

GENERAL NOTES:

1.0 STRIP VEGETATIVE AND ORGANIC SOIL FROM THE WALL AND GEOGRID ALIGNMENT.

2.0 BENCH CUT ALL EXCAVATED SLOPES.

3.0 DO NOT EXCAVATE BEYOND EXCAVATION LINES SHOWN ON PLAN UNLESS DIRECTED BY THE GEOTECHNICAL

ENGINEER TO REMOVE UNSUITABLE SOIL. 4.0 CONTRACTOR SHALL ENSURE TEMPORARY EXCAVATIONS ARE STABLE

AND PROVIDE EXCAVATION SUPPORT IF NEEDED. 5.0 GEOTECHNICAL ENGINEER SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT PER THE DESIGN PARAMETERS.

6.0 LEVELING PAD SHALL CONSIST OF COMPACTED SAND, GRAVEL, OR COMBINATION AND SHALL BE A MINIMUM 6-INCH THICK LAYER WITH A MINIMUM WIDTH OF 24 INCHES. AS AN ALTERNATIVE, A MINIMUM 3-INCH THICK LAYER OF LEAN CONCRETE (FLOWABLE FILL) WITH A 28-DAY COMPRESSIVE

STRENGTH OF 200-300 PSI MAY BE USED AS A LEVELING PAD. 7.0 A 4-INCH-DIAMETER SLOTTED DRAINAGE PIPE SHALL BE INSTALLED BEHIND THE WALL AND CONNECT TO WEEPHOLES INSTALLED AT THE BASE OF THE WALL (40 FEET ON CENTER) AND EXTEND BEYOND THE FINAL GRADE TO DAYLIGHT (SEE DRAIN DETAIL).

8.0 DRAINAGE AGGREGATE AND UNIT FILL (VERTICAL COLUMNS) SHALL CONSIST OF CLEAN ANGULAR GRAVEL (VDOT NO. 57 STONE), MEETING THE FOLLOWING GRADATION AS DETERMINED IN ACCORDANCE WITH ASTM D-422.

| SIEVE SIZE | PERCENTAGE PASSI | | |
|------------|------------------|--|--|
| 1-1/2 INCH | | | |
| 1 INCH | 95-100 | | |
| 1/2 INCH | 25 - 60 | | |
| NO. 4 | 0-10 | | |
| NO. 200 | 0-5 | | |
| | | | |

9.0 GEOGRIDS SHALL BE LAID HORIZONTALLY ON COMPACTED BACKFILL FOR THE REQUIRED GEOGRID LENGTH (GL) NOTED ON THE WALL PROFILE. THE GEOGRID SHALL BE PLACED WITHIN ONE INCH OF THE FRONT FACE OF THE UNIT BELOW AND EXTEND HORIZONTALLY OVER COMPACTED FILL.

10.0 ALLAN BLOCK AB CLASSIC UNITS MOLDED 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.

1.0 A 3/4 INCH SETBACK PER UNIT SHALL BE MAINTAINED FOR

PROPER BATTER (I.E. 6 DEGREE CANT FROM VERTICAL). 12.0 GEOGRIDS SHALL BE PLACED WITHIN 1 INCH OF THE FRONT FACE OF THE UNITS AND GEOGRIDS PULLED TIGHT (AFTER PLACEMENT OF THE NEXT COURSE OF BLOCK UNITS) TO REMOVE SLACK

AND TO INTEGRATE GEOGRID AND UNITS. 13.0 FIELD ADJUSTMENTS OF BLOCK ALIGNMENT MAY BE MADE ON NON-REINFORCEMENT LAYERS WITH THE USE OF SHIMS OR ASPHALT SHINGLES TO RAISE ONE COURSE OF BLOCK BY A MAXIMUM OF 1/4 INCH VERTICAL HEIGHT.

