

ARDAMAN & ASSOCIATES, INC. PROGRESS MEETING REPORT FOR PINEY POINT GYPSUM STACK SYSTEM CLOSURE		File No.: 06-110A Meeting Date: <u>12/7/06</u> Report No: <u>90</u>	Page 1 of 5 Report Date: <u>12/13/06</u>
Project Name:	CLOSURE CONSTRUCTION - OGS SLOPES, TOP CAPS & RELIEF DITCH, SCP-S AND PHASE II - NGS SLOPES		Project Address: 13300 U.S. Highway 41 North Palmetto, Florida 34221 Manatee County
ATTENDEES: Ardaman: John Cameron, Tony Deatherage FDEP: CDM: Dean Carter, Mike Cruz, Jean Wilson, George Curry, Steve Solters Comanco: Paul Moore Compass: Tim Morrow, Jeremy Giles, Tom McSweeney HRK:			

COPY TO: FDEP: Phil Coram, Sam Zamani, John Coates
 Ardaman: Nadim Fuleihan, Rob Werner, Tom Leto, John Cameron, Tony Deatherage
 CDM: Steve Solters, Dean Carter, Michael Edgar, Michael Cruz, Dick Slovarp
 Comanco: Tom Topp, Paul Moore
 Compass: Tim Morrow, Jeremy Giles, Tom McSweeney
 HRK: Art Roth, Ivan Nance

Next Meeting is Scheduled for Thursday, December 14, 2006
Site Tour at 8:00 am followed by Construction
and CDM Operations Meetings

1.0 REVIEW MINUTES OF PREVIOUS MEETING

- The following item was not recorded in Section 8.0 Technical Items - Miscellaneous. Acid bricks were encountered during the site tour, mixed with soil/gypsum in the dike near the southwest corner of the SCP-S. ECT/HRK were requested to check the bricks for possible contamination.

2.0 SAFETY

- Comanco reported that a technician cut his hand on 12/2/06, while working on corrugated drain pipe - the injury required 9 stitches, and the employee has returned to work. Comanco will forward an accident report to CDM.

3.0 SUMMARY OF WORK PERFORMED

Comanco:

- Continued Phase II stormwater ditch grading and seepage collection drain installation. Drain has been completed from station 151+20 to 110+00 as of 12/6/06
- Also continued Phase II ditch liner installation. Installed about 50,040 sf this week (345,541 sf total as of 12/6/06).
- Equipment: 3 excavators, 2 dozers, 2 plate compactors, 2 3-inch trash pumps, 1 loader, 1 track crawler dump, 1 mini-excavator, 2 pick-up trucks, 1 crew van, 2 Q/C trailers, 4 generators, 1 4-inch vacuum pump, 1 pipe fusion machine - 26 personnel.

Compass:

- Well Water usage - 70,000 gallons used for dust control since last report.
- Started washout repairs on the NGS-S south slope.
- Water seeded and sodded areas.
- Continued gypsum removal and started soil cover (with soil fill from Larkin Nurseries) in the Phase I stormwater ditches (NGS-N west ditch) on 12/1/06.

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- Equipment: 6 dump trucks, 2 water trucks, 2 D6 dozers, 1 D8 dozer, 2 excavators, 2 motor graders, 4 club carts - 7 personnel. Most equipment presently stored on site will be needed later when the Gulfstream II borrow area is available for hauling soil fill.

CDM

- Continued dewatering and stockpiling gypsum sediment/sludge in the SCP-S Cap area.
- Supported gypsum removal from the Phase I stormwater ditches.
- Excavated sludge from SCP-N for dredge placement.
- Dredge America started fusing and placing 12-inch dredge discharge pipeline.
- Equipment: 2 dump trucks, 1 dozer, 2 excavators, 1 4-inch diaphragm pump (added this report) - 2 personnel.

4.0 PROJECTED WORK FOR NEXT WEEK

Comanco:

- Continue work in the Phase II Slope Closure stormwater ditch - dewatering, fine grading and compaction, seepage collection drain installation and liner installation.
- If Comanco elects to use a dewatering ditch to facilitate drain installation, Ardaman/DEP should be notified prior to implementation, and all water collected in the dewatering ditch shall be routed to the existing seepage ditch.

Compass:

- Continue repairing washouts and watering grassed areas.
- Continue gypsum removal and hauling and placing soil fill in the Phase I stormwater ditches.

CDM

- Continue site preparation activities in the SCP-S area.
- Continue to support gypsum removal from the Phase I stormwater ditches.
- Dredge is scheduled to arrive on 12/8/06.
- Inquip has been re-scheduled to mobilize week of 1/1/07.
- Received 400' of 6" SDR 17 pipe for the Phase II Slope Closure.

