(305) 295-1000
1001 James Street
PO Box 6100
Key West, FL 33041-6100
www.KeysEnergy.com

UTILITY BOARD OF THE CITY OF KEY WEST

March 16, 2018

Mr. Robert Kirby, M.S.
Enforcement Section, Regulatory Division, Jacksonville District
U.S. Army, Corps of Engineers
9900 SW 107th Ave, #203
Miami, FL 33176

RE: Hurricane Irma Emergency Repairs, 1992-31093, Keys Energy Services, Line 4, Rockland Key

Dear Mr. Kirby:

Thank you for your email dated March 02, 2018 regarding the Hurricane Irma emergency repairs completed at Line 4 located north of Rockland Key. Keys Energy Services (KEYS) regrets the impacts to the seafloor that occurred as a result of the project and is eager to resolve any outstanding issues associated with the project.

First, KEYS believes a timeline would be helpful. In September 2017, the State of Florida was hit with a massive hurricane, Hurricane Irma, which hit the Florida Keys as a Category 4 hurricane and caused substantial damage, including catastrophic damage to several utility poles supporting the transmission line (Line Number 4) connecting Big Coppitt Key to Stock Island. As a result of the hurricane, the State of Florida was under a state of emergency issued by both the Governor (Executive Order No. 17-735, dated September 04, 2017) and the President (Emergency Declaration dated September 05, 2017). This hurricane sent local, state, and federal agencies scrambling in emergency mode for several months, and emergency repairs and recovery are still underway. KEYS is a municipal utility and was working under extreme public and governmental pressure at the time to ensure reliable energy to our service territory.

Because of the urgent necessity of restoring power to the Florida Keys, KEYS had multiple conversations with the Corps about the appropriate form of emergency authorization, and on September 22, 2017, through its consultant Terramar Environmental Services (Terramar) submitted a request for emergency authority to replace six (6) utility poles that failed due to the hurricane. The documentation supporting that request made it clear that KEYS sought to replace those 6 poles, not merely repair them, which would necessarily require demolition and removal of the existing failed poles. Given the urgency of the request and the unavailability of many construction contractors due to the storm, KEYS and Terramar had been unable to coordinate with the contractor that would do the replacement at the time the application was filed and therefore simply stated the assumption that the work would be able to proceed using standard utility construction methods and shallow draft work boats, which as you are aware would later

prove to be an incorrect assumption. Nevertheless, the request was for emergency authorization for the replacement of 6 poles.

In response to this emergency request, the U.S. Army Corps of Engineers (USACE) permit reviewer Gletys Guardia-Montoya promptly reviewed the request and on the same day, "determined that the proposed work involved the replacement of six (6) previously authorized structures, therefore in accordance with general condition #2 of that authorization (attached), you may proceed with the proposed work without further correspondence from this office." That previous authorization was Nationwide Permit No. 3 (NWP 3), with additional conditions given the presence of the work within a National Marine Sanctuary. NWP 3 authorizes not only "the repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure," but also expressly authorizes "the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage." Thus, this NWP 3 was, to all appearances, the appropriate vehicle to authorize the replacement of the poles, notwithstanding that the previous authorization to use NWP 3 (dated July 14, 2009) referenced by the USACE reviewer was for repair and not replacement of Line 4 structures. The letter of authorization included conditions imposed by FKNMS as well as additional special and general conditions. The USACE's September 22, 2017 email reflects a determination that additional conditions were not needed for KEYS to use NWP 3 and that there was no further need to correspond with USACE relative to the repair.

After communication between the Florida Keys National Marine Sanctuary (FKNMS) and USACE, on October 9, FKNMS emailed USACE that the proposed KEYS repairs to Line 4 were exempt from FKNMS permitting because of FKNMS understanding that no sea floor alteration was to be undertaken. However, on October 11, 2017, Joanne Delaney of FKNMS became aware of the drilling that would be associated with the emergency work due to mobilization of the equipment near the work site and a corresponding article in *Key West Citizen* following a press release from KEYS. Ms. Delaney immediately contacted the barge foreman, who detailed some of the work required to accomplish the pole replacement, and the barge foreman stopped work at her request, and she communicated to USACE that KEYS was writing up a revised scope of work/revised work plan for FKNMS to review. *No in-water work had yet commenced at that time, other than installation of turbidity curtains.* The USACE reviewer also indicated her intention to review the revised work plan. (See Attachment 1, email chain dated October 11, 2017) Later that same day, on October 11, 2017, Terramar submitted on KEYS behalf additional information on the means and methods of how the pole replacement and line repair were to be accomplished and reiterated that the overall scope of the project remained the complete replacement of 6 utility poles (see Attachment 1, Email from Terramar to USACE and FKNMS with October 11, 2017 Means and Method Statement).

Thereafter, FKNMS posed several questions to Terramar regarding means and method statement, to which Terramar responded. The USACE reviewer was copied on those emails. On October 12, FKNMS sent an email to Terramar, copying USACE, stating that, having reviewed the

Means and Method Statement and response to questions, "NOAA FKNMS agrees that the repairs should proceed at this time." (Attachment 2, Email from FKNMS to Terramar). Also on or about October 12, Terramar received oral confirmation from the USACE reviewer that the USACE had not changed its position on issuing KEYS the emergency permit because USACE felt the scope had not changed (i.e., it still involved the replacement of 6 poles). Given the authorization to proceed both orally and, from FKNMS, by email, the barge and other equipment were re-mobilized to begin work on approximately October 14.

Nonetheless, FKNMS continued to ask questions regarding the project, in order to have a better understanding of the potential impacts to sanctuary resources, which FKNMS recognized were unavoidable given the proposed Means and Methods. KEYS, through Terramar, continued to provide prompt responses to FKNMS, copying USACE on that communication (*see, e.g.*, thereto Attachment 3, Email chain, last email in the chain, dated October 17, 2017, and attachment thereto; Attachment 4, Email chain, last email in chain dated October 23, 2017, and attachment thereto). All of these documents outlined the best management practices and measures to be employed to minimize impacts to the sea floor (e.g., using Flexi-Float barges with shallow drafts in shallow areas, using the same travel paths to minimize the areal extent of impacts, scheduling installation events to coincide with maximum water depths, etc.), but recognized, as FKNMS recognized, that sea floor impacts were unavoidable, given the nature of the work (See Attachment 1, October 11, 2017, Means and Methods Statement, which was provided to USACE: "It should be understood that the water surrounding these structures is extremely shallow in large areas that must be accessed....Due to this there is *no way* to get a drill rig or crane for lifting the poles up to the pole sites without the barges as well as the Pontoon excavators dragging the bottom." (emphasis supplied); Attachment 4: "We anticipated contact with the seafloor occurring at all six pole locations....The intent is to minimize seafloor contact to the maximum extent practical.")

As a result of all of these communications and the emergency nature of the work, on October 24, 2017, FKNMS sent an email to the USACE reviewer with an attached approval letter authorizing the KEYS pole replacement project. (Attachment 5). In the email to USACE, FKNMS states that it "appreciates the efforts Keys Energy Services is undertaking to minimize impacts to sanctuary resources to the greatest extent possible while conducting these critical repairs. The attached authorization contains several required conditions for removing all defunct utility materials and providing post-construction biological surveys of *areas where equipment necessarily contacted the sea bed.* These actions will aid in protecting sanctuary resources and will provide information from which future, similar work can be more accurately evaluated." (emphasis added). FKNMS and KEYS continued to communicate regarding the work, and on February 16, 2018 the benthic survey was submitted to FKNMS. Responses to questions arising from the survey were provided on February 28 (Attachment 6). On March 2, 2018, your email interposed questions based on a review of the benthic survey. On March 5, 2018, FKNMS also sent an email regarding the results of the survey, on which you were copied, and that email is also discussed below.

The following are our response to the questions outlined in your email.

1). We request from the permittee an explanation of why the impacts described in Mr. Frank's report occurred in light of the September 22, 2017, application that states, "no impacts to the seafloor are anticipated."

Please see the foregoing timeline. KEYS initially applied to the USACE for the emergency repairs on September 22, 2017, twelve days following Irma landfall during a declared state of emergency. At that time, we were working with limited information on means and methods since the contractor had not mobilized. Our efforts to estimate potential impacts were very limited. Given the rushed circumstances and the urgent nature of the needed repairs, as well as limited knowledge of the equipment that would be needed for this type of emergency work, KEYS anticipated that the means and methods used for the proposed repairs were to be similar to historical, traditional construction repairs using shallow draft boats and barges. However, once it was realized that contact with the seafloor was unavoidable, the project was modified via the Means and Methods Statement submitted on October 11 and subsequent emails. As noted above, no in-water construction or demolition work was performed until the FKNMS and USACE had been made aware of the unavoidable seafloor impacts that would occur. See above timeline and Attachments 2-3.

During this extreme emergency, KEYS hired Michels Power to expedite the repairs, and Michels Power prepared the Means and Method Statement referenced above. When the contractor mobilized with the pontoon excavators and Flexi-Float barges, it became apparent that contact with the seafloor would be unavoidable. Prior to this, none of our staff or consultants had ever seen this equipment before and had no working experience with how it is used and no expectation as to the extent of any seafloor impacts, beyond the Means and Methods Statement that had been prepared.

As the above timeline clarifies, after FKNMS contacted the USACE on October 11, KEYS was in coordination with FKNMS and the USACE regarding the means and methods so that FKNMS could authorize the work and to prevent the USACE from revoking the permit authorization. During that coordination, we disclosed that seafloor contact was inevitable and that the Contractor (Michels Power) was made aware of the need to minimize impacts to the maximum extent possible (see Attachment 2, Attachment 4: October 23, 2017 response to FKNMS). FKNMS approved resumption of project activities on October 12, and USACE likewise declined to revoke the permit. FKNMS formally authorized the work on October 24, 2017.

To summarize, during the initial application to USACE, KEYS was operating in emergency mode and with limited information. At the time of application, we believed that repairs could be made using shallow-draft work platforms with minimal seafloor impacts. Once the equipment arrived on site, and as means and methods became more defined, KEYS concluded that seafloor impacts were unavoidable, and disclosed this to FKNMS during discussions that led up to the issuance of the FKLNMS Letter of Authorization (LOA) issued on October 24, 2017 (Attachment 5).

2). In the damage report, the impacts are described as "unavoidable." Please explain why "unavoidable" impacts were not identified prior to conducting the work and made part of the application.

As described above, no in-water work was conducted prior to KEYS submitting a modification to the work (Attachment 2, Means and Method Statement) and receiving oral authorization from the USACE and written authorization from FKNMS. (Attachment 3). As stated above, this information was unavailable to KEYS during the initial application to USACE, because KEYS was operating in emergency mode and with limited information. We believed that the repairs could be made using traditional methods such as shallow draft work platforms, which had been employed in past repairs, such that impacts to benthic resources could be avoided. This assumption proved to be incorrect. However, both KEYS and USACE were operating in an emergency mode at that time, and restoration of power in the Florida Keys was high priority locally, federally, and from state officials.

As means and methods became more defined, KEYS concluded that seafloor impacts were unavoidable, and disclosed this to FKNMS and to the USACE before in-water construction or demolition work was conducted. FKNMS requested the USACE revoke their emergency authorization on October 11, 2017 and re-review the project. USACE did not revoke that authorization and the work proceeded. As noted above, FKNMS authorized the project to proceed on October 12, subject to additional information being submitted. That additional information clarified the means and methods further and documented that seafloor impacts could not be avoided.

After reviewing this information, FKNMS issued a Letter of Authorization to the USACE on October 24, 2017 which included the requirement for the post-construction damage assessment survey. The FKNMS LOA states: *"The survey shall include a qualitative assessment of all work areas traversed by the pontoon excavators and Flexi Float barges where this equipment came in contact with the sea floor."* This acknowledgement of potential seafloor impacts in the FKNMS LOA is further documentation that as the project was being implemented, it became obvious that contact with the seafloor was unavoidable.
In summary, the existence of unavoidable impacts was identified prior to conducting the work. The full extent of the unavoidable impacts to the seafloor could not be determined until the post-construction damage assessment survey was completed.

3). Explain what personnel, equipment, practices, environmental compliance efforts and/or compliance personnel etc. were in place during the 2017 repair.

KEYS utilized a reputable utility contractor, Michels Power, a KEYS emergency response contractor, and also hired Leidos Engineering, LLC, who provided engineering design work for repair of the downed lines, to provide construction oversight and compliance. KEYS also hired Phil Frank with Terramar Environmental Services to coordinate permitting with USACE and FKNMS. Michels was involved in the development of the means and methods that were provided to FKNMS and were made aware throughout the project of the need to minimize

seafloor impacts by all means possible. The various minimization practices employed by Michels Power are outlined in Attachments 2 and 4. Every effort was made to minimize damage to benthic communities to the greatest extent possible given the emergency situation, as FKNMS recognized in its March 5, 2018 email.

4). If the 2017 repair work was different from the 2009 work, then explain how it was different and explain why Keys Energy sought to conduct the repair work under the 2009 permit.

KEYS applied for an emergency authorization to replace 6 utility poles downed during the hurricane and requested the USACE's assistance in expediting the permitting. During the emergency, expedited permit coordination with USACE, KEYS was advised to apply for the repairs using existing permit numbers where possible to expedite the process. The USACE determined that the 2009 letter of authorization to use NWP 3 was the appropriate vehicle to use for the project (see above). NWP 3 expressly authorizes replacement of existing structures due to damage or destruction caused by extreme storm events; therefore, KEYS had no reason to dispute the use of the 2009 letter of authorization or to seek a different authorization and, under the emergency circumstances, did not have the time to do so.

The 2009 work was significantly different from the 2017 emergency work. The work completed in 2009 consisted of repairs to existing utility poles and was completed using shallow work boats and not under emergency conditions. Hurricane Irma downed six transmission poles and associated lines and equipment occurring within the Florida Keys National Marine Sanctuary (as well as downing poles in uplands), something KEYS had never experienced in its history. The 2017 work required full demolition of downed and damaged poles, and installation of new utility poles into augured foundations. The work completed in 2009 was maintenance, while the work completed in 2017 was effectively a combination of new construction and demolition. Although the 2009 work was pole repair and the 2017 work was pole construction, this difference was not initially distinguished because both of these projects were repairs of the transmission line 4 in its entirety and both types of activities are authorized under NWP 3, to which the 2009 authorization pertained.

5). Explain what remediation measures, if any, Keys Energy will be voluntarily implementing to remediate damage described in Mr. Frank's report.

At the request of FKNMS, we completed the benthic survey prior to final pole removal and cleanup, with the final work to be completed by the end of March. To date, no remedial actions have been taken, as we still need to coordinate those actions with FKNMS. KEYS received an email from FKNMS on March 5, 2018 (on which you and Ms. Guardia-Montoya were copied), indicating they concur with the benthic survey assessment and stating FKNMS' belief "that impacts had been minimized to the greatest extent possible given their emergency nature." However, FKNMS also stated that impacts were degrees of significance greater than those anticipated. After assessing the unavoidable impacts caused by the emergency work, FKNMS indicated that they may be able to assist KEYS in developing recommendations for reasonable

and prudent alternatives that may be implemented to restore sanctuary resources impacted by the project. We will therefore coordinate with FKNMS to determine the appropriate actions KEYS should take to address any continuing damage to the resources at this location. We will keep USACE apprised of this effort.

KEYS fully regrets the unavoidable contact to the seafloor that occurred as a result of the emergency repairs at Line 4. Once the site was cleared of construction equipment and we were able to observe the site, and after reviewing the benthic report, it became apparent that the seafloor contact exceeded our initial estimates, and that will be part of our discussion with FKNMS.

We trust this is fully responsive to your questions and resolves this issue. As noted, KEYS will be taking steps, in coordination with FKNMS, to address seafloor contact within the FKNMS. Please let us know if you have any further concerns. We are available to meet with you and review the project if that would be helpful.

Sincerely,

Lynne Tejeda

Lynne Tejeda
General Manager/CEO
Keys Energy Services
1001 James Street
Key West, FL 33040
305-295-1020
Lynne.Tejeda@KeysEnergy.com

cc: Gletys Guardia-Montoya, USACE
Stephen Werndli, NOAA FKNMS
Joanne Delaney, NOAA FKNMS
Susan Stephens, Hopping Green & Sams

Enclosures

Attachment 1 – Email chain, last email in chain dated October 11, 2017, and attachment thereto
Attachment 2 – Email chain, last email in chain dated October 12, 2017
Attachment 3 – Email chain, last email in chain dated October 17, 2017, and attachment thereto
Attachment 4 – Email chain, last email in chain dated October 23, 2017, and attachment thereto
Attachment 5 – Email dated October 24, 2017, and attachment thereto
Attachment 6 – Email chain dated February 28, 2018, and attachment thereto

Attachment 1

Brown, Sandy

From: Phil Frank <terramar@bellsouth.net>
Sent: Wednesday, October 11, 2017 4:34 PM
To: 'Guardia-Montoya, Gletys CIV USARMY CESAJ (US)'; 'Joanne Delaney - NOAA Affiliate'
Cc: 'Lisa Symons'; 'Sarah Fangman'; Brown, Sandy; jbronsta@michels.us
Subject: RE: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement
Attachments: KEYS Pole Replacement Request - USACE 0.22.17.pdf; Means and Methods - KEYS pole replacement - Michels.pdf

Hi Gletys, Joanne:

I'm adding a couple people to this email, Sandy Brown Engineer with KEYS, and Joe Bronstad, Michels, HSE-Safety Coordinator, to facilitate communication.

When we applied for the emergency authorization for pole replacement on September 22, 2017, we made it clear that the power poles were to be replaced, not repaired. Replacement involves installing a new pole into the seafloor, in a new hole. We cannot remove the old pole foundations and re-use the old holes, it is a structural foundation and removal would do more damage than a new hole. Our emergency request to USACE is attached for reference. There is no change in the scope of the pole replacement request, everything is as originally requested and subsequently approved.

At the time of application, we did not have details on means and methods from the contractor, since they had not mobilized and evaluated the situation in detail. We were in emergency mode and doing what we could to authorize the repairs, so we described the replacement as "utilizing standard utility construction methods". Now that Michels has assessed the situation, they have provided the attached means and methods that describe details of how they plan to complete this work.

Michels has been directed by FKNMS to cease work until issues regarding the USACE authorization are resolved. Michels has informed KEYS that the cost for delayed mobilization for the equipment and crew currently on site is $88,000.00 per day. Because KEYS mobilized Michels based on the USACE emergency authorization, the delay and associated costs are of great concern.

To reiterate, there is no change in the scope of the pole replacement request, everything is as originally requested and subsequently approved.

Please advise us of what we need to do to move ahead with this project as quickly as possible.

Thanks,

Philip A. Frank, Ph.D.
Terramar Environmental Services, Inc.
1241 Crane Boulevard
Sugarloaf Key, Florida 33042
(305) 393-4200 terramar@bellsouth.net

-----Original Message-----
From: Guardia-Montoya, Gletys CIV USARMY CESAJ (US) [mailto:Gletys.Guardia-Montoya@usace.army.mil]
Sent: Wednesday, October 11, 2017 2:44 PM

To: Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov>
Cc: Phil Frank <terramar@bellsouth.net>; Lisa Symons <Lisa.Symons@noaa.gov>; Sarah Fangman <Sarah.Fangman@noaa.gov>
Subject: RE: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Good afternoon All,

Joanne, thank you for providing this information and yes, the Corps will have to re-review the new scope of work/proposed project. If the authorized scope of work changes to result on greater impacts to resources and/or navigation than the previous reviewed, the Corps will have to look at the proposal again.

Phil, please provide revised plans and any other relevant information that depict the extend/scope of the new work.

Please keep me on the loop with the development of this.

