APPENDIX A

PUBLIC AND AGENCY INVOLVEMENT

This page intentionally left blank.

SCOPING LETTER TO FLORIDA STATE HISTORIC PRESERVATION OFFICE



United States Department of Interior

NATIONAL PARK SERVICE CASTILLO DE SAN MARCOS NATIONAL MONUMENT 1 South Castillo Drive St. Augustine, FL 32084

REPLY REFER TO: H4217

Via: Certified Mail, Return Receipt Requested

August 29, 2006

Mr. Frederick Gaske Div of Historical Resources, Department of State 500 S. Bronough St., Room 305 Tallahassee, FL 32399-0250

Subject: Section 106 Consultation, Environmental Assessment for Rehabilitation of the 19th Century Seawall, Castillo de San Marcos National Monument, St. Augustine, Florida

Dear Mr. Gaske:

In accordance with the National Environmental Policy Act of 1969 (Public Law 91-190, as amended), the National Park Service is preparing an environmental assessment in conjunction with the proposed rehabilitation of the existing historic seawall located at Castillo de San Marcos National Monument in St. Augustine, Florida. Castillo de San Marcos National Monument is located on Matanzas Bay near the St. Augustine Inlet to the Atlantic Ocean (see location map). The National Monument is also located near the St. Augustine historic district.

Built between 1672 and 1695, Castillo de San Marcos served primarily as an outpost of the Spanish Empire. It guarded St. Augustine, the first permanent European settlement in the continental United States, and protected the sea route for treasure ships returning to Spain. During the 18th century, Castillo de San Marcos went from Spanish control to British and back to the Spanish, who remained in power in Florida until the area was purchased by the United States in 1821. In 1825 the War Department changed the name of Castillo de San Marcos to Fort Marion in honor of American Revolutionary War General Francis Marion. Confederate forces occupied Fort Marion between January of 1861 and March of 1862 when it was reoccupied by forces of the United States for the duration of the Civil War. Fort Marion was also used as a prison for members of the Seminole Indian tribe during the 1830s and the Apache, Cheyenne, Kiowa, Comanche, Caddo and Arapaho tribes during the 1870s and 1880s as western migration of settlers resulted in conflicts over land and resources and ultimately led to removal of the native peoples from their homelands by the United States Army.

The existing seawall that protects the fort from the tidal action in Matanzas Bay was constructed in 1842. The seawall is constructed from coquina and granite. The coquina portion of the seawall is failing and water that penetrates the seawall is eroding the soil on the landward side of the wall. This has resulted in the collapse of a sidewalk adjacent to the seawall at the park. Seawall failure will result in flooding conditions in the Castillo de San Marcos National Monument parking lot and downtown St. Augustine. Mr. Frederick Gaske

August 29, 2006 Page 2

The purpose of this letter is to provide your office formal notice that the park is beginning development of an environmental assessment for rehabilitation of the 19th Century Seawall at Castillo de San Marcos National Monument. This document will be guided by the park's enabling legislation, planning documents, and environmental and historic preservation mandates.

This rehabilitation project is badly needed because the portion of the seawall in the southern portion of the Castillo de San Marcos National Monument site has shown signs of distress; e.g. the toe (bottom) of the wall has been displaced outward, decreasing its stability and viability. Although the portion of the seawall north of the fort does not show similar displacement, there are other areas of concern, including large cracks, erosion, and wash out from behind the wall.

This damage has been caused by a series of different events and conditions, some on-going. Over the years, the historic seawall has undergone numerous hurricanes, episodes of dredging and filling, and disturbance by construction and placement of utilities. High tides continue to wash into crevices in the wall, gradually eroding away both stone and historic mortar, as well as soil on the landward side of the seawall.

Rain water draining away from the fort saturates the soil behind the wall (on the landward side), increasing the soil moisture load and the outward pressure on the vertical wall as well as washing soil seaward through openings in the wall. The incoming tidal waters also penetrate the porous walls, and sluice small particles of soil downward and out through the wall, gradually loosening the wall mortar, stone, and fill behind the walls.

In two areas the seawall is failing and portions of the adjacent sidewalk are collapsing due to the erosion beneath. The southern section, shown as section A on Figure 1, is approximately 243 feet in length and located at the southernmost portion of the park. The northern section, shown as section B on Figure 1, is approximately 70 feet in length and is located near the northeast side of the fort. Seawall failure would result in flooding conditions in the fort parking lot and downtown St. Augustine.

Based on comprehensive engineering evaluations of the historic seawall (J2 Engineering Inc 2004), the seawall is marginally acceptable from a structural perspective unless a significant event such as a hurricane occurs. However, a pressure of 100 pounds per square foot (which is considered minimal) could result in failure of the seawall.

The seawall is included on the National Register, along with the fort and other historic features at the park. The park is considering several options to rehabilitate the historic seawall. The preferred alternative is to place riprap (large boulders) along sections A and B approximately halfway up the elevation of the seawall and level to a distance of approximately 10 feet seaward. The riprap would then slope 6:1 to ground level. A limestone based mortar would be used to fill cracks and voids in the existing coquina seawall. A second alternative would be to construct a new parallel seawall approximately 10 feet seaward of the existing historic seawall in section A. The seawall would be of modern construction and would be constructed at a height comparable to the city's seawall system. The void between the seawalls would be filled with soil and covered with a promenade.

Although we are just beginning to plan and gather information for the project, we believe that its eventual implementation may have the potential to affect properties included in or that may be eligible for inclusion in the National Register. Therefore, we are initiating consultation with your

Mr. Frederick Gaske

August 29, 2006 Page 3

office in accordance with 36 CFR 800 and with the 1995 Service-wide Programmatic Agreement among your office, the Advisory Council on Historic Preservation, and the National Park Service.

This letter also serves to notify your office that we plan to use the environmental assessment for the project to accomplish compliance for both Section 106 and the National Environmental Policy Act (as described in 36 CFR 800.8 (a-c)). As required by this regulation, a similar letter has been sent to the Advisory Council on Historic Preservation. The environmental assessment will provide detailed descriptions of alternative approaches intended to remedy the failing seawalls, and, as required by law, a no-action alternative. The environmental assessment also will analyze the potential impacts associated with possible implementation of each alternative and will describe the rationale for choosing the preferred alternative. These details will be reiterated in a Section 106 Summary in the environmental assessment. Also contained in the environmental assessment will be measures that would help avoid adverse effects on cultural resources.

Based on the project description (above), we would appreciate receiving your initial comments by October 2, 2006 so that the public draft of the environmental assessment would address your concerns. Of course, you will still have an opportunity to comment later on the public draft of the environmental assessment, but we would like to incorporate your input into the document at the earliest possible planning stage.

As soon as the environmental assessment is completed, we will send it to you for your review, comment, and concurrence that the Section 106 process has been completed. We look forward to your participation and input on the planning process. We believe that your ongoing participation will continue to result in better planning for cultural resources management, and will help ensure that cultural resources are adequately considered during preparation of the plan and the accompanying environmental assessment. Consultation and coordination with other governmental agencies and with interested publics also is underway.

Please send any comments you might have regarding the project to:

Gordon Wilson, Superintendent Castillo de San Marcos National Monument 1 South Castillo Drive St. Augustine, FL 32084

Phone: (904) 829-6506 E-mail: Gordon_Wilson@nps.gov

Thank you for your interest in this project.

Sincerely,

Gordon Wilson Superintendent Mr. Frederick Gaske

August 29, 2006 Page 4

Similar Letter sent to: Mr. Don L. Klima Director, Office of Federal Agency Programs Advisory Council on Historic Preservation Old Post Office Building 1100 Pennsylvania Avenue NW, Suite 809 Washington, DC 20004

c: NPS-SERO-Steven Wright Parsons-Tampa-J. Martin Parsons-Denver-D. Rhodes This page intentionally left blank.

SAMPLE SCOPING LETTER TO OTHER AGENCIES



United States Department of Interior

NATIONAL PARK SERVICE CASTILLO DE SAN MARCOS NATIONAL MONUMENT 1 South Castillo Drive St. Augustine, FL 32084

REPLY REFER TO: H4217

August 29, 2006

XXX XXX XXX XXX XXX

Dear Mr. XXX:

In accordance with the National Environmental Policy Act of 1969 (Public Law 91-190, as amended), the National Park Service is preparing an environmental assessment in conjunction with the proposed rehabilitation of the existing historic seawall located at Castillo de San Marcos National Monument in St. Augustine, Florida. Castillo de San Marcos is located on Matanzas Bay near the St. Augustine Inlet to the Atlantic Ocean (see location map). The National Monument is also located near the St. Augustine historic district.

