SMITH+GARDNER
ENGINEERS

ADDRESS
14 N. Boylan Avenue, Raleigh NC 27603
TEL
919.828.0577
WEB
www.smithgardnerinc.com

Permit No.	Scan Date	DIN
4204-INDUS-1994	**October 21, 2015**	**25169**

MEMORANDUM

RECEIVED
October 20, 2015
Solid Waste Section
Asheville Regional Office

Date:	October 20, 2015
To:	Shawn McKee NC DEQ - Division of Waste Management
From:	Pieter K. Scheer, P.E. Smith Gardner, Inc.
RE:	**Halifax County Ash Monofill (NC Permit 42-04-INDUS-1994)** **Conceptual Filling and Intermediate Cover Plan**

NORTH CAROLINA PROFESSIONAL SEAL 021666 ENGINEER PIETER K. SCHEER
10/20/15

As a follow-up to our phone conversation and on behalf of Halifax County, **attached** is a conceptual plan showing our proposed incremental sequencing for ash filling and intermediate cover placement for Halifax County's ash monofill. The County requests the Division of Waste Management's review and concurrence with this plan in order to complete filling along outer slopes to final (top of ash) grades such that intermediate cover can be placed and run-off diverted (outside of the containment area) to perimeter drainage channels and sediment basins. As you are aware, the County has contracted with a local contractor to place intermediate soil cover on the North Slope (+/-4.9 acres). This work should be substantially complete within the next week.

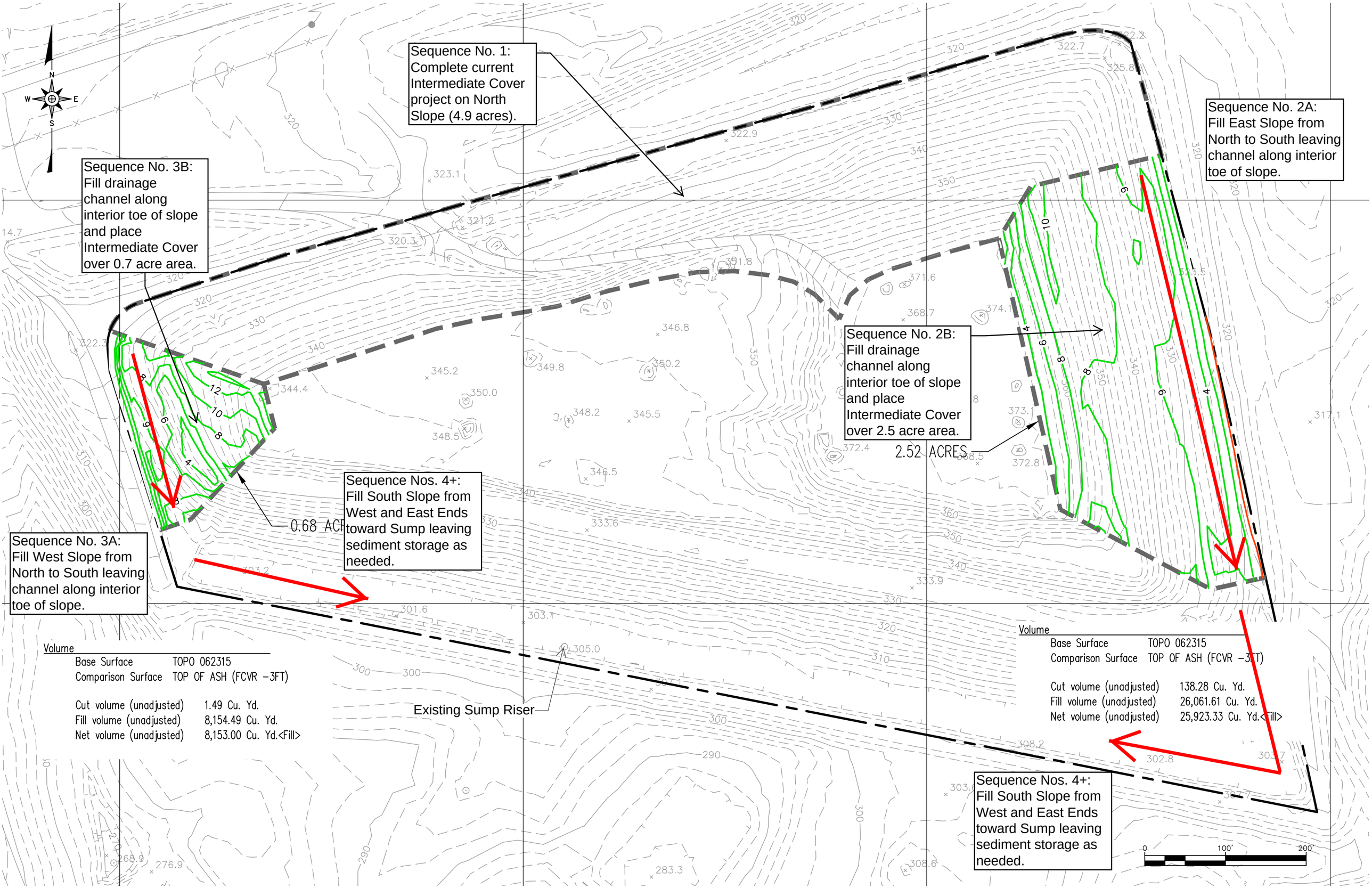
With the exception of the North Slope (current project is labeled as Sequence No. 1), the remainder of the ash monofill area (+/-15.9 acres) still requires a significant amount of ash to reach final (top of ash) grades. Of the remaining area, the East Slope (+/-2.5 acres) and West Slope (+/-0.7 acres) can be brought to grade the earliest. As shown on the plan (note isopach fill contours in green), the East Slope (Sequence Nos. 2A & 2B) will require approximately 25,900 CY of ash (approximately 25,900 tons of ash) while the smaller West Slope (Sequence Nos. 3A & 3B) will require approximately 8,200 CY (+/- 8,200 tons) of ash. Based on an anticipated 40,000 of ash to be disposed of in the next year, we anticipate that both of these slopes can be filled and covered with intermediate cover within approximately 10 to 12 months.