Respectfully,

Gletys Guardia-Montoya
Project Manager
U.S. Army Corps of Engineers
Miami Permits Section
9900 SW 107th Avenue, Suite 203
Miami, FL 33176
(O) 305-526-2515
(C) 786-428-4889

-----Original Message-----
From: Joanne Delaney - NOAA Affiliate [mailto:joanne.delaney@noaa.gov]
Sent: Wednesday, October 11, 2017 11:37 AM
To: Guardia-Montoya, Gletys CIV USARMY CESAJ (US) <Gletys.Guardia-Montoya@usace.army.mil>
Cc: Phil Frank <terramar@bellsouth.net>; Lisa Symons <Lisa.Symons@noaa.gov>; Sarah Fangman <Sarah.Fangman@noaa.gov>
Subject: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Dear Gletys,

I emailed you on October 9, 2017 indicating that the repairs proposed by Keys Energy Services in the Lower Keys to transmission line 4 were exempt from FKNMS permitting because no sea floor alteration was occurring nor were any other prohibited activities being undertaken.

Information in today's Key West Citizen (page 2, attached) and calls with the US Coast Guard and barge foreman hired to undertake this work indicate that drilling into the sea floor of the sanctuary is necessary to set new cans and poles at at least six of the structures proposed for repair. The barge foreman assured me that KEYS is writing up a revised scope of work and will be sending it to me. I have advised the barge captain to stand down any in-water work until such time that NOAA FKNMS can fully review what is proposed.

Phil, I have not called the on-site supervisor yet, but have been advised his name is Joe Brondstat 920-219-2577.

Gletys, the previous determination by NOAA FKNMS that this work is exempt from permitting is no longer valid based on this new information. Presumably Army Corps will need to re-review the project as well. I am not as well versed in Florida DEP emergency permitting procedures but assume Phil will forward the new information to DEP as necessary.

Thank you,

Joanne

Joanne Delaney
Resource Protection and Permit Coordinator NOAA/Florida Keys National Marine Sanctuary joanne.delaney@noaa.gov <mailto:joanne.delaney@noaa.gov>
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Follow us on Twitter <Blockedhttps://twitter.com/FloridaKeysNMS>

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(305) 393-4200 terramar@bellsouth.net

September 22, 2017

Gletys Guardia-Montoya
Project Manager
U.S. Army Corps of Engineers
Miami Permits Section
9900 SW 107th Avenue, Suite 203
Miami, FL 33176
(O) 305-526-2515 (C) 786-428-4889
Gletys.Guardia-Montoya@usace.army.mil

RE: SAJ-1992-31093 (NW-IMT), Keys Energy Services, Emergency Utility Pole Replacement

Gletys:

Please process this request to replace six (6) utility poles that failed as a result of Hurricane Irma. The poles are 24" concrete utility poles that support the backup tie line that extends from Big Coppitt Key to Stock Island. The poles are located in the waters of the Gulf of Mexico. The poles were previously authorized for repair per UASACE permit SAJ-1992-31093 (NW-IMT).

For the purpose of this emergency repair authorization, the applicant is:

Dale Finigan
Director of Engineering Services
Keys Energy Services
1001 James Street
Key West, FL 33040
dale.finigan@keysenergy.com

The following table describes the location of the six poles in need of emergency replacement.

Pole ID	**Status**	**Location: Lat Lon**
74	Structure good, guy wire repairs only	24°35'54.90"N 81°40'37.98"W
75	Replacement, in water	24°35'53.69"N 81°40'33.08"W
76	Replacement, in water	24°35'52.48"N 81°40'28.24"W
77	Replacement, in water	24°35'51.27"N 81°40'23.38"W
78	Replacement, in water	24°35'50.05"N 81°40'18.51"W
79	Replacement, structure in uplands	24°35'49.07"N 81°40'14.59"W

Pole ID	Status	Location: Lat Lon
80	Replacement, in water	24°35'47.85"N 81°40'9.65"W
81	Replacement, in water	24°35'47.62"N 81°40'5.90"W

Justification: Theos section of the tie line provides critical transmission line reliability for primary power to Stock Island and the City of Key West. Stock Island supports the Lower Keys only hospital, the Florida Keys Community College, the Monroe County Sheriff headquarters and jail, and numerous other critical services. Maintenance of the backup tie line serving the Lower Keys is absolutely essential, and an emergency repair authorization is completely justified.

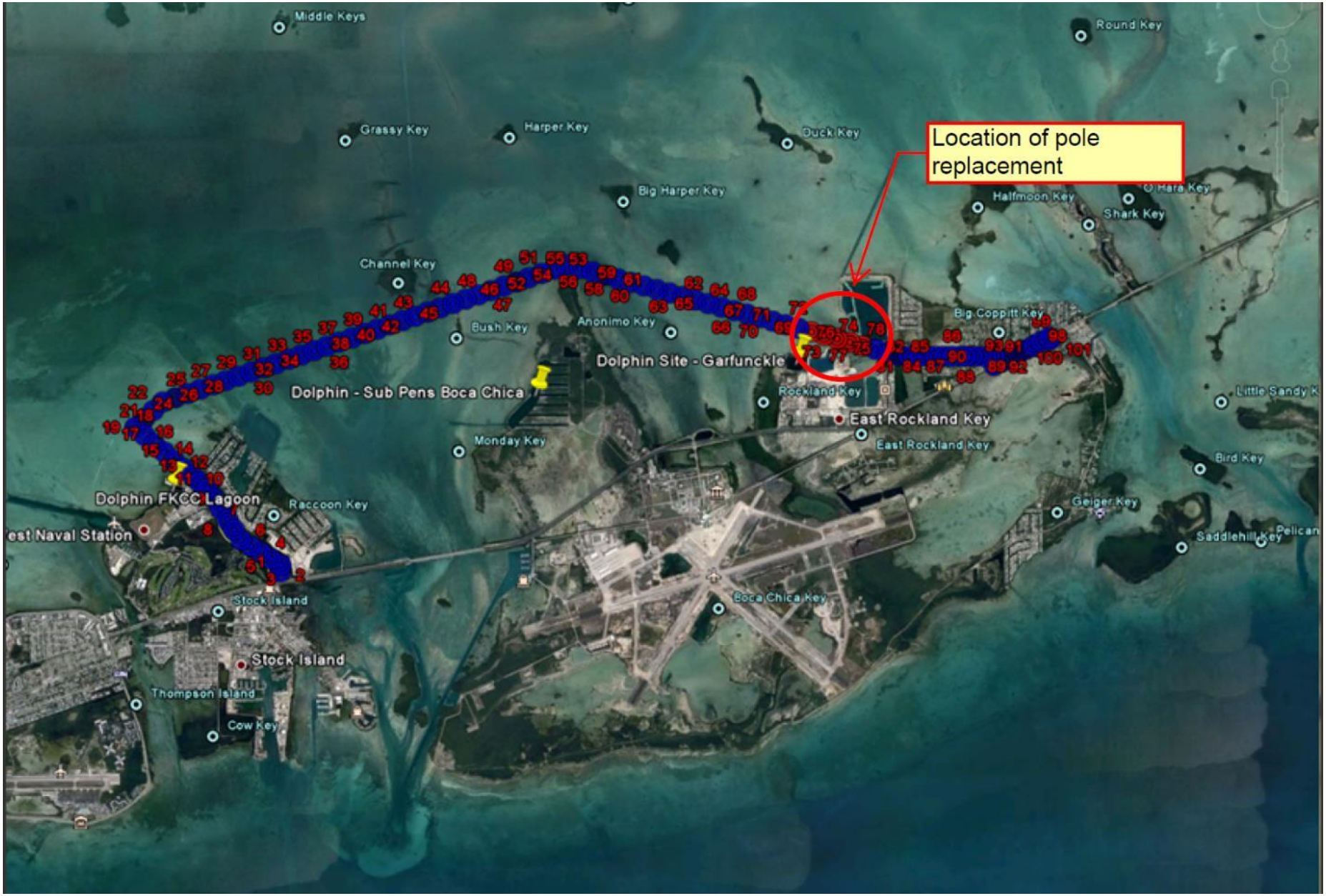
Means and Methods of Repair: The method of pole replacement will utilize standard utility construction methods. Shallow draft work boats will be used to access the poles. The poles and associated lines will be removed from the water and disposed at an approved upland location. Replacement poles will be installed in the same location as those removed, working from the shallow

Resource Impacts: The benthic habitat in the vicinity of the pole replacement are a mix of seagrass and hardbottom habitats. Shallow draft work boats have been used for years to maintain these poles, with no lasting impact observable. The proposed pole replacements will be completed using shallow draft work boats, and no impacts to the seafloor are anticipated. All work will follow in-water construction guidelines for sea turtles, small tooth sawfish and manatee.

We appreciate the USACE addressing this emergency repair as soon as possible. Please contact me if you have questions or require additional information. Cell: 3-05-393-4200. Email: terramar@bellsouth.net.

Attachments:

Project Plans
USACE permit SAJ-1992-31093


Location of pole replacement
Middle Keys
Round Key
Grassy Key
Harper Key
Duck Key
Big Harper Key
Halfmoon Key
O'Hara Key
Shark Key
Channel Key
Bush Key
Anonimo Key
Big Coppitt Key
Dolphin Site - Garfunckle
Dolphin - Sub Pens Boca Chica
Rockland Key
East Rockland Key
Little Sandy K
Monday Key
Bird Key
Dolphin FKCC Lagoon
Raccoon Key
Geiger Key
Saddlehill Key
Pelican
Stock Island
Boca Chica Key
Thompson Island
Cow Key


Keys Energy Services, Emergency Pole Replacement
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Poles to be replaced in RED.
Poles to be replaced in RED.
Pole 79 located in uplands

Photo of backup tie line going west to Stock Island showing poles that remain standing.

Aerial photo showing downed power poles 75-77. Pole 74 can be seen in the far left of the photo.

Reference Photos – Post Hurricane

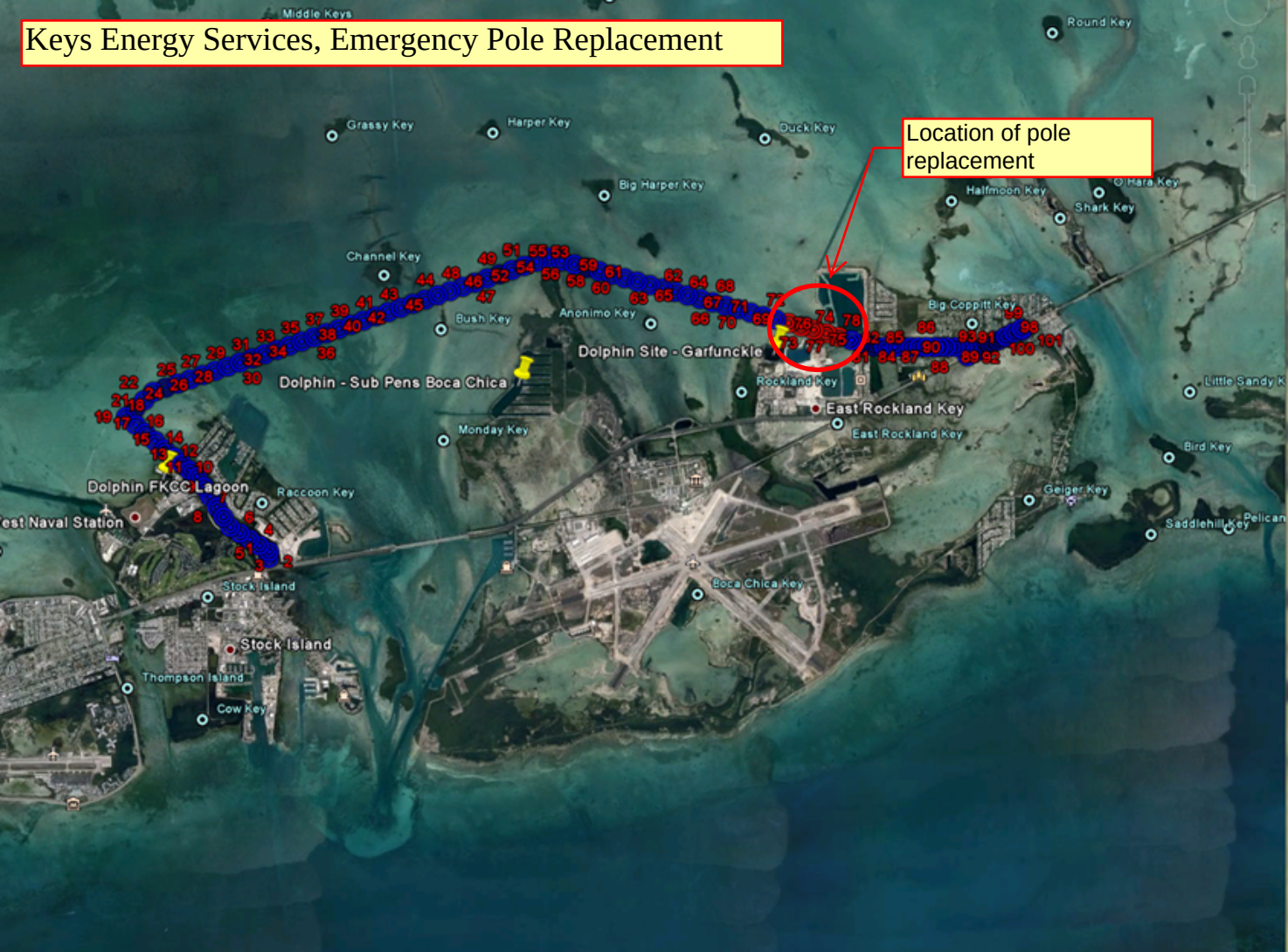
Photo of a severely damaged pole (#81) that is still standing, but the base has been compromised, and this pole requires replacement.

Photo of downed pole.

Photo of downed poles.

Project Plans for Repairs

Keys Energy Services, Emergency Pole Replacement




Keys Energy Services, Emergency Pole Replacement
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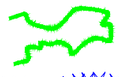
Poles to be replaced in RED.
Poles to be replaced in RED.
Pole 79 located in uplands

Project Plans
Keys Energy Emergency Repairs

FEATURE	PLAN SYMBOLOGY	PROFILE SYMBOLOGY	COMMENTS
SHIELD WIRE	NOT SHOWN FOR CLARITY		SEE NOTE 1
138kV CONDUCTOR	NOT SHOWN FOR CLARITY		SEE NOTE 2
OTHER OH CABLES			DISTRIBUTION, TELEPHONE, ETC.
OTHER TRANSM LINE			
TRANSM STRUCTURE	STR 002 		
DISTRIBUTION STRUCTURE			
DOWN GUYS			
BUILDING			
FENCE			
SIGN			
GROUND CENTERLINE	N/A		BETWEEN POLES
GROUND PROFILE LEFT	N/A		15 FT LEFT
GROUND PROFILE RIGHT	N/A		15 FT RIGHT
EDGE/TOP OF PAVEMENT			
EDGE OF VEGETATION		N/A	
EDGE/TOP OF WATER			PROFILE AT CROSSING

NOTES:

1. SHIELD WIRE IS 3#5 AW, DISPLAYED AT A TEMPERATURE OF 90°F, FINAL SAG.
2. 138kV CONDUCTORS ARE 559 AAAC "DARIEN", DISPLAYED AT A TEMPERATURE OF 167°F, FINAL SAG.
3. POLE DATA AND STRUCTURE TYPE IDENTIFICATION ARE BASED ON HISTORICAL PLAN AND PROFILE DRAWINGS T-252 THROUGH T-269, LATEST REVISION.

100.0 FT. HORIZ. SCALE
15.0 FT. VERT. SCALE

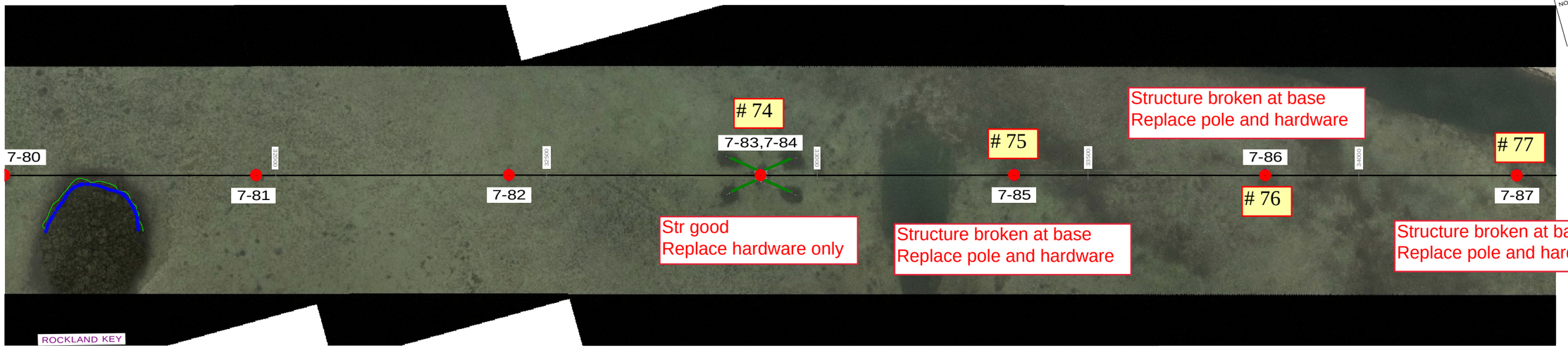
REV NO	BY	DATE	APPR	REVISION
A	CEW	7/9/13	XXX	PRELIMIARY P&P GENERATION DRAWN BY PLS-CADD
B	XXX	5/23/17	CEW	ADDED NOTE 3

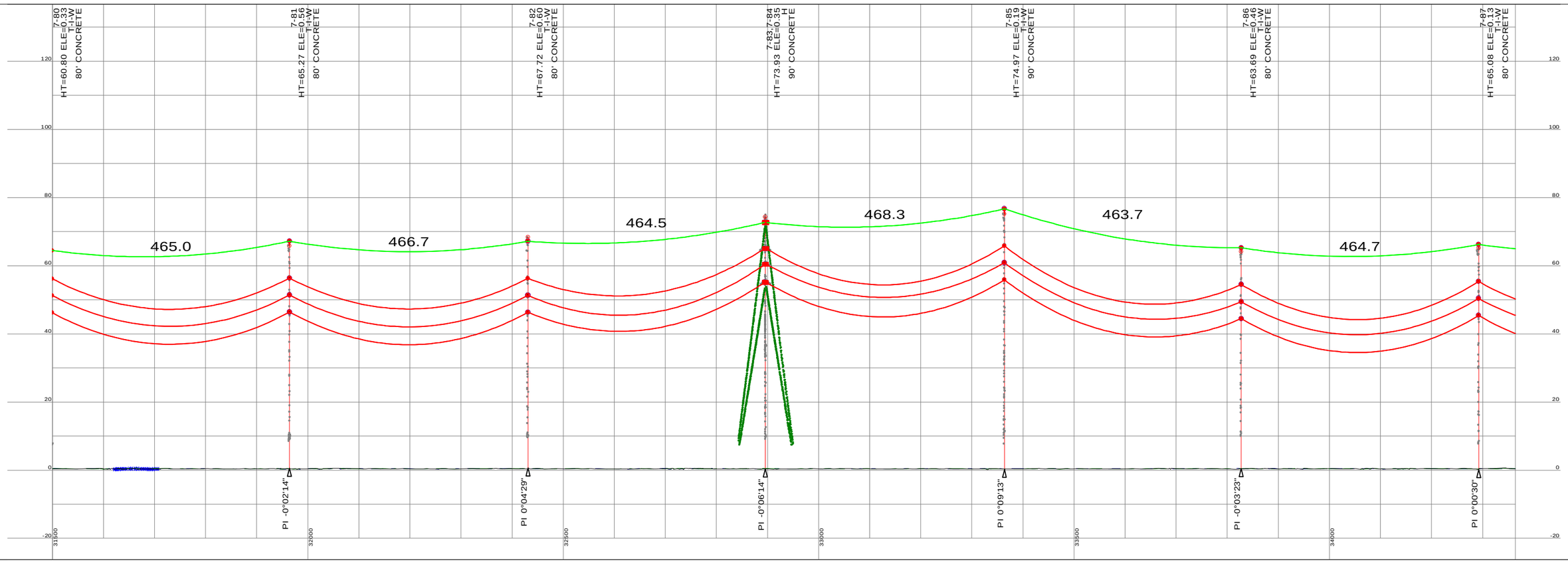
DIVISION: TRANSMISSION
ENGINEER: FW&A
DRN BY: JCARR — DATE: 7/24/2013
APPR BY: XXX — DATE: 7/24/2013