Built between 1672 and 1695, Castillo de San Marcos served primarily as an outpost of the Spanish Empire. It guarded St. Augustine, the first permanent European settlement in the continental United States, and protected the sea route for treasure ships returning to Spain. During the 18th century, Castillo de San Marcos went from Spanish control to British and back to the Spanish, who remained in power in Florida until the area was purchased by the United States in 1821. In 1825 the War Department changed the name of Castillo de San Marcos to Fort Marion in honor of American Revolutionary War General Francis Marion. Confederate forces occupied Fort Marion between January of 1861 and March of 1862 when it was reoccupied by forces of the United States for the duration of the Civil War. Fort Marion was also used as a prison for members of the Seminole Indian tribe during the 1830s and the Apache, Cheyenne, Kiowa, Comanche, Caddo and Arapaho tribes during the 1870s and 1880s as western migration of settlers resulted in conflicts over land and resources and ultimately led to removal of the native peoples from their homelands by the United States Army.

The existing seawall that protects the fort from the tidal action in Matanzas Bay was constructed in 1842. The seawall is constructed from coquina and granite. The coquina portion of the seawall is failing and water that penetrates the seawall is eroding the soil on the landward side of the wall. This has resulted in the collapse of a sidewalk adjacent to the seawall at the park. Seawall failure will result in flooding conditions in the Castillo de San Marcos parking lot and downtown St. Augustine.

The environmental assessment is being prepared to evaluate the potential effects of the rehabilitation of the historic seawall. We request your comments regarding any issues that you might have regarding the proposed project.

Mr. XXX August 29, 2006 Page 2

Please send any comments you might have regarding the project to:

Gordon Wilson, Superintendent Castillo de San Marcos National Monument 1 South Castillo Drive St. Augustine, FL 32084

Phone: (904) 829-6506 E-mail: <u>Gordon_Wilson@nps.gov</u>

Thank you for your interest in this project.

Sincerely,

Gordon Wilson Superintendent This page intentionally left blank.

SAMPLE SCOPING LETTER TO TRIBES



United States Department of Interior

NATIONAL PARK SERVICE CASTILLO DE SAN MARCOS NATIONAL MONUMENT 1 South Castillo Drive St. Augustine, FL 32084

REPLY REFER TO: H4217

August 29, 2006

XXX

XXX
XXX
XXX
XXX
Subject: Government-to-Government Consultation, Project to Rehabilitate the Historic Seawall at Castillo de San Marcos National Monument, St. Augustine, Florida

Dear Mr. XXX:

In accordance with the National Environmental Policy Act of 1969 (Public Law 91-190, as amended), the National Park Service is preparing an environmental assessment in conjunction with the proposed rehabilitation of the existing historic seawall located at Castillo de San Marcos National Monument in St. Augustine, Florida. Castillo de San Marcos is located on Matanzas Bay near the St. Augustine Inlet to the Atlantic Ocean (see location map). The National Monument is also located near the St. Augustine historic district.

Built between 1672 and 1695, Castillo de San Marcos served primarily as an outpost of the Spanish Empire. It guarded St. Augustine, the first permanent European settlement in the continental United States, and protected the sea route for treasure ships returning to Spain. During the 18th century, Castillo de San Marcos went from Spanish control to British and back to the Spanish, who remained in power in Florida until the area was purchased by the United States in 1821. In 1825 the War Department changed the name of Castillo de San Marcos to Fort Marion in honor of American Revolutionary War General Francis Marion. Confederate forces occupied Fort Marion between January of 1861 and March of 1862 when it was reoccupied by forces of the United States for the duration of the Civil War. Fort Marion was also used as a prison for members of the Seminole Indian tribe during the 1830s and the Apache, Cheyenne, Kiowa, Comanche, Caddo and Arapaho tribes during the 1870s and 1880s as western migration of settlers resulted in conflicts over land and resources and ultimately led to removal of the native peoples from their homelands by the United States Army.

The existing seawall that protects the fort from the tidal action in Matanzas Bay was constructed in 1842. The seawall is constructed from coquina and granite. The coquina portion of the seawall is failing and water that penetrates the seawall is eroding the soil on the landward side of the wall. This has resulted in the collapse of a sidewalk adjacent to the seawall at the park. Seawall failure will result in flooding conditions in the Castillo de San Marcos parking lot and downtown St. Augustine. The park is aware that American Indians value both natural and cultural resources and we want to ensure that the project will meet mutually held tribal and National Park Service goals for management of important resources in and near the park. We also want to be sure that the project will not affect ethnographic resources valued by your tribe. Therefore, this letter is to formally initiate Government-to-Government consultation with your office in accordance with legislation, Executive Orders, regulations, and policy, including sections 101 and 106 of the National Historic Preservation Act of 1966 as amended, 36 CFR 800, National Park Service *Management Policies* and Director's Order 28, *Cultural Resources Management* (especially Chapter 10, Ethnographic Resources).

We have begun the planning process required by Section 106 of the National Historic Preservation Act. The Environmental Assessment will study and assess the impacts to natural and cultural resources, including ethnographic resources. We plan to use the environmental assessment to accomplish compliance for both Section 106 and the National Environmental Policy Act (as described in 36 CFR 800.8 (a-c)).

The environmental assessment will provide detailed descriptions of alternative designs intended to meet the project objectives and, as required by law, a no-action alternative. The environmental assessment will describe the rationale for choosing the preferred alternative and include a full description of mitigation measures that would help avoid adverse effects on historic and cultural resources. The draft environmental assessment will include any required mitigation, and will be forwarded to you for your review and comment as soon as it is completed.

We believe that your participation will result in better planning for resource management, and will help ensure that cultural and natural resources valued by your tribe are adequately considered during the planning and compliance process. We look forward to receiving your input and any concerns you have about the project. Should you have any questions or desire additional information, we would be pleased to discuss this project further, either by telephone or in a meeting. Thank you for your interest in this project.

Please send any comments you might have regarding the project to:

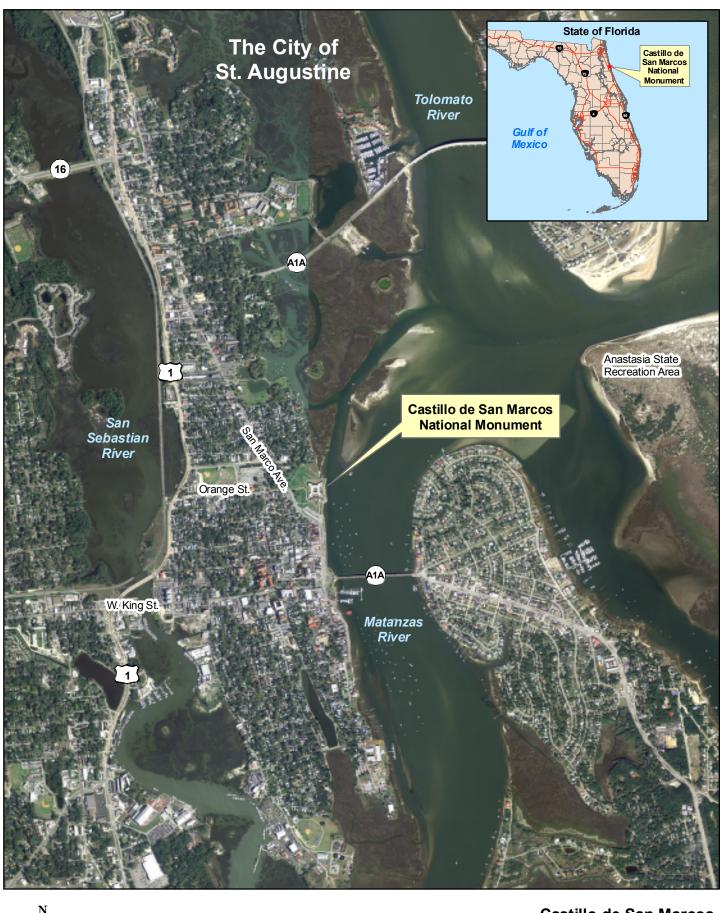
Gordon Wilson, Superintendent Castillo de San Marcos National Monument 1 South Castillo Drive St. Augustine, FL 32084

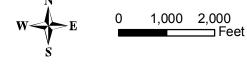
Phone: (904) 829-6506 E-mail: <u>Gordon_Wilson@nps.gov</u>

Sincerely,

Gordon Wilson Superintendent This page intentionally left blank.

ATTACHMENTS TO SCOPING LETTERS





Castillo de San Marcos National Monument Location Map



This page intentionally left blank.

