

MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION
STAFF REPORT

Address:	2420 Spencerville Rd., Spencerville	Meeting Date:	12/5/2018
Resource:	Individually Listed Master Plan Site <i>Spencer-Carr House</i>	Report Date:	11/28/2018
Applicant:	Cedar Ridge Community Church (Bryan Peterson, Agent)	Public Notice:	11/21/2018
Review:	Historic Area Work Permit	Tax Credit:	n/a
Case Number:	15/55-18C	Staff:	Dan Bruechert
PROPOSAL:	Partial Demolition and Stabilization		

STAFF RECOMMENDATION

Staff recommends that the HPC **approve with three (3) conditions** the Historic Area Work Permit: application:

1. The applicant needs to provide cost estimates for successfully mothballing the Spencer-Carr House, annual maintenance estimates for the house in its mothballed state, and estimates of rehabilitation costs, with any additional information requested by the HPC prior to issuance of the demolition permit.
2. Historic materials from the c.1871 addition must be salvaged to the greatest extent possible. The applicant needs to coordinate with Staff for verification that this condition has been met.
3. The work carried out to stabilize the Spencer-Carr House must be carried out according to the guidance provided in Preservation Briefs #31: Mothballing Historic Buildings.

ARCHITECTURAL DESCRIPTION

SIGNIFICANCE: Individually Listed Master Plan Site (*Spencer-Carr House - #15/55*)
STYLE: Spencerville Style/Folk Victorian
DATE: c.1855 and c.1871

From *Places from the Past*:

A distinctive three-story, three bay house, the Spencer-Carr House was built c.1855 with a rear addition dating from the 1870s. An illusion of added height is achieved through the incremental decrease in spacing between windows from the bottom level to the top together with decrease of window size. The center passage house is constructed of brick and covered with weatherboard siding. Reputedly building by William Spencer, founder of Spencerville, the house has a strong historical association with the early development of the community and is a significant example of rural antebellum building traditions in the county.

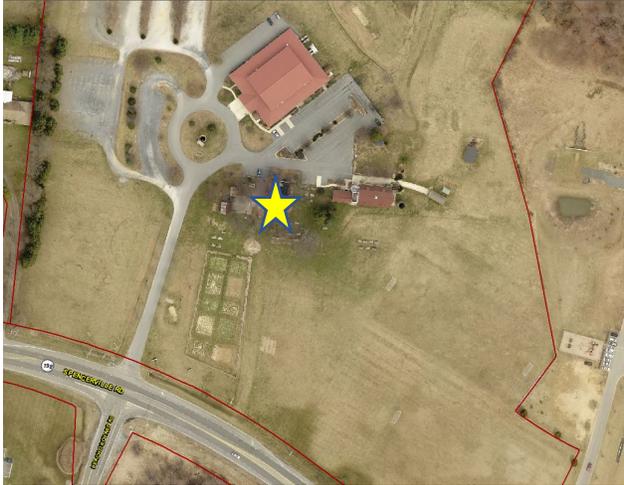


Figure 1: The Spencer-Carr House is located in a collection of historic buildings adjacent to a modern church.

BACKGROUND

The applicant presented a preliminary consultation at the October 10, 2018 meeting¹. The HPC was generally supportive of the proposal, however, many of the Commissioners expressed reservations that without more concrete plans the use and utilization the Spencer-Carr house would face the same fate as its rear addition. The Commissioners requested that the buildings be documented using both in measured drawings and photographs; and had more specific questions regarding the financial aspects of this project. The applicant has provided the requested documentation and has included detailed specifications for the demolition work as part of this application. The applicant will present the financial details at the hearing.

PROPOSAL

The applicant proposes to stabilize the c.1855 portion of the house and demolish the rear c.1870 addition.

APPLICABLE GUIDELINES

Proposed alterations to individual Master Plan Sites are reviewed under Montgomery County Code Chapter 24A (*Chapter 24A*) and the *Secretary of the Interior's Standards for Rehabilitation*. Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features, which convey its historical, cultural, or architectural values.