KEYS ENERGY 138KV LINE 4
US-1 SUB TO BIG COPPITT SUB, FIRST CIRCUIT

DRAWING NO. 138L4-PP-000
SHEET LEGEND
REV. B

PLS-CADD DRAWING





PLOTTED 5/19/2017 9:09:14 AM
F:\ELECTU\1706 KEYS UPDATE\LINE 4\ LINE-4 STATION 31500 TO 34364

100.0 FT. HORIZ. SCALE
15.0 FT. VERT. SCALE

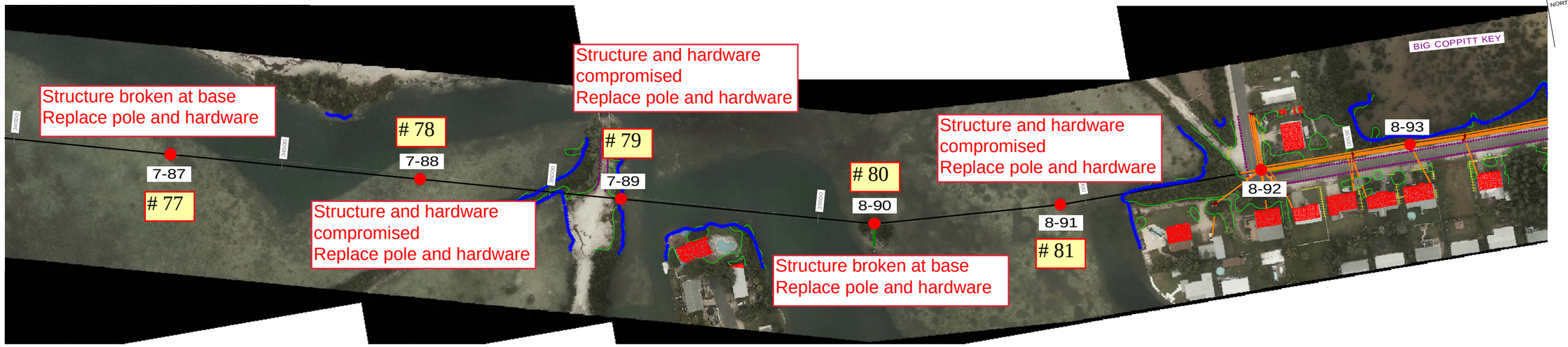
REV. NO.	BY	DATE	APPR	REVISION
A	CEW	00/00/00	XXX	PRELIMINARY P&P GENERATION DRAWN BY PLS-CADD
B	FGB	04/14/17	CEW	ADDED STRUCTURE TYPES AND POLE DATA

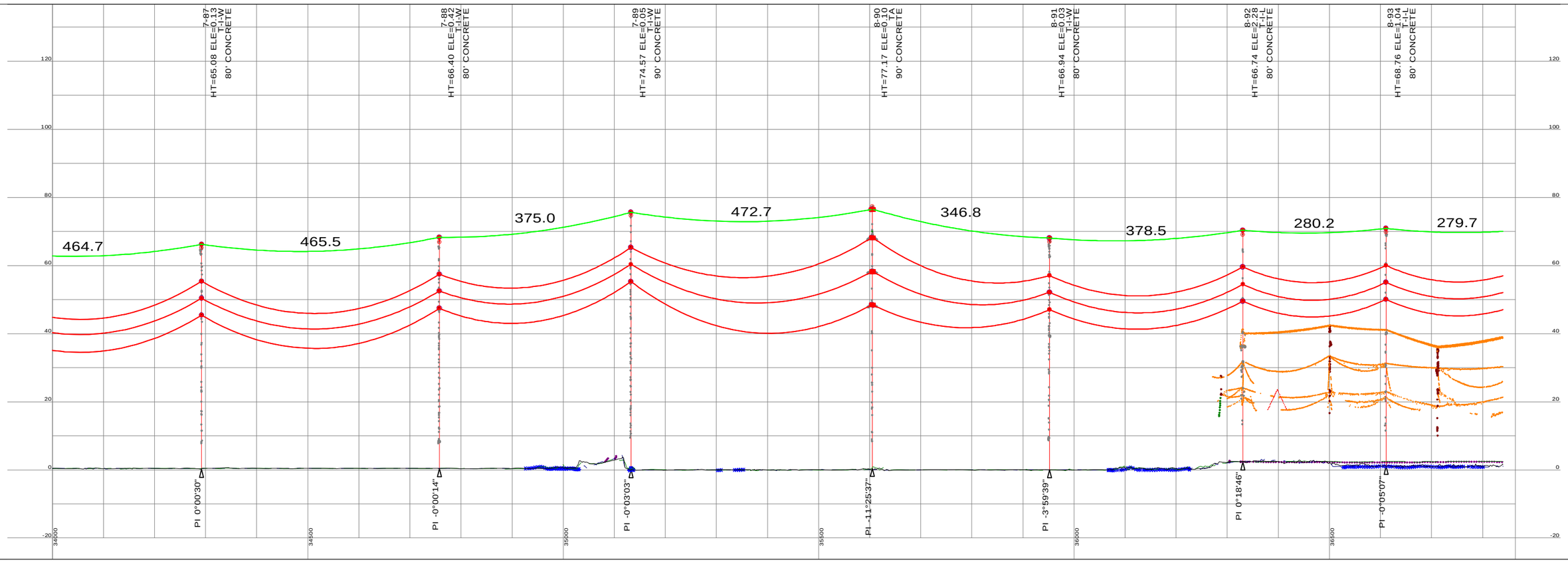
DIVISION: TRANSMISSION
ENGINEER: FW&A
DRN BY: PLS-CADD — DATE: 5/19/2017
APPR BY: XXX — DATE: 5/19/2017

KEYS ENERGY 138KV LINE 4
US-1 SUB TO BIG COPPITT SUB, FIRST CIRCUIT
7-81 TO 7-87

DRAWING NO. 138L4-PP-015
SHEET PAGE 15 OF 18
REV. B

PLS-CADD DRAWING





PLOTTED 5/19/2017 9:09:22 AM
F:\ELECT\1706 KEYS UPDATE\LINE 4\ LINE-4 STATION 34000 TO 36840

100.0 FT. HORIZ. SCALE
15.0 FT. VERT. SCALE

REV. NO.	BY	DATE	APPR	REVISION
A	CEW	00/00/00	XXX	PRELIMINARY P&P GENERATION DRAWN BY PLS-CADD
B	FGB	04/14/17	CEW	ADDED STRUCTURE TYPES AND POLE DATA

DIVISION: TRANSMISSION
ENGINEER: FW&A
DRN BY: PLS-CADD — DATE: 5/19/2017
APPR BY: XXX — DATE: 5/19/2017

KEYS ENERGY 138KV LINE 4
US-1 SUB TO BIG COPPITT SUB, FIRST CIRCUIT
7-87 TO 8-93

DRAWING NO. 138L4-PP-016
SHEET PAGE 16 OF 18
REV. B

USACE PERMIT

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
MIAMI REGULATORY OFFICE
9900 SW 107TH AVENUE, SUITE 203
MIAMI, FLORIDA 33176

REPLY TO
ATTENTION OF

July 14, 2009

Regulatory Division
South Permits Branch
Miami Regulatory Office
SAJ-1992-31093(NW-IMT)

Keys Energy Services
c/o Dale Finigan
1001 James St., PO Box 6100
Key West, FL 33041-1121

Dear Applicants:

Your application for a Department of the Army permit received on April 1, 2009, has been assigned number SAJ-1992-31093. A review of the information and drawings provided shows the proposed work is to repair 110 in-water transmission line poles, within footprint. The project is located in waters of the United States, adjacent to four separate portions of U.S. Highway 1: Garrison Bight, in the city of Key West - Palm Avenue to North Roosevelt; ±MM5 of Stock Island to ±MM10 of Big Coppitt Key; ±MM10 to ±MM30 of Big Pine Key; and ±MM30 to ±MM49 in the City of Marathon. The project is legally described as being located within the first and last Sections of Township 66-67 south, and Range 32-25 east, Monroe County, Florida.

Your project, as depicted on the enclosed drawings - pages 1-5 date stamped April 24, 2009 and pages 6-9 date stamped July 13, 2009 - is authorized by Nationwide Permit (NWP) Number #3. In addition, project specific conditions have been enclosed. This verification is valid until July 14, 2011. Please access the U.S. Army Corps of Engineers' (Corps) Jacksonville District's Regulatory web to access web links to view the Final Nationwide Permits, Federal Register Vol. 72, dated March 12, 2007, the Corrections to the Final Nationwide Permits, Federal Register 72, May 8, 2007, and the List of Regional Conditions. Our website address is as follows:

http://www.saj.usace.army.mil/Divisions/Regulatory/permitting_types_NWP.htm.

These files contain the description of the Nationwide Permit authorization, the Nationwide Permit general conditions, and the regional conditions, which apply specifically to this verification for NWP #3. Additionally, enclosed is a list of the six General Conditions, which apply to all Department of the Army

authorizations. You must comply with all of the special and general conditions and any project specific condition of this authorization or you may be subject to enforcement action. In the event you have not completed construction of your project within the specified time limit, a separate application or re-verification may be required.

The following special conditions are included with this verification:

1. Within 60 days of completion of the work authorized, the attached "Self-Certification Statement of Compliance" must be completed and submitted to the U.S. Army Corps of Engineers. Mail the completed form to the Regulatory Division, Enforcement Section, 9900 SW 107th Avenue, Suite 203, Miami, FL 33176.

2. The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the U.S. Army Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

3. No structure or work shall adversely affect or disturb properties listed in the National Register of Historic Places or those eligible for inclusion in the National Register. Prior to the start of work, the Permittee or other party on the Permittee's behalf, shall conduct a search in the National Register Information System (NRIS). Information can be found at; http://www.cr.nps.gov/nr/research/nris.htm. Information on properties eligible for inclusion in the National Register can be identified by contacting the Florida Master File Office by email at fmsfile@dos.state.fl.us or by telephone at 850-245-6440.

If unexpected cultural resources are encountered at any time within the project area that was not the subject of a previous cultural resource assessment survey, work should cease in the immediate vicinity of such discoveries. The permittee, or other party, should notify the SHPO immediately, as well as the appropriate Army Corps of Engineers office. After such notifications, project activities should not resume without verbal and/or written authorization from the SHPO.

If unmarked human remains are encountered, all work shall stop immediately, and the proper authorities notified in accordance with Section 872.05, Florida Statutes, unless on Federal lands. After such notifications, project activities on non-Federal lands shall not resume without verbal and/or written authorization from the Florida State Archaeologist for finds under his or her jurisdiction.

4. Prior to the initiation of any of the work authorized by this permit the Permittee shall install floating turbidity barriers with weighted skirts that extend to within 1 foot of the bottom around all work areas that are in, or adjacent to, surface waters. The turbidity barriers shall remain in place and be maintained until the authorized work has been completed and all erodible materials have been stabilized.

5. Prior to the initiation of any of the work authorized by this permit the Permittee shall install scaffolds and/or other protection sufficient to prevent damage to benthic communities.

6. The Permittee shall comply with the attached "Standard Manatee Conditions for In-Water Work - 2009" as provided in this permit.

7. The Permittee shall comply with the attached National Marine Fisheries Service's "Sea Turtle and Smalltooth Sawfish Construction Conditions" dated March 23, 2006, as provided in this permit.

8. The Permittee shall comply with the attached Sanctuary conditions for Authorization #FKNMS-2009-036 as provided in this permit.

9. Should any other regulatory agency require changes to the work authorized or obligated by this permit, the Permittee is advised that a modification to this permit instrument is required prior to initiation of those changes. It is the Permittee's responsibility to request a modification of this permit from the Miami Regulatory Office.

This letter of authorization does not obviate the necessity to obtain any other Federal, State, or local permits, which may be required. In Florida, projects qualifying for this NWP must be authorized under Part IV of Chapter 373 by the Department of Environmental Protection, a water management district under

§. 373.069, F.S., or a local government with delegated authority under §. 373.441, F.S., and receive Water Quality Certification (WQC) and Coastal Zone Consistency Concurrence (CZCC) (or a waiver), as well as any authorizations required by the State for the use of sovereign submerged lands. You should check State-permitting requirements with the Florida Department of Environmental Protection or the appropriate water management district.

This letter does not give absolute Federal authority to perform the work as specified on your application. The proposed work may be subject to local building restrictions mandated by the National Flood Insurance Program. You should contact your local office that issues building permits to determine if your site is located in a flood-prone area, and if you must comply with the local building requirements mandated by the National Flood Insurance Program.

If you are unable to access the internet or require a hardcopy of any of the conditions, limitations, or expiration date for the above referenced NWP, please contact Isla Turner at the letterhead address, by telephone at 305-779-6052, by fax at 305-526-7184, or by email at isla.m.turner@usace.army.mil.

Thank you for your cooperation with our permit program. The Corps Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to take a few minutes to visit the following link and complete our automated Customer Service Survey: http://regulatory.usacesurvey.com/. Your input is appreciated - favorable or otherwise.

Sincerely,

Isla Turner
Project Manager

Enclosures

Copy/ies Furnished:

CESAJ-RD-PE

GENERAL CONDITIONS
33 CFR PART 320-330
PUBLISHED FEDERAL REGISTER DATED 13 NOVEMBER 1986

1. The time limit for completing the work authorized ends on **date identified in the letter**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort of if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow a representative from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

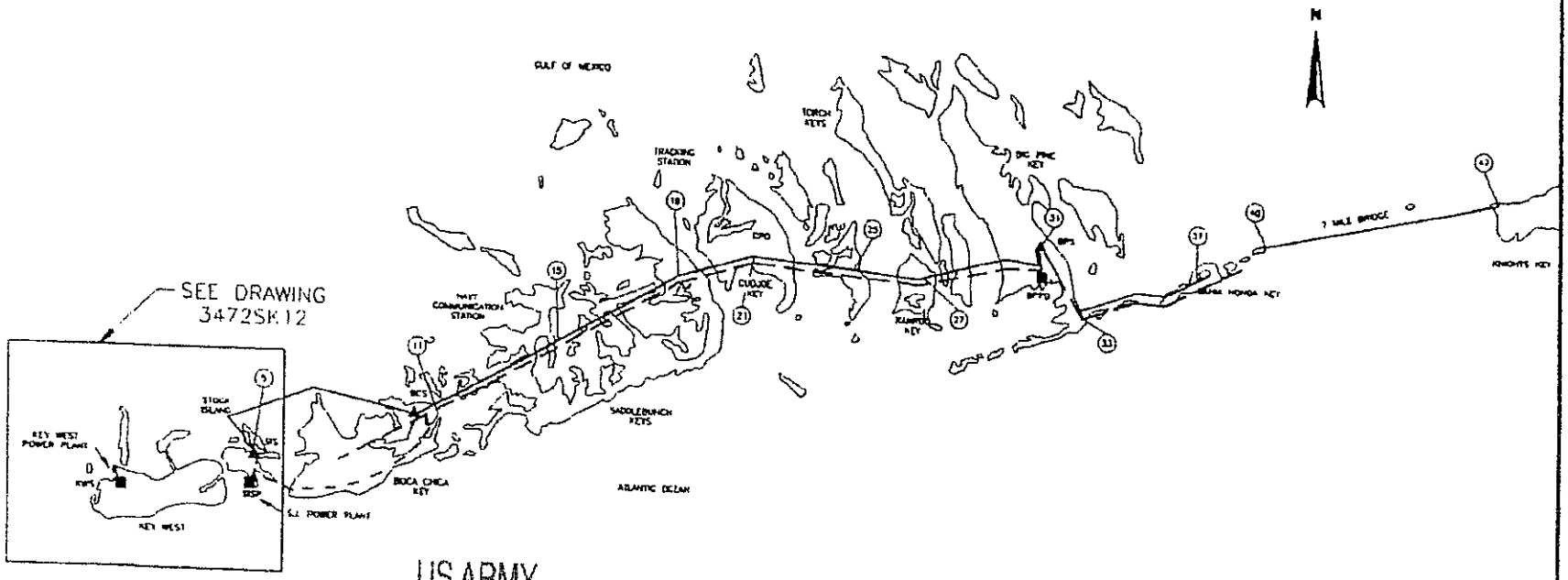
Florida Keys National Marine Sanctuary
33 East Quay Road
Key West, FL 33040

NOAA Florida Keys National Marine Sanctuary
Required Conditions for KEYS transmission line structure repairs
Authorization #FKNMS-2009-036

1. In keeping with section 7.0, "Environmental Compliance," of KEYS application to DEP and DA Corps, and the RAI response to NOAA dated May 21, 2009, seagrasses shall be avoided during all construction activities, including barge spudding, scaffold or other equipment placement, or other in-water work.

2. If changes occur to the number and scope of in-water transmission line structure repairs, NOAA FKNMS shall be re-consulted on the project. Contact Shelli Braynard (Shelli.Braynard@noaa.gov or 305-292-0311 x251) if needed for assistance.

3. In keeping with section 1.8, "Construction Sequence," of KEYS application to DEP and DA Corps, a detailed Pre-Construction Inspection shall occur for all structures. In addition to identifying and categorizing repairs for each structure, stony corals or other species of concern attached to submerged portions of the structures shall be identified and reported to NOAA as applicable. If stony corals are observed, KEYS shall contact Shelli Braynard (Shelli.Braynard@noaa.gov or 305-292-0311 x251) for guidance. NOAA may require additional information from KEYS including, but not limited to, a biological survey and/or coral rescue, relocation and mitigation plan. Coral relocation activities may also require specific authorization through issuance of a NOAA permit. The removal of or injury to stony coral is prohibited by FKNMS regulations at 15 CFR §922.163(a)(2).