Allan Block AB Classic Units (8" Height x 18" Width)

O 4" Drain Pipe to Daylight

Leveling Pad (Min. 6" Thick Stone)

Top of Wall (Excluding Cap Unit)

'StrataGrid SG200

Scale:

14.0 REINFORCED FILL SHALL CONSIST OF GRANULAR SOIL FILL WITH USCS SOIL TYPES GP, GW, GM, GC, SW, SP, SM, OR SC WITH A MINIMUM ANGLE OF INTERNAL FRICTION, ϕ' , OF 30 DEGREES AS OUTLINED IN DESIGN PARAMETERS - NOTE 4.

LOW PLASTICITY SILT OR CLAY (ML-CL) CAN BE USED SUBJECT TO APPROVAL BY THE GEOTECHNICAL ENGINEER. ROCK FRAGMENTS SHALL BE LIMITED TO 4 INCHES IN DIAMETER OR LESS. THE FINE FRACTION (MINUS NO. 40 SIEVE) SHALL HAVE A MAXIMUM LIQUID LIMIT (LL) OF 40 AND A MAXIMUM PLASTICITY INDEX (PI) OF 20. THE BACKFILL SHALL BE FREE OF DEBRIS AND ORGANIC MATTER. HIGHLY EXPANSIVE SOILS (MH-CH) SHALL NOT BE USED IN THE REINFORCED FILL ZONE.

15.0 REINFORCED FILL SHALL BE PLACED IN 8-INCH LIFTS AND COMPACTED TO A MINIMUM OF 95% OF MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-698). COMPACTION TESTS SHALL BE PERFORMED AS THE WALL IS INSTALLED. COMPACTION WITHIN 3 FEET OF THE WALL SHALL BE LIMITED TO HAND-UTERATED EQUIPMENT.

16.0 A VIBRATORY PLATE TAMPER SHALL BE USED TO DENSIFY NO. 57 STONE. COMPACTION TESTS CAN BE WAIVED

WHERE NO. 57 STONE IS USED AS REINFORCED FILL. 17.0 CONTRACTOR SHALL SLOPE SITE GRADES TO DIRECT SURFACE RUNOFF AWAY FROM WALL AT END OF EACH DAY TO AVOID WATER DAMAGING THE WALL WHILE UNDER CONSTRUCTION.

18.0 ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT, OR TURF SHALL BE INSTALLED IMMEDIATELY AFTER THE WALL IS

19.0 IF SITE AND SOIL CONDITIONS, WALL GEOMETRY, OR WALL LOADING ARE DIFFERENT THAN THE DRAWINGS AND THE DESIGN PARAMETERS, THE CONTRACTOR MUST CONTACT THE WALL DESIGN ENGINEER PRIOR TO PROCEEDING WITH THE CONSTRUCTION OF

20.0 DETAILS FOR FENCE OR HANDRAIL POSTS AT THE TOP OF THE WALL ARE PROVIDED FOR PLACEMENT OF POSTS (SEE SHEET 3 OF 9).

DESIGN PARAMETERS:

1 THE WALL PROFILES ARE BASED ON INTERPRETATION OF THE GRADING & STORM DRAINAGE PLAN, SOUTH PEAK HOTEL, SHEET C-8, DATED DATED DECEMBER 11, 2012, PREPARED BY MATTERN & CRAIG.

2 WALL DETAILS SHOWN ON THIS PLAN ARE FOR ALLAN BLOCK AB CLASSIC UNITS (W/6° BATTER) MEETING THE NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA) CRITERIA FOR SEGMENTAL RETAINING WALL SYSTEMS.

ENGINEERING ANALYSIS BASED ON USE OF STRATAGRID SG200 AND SG350 GEOGRIDS. OTHER COMPATIBLE GEOGRIDS MAY BE SUBSTITUTED

WITH THE APPROVAL OF THE WALL DESIGN ENGINEER. THE DESIGN OF THE SEGMENTAL RETAINING WALL (SRW) ASSUMES THE FOLLOWING PARAMETERS:

| | | γ_{m} , Moist | FRICTION | |
|-------------------|---------------|----------------------|----------------|----------|
| SOIL | SOIL | UNIT WEIGHT | ANGLE | COHESION |
| CONDITIONS | Type | (PCF) | Φ , (DEG) | (PSF) |
| REINFORCED FILL | Granular Soil | 120 | 32 | 0 |
| RETAINED SOIL | SC-CL | 120 | 30 | 0 |
| COLIND ATTON COTI | CC CI | 120 | 20 | 100 |

