

ARDAMAN & ASSOCIATES, INC. PROGRESS MEETING REPORT FOR PINEY POINT GYPSUM STACK SYSTEM CLOSURE		File No.: 05-110A Meeting Date: <u>7/13/06</u> Report No: <u>69</u>	Page 1 of 5 Report Date: <u>7/19 /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: Tom Leto, Rob Werner, John Cameron, Tony Deatherage FDEP: John Coates, Sam Zamani CDM: Dean Carter, Steve Solters, Jean Wilson, Mike Cruz Moretrench: Steve Voytko, Mike Panny, Paul Davis Comanco: Tom Topp, Paul Moore Compass: Tom McSweeney, Jeremy Giles			

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
 Moretrench: Al Schuman, Steve Voytko, Mike Panny, Nick Haddon, Ralph Remmert
 Comanco: Tom Topp, Paul Moore
 Compass: Tim Morrow, Jeremy Giles, Tom McSweeney

Next Meeting is Scheduled for Thursday, July 20, 2006
Construction/Engineering Meeting at 9:00 am

1.0 REVIEW MINUTES OF PREVIOUS MEETING

No corrections were noted.

2.0 SAFETY

About 3,000 ft of 6-inch PVC irrigation header pipe accidentally slid down the slope and into the bottom of the NGS-S Compartment Reservoir while being relocated by Moretrench on 7/7/06 along the upstream edge of the east and south NGS-S crest roads, resulting in substantial damage to the 80-mil textured liner. CDM will forward an incident report to FDEP. See 8.0 Technical Items - Miscellaneous for more.

3.0 SUMMARY OF WORK PERFORMED

Moretrench:

- Continued work on Phase II Slope Closure - finish graded the south and east crest roads, completed 200' of seepage collection drain under the east stormwater ditch, and continued finish grading the south perimeter road. Installation of an additional 100' of drain was partially completed (i.e., the geotextile, gravel and pipes were placed but the geotextile not sewn) *but will need to be reconstructed due to accumulation of excessive gypsum sediment in the gravel that eroded from the slopes during rainfall events.*
- Well Water usage - none since last report.
- Equipment: 5 D-6 dozers, 1 D-8 dozer, 1 compactor, 2 excavators, 1 water wagon, 1 loader, one 6-inch hydraulic pump - 10 personnel.

Comanco:

- Completed detail work on the Phase I Slope Closure stormwater ditch 80-mil liner.
- Received 1 additional roll (total 46) of 80-mil smooth liner and 5 rolls (31 total) of 80-mil textured liner for the SCP-S Process Water Sump. Also received 5 additional "insurance" rolls of 80-mil textured liner to supplement existing GSE inventory and 48 rolls (48 total) of 60-mil textured liner for the Phase II Slope Closure.
- Resumed work on the NGS-N spray field modification.
- Equipment: 1 excavator, 2 3-inch pumps, 1 loader, 1 track crawler dump, 1 4x4 Honda 350 w/trailer, 2 pick-up trucks, 1 QC trailer, 5 generators - 21 personnel

Compass:

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- Continued irrigation on the OGS-S slopes and watering for dust control, and completed mowing/cutting (weeds) on the OGS-S slopes and caps.
- Completed finish grading the SCP-S partition dike crest and east slope, and started finish grading the Process Water Sump north and south dikes; no fill was hauled to the dikes since last report (5,830 cy total by truck load estimate).
- Continued hauling and placing fill on the SCP-S Process Water Sump pond bottom; 3,740 cy was hauled from the SCP west dike since last reported; 4,716 cy total (by truck load estimate) as of 7/9/06; also started installation of inlet structure #1 and outlet pipe, and finish grading the pond bottom.
- Well Water usage - none since last report.
- Equipment: 2 dump trucks, 1 water wagon, 2 D-6 dozers, 2 excavators, 1 compactor, 1 Case dozer, 1 motor grader - 7 operators. 1 motor grader was added since last report.

