. The current monitoring requirement shall consist of yearly monitoring that consists of 4 (quarterly) trapping surveys conducted for 5 nights each. Site description and trapping data shall be recorded. Site description should include project location, habitat on the Project area and trapping design relative to habitat distribution. Daily trapping data should include number of beach mice captured per day, their sex, age, and reproductive condition, non-target species captured, weather conditions, lost or missing traps, and moon phase. Geographic position data shall be taken for every trap and mice capture location. A

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population estimate shall be calculated using the Program CAPTURE (Otis et. al 1978). Beach mice shall be individually marked to calculate a population estimate. The U.S. Fish and Wildlife Service shall approve of the trapping design. The design shall be submitted to the U.S. Fish and Wildlife Service at least 120 days prior to the start of the monitoring. Persons conducting the monitoring shall be required to obtain appropriate permits from the U.S. Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission and shall follow the stipulations outlined in the permit(s). All information shall be provided in the annual reports for this Permit.

2. All house mice captured during monitoring surveys for PKBM shall be humanely euthanized and disposed of properly. Any cotton rats or cotton mice shall be released at capture point.

Operation and Maintenance

1. Cats (including pets) shall be prohibited from the exterior and interior premises of the Project. Dogs are permissible when kept confined inside the residence. Dogs may be walked on a 6-foot hand held leash outside of beach and dune areas. All dog solid waste material must be picked up and disposed of properly by the pet owner/care taker.
2. The Escambia County animal control shall be contacted if free-roaming cats (pet or feral) are observed on the Project premises.
3. Trash collection and storage shall be contained in the interior spaces. Exterior trash receptacles for trash pick-up would be animal-proof and would reduce predator and competition pressure from nuisance and exotic species.
4. Subject to temporary disturbance during construction as allowed by the terms of this Permit, permanent impact to the site shall be limited to the 0.19 acre as indicated in Appendix A; land allowed by this Permit to be disturbed during construction and shall be restored after completion of construction. After Project completion 0.6 acre of PKBM habitat shall be protected, managed, and maintained on the Project site.
5. The applicant would establish a condition in the deed and restrictions of the property that requires restoration of sand and vegetation in the dune community after a named storm event, should such be lost or degraded if such areas are not otherwise restored by a governmental entity or other third party as part of an overall or isolated dune restoration program (such as, for example purposes only, the dune restoration program undertaken by state,

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federal and local government entities after Hurricane Ivan) and, provided that this requirement shall not interfere with or otherwise prohibit future participation in any such dune restoration program.

6. The use of exterior rodenticides and herbicides shall be prohibited. Any captured exotic or non-native rodents (house mice, Norway rats, black rats) shall be humanely euthanized and disposed of properly.
7. The Permittee/Owner shall comply with the State of Florida marine turtle nesting survey requirements applicable to the Project, including such requirements as pertain to stranded turtle notification and handling. The Florida Fish and Wildlife Conservation Commission, Tequesta Field Laboratory at (561) 575-5408 shall be contacted to obtain marine turtle permit contact information holder if needed.
8. All beach chairs and umbrellas or similar items shall be removed from the beach on the Project each night during the sea turtle nesting season from May 1 through October 31.
9. A Conservation Easement with the Florida Fish and Wildlife Conservation Commission as the easement grantee shall be placed on the undeveloped portions of the Project with the exception of a 10-foot access easement associated with the walkover. The boundaries of the Conservation Easement shall be surveyed by a licensed certified land surveyor. The Conservation Easement shall be recorded with the Clerk of Escambia County within 6 months of the completion of the Project (first Owner occupancy). The Permittee/Owner shall work with the Florida Fish and Wildlife Conservation Commission to draft the Conservation Easement. A draft copy of the Conservation Easement shall be provided to the U.S. Fish and Wildlife Service for review and approval. A copy of the survey and recorded Conservation Easement shall be provided to the U.S. Fish and Wildlife Service within ninety (90) days after the Conservation Easement is recorded.
10. As noted in the Permittee's/Owner's HCP, the Permittee shall contribute a one-time sum of \$17,000 to the PKBM Conservation Fund held by Escambia County, Florida or such other entity as is designated by the U.S. Fish and Wildlife Service for such purpose. This contribution shall be provided with the application for a County Building Permit or other such permit that will result in impacts covered by the HCP. Following the issuance of the Certificate of Occupancy for the Project and every year following for the life

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of the Permit a fee of \$201.00 shall be deposited in the PKBM Conservation Fund. The purpose of the Fund is to implement compensation and mitigation of development impacts on PKBM.

