



United States
Department of
Agriculture

August 4, 1999

Natural
Resources
Conservation
Service

NEW YORK BULLETIN NO. NY210-9-4

441 South Salina St.
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Syracuse, NY 13202
TEL: 315-477-6538
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SUBJECT: ENG- AGRICULTURAL WASTE MANAGEMENT FIELD HANDBOOK, PART
651 – SUPPLEMENT #7

Purpose: To add to the approved list (Sept. 1995) of standard detailed drawings prepared
by non-NRCS Engineers

Expiration Date: This bulletin expires when the contents have been filed.

Filing Instructions: File this material according to the instructions below.

The following standard detail drawings have been approved for use on NRCS assisted
projects in New York:

Groffdale Concrete Walls, (GCW) Circular Site Cast Waste
Storage Facility - GCW-NS-98UN

Please make pen and ink changes to the index located in chapter 10 and file this material
after page 10-26.

If you have any questions please give me a call at 315-477-6538.

WALTER E. GRAJKO
State Conservation Engineer

Distribution: All Area Offices
JCEO
Design
All Holders of the AWMFH



SUITE 340
ONE CREDIT UNION PLACE
HARRISBURG, PA 17110-2993
717-237-2212; fax: 717-237-2239

Mr. John Stoltzfus, Jr.
Groffdale Concrete Walls
430 Concrete Avenue
Leola, PA 17540

July 22, 1999

Dear John:

We have reviewed your standard detail drawing GCW-NS-98UN sheets one through 14, dated 9/98 and sealed by Everitt Prewitt, P.E. on 6/10/99. The drawing meets the structural design requirements of PA Standard 313.

I concur in the drawing for use on NRCS assisted projects in Pennsylvania. As always, the drawing must be used as part of a site specific design approved by an NRCS engineer and within the original design assumptions. As in the past, you will be required to provide a complete set of your drawing on each job site.

I am distributing one set of this drawing to each of our four Area Engineers for their reference. No further copies or distribution will be made.

I am also notifying the NRCS State Conservation Engineers in the adjoining states of my concurrence. You will need the concurrence of the State Conservation Engineer in each state where you plan to use this drawing on NRCS assisted projects.

Thanks for your continued cooperation in serving the farmers and environment of Pennsylvania. If you have any questions, please call me at 717-237-2206 or Tim Murphy at 717-237-2212.

Sincerely,


WILLIAM J. BOWERS, P.E.
State Conservation Engineer

cc:
Gary Miller, Area Engineer, Clarion, PA
John Zaginaylo, Area Engineer, Bloomsburg, PA
Wayne Bogovich, Area Engineer, Somerset, PA
Hosea Latshaw, Area Engineer, Lebanon, PA

Cc: w/enclosure
See distribution list on reverse of this sheet

Design Data Sheet for Standard Detail Drawing by:
Groffdale Concrete Walls, (GCW) Circular, Site Cast Waste Storage Facility

Designer: Everitt H. Prewitt, PE 816-421-4232
Norton & Schmidt, Consulting Engineers
Suite 419, 1100 Main Street, Kansas City, MO 64105

Fabricator: Groffdale Concrete Walls 717-656-2016
430 Concrete Avenue, Leola, PA 17540

Drawings: GCW-NS-98UN 1 thru 14, dated 9/98 and sealed 6/10/99.

Location: Calculations and drawing were reviewed for conformance with PA Standard 313. Design data are on file in NRCS-PA state office. Review was completed July 1999.

Materials: Reinforced concrete footings, floor slabs, walls, and access pads require Grade 60 steel with Class 4000 (Class 5000 for diameters over 120 feet) air-entrained concrete.

Sizes: Diameters: 80 to 140 ft. in 10 ft. increments for 16 ft. walls.
Walls: 16 ft high by 9 in thick.

Applications: PA Standard 313 for Medium (20 year) service life.

Assumptions: Walls are designed for full backfill, structure empty and structure full. minimum backfill conditions. Lateral earth pressure of 75 psf and 100psf surcharge are assumed. Walls are adequate for an equipment load up to 15,000 pounds adjacent to the tank if additional reinforcing steel is added to the wall as detailed in General Note K. An equipment access pad is required for larger loads or if the additional wall steel is not used. Minimum required soil bearing capacities are 1.8 ksf under floor slab, and 2.0 ksf for the footing. Backfill for frost protection is required. Height of backfill against the structure walls shall not vary more than 13 feet, and the minimum backfill shall be four feet above the base of the footing. Structure diameters between those shown may be used provided the reinforcing steel for the next larger diameter is used. Design assumes a foundation drain as shown on drawings.

Concurrence: The State Conservation Engineer concurs in the use of these standard detail drawings.