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13 May 2001

Mr. Anthony Davis
Parsons Engineering Science
8000 Centre Park Drive, Suite 200
Austin, Texas 78754

Re: Piping Plover Survey, Placement Area No. 2A, Mansfield Cut, Padre
Island – Contract No. DACW64-99-D-0005
April 2002 Survey Results
HJN 020090

Dear Anthony:

Horizon Environmental Services, Inc. conducted the first monthly survey effort for piping plovers on the Placement Area No. 2A study area (Figure 1) on April 24, 25, and 26, 2002. Prior to the survey effort, Horizon acquired a Special Use Permit from the National Park Service for work on Padre Island National Seashore (attached). The survey was conducted by Lee Sherrod. The site was accessed by boat from Port Mansfield. The surveys were conducted according to the U.S. Fish and Wildlife Service (FWS) "Piping Plover Survey Criteria Guidelines," December 5, 1991. The surveys were conducted in the mornings and late afternoons of the three day survey period, except for the afternoon of the last day in which the wind speed exceeded the 25 mph limit established in the FWS survey protocol. Notes were made of the weather and tide conditions during each survey event and any human activity on the beach area.

Only one habitat type suitable for piping plovers, "beach", was present at the survey site (Figure 2). GPS readings were made at the observed normal high tide line (debris line) and at the seaward edge of the dune line at various places along the study area to better define the "beach zone" and to have documentation in the event of beach modifications by storms or human activity prior to next fall's survey efforts.

The survey was conducted along the approximately 3000 linear feet of beach area by slowly walking and observing each bird encountered at a distance with high-powered binoculars to prevent premature disturbance. While only the beach provided suitable habitat for piping plovers, the occurrence of all bird species observed was noted as being on the beach, in the dunes, or as a flyover. Approximate numbers or relative abundance of each species was also noted.

No piping plovers were noted to be present during the survey. Discussions with Padre Island National Seashore personnel prior to the survey effort revealed that

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they believed most of the piping plovers had already left the beaches for migration.

The attached matrix provides the results of the bird observations. Beach and weather conditions for each survey episode are noted below.

Survey Episode No. 1 – 4/24/02 - 9:45 am to 12:45 pm.

Out-going tide, weather clear to PC, wind 10 to 15 mph, temperatures in the low 80s. One pair of campers on the beach adjacent to the north jetty with two dogs. Park Ranger riding 4-wheeler came down beach shortly after initiation of the survey. A group of illegal aliens were stranded on the island at the jetties. A Coast Guard helicopter came over the beach low and then hovered to observe the illegal aliens. About an hour later, two border patrol trucks came down the beach to pick up the illegals.

Survey Episode No. 2 – 4/24/02 – 6:00 pm to 8:00 pm.

Incoming tide. Weather PC, wind 10-20 mph, temperatures in the low 90s. Same campers on beach. No other human activity.

Survey Episode No. 3 – 4/25/02 – 9:00 am to 11:00 am.

Outgoing tide. Weather clear to PC, wind 5 to 10 mph, temperatures in the low 80s. Park Ranger on 4-wheeler riding on beach (sea turtle patrol) twice during survey. Same campers still present and walking dogs up and down beach. Another truck drove down the beach to the jetties. Two Park Service trucks (Haz Mat team) drove up and down beach during survey, occasionally stopping to pick up debris.

Survey Episode No. 4 – 4/25/02 – 5:00 pm to 7:00 pm.

Incoming tide. Weather PC, temperatures in the low 90s, wind 10 to 20 mph. Same campers still on beach. No other human activity, but numerous 4-wheeler tracks on the beach from that day.

Survey Episode No. 5 – 4/26/02 – 9:00 am to 11:30 am.

Tide near high and starting to fall. Weather PC, wind 5 to 10 mph, temperatures in the low 80s. Same campers on the beach, walking their dogs. No other human activity.

Please call if you have questions.

