

EARTH IMPROVEMENT TECHNOLOGIES

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March 14, 2008

Mr. Donald LeBlanc LeBlanc Manufacturing, LLC P. O. Box 73 Linden, MI 48451

RE:

GRAVEL Not Required in Prefabricated Foundation Drainage Systems

Products:

Great Lakes Drain System / JDR-SWD 7.25"

ICC Code Ref:

Sect. 02620 - Subdrainage - Div. 2 Site Construction

ICC - ESR Ref:

ESR-1901 (issued 1-Sep-07 last revised Jan-08, see attached)

EIT Project No.: C07023

Dear Mr. LeBlanc:

Earth Improvement Technologies, Inc. (EIT) has reviewed the product suitability and installation requirements for the Great Lakes Drain System™ (GLDS™) foundation drainage system product. The attached ICC-ES report ESR-1901, completely defines the Great Lakes Drain system components and installation requirements. As indicated in section 3.0 of the ESR-1901 report, the GLDS™ is a complete and total replacement for conventional PIPE and GRAVEL systems around building foundations, referenced to the ICC code section 02620. Gravel is not part of the GLDS™, and consequently is not required during installation, consistent with detailed installation directions in section 4 of ESR-1901. The GLDS™ will work as a foundation drainage system in all soil types, provided it is installed according to the manufacturers directions with the proper geotextile filter attached.

The prefabricated plastic core is a complete replacement of the gravel in conventional drainage systems, providing both the collection and conveyance functions, while the geotextile wrap provides the filtering function. This is explained in geosynthetic engineering textbooks, one of which is "Membranes in Ground Engineering", see attached pages 200-201. These prefabricated drainage systems have been used in foundation drainage applications for over twenty years, and is one of the subject areas covered in the University of Wisconsin- Madison's short course on "Geosynthetics -Current Practices in Design and Construction" for which I am a course instructor.

Based on the ICC-ES report ESR-1901 the GLDS™ should be utilized with confidence as an alternate, and complete substitute for conventional pipe and gravel drainage system around building foundations. Additionally, if the interior basement sump is properly sealed, and the GLDS™ vented through the basement floor to the outside (typically through the roof), the GLDS™ may also be effective at intercepting and expelling dangerous radon gas from beneath the house. Call me with any questions.

Respectfully submitted.

ROBERT SIMAC

ENGINEER

No. 62010-

OFESSION

Michael R. Simác, PE

Principal Engineer

Attachments: ICC-ES report ESR-1901 "Membranes in Ground Engineering" Pg 200-201

Mr. Simac is registered to practice engineering of States: MN, MI, IL, MO, TN, WV, PA, NY, MD, VA, NC, SC, GA, FL, AZ, WA