11. Within ninety (90) days of the date of this Permit issuance, the Permittee/Owner shall provide the U.S. Fish and Wildlife Service a final site layout that shows the house, driveway, parking, deck, and dune walkover. The dimensions as provided in this Permit shall be accurately depicted on the layout. The layout shall be no smaller in scale than 1 inch = 30 feet.
12. The Permittee/Owner shall place in escrow with Clark, Paddington, Hart et al., P.A., funds sufficient to finance 12 PKBM monitoring events at the property. The property deed restriction shall identify that this account cannot be dissolved under any circumstances until the monitoring surveys are completed.

N. Because the purpose of the HCP and this Permit is to minimize take of and to gather data on the impacts to PKBM resulting from the Project it is important that any PKBM occupying the Project site not be relocated. Therefore the use of trapping or other methods to capture PKBM prior to the Project construction for purposes of relocation shall be prohibited.

O. The Permittee/Owner and the U.S. Fish and Wildlife Service may propose modifications and/or amendments to the HCP or this Permit by providing written notice. Such notice shall include a statement of the reason for the proposed modification and an analysis of its environmental effects, including its effects on operations under the HCP and on the PKBM. This analysis shall be jointly conducted between the Permittee/Owner and the contact office of the U.S. Fish and Wildlife Service in 11.V. The U.S. Fish and Wildlife Service or the Permittee will use reasonable efforts to respond to a proposed modification or amendment within sixty (60) days of receipt of such notice. Absent any objection from the U.S. Fish and Wildlife Service or the Permittee/Owner, the proposed modification and/or amendment will be determined as minor and shall become effective upon written approval by the U.S. Fish and Wildlife Service or the Permittee/Owner. If, for any reason, a receiving party objects to a proposed amendment or modification, it must be processed in accordance with Condition 11.P and 11.Q, below.

P. The U.S. Fish and Wildlife Service shall not propose or approve minor modification to the HCP or this Permit if the U.S. Fish and Wildlife Service determines that such modifications would result in operations under the HCP and Permit that are significantly different from those analyzed in connection with the HCP, adverse effects on the environment that are new or significantly different from those analyzed in the

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HCP, or additional take of PKBM or another federally protected species not analyzed in connection with the original HCP.

Q. Any amendment or modification shall conform with all applicable legal requirements, including but not limited to the Endangered Species Act, the National Environmental Policy Act, and the U.S. Fish and Wildlife Service's permit regulations at 50 CFR §13 and §17.

R. This Permit may be administratively amended to allow an additional 3% (0.02 acre) permanent loss of PKBM habitat on the Project site after 5 years of this Permit implementation. The Permittee/Owner shall submit a request to the U.S. Fish and Wildlife Service for the modification. The request shall include a reason for the project modification and an analysis of its environmental effects, including its effects on the current Permit requirements and the PKBM. The U.S. Fish and Wildlife Service shall use its best efforts to respond to a proposed modification or amendment within sixty (60) days of receiving the request. Absent any objection from the U.S. Fish and Wildlife Service, the proposed modification shall become effective upon written approval by the U.S. Fish and Wildlife Service.

S. The Permittee/Owner shall submit an annual report, due by January 31 of each year the Permit is valid, to the U.S. Fish and Wildlife Service offices listed in Condition 11.W. of this Permit. The first report will be due January 31, 2007. The failure to submit this report shall not be deemed a default under the Permit unless such failure was willful or unless Permittee fails to submit such report within sixty (60) days following written notice from the Service that the report is delinquent. The annual report shall address items in Conditions I. through M. The following certification from a responsible company official who supervised or directed the preparation of the report shall be included in the annual report:

“Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this report, the information submitted is true, accurate, and complete.”