Sincerely,



C. Lee Sherrod
Principal



Piping Plover Survey Results
April 2002
Placement Area No. 2A

<u>SPECIES</u>	<u>4/24 am</u>	<u>4/24 pm</u>	<u>4/25 am</u>	<u>4/25 pm</u>	<u>4/26 am</u>
Least Sandpiper	B	B	B	B	B
Laughing Gull	B, F	B, F	B, F	B, F	B, F
Black-bellied plover	B	B	B	B	B
Western sandpiper	B	B	B	B	B
Least tern	B	B, F	B	B	B
Ruddy turnstone	B		B	B	B
Willet	B	B	B	B	B
Royal tern	B, F	B	B	B, F	B, F
Ring-billed gull				B	
Sandwich tern	B		B	B, F	B
Herring gull	B	B, F	B	B	B
Wilson's plover				B	B
Caspian tern	B, F	B, F	B, F	B, F	
Sanderling				B	B
Brown pelican	F		F		F
Cliff swallow	F		F		F
Oyster catcher			B		
Grackle	D		D		
Lesser golden plover			B		
Common tern					B

B - Beach

D - Dune

F - Flyover



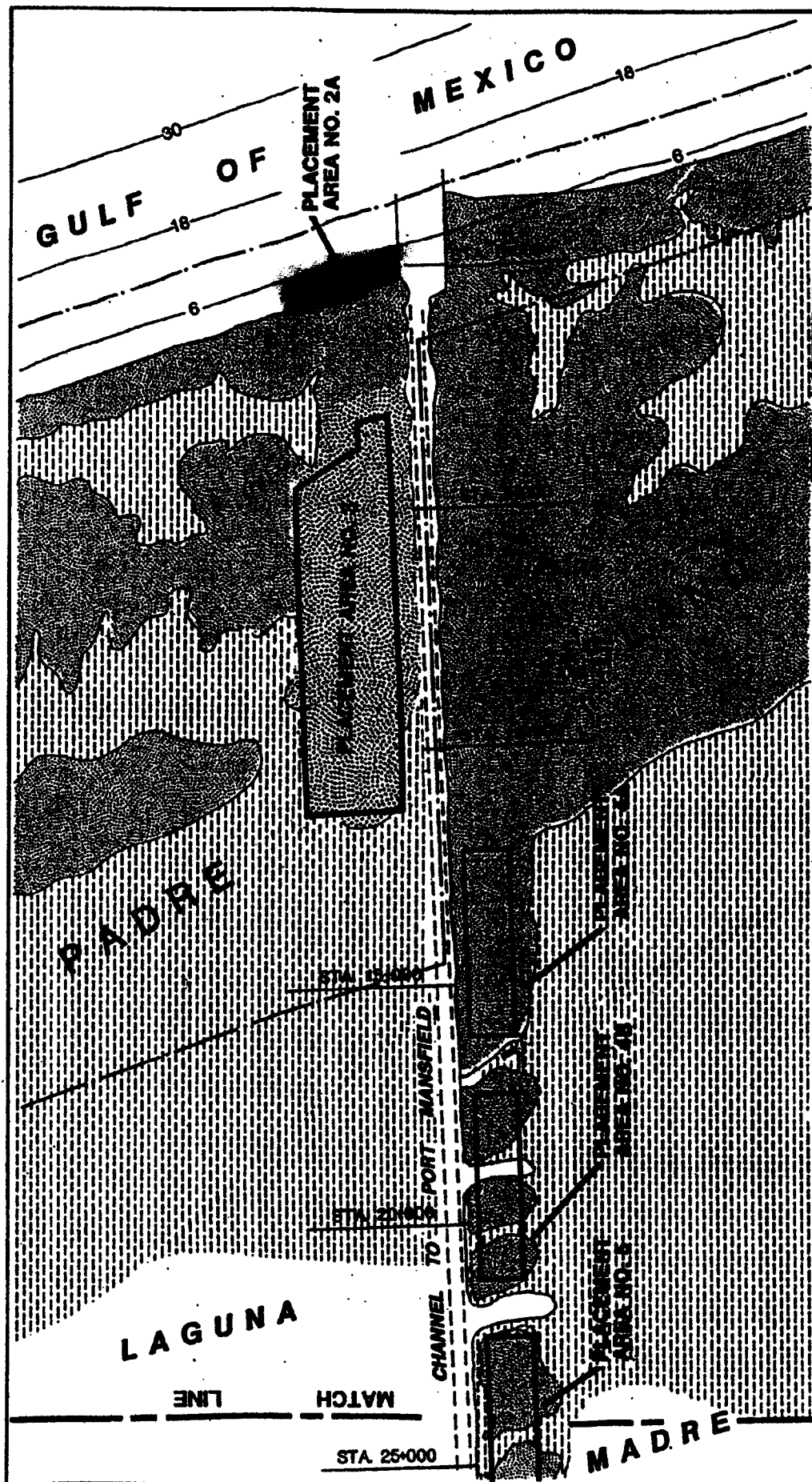
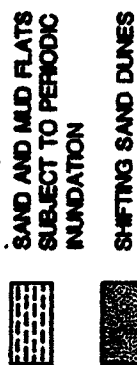
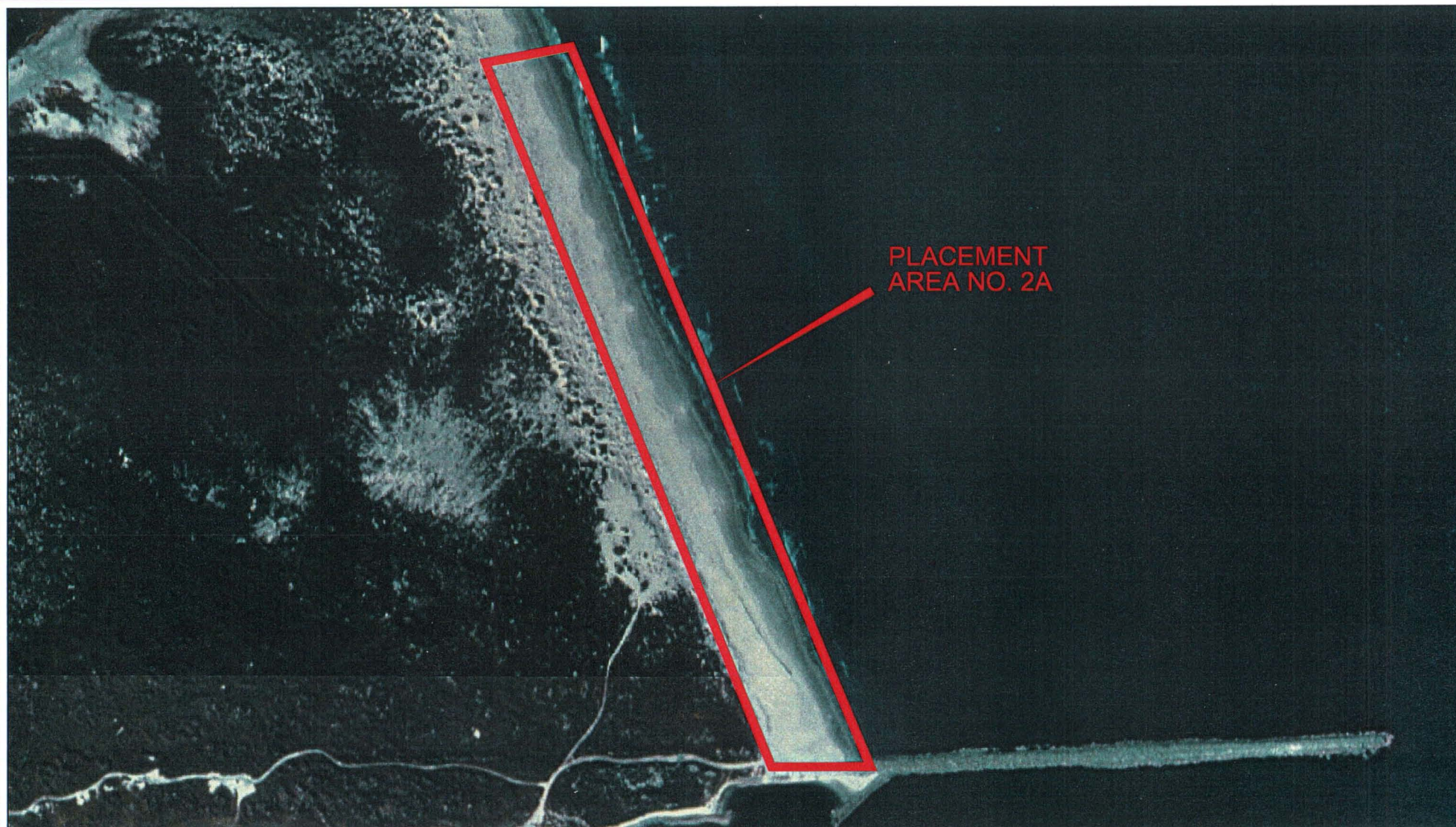


