

ARDAMAN & ASSOCIATES, INC. PROGRESS MEETING REPORT FOR PINEY POINT GYPSUM STACK SYSTEM CLOSURE		File No.: 06-110A	Page 1 of 5
		Meeting Date: <u>6/21/07</u>	
		Report No: <u>118</u>	Report Date: <u>6/27/07</u>
Project Name:	CLOSURE CONSTRUCTION - OGS & NGS SLOPES, NGS-N RELIEF DITCH, SCP-S AND SCP-N		Project Address: 300 U.S. Highway 41 North Palmetto, Florida 34221 Manatee County
<u>ATTENDEES:</u> Ardaman: Rob Werner, John Cameron, Tony Deatherage FDEP: John Coates, Sam Zamani CDM: Dean Carter, Mike Cruz, Jack Partin, Jean Wilson, George Curry Comanco: Paul Moore Compass: Mike Slovensky, Tim Morrow 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, Mike Slovensky
 HRK: Art Roth, Ivan Nance

Next Meeting is Scheduled for Thursday, June 28, 2007
Construction/Engineering Meeting at 9:00 am

1.0 REVIEW MINUTES OF PREVIOUS MEETING

- No corrections were noted.

2.0 SAFETY

- An Ardaman technician twisted his ankle while working on soil cover in the Relief Ditch on 6/18/07. He was reassigned to SCP liner QC work - no lost time. [An accident report was copied by email to CDM and FDEP on 6/25/07].
- Ardaman's technicians are wearing orange safety vests as requested by CDM.

3.0 SUMMARY OF WORK PERFORMED

Compass

- Well Water usage - none since last report.
- Water seed and sod areas; repairs on the NGS-N north slope reported as complete, repairs on the NGS-S east slope are in progress.
- Continued hauling soil from the Gulfstream II borrow area; total hauled as of 6/20/07 was reported at 87,340 cy (estimated by truck count). The updated truck load count spreadsheet was updated to reflect excess soil hauled out of the OGS south ditch.
- Continued grading and compacting soil cover on liner in the Phase I south stormwater ditch liner.
- Started placing soil cover on liner in the Phase II south stormwater ditch.
- Continued placing soil cover on liner in the NGS Relief Ditch.
- Equipment: 6 dump trucks, 2 water trucks, 4 D6 dozers, 2 excavators, 1 motor grader, 2 club carts, 1 skidsteer bobcat, 1 fuel truck, 4 pumps - 21 personnel.

Comanco

- Continued liner deployment and detail work on the SCP-S west compartment dikes and bottom; 139,716 sq ft of 40-mil textured and 664,931 sq ft of 40-mil smooth liner were deployed as of 6/19/07.

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- Equipment: 1 excavator, 1 loader, 1 crawler, 2 pick-up trucks, 1 QC trailer - 16 personnel

CDM

- Completed grading and compacting the SCP-S west compartment (including structure nos. 2 and 3).
- Continued desiccating sludge and grading and compacting the SCP-N.
- Continued hauling soil-gypsum mix materials to the excess material stockpile area.
- Started removing gypsum sediment from the NGS-N Relief Ditch liner, and started installing Relief Ditch panel drains.
- Equipment: 5 dump trucks, 1 loader, 4 D6 dozers, 5 excavators, 2 compactors, 2 water trucks, 1 4-inch double diaphragm pump, 3 6-inch service pumps, 1 2-inch pump, 2 plate compactors, 1 12-inch fusing machine - 23 personnel.

4.0 PROJECTED WORK FOR NEXT WEEK

Compass

- Water seeded and sodded areas; continue repairs on the NGS-S slopes. See 9.0 Technical Items - Miscellaneous for more.
- Continue hauling soil from the Gulfstream II borrow area and placing soil cover on the liner in the Phase I and II stormwater ditches and NGS-N Relief Ditch.

Comanco

- Continue liner detail work on the SCP-S west compartment dikes and bottom.
- Start SCP-S west compartment anchor trench compaction.

CDM

- Continue desiccating sludge, grading and compacting the SCP-N, and hauling to the excess material stockpile area.
- Continue removing gypsum sediment from the NGS-N Relief Ditch liner and installing panel drains.
- Start excavating and grading for the SCP-S south seepage drain installation.

