

ARDAMAN & ASSOCIATES, INC. PROGRESS MEETING REPORT FOR PINEY POINT GYPSUM STACK SYSTEM CLOSURE		File No.: 06-110A Meeting Date: <u>11/16/06</u> Report No: <u>87</u>	Page 1 of 4 Report Date: <u>11/21/06</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: Nadim Fuleihan, John Cameron, Tony Deatherage FDEP: John Coates, Sam Zamani CDM: Dean Carter, Mike Cruz, Steve Solters, Jean Wilson, George Curry Comanco: Paul Moore Compass: Jeremy Giles HRK: Art Roth, Ivan Nance			

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 Wednesday, November 29, 2006
Construction/Engineering Meeting at 9:00 am

1.0 REVIEW MINUTES OF PREVIOUS MEETING

No corrections were noted.

2.0 SAFETY

No safety incidents were reported.

3.0 SUMMARY OF WORK PERFORMED

Comanco:

- Continued Phase II stormwater ditch grading and seepage collection drain installation. Drain has been completed up to station 121+50 as of 11/15/06. Ditch bottom grading completed to about station 117+00.
- Also continued Phase II ditch liner installation. Installed about 6,917 sf this week (268,703 sf total as of 11/14/06 - note: it was discovered after the meeting that the 284,081 reported was incorrect).
- The order for additional GSE welding rod was canceled. 12 rolls of 80-mil textured liner were received from Agru-America, including 10 rolls reserved for Piney Point, for which conformance testing has already been satisfactorily completed; 18 additional rolls are still on order - see 7.0 Shop Drawings and Submittals for more. By Comanco's count, 10 rolls are apparently missing from the site.
- Equipment: 3 excavators, 2 dozers, 2 plate compactors, 2 3-inch pumps, 1 4-inch vacuum pump, 1 loader, 1 track crawler dump, 1 smooth-drum roller, 1 mini-excavator, 2 pick-up trucks, 1 crew van, 2 QC trailers, 6 generators, 2 pipe fusion welding machines - 32 personnel.

Compass:

- Well Water usage - 16,000 gallons used for dust control since last report.
- Continued washout repairs on the Phase I slopes.
- Equipment: 5 dump trucks, 1 water truck, 2 D6 dozers, 1 D8 dozer, 2 excavators, 2 motor graders - 5 personnel. Compass indicated that the equipment presently stored on site will be needed later when the Gulfstream II borrow area is available for hauling soil fill. One additional D8 dozer will also be required at that time.

CDM

- Continued dewatering and stockpiling gypsum sediment/sludge in the SCP-S Cap area.

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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.
- Start silt fencing at the Gulfstream II borrow area.

CDM

- Continue site preparation activities in the SCP-S area.
- Excavate the side slopes of the overflow cut between the return ditch and the southeast corner of the SCP-N.
- Re-excavate and maintain the elevation profile of the relief ditch between the SCP-S and SCP-N at 8.0'.

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. An updated composite as-built survey drawing was provided via email by CDM for work performed by Comanco through 11/11/06.
- 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. A review of the data indicates that the 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.
- CDM/Edgemon re-surveyed the invert elevation profile of the relief ditch between the SCP-S and SCP-N; elevations ranged from approximately 11.4' at the east end to 7.5' at the west end.
- CDM indicated that it was discovered that the top-of-pipe elevations for piezometers PZ-201 and repaired PZ-201A reported at last week's operations meeting were actually GPS-surveyed elevations by Edgemon. Elevations re-surveyed on 10/7/06 were also performed by Edgemon using GPS. Subsequent check surveys performed using a laser level (reference not certain) indicated discrepancies. Edgemon has resurveyed via a benchmark-referenced closed circuit level survey; CDM has since forwarded the survey data to Ardaman.
- Dredge America performed a pre-dredge survey of the SCP-N; CDM is awaiting results. CDM was requested to forward a copy of the survey results to Ardaman.

6.0 PROJECT SCHEDULE

- No work days were lost to rain this reporting period.
- The project schedule was last updated by CDM on 11/14/06. An updated schedule was emailed on 11/14/06, and was distributed and discussed at the meeting.
- CDM was requested by FDEP to add the following activities to the schedule: 1) installation of the stormwater drain from basin 02 to outfall 001; 2) slope washout repairs on the gypsum stack phase 2 slope closure, including a link to show its impact on the delayed watershed removal date.
- CDM was also requested by FDEP to firm up scheduling forecasts for activities related to the NCP slurry wall installation (by Inquip) and SCP-N dredging (by Dredge America). CDM to respond by Monday.
- CDM was requested to provide an updated table of watershed reduction dates prior to the next meeting; it was requested that these forecasts be as accurate as possible, as they will be used by Ardaman to update water balance projections.