US ARMY CORPS OF ENGINEERS

APR 24 2009

MIAMI REGULATORY OFFICE

COE #: 1992 31093

PROJECT MANAGER ZMT

LEGEND

KWS	KEY WEST STEAM PLANT
SISP	STOCK ISLAND STEAM PLANT
SIS	STOCK ISLAND SUBSTATION
BCS	BIG COPPITT SUBSTATION
CPD	CUDJOE PEAKING DIESEL
BPS	BIG PINE SUBSTATION
BPPD	BIG PINE PEAKING DIESEL
———	138 KV TRANSMISSION LINE
— —	13.8 KV DISTRIBUTION LINE
○	DESIGNATES MILES MARKER

DRAWN GAA
CHECKED SMH
APPROVED
APPROVED
DATE 6/5/97

R.W. BECK AND ASSOCIATES

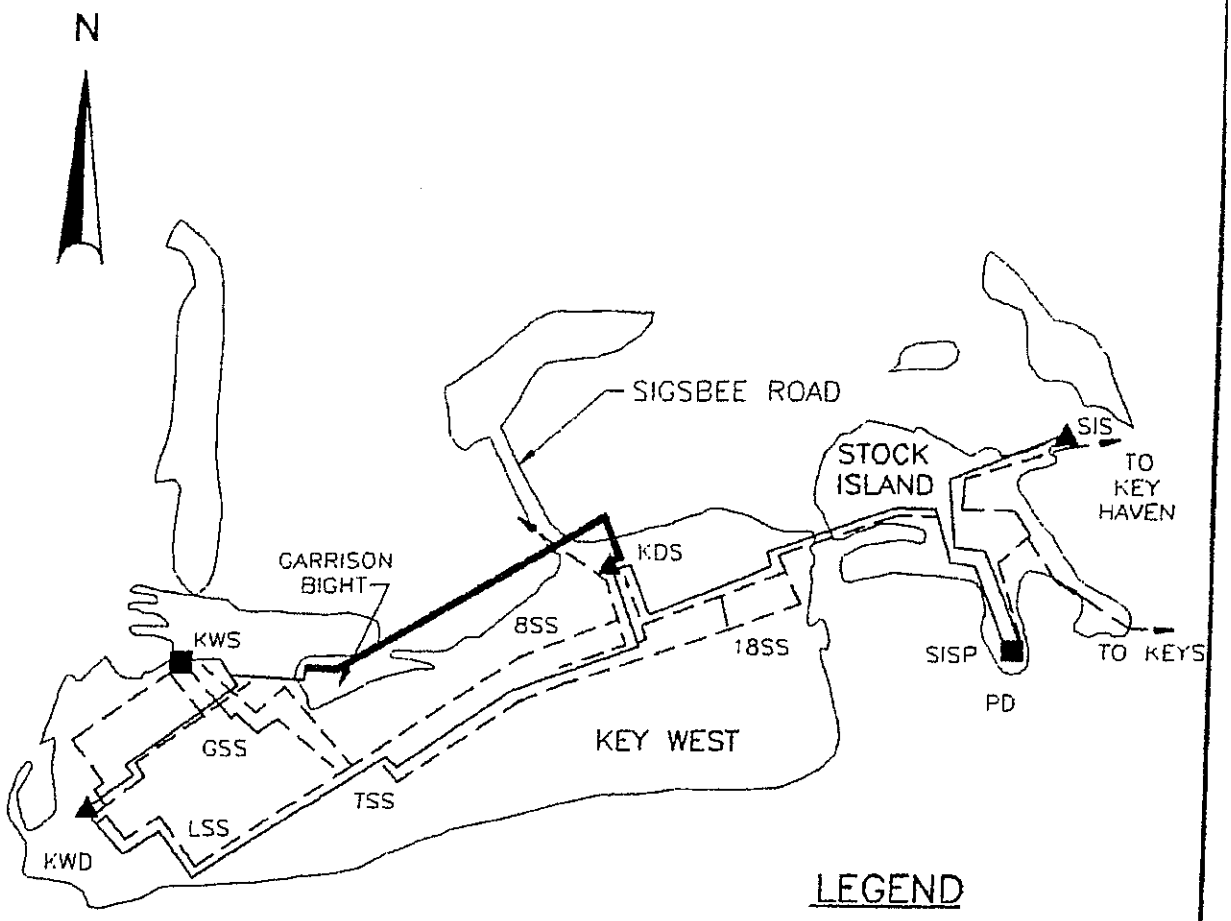
UTILITY BOARD OF THE CITY OF KEY WEST
KEY WEST, FLORIDA

EXHIBIT A
VICINITY MAP
LOWER FLORIDA KEYS
SHOWING 13.8 & 138KV LINES

SCALE

NO. 3472-SK-10

REV. 0



LEGEND

KWS	KEY WEST STEAM PLANT
KWD	KEY WSET DIESEL SUBSTATION
GSS	GRINNELL STREET SUBSTATION
LSS	LOUISA STREET SUBSTATION
TSS	THOMPSON STREET SUBSTATION
8SS	8th STREET SUBSTATION
KDS	KENNEDY DRIVE SUBSTATION
18SS	18th STREET SUBSTATION
SISP	STOCK ISLAND STEAM PLANT
PD	PEAKING DIESEL
SIS	STOCK ISLAND SUBSTATION
———	69 KV TRANSMISSION LINE
— —	13 8 KV DISTRIBUTION LINE
▬▬	POLE REPAIR PROJECT

US ARMY
CORPS OF ENGINEERS

APR 24 2009

MIAMI REGULATORY OFFICE 2 of 9

COE #: 1992 51093
PROJECT MANAGER: EMT

REVISIONS	DATE	BY	CKD	APP	APP

DRAWN CAA
CHECKED AMK
APPROVED
APPROVED
DATE 6/8/92

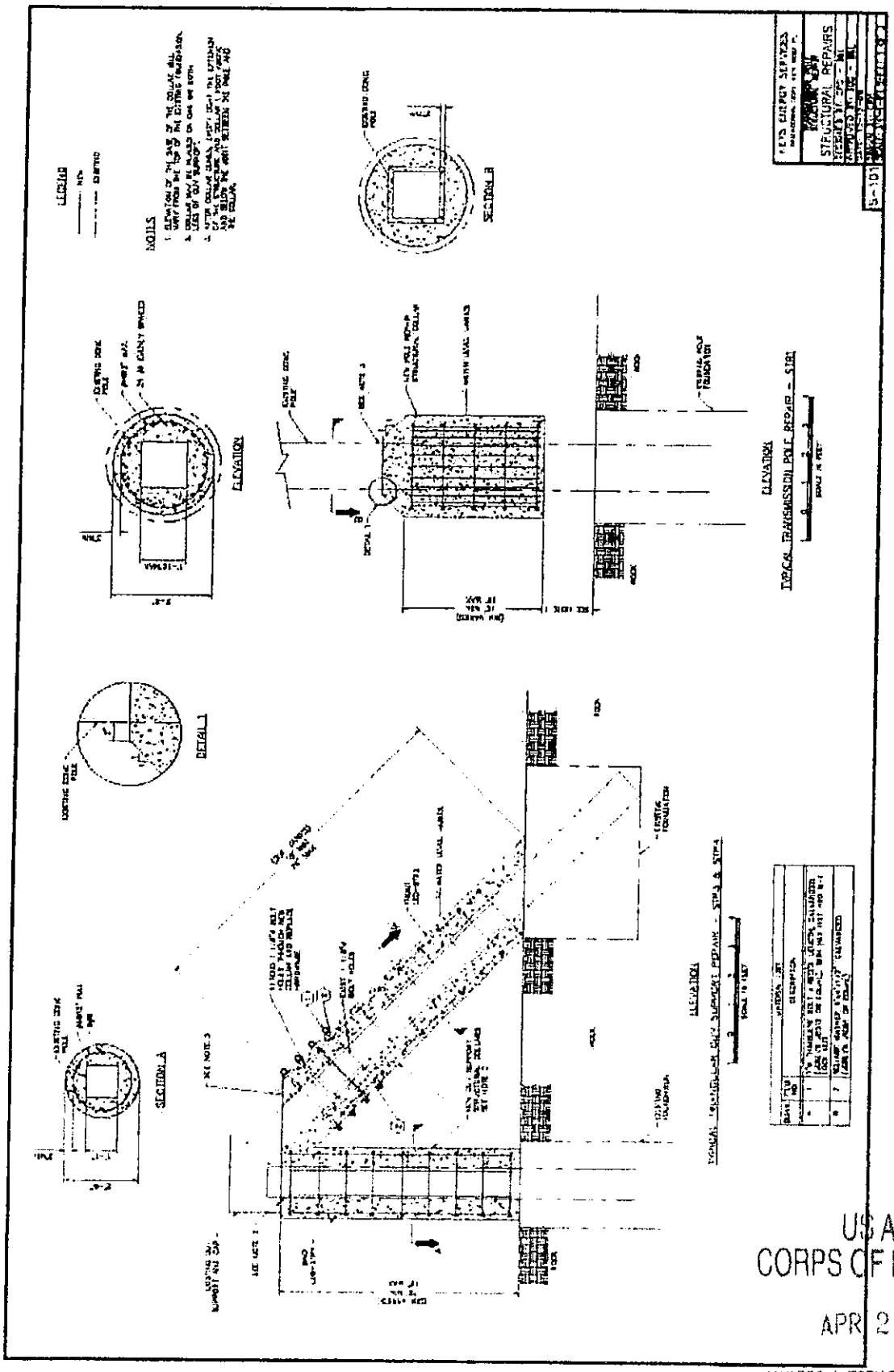
R.W. BECK AND ASSOCIATES

UTILITY BOARD OF THE CITY OF KEY WEST
KEY WEST, FLORIDA

EXHIBIT A1
VICINITY MAP
KEY WEST & STOCK ISLAND
SHOWING 13.8 & 69 KV LINES

SCALE

NO	REV
3472-SK-12	0



US ARMY
CORPS OF ENGINEERS

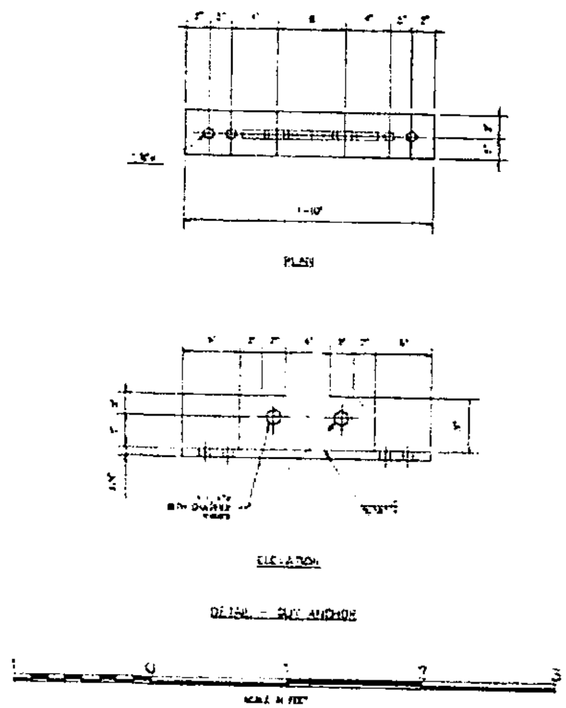
APR 24 2009

MIAMI REGULATORY OFFICE

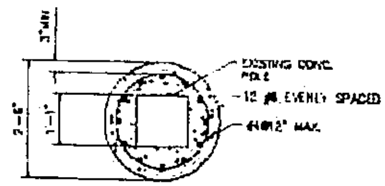
3 of 9

COE #: 1992 51093

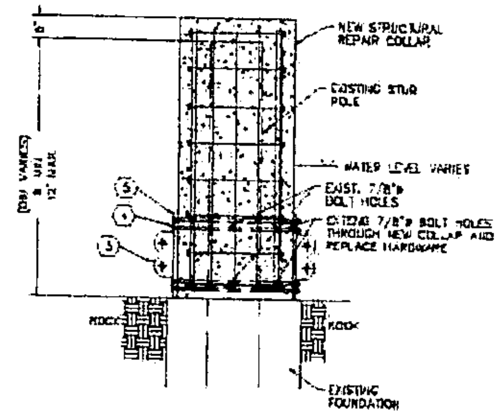
PROJECT MANAGER: IMT



DETAIL – GUY ANCHOR



PLAN



ELEVATION

TYPICAL STUB POLE REPAIR – STR 2

SCALE IN FEET

LEGEND

——— NEW

– – – – EXISTING

NOTES:

1. SEE CONTRACT SPECIFICATION SECTION 05500 – METAL FABRICATIONS FOR DETAILS ON GUY ANCHOR.

US ARMY
CORPS OF ENGINEERS

APR 24 2009

MIAMI REGULATORY OFFICE 4 of 9

COE # 1992 31093

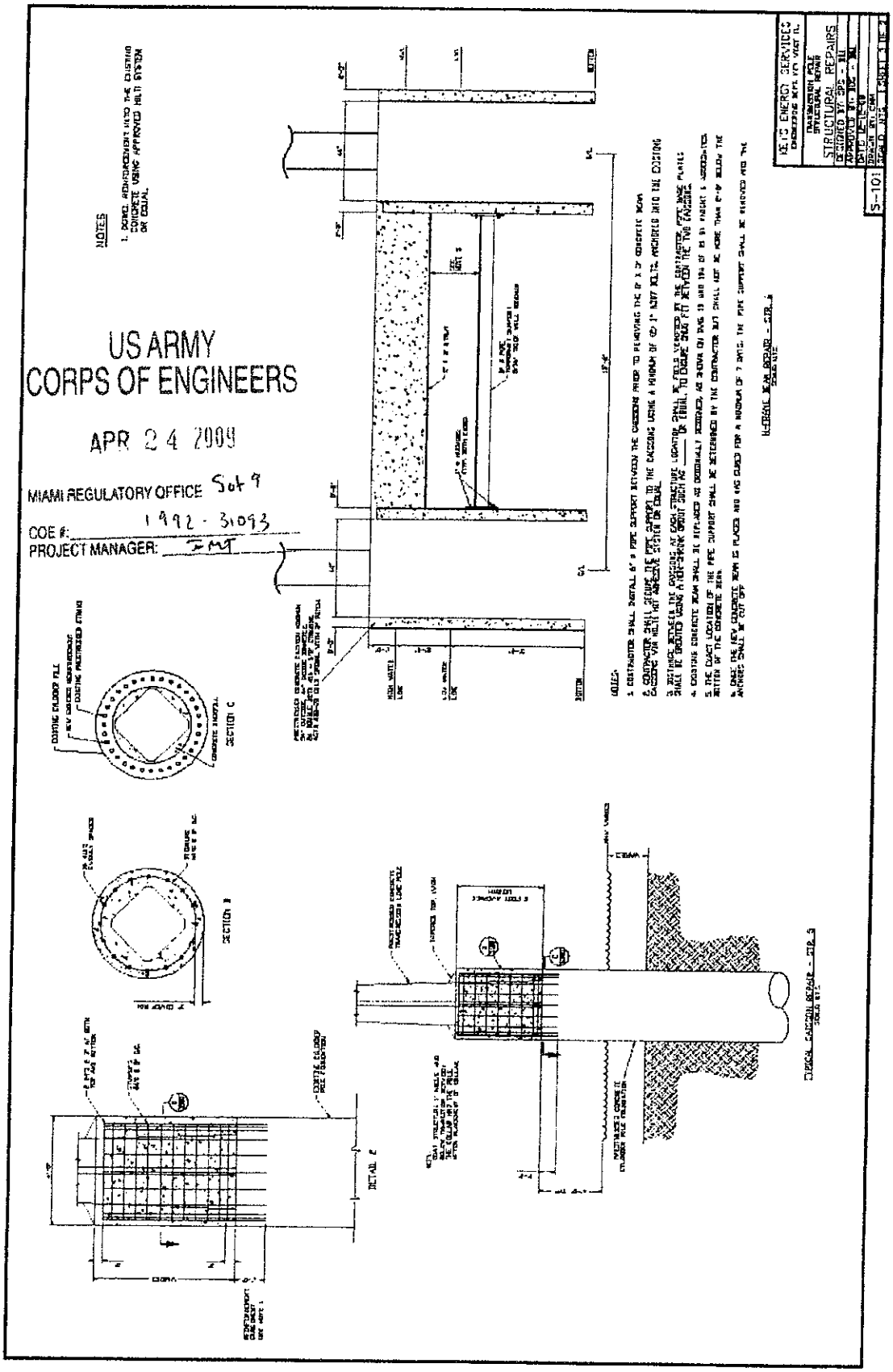
PROJECT MANAGER IMT

MATERIAL LIST		
QUAN.	ITEM NO.	DESCRIPTION
1	3	GUY ANCHOR, GALV. DETAILS SHOWN
4	4	3/4"ø BOLT, REQ'D. LENGTH WITH HEX NUT AND M-F LOCK NUT, GALV.
8	5	WASHER, ROUND, GALV. (JOSLYN J1068 OR EQUAL)

KEYS ENERGY SERVICES

STRUCTURAL REPAIRS

S-101


US ARMY
CORPS OF ENGINEERS
APR 24 2009
MIAMI REGULATORY OFFICE
COE #: 1992-31093
PROJECT MANAGER: JMT
NOTES
FPL ENERGY SERVICES
TRANSMISSION POLE STRUCTURAL REPAIRS
STRUCTURAL REPAIRS
S-101

KEYS Energy Services

SAJ-1992-31093 (NW-IMT), Keys Energy Services, Emergency Utility Pole Replacement

Means and methods for Pole Replacement

From: Joe Bronstad jbronsta@michels.us

Sent: Wednesday, October 11, 2017 3:09 PM

Subject: means and methods for Michels

To: Brown, Sandy sandy.brown@keysenergy.com

Attached is the means and methods for the work that Michels is conducting.

Barge Crew

Here is a brief description of the work on the barge.

All access to the existing damaged structures, as well as the installation of the new structures will be acquired utilizing Flexi Float Style barges. These barges will be moved around utilizing Long Reach Pontoon excavators. These machines are capable of maneuvering through the very shallow water that surrounds the structures due to the pontoon style tracks they are equipped with. In areas with deeper water a shallow water push boat will be utilized to maneuver the barges. It should be understood that the water surrounding these structures is extremely shallow in large areas that must be accessed. Depending on the tide the water depth around the structures ranges between 1 foot deep and roughly 3 feet. Due to this there is no way to get a drill rig or a crane for lifting the poles up to the pole sites without the barges as well as the Pontoon excavators dragging the bottom. All movements will be made as slowly and smoothly as possible as to minimize disturbance as well as minimize turbidity.

Drill Crew

Here is a brief procedure to go with that:

1) Set 72" x 10ft temporary steel casing and twist through overburden and into rock.
2) Clean out inside of the 72" casing to top of rock
3) Drill a 60" dia shaft through rock to final tip elevation of the shaft (12-15 ft)
4) Set a 54" dia CMP x 20 ft long and backfill the annulus with stone between the casing.
5) Twist/Pull the 72" x 10 ft temporary steel casing out.

Lineman

We will load crane and poles onto the barge. Then we will proceed to the location where the pole is to be set (In a noninvasive manner). We then stand the pole and set it in the hole provided by drill crew, plum and backfill with rock which will be contained be a casing around the pole covering the full depth of the foundation. Repeat for all remaining poles.

Joe Bronstad |HSE-Safety Coordinator

MICHELS

PO Box 128 |817 Main Street

Brownsville, WI 53006c

office: 920.720.5200 |cell: 920.219.2577

jbronsta@michels.us

Attachment 2

Brown, Sandy

From: Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov>
Sent: Thursday, October 12, 2017 11:08 AM
To: Phil Frank
Cc: Guardia-Montoya, Gletys CIV USARMY CESAJ (US); Lisa Symons; Sarah Fangman; Brown, Sandy; jbronsta@michels.us; Tejeda, Lynne
Subject: Re: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Phil,
Thank you again for your response regarding the Keys Energy pole replacement work. We acknowledge the importance of these repairs and urgency of removing downed/defunct equipment from waters of the sanctuary. For this reason, NOAA FKNMS agrees that the repairs should proceed at this time.

However, we are requesting that additional information be provided regarding the scope and timeline of the work so we have a better understanding of what will occur. From this information we will evaluate possible impacts to sanctuary resources and determine if any avoidance, minimization, or mitigation measures are required. Please provide the following information within the next day:

1) Confirmation that a total of 6 pole bases/foundations in water are being replaced.

2) Will the one pole base on uplands requiring replacement need to be accessed from the water, or will repairs be entirely shore-based?

3) Number of downed poles that will be removed and removal methods.

4) For downed poles, what portion of the structure will be removed? Will bases remain in place?

5) Number of pole bases being replaced that will require use of the pontoon excavator, and for those pole bases where the pontoon excavator is used: a) How many trips will be taken from shore/launch point to each pole (e.g., one round trip or more)?
b) Will the excavator travel in the same path when going to the pole and returning to shore?
c) Approximate distance across the seafloor that the excavator will be traveling to each pole.
d) Width/beam of the excavator's footprint on the seafloor.
e) Will the pontoon excavator be used for any other repairs on line 4, or just for replacing pole bases? If the excavator will be used for other repairs, please provide an explanation of what work will occur and the information requested in a, b, and c, above.