5.0 SURVEY NOTES

- Edgemon continued as-built surveys for the Phase II Slope Closure stormwater ditch drain installation and liner subgrade as the work progressed by Comanco. Approval by Ardaman is based on field notes signed by Edgemon's surveyor and provided by Comanco/CDM. A drawing of as-built surveys was last updated by Edgemon on 11/29/06.
- CDM provided a pdf file to Ardaman by email on 10/10/06 of as-built survey data for the Phase I stormwater ditch inboard anchor trench liner extensions. Liner extensions may or may not still be short in some areas, depending on the steepness of the slope when the liner extension is actually installed on a smooth and compacted subgrade. In order to assure compliance, the elevation of the liner extension should be re-surveyed after final installation.
- Dredge America had previously performed a pre-dredge survey of the top of sludge in the SCP-N. CDM reported that an additional pre-dredge survey of the bottom of sludge is in progress. CDM was requested to forward a copy of the survey to FDEP and Ardaman.
- Ardaman sent an electronic copy of the NCP slurry wall as-built survey to CDM by email on 12/3/06.

6.0 PROJECT SCHEDULE

- No work days were lost to rain this reporting period.
- CDM will update the project schedule and distributed by email on 12/12/06.

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- Compass indicated that approval has not yet been received from SWFWMD or Manatee County on the Gulfstream II borrow pit application. Compass indicated that the earliest start of hauling fill from Gulfstream II would be about 12/26/06.
- Inquip mobilization has been re-scheduled to start 1/2/07.
- Weekend work schedule: Compass on Saturday on soil cover (grading only, no hauling).

7.0 SHOP DRAWINGS and SUBMITTALS

All shop drawings and submittals should be submitted to Rob Werner (Ardaman) for approval, with transmittals only copied to John Cameron (Ardaman) and Steve Solters (CDM).

- Regarding approval status of Agru America 80-mil textured liner for the Phase I stormwater ditches - including previous approvals, 33 of 35 rolls have been conditionally approved for installation. A summary of conformance testing was updated on 12/6/06 (revision 4 - amended) and was distributed at the meeting.
- Shop drawings were submitted to Ardaman for approval by CDM via email on 11/30/06 for various concrete uniform section mats: Phase I (structures 5, 8 & 10) and Phase II (structure 4).

8.0 TECHNICAL ITEMS/CLARIFICATIONS AND QUALITY ASSURANCE

Updated drawing sets, dated 9/28/05, were distributed at the 9/29/05 meeting for the NGS-S Cap and NGS-N Relief Ditch and the Phase I Slope Closure. Revised Phase I Slope Closure drawing Nos. C-2, C-5, C-6, D-6, D-9, D-10, D-11), dated 2/15/06 (various revision nos.) were distributed at the 2/16/06 construction meeting to reflect changes related to lowering the OGS south stormwater ditch seepage collection drain. Electronic (ACAD) are available for download from Ardaman's ftp web site. Current drawings, dated 12/16/05, were distributed at the 12/16/05 meeting for Slope Cover Construction - OGS Ponds. Current drawings (including all detail drawings for structures, drains, etc.), dated 12/22/05 (various revision nos.), for the Phase II Slope Closure were delivered to CDM at the site on 12/23/05. Current drawings (including all detail drawings for structures, drains, etc.), dated 1/11/06 (various revision nos.), for the SCP-South Compartment Closure were distributed on 1/12/06, along with CD's containing ACAD files for all current for the SCP-South and Phase II slope Closure drawings. Revised SCP-South Compartment Closure Drawing No. D-6, dated 2/15/06 (Rev. 1), was distributed at the 2/16/06 construction meeting to reflect changes related to the lowered the OGS south seepage collection drain - an electronic version (ACAD) was emailed to CDM and Moretrench on 2/28/06. Regarding finish grades for the SCP-S Process Water Sump, a drawing was provided by Ardaman at the 7/6/06 construction meeting (and attached to meeting minutes) indicating optional design grades for the pond bottom area, which were adopted by CDM/Compass. Drawing Nos. C-1, C-3, C-4, D-1 and L-1 will be updated for the record to indicate the revised grading plan.

Regarding specifications for the OGS Slopes, Top Cap Areas and NGS-N Relief Ditch, pertinent NGS-S Reservoir, Phase II OGS Compartment Closure and ITN specification documents shall be used. Pertinent specification sections from the Phase II and ITN sources, along with specifications for HDPE panel drains and concrete erosion control mats, were issued in a preliminary specification document (Sections 24, 25, 26, 27, 28, 29 and 30, all revision 0, dated 7/6/05) on 7/7/05. Additional supplemental specifications for "Woven Geotextile" and "General Earthwork Using Soil" (Sections 31 and 32, both revision 1, dated 1/4/06) were distributed at the meeting on 1/5/06.

- Preliminary drawings and CD's were distributed at the 9/15/05 meeting for the NGS-S Soil Slope Cover Construction, C-1 through C-5 for Contractor's use in estimating take-off quantities.
- Preliminary drawings for the NCP capacity upgrade project were revised; CAD files were emailed to CDM on 7/19/06 and 4 sets of hard copies were distributed at the 7/20/06 construction meeting. Preliminary technical specifications (revision P1) were emailed to CDM on 7/14/06.
- Drawings were distributed by Ardaman at the 7/20/06 meeting for additional panel drains required in the following areas: OGS Slope Pond, OGS-N Cap, OGS west and south ditches, and the NGS-S east ditch. Copies of these figures were attached to the electronic version of the meeting minutes.
- Drawings were distributed by Ardaman at the 10/5/06 meeting to add 4-inch bleeder orifices at structure #7 in the OGS Slope Pond.