Figure 1:
**CHANNEL TO PORT MANSFIELD
DREDGED MATERIAL
PLACEMENT SITES
WILLACY COUNTY, TEXAS**



Base Map: USGS 7.5' Quadrangles, Port Mansfield & South of Potrero
Lopeno SE; 1989 color infrared aerial photography



BASE MAP SOURCE: USGS 1m SERIES SOUTH OF POTRERO LOPENO SE-NE AND SE-SE DOQQ TEXAS QUARTER QUAD 2001

0 250 500
SCALE IN FEET



FIGURE 2

PIPING PLOVER SURVEY AREA
PLACEMENT AREA 2A
WILLACY COUNTY, TEXAS

Horizon

ENVIRONMENTAL SERVICES, INC.

SCIENTIFIC RESEARCH AND COLLECTING PERMIT

Grants permission in accordance with the attached general and special conditions

United States Department of the Interior
National Park Service

Padre Island National Seashore

Study #:

Permit #: 2002-006

Start date: April 23, 2002

Expiration date: January 31, 2003

Coop. Agreement #:

Optional Park Code:

Name of principal investigator

Lee Sherrod

Name of institution represented

Horizon Environmental Services, Inc.

Additional Investigator(s)

Project title

Survey of Piping Plovers at Port Mansfield Jetties

Purpose of study

The purpose of this study is to census the Piping Plovers that may occur along the Gulf beach near the Port Mansfield jetties. This survey has been contracted by the US Army Corps of Engineers to determine the use of dredge material placed on the beach by Piping Plovers.

Locations authorized

The Gulf beach north of the Port Mansfield Jetties for a length of approximately 300 meters.

Transportation method to research site(s)

The researcher will access the survey site via a boat that will be launched at the town of Port Mansfield. The boat will be anchored or beached at the Port Mansfield Channel and the researcher will walk the survey area.

Collection of the following specimens or materials, quantities authorized, and any limitations on collecting

No specimens will be collected as part of this project

Name of repository for specimens or sample materials, if applicable

N/A

Specific conditions or restrictions (also see attached conditions)

Researchers should wear protective clothing for snakes, insects, and prolonged sun exposure. Weather information and beach conditions may be obtained by calling the park at 361-949-8175.

Normal office hours for Park Headquarters are 800a-430p Monday thru Friday. In case of an emergency, researchers should contact the park Dispatch during normal operating hours at 361-949-8173 extension 0 or dial 911 if outside of the park's normal operating hours.

In addition to any requirements outlined in the attached General Conditions for Scientific Research and Collecting Permit, copies of all data collected and reports generated from this permitted project will be provided to the park when the Investigators Annual Report is submitted. Park staff will use these reports and data to better understand the parks resources.

Recommended by park staff (print name and title):

Daniel Sedels

Asst. Mgr. Sec.

Reviewed by Collections Manager:

Yes

No ☒

Approved by park official: _____

Date approved: _____

Title: _____

I Agree To All Conditions And Restrictions Of This Permit As Specified.