T. The Permittee/Owner and the U.S. Fish and Wildlife Service acknowledge that even with the above detailed provisions for mitigating and/or minimizing impacts to the covered species, changes in circumstances could arise which were not fully anticipated by this permit and which may result in substantial and adverse change in the status of the covered species. The U.S. Fish and Wildlife Service's policy regarding changed and unforeseen circumstances is contained in the final “No Surprises” rule published on December 10, 2004, (69 FR 71723) and codified at 50 C.F.R. §§ 17.22(b)(5), 17.32(b)(5), 222.22(g).

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Unforeseen and/or changed circumstances may become apparent either to the Permittee/Owner, authorized agents or to personnel of the U.S. Fish and Wildlife Service. For the purposes of implementation of this condition, unforeseen circumstances are defined as changes in circumstances affecting a species or geographic area covered by the HCP that could not reasonably have been anticipated by the HCP developers and the U.S. Fish and Wildlife Service at the time of the HCP's negotiation and development, and that result in a substantial and adverse change in the status of the covered species. Changed circumstances are defined as changes in circumstances affecting a species or geographic area covered by the HCP that can reasonably be anticipated by HCP developers and the U.S. Fish and Wildlife Service, and that can be planned for. Should either unforeseen or changed circumstances arise, the Permittee/Owner and the contact office of the U.S. Fish and Wildlife Service shall meet within twenty (20) working days following notice. The U.S. Fish and Wildlife Service and Permittee/Owner shall together agree upon appropriate and reasonable measures for addressing such circumstances, within the rule of applicable law, and the Permittee/Owner shall implement appropriate and reasonable measures within an additional thirty (30) working days, unless a longer period of time is agreed to by the U.S. Fish and Wildlife Service.

U. Upon locating a dead, injured, or sick individual of an endangered or threatened species, initial notification must be made to the Fish and Wildlife Service Law Enforcement Office, Clermont, Florida at 352-429-1037 within 24 hours. Additional notification must be made to the Fish and Wildlife Services Field Office at Panama City, Florida at (850) 769-0552 within 48 hours. Care should be taken in handling sick or injured individuals and in the preservation of specimens in the best possible state for later analysis of cause of death or injury.

V. For purposes of monitoring compliance and administration of the terms and conditions of this Permit, of review and approval of site plans, lighting plans, landscape and dune restoration plans the contact office of the U.S. Fish and Wildlife Service is:

Field Supervisor
U.S. Fish and Wildlife Service
1601 Balboa Avenue
Panama City, Florida 32405
Telephone: (850) 769-0552
Fax: (850) 763-2177

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W. Annual reports shall be provided to the following offices of the U.S. Fish and Wildlife Service:

Field Supervisor
U.S. Fish and Wildlife Service
1601 Balboa Avenue
Panama City, Florida 32405
Telephone: (850) 769-0552
Fax: (850) 763-2177

Section 10 Permit Coordinator
U.S. Fish and Wildlife Service
1875 Century Boulevard, Suite 210
Atlanta, Georgia 30345
Telephone: (404) 679-4144
Fax: (404) 679-7081

X. Any correspondence generated from implementation, modifications, or administration of the Permit shall also be provided to the following office of the U.S. Fish and Wildlife Service:

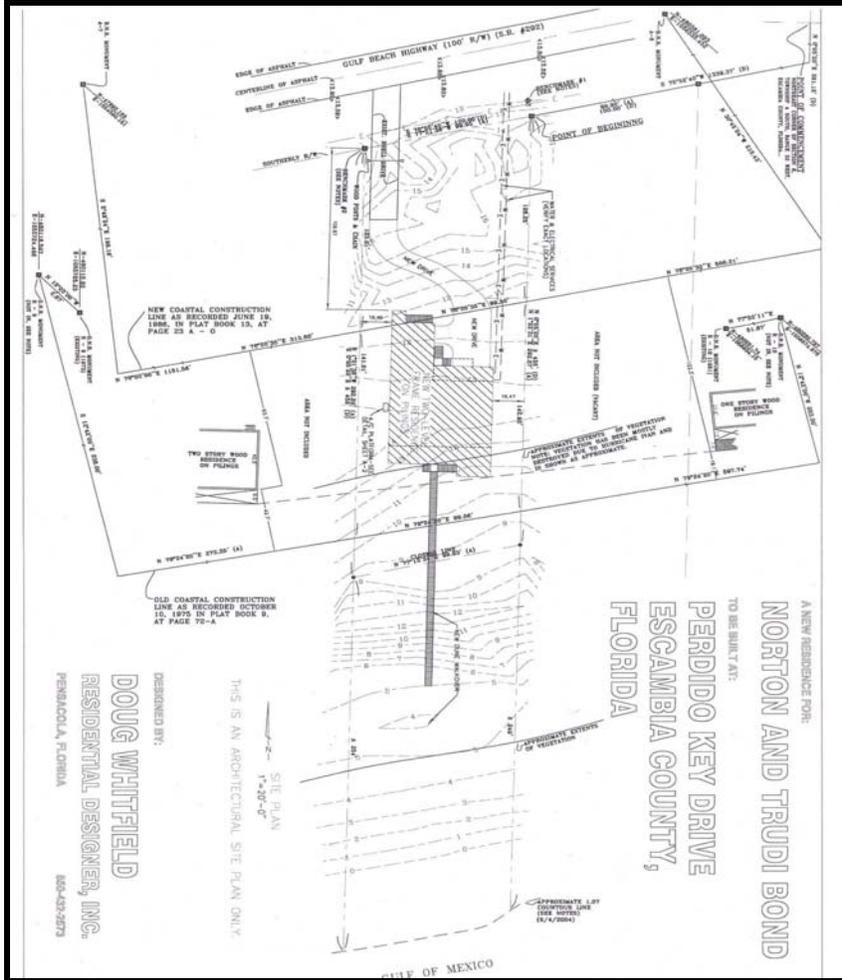
Section 10 Permit Coordinator
U.S. Fish and Wildlife Service
1875 Century Boulevard, Suite 210
Atlanta, Georgia 30345
Telephone: (404) 679-4144
Fax: (404) 679-7081

END

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Appendix A Project Design Plans



Bond Single Family	Acres
Total PKBM habitat on site	0.77
Permanent impacts to PKBM habitat	0.17
Temporary impacts to PKBM habitat	0.08
PKBM habitat remaining	0.6
PKBM habitat in conservation easement	0.6
Area under deed restriction	1.05

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Appendix B

Project Lighting Restrictions for Conservation of Protected Coastal Species

To prevent adverse impacts to nesting and hatchling sea turtles, nocturnal movements of beach mice, and disturbance to resting shorebirds, the minimal amount of exterior lighting for human safety and security shall be installed.

1. Lights shall not be placed within the developed footprint such that the light is visible outside the developed area or in accordance with the final State of Florida Coastal Construction Control Line permit for the project.
2. Lights on the dune walkover shall not be located seaward of the landward toe of the dune (or its equivalent).
3. The light source or any reflective surface of a light fixture shall not be visible from any point beyond the developed footprint. There should be no illumination of any area outside the developed footprint, either through direct illumination, reflective illumination, or cumulative illumination.
4. Exterior wall light fixtures shall be either low pressure sodium lamps or low wattage (i.e., 480 lumens or less) "bug" type bulbs florescent bulbs. The light fixtures should be completely shielded without interior reflective surfaces and directed downward. Lights may also be louvered and/or recessed, with black baffles or without interior reflective surfaces as appropriate.
5. Light fixtures shall be mounted as low as feasible to provide light where it is needed (i.e. patios, balconies, pedestrian paths). This can be accomplished through the use of low bollards, ground level fixtures, or low wall mounts.
6. Lights for purely decorative or accent purposes shall not be visible outside of the developed footprint and shall be limited in number and intensity. Up-lights shall not be used.
7. Roadway lighting shall use shielded low pressure sodium (LPS) lamps. The height and number of fixtures should be kept to a minimum and should be positioned and mounted in a manner such that the point source of light or any reflective surface of the fixture is not visible on the development outside of the developed footprint.
8. Lighting in parking areas shall use shielded low pressure sodium (LPS) lamps, have a height of 20 feet or less and shall not be visible from any point outside the developed footprint. The lighting shall be positioned and shielded such that the point source of light or any reflective surface of the light fixture is not visible outside of the developed area. The light emanating from such fixtures may not directly or indirectly illuminate the area outside of the developed footprint.