AGENCY AND TRIBAL COMMENT TO SCOPING LETTER

101-10-11-何日の主法

FLORIDA DEPARTMENT OF STATE Sue M. Cobb Secretary of State DIVISION OF HISTORICAL RESOURCES

Mr. Gordon Wilson National Park Service Castillo De Marcos National Monument 1 South Castillo Drive St. Augustine, FL 32084 October 4, 2006

RE: DHR Project File Number: 2006-8201
 Received by DHR: September 6, 2006
 National Park Service/Castillo De Marcos National Monument
 Section 106 Consultation, Environmental Assessment for Rehabilitation of Over 300 Feet
 of the 19th Century Seawall, Matanzas Bay Frontage, Castillo de San Marcos National
 Monument
 St. Augustine, St. Johns County

Dear Mr. Wilson:

This office received and reviewed the information for the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended and 36 CFR Part 800: Protection of Historic Properties and the National Environmental Policy Act of 1969, as amended. The State Historic Preservation Officer is to advise Federal agencies as they identify historic properties (listed or eligible for listing in the National Register of Historic Places), assess effects upon them, and consider alternatives to avoid or minimize adverse effects.

Since architect David Ferro visited the site to inspect the seawall last year, it is clear that some action is needed to prevent further deterioration and eventual collapse of this significant feature. Therefore, Alternative A, the "No Action" alternative, would predictably have an eventual adverse effect on the historic integrity of the seawall and possibly other features of the site.

Alternative B, involving the placement of stone riprap along the length of the seawall is considered the most appropriate of the three alternatives described; however, there is no mention of repair/restoration of the historic seawall as part of this alternative. Is such work intended as part of this alternative?

Alternative C would result in the construction of a contemporary concrete seawall beyond the existing structure, infill of the space between them and construction of a promenade between the

500 S. Bronough Street . Tallahassee, FL 32399-0250 . http://www.flheritage.com

Director's Office	🖸 Archaeolog	ical Research	 ric Preservation	Historical Museums
(850) 245-6300 * FAX: 245-6436	(850) 245-6444	•FAX: 245-6452	5333 •FAX: 245-6437	(850) 245-6400 •FAX: 245-6433
□ Southeast Re; (954) 467-4990 • F		O Northeast Region (904) 825-5045 •FAX:	 Central Florida P (813) 272-3843 •FA 	

2.q

8856528406

NOITARTRINIMOA OLITZAO CASTILLO ADMINISTRATION

Mr. Wilson October 4, 2006 Page 2

two walls - with the historic seawall being used as a sitting wall. The significant adverse effects of this alternative would be physical (on the seawall), as well as contextual (on the Castillo). We strongly discourage further consideration of this alternative.

If you have any questions, please contact David Ferro, Preservation Architect, or James Toner, Historic Sites Specialist, at 850-245-6333.

Sincerely,

aint P. Gala

Frederick P. Gaske, Director, and State Historic Preservation Officer



"Kelly Yasaitis Fanizzo" <kfanizzo@achp.gov> 09/11/2006 11:22 AM AST To: <gordon_wilson@nps.gov> cc: "Reid Nelson" <melson@achp.gov> Subject:

Hi Gordon,

Thanks again for taking the time to speak with me this morning. As discussed, we are in receipt of your notification of intent to follow 36 CFR 800.8(c) to meet section 106 obligations for the proposed rehabilitation of the 19th century seawall at Castillo de San Marcos National Monument, St. Augustine, FL.

We have no preliminary comments at this point, however, we do recommend you continue consultation with the Florida State Historic Preservation Office and any tribes and/or other consulting parties on all potential impacts that may occur to historic properties.

If you have any questions, please do not hesitate to give me a call.

Thanks, Kelly Yasaitis Fanizzo

Kelly Yasaitis Fanizzo, JD Historic Preservation Specialist Office of Federal Agency Programs Advisory Council on Historic Preservation 1100 Pennsylvania Avenue, NW, Suite 809 Washington, DC 20004

PLEASE NOTE NEW EMAIL ADDRESS- kfanizzo@achp.gov.

Phone (202) 606-8583 Fax (202) 606-5072



Department of Environmental Protection

Colleen M. Castille

Secretary

Jeb Bush Governor Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

October 19, 2006

Mr. Gordon Wilson, Superintendent Castillo de San Marcos National Monument 1 South Castillo Drive St. Augustine, FL 32084

> RE: National Park Service – Scoping Notice – Environmental Assessment for Rehabilitation of the 19th Century Seawall, Castillo de San Marcos National Monument – St. Augustine, St. Johns County, Florida.

SAI # FL200609052775C

Dear Mr. Wilson:

The Florida State Clearinghouse, pursuant to Presidential Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, has coordinated a review of the referenced project.

The St. Johns River Water Management District (SJRWMD) states that the proposed project will require an Environmental Resource Permit (ERP) from the SJRWMD. The applicant is advised to contact Mr. David Miracle, Service Center Director, in the Jacksonville Service Center at (904) 730-6270 or <u>dmiralce@sirwmd.com</u> for further assistance or to schedule a pre-application meeting.

The Florida Department of Environmental Protection (DEP) notes that placement of riprap in front of the existing seawall (Alternative B) would require a Noticed General ERP under Section 62-341.437, *Florida Administrative Code*, while construction of a new bulkhead waterward of the existing seawall (Alternative C) may require a Standard General ERP and mitigation for loss of nearshore habitat. For additional information, please contact Mr. Mike Eaton at the DEP Northeast District Office in Jacksonville at (904) 807-3328.

Based on the information contained in the public notice and the enclosed state agency comments, state has determined that, at this stage, the proposed federal activities are consistent with the Florida Coastal Management Program (FCMP). The federal agency must, however, address the concerns identified by our reviewing agencies prior to project implementation. The state's continued concurrence with the project will be based, in part, on the adequate resolution

"More Protection, Less Process"

Printed on recycled paper.

Mr. Gordon Wilson October 19, 2006 Page 2 of 2

of issues identified during this and subsequent reviews. The state's final concurrence of the project's consistency with the FCMP will be determined during the environmental permitting stage.

Thank you for the opportunity to review the proposed project. Should you have any questions regarding this letter, please contact Ms. Suzanne E. Ray at (850) 245-2172.

Sincerely,

Jacey 43. Mann

Sally B. Mann, Director Office of Intergovernmental Programs

SBM/ser Enclosures

cc: Geoffrey Sample, SJRWMD Jennifer Auger, DEP, Northeast District

:

8856528406







Department of Environmental Protection

Florida

More Protection, Less Process*

DEP Home | OIP Home | Contact DEP | Search | DEP Site Map

Project Information					
Project:	FL200609052775C				
Comments Due:	10/06/2006				
Letter Due:	10/20/2006				
Description:	NATIONAL PARK SERVICE - SCOPING NOTICE - ENVIRONMENTAL ASSESSMENT FOR REHABILITATION OF THE 19TH CENTURY SEAWALL, CASTILLO DE SAN MARCOS NATIONAL MONUMENT - ST. AUGUSTINE, ST. JOHNS COUNTY, FLORIDA				
Keywords:	NPS - CASTILLO DE SAN MARCOS NATIONAL MONUMENT SEAWALL REHAB ST. JOHNS CO.				
CFDA #:	15.912				
Agency Com	nents:				
NE FLORIDA RPC -	NORTHEAST FLORIDA REGIONAL PLANNING COUNCIL				
No Comment					
FISH and WILDLIFE	COMMISSION - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION				
No Comments Received					
STATE - FLORIDA DEPARTMENT OF STATE					
No Comments Received					
ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION					
while construction of and mitigation for los	blacement of riprap in front of the existing seawall (Alternative B) may require a Noticed General ERP, a new buildhead waterward of the existing seawall (Alternative C) may require a Standard General ERP is of nearshore habitat. For additional information, please contact Mr. Mike Eaton at the DEP Northeast sonville at (904) 807-3328.				
ST. JOHNS RIVER WMD - ST. JOHNS RIVER WATER MANAGEMENT DISTRICT					
The project will require an Environmental Resource Permit from SJRWMD. Please contact Mr. David Miracle, Service Center Director, In the Jacksonville Service Center at (904) 730-6270 or dmiralce@sjrwmd.com for further assistance or to schedule a pre-application meeting.					

For more information please contact the Clearinghouse Office at:

3900 COMMONWEALTH BOULEVARD MS-47 TALLAHASSEE, FLORIDA 32399-3000 TELEPHONE: (850) 245-2161 FAX: (850) 245-2190

Visit the Clearinghouse Home Page to query other projects.

Copyright and Disclaimer Privacy Statement

.