(Not valid unless signed and dated by the principal investigator)

(Principal investigator's signature)

4/21/02

(Date)

**THIS PERMIT AND ATTACHED CONDITIONS AND RESTRICTIONS MUST BE CARRIED AT ALL TIMES
WHILE CONDUCTING RESEARCH ACTIVITIES IN THE DESIGNATED PARK(S)**

Attachment 4

Piping Plover Survey Segment Form

Placement Area No. ZA

County: Willacy

Location: N. Padre Island - N. Mansfield Cut

U.S. Geological Survey Topographic Map (Quadrangle name):

Port Mansfield &

Name of surveyor: Lee Sherrard - Horizon ESI

S. of Portero Lopeno SE

Date of observation: 4/24/02

Sunrise: ~ 6:30 am

Sunset: ~ 8:30 pm

High tide(s): early AM

Low tide(s): Afternoon

Tidal conditions during survey segment: falling

Wind speed and direction during survey segment: 10-15 mph - SE

Time segment begins: 9:45 am Time segment ends: 12:45 pm

Total number of Piping Plovers observed during segment: 0

SPECIES	HABITATS					TOTAL
	A	B	C	D	E	
PIPING PLOVER	0					
BLACK-BELLIED PLOVER	>10					
SNOWY PLOVER						
WILSON'S PLOVER						
SEMIPALMATED PLOVER						
AMERICAN OYSTERCATCHER						
AMERICAN AVOCET						
WILLET	1					
LONG-BILLED CURLEW						
MARbled GODWIT						
RUDDY TURNSTONE	1					
RED KNOT						
SANDERLING						
WESTERN SANDPIPER	>15					
LEAST SANDPIPER	>15					
DUNLIN						
SHORT-BILLED DOWITCHER						

HABITAT TYPES

A: Beach
B:
C:

D:
E:

Other Species:

laughing gull
least tern
grackle
cliff swallow
Caspian tern
brown pelican
royal tern
sandwich tern
herring gull

Attachment 4

Piping Plover Survey Segment Form

Placement Area No. 2A

County: *Willacy*Location: *N. Padre Island - N. of Mansfield cut*U.S. Geological Survey Topographic Map (Quadrangle name): *Port Mansfield &*Name of surveyor: *Lee Sherrod - Horizon ESI**S. of Portrero Lopeno SE*Date of observation: *4/24/02*Sunrise: *~ 6:30 am*Sunset: *~ 8:30 pm*High tide(s): *early am*Low tide(s): *afternoon to evening*Tidal conditions during survey segment: *incoming tide*Wind speed and direction during survey segment: *10-20 mph - SE*Time segment begins: *6:00 pm* Time segment ends: *8:00 pm*Total number of Piping Plovers observed during segment: *0*

HABITATS

SPECIES	A	B	C	D	E	TOTAL
PIPING PLOVER	<i>0</i>					
BLACK-BELLIED PLOVER	<i>6-8</i>					
SNOWY PLOVER						
WILSON'S PLOVER						
SEMPALMATED PLOVER						
AMERICAN OYSTERCATCHER						
AMERICAN AVOCET						
WILLET	<i>3</i>					
LONG-BILLED CURLEW						
MARbled GODWIT						
RUDDY TURNSTONE						
RED KNOT						
SANDERLING						
WESTERN SANDPIPER	<i>> 10</i>					
LEAST SANDPIPER	<i>> 10</i>					
DUNLIN						
SHORT-BILLED DOWITCHER						

HABITAT TYPES

A: *Beach*
 B:
 C:

D:
 E:

Other Species:

laughing gull
Caspian tern
least tern
herring gull
royal tern

Attachment 4

Piping Plover Survey Segment Form

County: *Willacy*Location: *N. Padre Island - N. of Mansfield Cut*U.S. Geological Survey Topographic Map (Quadrangle name): *Port Mansfield +*Name of surveyor: *Lee Sherrad - Horizon ESI**S. of Portrero Lopez*Date of observation: *4/25/02*Sunrise: *~ 6:30 am*Sunset: *~ 8:30 pm*High tide(s): *early AM*Low tide(s): *Afternoon to evening*Tidal conditions during survey segment: *outgoing*Wind speed and direction during survey segment: *5-10 mph SE*Time segment begins: *9:00 am* Time segment ends: *11:00 am*Total number of Piping Plovers observed during segment: *0*