Montgomery County Code; Chapter 24A-8

- (b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to insure conformity with the purposes and requirements of this chapter, if it finds that:

¹ The Staff Report for the October 10, 2018 Preliminary Consultation can be found here: <http://montgomeryplanning.org/wp-content/uploads/2018/10/II.A-2420-Spencerville-Road-Spencerville.pdf>. An audio recording of that HPC meeting can be heard here: http://mncppc.granicus.com/MediaPlayer.php?publish_id=af96f600-d92e-11e8-9302-0050569183fa, the discussion for this hearing begins at 5:10 of the recording.

- (1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or
- (2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter; or
- (3) The proposal would enhance or aid in the protection, preservation and public or private utilization of the historic site or historic resource located within an historic district in a manner compatible with the historical, archeological, architectural or cultural value of the historic site or historic district in which an historic resource is located; or
- (4) The proposal is necessary in order that unsafe conditions or health hazards be remedied; or
- (5) The proposal is necessary in order that the owner of the subject property not be deprived of reasonable use of the property or suffer undue hardship.

Secretary of Interior's Standards for Rehabilitation

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

STAFF DISCUSSION

The Spencer-Carr House (c.1855) was the home to the founder of Spencerville, William Spencer. It consists of the original, side gable, three bay wide massing of the house and a c.1871 rear L addition. It appears as though the L addition had a very shallow rear-facing gable roof. Much of this roof has collapsed and a portion of the structure on the right side of the addition projects through the wall plane. The Spencer-Carr house has not been occupied since the mid-1990s. The historic windows for the house have been removed and are stored until they can be reinstalled.

The applicant proposes to demolish the rear addition and to stabilize the structure and seal the envelope of the original 1855 structure.

Demolition

The c.1871 L-addition to the Spencer-Car House has significantly degraded as shown in the submitted photographs and discussed at the October 10, 2018 Preliminary Consultation. The

roof has collapsed, and significant water infiltration has caused interior floor failure and significant bowing in one of the exterior walls. In 2015, the owner had an assessment of the entire property (attached) which stated, "The rear addition is dilapidated and beyond feasible rehabilitation. It is unstable, unsafe, and at risk of collapse, creating a dangerous condition."

In September 2018, RGA Structural Engineers examined the building and determined that the rear addition had areas of structural rot and decay and was beyond repair. The engineers recommended that the addition be demolished while determining the original section of the house could be stabilized and repaired.

At the preliminary consultation the consulting architect expressed concerns that if the c.1871 addition was not removed, there was a significant risk that it could collapse and cause significant damage to the c.1855 portion of the house.

Staff has visited the building on two occasions and agrees that the building has suffered a significant amount of damage and that retaining the rear L may be impossible and its collapse may put the c.1855 portion of the house at risk. The applicant proposes retaining the original foundation of the c.1871 addition so that the dimensions of the building will remain visible and so the addition could be reconstructed at a later date. Staff finds that demolition of the c.1871 addition is necessary so that an unsafe condition on the site can be remedied (per 24A-8(b)(4)).

The HPC expressed concern that the cost of maintaining and rehabilitating the Spencer-Carr House may be beyond the capacity of the applicant, as they are a non-profit with several other areas of focus. In order to assure the HPC that the applicant can successfully undertake this work and maintain the building in a reasonable manner until such time that a full rehabilitation can be completed, Staff recommends the HPC review cost estimates of both the cyclical maintenance required to keep the Spencer-Carr House in a mothballed state and cost estimates of a rehabilitation that would put the Spencer-Carr House back into use. Staff has requested the applicant to provide this information to the HPC. Staff recommends that an approval of this HAWP be conditional on the HPC's review of this financial information, and that any additional information requested by the HPC be submitted prior to issuance of the demolition permit.

Staff additionally recommends that the HPC include a condition for approval that the applicant salvage historic fabric from the c.1871 addition to the greatest extent possible. The applicant should coordinate with Staff on the timeframe for the demolition so Staff may be at the site to verify that the condition has been met.

Stabilization and Restoration

The applicant will conduct repairs necessary to secure the building envelope and stabilize the foundation of the original, c.1855 portion of the house. This work is repair in nature and does not require the HPC's approval. Generally, the applicant proposes to re-coat the existing roof, repoint the chimney as necessary, replace damaged clapboards, re-point the foundation, reinforce sagging structural measures, to secure the envelope to prevent pest infiltration. The applicant will maintain the boarded-up windows and the building will remain in the mothballed state until such time that it can be rehabilitated or restored and put into use. The historic windows, which have been removed and stored, will be reinstalled in their original openings.

