

# MEMORANDUM

<b>Date:</b>	September 10, 2013
<b>To:</b>	Amanda Bader, P.E., Harnett County Randy Smith, Harnett County
<b>From:</b>	Pieter K. Scheer, P.E. Smith Gardner, Inc.
<b>RE:</b>	<b>Landfill Capacity Clarification for Dunn-Erwin C&amp;D Landfill NC Solid Waste Permit No. 43-02</b>

I understand that Mr. Ethan Brown of the NCDENR Division of Waste Management (DWM) has requested that the County provide revised capacity values for the County's Dunn-Erwin C&D landfill annual report. These values include airspace used and total tons disposed. To determine the airspace used we compared the July 16, 2013 topography (performed by Mapping Resource Group) with grades from January 1998 (provided by C.T. Clayton, Sr., P.E., Inc.) (see **attached** cut and fill isopach drawing). Disposal tonnages were as reported to the DWM and as provided by the County for the period between January 1, 1998 and July 16, 2013. Based on this, the following revised values should be reported:

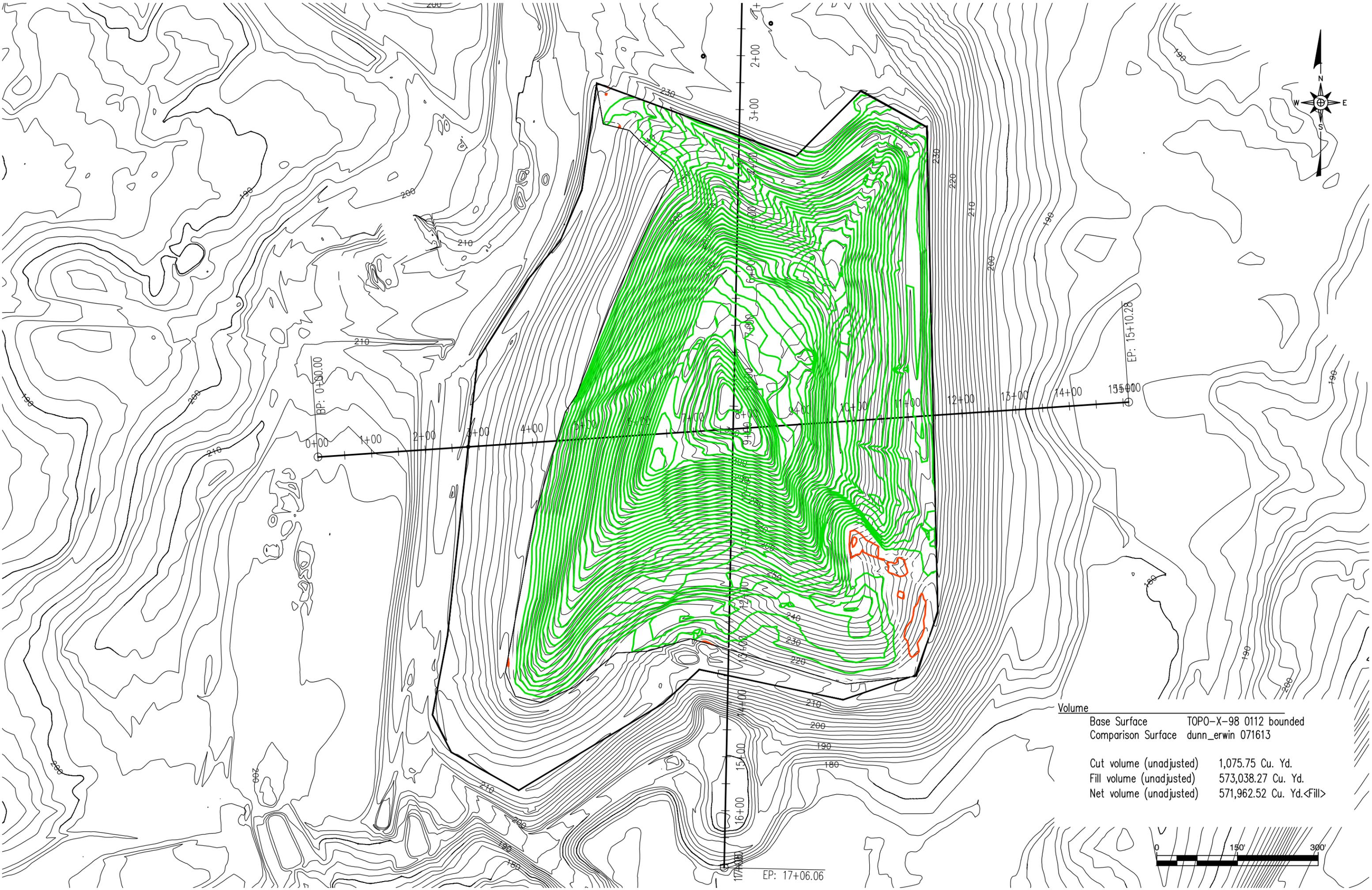
**Dunn-Erwin C&D Landfill:**

Date Facility Last Surveyed	7/16/13
Airspace Used (cubic yards):	571,963
Total Tons Disposed in Airspace Used (tons):	256,683

Please let me know if you have any questions or need any additional information.

Attachment: Dunn-Erwin C&DLF Cut/Fill Isopach Drawing





BP: 0+00.00

EP: 15+10.28

EP: 17+06.06

Volume	
Base Surface	TOPO-X-98 0112 bounded
Comparison Surface	dunn_erwin 071613
Cut volume (unadjusted)	1,075.75 Cu. Yd.
Fill volume (unadjusted)	573,038.27 Cu. Yd.
Net volume (unadjusted)	571,962.52 Cu. Yd.<Fill>

