ASE STUDY Between a Rock and a Hard Place in Rockaway, New Jersey

When enginer Dick Greene of Geo Quality Management and Engineering, Inc. was first approached to work on the Fox Hills Development project, he quickly realized the project was off to a rocky start. The plane handed to Greene for the 88-ace, 600-unit adult residential community called for about 30 reasining walls — constructed to boulders.

The reason for the choice of materials stemmed from

soil, so full of huge cobbles and stones, that the developer hoped to make use of the natural resources. Due to the billy terrain in Rockaway, the walls would have to reach heights of 20 to 30 feet and stand near vertical. Greene easily surmised that the stability concerns of boulder walls was simply non suitable for the conditions.

Multi-Functional Walls

The functional requirements of the walls added to the complexity of the asignment. One of the walls was to provide a fire account of the community. Another pair of walls were designed to create a road to bridge a ravine. Yet another wall had to extend 25 to 30 linear feet from the footings of an apartment building to retain the soil supporting the building.



Is the System Working?

The cell for pidelines specific or segmental remaining walks in our university workseck. Double Densh, plan check engineer for the city of Bloomington, Minnessen, Statistica et al. (1998) and the current requirements. A Chairman of the Minneson Neuthaut Chapter of the MasonryConserve Committee and member of the committee for elucation and certification of Concere Finalsers through the University of Florida, Dornh it inituatly acquirements with close a system retaining and construction. From Densh's perspective, the current years works. "Han on poler dispations and the installer follows the doign requirements, the current of evel will produce against."

A Push for Inclusive Minimum Requirements

At the very least, there's need for the indury to comguidrer as a group rock agreemer. Where Rumann, PL, an Achent Wall Systems engineer and IRC hearing observes, believes: it correndy important the the IRC bearing and the set in terms of the system in the the BC and all of the industry in physes. Notes Rumanna, "An industry, we withmind a code antomotes to the IBC specific to segmental retaining wall design. We've done this targity as a defensive move, in light of other opposition that max attempting to pass code that may provide advantages to certain manufactures and registra's the proposed industry mendment, which that is has not prevailed, wai inclusive, meaning any system that mey another organization data weat a look fared at the IRC, mother organization data weat a look fared at the IRC.



The Rationale for the NCMA Manual

Whith the segmental retaining wells, industry, the NCMA Doing Manual is considered a spraubble inclusive document editinity segmental retaining well construction. A control have within the organization is whither or note NCMA should go through the American National Sandards finitume (ANSI) prices of accreditation to produce a forward) proposed industry communic document. In doing no, the document could arere as the national order for segment activationing wells.

Bannam notes, "Several members of the IBC trustmatiindocumultime believe there are adequate requirements for segmental rectaining all doign already in the body of the code and don't use a need to be more specific. That's good from the industry preproteries. However, on defined the generic use of several systems, we have to be alter to any potential changes pupped by another company to gain contomic benefit for their product. There my be value in our continuing to pursue an amendment that would make use of the NCMA delaym namal as a bac delaym tendedology."

How will minimum requirements affect you?

leff Greenwald, manager of codes and standards for NCMA, represents the NCMA membership in the IBC process. He's still eathering information regarding the wishes of his constituency to place minimum segmental retaining wall code requirements in the IBC. While Greenwald is now considering all opinions regarding which way the industry should go at this time, he suggests that quality assurance, control and inspection provisions pertaining to segmental retaining wall construction may be necessary and of benefit to the entire industry. Says Greenwald "NCMA could develop language that could go into the building code to cover these areas. For example, the code might require that the segmental retaining wall unit meet minimum standards, that backfill meet certain criteria, or that geosynthetic fabrics be labeled according. to their strength and proper orientation, and so on."

In August, the NCMA Segmental Betaining Wall Technical Subcommittee will be debuting what the membership should propose to the IRC. In the meantime, Greenwald suggest that NCMA members and other interested parties think carefully about how projects are approved now at the local jurisdiction and what difference it would mean to their business if minimum requirements were enforced accoss the industry.

If you would like to provide your input on this important issue, e-mail Jeff Greenwald at jgreenwald@ncma.org or contact him at the NCMA at 703/713-1900.

The Anchor Diamond" block is well suited to tall applications such as this 400-foot project in Fax Hills, New Jersey