CDM

- Continued receiving soil fill material from L.A. Enterprises for construction of the Phase II Slope Closure perimeter dike - 19,839 loose cy total by truck load count as of 7/12/06.
- Also received 1 24-inch manhole and a 12-inch tee for the SCP-S PWS relief drain, and fabriform material for the east dike overflow.

4.0 PROJECTED WORK FOR NEXT WEEK

Moretrench:

- Continue work on Phase II Slope Closure - constructing and grading the stormwater pond and perimeter dikes.
- Continue work on Phase I Slope Closure - install 8-inch and 24-inch valves on structure Nos. 1 and 2 outlet pipes.
- See 10.0 Comments by FDEP regarding initiating repair work to retrofit rip-rap structure depressions in the OGS north ditch below the slope pond.
- [Moretrench indicated that they intend to suspend installation of the Phase II seepage collection drain until after the rainy season, but will continue fine grading and liner subgrade preparation in the south section of the Phase II stormwater ditch.]*

Comanco:

- Continue liner anchor trench compaction in the Phase I Slope Closure stormwater ditches.
- Continue modifications to the NGS-N spray evaporation system (pending delivery of pads materials and additional polypropylene ties).
- Start deployment of 80-mil textured liner on the SCP-S partition dike.

Compass:

- Continue irrigating OGS grassed slopes and watering for dust control.
- Continue grading the SCP-S Process Water Sump dikes and bottom, installing inlet structure #1, and hauling fill to the east dike.
- Resume grassing remedial work (subcontractor Tate Environmental).

5.0 SURVEY NOTES

- A final composite as-built drawing by Moretrench/Edgemon for the Phase I Slope Closure stormwater ditches will be submitted by CDM to Ardaman after the meeting.
- Compass/Edgemon surveyed the SCP-S Process Water Sump grades on 6/28/06, and the south and west borrow dikes on 6/29/06; Ardaman also requested take-up quantities. CDM is reviewing a draft of the survey.
- Ardaman requested an as-built survey of the NGS-S south and east crest roads, which have been re-graded by Moretrench, for the record.

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- An as-built survey dated 7/10/06 of the SCP-S Process Water Sump liner subgrade was provided to Ardaman on 7/12/06, for the west dike and an adjacent 40-foot wide strip. CDM/Compass were advised at the meeting of additional survey data required before the area could be released for liner deployment.

6.0 PROJECT SCHEDULE

- 3 workdays were lost to weather by Compass this reporting period; none by Moretrench or Comanco.
- The project schedule was updated by CDM and distributed by email on 7/11/06. The updated schedule reflects progress to date, and was distributed and discussed at the meeting.
- Moretrench indicated their intent to discontinue work on the Phase II seepage collection drain until the end of the rainy season (i.e., end of September +/-). CDM will review the schedule and determine work which would be impacted by this schedule change.
- In response to a FDEP inquiry, CDM indicated that work towards conveying runoff from closed watershed areas including the OGS Caps and OGS Slope Pond, and the NGS-S Cap and Relief Ditch if clean, to Outfall 003 (i.e., completion of liner and grade corrections at rip-rap pad locations, removal of gypsum sediment from atop the liner, placement of soil for pipe crossings, piping modifications, etc.) should be completed within the next 2 weeks.
- Weekend work schedule: Moretrench and Compass will work on Saturday.

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).

- An official submittal/proposal by CDM for the gravel erosion protection yet to be installed along the inboard slope of the access road at the toe of the OGS-S slope cover is forthcoming pending internal review. See 10.0 Comments by FDEP for more.

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. 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.