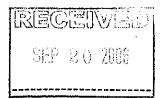
SAI# FL200609052775C

National Park Service - Scoping Notice - Environmental Assessment for Rehabilitation of the 19th Century Seawall, Castillo de San Marcos National Monument - St. Augustine, St. Johns County, Florida.

agencies. The clearance letter and agency comments will be forwarded to you no The above-referenced project was received by the Florida State Clearinghouse on , and has been forwarded to the appropriate reviewing 10/20/06 ... unless you are otherwise notified. Please refer to the State Application Identifier (SAI) number in all written correspondence with the Florida State Clearinghouse regarding this project. If you have any questions, please contact the Ciearinghouse staff at (850) 245-2161. 5106 later than ____ 6



DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS P. O. BOX 4970 JACKSONVILLE, FLORIDA 32232-0019



REPLY TO ATTENTION OF

September 18, 2006

Regulatory Division North Permits Branch Atlantic Permits Section

Mr. Gordon Wilson Castillo de San Marcos National Monument 1 South Castillo Drive St. Augustine, Florida 32084

Dear Mr. Wilson:

Reference is made to your letter, dated August 29, 2006, regarding potential work associated with the rehabilitation of the historic seawall adjacent to the Castillo de San Marcos.

Within the last year, the U.S. Army Corps of Engineers (Corps) evaluated work associated with the rehabilitation of the historic seawall south of the Bridge of Lions, near the armory. That project generated concerns pertinent to the potential impact on the historic seawall, potential impacts to emergent aquatic vegetation, and oyster beds. The State of Florida, Department of State, Division of Historic Resources, State Historic Preservation Officer (SHPO) and the National Marine Fisheries Service (NMFS) submitted correspondence conveying their concerns during the Department of the Army public notice for that project.

The Corps believes similar concerns would be generated by any potential work associated with the rehabilitation of the seawall near the Castillo de San Marcos. Therefore, we request that any plans to conduct work in association with the rehabilitation of the referenced section of seawall carefully consider any potential impacts to the historic resource (the seawall) and the contiguous aquatic resources (the tidal flats).

Any work at the site affecting navigable waters of the United States will require a Department of the Army permit in accordance with Section 10 of the Rivers and Harbors Act of 1899. Furthermore, any work at the site involving the discharge of dredged or fill material into waters of the United States will require a Department of the Army permit in accordance with Section 404 of the Clean Water Act. The Corps is willing to work cooperatively with your agency to proactively address regulatory and environmental issues. If you have any questions, or wish to solicit any additional assistance, please contact Mr. Mark R. Evans at the letterhead address or by telephone at 904-232-2028.

Sincerely,

Osvaldo Collazo

Chief, North Permits Branch



OCT 1 6 2006

October 9, 2006

Gordon Wilson, Superintendent Castillo de San Marcos National Monument 1 South Castillo Drive St Augustin, FL 32084

Re: Preparation of environmental assessment in conjunction with the proposed rehabilitation of the existing historic seawall located at Castillo de San Marcos National Monument in St. Augustin, Florida

Dear Mr. Wilson:

Thank you for your letter of August 29th regarding the proposed rehabilitation of the existing historic seawall as referenced above.

At this time, the Comanche Nation has no immediate concerns or issues regarding this project; however, please keep us informed as your planning proceeds. We look forward to receiving any project reports, archaeological reports or other information that is derived from the planning, preparation, and construction work.

If in the process of the project human remains or archaeological items are discovered, we request that you immediately cease the project work and notify us so that we may discuss appropriate disposition with you and the other Tribal Nations that may be affected by such discoveries.

We look forward to your reports as activities proceed.

Sincerely,

the Joahty

Ruth Toahty, NAGPRA Associate

P.O. Box 908 • Lawton, Oklahoma 73502 • (580) 492-3754 • (580) 492-3733 FAX

S.q



Robert Cest <hpd@netride.net> 10/27/2006 01:11 PM EST To: "Gordon Wilson" <Gordon_Wilson@nps.gov> cc: Subject: Castillo de San Marcos National Monument

Dear Mr. Wilson:

My name is Robert Cast and I am the THPO for the Caddo Nation. Your letter requesting consultation regarding the project to Rehabilitate the Historic Seawall at Castillo de San Marcos National Monument was forwarded to my office by Chairwoman LaRue Parker. I have sent out a letter requesting any information on the Caddo people that you mention being held prisoner there in the 1870s and 1880s. Although we would probably not have many concerns about the seawall, this place may hold significance to the Caddo depending upon what information you can provide to us. Thank you for any information in advance. Have a good weekend.

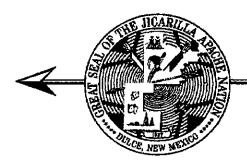
Robert Cast THPO, Caddo Nation P. O. Box 487 Binger, OK 73009 Ph: 405-656-2901 fax: 405-656-2386

www.caddonation-nsn.gov

"The ideals which have lighted my way, and time after time have given me new courage to face life cheerfully, have been Kindness, Beauty, and Truth" Albert Einstein

2'd

8856528406



THE JICARILLA APACHE NATION



P.O. BOX 507 • DULCE, NEW MEXICO • 87528-0507

. A. S.

October 16, 2006

Gordon Wilson, Superintendent

St. Augustine, Florida

I South Castillo Drive St. Augustine, FL 32084

Dear Ms. McGraw,

759-1343.

Sincerely,

IA LA

Cc:

Lorene Willis, Director

RE:

Castillo de San Marcos National Monument

Project to Rehabilitate the Historic Seawall at Castillo de San Marcos National Monument

Your letter of August 9, 2006 was referred to my office. The Jicarilla Apache Nation appreciates you contacting us regarding the above referenced project.

We are deferring any decisions regarding the project to the surrounding tribes and

support their concerns. Please feel free to call me if you have any questions, 505-

Jicarilla Apache Traditional Culture <u>Committee</u>

Wainwright Velarde President

Raymond Taloya, Sr. Vice President

Dr. Wilhelmina Phone Secretary

Bryan F. Vigil *Treasurer*

"dedicated to the

preservation

and

perpetuation of the

Jicarilla Apache

culture

and

traditions"

President Levi Pesata

Jicarilla Apache Cultural Affairs



SI45P CASTILLO ADMINISTRATION

Oct 30 06 03:42b

This page intentionally left blank.

PUBLIC COMMENT - PROJECT SCOPING





United States Department of the Interior

NATIONAL PARK SERVICE Attention: Gordon Wilson, Superintendent Castillo de San Marcos National Monument 1 South Castillo Drive St. Augustine, FL 32084-3252 904-829-6506 <u>http://www.nps.gov/casa/</u>

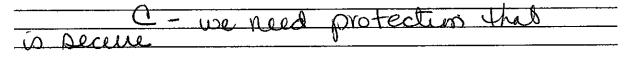
COMMENT FORM

Alternatives for the Castillo de San Marcos National Monument Proposed Seawall Rehabilitation Environmental Assessment

Please provide us with feedback on the alternatives for the Castillo de San Marcos National Monument proposed seawall rehabilitation project. If you need more space, feel free to attach additional pages to this form. If you prefer, you may also comment via e-mail at Gordon_Wilson@nps.gov. The National Park Service will not consider anonymous comments.

I. Do you think the alternatives for the proposed seawall rehabilitation are appropriate? If not, what is missing or inappropriate?

2. Which alternative for the proposed seawall rehabilitation do you prefer and why? If you are not satisfied with any of the alternatives, please describe your preferred alternative.



3. What else would you like the planning team to know with regard to this project?

	1	A	
maentaen	Securite	of the	basitront,
		0	
		Dease.	
Your Name: Organization:	Rosiyn A	loberts	
Address: City/State or Territory/Zip: Date:	206 Hera St Augusti 9-28.6		32080

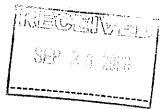
Please submit the completed form by October 2, 2006 to Gordon Wilson at the address above.



United States Department of the Interior



NATIONAL PARK SERVICE Attention: Gordon Wilson, Superintendent Castillo de San Marcos National Monument 1 South Castillo Drive St. Augustine, FL 32084-3252 904-829-6506 http://www.nps.gov/casa/



COMMENT FORM

Alternatives for the Castillo de San Marcos National Monument Proposed Seawall Rehabilitation Environmental Assessment

Please provide us with feedback on the alternatives for the Castillo de San Marcos National Monument proposed seawall rehabilitation project. If you need more space, feel free to attach additional pages to this form. If you prefer, you may also comment via e-mail at Gordon_Wilson@nps.gov. The National Park Service will not consider anonymous comments.

I. Do you think the alternatives for the proposed seawall rehabilitation are appropriate? If not, what is missing or inappropriate?

2. Which alternative for the proposed seawall rehabilitation do you prefer and why? If you are not satisfied with any of the alternatives, please describe your preferred alternative.

TION

ſ

Alternative B. a pomende would be a detraction-These would be more problems with trash stathan exist now also the nipsap would fit in much better with the Fortic historical appearance them would a promende what else would you like the planning team to know with regard to this project? Alternative B also takes care of the processing need

something +

3.