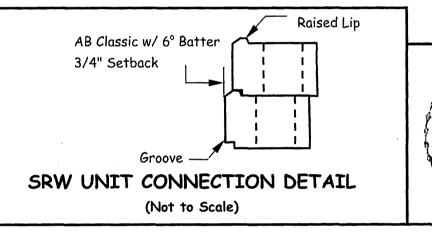
5 SOIL STRENGTH PARAMETERS ARE BASED ON USE OF ON-SITE GRANULAR SOIL OR VDOT NO. 57 STONE IN THE REINFORCED FILL ZONE. ON-SITE GRANULAR SOIL FILL CAN BE USED FOR FILL PROVIDED THE SOIL IS PLACED IN 8-INCH LIFTS AND EACH LIFT IS COMPACTED TO A MINIMUM OF 95% OF MAX. STANDARD PROCTOR DENSITY USING PORTABLE COMPACTION EQUIPMENT DO <u>NOT</u> USE HIGH PLASTICITY CLAY (CH-MH), ROOTS OR TOPSOIL IN

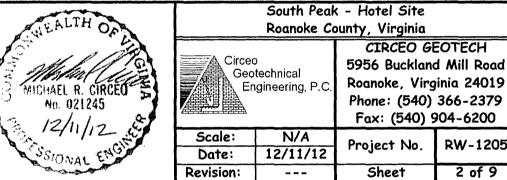
ANY SOFT, SATURATED SOIL ENCOUNTERED IN SUBGRADE SHALL BE UNDERCUT AND REPLACED WITH CRUSHED STONE TO STABILIZE THE FOUNDATION SUBGRADE OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER. FOUNDATION SOILS AND RETAINED SOIL ARE PRESUMED TO BE RESIDUAL SOIL OR PROPERLY COMPACTED ENGINEERED FILL.

