



Building Code Appeal Request

PROJECT INFORMATION

Project Name: Lake Anne House
Project Address: 11444 North Shore Drive, Reston, VA 20190
Permit or case number: 200860261 Tax map number: 017-2/ 01/ /0002D

APPLICANT INFORMATION

Applicant Name: Melissa Matthews ☐ Owner ☒ Owner's agent
Address: 11180 Sunrise Valley Drive, Suite 200
City: Reston State: VA ZIP: 20191
Phone: 202-577-6056 Email: melissa.matthews@orpartners.com

OWNER INFORMATION

☐ See applicant information
Owner Name: New Lake Anne House LP
Address: 11444 North Shore Drive
City: Reston State: VA ZIP: 20190
Phone: 202-302-4372 Email: mengel@enterprisecommunity.org

APPEAL INFORMATION

Appealing decision made on the date of by ☒ Building Official ☐ Fire Official ☐ Property Maintenance Official
rendered on the following date: 06-17-2020
Code(s) (IBC, IMC, IPMC, etc.) and year-edition: _____
Section(s): _____

REQUEST/SOLUTION

Describe the code or design deficiency and practical difficulty in complying with the code provision:

The Building Official is requiring that the modular retaining wall that we are proposing to use, which is the Stone Strong wall, have an ICC evaluation report or National Evaluation report as described on the Fairfax County website. The Stone Strong wall does not have one of the listed evaluation reports at this time period. It does have the ASTM standard C-1776, the HITEC review and has been approved for use by both VDOT and MDSHA for walls up to 36 feet in height.

The retaining wall for the Lake Anne house is a maximum of 12' high, but decreases in height along its length. Our Structural Engineer of Record has approved the product and design for this retaining wall and our Geotechnical Engineer has completed the global stability analysis of the wall and specified product. We are currently in construction and based our design around a conversation with Fairfax County in 2019, during which the building reviewer said that the modular retaining wall should be acceptable in nature. If we are required to switch the construction type of the retaining wall, it will come at a great cost to the project, which is a 100% affordable senior housing project with FCRHA Blueprint funding.

Please return the completed form and any supporting documentation to the address or email below. A \$216.32 fee is required at the time of submittal. This total fee includes a base fee of \$208.00 plus a 4% technology surcharge. The application will not be further processed until this fee has been collected.

Chairman, Fairfax County Board of Building Code Appeals
12055 Government Center Parkway, Suite 334
Fairfax, VA 22035-5504
Attention: Secretary to the Board
buildingofficial@fairfaxcounty.gov

Updated July 2019

May 12, 2020

Mr. Bruce Neale
Modern Foundations, Inc.
7860 Kabik Court
Woodbine, Maryland 21797

Dear Mr. Neale:

The Maryland Department of Transportation State Highway Administration – Office of Structures (MDOT SHA – OOS) has reviewed your submittal package requesting approval for the renewal of your proprietary retaining wall system. The submittal included the independent consultant review performed by Mr. James G. Collin, Ph.D., P.E. for compliance with AASHTO LRFD Bridge Design Specifications and MDOT SHA requirements. We hereby approve your renewal request for the use of Stone Strong Gravity Wall System on MDOT SHA projects for walls up to 36 feet in height. Please note the following:

- Only the gravity wall system is currently approved.
- A traffic barrier system with design calculations was not submitted for review. This wall will not be used in situations that require a traffic barrier system to be mounted at the top of the wall.
- On some occasions we limit the use of certain walls based on aesthetic or other reasons. Therefore, the use of this wall at every location is not assured but will depend on your ability to meet any site specific requirements that will be spelled out in the contract documents.
- Only #57 stone is acceptable as backfill behind the wall.
- The wall system must be founded on a concrete leveling pad.
- The preparation of specific contract documents will include the submittal of substitute drawings as outlined in Section 450.01.01 of the MDOT SHA Standard Specifications for Construction and Materials. These drawings must be issued as a red line revision to the contract before the submittal and approval of any shop drawings. The substitute drawings will be compared to your approved submittal package. The shop drawings will be compared to the red lined substitute drawings. Failure to provide contract specific substitute drawings will result in the rejection of all shop drawings.