6) Additional information of the use of Flexi-Float barges:
a) At how many structures will the barges be used?
b) At how many structures are the barges expected to contact the seafloor or be pushed along the seafloor by the pontoon excavator?
c) Width/beam of the barge's footprint on the seafloor.

d) Will the barges be used for any other repairs on line 4, or just for replacing pole bases? If the barges will be used for other repairs, please provide an explanation of what work will occur and the information requested in a and b, above.

7) For upright poles that are being repaired, what portion of the structure will be removed? Will bases remain in place?

8) Where will the new pole bases be placed in relation to the existing ones (e.g., immediately adjacent or an entirely new location)? How will the new pole base locations be determined?

9) What is the anticipated timeline for repairs?

We appreciate your submitting this information to us because it will help us determine the level of impacts to sanctuary resources and allow us to provide a letter of authorization or permit for this work. In the interest of expediency, please feel free to schedule a time with me where these questions could be reviewed by phone with the project engineer or superintendent. We would like a written response as well for the permit record, but that could follow a phone meeting.

It is regretful that we are all in a situation such as this, and we recognize that the aftermath of a storm like Irma creates a lot of challenges and time sensitive needs. Clearly everyone is doing their best to respond to this major event. However, FKNMS is statutorily designated and has its own federal regulations (15 CFR 922 Subpart P) meant to protect sensitive marine resources; these include prohibitions on certain activities in the sanctuary, including seafloor disturbance. Regardless of whether Army Corps or DEP approve any given project, if the activity is prohibited by FKNMS regulations, a permit or authorization from FKNMS is required. Our office did not receive the Sept. 22, 2017 application requesting pole base replacements. Had it been forwarded to FKNMS for review, we would have reviewed what was proposed and provided approval as necessary at that time.

The methods proposed at this time are not the same as those described in the Sept. 22 application, which stated that replacement poles would be installed in the same location as those removed and the work would occur from shallow draft boats. At such time that the repair/replacement methods were determined to be different than what was requested in the application, the Army Corps and FKNMS should have been notified to review the revised plans and determine if any additional protective measures should be applied to the activity.

Again, we understand that this is a very unusual circumstance. We will continue to work with you to serve the needs of Keys Energy customers while recognizing our responsibility to protect the natural resources of the sanctuary.

We look forward to reviewing additional information about this work. Thank you for your cooperation with NOAA FKNMS.

Sincerely,
Joanne

Joanne Delaney
Resource Protection and Permit Coordinator
NOAA/Florida Keys National Marine Sanctuary
joanne.delaney@noaa.gov
(305) 809-4714
floridakeys.noaa.gov
Join us on Facebook

Follow us on Twitter

On Thu, Oct 12, 2017 at 10:12 AM, Phil Frank <terramar@bellsouth.net> wrote:

> Sounds good, please let us know once you have made a determination.
>
> Thank You.
>
> Philip A. Frank, Ph.D.
> Terramar Environmental Services, Inc.
> 1241 Crane Boulevard
> Sugarloaf Key, Florida 33042
> (305) 393-4200 terramar@bellsouth.net

On Oct 11, 2017, at 8:09 PM, Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov> wrote:

> Thank you, Phil, for your message and this additional information about the proposed project methods. I am reviewing them now and expect to touch base with the Army Corps and our management team early tomorrow, and will follow up with you then.
>
> Sincerely,
> Joanne
>
> ---
> Joanne Delaney
> Resource Protection and Permit Coordinator
> NOAA/Florida Keys National Marine Sanctuary
> joanne.delaney@noaa.gov
> (305) 809-4714
> floridakeys.noaa.gov
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> Follow us on Twitter
>
> On Wed, Oct 11, 2017 at 4:34 PM, Phil Frank <terramar@bellsouth.net> wrote:
>
> > Hi Gletys, Joanne:
> >
> > I'm adding a couple people to this email, Sandy Brown Engineer with KEYS, and Joe Bronstad, Michels, HSE-Safety Coordinator, to facilitate communication..
> >
> > When we applied for the emergency authorization for pole replacement on September 22, 2017, we made it clear that the power poles were to be replaced, not repaired. Replacement involves installing a new pole into the seafloor, in a new hole. We cannot remove the old pole foundations and re-use the old holes, it is a structural foundation and removal would do more damage than a new hole. Our emergency request to USACE is attached for reference. There is no change in the scope of the pole replacement request, everything is as originally requested and subsequently approved.
> >
> > At the time of application, we did not have details on means and methods from the contractor, since they had not mobilized and evaluated the situation in detail. We were in emergency mode and doing what we could to authorize the repairs, so we described the replacement as "utilizing standard utility construction methods". Now that Michels has assessed the situation, they have provided the attached means and methods that describe details of how they plan to complete this work.

Michels has been directed by FKNMS to cease work until issues regarding the USACE authorization are resolved. Michels has informed KEYS that the cost for delayed mobilization for the equipment and crew currently on site is $88,000.00 per day. Because KEYS mobilized Michels based on the USACE emergency authorization, the delay and associated costs are of great concern.

To reiterate, there is no change in the scope of the pole replacement request, everything is as originally requested and subsequently approved.

Please advise us of what we need to do to move ahead with this project as quickly as possible.

Thanks,

Philip A. Frank, Ph.D.
Terramar Environmental Services, Inc.
1241 Crane Boulevard
Sugarloaf Key, Florida 33042
(305) 393-4200 terramar@bellsouth.net

-----Original Message-----
From: Guardia-Montoya, Gletys CIV USARMY CESAJ (US) [mailto:Gletys.Guardia-Montoya@usace.army.mil]
Sent: Wednesday, October 11, 2017 2:44 PM
To: Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov>
Cc: Phil Frank <terramar@bellsouth.net>; Lisa Symons <Lisa.Symons@noaa.gov>; Sarah Fangman <Sarah.Fangman@noaa.gov>
Subject: RE: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Good afternoon All,

Joanne, thank you for providing this information and yes, the Corps will have to re-review the new scope of work/proposed project. If the authorized scope of work changes to result on greater impacts to resources and/or navigation than the previous reviewed, the Corps will have to look at the proposal again.

Phil, please provide revised plans and any other relevant information that depict the extend/scope of the new work.

Please keep me on the loop with the development of this.

Respectfully,

Gletys Guardia-Montoya
Project Manager
U.S. Army Corps of Engineers
Miami Permits Section
9900 SW 107th Avenue, Suite 203
Miami, FL 33176
(O) 305-526-2515

(C) 786-428-4889

-----Original Message-----
From: Joanne Delaney - NOAA Affiliate [mailto:joanne.delaney@noaa.gov]
Sent: Wednesday, October 11, 2017 11:37 AM
To: Guardia-Montoya, Gletys CIV USARMY CESAJ (US) <Gletys.Guardia-Montoya@usace.army.mil>
Cc: Phil Frank <terramar@bellsouth.net>; Lisa Symons <Lisa.Symons@noaa.gov>; Sarah Fangman <Sarah.Fangman@noaa.gov>
Subject: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Dear Gletys,

I emailed you on October 9, 2017 indicating that the repairs proposed by Keys Energy Services in the Lower Keys to transmission line 4 were exempt from FKNMS permitting because no sea floor alteration was occurring nor were any other prohibited activities being undertaken.

Information in today's Key West Citizen (page 2, attached) and calls with the US Coast Guard and barge foreman hired to undertake this work indicate that drilling into the sea floor of the sanctuary is necessary to set new cans and poles at at least six of the structures proposed for repair. The barge foreman assured me that KEYS is writing up a revised scope of work and will be sending it to me. I have advised the barge captain to stand down any in-water work until such time that NOAA FKNMS can fully review what is proposed.

Phil, I have not called the on-site supervisor yet, but have been advised his name is Joe Brondstat 920-219-2577.

Gletys, the previous determination by NOAA FKNMS that this work is exempt from permitting is no longer valid based on this new information. Presumably Army Corps will need to re-review the project as well. I am not as well versed in Florida DEP emergency permitting procedures but assume Phil will forward the new information to DEP as necessary.

Thank you,

Joanne

Joanne Delaney
Resource Protection and Permit Coordinator NOAA/Florida Keys National Marine Sanctuary
joanne.delaney@noaa.gov <mailto:joanne.delaney@noaa.gov>
(305) 809-4714
floridakeys.noaa.gov <Blockedhttp://floridakeys.noaa.gov>
Join us on Facebook <Blockedhttps://www.facebook.com/floridakeysnoaagov>
Follow us on Twitter <Blockedhttps://twitter.com/FloridaKeysNMS>

Attachment 3

Brown, Sandy

From: Phil Frank <terramar@bellsouth.net>
Sent: Tuesday, October 17, 2017 10:50 AM
To: 'Joanne Delaney - NOAA Affiliate'
Cc: 'Guardia-Montoya, Gletys CIV USARMY CESAJ (US)'; 'Lisa Symons'; 'Sarah Fangman'; Brown, Sandy; jbronsta@michels.us; Tejeda, Lynne; terramar@bellsouth.net
Subject: RE: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement
Attachments: FKNMS Responses for Line 4 Replacements.docx

Hi Joanne:

Please see attached our response to your questions regarding the KEYS Energy pole salvage and replacement project. We worked with KEYS and Michels Power to compile the most accurate responses possible.

Please let us know if you have questions or nee clarifications or additional information.

Michels Power will work 7 days a week until the work is complete.

Thank you.

Philip A. Frank, Ph.D.

Terramar Environmental Services, Inc.
1241 Crane Boulevard
Sugarloaf Key, Florida 33042
(305) 393-4200 terramar@bellsouth.net

From: Phil Frank [mailto:terramar@bellsouth.net]
Sent: Friday, October 13, 2017 3:29 PM
To: Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov>
Cc: Guardia-Montoya, Gletys CIV USARMY CESAJ (US) <Gletys.Guardia-Montoya@usace.army.mil>; Lisa Symons <Lisa.Symons@noaa.gov>; Sarah Fangman <Sarah.Fangman@noaa.gov>; Brown, Sandy <Sandy.Brown@keysenergy.com>; jbronsta@michels.us; Lynne.Tejeda@keysenergy.com
Subject: Re: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Hi Joanne,

I'm on the site now. They are still staging and set up. They plan to work 7 days. They plan to remove debris, drill holes, then set the cans and poles. This weekend they will be drilling and removing downed poles. They have one barge in the water and the pontoon excavator.

Thank You.

Philip A. Frank, Ph.D.
Terramar Environmental Services, Inc.
1241 Crane Boulevard
Sugarloaf Key, Florida 33042
(305) 393-4200 terramar@bellsouth.net

On Oct 13, 2017, at 1:37 PM, Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov> wrote:

> Dear Phil,
> It was good to chat with you, thanks for calling. Per our discussion, can you give us a sense of what level of in-water work will be occurring between now and when we have some additional details about the project methods and scope?
>
> Thanks,
> Joanne
>
> ---
> Joanne Delaney
> Resource Protection and Permit Coordinator
> NOAA/Florida Keys National Marine Sanctuary
> joanne.delaney@noaa.gov
> (305) 809-4714
> floridakeys.noaa.gov
> Join us on Facebook
> Follow us on Twitter
>
> On Fri, Oct 13, 2017 at 12:34 PM, Phil Frank <terramar@bellsouth.net> wrote:
>
> > Joanne:
> >
> > Thanks for your time this morning. This is to confirm we are wrapping up our response to FKNMS, and will have a complete submittal on Monday. We need to address a couple of items, and then allow for some internal review. Expect our response Monday.
> >
> > Thank you.
> >
> > Philip A. Frank, Ph.D.
> >
> > Terramar Environmental Services, Inc.
> > 1241 Crane Boulevard
> > Sugarloaf Key, Florida 33042
> > (305) 393-4200 terramar@bellsouth.net
> >
> > **From:** Joanne Delaney - NOAA Affiliate [mailto:joanne.delaney@noaa.gov]
> > **Sent:** Thursday, October 12, 2017 11:08 AM
> > **To:** Phil Frank <terramar@bellsouth.net>

Cc: Guardia-Montoya, Gletys CIV USARMY CESAJ (US) <Gletys.Guardia-Montoya@usace.army.mil>; Lisa Symons <Lisa.Symons@noaa.gov>; Sarah Fangman <Sarah.Fangman@noaa.gov>; Brown, Sandy <Sandy.Brown@keysenergy.com>; jbronsta@michels.us; Lynne.Tejeda@keysenergy.com
Subject: Re: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Dear Phil,

Thank you again for your response regarding the Keys Energy pole replacement work. We acknowledge the importance of these repairs and urgency of removing downed/defunct equipment from waters of the sanctuary. For this reason, NOAA FKNMS agrees that the repairs should proceed at this time.

However, we are requesting that additional information be provided regarding the scope and timeline of the work so we have a better understanding of what will occur. From this information we will evaluate possible impacts to sanctuary resources and determine if any avoidance, minimization, or mitigation measures are required. Please provide the following information within the next day:

1) Confirmation that a total of 6 pole bases/foundations in water are being replaced.

2) Will the one pole base on uplands requiring replacement need to be accessed from the water, or will repairs be entirely shore-based?

3) Number of downed poles that will be removed and removal methods.

4) For downed poles, what portion of the structure will be removed? Will bases remain in place?

5) Number of pole bases being replaced that will require use of the pontoon excavator, and for those pole bases where the pontoon excavator is used: a) How many trips will be taken from shore/launch point to each pole (e.g., one round trip or more)?
b) Will the excavator travel in the same path when going to the pole and returning to shore?
c) Approximate distance across the seafloor that the excavator will be traveling to each pole.
d) Width/beam of the excavator's footprint on the seafloor.

e) Will the pontoon excavator be used for any other repairs on line 4, or just for replacing pole bases? If the excavator will be used for other repairs, please provide an explanation of what work will occur and the information requested in a, b, and c, above.

6) Additional information of the use of Flexi-Float barges:

a) At how many structures will the barges be used?

b) At how many structures are the barges expected to contact the seafloor or be pushed along the seafloor by the pontoon excavator?

c) Width/beam of the barge's footprint on the seafloor.

d) Will the barges be used for any other repairs on line 4, or just for replacing pole bases? If the barges will be used for other repairs, please provide an explanation of what work will occur and the information requested in a and b, above.

7) For upright poles that are being repaired, what portion of the structure will be removed? Will bases remain in place?

8) Where will the new pole bases be placed in relation to the existing ones (e.g., immediately adjacent or an entirely new location)? How will the new pole base locations be determined?

9) What is the anticipated timeline for repairs?

We appreciate your submitting this information to us because it will help us determine the level of impacts to sanctuary resources and allow us to provide a letter of authorization or permit for this work. In the interest of expediency, please feel free to schedule a time with me where these questions could be reviewed by phone with the project engineer or superintendent. We would like a written response as well for the permit record, but that could follow a phone meeting.

It is regretful that we are all in a situation such as this, and we recognize that the aftermath of a storm like Irma creates a lot of challenges and time sensitive needs. Clearly everyone is doing their best to respond to this major event. However, FKNMS is statutorily designated and has its own federal regulations (15 CFR 922 Subpart P) meant to protect sensitive marine resources; these include prohibitions on certain activities in the sanctuary, including seafloor disturbance. Regardless of whether Army Corps or DEP approve any given project, if the activity is prohibited by FKNMS regulations, a permit or authorization from FKNMS is required. Our office did not receive the Sept. 22, 2017 application requesting pole base replacements. Had it been forwarded to FKNMS for review, we would have reviewed what was proposed and provided approval as necessary at that time.

The methods proposed at this time are not the same as those described in the Sept. 22 application, which stated that replacement poles would be installed in the same location as those removed and the work would occur from shallow draft boats. At such time that the repair/replacement methods were determined to be different than what was requested in the application, the Army Corps and FKNMS should have been notified to review the revised plans and determine if any additional protective measures should be applied to the activity.

Again, we understand that this is a very unusual circumstance. We will continue to work with you to serve the needs of Keys Energy customers while recognizing our responsibility to protect the natural resources of the sanctuary.

We look forward to reviewing additional information about this work. Thank you for your cooperation with NOAA FKNMS.

Sincerely,

Joanne

Joanne Delaney
Resource Protection and Permit Coordinator
NOAA/Florida Keys National Marine Sanctuary
joanne.delaney@noaa.gov
(305) 809-4714
floridakeys.noaa.gov
Join us on Facebook

Follow us on Twitter

On Thu, Oct 12, 2017 at 10:12 AM, Phil Frank <terramar@bellsouth.net> wrote:

> Sounds good, please let us know once you have made a determination.
>
> Thank You.
>
> Philip A. Frank, Ph.D.
>
> Terramar Environmental Services, Inc.
> 1241 Crane Boulevard
> Sugarloaf Key, Florida 33042
> (305) 393-4200 terramar@bellsouth.net
>
> On Oct 11, 2017, at 8:09 PM, Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov> wrote:
>
> > Thank you, Phil, for your message and this additional information about the proposed project methods. I am reviewing them now and expect to touch base with the Army Corps and our management team early tomorrow, and will follow up with you then.
> >
> > Sincerely,
> >
> > Joanne

Joanne Delaney
Resource Protection and Permit Coordinator
NOAA/Florida Keys National Marine Sanctuary
joanne.delaney@noaa.gov
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> Thanks,

Philip A. Frank, Ph.D.
Terramar Environmental Services, Inc.
1241 Crane Boulevard
Sugarloaf Key, Florida 33042
(305) 393-4200 terramar@bellsouth.net

-----Original Message-----
From: Guardia-Montoya, Gletys CIV USARMY CESAJ (US) [mailto:Gletys.Guardia-Montoya@usace.army.mil]
Sent: Wednesday, October 11, 2017 2:44 PM
To: Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov>
Cc: Phil Frank <terramar@bellsouth.net>; Lisa Symons <Lisa.Symons@noaa.gov>; Sarah Fangman <Sarah.Fangman@noaa.gov>
Subject: RE: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Good afternoon All,

Joanne, thank you for providing this information and yes, the Corps will have to re-review the new scope of work/proposed project. If the authorized scope of work changes to result on greater impacts to resources and/or navigation than the previous reviewed, the Corps will have to look at the proposal again.

Phil, please provide revised plans and any other relevant information that depict the extend/scope of the new work.

Please keep me on the loop with the development of this.

Respectfully,

Gletys Guardia-Montoya
Project Manager
U.S. Army Corps of Engineers
Miami Permits Section
9900 SW 107th Avenue, Suite 203
Miami, FL 33176
(O) 305-526-2515
(C) 786-428-4889

-----Original Message-----
From: Joanne Delaney - NOAA Affiliate [mailto:joanne.delaney@noaa.gov]
Sent: Wednesday, October 11, 2017 11:37 AM
To: Guardia-Montoya, Gletys CIV USARMY CESAJ (US) <Gletys.Guardia-Montoya@usace.army.mil>
Cc: Phil Frank <terramar@bellsouth.net>; Lisa Symons <Lisa.Symons@noaa.gov>; Sarah Fangman <Sarah.Fangman@noaa.gov>
Subject: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Dear Gletys,

I emailed you on October 9, 2017 indicating that the repairs proposed by Keys Energy

Services in the Lower Keys to transmission line 4 were exempt from FKNMS permitting because no sea floor alteration was occurring nor were any other prohibited activities being undertaken.

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Phil, I have not called the on-site supervisor yet, but have been advised his name is Joe Brondstat 920-219-2577.

Gletys, the previous determination by NOAA FKNMS that this work is exempt from permitting is no longer valid based on this new information. Presumably Army Corps will need to re-review the project as well. I am not as well versed in Florida DEP emergency permitting procedures but assume Phil will forward the new information to DEP as necessary.