Louis & Connie Graitanis Your Name: Organization: Address: City/State or Territory/Zip: Date:



HATIONAL PARK SERVICE

United States Department of the Interior

NATIONAL PARK SERVICE Attention: Gordon Wilson, Superintendent Castillo de San Marcos National Monument 1 South Castillo Drive St. Augustine, FL 32084-3252 904-829-6506 http://www.nps.gov/casa/

COMMENT FORM

Alternatives for the Castillo de San Marcos National Monument Proposed Seawall Rehabilitation Environmental Assessment

Please provide us with feedback on the alternatives for the Castillo de San Marcos National Monument proposed seawall rehabilitation project. If you need more space, feel free to attach additional pages to this form. If you prefer, you may also comment via e-mail at Gordon_Wilson@nps.gov. The National Park Service will not consider anonymous comments.

I. Do you think the alternatives for the proposed seawall rehabilitation are appropriate? If not, what is missing or inappropriate?

2. Which alternative for the proposed seawall rehabilitation do you prefer and why? If you are not satisfied with any of the alternatives, please describe your preferred alternative.

Alternative C- Burgers it will be attraction, presure the old screendl and pravide a pleasant way for visitors to view the Castillo. Also, a similar restoration will be made of the St. Augustice city screenic south of the plazar Mayre the two Can Me linked at a terren date.

3. What else would you like the planning team to know with regard to this project?

Alternation B	would be a	msightly. Also it	muli pe	historially	Mieleding as	Idon't
these vip-cus	existed in C	clound Floridae	<u> </u>			
/						

I OUL I VUIMO.	Robert M. Ballinger	-
Organization: Address:	34 Aledo Er.	
City/State or Territory/Zip: Date:	Sti Augustini, FL BLOGG Sept. 16, 2006	



United States Department of the Interior

NATIONAL PARK SERVICE Attention: Gordon Wilson, Superintendent Castillo de San Marcos National Monument 1 South Castillo Drive St. Augustine, FL 32084-3252 904-829-6506 http://www.nps.gov/casa/

- Annual - A	
BCENV/Ban	}

INTER	시스럽	VED.
SEP	14	2006

1657

COMMENT FORM

Alternatives for the Castillo de San Marcos National Monument Proposed Seawall Rehabilitation Environmental Assessment

Please provide us with feedback on the alternatives for the Castillo de San Marcos National Monument proposed seawall rehabilitation project. If you need more space, feel free to attach additional pages to this form. If you prefer, you may also comment via e-mail at Gordon_Wilson@nps.gov. The National Park Service will not consider anonymous comments.

Do you think the alternatives for the proposed seawall rehabilitation are appropriate? If not, what is missing or inappropriate?

I would consider appropriate but urgen preserves the present historic wall

Which alternative for the proposed seawall rehabilitation do you prefer and why? If you are not satisfied 2. with any of the alternatives, please describe your preferred alternative.

been here in 1964 for The knowcame Dota Having The sea come over the seawall seeme I believe that the height en breaking at it 1 th out prese above

3.

Ϊ.

What else would you like the planning team to know with regard to this project?

dauger that the present wall means to well as the castillo grounds The. HISTORIC

M. HALL Your Name: College Prot Organization: 42 Spanish S Address: 32084 City/State or Territory/Zip: Date:



2.

3.

United States Department of the Interior



NATIONAL PARK SERVICE Attention: Gordon Wilson, Superintendent Castillo de San Marcos National Monument 1 South Castillo Drive St. Augustine, FL 32084-3252 904-829-6506 http://www.nps.gov/casa/

COMMENT FORM

Alternatives for the Castillo de San Marcos National Monument Proposed Seawall Rehabilitation Environmental Assessment

Please provide us with feedback on the alternatives for the Castillo de San Marcos National Monument proposed seawall rehabilitation project. If you need more space, feel free to attach additional pages to this form. If you prefer, you may also comment via e-mail at Gordon_Wilson@nps.gov. The National Park Service will not consider anonymous comments.

I. Do you think the alternatives for the proposed seawall rehabilitation are appropriate? If not, what is missing or inappropriate?

ES, THEY ARE APPROPRIATE Which alternative for the proposed seawall rehabilitation do you prefer and why? If you are not satisfied with any of the alternatives, please describe your preferred alternative. ALTERNATIVE C ALTERNATIVE B SEEMS BETTER THAN ALTERNATIVE C BETTER LOOK_ IN THAT IT WOULD VISUAL BUT WOULD DESTROY THE LAST LONGER MIGHT OF THE SEAWALL . QUALITY What else would you like the planning team to know with regard to this project? HISTORICAL REHAB CLOSE OT AS THE MATERIALS MODERN POSSIBLE. NO IDENTITY BE RERR NANCY Your Name: Organization: LANE 716 WANDERING Address: 32080 ST AUGUSTINE, City/State or Territory/Zip: Date: 2006 N Sant Please submit the completed form by October 2, 2006 to Gordon Wilson at the address above.





United States Department of the Interior

SEP 1 1 2006

I.

NATIONAL PARK SERVICE Attention: Gordon Wilson, Superintendent Castillo de San Marcos National Monument 1 South Castillo Drive St. Augustine, FL 32084-3252 904-829-6506 http://www.nps.gov/casa/

COMMENT FORM

Alternatives for the Castillo de San Marcos National Monument Proposed Seawall Rehabilitation Environmental Assessment

Please provide us with feedback on the alternatives for the Castillo de San Marcos National Monument proposed seawall rehabilitation project. If you need more space, feel free to attach additional pages to this form. If you prefer, you may also comment via e-mail at Gordon_Wilson@nps.gov. The National Park Service will not consider anonymous comments.

Do you think the alternatives for the proposed seawall rehabilitation are appropriate? If not, what is missing or inappropriate?

Yes, they are appropriate

2. Which alternative for the proposed seawall rehabilitation do you prefer and why? If you are not satisfied with any of the alternatives, please describe your preferred alternative.

I prefer Alterna	the B which	will allow u	ns to see	the oliginal
I prefer Alterna Seawall. It a	ppears that	Alt. C us	ul obsence +	het New.
Alt. B also not	a nocar r	nore "nathral	-looking" (han Alt. C.
			•	

What else would you like the planning team to know with regard to this project?

Flord Your Name: Organization: 24 Cathedral Pl, Ste 601 Address: City/State or Territory/Zip: St. ALG. FL 32084 Date:





United States Department of the Interior

NATIONAL PARK SERVICE Attention: Gordon Wilson, Superintendent Castillo de San Marcos National Monument 1 South Castillo Drive St. Augustine, FL 32084-3252 904-829-6506 http://www.nps.gov/casa/

COMMENT FORM

Alternatives for the Castillo de San Marcos National Monument Proposed Seawall Rehabilitation Environmental Assessment

Please provide us with feedback on the alternatives for the Castillo de San Marcos National Monument proposed seawall rehabilitation project. If you need more space, feel free to attach additional pages to this form. If you prefer, you may also comment via e-mail at Gordon_Wilson@nps.gov. The National Park Service will not consider anonymous comments.

Do you think the alternatives for the proposed seawall rehabilitation are appropriate? If not, what is

missing or inappropriate? THEY APPEAR APPROPUTE TO ME.

2. Which alternative for the proposed seawall rehabilitation do you prefer and why? If you are not satisfied with any of the alternatives, please describe your preferred alternative.

LIEVE ALTERNATIVE CILA BETTER M. SOLUTIONS I AM NOT AN ENGINEER, BUT I RECION COULD CONTINUE WITH RIPRAP PROMENTADE WOULD BRA GOOD ADDIDON TO THE WOTTER FRONT What else would you like the planning team to know with regard to this project?

OLD WALL BE MARKED WITH APPROPRIATE

YOU FELELT ALTERNATIVE C, F RELEMMED THE

3.

I.

Walter C. Daniels 148 Ocean Hollow Lane Your Name: St. Augustine, Florida 32084-1748 Organization: Address: City/State or Territory/Zip: (AP 7, 2006 Date:

Please submit the completed form by October 2, 2006 to Gordon Wilson at the address above.

CIENAGE.

Tom Sims 09/06/2006 09:14 AM EDT Thomas E. Sims Information Technology Specialist Castillo de San Marcos and Ft Matanzas

 National Monuments

 St. Augustine, Florida 32084

 904-829-6506, x243

 904-669-0711 - cell

 ----- Forwarded by Tom Sims/CASA/NPS on 2006-09-06 09:13 AM ----

 bppettie@bellsouth.net
 To: casa_ranger_activities@nps.gov

 2006-09-05 08:15 PM
 cc:

 AST
 Subject: From NPS.gov: Alternatives for Seawall Rehabilitiation

,

Email submitted from: /casa/index.htm

Gordon, I received the comment form and am responding here. 1. Yes, the alternatives are appropriate and sufficient. 2. I prefer alternative #2 -- Rip Rap b/c it creates a better environmental condition for river creatures, it appears to be less expensive and intrusive into the eclogical system and we reall do not need a promenade. 3. I would hope the planning and decision team will keep not only the best alternative in mind, but the least intrusive into the system and consider expense to taxpayers. Thank you for asking, paul pettie, 1591 San Carlos St., St. Aug, 32080-5480 904 471 4541

This page intentionally left blank.