- If you wish to revise any of the approved details or information previously approved, you must submit the revisions to us for our review and approval prior to its incorporation in any MDOT SHA project. This review may require evaluation from an approved independent Professional Engineer if we deem it necessary.
- The approval is valid for 10 years from the above captioned date after which a new review will be required.

If you have any questions, please contact Mr. Prasoon Shrestha, at (410) 545-8887 or via email at pshrestha@mdot.maryland.gov. Mr. Shrestha will be happy to assist you.

Sincerely,



Mr. Maurice Agostino, Director
Office of Structures

Attachment: The revised submittal from The Collin Group Ltd. (dated May 11, 2020)

cc: Mr. Aly F. Soliman (AFS Geo Consultants, LLC)

Mr. James G. Collin (The Collin Group Ltd.)
Mr. Rick Dorsey (Modern Foundation, Inc.)

Guerra-Moran, Carla C.

From: Melissa Matthews <melissa.matthews@orrpartners.com>
Sent: Thursday, June 11, 2020 2:21 PM
To: Foley, Brian; Barzingy, Haval
Cc: Engel, Matt; Welch, Suzanne K.
Subject: Lake Anne Project: permit Number 192350010

Good afternoon Mr. Foley,

The Lake Anne Project, in Reston, VA is currently trying to obtain a retaining wall permit under number 200860261. One of the comments that we received from Mr. Barzingy was to provide the ICC report for the Stone Strong wall that was designed for the retaining wall. The Stone Strong Wall does not have an ICC report to provide. It has a HITEC evaluation report and ASTM C-1776. In addition, it is approved for use by VDOT and by MDSHA. Both of these entities require review by independent consultants/experts in the field of retaining walls, which was conducted by James Collin, of The Collin Group, LTs. I understand that Mr. Collin used to be a member of the Fairfax County Geotechnical Review Board.

We are very concerned regarding the requirement of the ICC report and are asking for your approval of the product, based on the reports that the wall does offer and the acceptance by our Structural and Geotechnical Engineers. We discussed the use of this product in July of 2019, with Mr. Mekonnen Gebresillasie, to make sure that we were not spending money on a system that would not be approved. At that time period, Mr. Gebresillasie requested the manufacturers cut sheets for the product, which we provided. I talked with Mr. Gebresillasie about the Stone Strong product, and he said that Fairfax County has approved modular walls previously and that the Stone Strong wall should not present a problem.

Can you please provide your guidance on how we should approach this Permit comment and time sensitive issue? This is an Affordable Senior Housing project with FCRHA Blueprint funding and this wall type was accepted into our Construction budget at a significant savings to the originally designed concrete retaining wall.

We would be delighted to talk through the issue with you at your convenience, and provide you the design documents, Structural Engineer letters, and evaluation reports that the wall does currently have. Could you please let us know at your earliest convenience, or we could set up a call today, Friday or Monday, if any of these work for yourself.

Respectfully,

Melissa Matthews, AIA, LEED AP
Senior Project Manager
Cell: 202-577-6056
Main: 703-289-2100
www.orrpartners.com

11180 Sunrise Valley Dr., Suite 200, Reston, VA 20191

Large Wall Building Comments:

1	05/08/2020	<p>B_Building [001_Title Sheet.pdf]:Changemark #01 -----</p> <p>B_Please explain why two engineers signing this plan and which one is responsible for the design. Please check the cover sheet (index sheet).</p>
2	05/08/2020	<p>B_Building [S_001 General Notes.pdf]:Changemark #01 -----</p> <p>B_An evaluation report issued by a certified listing agency is required for all products or material not specifically referenced in the building code. You may obtain valid reports from www.icc-es.org or www.architecturaltesting.com. We only accept reports that are issued for the current code.</p>
3	05/08/2020	<p>B_Building [S_001 General Notes.pdf]:Changemark #02 -----</p> <p>B_Site and Zoning approval are required.</p>
4	05/08/2020	<p>B_Building [S_001 General Notes.pdf]:Changemark #03 -----</p> <p>B_Please provide a letter from Geotechnical Engineer indicating the concurrence with the soil data used for this design, and the design meet all the recommendation by geotechnical report with regard retaining wall.</p>
5	05/08/2020	<p>B_Building [S_001 General Notes.pdf]:Changemark #04 -----</p> <p>B_State of Virginia seal is required, you have submitted plan with State of Maryland seal</p>
6	05/08/2020	<p>B_Building [S_001 General Notes.pdf]:Changemark #05 -----</p> <p>B_Please provide the permit number for the Support Of Excavation (SOE) that must be done before starting the construction of the retaining wall. The final approval of the retaining wall permit is pending of the SOE permit application and approval.</p>
7	05/08/2020	<p>B_Building [Lake Anne House Walls Calcs.pdf]:Changemark #01 -----</p> <p>B_Calculation and global stability analysis will be reviewed when you submit evaluation report.</p>
8	05/08/2020	<p>B_Building [S_000 Cover Sheet.pdf]:Changemark #01 -----</p> <p>B_Please see sheet 001 Title Sheet shows 21 sheets?</p>
9	05/08/2020	<p>B_Building [S_000 Cover Sheet.pdf]:Changemark #02 -----</p> <p>B_Calculation and global stability analysis will be reviewed when you submit evaluation report.</p>
10	05/08/2020	<p>DWGS, CALCS MUST HAVE A/E SEAL: Please ensure that drawings details and calculations shall bear an original seal, signature, and date of an architect or engineer registered in the Commonwealth of Virginia. When certifying a set of drawings, each page must be sealed, signed and dated. However, if the cover sheet containing a full table of contents is certified, the remaining pages may contain a copy of the seal, signature and date. For requirements on electronic seals see our policy at: https://www.fairfaxcounty.gov/landdevelopment/sites/landdevelopment/files/assets/documents/electronic_signature_policy_0.pdf To</p>

determine when a seal is required, visit our website at:

https://www.fairfaxcounty.gov/landdevelopment/sites/landdevelopment/files/assets/documents/electronic_signature_policy_0.pdf (Ref. VCC 108 and Code of Virginia Title 54.1-402)

Prior to issuance of a permit, a Special Inspections meeting is required. Please visit county website to schedule a meeting.

11 05/08/2020

<https://fairfaxcounty-639180.workflowcloud.com/forms/54e4848f-ffdd-494c-bd3a-75b7f441a245>



Stone Strong is designated under the following
International ASTM Standard Specification

for

Wet-Cast Precast Modular Retaining Wall Units



C1776/C1776M - 17

A full copy of the specification can be downloaded at:
<https://global.ihs.com/standards.cfm?publisher=ASTM>

Guerra-Moran, Carla C.

From: Grace, Richard
Sent: Tuesday, June 23, 2020 3:31 PM
To: Guerra-Moran, Carla C.
Subject: FW: Building Code Appeal
Attachments: Lake Anne Large Wall Building Comments.docx; Lake Anne Project: permit Number 192350010

Hi Carla,

Can you put this email in the J drive folder for 11444 North Shore Drive? I don't have "write" permissions to move it myself.

From USBC:

119.5 Right of appeal; filing of appeal application. A copy of the building official's decision shall be submitted along with the application for appeal and maintained as part of the record.

This email serves as the building official's decision that the appellant is using as the reason for the appeal.

Thanks,

Richard

From: Melissa Matthews <melissa.matthews@orrapartners.com>
Sent: Wednesday, June 17, 2020 1:49 PM
To: LDS Building Official <LDSBuildingOfficial@fairfaxcounty.gov>
Cc: Engel, Matt <mengel@enterprisecommunity.org>; Warntz, Rebecca <rwarntz@enterprisecommunity.org>
Subject: RE: Building Code Appeal

Good afternoon,

Mr. Foley called me to say that he was upholding comment 2 of the attached Permit comments, which requires the ICC report or acceptable national evaluation report as listed on the Fairfax County Website. I had previously written to him, in the attached email, asking for permission to use the Stone Strong wall, with the ICC report.