SPECIES	HABITATS					TOTAL
	A	B	C	D	E	
PIPING PLOVER	<i>0</i>					
BLACK-BELLIED PLOVER	<i>6</i>					
SNOWY PLOVER						
WILSON'S PLOVER						
SEMIPALMATED PLOVER						
AMERICAN OYSTERCATCHER	<i>1</i>					
AMERICAN AVOCET						
WILLET	<i>4</i>					
LONG-BILLED CURLEW						
MARbled GODWIT						
RUDDY TURNSTONE	<i>8</i>					
RED KNOT						
SANDERLING						
WESTERN SANDPIPER	<i>8</i>					
LEAST SANDPIPER	<i>> 10</i>					
DUNLIN						
SHORT-BILLED DOWITCHER						

HABITAT TYPES

A:
B:
C:D:
E:

Other Species:

laughing gull
lesser golden plover
Caspian tern
herring gull
grackle
royal tern
least tern
sandwich tern
Brown Pelican

Attachment 4

Piping Plover Survey Segment Form

Placemnt Area No. 2A

County: *Willacy*Location: *N. Padre Island - N. of Mansfield Cr.*U.S. Geological Survey Topographic Map (Quadrangle name): *Port Mansfield &*Name of surveyor: *Lee Sherrad - Horizon EST**S. of Portrero Lopez S*Date of observation: *4/25/02*Sunrise: *~ 6:30 am*Sunset: *~ 8:30 pm*High tide(s): *early am*Low tide(s): *afternoon + evening*Tidal conditions during survey segment: *Incoming*Wind speed and direction during survey segment: *10-20 mph - SE*Time segment begins: *5:00 pm* Time segment ends: *7:00 pm*Total number of Piping Plovers observed during segment: *0*

HABITATS

SPECIES	A	B	C	D	E	TOTAL
PIPING PLOVER	0					
BLACK-BELLIED PLOVER	8					
SNOWY PLOVER						
WILSON'S PLOVER	1					
SEMPALMATED PLOVER						
AMERICAN OYSTERCATCHER						
AMERICAN AVOCET						
WILLET	3					
LONG-BILLED CURLEW						
MARBLED GODWIT						
RUDDY TURNSTONE	10					
RED KNOT						
SANDERLING	2					
WESTERN SANDPIPER	> 10					
LEAST SANDPIPER	> 10					
DUNLIN						
SHORT-BILLED DOWITCHER						

HABITAT TYPES

A: *Beach*
 B:
 C:

D:
 E:

Other Species:

laughing gull
least tern
royal tern
ring-billed gull
sandwich tern
herring gull
easpian tern

Attachment 4

Piping Plover Survey Segment Form

Placement Area No. 2A

County: *Willacy*Location: *N. Padre Island - N. of Mansfield cut*U.S. Geological Survey Topographic Map (Quadrangle name): *Port Mansfield +*Name of surveyor: *Lee Sherrod - Horizon ESI**S. of Portrero Lopez SE*Date of observation: *4/26/02*Sunrise: *~ 6:30 am*Sunset: *~ 8:30 pm*High tide(s): *early am*Low tide(s): *Afternoon + evening*Tidal conditions during survey segment: *near high beginning to fall*Wind speed and direction during survey segment: *5-10 mph - SE*Time segment begins: *9:00 am* Time segment ends: *11:30 am*Total number of Piping Plovers observed during segment: *0*

HABITATS

SPECIES	A	B	C	D	E	TOTAL
PIPING PLOVER	<i>0</i>					
BLACK-BELLIED PLOVER	<i>6</i>					
SNOWY PLOVER						
WILSON'S PLOVER	<i>1</i>					
SEMPALMATED PLOVER						
AMERICAN OYSTERCATCHER						
AMERICAN AVOCET						
WILLET	<i>4</i>					
LONG-BILLED CURLEW						
MARbled GODWIT						
RUDDY TURNSTONE	<i>8</i>					
RED KNOT						
SANDERLING	<i>1</i>					
WESTERN SANDPIPER	<i>> 10</i>					
LEAST SANDPIPER	<i>> 10</i>					
DUNLIN						
SHORT-BILLED DOWITCHER						

HABITAT TYPES

A: *Beach*
 B:
 C:

D:
 E:

Other Species:

Brown Pelican
Laughing gull
least tern
royal tern
Sandwich tern
cliff swallow
common tern
herring gull