

**SITE PLAN**  
SCALE: 1"=50'-0"

**General**  
The contractor shall protect all existing utilities, and shall be responsible for all worker and public safety at the retaining wall site. All proposed utilities and/or utility relocations shall be underground. All installation shall be per the retaining wall manufacturer's construction recommendations and/or as noted herein.

**Materials**  
**The Leveling Pad** shall be constructed 1" minus crushed limestone compacted to a minimum of 90% of maximum density as determined by the Modified AASHTO T-180 Compaction Test or 95% of maximum density as determined by the Standard Proctor Test AASHTO T-99.

**Retaining Wall Units** shall be Rockwood Classic. Units must be 12" deep. Concrete wall units shall meet the requirements of ASTM C90-90 and compressive strength shall be a minimum of 3000 psi. The maximum water adsorption shall be limited to 8.0 percent. The concrete shall have adequate freeze thaw resistance in accordance with ASTM 666-90.

The **reinforced wall backfill** material shall be compacted 1" minus crushed limestone compacted to 95% Standard Proctor, as required by the City of O'Fallon.

The **drainage layer** material shall be 1/2" clean crushed limestone.

**Geogrid** shall be Carthage Mills GX as indicated on the plan, or approved equivalent.

**Filter Fabric** shall be Carthage Mills FX35HS or approved equivalent.

**Drain Tile** shall be 4" HDPE.

The **Soil Cap** shall consist of compacted low plastic impervious soil above the granular backfill in areas not to be paved.

**Wall Foundation Excavation**  
Foundation soil shall be excavated as required for the leveling pads and the reinforcing zone. We recommend the exposed soils be observed by a qualified geotechnical engineer to confirm the materials are consistent with the design assumptions. Any soils that are soft, plastic (LL > 50%), frozen, or wet and untested fills shall be removed and recompacted to 90% modified Proctor under the direction of the geotechnical engineer.

**Wall Construction**  
Install the first course of units on the leveling pad. Install the next course in a running bond stack. Adjust for setback per course. Backfill, install reinforcement as shown and continue construction. Filter fabric shall separate the granular backfill from the retained soil and the soil cap. Filter fabric shall not cover the foundation materials.

**Geogrid Reinforcing**  
The geogrids shall be cut to the design lengths "L" and placed between the blocks at the elevations shown on the plans. The geogrid's primary strength direction shall be perpendicular to the wall face (into the fill). The geogrid shall be placed horizontally and laid flat on the reinforcing fill material. The geogrid shall be placed so that a minimum of 10" of grid is between the block layers. Slack in the geogrid shall be removed prior to placing backfill.

**Wall Backfill**  
Backfill material shall be placed in maximum 8" lifts and compacted. Backfill shall be placed, spread and compacted in such a manner that minimizes wrinkles and movement of the geogrid. During backfill placement only hand operated equipment shall be used in the 4' zone directly behind the wall. The front of the wall shall be backfilled and compacted to finished grade.

**Protection of Work**  
The surfaces surrounding the wall shall be graded at the end of each day to provide positive drainage away from the wall. Grading shall include proper contouring of fills in adjacent areas to prevent the flow of excessive surface water toward the wall. Finish grading should be completed in accordance with the approved site development plan.

Upon completion of the retaining walls, the ground shall be finished graded to direct storm water away from and around the retaining wall. The ends of the wall shall be protected from scour. Storm water shall not be allowed to flow over the retaining walls. No slopes shall exceed 3 (horizontal): 1 (vertical).

**Miscellaneous**  
If a fence or guardrail is to be installed along the top of the wall under a separate plan. We recommend that PVC or sonotube sleeves be placed as the wall is being backfilled to prevent a need to excavate post holes after wall construction which could damage the geogrid. These sleeves shall be coordinated with the fence contractor.

**General Notes**  
Existing utilities are not shown. The contractor shall locate and protect all utilities. The contractor shall notify Engineering Solutions, P.C. of any utility conflict affecting this work.

Unless otherwise noted all temporary shoring is strictly the responsibility of the contractor under a separate design.