Beyond completion of filling and placement of intermediate cover on the East and West Slopes, placement of ash would continue incrementally from both the West and East ends and toward the sump (Sequence Nos. 4+). Some storage for the purpose of ash settling will need to remain around the sump. However, as more intermediate cover is placed and runoff diverted outside of the containment area, the need for storage capacity at the South end of the monofill will be further reduced. Additionally, less runoff from ash surfaces being collected at the South end of the monofill will result in improved settling of ash prior to discharge from the sump. Thus, the potential for ash to reach the stormwater basin located to the southwest of the monofill will be minimized.

Please contact me at your earliest convenience should you have any questions or comments. The County would also welcome the opportunity to meet to discuss the plan further.

Attachment: Conceptual Filling and Intermediate Cover Plan

cc: Dennis Shackelford, NC DWM
Larry Frost, NCDWM
Greg Griffin, Halifax County
Ed Stanfield, Halifax County



Volume

Base Surface	TOPO 062315
Comparison Surface	TOP OF ASH (FCVR -3FT)
Cut volume (unadjusted)	1.49 Cu. Yd.
Fill volume (unadjusted)	8,154.49 Cu. Yd.
Net volume (unadjusted)	8,153.00 Cu. Yd.<Fill>

Volume

Base Surface	TOPO 062315
Comparison Surface	TOP OF ASH (FCVR -3FT)
Cut volume (unadjusted)	138.28 Cu. Yd.
Fill volume (unadjusted)	26,061.61 Cu. Yd.
Net volume (unadjusted)	25,923.33 Cu. Yd.<Fill>