Please let me know if this information satisfies your request.

Respectfully,

Melissa Matthews, AIA, LEED AP
202-577-6056

From: LDS Building Official <LDSBuildingOfficial@fairfaxcounty.gov>
Sent: Wednesday, June 17, 2020 1:16 PM
To: Melissa Matthews <melissa.matthews@orrapartners.com>; LDS Building Official

<LDSBuildingOfficial@fairfaxcounty.gov>

Cc: Engel, Matt <mengel@enterprisecommunity.org>; Warntz, Rebecca <rwarntz@enterprisecommunity.org>

Subject: RE: Building Code Appeal

Good afternoon Ms. Matthews,

I have received your request for appeal and will forward to the Secretary to the Board for processing. Expect a response from her as well. Looking over your documents submitted, I did not see documentation related to the Building Official's decision. Can you please provide this documentation?

Thank you,

Richard Grace, MCP
Code Specialist III
Local Board of Building and Fire Code Appeals Liaison
Building Code Research and Development
Land Development Services
Fairfax County, Virginia
703-324-1687

From: Melissa Matthews <melissa.matthews@orrpartners.com>

Sent: Wednesday, June 17, 2020 12:29 PM

To: LDS Building Official <LDSBuildingOfficial@fairfaxcounty.gov>

Cc: Engel, Matt <mengel@enterprisecommunity.org>; Warntz, Rebecca <rwarntz@enterprisecommunity.org>

Subject: Building Code Appeal

Attention: Secretary to the Board

Attached, please find our package for the appeal of the Building Official's decision regarding the use of the Stone Strong product in a retaining wall application at the Lake Anne Project in Reston, VA.

Thank you for your time

Melissa Matthews, AIA, LEED AP
Senior Project Manager
Cell: 202-577-6056
Main: 703-289-2100
www.orrpartners.com

11180 Sunrise Valley Dr., Suite 200, Reston, VA 20191



June 5, 2020

**Community Preservation and
Development Corporation (CPDC)**

8403 Colesville Rd #1150
Silver Spring, MD 20910

Attn: Mr. Matt Engel

Subject: Permanent Site Retaining Walls/Support of Excavation (SOE) System
(Site Retaining Walls A1, A2 and A3)

Project: Lake Anne/Fellowship House
11444 North Shore Drive
Reston, Fairfax County, VA 22182

Fairfax County Permit No.: **200860261** (Permanent Site Retaining Walls)

AFS Geo Our Project: **VA19036**

Gentlemen,

AFS Geo Consultants, LLC ("AFS Geo") has completed a detailed design for three permanent site retaining walls (Wall Nos. A1, A2, and A3). Since the permanent site retaining walls were located in a close proximity the Limit of Clearing and Grading (LCG), a temporary support of excavation (SOE) system was deemed necessary to facilitate the construction of the permanent site retaining walls.

AFS Geo has only designed, and has issued stamped construction drawings for, the permanent site retaining walls. The SOE design was performed others. **AFS Geo** only assumes responsibility for the design of the permanent site retaining walls.

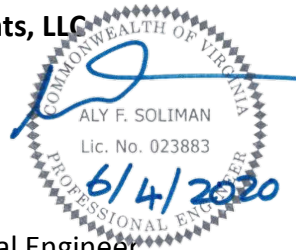
Based on a brief review of the SOE plans, developed by AFM Engineering, Inc. of Temple Hills, MD, it is my professional opinion that the SOE system, as located and detailed, should facilitate the construction/excavation for the permanent site retaining walls. It is our understanding that the SOE system will be installed along the LCG. It is our further understanding that the design of the SOE system has been reviewed, by the project's Geotechnical Engineer of Record (GER).

We have prepared this letter in accordance with generally accepted geotechnical engineering and design practices. No warranties, expressed or implied, are made as to the professional services provided herein.

We appreciate the opportunity to submit this report to you. Please contact the undersigned should you have any questions regarding this letter.

Yours Sincerely,

AFS Geo Consultants, LLC



Aly F Soliman, P.E.
Chief Geo-Structural Engineer

