

Product Evaluation

RE: Review of Gravix Precast Retaining Wall System

PRODUCT

Gravix Precast Retaining Wall System is manufactured and distributed in Alberta by Earth Wall Products located in Marietta, Georgia, USA. Website: www.earthwallproducts.com/gravix

VENDOR CLAIMS AND INFORMATION

CLAIMS

The large precast modular Gravix unit acts as a “bin wall” system and possesses unprecedented engineering efficiency by the patented shape to use the soil backfill weight for stability and to resist earth pressure. Hence the Gravix retaining wall is a true gravity system with the weight of the concrete units along with the soil infill being used to resist overturning and sliding forces.

DESCRIPTION

Gravix Precast Retaining Wall System is a gravity retaining wall system with integrated traffic barrier. Gravix system has a typical face area of 4 feet high and 8 feet wide with custom units up to 7 feet high and 8 feet wide and the depth of the stems varying between 4 feet through 28 feet. The stem depth is based upon the wall height and loading conditions.

POTENTIAL USAGE

Gravix Precast Retaining Wall System can be used for shoreline protection, foundation support for construction projects, bridge abutments, highway retaining walls and erosion control.

STANDARDS

AASHTO LRDF, MASH TL-4,

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE

Alberta Transportation has no experience with this product

APPLICABLE STANDARDS

For bridge applications this product must meet the requirements as specified in the Specification for Bridge Construction, Section 25, Mechanically Stabilized Earth Walls -

<http://www.transportation.alberta.ca/content/docType246/Production/10bcs25.pdf> .

For roadway applications this product has to be in compliance to the department's Roadside Design Guide -

<http://www.transportation.alberta.ca/3451.htm>

RECOMMENDATIONS

Gravix Precast Retaining Wall System be listed as a Potential Product under Alberta Transportation Products List, Earth Retaining Systems – Modular Gravity Wall – Proprietary – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

RESTRICTIONS ON USE

Caveat:

- 1) Product is to be used outside of clear-zone only.
- 2) Maximal allowable height will not exceed six meters.
- 3) The wall shall always have free draining granular backfill.
- 4) The product shall not be used at bridge abutments.
- 5) Any application of Gravix Precast Retaining Wall System should be designed by Professional Engineer in good standing with APEGA.

TRIAL PROJECTS

Rishi Adhikari

cc Innovations Evaluation Committee – Roger Skirrow,
Hal Cook / Junaid Iqbal