5.0 SURVEY NOTES

- CDM/Edgemon completed as-built surveys of the SCP-S for liner subgrade, including structure nos. 2 and 3.
- CDM/Edgemon provided as-built surveys to Ardaman by email on 6/20/07, for panel drain installation at Phase I inlet structure no. 1, and Phase II inlet structure no. 3.

6.0 PROJECT SCHEDULE

- No workdays were lost to rain this reporting period.
- CDM updated and distributed the project schedule by email on 6/19/07. CDM indicated that the schedule has been updated to reflect current progress, and commented on a few logic changes.
- Weekend work schedule: CDM and Compass 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).

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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.
- 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.
- 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 (hard copies and CD's). Additional signed large drawings sets were distributed at the meeting. Supplemental drawings were distributed at the 3/29/07 meeting to clarify installation of the SCP-S seepage collection drain system between point nos. 14 and 23 (end of drain). It was noted at the 4/5/07 meeting that the east end of the drain may be shortened to accommodate installation of a cut-off wall that is being considered in conjunction with design discussions related to the proposed Buckeye Road groundwater collection drain.
- Ardaman provided hard copies and a CD for Phase II Slope Closure drawing revisions on 12/14/06 as follows: C-1, revision 2, and D-2, revision 1, both dated 12/13/06.
- Drawings C-1, C-2, D-1, D-2 and D-3 were distributed at the 4/5/07 meeting for the First 50 percent - Plant Watershed Areas. Drawing C-1, revision 1 and a CD were distributed at the meeting for use as an interim grading plan.
- Ardaman distributed a detailed grading plan figure at the 5/10/07 meeting to clarify the transition from typical berm section to outlet pipe profile at the locations of the SCP cap outlets; additional clarifications were sent by email to CDM on 5/21/03 and 5/23/07.
- Regarding closure of the NGS-N crest roads, Ardaman replied to CDM's proposed location for placement of gypsum to be excavated to lower the crest roads to grade in a 6/6/07 email. A marked-up copy of the proposed typical cross section for placement of gypsum on the north end of the NGS-S east slope was provided a sketch at the meeting. See 8.0 Technical Items, Miscellaneous for more.

Quality Control Activities

- Ardaman had 9 technicians on site this reporting period.
- In-place gypsum/soil density tests

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- Phase II SCP closure - 104 passing, none failing, none pending.
- In-place soil fill density tests
 - OGS reservoir slope cover - no change - 59 passing, none failing, none pending.
 - Phase I stormwater ditches soil cover - 54 passing, none failing, none pending.
- Liner conformance testing
 - SCP Phase II liner conformance testing was last updated on 6/6/07 (revision 2).
- Liner destructive testing (DT's)
 - SCP Phase II pond - 74 marked, 55 passing, 1 failed in field, none pending. A summary of results, dated 6/20/07, was distributed at the meeting.