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- Regarding resumption of soil cover, results of geotechnical testing and chemical screening for samples obtained from the Larkin pit are still pending - see 8.0 Technical - Miscellaneous for more. CDM/Compass are presently indicating that this work will start on 11/27/06.
- Weekend work schedule: Comanco on Saturday (pumping and dewatering only).

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).

- On behalf of Comanco, Agru America submitted factory quality control test reports via email to Ardaman on 11/7/06 for 16 rolls of 80-mil textured liner. Ten of these rolls, produced during the production run made for the SCP-PWS liner, have been received at the job site, and have previously been conditionally approved by Ardaman. The other 6 rolls were similarly on-hold for Comanco at Agru's from a prior order placed for another phosphate industry project. (Conformance testing for these six rolls will be required.) An additional 14 rolls of 80-mil textured liner will be produced to complete Comanco's 30-roll order, for which conformance testing will also be required.

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. CDM was requested to provide a proposal for the extra work. Copies of these figures were attached to the electronic version of the meeting minutes.

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- 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. CDM was requested to provide a proposal for the extra work, and to include it in the change order request for additional panel drains.
- 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). Additional detail drawings will follow.
- 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 meeting (hard copies and CD's). Additional signed large Drawings will be distributed next week.
- 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. CDM and Compass were scheduled to discuss the erosion repair issue after the 11/9/06 meeting.

Quality Control Activities

- Ardaman had 3 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 - no change - 191 passing, none failing, none 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) - 32 marked, 32 passing, none pending. A summary of DT testing dated 11/15/06, revision 3, was distributed at the meeting.
- Phase II stormwater ditch liner anchor trench density tests - 45 passing, none failing, 1 pending.

Miscellaneous

- Rainfall: CDM reported 0.00 inches from 11/9/06 through 11/14/06.
- Regarding extrusion welding problems, Comanco is awaiting on a report from GSE regarding findings subsequent to David Legget's visit on 10/26/06. Comanco reported that the on-site supply of 80-mil textured GSE liner has essentially been depleted.
- CDM installed a gage board in the Return Channel.
- CDM and Ardaman continue to monitor seepage flow at the Granddaddy Boil location.
- On Tuesday, 11/10/06, CDM/Compass, Ardaman and FDEP obtained soil samples from three stockpile locations at the Larkin Nurseries borrow site on U.S. 41. Compass/CDM obtained samples for chemical screening and provided split samples to FDEP - CDM should submit testing results to FDEP. Ardaman obtained bulk samples at the same locations for geotechnical testing - Ardaman reported that preliminary results appear to be satisfactory.

Acceptances

- On 11/15/06, subgrade for liner installation, Phase II Slope Cover stormwater ditch, from station 126+00 to 122+00.

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.
- Soil cover quantities for Tasks C2 and C3 were discussed at the Program Manager's meeting on 9/7/06; CDM has reviewed input provided by Compass on 9/28/06, and emailed quantities to FDEP and Ardaman for review. CDM has indicated agreement with all Ardaman quantities, except for the OGS-N, for which CDM is waiting on comments from Compass.
- CDM has received proposals from Compass and Comanco to install additional panel drains, requested by Ardaman at the 7/20/06 construction meeting, in the OGS Slope Pond, OGS-N Cap, OGS west and south ditches, and the NGS-S

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east ditch. CDM submitted a change order request for this work, and received comments by FDEP on 10/18/06. CDM submitted a revised change order request on 10/24/06.

- A tabulation for grassing work to date was received by CDM from Compass, and forwarded to FDEP on 10/2/06. The tabulation was distributed at the 10/12/06 meeting; CDM was requested to include a tabulation of acres for each area worked - they are presently reviewing a tabulation provided by Compass. CDM and Compass planned to do an inspection of the OGS Caps and NGS-N Cap after the 11/9/06 meeting. CDM will request Ardaman by email to inspect whatever portions are ready.

10.0 COMMENTS by FDEP

- FDEP requested CDM/Compass to confirm whether or not the final permit application for the Gulfstream II borrow site has been submitted for approval.
- CDM was requested to provide written reports at future meetings to summarize work performed and planned.
- See 6.0 Project Schedule for comments relative to scheduling.
- Two areas of erosion were observed during the site tour - the SCP-PWS east dike exterior slope, and a washout location on the OGS south dike (facing Buckeye Road) - CDM was requested to perform maintenance at these locations.

11.0 COMMENTS by HRK

- No comments.