

Wetland Conversion of the Old Quarry Site, Pt. Marianne

Prepared by
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Environmental (N5) PWD, Diego Garcia



DEPARTMENT OF THE AIR FORCE
PACIFIC AIR FORCES

FILE COPY

U.S. AIR FORCE

2 Oct 01

TO: NSF Public Works Department

FROM: Det 1, 13 AF/CE

SUBJECT: Request to Secure Fill Material from Borrow Pit

1. Request permission to secure 460 cubic yards of fill from the Point Marianne borrow pit. This material is needed to fill in low-lying areas in tent city to support deployed forces.
2. If you have any questions, please contact me at 370-3821. We greatly appreciate your help.

Robert E. Greene
 ROBERT E. GREENE, SMSgt, USAF
 Chief of Civil Engineering

BRITREQ -
 WE SUPPORT THIS!
 YAJEN

OK!


24 Nov 01

Nestor:

AA outstanding Report.

Ya Did Good 😊 CDR Koch

Nestor Guzman
50E3/370-4546
18 Sep 01

SUBJ: WETLAND CONVERSION OF THE OLD QUARRY SITE, PT. MARIANNE

BACKGROUND

The 15acre old quarry site is located at Pt Marianne, east of DG 1 on the lagoon side. It's a part of the reclaimed area as a result of the extensive dredging and stockpiling for big construction operations in the early 1970's. Since then, it became a borrow source of fill materials until depleted in CY 2000. The shoreline erosion site assessment prepared by two Naval Reservists, CDR Nick Koch and LCDR Steve Robertson for Diego Garcia, points out the need to have a ready source of construction fill materials for quick fix on severe erosion problems. Out of the 15acres, 10 acres will be converted to wetland and 50,000 CY of fill materials will be obtained.

DISCUSSION

Conversion of the old quarry into wetland has important advantages that will address to the management of natural resources of Diego Garcia.

1. Removal of invasive ironwood trees.

One characteristic of disturbed lands on Diego Garcia is the growth of the non-native ironwood plant species. The dominance of ironwood over an area hinders the growth of native trees and smaller shrubs because of the toxic resin present on the droppings. Growth and dominance of ironwood has spread throughout the whole area since it was abandoned in the late '00s. The NRMP does not recommend complete eradication of ironwood because of its beneficial uses (as habitat for arboreal-nesting seabirds, notably the fairy terns, as beach stabilizers against erosion and as effective windbreak). However, ironwoods are considered undesirable exotic species by the BRITREP and their removal in lieu of native plant species is preferred.

2. Avoid the introduction of invasive weeds from importation of fill materials.

Discussed in the Natural Resources management Plan is the identification of 31 new weed species within the last decade presumed to have come from sand and aggregates brought to the island as fill materials, or seeds carried on cargo, cargo containers and MILVANS. One example is the invasive giant sensitive plant that came in with brown sand imported from Indonesia during the late seventies. Invasive weeds, if left uncontrolled, can result in the crowding of native vegetation, which can ultimately cause extirpation of plant species native to the island. The 50,000 CY of fill materials taken out of the site via importation is a best management measure to avoid further introduction of exotic plants.

3. Enhance habitat of wetland plant and animal species.

Wetlands are considered one of the most important habitats for waterfowls, birds, reptiles and mammals. It is also crucial in maintaining the hydrology of some watersheds. The 2 Naval Reservist reiterated the importance of wetlands in water purification and aquifer recharge on their assessment of water conservation efforts for DG. 38 species of migratory and resident birds on DG utilize wetland habitats during some portions of their life cycle and the site may be developed for future bird watching program.

4. Supports to Bird/Aircraft Strike Hazard (BASH) Program.

Cattle egrets, the BASH problem birds on DG, utilize wetland for forage. The construction of the 10acre wetland will expand the adjacent smaller wetlands west of DG-1 road, farther east from the midsection of the airfield. This may attract considerable population of airfield cattle egrets and keep them farther away from flight lines.

RECOMMENDATIONS

Earth fill requirements for the shore protection projects alone will be massive. The on-going erosion control construction by the fuel farm requires earth fill that DG does not have. A request approval from the host country to generate fill materials from old quarry site is recommended. No negative impact to the environment has been perceived for this project. Additionally, with the current operation for contingency support (Operation Noble Eagle), several urgent project requires considerable amount of backfill materials. This recommendation is very timely and needs expeditious endorsement from the Host command base commander and favorable approval from the Host Nation representative.

SURVEY NOTES:

1. THIS PLAN IS A PRELIMINARY PLAN AND IS NOT TO BE USED FOR CONSTRUCTION.
2. THE SURVEY WAS MADE BY THE SURVEYOR AND HIS ASSISTANTS.
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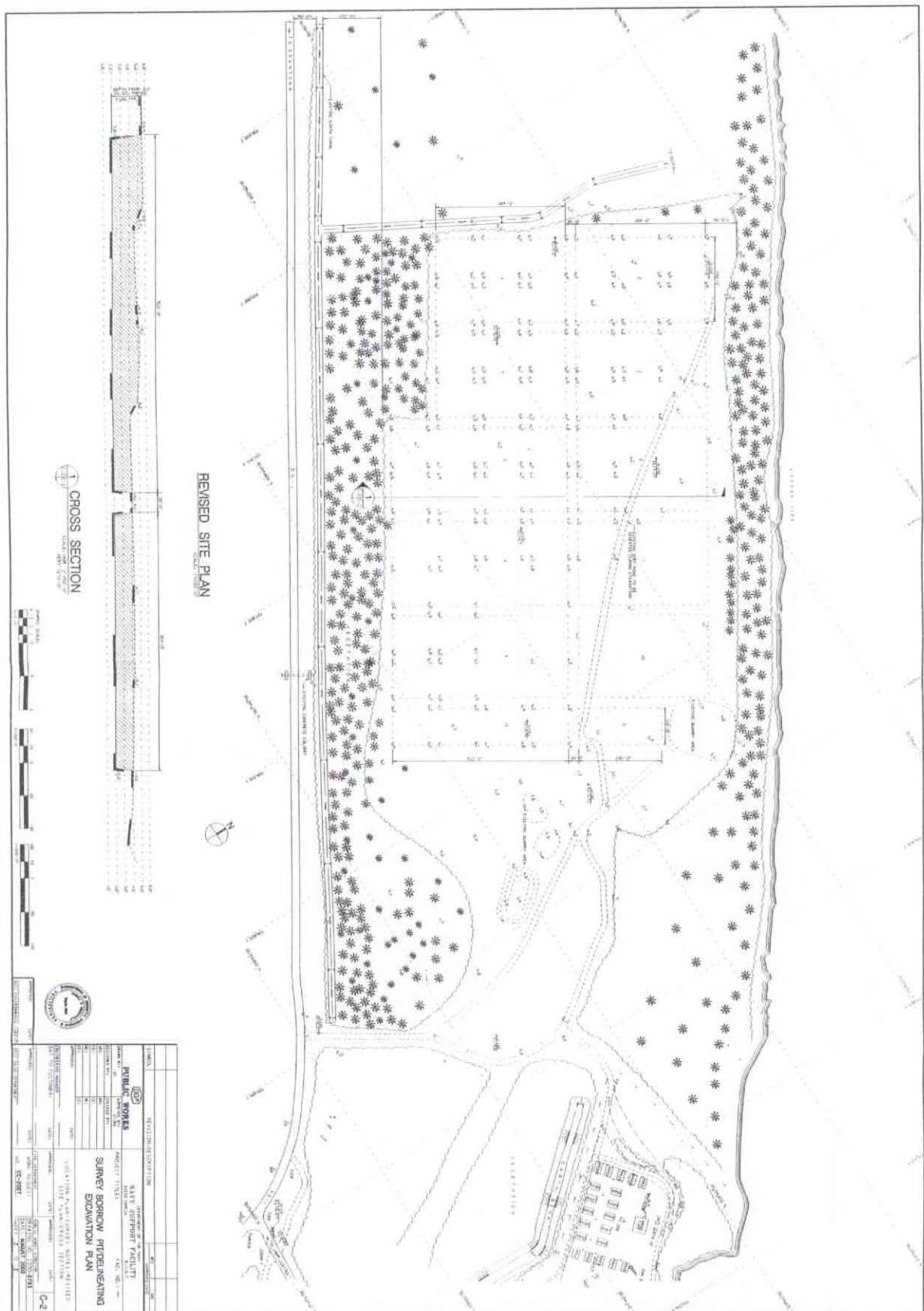
LEGEND/SYMBOLS:

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SITE DEMOLITION PLAN

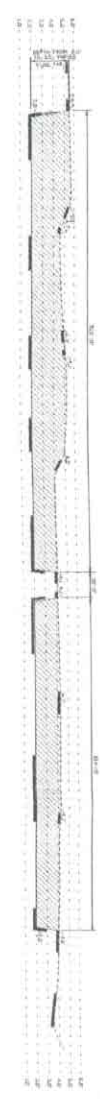


<p>INCLUSION INFORMATION:</p> <p>PUBLIC WORKS</p> <p>DATE: 11/11/2011</p> <p>PROJECT TITLE: SURVEY BORROW PROBLEMATICS EXCAVATION PLAN</p> <p>PROJECT NO: 11111111</p> <p>PROJECT LOCATION: 11111111</p> <p>PROJECT OWNER: 11111111</p> <p>PROJECT CONTACT: 11111111</p> <p>PROJECT PHONE: 11111111</p> <p>PROJECT FAX: 11111111</p> <p>PROJECT EMAIL: 11111111</p> <p>PROJECT WEBSITE: 11111111</p> <p>PROJECT ADDRESS: 11111111</p> <p>PROJECT CITY: 11111111</p> <p>PROJECT STATE: 11111111</p> <p>PROJECT ZIP: 11111111</p> <p>PROJECT COUNTY: 11111111</p> <p>PROJECT DISTRICT: 11111111</p> <p>PROJECT SUBDISTRICT: 11111111</p> <p>PROJECT WARD: 11111111</p> <p>PROJECT NEIGHBORHOOD: 11111111</p> <p>PROJECT ZONE: 11111111</p> <p>PROJECT PHASE: 11111111</p> <p>PROJECT STATUS: 11111111</p> <p>PROJECT TYPE: 11111111</p> <p>PROJECT PRIORITY: 11111111</p> <p>PROJECT RISK: 11111111</p> <p>PROJECT IMPACT: 11111111</p> <p>PROJECT BENEFIT: 11111111</p> <p>PROJECT COST: 11111111</p> <p>PROJECT REVENUE: 11111111</p> <p>PROJECT NET BENEFIT: 11111111</p> <p>PROJECT NET COST: 11111111</p> <p>PROJECT NET IMPACT: 11111111</p> <p>PROJECT NET BENEFIT/COST: 11111111</p> <p>PROJECT NET IMPACT/BENEFIT/COST: 11111111</p> <p>PROJECT NET BENEFIT/COST/IMPACT: 11111111</p> <p>PROJECT NET BENEFIT/COST/IMPACT/BENEFIT/COST: 11111111</p>	
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REVISED SITE PLAN

CROSS SECTION



<p>DATE: 10/15/2010</p> <p>PROJECT: SURVEY BORROW PROBLEMATICS EXCAVATION PLAN</p> <p>SCALE: AS SHOWN</p>	
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