

July 18, 2007

VCGY-10, LLC c/o Taxserve, LLC

1313 Dolley Madison Boulevard, Suite II-130 McLean, Virginia 22101

Attn: Mr. Jeff Sherrin

Re: Preliminary Geotechnical Engineering Report Cottonwood Industrial Site

6800 Kilmer Street

Arvada, Colorado

Terracon Project No. 25075119

Consulting Engineers and Scientists

10625 West I-70 Frontage Road North Suite 3 Wheat Ridge Colorado 80033 Phone (303) 423-3300 Fax (303)

423-3353 [www.terracon.com](http://www.terracon.com)

Terracon has completed preliminary geotechnical engineering exploration for the proposed residential development to be located at the referenced address in Arvada, Colorado. This study was performed in general accordance with our proposal number D25070490 dated May 10, 2007.

The results of our engineering study are attached. These results include the Boring Location Map, laboratory test results, Logs of Boring, and the preliminary geotechnical recommendations needed to aid in the design and construction of foundations and other earth connected phases of this project.

The site was previously used as a landfill and will require considerable modification prior to development.

Landfill materials (municipal refuse) were encountered across the site to depths of about 7 1/2 to 16 feet, and are of variable composition including paper, glass, plastic, organic, metal and wood debris as well as metal fencing, box springs, carpeting, etc. Sandy clay to clayey sand soils is mixed with the landfill debris.

Results of field exploration and laboratory testing completed for this study indicate that the natural sand-clay deposits and sand and gravel deposits underlying the landfill debris have a non- to low expansive potential and a low to moderate potential for settlement and/or compressibility. The claystone bedrock is considered to be low to moderately expansive and has a non- to low potential for settlement and/or compressibility.

Based on the geotechnical engineering analyses, subsurface exploration and laboratory test results, the existing fill materials should not be used for support of foundations, slabs, pavements and/or utilities without significant modification. Unless entire building structures (including floor slabs) are supported by a deep foundation system, such as drilled piers or driven piles, existing landfill materials should be completely removed and replaced with engineered fill. Partial removal of landfill materials and replacement with engineered fill, coupled with the use of geotextiles, could be considered in areas where greater potential movements can be tolerated, such as pavements and utility corridors, and provided that the owner can accept the risk of differential settlements exceeding 2 inches within these areas. Depth of partial removal of existing landfill materials would likely be in the range of 6 to 10 feet below planned road subgrade or bottom of utility structure, but will ultimately depend on subsurface conditions encountered during construction.

After landfill materials are removed to the depth of natural soils, stabilization of the bottom and sides of the excavation, including site dewatering and the use of geosynthetics or rock may be required. Other design and construction recommendations, based upon encountered geotechnical conditions, are presented in the report. Supplementary geotechnical engineering exploration should be performed at the site when preliminary design plans become available in order to confirm or modify the recommendations contained in this preliminary report. Excavated landfill materials and site dewatering may require special handling and disposal. Environmental assessment of the landfill materials and groundwater will be addressed in the Limited Site Investigation Report (prepared by Terracon under separate cover).

We appreciate being of service to you in this preliminary phase of the project. We are prepared to assist you during later design and construction phases as well. Please do not hesitate to contact us if you have any questions concerning this report or any of our testing, inspection, design and consulting services.

Sincerely,

TERRACON CONSULTANTS, INC.

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7/18/07

Mark Weritz, P.E. Geotechnical Project Manager

Copies to: Addressee (5)

Andrew J. Garner, P.E. Geotechnical Department Manager