

## RETAINING WALL NOTES

1. THE RETAINING WALL DRAWINGS SHOWN ON THIS PLAN ARE FOR COORDINATION PURPOSES ONLY. THE G.C. SHALL BE RESPONSIBLE FOR OBTAINING THE LATEST PLANS FROM THE WALL DESIGNER PRIOR TO CONSTRUCTION.
2. THE RETAINING WALL DRAWINGS SHOWN ON THIS PLAN HAVE BEEN REDUCED IN SCALE.
3. THE G.C. SHALL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS RELATING TO THE RETAINING WALL CONSTRUCTION, INCLUDING SUBMITTAL TO THE BUILDING DEPARTMENT.
4. THE G.C. SHALL COORDINATE THE WALL CONSTRUCTION AND GEOGRID PLACEMENT WITH ALL PROPOSED CURB AND GUTTER, STORM SEWER, LIGHT POLES, GUARDRAIL INSTALLATION, ETC.

### DESIGN PARAMETERS

1. THE WALL PROFILE IS BASED ON INTERPRETATION OF THE GRADING PLAN, "VISTAR - 2154 MCVITY RD. SW", SHEET NO. 04 DATED APRIL 24, 2015 (REV. 10/21/15), PREPARED BY BALZER AND ASSOCIATES, P.C.
2. WALL DETAILS SHOWN ON THIS PLAN ARE FOR ALLAN BLOCK AB CLASSIC UNITS (W/ 4" BATTER) MEETING THE NATIONAL CONCRETE BLOCK ASSOCIATION (NCMA) DESIGN FOR SEGMENTAL RETAINING WALL SYSTEMS.
3. ENGINEERING ANALYSIS BASED ON USE OF STRATIFIED SOILS. OTHER COMPUTER GEOTECHNICAL ANALYSES MAY BE SUBSTITUTED WITH THE APPROVAL OF THE WALL DESIGN ENGINEER.
4. THE DESIGN OF THE SEGMENTAL RETAINING WALL (SRW) ASSUMES THE FOLLOWING PARAMETERS:

SOIL	SOIL TYPE	UNIT WEIGHT (pcf)	MOISTURE (%)	ANGLE OF INTERNAL FRICTION (°)	COHESION (psf)
REINFORCED FILL	Granular Soil	120	20	30	0
RETAINED SOIL	Clay	120	20	28	0
FOUNDATION SOIL	Clay	120	28	28	100

5. SOIL STRENGTH PARAMETERS ARE BASED ON USE OF CRUSHER RUN OR APPROVED GRANULAR FILL IN THE REINFORCED FILL ZONE.
6. ALL SUITABLE SOIL IN THE REINFORCED FILL ZONE SHALL BE PLACED IN MAXIMUM 8 INCH LIFTS AND EACH LIFT IS COMPACTED TO A MINIMUM OF 95% OF MAX. STANDARD PROCTOR DENSITY, WITHIN ± 1 TO 3 PERCENTAGE POINTS OF OPTIMUM MOISTURE CONTENT, USING PORTABLE COMPACTION EQUIPMENT.
7. SOIL USE HIGH PLASTICITY CLAY (CH-MH), SILTS OR TOPSOIL IN REINFORCED ZONE.

8. ANY SOFT, SATURATED SOIL ENCOUNTERED IN SUBGRADE SHALL BE REMOVED AND REPLACED WITH CRUSHER RUN TO STABILIZE THE FOUNDATION SUBGRADE OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.

9. WALL A - MAX. EXPOSED WALL HEIGHT = 9.67 FEET  
FRONT SLOPE = LEVEL  
BACKSLOPE BEHIND THE WALL (PARKING LOT/DUMPSTER PAD) = LEVEL  
ELEV. SUBGRADE AT TOP OF WALL (VEHICULAR TRAFFIC) = 103.00'

10. MINIMUM FACTOR OF SAFETY (FOS) = 1.5  
MINIMUM FACTOR OF SAFETY (FOS) (SLIDING) = 2.0  
MINIMUM FACTOR OF SAFETY (FOS) (BEARING CAPACITY) = 2.0  
DESIGN SOIL BEARING CAPACITY = 1,500 PSF (SEE NOTE ON WALL PROFILE)