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Appendix B

Project Lighting Restrictions for Conservation of Protected Species (Page 2)

9. Car and other vehicle parking areas shall be designed or positioned such that vehicular headlights do not cast light outside the developed footprint. Native dune vegetation, and/or other ground-level barriers may be used to meet this objective.
10. Minimal temporary lighting during construction should only be used for security and safety. The lights should be completely shielded and low-mounted. Low pressure sodium lights or low wattage yellow "bug" type bulbs (480 lumens or less) shall be used. The lights should not directly or indirectly illuminate any area outside the construction site.
11. Light fixtures using natural gas as the light source shall not be used for fixtures unless they are fully shielded and the lighting is not visible outside the developed footprint.
12. Tinted glass or window film that meets a transmittance value of 45% or less (inside to outside transmittance) shall be used on all windows and glass doors throughout the development.
13. All ceiling-mounted light fixtures in the interior of the residence that could be visible from the outside shall minimize the amount of exposed light bulbs.

References:

- Bird, B. L. 2004. Effects of coastal lighting on foraging behavior of beach mice. *Conservation Biology* 18: 1435-1439.
- Bird, B. L. 2002. Effects of predatory risk, vegetation structure, and artificial lighting on the foraging behavior of beach mice. Masters thesis. University of Florida, Gainesville.
- Bowers, M.A and H.D. Smith. 1979. Differential habitat utilization by sexes of the deer mouse, *Peromyscus maniculatus*. *Ecology*, Vol. 60 (5). pp 869-875.
- Brillhart, D.B. and D. W. Kauman. 1991. Influence of illumination and surface structure on space use by prairie deer mice (*Peromyscus maniculatus bairdii*). *Journal of Mammalogy* 72(4):764-768.
- Clarke, J.A. 1983. Moonlight's influence on predator/prey interactions between short-eared owls (*Asio flammues*) and deer mice (*Peromyscus maniculatus*). *Behavioral Ecology and Sociobiology* 13:205-209.
- Florida Department of Environmental Protection Chapter 62B-34, General Permit for Activities Seaward of the Coastal Construction Control Line, Chapter 62B-55 Model Lighting Ordinance for Marine Turtle Protection.
- Witherington, B.E. and R.E. Martin. 1996. Understanding, assessing, and resolving light-pollution problems on sea turtle nesting beaches. Florida Marine Research Institute Tech. Rep. TR-2. 73 pp.

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Appendix C
Species Plant List for Coastal Dune and Beaches in Escambia County, Florida