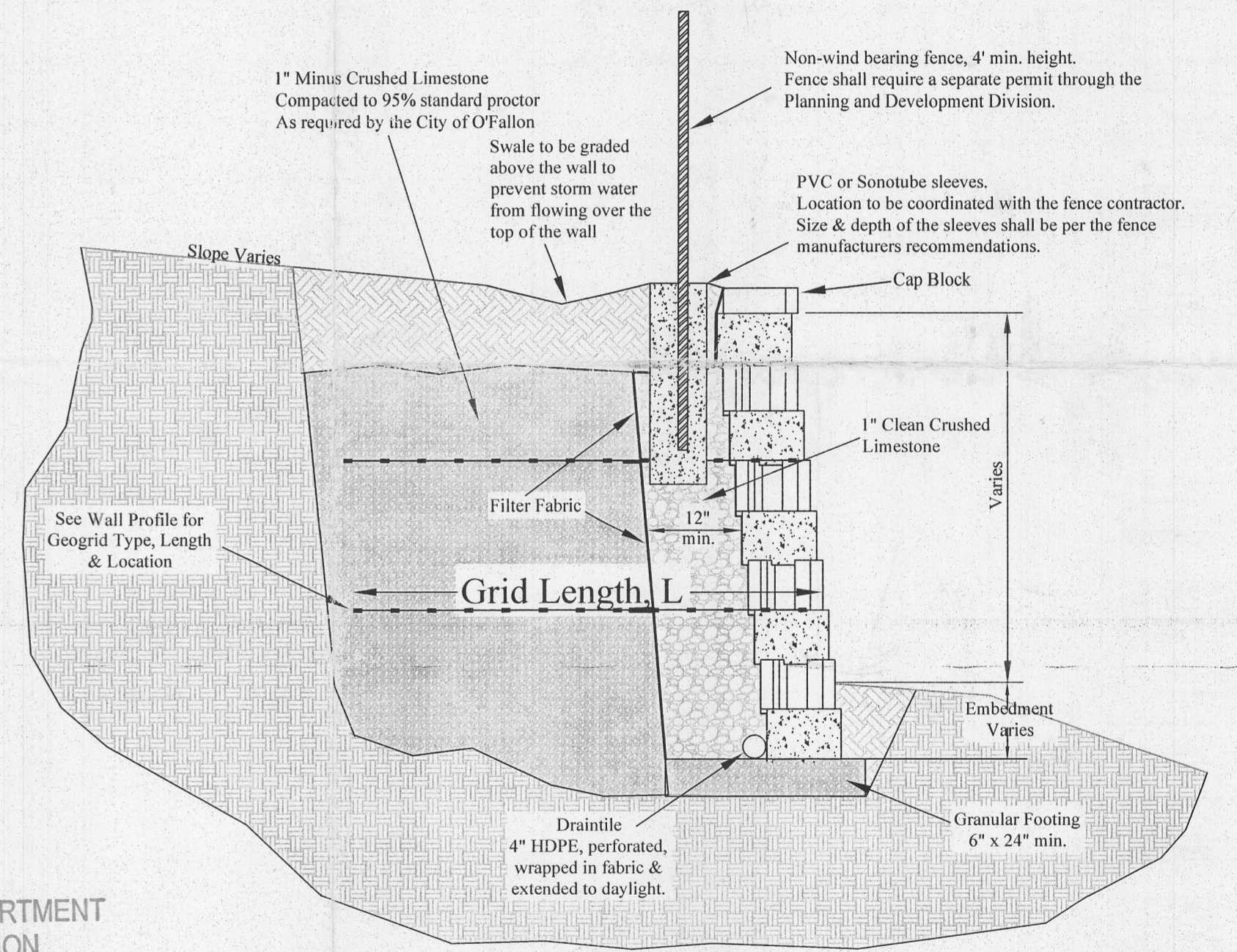
All job site worker and public safety is strictly the responsibility of the contractor. The contractor shall comply with all OSHA regulations & requirements.