NEWSLETTER



Castillo de San Marcos National Monument Proposed Seawall Rehabilitation

August 2006

Environmental Assessment Underway

News from the Superintendent

Friends,

Castillo de San Marcos National Monument is preparing an environmental assessment in conjunction with the proposed rehabilitation of the seawall that protects the fort. This newsletter describes the project background, the results of preliminary planning efforts completed by the National Park Service planning team, a description of the proposed alternatives, and a summary of the next steps in the environmental assessment process.

We want to hear from you so that we may make the most informed decisions concerning the alternatives on this proposed project. We appreciate your imput into this process.

Thank you for your interest in the proposed seawall rehabiliation project.

Sincerely,

Gordie Wilson, Superintendent

A comment form is included on page 4 of this newsletter for your convenience. You are welcome to write to us at the address given on page 4, but our preference would be for you to provide your comments on the National Park Service Planning, Environment & Public Comment (PEPC) web site. Comments can be made directly online by going to the following link: http://parkplanning.nps.gov

Please provide us with your comments by October 2, 2006.

Background

Castillo de San Marcos National Monument is located in St. Augustine, St. Johns County, Florida. The Castillo de San Marcos fort was originally constructed between 1672 and 1695. The National Monument encompasses approximately 20 acres and lies north of St. Augustine's central plaza fronting Matanzas Bay. The city of St. Augustine is located on the eastern coastal plain of Florida. It is a low-lying, sandy area protected from the sea by a number of barrier islands. A seawall and water battery separates Castillo de San Marcos National Monument from the waters of Matanzas Bay on the fort's east side.

Purpose and Need

The existing seawall was constructed in



1842 from coquina and granite; and is considered an historic structure. Two

sections of the existing seawall (sections A and B) at the park are failing due to water penetration from Matanzas Bay, a tidal body of water near the St. Augustine Inlet to the Atlantic Ocean. The water penetration has resulted in erosion and the collapse of sections of sidewalk at the park. Rehabilitation of these sections of the seawall is required to protect the historic fort.

The southern section of the failing seawall (section A) is approximately 243 feet in length. The northern section (section B) is approximately 70 feet in



length.

The National Park Service proposes to rehabilitate a portion of the existing seawall at Castillo de San Marcos National Monument. An environmental assessment will be prepared that will evaluate the environmental effects of the alternatives being considered to rehabilitate this historic seawall.

Early Planning

The National Park Service held an internal meeting at the National Monument in July, 2006 to identify potential environmental issues associated with the proposed rehabilitation of the historic seawall. As the fort and the seawall are each historic properties, the seawall rehabilitation project must be carefully planned to minimize impacts. Visitor experience could be affected by the proposed seawall rehabilitation



Seawall Section A, 243 feet

project, as visitors often fish near the seawall or enjoy the view from the seawall.

Description of the Proposed Alternatives

Three alternatives for this project are proposed for environmental assessment. The No Action alternative, Alternative A, is defined as continuing present management practices at the National Monument. Under this alternative, the seawall would not be rehabillitated. The No Action alternative provides a basis for comparing the two action alternatives. The No Action alternative is addressed in accordance within the National Environmental Policy Act.

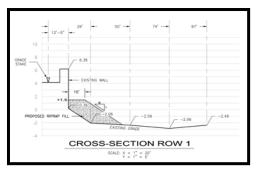
The two action alternatives are titled Alternative B and Alternative C. Alternative B was developed as a result of an engineering analysis conducted by the park in 2004. This alternative



Seawall Section B, 70 feet

includes placing riprap along the seaward side of the two sections of seawall to be rehabilitated. Riprap is a term for large rocks or boulders that are placed on the seaward side of the seawall to provide support for the wall and reduce the ersosive effects of wave action. The riprap would be installed from the base of the seawall to a height of 1.5 feet above sea level, or approximately 2.5 to 3.5 feet above the existing elevation at the base of the seawall. The riprap would extend seaward for 10 feet at this elevation, then would slope down at 6:1 to grade.

The riprap would be added to approximately 243 feet of the southernmost seawall at the National Monument (section A) and approximately 70 feet of the seawall near the northeast corner of the fort (section B). It is estimated that approximately 824 cubic yards of riprap material would be needed for this alternative.



Alternative C is the other action alternative. This alternative consists of positioning a new parallel seawall approximately 12 feet seaward of the existing historic seawall. The new seawall would be constructed of modern

materials and would be constructed at a height of 7.7 feet above mean sea level, or approximately 0.7 to 2.1 feet higher than the existing historic seawall at the National Monument. This alternative would extend to the north approximately 243 feet from the south National Monument property boundary, shown as seawall section A. The area between the seawalls would be filled with soil and a 12 foot promenade would be constructed over the fill. The existing historic seawall would be capped and used for seating. Seawall section B as shown would not be rehabilitated under this alternative.



NATIONAL PARK SERVICE DTR IMME

United States Department of the Interior

NATIONAL PARK SERVICE Attention: Gordon Wilson, Superintendent Castillo de San Marcos National Monument 1 South Castillo Drive St. Augustine, FL 32084-3252 904-829-6506 http://www.nps.gov/casa/

COMMENT FORM

Alternatives for the Castillo de San Marcos National Monument Proposed Seawall Rehabilitation Environmental Assessment

Please provide us with feedback on the alternatives for the Castillo de San Marcos National Monument proposed seawall rehabilitation project. If you need more space, feel free to attach additional pages to this form. If you prefer, you may also comment via e-mail at Gordon_Wilson@nps.gov. The National Park Service will not consider anonymous comments.

- 1. Do you think the alternatives for the proposed seawall rehabilitation are appropriate? If not, what is missing or inappropriate?
- 2. Which alternative for the proposed seawall rehabilitation do you prefer and why? If you are not satisfied with any of the alternatives, please describe your preferred alternative.

3. What else would you like the planning team to know with regard to this project?

Your Name: Organization:	
Address:	
City/State or Territory/Zip:	
Date:	



National Park Service U.S. Department of the Interior

Castillo de San Marcos National Monument 1 South Castillo Drive

St. Augustine, FL 32084-3252

EXPERIENCE YOUR AMERICA

Next Steps

The draft environmental assessment will be made available for public review and comment in the spring of 2007. All comments received will be incorporated into a final environmental assessment. If applicable, the finding of no significant impact (FONSI) will be made available to the public in late spring or early summer 2007. All comments will be included as part of the formal public record maintained by the National Park Service. The National Park Service appreciates your input into this planning process and would like to obtain your comments. We request that you provide your comments electronically, or by mail using the following contact information:

Comments? Write to:

National Park Service

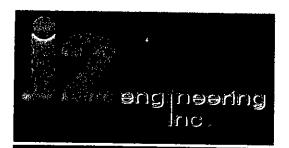
Castillo de San Marcos National Monument Attn: Gordon Wilson Castillo de San Marcos Seawall Rehabilitation Comments 1 South Castillo Drive St. Augustine, FL 32084-3252

You may also enter comments directly through the Internet by directing your web browser to the following URL address: http://parkplanning.nps.gov

Our practice is to make comments, including names, home addresses, home phone numbers, and email addresses of respondents, available for public review. Individual respondents may request that we withhold their names and/or home addresses, etc., but if you wish us to consider withholding this information you must state this prominently at the beginning of your comments. In addition, you must present a rationale for withholding this information. This rationale must demonstrate that disclosure would constitute a clearly unwarranted invasion of privacy. Unsupported assertions will not meet this burden. In the absence of exceptional, documentable circumstances, this information will be released. We will always make submissions from organizations or businesses, and from individuals identifying themselves as representatives of or officials of organizations or businesses, available for public inspection in their entirety. This page intentionally left blank.

APPENDIX B

ENGINEERING REPORT FOR PREFERRED ALTERNATIVE



285 NW 138th Terrace Suite 100 Jonesville, FL 32669

ph: (352) 333-9644 fax: (352) 333-9648

June 9, 2006

Robin Leatherman National Park Service Castillo de San Marcos 1 South Castillo Drive St. Augustine, FL 32084

RE: Survey of Historic Retaining Wall at the Castillo de San Marcos

Dear Robin:

As you requested, J2 Engineering, Inc. (J2) visited the Castillo de San Marcos on May 31, 2006, at which time a survey of the existing wall was conducted in two locations. The majority of the investigation was conducted on the seaward side of the wall, with subsurface elevations being obtained. Results of this survey effort are presented in the attached figures.