Scale	Date	Revision	Project No.	Sheet
N/A	04/25/15	10/28/15	RW-1563	2 of 6

### GENERAL NOTES

1. STRIP VEGETATIVE AND ORGANIC SOIL FROM THE WALL AND GEOTECHNICAL ANALYSIS.
2. BENCH OUT ALL EXISTING SLOPES.
3. DO NOT EXCAVATE BEHIND EXISTING LINES SHOWN ON PLAN UNLESS DIRECTED BY THE GEOTECHNICAL ENGINEER TO REMOVE UNSUITABLE SOIL.
4. CONTRACTOR SHALL ENSURE TEMPORARY EXCAVATIONS ARE STABLE AND PROVIDE EXCAVATION SUPPORT BY NEED.
5. GEOTECHNICAL ENGINEER SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT FOR THE DESIGN PARAMETERS.
6. LEVELING PAD SHALL CONSIST OF COMPACTED SAND, GRAVEL, OR COMBINATION THEREOF, SHALL BE A MINIMUM 6-INCH THICK LAYER WITH A MINIMUM WIDTH OF 24 INCHES.
7. AS AN ALTERNATE, A MINIMUM 3-INCH THICK LAYER OF LEAN CONCRETE (PLUMBABLE FILL) WITH A 28-DAY COMPRESSIVE STRENGTH OF 200-300 PSI MAY BE USED AS A LEVELING PAD.
8. A 4-INCH-DIAMETER SLOTTED DRAINAGE PIPE SHALL BE INSTALLED BEHIND THE WALL AND CONNECT TO VESSELS INSTALLED AT THE BASE OF THE WALL (MAX 40 FEET ON CENTER) AND EXTEND BEYOND THE FINAL GRADE TO DAYLIGHT (SEE DRAIN DETAIL).
9. DRAINAGE AGGREGATE AND SLOTTED DRAINAGE PIPE SHALL CONSIST OF CLEAN ANNUAL GRAVEL (VDOT No. 57 STONE), MEETING THE FOLLOWING GRADATION AS DETERMINED IN ACCORDANCE WITH ASTM D-422:

TEST SIZE	PERCENTAGE PASSING
1/2" INCH	100
1/4" INCH	95-100
NO. 4	25-60
NO. 10	0-10
NO. 20	0-5

10. GEOTECHNICAL SHALL BE LAYED HORIZONTALLY ON COMPACTED BACKFILL FOR THE REQUIRED GEOTEXTILE LENGTH (RL) IN THE TENSILE STRENGTH DIRECTION (PERPENDICULAR TO WALL FACE) NOTED ON THE WALL PROFILE. THE GEOTEXTILE SHALL BE PLACED WITHIN ONE INCH OF THE FRONT FACE OF THE UNIT BELOW AND EXTEND HORIZONTALLY OVER COMPACTED FILL.

11. ALLAN BLOCK AB CLASSIC UNITS MOULD DIMENSIONS SHALL BE 8 INCHES HIGH BY 18 INCHES LONG BY 12 INCHES DEEP AND SHALL NOT DIFFER MORE THAN 1/8 INCH IN ANY DIMENSION.
12. A 3/4 INCH SETBACK PER UNIT SHALL BE MAINTAINED FOR PROPER BATTER (SEE 4 DEGREE BATTER FROM VERTICAL).
13. GEOTECHNICAL SHALL BE PLACED WITHIN 1 INCH OF THE FRONT FACE OF THE UNITS AND GEOTECHNICAL SHALL BE PLACED WITHIN 1 INCH OF THE FRONT FACE OF THE UNITS AND GEOTECHNICAL SHALL BE PLACED WITHIN 1 INCH OF THE FRONT FACE OF THE UNITS.
14. FIELD ADJUSTMENTS OF BLOCK ALIGNMENT MAY BE MADE ON NON-REINFORCED LAYERS WITH THE USE OF SHIMS OR ASPHALT SHIMMES TO RAISE ONE COURSE OF BLOCK BY A MAXIMUM OF 1/4 INCH VERTICAL HEIGHT.