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Quality Control Activities

- Ardaman had 6 technicians on site this reporting period.
- Phase 1 slope closure in-place gypsum/soil density tests - no change - 943 tests passing, none failing, none pending.
- Phase 2 slope closure in-place gypsum/soil density tests - 74 tests passing, 1 failing (station 108+50 toe road), none pending.
- SCP south compartment in-place gypsum/soil density tests - 102 tests passing, none failing, none pending.
- OGS-S slope cover in-place soil fill density tests - no change - 59 passing, none failing, none pending.
- Phase I stormwater ditch liner seam destructive testing (DT's) - 54 marked, 54 passing, none failing, none pending. A summary of DT testing (revision 6 - Final, dated 7/13/06) was distributed at the meeting.
- Phase I stormwater ditch liner anchor trench density tests - 54 tests passing, 2 failing, 3 pending.
- SCP-S PWS 80-mil smooth liner conformance testing: a summary of testing status report (Table 1a), was updated on 7/13/06 (revision 2) and was distributed at the meeting.
- SCP-S PWS 80-mil textured liner conformance testing: a summary of testing status report (Table 1b), was updated on 7/13/06 (revision 2) and was distributed at the meeting.
- Phase II Slope Closure 80-mil textured liner conformance testing: a summary of testing status report (Table 2) for 5 additional rolls, was updated on 7/13/06 (revision 2) and was distributed at the meeting.
- Phase II Slope Closure 60-mil textured liner conformance testing: a summary of testing status report (Table 3), was updated on 7/13/06 (revision 2) and was distributed at the meeting.

Miscellaneous

- Rainfall: CDM reported 3.72 inches from 7/5/06 through 7/11/06.
- Regarding status of the Gulfstream II borrow pit, Compass indicated that Gulfstream has submitted the application package to Manatee County Planning and Environmental Departments.
- Compass indicated that they are no longer pursuing the Port Manatee dredge disposal area as a potential soil borrow source.
- Ardaman performed a preliminary inspection of the NGS-S liner damaged by the fallen irrigation header pipe and identified three hundred thirty-three damaged areas. On 7/12/06, Rob Werner inspected the damaged areas and developed a preliminary inventory map to assess the extent of the damage and general scope of necessary repair work. Based on visual observations and field micrometer measurements, it was determined that the core of the liner sheet was affected at most of the damage locations. At some locations, the damage appears minor (e.g., only partial scraping of the texturing) such that repairs will likely not be required. Nonetheless, the total number of repairs is expected to exceed 250. Further, the damage to about 12 to 15 panels on the slope at the northern end of the east dike is so extensive that the panels will need to be replaced. A copy of the preliminary inventory map was provided to Moretrench and FDEP at the meeting. Ardaman will complete a more detailed mapping of the defect locations, make final assignment of locations not requiring repair, and provide instructions regarding repairs and panel replacement.
- The Phase II Slope Closure west and south ditch 80-mil liner installation, from station 100+00 to 128+75, was inspected by Ardaman on 7/7/06, accompanied by CDM and Comanco [repairs complete except anchor trench compaction and water under the membrane along the south side of the south ditch from panel 214+00 east].

Acceptances

- On 6/29/06 for gypsum amendment and grassing, the NGS Phase II slopes above the 1:1 cut, pending completion of finish grading and correction of crest road grades where applicable. It was noted at the meeting that corrective work is sufficiently complete on crest roads so that slopes will not impacted; some corrective work is required on the east slope between station 138+00 and the temporary access ramp.

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9.0 COMMENTS by PROGRAM MANAGER

- Change order requests related to Phase I closure gypsum quantity adjustments and Phase I south seepage collection drain lowering are in progress - CDM is presently reviewing a package received from Moretrench.
- Ardaman will finalize and email specifications next week for planned modifications to the NCP perimeter dike and slurry wall. CDM indicated that they will be getting bids from Inquip and Recon for the slurry wall work, and from Patterson for concrete work

10.0 COMMENTS by FDEP

- CDM was requested to submit an official proposal as soon as possible, for the gravel erosion protection yet to be installed along the inboard slope of the access road at the toe of the OGS-S slope cover.
- CDM/Moretrench were requested to initiate repair work to retrofit rip-rap structure depressions in the OGS north ditch below the slope pond, including removal of gypsum sediment from the liner.