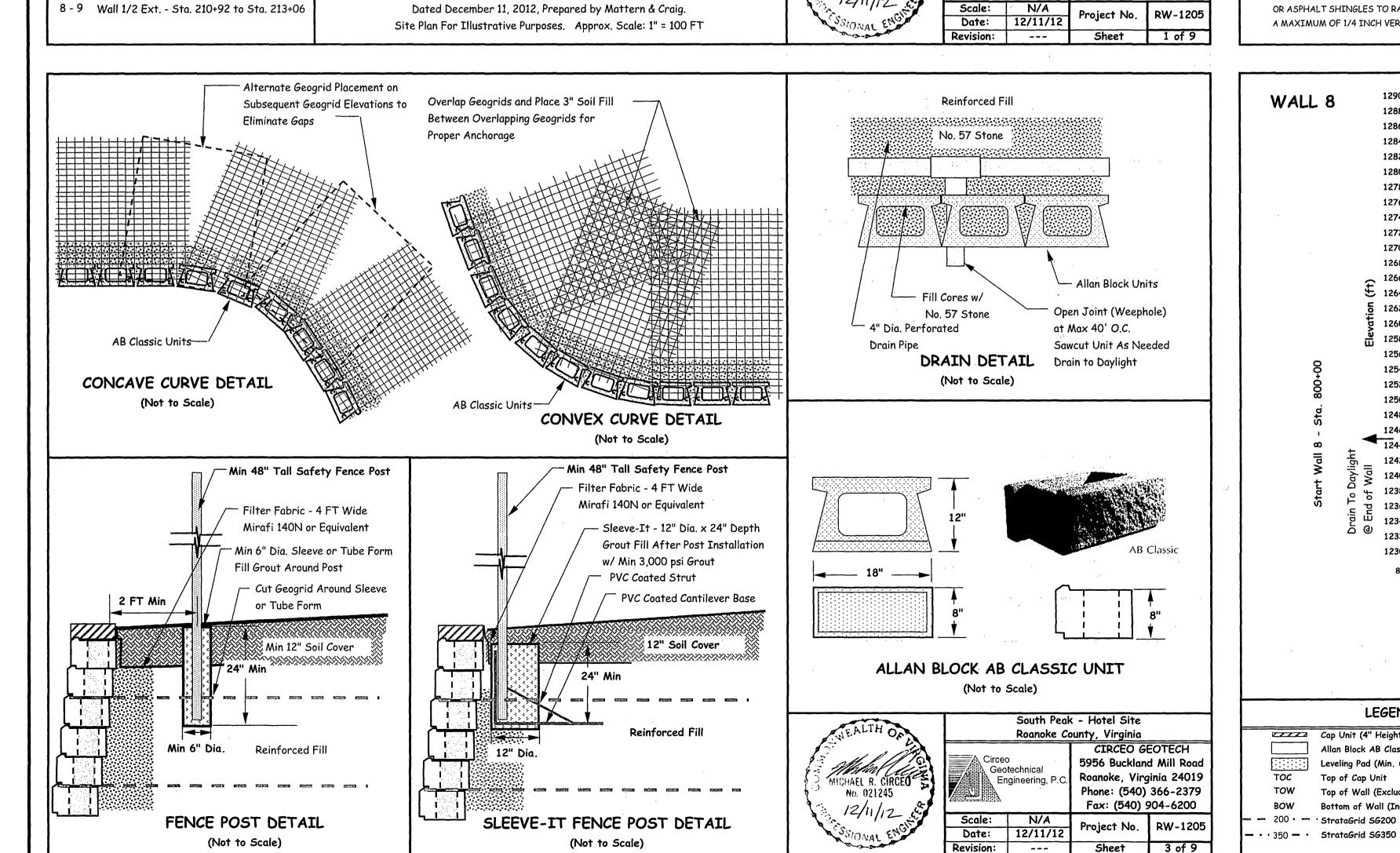
WALL 8 - MAXIMUM WALL HEIGHT = 16.67 FEET (INCLUDING EMBEDMENT) WALL 1/2 EXT. - MAX. WALL HEIGHT = 6.67 FEET (INCLUDING EMBEDMENT) FRONT SLOPE = LEVEL

BACKSLOPE BEHIND THE WALL = MAX 2H:1V SURCHARGE LOADING AT TOP OF WALL (HEAVY TRUCK TRAFFIC)= 250 PSF DESIGN SOIL BEARING CAPACITY = 1,500 PSF TO 3,000 PSF (SEE WALL PROFILES)