Miscellaneous

- Rainfall was reported by CDM at 0.05" from 6/13/07 through 6/19/07.
- CDM and Ardaman continue to monitor the Granddaddy Boil location.
- Protection of the twin 18" gate valves on the NGS-N outlet pipeline and plans for final grading of the existing low area around the valves at the northwest corner on the NGS-N were discussed at the 5/17/07 meeting. Ardaman will provide a sketch for HRK's review and then to CDM for execution.
- Ardaman indicated at the 5/31/07 meeting that the design for the south drain segment east of Outfall 003 will be revised for compatibility with the proposed Buckeye Road groundwater collection drain and associated cutoff wall (plans for which are currently under review by CDM). CDM indicated their selection of drain Option 1.
- Regarding removal and placement of gypsum from the NGS-N northern and western crest roads, Ardaman indicated to CDM by email on 6/8/07 that the capacity of the proposed placement area is approximately 2,000 cy, whereas the anticipated cut volume is approximately 4,000 cy; a supplemental gypsum placement area needs to be identified. Two potential areas were suggested for consideration at the meeting: the NGS-S east crest road, and the wide ramp at the northeast corner of the NGS-N. CDM will survey existing elevations along the NGS-S east crest road (which had previously been excavated in preparation for closure but appeared lower than 2 feet relative to the reservoir liner at the edge of the crest road). Ardaman offered to sketch a draft grading plan for the NGS-N northeast ramp for use in estimating gypsum placement capacity for this option.
- Regarding erosion repairs presently being performed by Compass on the Phase II slopes, it was noted during the site tour that erosion gullies were being filled with loose dry soil, which has a high erosion potential. It was suggested that CDM/Compass consider wetting, scarifying, dressing and recompact (tracking in with a doze) the eroded gypsum surface prior to placement of soil dressing and re-seeding. CDM/Compass concurred and agreed to revisit and revise slope repair protocols. See 10.0 Comments by FDEP for more.
- The HDPE liner and panel drain in the NGS Relief Ditch were accidentally damaged by a Compass dozer on 6/15/07. The dozer, which was grading soil cover, did not have GPS-assist or traffic cones to indicate soil cover thickness at this location. A report regarding the incident was sent to FDEP by Ardaman on 6/18/07. CDM/Compass agreed to maintain traffic cone or similar visual depth markers in all active soil cover grading and hauling areas. It was also noted that excessive rutting by hauling traffic had recently been observed during placement of wet soil cover materials in the relief ditch. Compass will avoid hauling and placing soil cover materials that are too wet. See 10.0 Comments by FDEP for more.
- During the site tour, CDM stated that they do not anticipate hauling substantial additional sludge from the SCP for disposal along the east side of the NCP. It was noted that maintenance (motorgrader or dozer blading) of the east dike of the NCP during the hauling operation appears to have resulting in lowering of the road along the east edge to a degree along some portions that the existing NGS-N west ditch liner anchor trench could have been affected. CDM agreed to survey and flag the liner anchor trench location to confirm that it was not damaged. Further, CDM agreed to locate and uncover the existing NGS-N outlet pipeline that had been buried along the west edge of the same road during the sludge handling/disposal process. CDM will use a probe to locate the pipe manual labor if needed to avoid any damage to the pipe during excavation.

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Acceptances

- On 6/15/07, SCP-S subgrade for liner installation, the east dike from station 59+75 to 58+75, and 64+75 to 65+25, the west dike from station 12+80 to 12+30, and the pond bottom between contours 8.25' and 8.05'.
- On 6/15/07, SCP-S subgrade for liner installation, the east and south dikes from station 65+25 to 10+00, and pond bottom upstream of contour 8.25 feet, including structure no. 2.
- On 6/20/07, SCP-S subgrade for liner installation, the south dike from station 10+00 to 12+30, and the pond bottom within contour 8.25', including structure no. 3.

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 last discussed by conference call on 2/13/07 between FDEP, CDM and Ardaman. [Ardaman forwarded a sketch to CDM showing a potential cross section revision that may be considered to reduce the required gravel quantity via email on 2/23/07.] It has been agreed that the existing access ramps will be left in place until this work is done. Discussions are in progress with FDEP.
- Based on updated grassing tabulations previously forwarded to FDEP and Ardaman for review, change order no. 20 is in progress.
- CDM received an updated cost proposal from Compass for closure of the First 50 percent - Plant Watershed Area, which was forwarded to FDEP on 6/12/07. Discussions are in progress with FDEP.
- CDM/Comanco submitted preliminary quantity estimates for crest road closure. (Ardaman quantity estimates were submitted to FDEP via email 5/30/07). CDM/Comanco agreed to Ardaman's quantities for liner work; CDM received Compass quantity estimates, and forwarded to FDEP this week.

10.0 COMMENTS by FDEP

- The Department again expressed concerns regarding watershed removal, and the potential to lose focus on its importance as uncommonly dry weather continues. For example, regarding timely grass establishment on the Phase II gypsum slopes, it is important that effective repairs be undertaken expeditiously in order to meet intended watershed reduction (and associated runoff water quality) milestones.
- An as-built of the gas line was provided to Ardaman at the meeting.
- CDM/Compass were requested to submit an incident report regarding damage to liner and panel drain in the NGS Relief Ditch on 6/15/07.

11.0 COMMENTS by HRK

- HRK was not represented at the meeting.