Engineering Solutions, P.C. is available upon request to confirm construction compliance with this plan. Please notify Engineering Solutions, P.C. in advance of the work if field inspection is requested.

The City of O'Fallon Construction Division shall be notified at 636-379-5596 at least 48 hours before construction begins and 24 hours in advance of any required inspections.

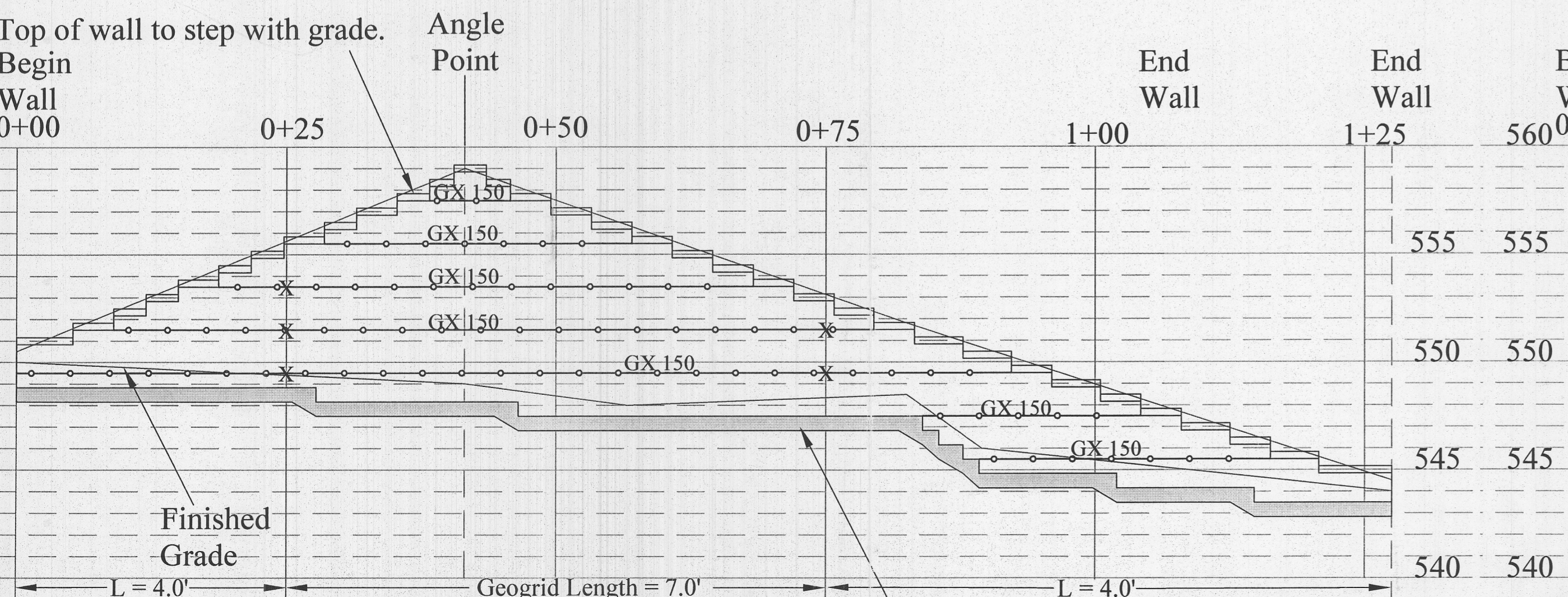
A geotechnical engineer shall verify the compaction requirements of the leveling pad & the bearing capacity of the subgrade prior to and during the construction of the retaining walls. The City of O'Fallon Construction Inspection Division must be onsite when the tests are being performed.

A geotechnical engineer shall verify the compaction requirements of the material in the reinforcing zone and stability & bearing loads during the construction of these retaining walls.