Scientific Name	Common Name	Height	Container	Primary & Secondary Dune	Inter-dunal	Scrub dune
Trees						
Magnolia grandiflora	Southern Magnolia	60'-90'*	1gTP,3gTP,D			X
Osmanthus americanus	Wild Olive	70'*	1gTP,3gTP,D			X
Pinus clausa	Sand Pine	20'*	1gTP,3gTP,D			X
Pinus elliotii	Slash Pine	80'-100'*	1gTP,3gTP,D			X
Quercus geminata	Sand Live Oak	30'*	1gTP,3gTP,D			X
Quercus myrtifolia	Myrtle Oak	40'*	1gTP,3gTP,D			X
Quercus virginiana maritima	Sand Live Oak	40'-50'*	1gTP,3gTP,D			X
Medium to Large Shrubs & Small Trees						
Callicarpa americana	Beautyberry	5'	1gTP,TB,D			X
Ilex vomitoria	Yaupon Holly	20'	1gTP,TB,D			X
Iva frutescens	Marsh-Elder	11'	1gTP,TB,D		X	
Rhus copallina	Winged Sumac	10' (30')	1gTP,TB,D		X	X
Serenoa repens	Saw Palmetto	10' (30')	1gTP,TB,D			X
Small Shrubs & Ground Covers						
Schizachyrium (formerly maritimum)	Bluestem		LT,TB	X		X
Asclepias humistrata	Sandhill Milkweed		LT,TB			X
Bignonia capreolata	Cross Vine		LT,TB			X
Cakile constricta	Sea Rocket		LT,TB	X		
Ceratiola ericoides	Seaside Rosemary		LT,TB			X
Chrysosoma pauciflosculosa	Seaside Goldenrod		LT,TB	X		X
(T) Chrysopsis gossypina cruiseana	Cruise's Golden Aster		LT,TB	X		X
Conradina canescens	Beach Heather		LT,TB	X		X
Cyperus sp.	Sedge		LT,TB		X	
Heterotheca subaxillaris	Aster (Camphor weed)		LT,TB	X		X
Hydrocotyle bonariensis	Pennywort		LT,TB	X	X	X
Ipomoea pes-caprae	Railroad Vine		LT,TB	X		
Ipomoea imperati (formerly stolonifera)	Beach Morning Glory		LT,TB	X		
Licania michauxii	Gopher Apple		LT,TB			X
Panicum amarum	Beach Grass		LT,TB	X	X	
(E) Polygonella macrophylla	Large-leaved Jointweed		LT,TB			X
Tradescantia ohiensis	Spiderwort		LT,TB		X	X
Uniola paniculata	Sea Oats		LT,TB	X		X

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The use of installed irrigation, mulch, regardless if artificial or natural material, and landscape fabric is prohibited.

T & E = State of Florida protected plant. Planting is strongly encouraged to help recover the species. Make sure the nursery you purchase the plant from is in the Association of Florida Native Plants; they follow all State regulations to grow and sell protected species.

*Trees living in coastal dunes do not reach “normal heights.” They tend to be stunted and “pruned” by the wind, sand, and salt spray. Small specimens should be planted in protected areas such as on the landward side of the dunes.

References:

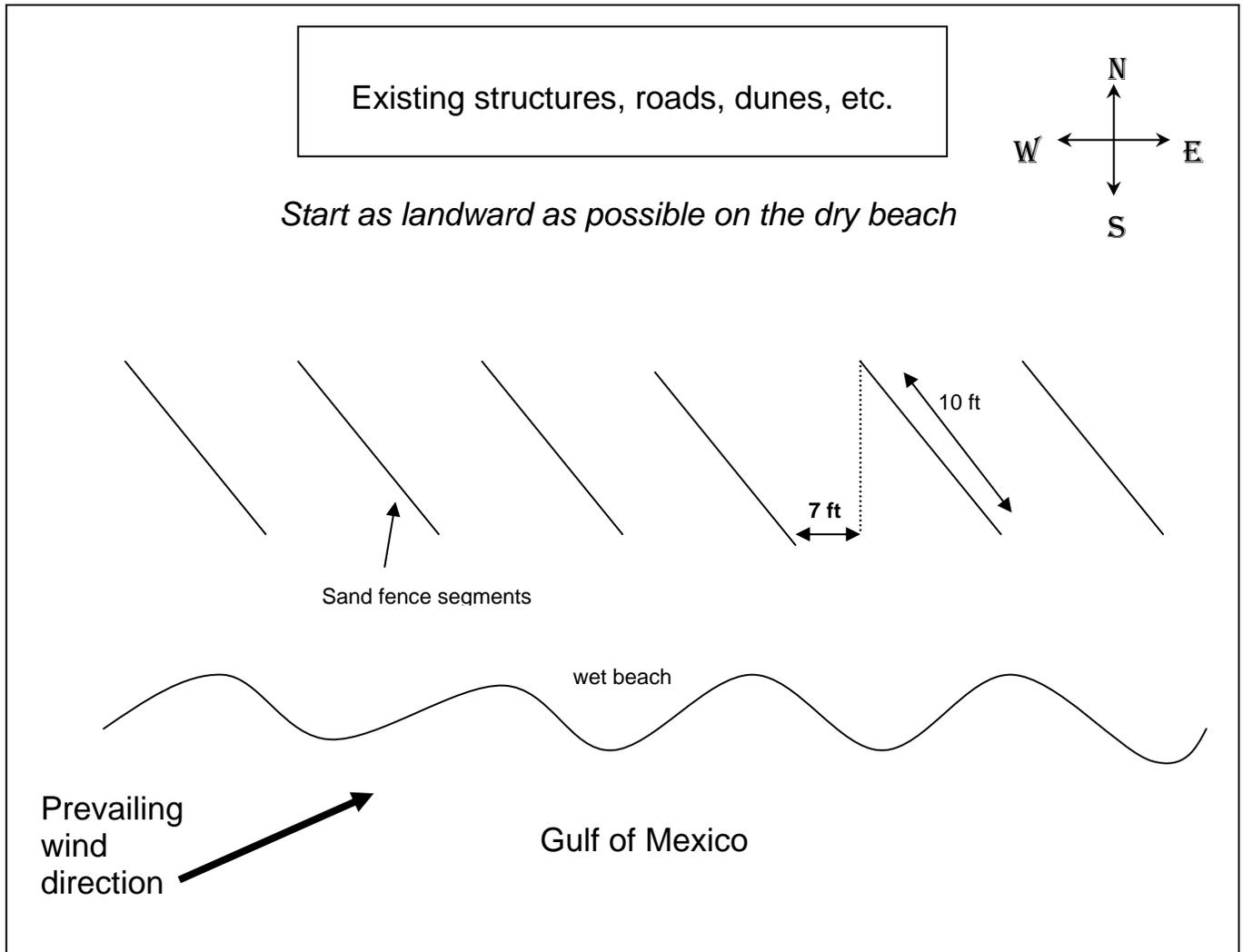
- Moyers, J.E. 1996. Food habits of Gulf coast subspecies of beach mice (*Peromyscus polionotus* spp.). M.S. Thesis, Auburn University, Alabama. 84 pp.
- Clewell, A. F. 1993. Guide to the vascular plants of the Florida panhandle. University Presses of Florida, Florida State University Press, Tallahassee, Florida 605 pp.
- Sneckenberger, S.I. 2001. Factors influencing habitat use by the Alabama beach mouse (*Peromyscus polionotus ammobates*). Master's thesis. Auburn University, Auburn, Alabama.
- Wunderlin, R. P., and B. F. Hansen. 2004. *Atlas of Florida Vascular Plants* (<http://www.plantatlas.usf.edu/>). [S. M. Landry and K. N. Campbell (application development), Florida Center for Community Design and Research.] Institute for Systematic Botany, University of South Florida, Tampa.
- Wunderlin, R.P. 1998. Guide to the vascular plants of Florida. University Presses of Florida, Gainesville, Florida 806 pp.

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Appendix D Sand Fence Installation Configuration for Sea Turtle Nesting Beaches Northwest Florida

A maximum of 10 foot-long spurs of parallel fence spaced a minimum of 7 feet apart shall be installed on a northeast-southwest (diagonal) alignment (below schematic).



Florida Department of Environmental Protection. Sand Fencing guidelines.
<http://www.dep.state.fl.us/beaches/publications/worddoc/sndfncgl.doc>

Florida Department of Environmental Protection. Building Back the Sand Dunes. Brochure.
<http://www.dep.state.fl.us/beaches/publications/pdf/bldgbkvw.pdf>