The portion of the wall south of the Castillo has shown signs of distress (a significant outward displacement at the bottom/toe of the wall) and was the subject of a previous study prepared by J2 in July 2004. The portion of the wall north of the Castillo has not been displaced; however, it does display other areas of concern, including large cracks, erosion, and wash out from behind the wall.

One of the recommendations presented in J2's July 2004 report was for rip-rap to be placed on the passive (seaward) side of the wall. On the attached figures a proposed fill cross section has been superimposed atop the survey measurements that were obtained. Assuming that the rip rap is placed to an elevation of +1.5 (approximately 2.5 - 3.5 feet above the existing elevation at the wall) for a distance of 10 feet beyond the wall and then sloping at 6:1 to grade, J2 estimates that approximately 824 cubic yards of material will be needed.

The same procedure implemented at the north end of the wall would require 137 cubic yards of rip rap. Although fill in front of any wall will relieve applied stresses, J2 suggests that a more cost effective solution at this time might be to repair all cracks with hydraulic lime mortar and to fill any voids in front of and behind the walls in this area.

Page 2

J2 appreciates the opportunity to provide professional engineering services to the National Park Service. Should you have any questions, please call me at 352-333-9644.

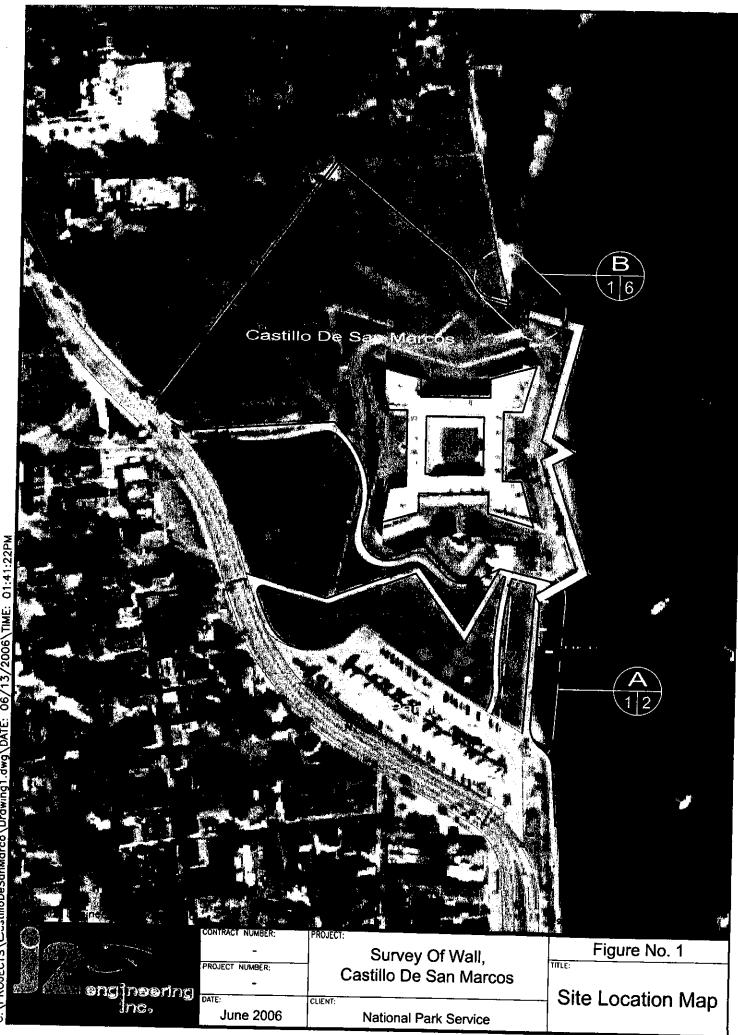
Sincerely J2 Engineering, Inc.

rusula

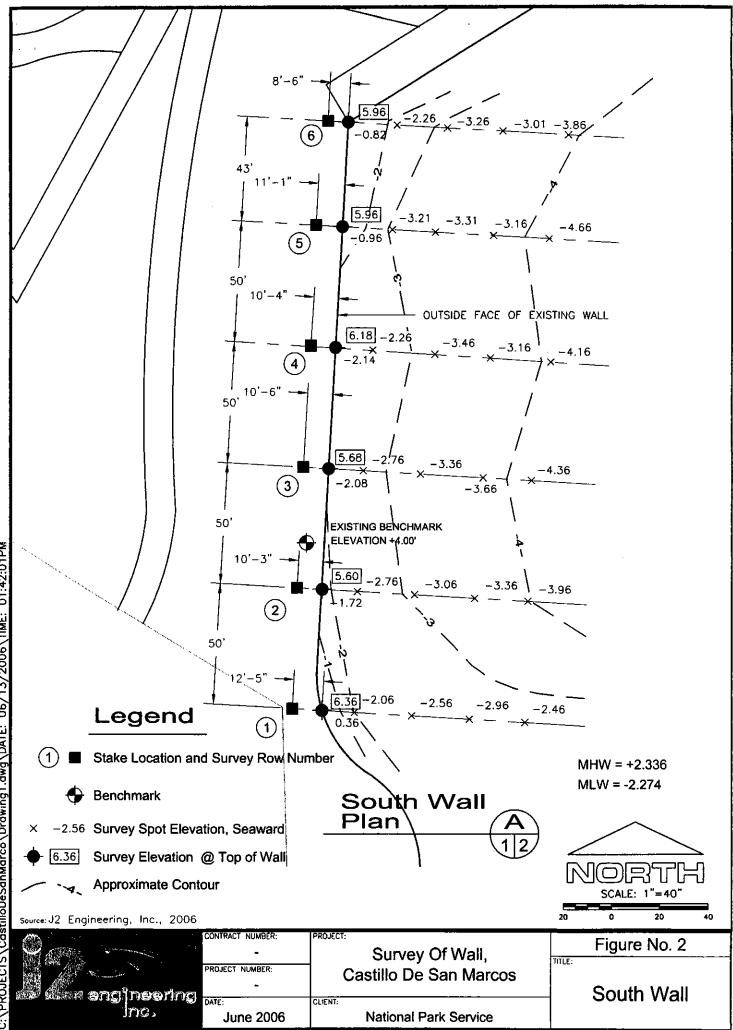
Richard G. Wheeler, P.E. V.P. of Engineering, Project Manager