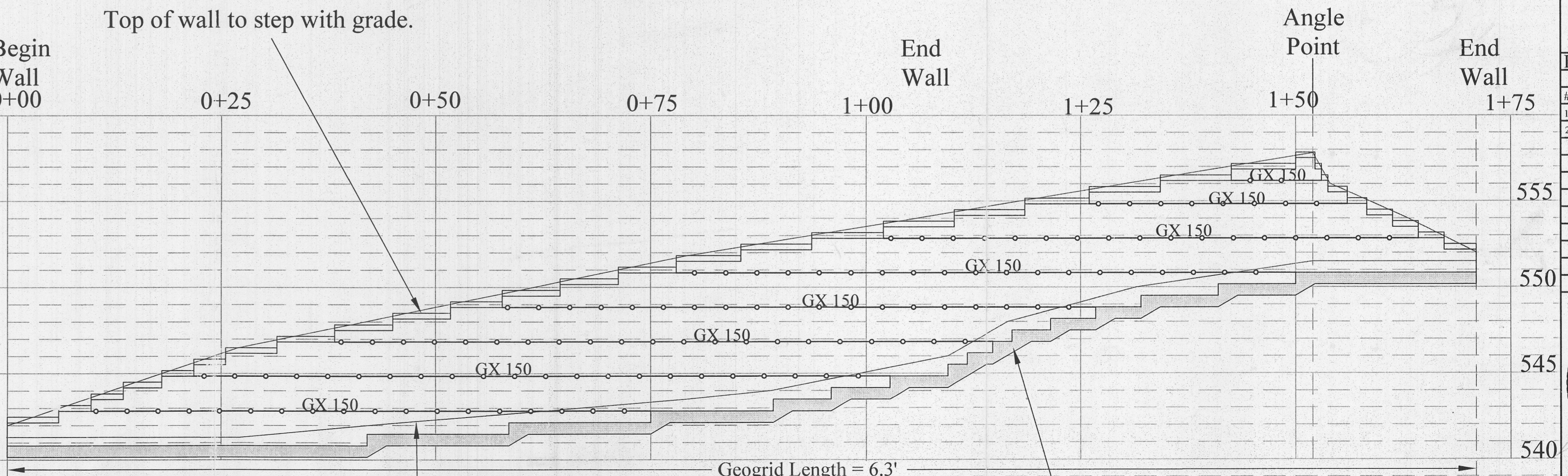


**Reinforced Block Wall (N.T.S.)**

CITY OF O'FALLON  
COMMUNITY DEVELOPMENT DEPARTMENT  
ACCEPTED FOR CONSTRUCTION  
BY: [Signature] DATE: Nov 25, 2013  
PROFESSIONAL ENGINEER'S SEAL  
INDICATES RESPONSIBILITY FOR DESIGN



**WALL 1 PROFILE**  
SCALE: 1"=5' vert, 1"=10' horiz.  
Calculated Bearing Pressure = 2,200 psf  
Compacted granular leveling pad 6" min.



**WALL 2 PROFILE**  
SCALE: 1"=5' vert, 1"=10' horiz.  
Calculated Bearing Pressure = 1,900 psf  
Compacted granular leveling pad 6" min.

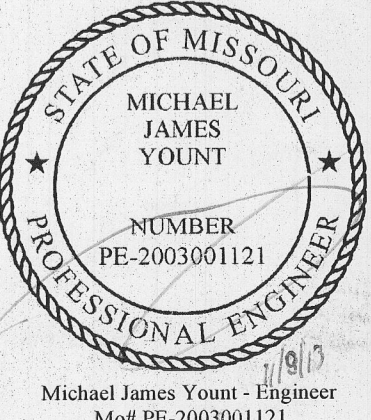
**Engineering Solutions, P.C.**  
5393 Old Baumgartner Rd  
St Louis, Mo. 63129  
Phone (314) 280-7748  
Mo State Certificate of Authority #P0056746

**Retaining Wall Solutions, inc.**  
phone (314) 842-8200 fax (314) 842-8201  
www.retainingwallsolutions.net

**Retaining Wall Plan**  
**Weatherly Landing**  
**O'fallon, Mo**

Date: 8/23/13

Revisions		
#	Description	Date
1	City Comments	10/21/13
2	Eliminated free drawing material in the reinforcing zone as required by the City of O'Fallon	11/08/13



Sheet: RW 1 of 1