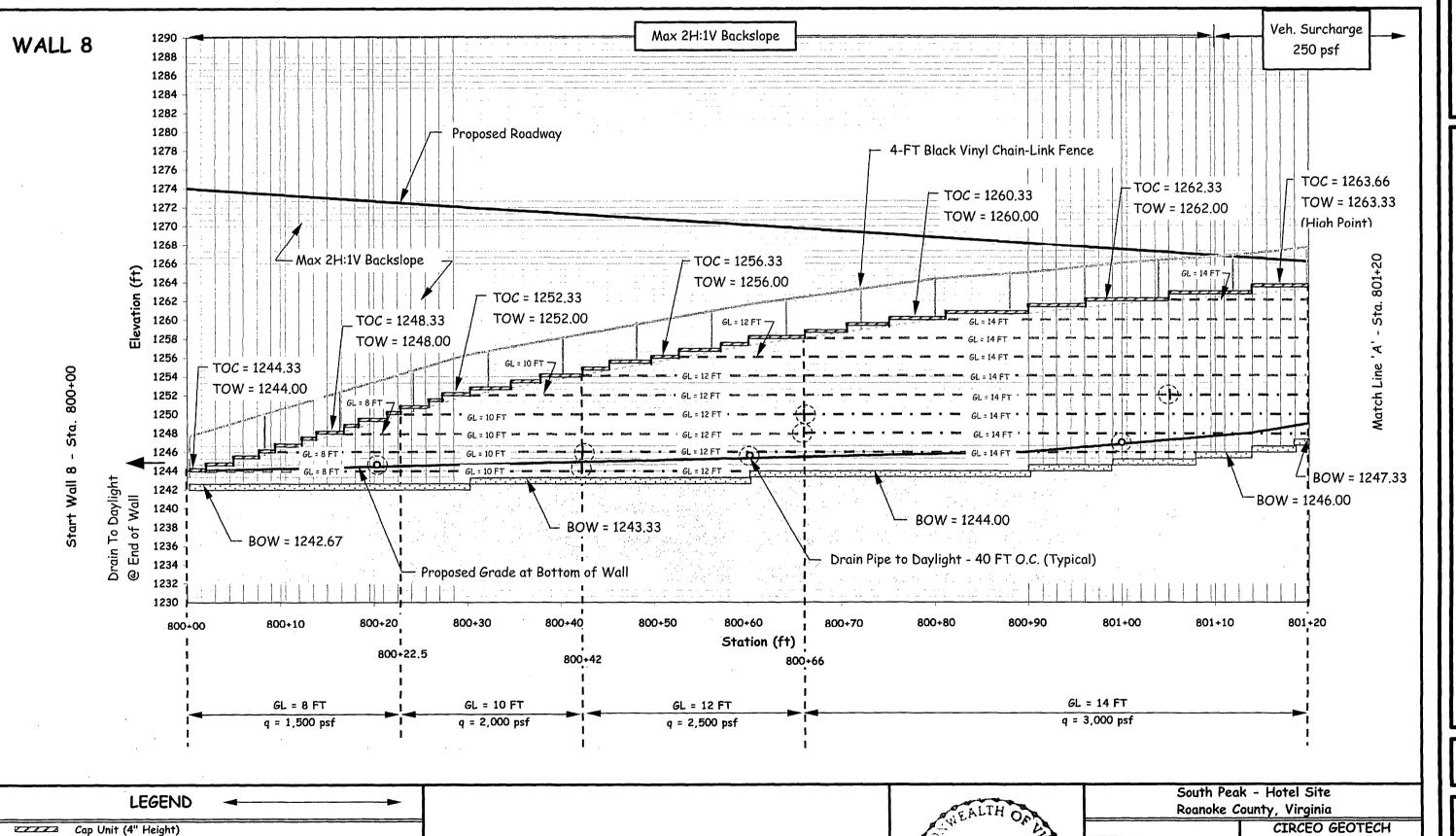
GLOBAL STABILITY (FACTOR OF SAFETY AGAINST SLOPE FAILURE) ≥ 1.50 [BASED ON GSLOPE LIMIT EQUILIBRIUM SLOPE STABILITY ANALYSIS]







8 - 9 Wall 1/2 Ext. - Sta. 210+92 to Sta. 213+06

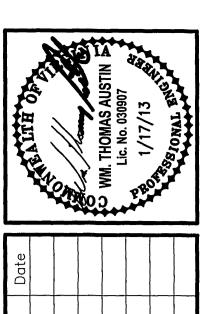


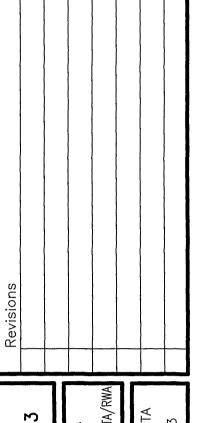
RETAINING WALL 8

Sta. 800+00 to Sta. 801+20

Viewed From Front Face of Wall

q = Design Soil Bearing Pressure (psf)



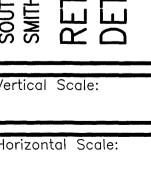








WAL RETAINING DETAILS SOUTH PEAK SMITH/PACKE



mission Number: 3101-H

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Sheet 4 of 9

RW-1205

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Geotechnical

Date: 12/11/12

Revision:

Engineering, P

ქ: 1"= 10 ft 1"= 10 ft.

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