Cc: Don Mueller

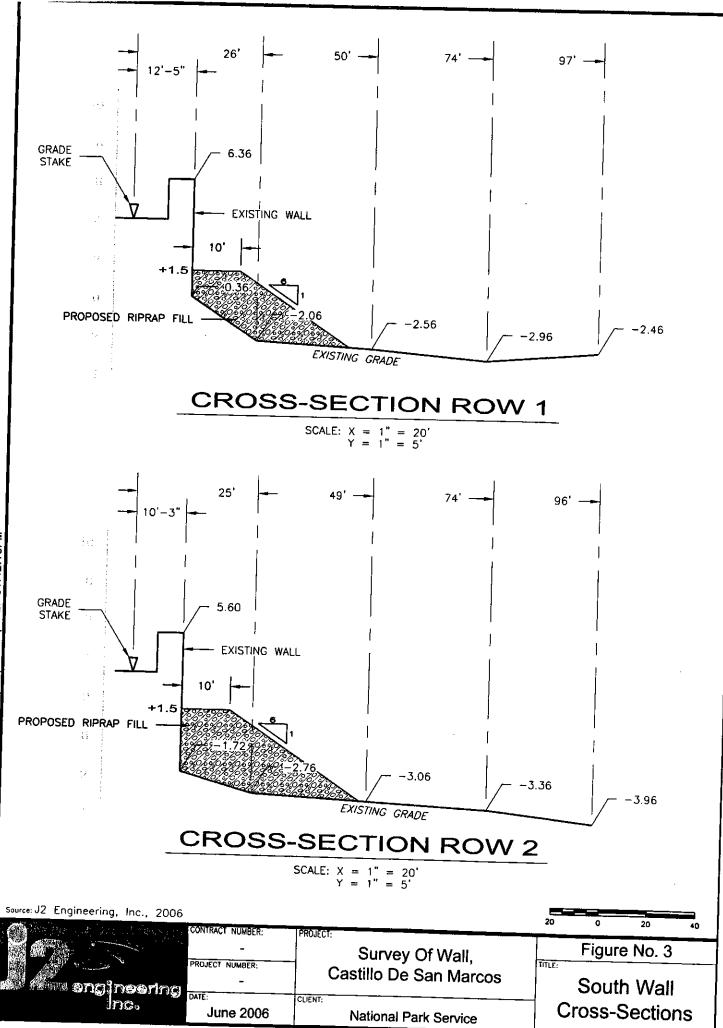
Ł



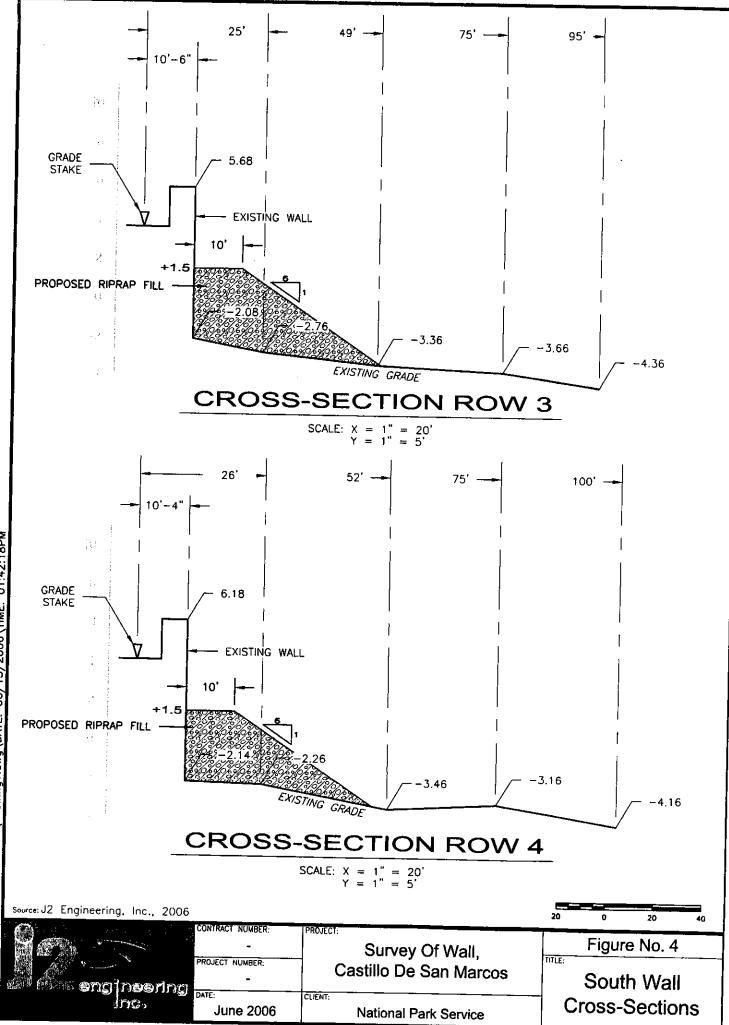
01:4 C:\PROJECTS\CuatilloDeSanMarco\Drawing1.dwg\DATE: 06/13/2006\TIME:



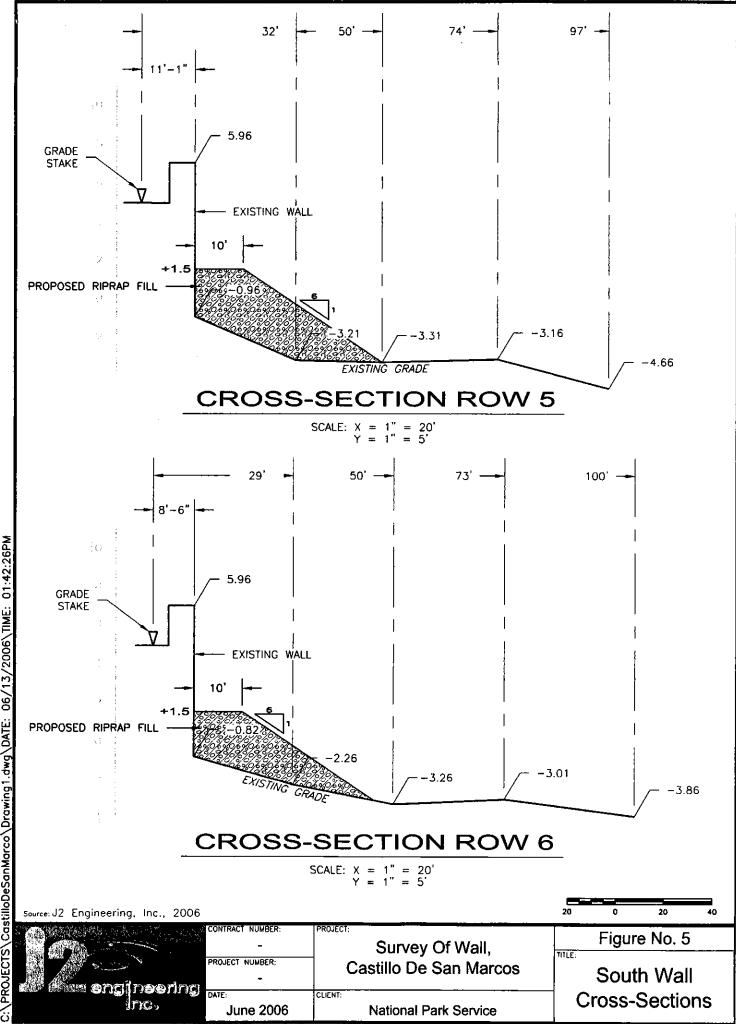
c:\PROJECTS\CastilloDeSanMarco\Drawing1.dwg\DATE: 06/13/2006\TIME: 01:42:01PM



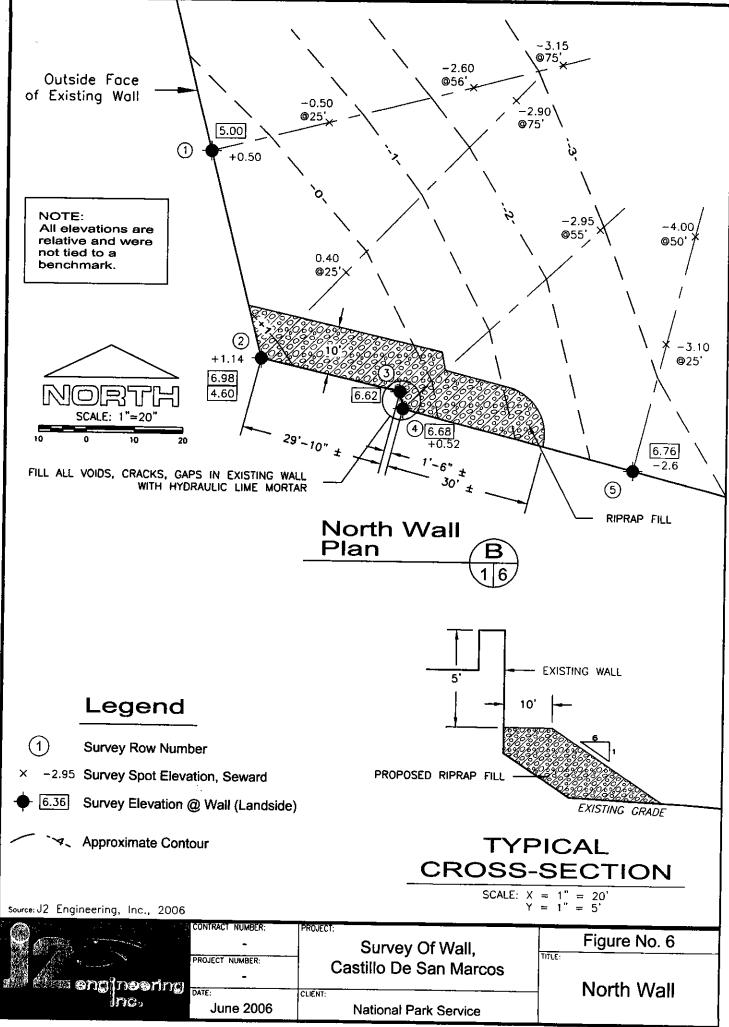
C:\PROJECTS\CastilloDeSanMarco\Drawing1.dwg\DATE: 06/13/2006\TiME: 01:42:10PM



C:\PROJECTS\CastilloDeSanMarco\Drawing1.dwg\DATE: 06/13/2006\TIME: 01:42:18PM



06/13/2006\TIME: C:\PROJECTS\CastilloDeSanMarco\Drawing1.dwg\DATE:



C:\PROJECTS\CastilloDeSanMarco\Drawing1.dwg\DATE: 06/13/2006\TIME: 01:42:34PM

,	۸N			ENDS	6		ភ		4		З		2		- -	ROW
	60.70 S.F.			52.5 S.F.(EACH)	70.07 S.F.		90.99 S.F.		87.98 S.F.		98.62 S.F.		92.24 S.F.		60.70 S.F.	AREA
						80.53		89.485		93.3		95.43		76,47		AVERAGE
	61					43		50		50		50		50		DISTANCE
	3702.7			1050		3462.79		4474.25		4665		4771.5		3823.5		VOLUME (CUBIC FEET)
	27	TOTAL	,		 				Ň	1		X				FACTOR
	137.1	824		38.9		128.3		165.7		172.8		176.7		141.6		VOLUME (CUBIC YARDS)

ļ,

l. .