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- Preliminary drawings were distributed at the 10/19/06 meeting for the SCP-S and SCP-N as follows: C-1, C-2, C-3, C-4 and L-1, all revision 0, dated 10/20/06. Electronic versions of Dwg. Nos. C-1 and L-1 were provided via email on 10/20/06. Drawing C-1, revision 1, dated 10/31/06, was distributed at the meeting (hard copies and CD's).
- Final drawing sets for the SCP phase 2 closure, dated 11/8/08, including all detail and liner drawings, were issued for construction and distributed at the 11/16/06 meeting (hard copies and CD's). Additional signed large Drawings will be distributed next week.

Quality Control Activities

- Ardaman had 6 technicians on site this reporting period.
- Phase I Slope Closure in-place gypsum/soil density tests - no change - 945 passing, none failing, none pending.
- Phase II Slope Closure in-place gypsum/soil density tests - 222 passing, none failing, 2 pending.
- OGS-S slope cover in-place soil fill density tests - no change - 59 passing, none failing, none pending.
- Phase II Slope Closure 80-mil stormwater ditch liner seam destructive testing (DT's) - 40 marked, 35 passing, none failing, 5 pending. A summary of DT testing was updated on 12/5/06 (revision 5) and was distributed at the meeting.
- Phase II stormwater ditch liner anchor trench density tests - no change - 47 passing, none failing, none pending.

Miscellaneous

- Rainfall: CDM reported 0.06 inches from 11/29/06 through 12/4/06.
- Regarding extrusion welding problems on GSE liner, Comanco is awaiting on a report from GSE regarding findings subsequent to David Legget's visit on 10/26/06.
- CDM and Ardaman continue to monitor seepage flow at the Granddaddy Boil location.
- Ardaman provided an "Erosion Damage Characterization" plan and tabulation for the previously seeded areas of the Phase II amended gypsum slopes (i.e., the south slope and east slope south of the former east slope ramp) at the 11/9/06 construction meeting. This issue was discussed at the 11/30/06 construction meeting, as well as restoration of the 1:1 slope on both the Phase I and Phase II stacks. Ardaman provided additional clarification by email in a memo on 12/4/06.
- Regarding acid brick noted in Section 1.0 Review of Previous Meeting Minutes, Ardaman indicated by email on 12/3/06 that the brick was checked by ECT/HRK and found to be not contaminated. It was previously agreed on the site tour that the bricks may be incorporated/buried in fill at least 2' below liner grade, provided that they are dispersed in the fill such that they are not in direct contact with each other or otherwise cause voids in the fill matrix. In the SCP-S Cap area, they need to be placed along the north side, and cannot be dumped into dewatering ditches without first de-mucking so that the first lift of fill can be compacted to specification.
- CDM requested Ardaman by email on 12/4/06, for clarification regarding location of the Phase II Inlet Structure No. 1.
- Existing soil cover thickness was measured by Ardaman at several locations along the perimeter roads around the OGS-N and OGS-S Caps on 12/4/06. The data was provided to Compass and CDM at the meeting. The soil cover thickness was found to be deficient at about half of the 37 locations tested, with a few locations having only 13 to 14 inches of cover. The deficient areas need to be corrected.

Acceptances

- On 12/6/06, subgrade for liner installation, Phase II Slope Cover stormwater ditch, from station 119+00 to 110+00. (It was noted that the acceptance form has not been executed as yet - it should be available next meeting).
- On 11/30/06 Comanco, CDM and Ardaman inspected the liner installation at the Phase II east stormwater ditch, from approximately station 152+20 north to the northeast corner (panels 98 through 245). Four repair patches were noted - repairs have not yet been done.

9.0 COMMENTS by PROGRAM MANAGER

- A proposal for gravel erosion protection, yet to be installed along the inboard slope of the access road at the toe of the OGS-S slope cover, was discussed at the 8/10/06 Program Manager's meeting. CDM is awaiting feedback from FDEP.

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- Change Order SP644-014 (Phase I/II Slopes/Caps/NGS Relief Ditch Soil Cover, Phase II Gyp/Earthwork, and Additional Panel Drains) has been signed by CDM and forwarded to for signature.
- A tabulation for grassing work to date was received by CDM from Compass, and forwarded to FDEP on 10/2/06. The tabulation has been updated by Compass to include acres; CDM will forward to FDEP and Ardaman.
- CDM indicated that a contract with Inquip is awaiting signatures by CDM.
- A change order request is in progress by CDM for changes to the SCP (including dredging) and the NCP slurry wall. Comanco provided liner quantities to CDM and Ardaman by email on 12/4/06.

10.0 COMMENTS by FDEP

FDEP was not represented at the meeting.

11.0 COMMENTS by HRK

HRK was not represented at the meeting.