Thank you,

Joanne

Joanne Delaney
Resource Protection and Permit Coordinator NOAA/Florida Keys National Marine Sanctuary joanne.delaney@noaa.gov <mailto:joanne.delaney@noaa.gov>
(305) 809-4714
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Join us on Facebook <Blockedhttps://www.facebook.com/floridakeysnoaagov>
Follow us on Twitter <Blockedhttps://twitter.com/FloridaKeysNMS>

RE: Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Date: October 17, 2017

Joanne:

Thank you for your detailed request for information. We have conferred with Michels, the contractor completing the work, and KEYS engineering staff, and have compiled responses based on the best current available information. The following are the FKNMS questions followed by our responses.

1) Confirmation that a total of 6 pole bases/foundations in water are being replaced.

Response: Yes, a total of six pole bases/foundations are being replaced. The in-water poles being replaced are illustrated below, and include pole #'s 75, 76, 77, 78, 80 and 81.

2) Will the one pole base on uplands requiring replacement need to be accessed from the water, or will repairs be entirely shore-based?

Response: Pole # 79 is in uplands along the shoreline, and this entire structure has been replaced, working shore-based and entirely from the uplands.

3) Number of downed poles that will be removed and removal methods.

Response: A total of six structures will removed from the project area. Poles that are already down will be strapped and lifted onto the work barges by a crane. Poles that remain standing but require replacement will be snapped off at the base by an excavator and then lifted out of water onto a barge using a crane.

Pole ID	Status
75	Pole broken at base, in water
76	Pole broken at base, in water
77	Pole broken at base, in water
78	Structure standing but compromised
79	Structure standing but compromised, in uplands
80	Pole broken at base, in water
81	Structure standing but compromised

4) For downed poles, what portion of the structure will be removed? Will bases remain in place?

Response: For all six poles to be replaced, the entire structure to be removed down to the seafloor. The only portion remaining will be the foundation that lies beneath the seafloor.

5) Number of pole bases being replaced that will require use of the pontoon excavator, and for those pole bases where the pontoon excavator is used:

a) How many trips will be taken from shore/launch point to each pole (e.g., one round trip or more)?

For each of the six poles to be replaced, a total of three round-trips with the pontoon excavator will be required. Work will occur from the Flexi-Float barges to the maximum extent practical

b) Will the excavator travel in the same path when going to the pole and returning to shore?

Yes, the pontoon excavator will travel same path each time traveling to and from poles. The repairs will be designed to minimize impacts to shallow marine habitats. The Flexi Float barges will be configured from land to reach the poles over the man-made deep channel as much as possible. See attached work plan for reference.

c) Approximate distance across the seafloor that the excavator will be traveling to each pole.

The pontoon excavators will be used to position Flexi Float barges, remove demolition debris from the site and support the main work effort from Flexi Float barges. A work area around each pole estimated at 50'per structure will be required. The pontoon barges can float in deep water, and can access poles using the minimum path, see attached work plan.

d) Width/beam of the excavator's footprint on the seafloor.

The pontoon excavator is 20'in width.

e) Will the pontoon excavator be used for any other repairs on line 4, or just for replacing pole bases? If the excavator will be used for other repairs, please provide an explanation of what work will occur and the information requested in a, b, and c, above.

The pontoon excavator will be used primarily for removal of demolition debris, pole repairs and to position Flexi Float barges. KEYS has confirmed that the stringing of overhead power lines will be completed using a helicopter, negating the need to use the pontoon excavators for this part of the work.

6) Additional information of the use of Flexi-Float barges:

a) At how many structures will the barges be used?

The flexi-float barges will be used at all six pole locations.

b) At how many structures are the barges expected to contact the seafloor or be pushed along the seafloor by the pontoon excavator?

We anticipate contact with the seafloor occurring at all six pole locations. The extent of contact will vary depending on the distance the poles are located from the deep-water channel. The intent is to minimize seafloor contact to the maximum extent practical.

c) Width/beam of the barge's footprint on the seafloor.

The barges are 50' wide and 100' in length.

d) Will the barges be used for any other repairs on line 4, or just for replacing pole bases? If the barges will be used for other repairs, please provide an explanation of what work will occur and the information requested in a and b, above.

Yes, barges will also be used to support bucket trucks for stringing overhead power lines between poles.

7) For upright poles that are being repaired, what portion of the structure will be removed? Will bases remain in place?

For all poles to be replaced, both those standing (2) and those failed and in the water (4), all portions of the structures extending above the seafloor will be removed, and all associated debris removed from the water.

8) Where will the new pole bases be placed in relation to the existing ones (e.g., immediately adjacent or an entirely new location)? How will the new pole base locations be determined?

Replacement poles will be effectively in the same location as failed poles, typically within 5-10 feet of the existing pole foundations. The 5-10' offset is required for structural stability in the limestone substrate.

9) What is the anticipated timeline for repairs?

The total time for repairs is estimated to be 30 days. Michels Power will work 7 days a week until the work is complete.

Work plan showing proposed access paths to the poles for replacement. The pontoon excavators and Flexi-float barges can use the deep-water channel to minimize impacts to shallow areas.

Photo of a pontoon excavator. These machines can float in deep water, and access poles using the minimum path possible over shallow waters.

Photo of the “cans” that will be installed to contain the pole and stabilizing fill materials.

Photo of flexi-float barge installed over deep water to access a power pole. The barges are installed perpendicular to the shoreline to minimize the need to work over shallow areas.

Flexi-float barge sections ready for deployment.

Drill rig being loaded onto the flexi float barge to access poles for replacement.

Attachment 4

Brown, Sandy

Subject: FW: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

From: Phil Frank [mailto:terramar@bellsouth.net]
Sent: Monday, October 23, 2017 9:20 AM
To: 'Joanne Delaney - NOAA Affiliate' <joanne.delaney@noaa.gov>
Cc: 'Guardia-Montoya, Gletys CIV USARMY CESAJ (US)' <Gletys.Guardia-Montoya@usace.army.mil>; 'Lisa Symons' <Lisa.Symons@noaa.gov>; 'Sarah Fangman' <Sarah.Fangman@noaa.gov>; Brown, Sandy <Sandy.Brown@KeysEnergy.com>; jbronsta@michels.us; Tejeda, Lynne <Lynne.Tejeda@KeysEnergy.com>; terramar@bellsouth.net
Subject: RE: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Good morning Joanne,

I had to travel last week and was not able to get to the site. I will go to the site today with these questions in-hand and discuss with the Michels team. I will respond based on that site visit and also provide an update of progress and anticipated schedule.

Thanks,

Philip A. Frank, Ph.D.

Terramar Environmental Services, Inc.
1241 Crane Boulevard
Sugarloaf Key, Florida 33042
(305) 393-4200 terramar@bellsouth.net

From: Joanne Delaney - NOAA Affiliate [mailto:joanne.delaney@noaa.gov]
Sent: Wednesday, October 18, 2017 8:37 AM
To: Phil Frank <terramar@bellsouth.net>
Cc: Guardia-Montoya, Gletys CIV USARMY CESAJ (US) <Gletys.Guardia-Montoya@usace.army.mil>; Lisa Symons <Lisa.Symons@noaa.gov>; Sarah Fangman <Sarah.Fangman@noaa.gov>; Brown, Sandy <Sandy.Brown@keysenergy.com>; jbronsta@michels.us; Lynne.Tejeda@keysenergy.com
Subject: Re: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Thank you, Phil, for your efforts.

We completely understand that there will be some decision-making at the site based on local conditions and project needs. Having some additional understanding of the scope of work, as requested below, would be most helpful for our continued review of the project and what level of permitting would be necessary.

Thanks again,
Joanne

Joanne Delaney
Resource Protection and Permit Coordinator
NOAA/Florida Keys National Marine Sanctuary
joanne.delaney@noaa.gov
(305) 809-4714
floridakeys.noaa.gov
Join us on Facebook
Follow us on Twitter

On Wed, Oct 18, 2017 at 8:34 AM, Phil Frank <terramar@bellsouth.net> wrote:

> Hi Joanne,
>
> I will take these questions to KEYS and Michels this am, I cannot immediately address this level of detail based om my site visits and meetings with Michels. I suspect there is some adaptive problem solving required for this job, so not every detail may be worked out in advance.
>
> I can confirm that KEYS and Michels are fully aware of the need to complete this work in the most environmentally-responsible manner possible, and are making every effort to minimize any adverse impacts, given the circumstances.
>
> Thank you.
>
> Philip A. Frank, Ph.D.
>
> Terramar Environmental Services, Inc.
> 1241 Crane Boulevard
> Sugarloaf Key, Florida 33042
> (305) 393-4200 terramar@bellsouth.net
>
> **From:** Joanne Delaney - NOAA Affiliate [mailto:joanne.delaney@noaa.gov]
> **Sent:** Tuesday, October 17, 2017 8:03 PM
> **To:** Phil Frank <terramar@bellsouth.net>
> **Cc:** Guardia-Montoya, Gletys CIV USARMY CESAJ (US) <Gletys.Guardia-Montoya@usace.army.mil>; Lisa Symons <Lisa.Symons@noaa.gov>; Sarah Fangman <Sarah.Fangman@noaa.gov>; Brown, Sandy <Sandy.Brown@keysenergy.com>; jbronsta@michels.us; Lynne.Tejeda@keysenergy.com
> **Subject:** Re: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Dear Phil,

Thank you for your detailed response to FKNMS's questions. I am sorry we were not able to connect today, I understand how busy things are right now for everyone. Upon review I had a few clarifying questions that would again aid us in fully understanding the work being conducted by Keys Energy. My questions below are numbered based on the responses you provided.

4) Will any drilling or cutting be necessary to remove the old pole foundations? The response to #3 says they will be snapped off at the sea floor, but is that possible given the width and strength of the existing foundations? I am referencing the FDOT Long Key Bridge repair project where 48" diameter concrete piles had to be torch cut underwater by commercial divers, and perhaps these foundations/bases are larger than that?

5a) Please further explain if the Flexi-Float barges and pontoon excavator will be used exclusive of one another or in conjunction. The brief methods document from Michel last week indicated they would be used together. Again, per the information requested, we are seeking some attempt at quantification of the amount of sea floor impacts that will occur from this equipment type and the pontoon excavators.

5c) We are seeking the distance/total area that the pontoon excavators and/or barges will be contacting the sea floor based on minimum travel paths and water depths Understandably if a travel path to a pole includes the deep water channel, we would only want to know what distance the excavators and barges will be in shallows and traversing seagrass or hardbottom habitats (e.g., 200 linear feet out of a total 1000 foot travel path).

The response to this item also states that a work area around each pole of 50' is required. Is that a 50' diameter circle centered on the pole, or a 50' area extending out from each pole (i.e., a 100' diameter area)?

5e & 6d) The responses here note that the overhead lines will be strung by helicopter and by barges supporting bucket trucks. Please clarify which method will be used.

8) Will the impacts from replacing the poles within 5-10 feet of the existing poles fall within the 50' around each pole noted in item 5c?

Thank you again for the additional project information. Please feel free to call me to discuss these questions if that is more efficient for you.

Sincerely,

Joanne

Joanne Delaney
Resource Protection and Permit Coordinator
NOAA/Florida Keys National Marine Sanctuary
joanne.delaney@noaa.gov
(305) 809-4714
floridakeys.noaa.gov
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On Tue, Oct 17, 2017 at 10:50 AM, Phil Frank <terramar@bellsouth.net> wrote:

Hi Joanne:

Please see attached our response to your questions regarding the KEYS Energy pole salvage and replacement project. We worked with KEYS and Michels Power to compile the most accurate responses possible.

Please let us know if you have questions or nee clarifications or additional information. Michels Power will work 7 days a week until the work is complete.

Thank you.

Philip A. Frank, Ph.D.

Terramar Environmental Services, Inc.
1241 Crane Boulevard
Sugarloaf Key, Florida 33042
(305) 393-4200 terramar@bellsouth.net

From: Phil Frank [mailto:terramar@bellsouth.net]
Sent: Friday, October 13, 2017 3:29 PM
To: Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov>
Cc: Guardia-Montoya, Gletys CIV USARMY CESAJ (US) <Gletys.Guardia-Montoya@usace.army.mil>; Lisa Symons <Lisa.Symons@noaa.gov>; Sarah Fangman <Sarah.Fangman@noaa.gov>; Brown, Sandy <Sandy.Brown@keysenergy.com>; jbronsta@michels.us; Lynne.Tejeda@keysenergy.com
Subject: Re: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Hi Joanne,

I'm on the site now. They are still staging and set up. They plan to work 7 days. They plan to remove debris, drill holes, then set the cans and poles. This weekend they will be drilling and removing downed poles. They have one barge in the water and the pontoon excavator.

Thank You.

Philip A. Frank, Ph.D.

Terramar Environmental Services, Inc.
1241 Crane Boulevard
Sugarloaf Key, Florida 33042
(305) 393-4200 terramar@bellsouth.net

On Oct 13, 2017, at 1:37 PM, Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov> wrote:

> Dear Phil,
> It was good to chat with you, thanks for calling. Per our discussion, can you give us a sense of what level of in-water work will be occurring between now and when we have some additional details about the project methods and scope?
> Thanks,
> Joanne
>
> ---
> Joanne Delaney
> Resource Protection and Permit Coordinator
> NOAA/Florida Keys National Marine Sanctuary
> joanne.delaney@noaa.gov
> (305) 809-4714
> floridakeys.noaa.gov
> Join us on Facebook
> Follow us on Twitter
>
> On Fri, Oct 13, 2017 at 12:34 PM, Phil Frank <terramar@bellsouth.net> wrote:
>
> > Joanne:
> >
> > Thanks for your time this morning. This is to confirm we are wrapping up our response to FKNMS, and will have a complete submittal on Monday. We need to address a couple of items, and then allow for some internal review. Expect our response Monday.
> >
> > Thank you.
> >
> > Philip A. Frank, Ph.D.
> >
> > Terramar Environmental Services, Inc.
> > 1241 Crane Boulevard
> > Sugarloaf Key, Florida 33042
> > (305) 393-4200 terramar@bellsouth.net
> >
> > **From:** Joanne Delaney - NOAA Affiliate [mailto:joanne.delaney@noaa.gov]
> > **Sent:** Thursday, October 12, 2017 11:08 AM
> > **To:** Phil Frank <terramar@bellsouth.net>
> > **Cc:** Guardia-Montoya, Gletys CIV USARMY CESAJ (US) <Gletys.Guardia-

Montoya@usace.army.mil>; Lisa Symons <Lisa.Symons@noaagov>; Sarah Fangman <Sarah.Fangman@noaa.gov>; Brown, Sandy <Sandy.Brown@keysenergycom>; jbronsta@michels.us; Lynne.Tejeda@keysenergy.com
Subject: Re: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Dear Phil,

Thank you again for your response regarding the Keys Energy pole replacement work. We acknowledge the importance of these repairs and urgency of removing downed/defunct equipment from waters of the sanctuary. For this reason, NOAA FKNMS agrees that the repairs should proceed at this time.

However, we are requesting that additional information be provided regarding the scope and timeline of the work so we have a better understanding of what will occur. From this information we will evaluate possible impacts to sanctuary resources and determine if any avoidance, minimization, or mitigation measures are required. Please provide the following information within the next day:

1) Confirmation that a total of 6 pole bases/foundations in water are being replaced.

2) Will the one pole base on uplands requiring replacement need to be accessed from the water, or will repairs be entirely shore-based?

3) Number of downed poles that will be removed and removal methods.

4) For downed poles, what portion of the structure will be removed? Will bases remain in place?

5) Number of pole bases being replaced that will require use of the pontoon excavator, and for those pole bases where the pontoon excavator is used: a) How many trips will be taken from shore/launch point to each pole (e.g., one round trip or more)?
b) Will the excavator travel in the same path when going to the pole and returning to shore?
c) Approximate distance across the seafloor that the excavator will be traveling to each pole.
d) Width/beam of the excavator's footprint on the seafloor.

e) Will the pontoon excavator be used for any other repairs on line 4, or just for replacing pole bases? If the excavator will be used for other repairs, please provide an explanation of what work will occur and the information requested in a, b, and c, above.

6) Additional information of the use of Flexi-Float barges:

a) At how many structures will the barges be used?

b) At how many structures are the barges expected to contact the seafloor or be pushed along the seafloor by the pontoon excavator?

c) Width/beam of the barge's footprint on the seafloor.

d) Will the barges be used for any other repairs on line 4, or just for replacing pole bases? If the barges will be used for other repairs, please provide an explanation of what work will occur and the information requested in a and b, above.

7) For upright poles that are being repaired, what portion of the structure will be removed? Will bases remain in place?

8) Where will the new pole bases be placed in relation to the existing ones (e.g., immediately adjacent or an entirely new location)? How will the new pole base locations be determined?

9) What is the anticipated timeline for repairs?

We appreciate your submitting this information to us because it will help us determine the level of impacts to sanctuary resources and allow us to provide a letter of authorization or permit for this work. In the interest of expediency, please feel free to schedule a time with me where these questions could be reviewed by phone with the project engineer or superintendent. We would like a written response as well for the permit record, but that could follow a phone meeting.

It is regretful that we are all in a situation such as this, and we recognize that the aftermath of a storm like Irma creates a lot of challenges and time sensitive needs. Clearly everyone is doing their best to respond to this major event. However, FKNMS is statutorily designated and has its own federal regulations (15 CFR 922 Subpart P) meant to protect sensitive marine resources; these include prohibitions on certain activities in the sanctuary, including seafloor disturbance. Regardless of whether Army Corps or DEP approve any given project, if the activity is prohibited by FKNMS regulations, a permit or authorization from FKNMS is required. Our office did not receive the Sept. 22, 2017 application requesting pole base replacements. Had it been forwarded to FKNMS for review, we would have reviewed what was proposed and provided approval as necessary at that time

The methods proposed at this time are not the same as those described in the Sept. 22 application, which stated that replacement poles would be installed in the same location as those removed and the work would occur from shallow draft boats. At such time that the repair/replacement methods were determined to be different than what was requested in the application, the Army Corps and FKNMS should have been notified to review the revised plans and determine if any additional protective measures should be applied to the activity.

Again, we understand that this is a very unusual circumstance. We will continue to work with you to serve the needs of Keys Energy customers while recognizing our responsibility to protect the natural resources of the sanctuary.

We look forward to reviewing additional information about this work. Thank you for your cooperation with NOAA FKNMS.

Sincerely,

Joanne

Joanne Delaney
Resource Protection and Permit Coordinator
NOAA/Florida Keys National Marine Sanctuary
joanne.delaney@noaa.gov
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On Thu, Oct 12, 2017 at 10:12 AM, Phil Frank <terramar@bellsouth.net> wrote:

> Sounds good, please let us know once you have made a determination.
>
> Thank You.
>
> Philip A. Frank, Ph.D.
>
> Terramar Environmental Services, Inc.
> 1241 Crane Boulevard
> Sugarloaf Key, Florida 33042
> (305) 393-4200 terramar@bellsouth.net
>
> On Oct 11, 2017, at 8:09 PM, Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov> wrote:
>
> > Thank you, Phil, for your message and this additional information about the proposed project methods. I am reviewing them now and expect to touch base with the Army Corps and our management team early tomorrow, and will follow up with you then.
> >
> > Sincerely,
> >
> > Joanne

Joanne Delaney
Resource Protection and Permit Coordinator
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On Wed, Oct 11, 2017 at 4:34 PM, Phil Frank <terramar@bellsouth.net> wrote:

> Hi Gletys, Joanne:
>
> I'm adding a couple people to this email, Sandy Brown Engineer with KEYS, and Joe Bronstad, Michels, HSE-Safety Coordinator, to facilitate communication..
>
> When we applied for the emergency authorization for pole replacement on September 22, 2017, we made it clear that the power poles were to be replaced, not repaired. Replacement involves installing a new pole into the seafloor, in a new hole We cannot remove the old pole foundations and re-use the old holes, it is a structural foundation and removal would do more damage than a new hole. Our emergency request to USACE is attached for reference. There is no change in the scope of the pole replacement request, everything is as originally requested and subsequently approved
>
> At the time of application, we did not have details on means and methods from the contractor, since they had not mobilized and evaluated the situation in detail. We were in emergency mode and doing what we could to authorize the repairs, so we described the replacement as "utilizing standard utility construction methods". Now that Michels has assessed the situation, they have provided the attached means and

methods that describe details of how they plan to complete this work.

Michels has been directed by FKNMS to cease work until issues regarding the USACE authorization are resolved. Michels has informed KEYS that the cost for delayed mobilization for the equipment and crew currently on site is $88,000.00 per day. Because KEYS mobilized Michels based on the USACE emergency authorization, the delay and associated costs are of great concern.

To reiterate, there is no change in the scope of the pole replacement request, everything is as originally requested and subsequently approved.

Please advise us of what we need to do to move ahead with this project as quickly as possible.

Thanks,

Philip A. Frank, Ph.D.
Terramar Environmental Services, Inc.
1241 Crane Boulevard
Sugarloaf Key, Florida 33042
(305) 393-
4200 terramar@bellsouth.net

-----Original Message-----
From: Guardia-Montoya, Gletys CIV USARMY CESAJ (US)
[mailto:Gletys.Guardia-Montoya@usace.army.mil]
Sent: Wednesday, October 11, 2017 2:44 PM
To: Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov>
Cc: Phil Frank <terramar@bellsouth.net>; Lisa Symons <Lisa.Symons@noaa.gov>; Sarah Fangman <SarahFangman@noaa.gov>
Subject: RE: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole

Replacement

Good afternoon All,

Joanne, thank you for providing this information and yes, the Corps will have to re-review the new scope of work/proposed project. If the authorized scope of work changes to result on greater impacts to resources and/or navigation than the previous reviewed, the Corps will have to look at the proposal again.

Phil, please provide revised plans and any other relevant information that depict the extend/scope of the new work.

Please keep me on the loop with the development of this.

Respectfully,

Gletys Guardia-Montoya
Project Manager
U.S. Army Corps of Engineers
Miami Permits Section
9900 SW 107th Avenue, Suite 203
Miami, FL 33176
(O) 305-526-2515
(C) 786-428-4889

-----Original Message-----
From: Joanne Delaney - NOAA Affiliate [mailto:joanne.delaney@noaa.gov]
Sent: Wednesday, October 11, 2017 11:37 AM
To: Guardia-Montoya, Gletys CIV USARMY CESAJ (US) <Gletys.Guardia-Montoya@usace.army.mil>
Cc: Phil Frank <terramar@bellsouth.net>; Lisa Symons <Lisa.Symons@noaa.gov>; Sarah Fangman <Sarah.Fangman@noaa.gov>
Subject: [EXTERNAL] Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Dear Gletys,

I emailed you on October 9, 2017 indicating that the repairs proposed by Keys Energy Services in the Lower Keys to transmission line 4 were exempt from FKNMS permitting because no sea floor alteration was occurring nor were any other prohibited activities being undertaken.

Information in today's Key West Citizen (page 2, attached) and calls with the US Coast Guard and barge foreman hired to undertake this work indicate that drilling into the sea floor of the sanctuary is necessary to set new cans and poles at at least six of the structures proposed for repair. The barge foreman assured me that KEYS is writing up a revised scope of work and will be sending it to me. I have advised the barge captain to stand down any in-water work until such time that NOAA FKNMS can fully review what is proposed.

Phil, I have not called the on-site supervisor yet, but have been advised his name is Joe Brondstat 920-219-2577.

Gletys, the previous determination by NOAA FKNMS that this work is exempt from permitting is no longer valid based on this new information Presumably Army Corps will need to re-review the project as well. I am not as well versed in Florida DEP emergency permitting procedures but assume Phil will forward the new information to DEP as necessary.

Thank you,

Joanne

Joanne Delaney
Resource Protection and Permit Coordinator NOAA/Florida Keys National Marine Sanctuary
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RE: Revoking previous determination -- 1992-31093-NW-GGM, Keys Energy Services, Emergency Utility Pole Replacement

Date: October 23, 2017

Joanne:

Thank you for your request for additional information dated October 17, 2017. We have conferred with Michels, the contractor completing the work, and KEYS engineering staff, and have compiled the following responses based on the best current available information. The following are the FKNMS questions followed by our responses.

4) Will any drilling or cutting be necessary to remove the old pole foundations? The response to #3 says they will be snapped off at the sea floor, but is that possible given the width and strength of the existing foundations? I am referencing the FDOT Long Key Bridge repair project where 48" diameter concrete piles had to be torch cut underwater by commercial divers, and perhaps these foundations/bases are larger than that?

Response: The poles that are down have been removed, and the poles that were upright but damaged were snapped over using the excavator. The pole bases that remain standing will be cut off at the seafloor using a cutting saw as close to the seafloor / mud line as possible. All demolition debris will be removed from the old pole foundations.

5a) Please further explain if the Flexi-Float barges and pontoon excavator will be used exclusive of one another or in conjunction. The brief methods document from Michel last week indicated they would be used together. Again, per the information requested, we are seeking some attempt at quantification of the amount of sea floor impacts that will occur from this equipment type and the pontoon excavators.

Response: Correct, the pontoon excavator and barges work together in shallow areas. The pontoon excavator is used to position the barges for drilling and pole placement. The water at the pole replacement sites is too shallow for traditional push boats to position the barges. The contractor is working with the tides to minimize seafloor impacts, scheduling installation events to coincide with maximum water depth and allow the barges access to pole locations. Impacts to the seafloor from the pontoon excavators is minimized by the large area of the tracks, resulting in low pressure footprint due to the large area the loads are distributed over.

5c) We are seeking the distance/total area that the pontoon excavators and/or barges will be contacting the sea floor based on minimum travel paths and water depths. Understandably if a travel path to a pole includes the deep water channel, we would only want to know what distance the excavators and barges will be in shallows and traversing seagrass or hardbottom habitats (e.g., 200 linear feet out of a total 1000 foot travel path).

Response: The attached graphic shows the travel path for the pontoon excavator and flexi-float barges. The areas of deep water are used to access pole locations, so that access in areas of shallow

water are minimized. It is estimated that shallow water access will need to occur over appx. 920 linear feet to access the pole repair locations.

The response to this item also states that a work area around each pole of 50' is required. Is that a 50' diameter circle centered on the pole, or a 50' area extending out from each pole (i.e., a 100' diameter area)?

Response: The 50' work area around each pole was estimated by the contractor based on the length of the pontoon excavator and the need to access the pole site to manipulate barges and poles. These machines can turn in a small area, however we should assume that the area needed to maneuver is 50' from the pole center in all directions, e.g. a 100' diameter area centered at each pole replacement site.

5e & 6d) The responses here note that the overhead lines will be strung by helicopter and by barges supporting bucket trucks. Please clarify which method will be used.

Response: The Contractor has indicated that the overhead lines will be strung by a helicopter from a large spool of line stationed on a barge. Linemen will still require access to each pole for rigging, and that will occur using a bucket truck that is stationed on a flexi-float barge. However the barges can be positioned at each pole for rigging using the aforementioned travel paths, and the barge will not need to traverse from pole to pole in shallow water, as was initially envisioned. The use of a helicopter is a significant additional expense to the project that was selected by KEYS in order to minimize seafloor impacts.

8) Will the impacts from replacing the poles within 5-10 feet of the existing poles fall within the 50' around each pole noted in item 5c?

Response: Yes, as mentioned previously, the new pole will be positioned as close to the existing pole as possible, generally 5-10 feet, and will fall within the established work area.

Estimated shallow water access paths with distances traversed.

Attachment 5

Brown, Sandy

From: Joanne Delaney - NOAA Affiliate <joanne.delaney@noaa.gov>
Sent: Tuesday, October 24, 2017 12:06 PM
To: Gletys Guardia-Montoya
Cc: Phil Frank; Sarah Fangman; Lisa Symons; Stephen Werndli; Beth Dieveney - NOAA Federal; Brown, Sandy; jbronsta@michels.us; Tejeda, Lynne
Subject: FKNMS authorization -- Keys Energy Services, SAJ-1992-31093 (NW-GGM)
Attachments: FKNMS-2017-098_Keys Energy LOA.pdf

Dear Gletys,
Attached to this message is letter of authorization #FKNMS-2017-098 for the subject project, which proposes to conduct utility pole and infrastructure repairs and replacements at various Gulf of Mexico and Atlantic Ocean sites in the Lower Florida Keys. The DA Corps is processing this project under emergency permitting in response to Hurricane Irma.

As you know, FKNMS has been reviewing project information for the replacement and repair of seven utility poles on the Gulfside of Key West and Rockland Key. Today we have also reviewed preliminary information on the replacement/repair of two poles on the oceanside near Cow Key Channel Bridge. The attached approval letter is meant to address both projects as the repairs are similar in location, scope, and methodology.

NOAA FKNMS appreciates the efforts Keys Energy Services is undertaking to minimize impacts to sanctuary resources to the greatest extent possible while conducting these critical repairs. The attached authorization contains several required conditions for removing all defunct utility materials and providing post-construction biological surveys of areas where equipment necessarily contacted the sea bed. These actions will aid in protecting sanctuary resources and will provide information from which future, similar work can be more accurately evaluated.

If you have any questions about the attached authorization or NOAA's determination on this project, please do not hesitate to contact me.

Thank you for your continued coordination with FKNMS.

Sincerely,
Joanne

Joanne Delaney
Resource Protection and Permit Coordinator
NOAA/Florida Keys National Marine Sanctuary
joanne.delaney@noaa.gov
(305) 809-4714
floridakeys.noaa.gov
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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

Florida Keys National Marine Sanctuary
33 East Quay Road
Key West, FL 33040

October 24, 2017

Ms. Gletys Guardia-Montoya
Department of the Army Jacksonville District Corps of Engineers
Miami Regulatory Office
9900 Southwest 107th Avenue, Suite 203
Miami, FL 33176

Dear Ms. Guardia-Montoya:

NOAA Florida Keys National Marine Sanctuary (FKNMS or sanctuary) has reviewed Department of the Army Corps of Engineers (DA Corps) application no. 1992-31093 (NW-GGM). The applicant, Keys Energy Services, is requesting a permit to conduct emergency repairs and replacements of utility poles at various Gulf of Mexico and Atlantic Ocean locations in the Lower Florida Keys, Monroe County, FL. The project as proposed is prohibited by FKNMS regulations at 15 CFR § 922.163(a)(3).

The DA Corps is processing this project under emergency permitting in response to Hurricane Irma.

NOAA appreciates the applicant's willingness to remove all defunct and broken utility poles, wires, bases, and other materials from waters of the sanctuary, and to conduct post-construction benthic surveys of the shallow project areas. These efforts will ensure that natural habitats of the sanctuary are maintained and will provide data to inform future decision making about similar repairs. Therefore, pursuant to 15 CFR § 922.49, NOAA does not object to the issuance of a DA Corps permit for the project as proposed, and a separate FKNMS permit will not be required, **if the attached measures are enacted by the applicant (Keys Energy Services) or their agent/contractor**. These terms and conditions have been deemed reasonable to protect sanctuary resources and qualities per NOAA authority at 15 CFR § 922.49.

This determination is only applicable to DA Corps application no. 1992-31093 (NW-GGM). If any changes are made to the project description in this application, DA Corps shall notify NOAA and this letter of authorization will be rescinded. Upon such notification, NOAA shall re-review the project and special conditions and provide a supplementary determination. Further information on sanctuary permit review and authorization is set forth at 15 CFR § 922.49.

This project has been assigned authorization #FKNMS-2017-098. Please contact FKNMS Permit Coordinator Joanne Delaney at Joanne.Delaney@noaa.gov if you have questions about NOAA's determination on this project or the attached conditions. Thank you for your continued cooperation with NOAA Florida Keys National Marine Sanctuary.

Sincerely,

Sarah Fangman
Superintendent

cc: Phil Frank, Terramar Environmental Services

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

Florida Keys National Marine Sanctuary
33 East Quay Road
Key West, FL 33040

NOAA Florida Keys National Marine Sanctuary
Required Conditions for Keys Energy Services
Lower Keys utility pole repairs and replacements
Authorization #FKNMS-2017-098

1. All defunct and broken utility materials (poles, bases / foundations, wires, and other materials) must be removed from the sanctuary and disposed of at an authorized upland waste disposal facility.

2. A post-construction benthic survey shall be submitted to FKNMS within 30 days of construction completion at each line. The survey shall include a qualitative assessment of all work areas traversed by the pontoon excavators and Flexi Float barges where this equipment came in contact with the sea floor. The qualitative assessment shall provide a description of adjacent, un-impacted areas for comparison purposes. Photos shall be included to document the impacted and un-impacted area at each pole. The survey(s) shall be submitted to Joanne Delaney, FKNMS Permit Coordinator (Joanne.Delaney@noaa.gov).

3. No demolition or construction debris may be deposited in waters of FKNMS at or near the project site at any time. A post-construction benthic survey to inspect compliance with this condition may be required. Should construction debris be evident in adjacent waters, the applicant or his agent will be required to clean up all items immediately and mitigate for any resource injury.

Attachment 6

Brown, Sandy

From: Brown, Sandy
Sent: Wednesday, February 28, 2018 7:56 AM
To: Joanne Delaney - NOAA Affiliate
Cc: sarah.fangman@noaa.gov; stephen.werndli@noaa.gov; Tejeda, Lynne; Sabino, Dan; Phil Frank; Brown, Sandy
Subject: RE: Keys Energy Services (KEYS) Line 4 Benthic Survey for #FKNMS-2017-098
Attachments: KEYS Line 4 Damage Assessment - 2.27.18.pdf

Ms. Delaney,
Please see the responses below.

Sandy Brown
Project Engineer
sandy.brown@keysenergy.com
office 305.295.1050
cell 305-393-7626

KEYS Energy Services
1001 James Street
Key West, FL 33040

"The sea is selective, slow at recognition of effort and aptitude but fast in the sinking of the unfit."
Felix Riesenberg

From: Joanne Delaney - NOAA Affiliate [mailto:joanne.delaney@noaa.gov]
Sent: Monday, February 26, 2018 7:50 PM
To: Brown, Sandy <Sandy.Brown@KeysEnergy.com>
Cc: sarah.fangman@noaa.gov; stephen.werndli@noaa.gov; Tejeda, Lynne <Lynne.Tejeda@KeysEnergy.com>; Sabino, Dan <Dan.Sabino@KeysEnergy.com>; Phil Frank <terramar@bellsouth.net>
Subject: Re: Keys Energy Services (KEYS) Line 4 Benthic Survey for #FKNMS-2017-098

Dear Ms. Brown,
As with the KEYS Line 3 report, thank you for transmitting this post-repair survey to FKNMS. And again, please accept my apologies for the delay in responding.

I will be reviewing the report with our management team shortly, but was hoping that you and Phil could answer some questions and provide more information, as follows:

1) When will the remaining pole bases of the line 4 structures be removed? Will they be cut flush at the sea bed, pulled out/extracted, or be removed by some other means?

Response: KEYS anticipates the remaining pole bases to be removed by March 31 by the contractor. They will be cut flush to the sea bed.

2) Have all of the pole hardware pieces and downed conductor wire been removed from the sanctuary, or is there remaining salvage of those items to be completed?

Response: Yes, all the hardware pieces and downed conductor wire have been removed.

3) Please clarify the areal quantification provided on page 3 of the report, which states that the area traversed by equipment as 9.8 acres, but further notes that ~1.6 of those acres was hardbottom habitat that did not sustain any damage. This would seem to equate to 8.2 acres of damage (9.8 - 1.6); however, the following paragraph notes observable damage to 10.5 acres of habitat. How was the 10.5 acres figure derived?

Response: The area traversed by equipment was mapped and calculated to be 10.5 acres. Of the 10.5 acres, appx. 1.6 acres includes a hardbottom area that exhibited little observable damage. The 9.8-acre reference was an error, and this has been corrected in the revised report.

4) Please clarify the legend in the figure on page 7 of the report (3rd figure in attachment 1). What does the GE crop / red, green, and blue bands refer to?

Response: The "GE CCROP RGB" identified on the legend of Map 1 of the report is a legend reference to a Google Earth image that was imported into the ARCGIS mapping software. This reference has been deleted from the revised report.

Thank you very much,
Joanne

Joanne Delaney
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Follow us on Twitter

On Fri, Feb 16, 2018 at 4:40 PM, Brown, Sandy <Sandy.Brown@keysenergy.com> wrote:

> Ms. Delaney,
>
> Enclosed is a Cover Letter and Benthic Survey completed by KEYS for Line 4 138kV Transmission Line. This fulfills the obligation stated in NOAA Florida Keys National Marine Sanctuary Letter of Authorization #FKNMS-2017-098.
>
> Sandy Brown
>
> Project Engineer
>
> sandy.brown@keysenergy.com

office 305.295.1050

cell 305-393-7626

KEYS Energy Services

1001 James Street

Key West, FL 33040

“The sea is selective, slow at recognition of effort and aptitude but fast in the sinking of the unfit.”

Felix Riesenberg

Terramar Environmental Services, Inc.
1241 Crane Boulevard
Sugarloaf Key, Florida 33042
(305) 393-4200 terramar@bellsouth.net

MEMORANDUM

Date: February 9, 2018

To: Dan Sabino
Director of Engineering
Keys Energy Services (KEYS)

From: Philip A. Frank, Senior Biologist

RE: KEYS Hurricane Irma Emergency Repairs, Line 4 Damage Assessment

We completed a resource damage assessment on poles on Line 4 that were repaired following Hurricane Irma. The assessment was conducted on January 22-24, 2018. This assessment was stipulated by the Florida Keys National Marine Sanctuary (FKNMS) per the October 24, 2017 Letter of Authorization (FKNMS-2017-098) provided to the U.S. Army Corps of Engineers, Jacksonville District. Required Condition 32 states:

A post-construction benthic survey shall be submitted to FKNMS within 30 days of construction completion at each line. The survey shall include a qualitative assessment of all work areas traversed by the pontoon excavators and Flexi Float barges where this equipment came in contact with the sea floor. The qualitative assessment shall provide a description of adjacent, un-impacted areas for comparison purposes. Photos shall be included to document the impacted and un-impacted area at each pole.

Hurricane repairs were completed on six in-water poles at Line 4: 75, 76, 77, 78, 80 and 81. Work on Line 4 started on October 9, 2017 and was substantially complete on November 12, 2017. The only remaining in-water work remaining on Line 4 is to remove the remnants of the abandoned poles. The work was completed by Michels Power working under contract to KEYS. Methods utilized to remove damaged poles and power lines, and install replacement poles, were adaptive and utilized a combination of Flexi-Float sectional barges, amphibious pontoon excavators, and traditional utility equipment. The work was complicated by the shallow waters surrounding the poles, typically between 1-3' in depth.

The methods for the damage assessment at Line 4 utilized a survey drone to capture an accurate georeferenced image of the site. ArcGIS mapping software was then used to digitize areas of obvious damage. Aerial base maps were taken to the field to ground-truth damage vs undamaged

areas by experienced marine biologists. A small portion of the survey area was inaccessible to the survey drone due to closed airspace associated with the Naval Air Station. In those areas, traditional mapping methods using a handheld GPS was used to complete the mapping.

Aerial mapping of damaged areas was conducted over the drone maps using heads-up digitizing. The accuracy of the imagery was such that accurate mapping of damaged areas was possible and was a far more accurate method for this site as compared to traditional transect or swim-thru mapping methods. Ground-truthing the maps further increased resolution, and matched marine habitat conditions to aerial imagery.

To determine the extent of damage in marine habitats, reference habitats well outside of the area impacted were assessed to establish the baseline condition of intact habitat. Habitats are described qualitatively based on the following criteria:

Habitat Type	Cover Type	Cover Description	Cover Class
Seagrass	Note dominant species	Sparse	5-25%
Seagrass	Note dominant species	Moderate	25-75%
Seagrass	Note dominant species	Dense	75-100%
Hardbottom	Note dominant taxa	Sparse	5-25%
Hardbottom	Note dominant taxa	Moderate	25-75%
Hardbottom	Note dominant taxa	Dense	75-100%

Marine Habitats

There were two primary marine habitats in the survey area; seagrass and hardbottom (Attachment 1 – Maps, Attachment 2 – Reference Photographs). These habitats form a mosaic with seagrass and hardbottom interspersed throughout much of the area.

Seagrass habitats in the project vicinity are healthy and well-developed. Seagrass was prevalent in areas with deep sediments and were composed of moderate to dense Turtle grass (*Thallassia testudinum*) rooted in deep, soft sediments. Shoal grass (*Halodule wrightii*) was also well represented, but turtle grass was the dominant species observed. Seagrass density was highly variable, ranging from sparse to dense depending on water depth and sediment development. Of interest is the high density of sediment mounds created by marine worms in the seagrass habitat.

These mounds can be seen clearly in the drone imagery and comprised significant cover in areas of well-developed seagrass.

Hardbottom habitats occurred in shallow areas where exposed limerock substrate was present, limiting the ability for seagrass to colonize. Due to the shallow water in the hardbottom areas, hardbottom supported a limited benthic community composed of sparse algae (Laurencia, Halimeda, Caulerpa) and scattered small sponges. No hard or soft corals were observed anywhere in the survey area, likely due to the shallow waters allowing habitats to be periodically exposed during low tide events.

Damage Assessment

In general, substrate and water depth were primary factors in observed damage. Areas of adequate water depth capable of supporting the barges, especially depending on the tide, did not sustain measurable damage. Areas of deep, soft sediments supported well-developed seagrass habitats, and these habitats were most vulnerable to damage from equipment and sustained extensive damage in many areas. Topographic alteration of the seafloor resulting from equipment use was evident in areas of shallow seagrass habitat, consisting of trenches, berms and scarification.

Shallow hardbottom habitats with a limited benthos were more resilient to damage, and in many areas, it was difficult to discern if equipment had traversed the site. The only evidence of impact in many shallow hardbottom areas was damaged sponges and algae, but the underlying substrate was intact.

Damage to marine habitats was highly variable, ranging from dense scarification over large areas to single excavator tracks in intact habitats. Qualitatively, the majority of observed damage was dense to moderate in cover. Trenches resulting from excavator tracks ranged in depth from very shallow to 18” in some areas. Berms composed of seagrass sods and associated sediment were present in those areas with well-developed seagrass and deep, soft sediments.

The estimated area traversed by equipment conducting repairs is 10.5 acres. Of the 10.5 acres mapped as potentially impacted, an area of approximately 1.6 acres located between pole 77 and the bridge over the channel was obviously traversed by equipment but exhibited little observable benthic damage. This was likely the result of the exposed rock substrate with minimal benthic cover supporting the low-pressure tracks of the pontoon excavators without sustaining damage.

Observable damage to benthic habitats was estimated to be 10.5 acres, with the majority of that in seagrass habitats where deep, soft sediments made the habitat susceptible to equipment damage (Attachment 1 – Maps). Benthic damage was observed in two main locations; poles 75-77 and poles 80-81. Benthic damage at 78 was accomplished by placing a barge across the dredged channel and then working from the barge, limiting the need for the excavators to maneuver in this

area. In addition, the area surrounding pole 78 was hardbottom which exhibited less damage than seagrass habitats.

The observed damage consisted of trenches, berms and scarification on seagrass habitats. Qualitatively, observed damage in mapped impacted areas ranged from severe damage consisting of areas of consolidated scarification to moderate to minimal impacts consisting of individual trenches in otherwise un-impacted habitats. Trenches resulting from excavator tracks ranged in depth from very shallow to 18" in some areas. Berms composed of seagrass sods and associated sediment were present in those areas with well-developed seagrass and deep, soft sediments.

Summary

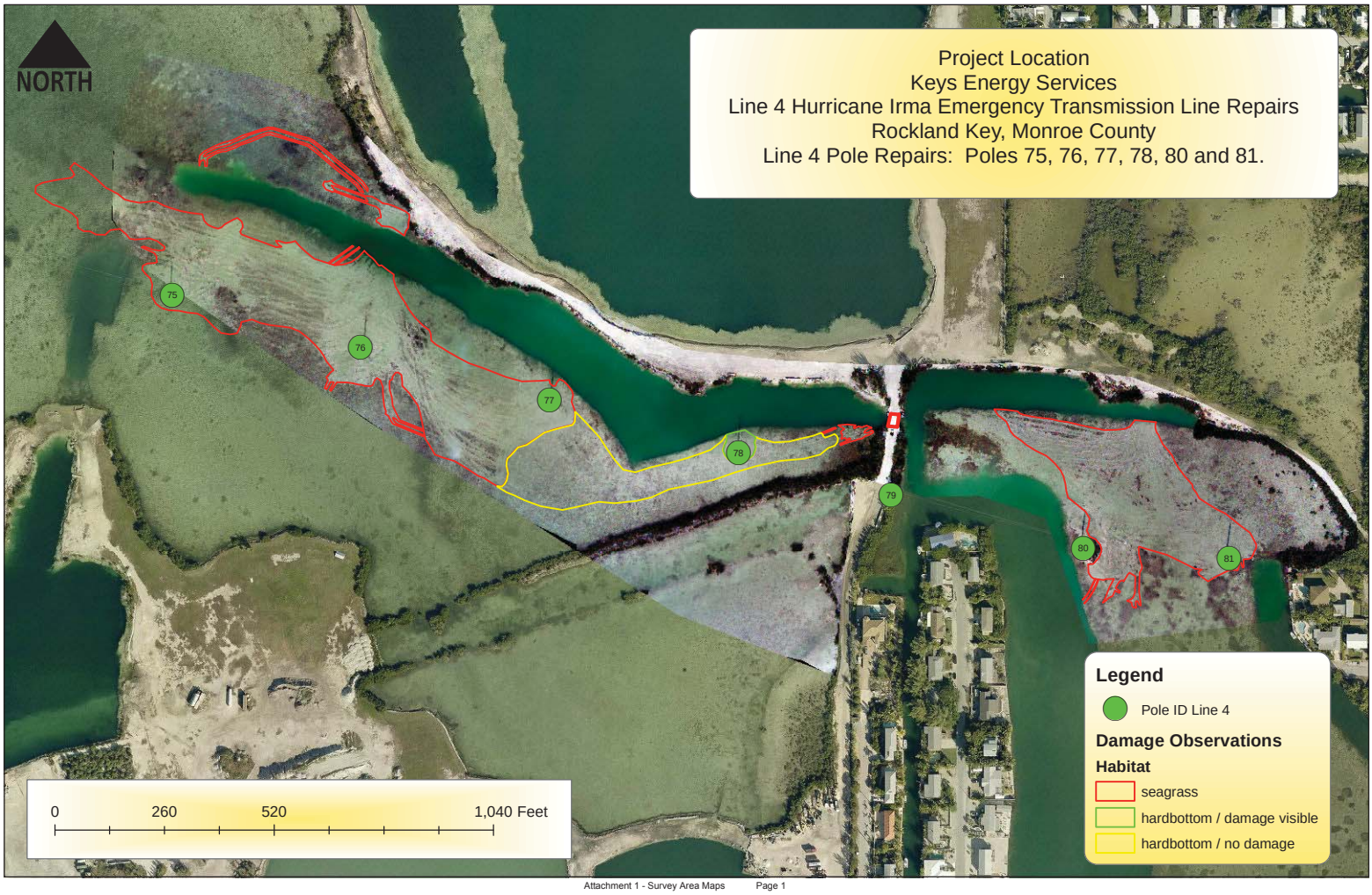
As a result of damage caused by Hurricane Irma, KEYS was required to initiate emergency repairs on six in-water poles at Line 4: 75, 76, 77, 78, 80 and 81. Work on Line 4 started on October 9, 2017 and was substantially complete on November 12, 2017. Construction methods were complicated by shallow water at the site, requiring amphibious pontoon excavators and shallow-draft Flexi-float barges.

Unavoidable impacts to seagrass and hardbottom habitats occurred as a result of the project. An estimated 10.5 acres of seagrass and hardbottom habitats were impacted from the emergency work, with damage classified as moderate to severe in most areas.

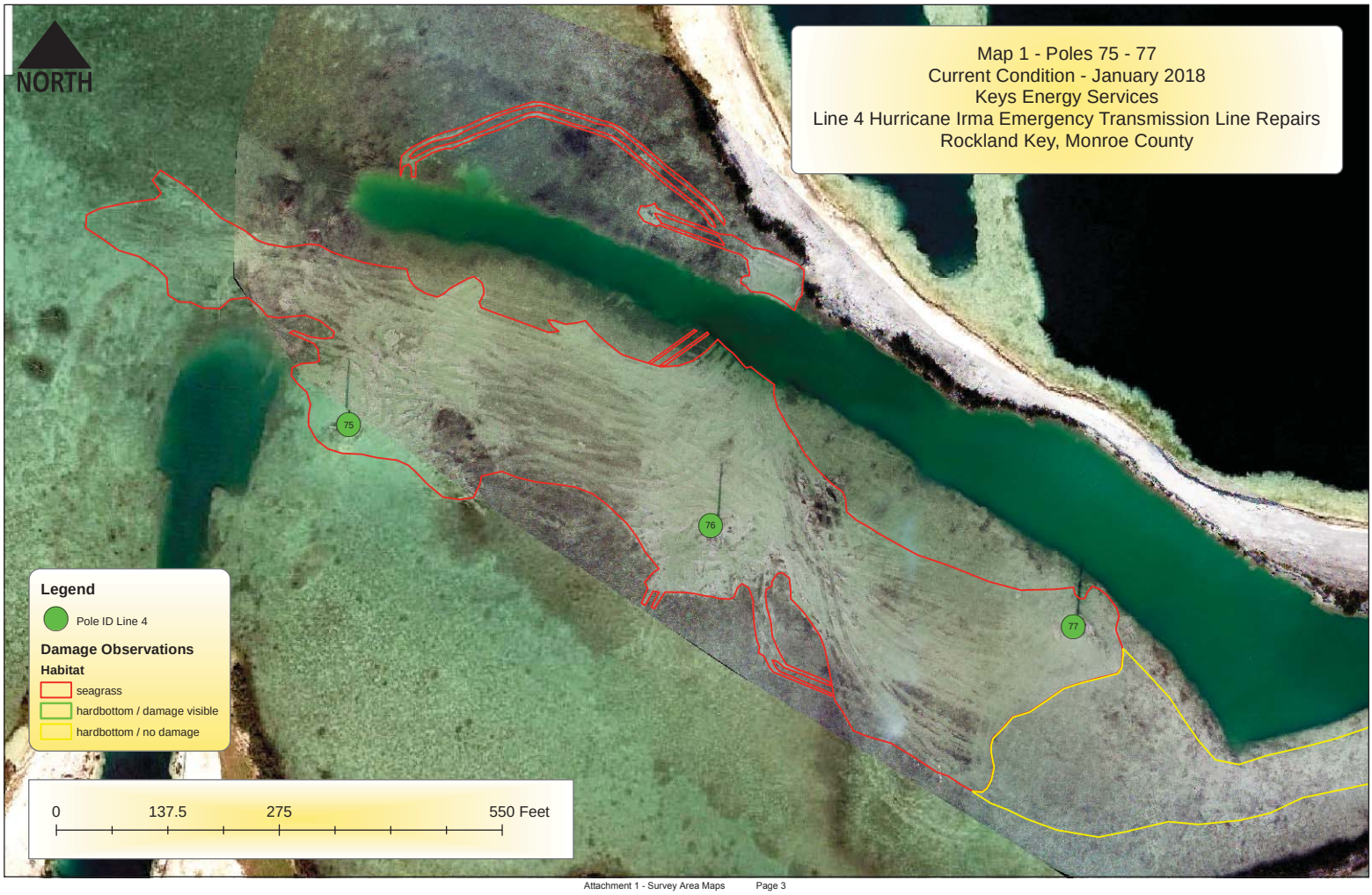
Damage was most severe in seagrass habitats characterized by deep, soft sediments. Damage resulted in topographic alterations to the seafloor consisting of trenches, berms and scarification.

Damage to hardbottom areas was less observable. An area of approximately 1.6 acres between pole 77 and the bridge was traversed by equipment but exhibited little observable damage. This was likely the result of exposed rock with little to no substrate or benthic cover supporting the low-pressure tracks of the pontoon excavators.

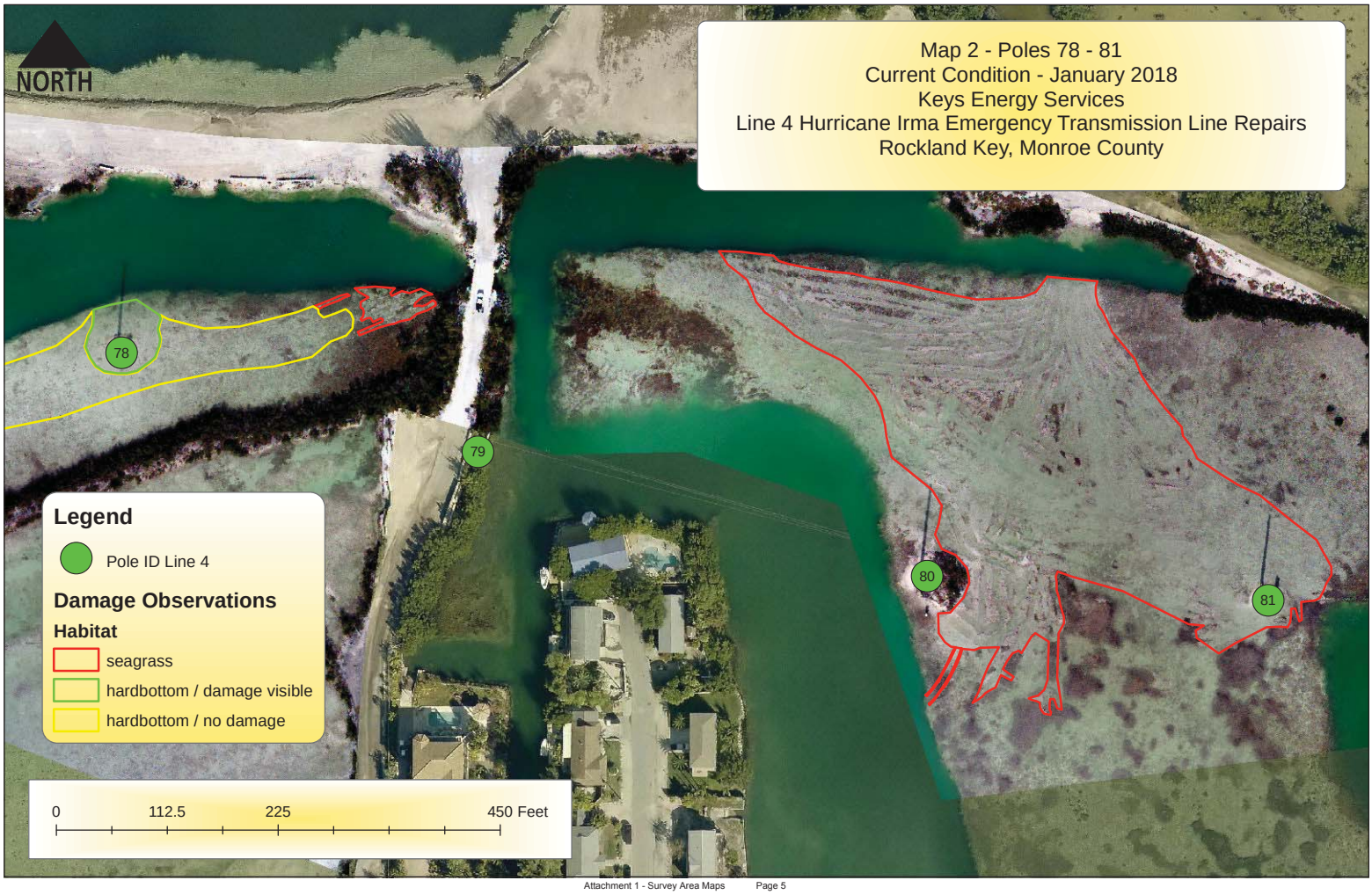
Coral resources were not observed in the project area; therefore, it is unlikely that any coral resources were impacted by the emergency repair work.


NORTH
Project Location
Keys Energy Services
Line 4 Hurricane Irma Emergency Transmission Line Repairs
Rockland Key, Monroe County
Line 4 Pole Repairs: Poles 75, 76, 77, 78, 80 and 81.
75
76
77
78
79
80
81
0
260
520
1,040 Feet
Legend
Pole ID Line 4
Damage Observations
Habitat
seagrass
hardbottom / damage visible
hardbottom / no damage


NORTH
Map 1 - Poles 75 - 77
Pre-Irma Habitats
Keys Energy Services
Line 4 Hurricane Irma Emergency Transmission Line Repairs
Rockland Key, Monroe County
75
76
77
Legend
Pole ID Line 4
Damage Observations
Habitat
seagrass
hardbottom / damage visible
hardbottom / no damage
0
137.5
275
550 Feet


NORTH
Map 1 - Poles 75 - 77
Current Condition - January 2018
Keys Energy Services
Line 4 Hurricane Irma Emergency Transmission Line Repairs
Rockland Key, Monroe County
75
76
77
Legend
Pole ID Line 4
Damage Observations
Habitat
seagrass
hardbottom / damage visible
hardbottom / no damage
0
137.5
275
550 Feet


NORTH
Map 2 - Poles 78 - 81
Pre-Irma Habitats
Keys Energy Services
Line 4 Hurricane Irma Emergency Transmission Line Repairs
Rockland Key, Monroe County
78
79
80
81
Legend
Pole ID Line 4
Damage Observations
Habitat
seagrass
hardbottom / damage visible
hardbottom / no damage
0
112.5
225
450 Feet


NORTH
Map 2 - Poles 78 - 81
Current Condition - January 2018
Keys Energy Services
Line 4 Hurricane Irma Emergency Transmission Line Repairs
Rockland Key, Monroe County
78
79
80
81
Legend
Pole ID Line 4
Damage Observations
Habitat
seagrass
hardbottom / damage visible
hardbottom / no damage
0
112.5
225
450 Feet

Flexi-float barge being deployed across channel to access pole 78. October 2017.

Pontoon excavators working in shallow water at pole 78. October 2017.

Flexi-float barge and pontoon excavators working on pole 78. October 2017.

Replacement pole showing casing installation and stub at Pole 78. January 2018.

Typical dense seagrass habitat in un-impacted area. Turtle grass was the dominant species observed throughout the survey area. January 2018.

Typical hardbottom habitat in un-impacted area. These habitats are characterized by shallow sediment and exposed rock with sparse macroalgae and limited seagrass present. January 2018.

Damaged seagrass habitat with trenches and berms visible. January 2018.

Damaged dense seagrass habitat with trenches and berms visible. January 2018.

Damaged dense seagrass habitat with trenches visible. January 2018.

Damaged dense seagrass habitat with trenches visible. January 2018.

Damaged hardbottom habitat with surface scarification evident. January 2018.

Damaged hardbottom habitat with surface scarification evident. January 2018.