Staff recommended, and the applicant agrees, that the necessary repairs to secure the building envelope will follow the guidance provided in Preservation Briefs 31: Mothballing Historic Buildings² to ensure the future utility of the Spencer-Carr House until such time that the restoration of the interior can be undertaken. Staff has also recommended that the applicant consult Staff prior to undertaking this work to determine if it will require a HAWP. Staff recommends that a condition be added to the approval of the demolition that all work carried out be done under the Guidance of Preservation Briefs #31.

STAFF RECOMMENDATION

Staff recommends the HPC **approve with three (3) conditions** the HAWP application;

1. The applicant needs to provide cost estimates for successfully mothballing the Spencer-Carr House and annual maintenance estimates for the house in its mothballed state prior to HPC approval with any additional information requested by the HPC prior to issuance of the demolition permit.;
2. Historic materials from the c.1871 addition must be salvaged to the greatest extent possible. The applicant needs to coordinate with Staff for verification that this condition has been met;
3. The work carried out to stabilize the Spencer-Carr House must be carried out according to the guidance provided in Preservation Briefs #31: Mothballing Historic Buildings;

and with the general condition applicable to all Historic Area Work Permits that **the applicant will present 3 permit sets of drawings to HPC staff for review and stamping prior to submission for permits (if applicable)**. After issuance of the Montgomery County Department of Permitting Services (DPS) permit, the applicant will arrange for a field inspection by calling the DPS Field Services Office at 240-777-6370 prior to commencement of work and not more than two weeks following completion of work.

² Preservation Briefs 31: Mothballing Historic Buildings: <https://www.nps.gov/tps/how-to-preserve/briefs/31-mothballing.htm>.



HISTORIC PRESERVATION COMMISSION
301/563-3400

APPLICATION FOR HISTORIC AREA WORK PERMIT

Contact Email: bryan@ccc.org Contact Person: Bryan Peterson
 Daytime Phone No.: 301.421.5949 (ext 220)
 Tax Account No.: 03 233387 (Fed 52-1350329)
 Name of Property Owner: Cedar Ridge Community Church Daytime Phone No.: 301.421.5949 (ext. 220)
 Address: 2420 Spencerville Rd, Spencerville MD 20868
Street Number City State Zip Code
 Contractor: TBD Phone No.: _____
 Contractor Registration No.: _____
 Agent for Owner: _____ Daytime Phone No.: _____

858362

LOCATION OF BUILDING/PREMISE

House Number: 2420 Street: Spencerville Rd
 Town/City: Spencerville Nearest Cross Street: Rock Orchard Rd
 Lot: None Block: None Subdivision: 0001 PAR A Spencer Farm
 Liber: _____ Folio: _____ Parcel: 202

PART ONE: TYPE OF PERMIT ACTION AND USE

1A. CHECK ALL APPLICABLE: Construct Extend Alter/Renovate A/C Stab Room Addition Porch Deck Shed
 Move Install Wreck/Raze Solar Fireplace Woodburning Stove Single Family
 Revision Repair Revocable Fence/Wall (complete Section 4) Other: _____

1B. Construction cost estimate: \$ TBD (\$200,000)

1C. If this is a revision of a previously approved active permit, see Permit # _____

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTEND/ADDITIONS

2A. Type of sewage disposal: 01 WSSC 02 Septic 03 Other: _____
 2B. Type of water supply: 01 WSSC 02 Well 03 Other: _____

PART THREE: COMPLETE ONLY FOR FENCE/RETAINING WALL

3A. Height _____ feet _____ inches
 3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:
 On party line/property line Entirely on land of owner On public right of way/easement

I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issuance of this permit.

Bryan Peterson Signature of owner or authorized agent 11/9/18 Date

Approved: _____ For Chairperson, Historic Preservation Commission
 Disapproved: _____ Signature: _____ Date: _____
 Application/Permit No.: _____ Date Filed: _____ Date Issued: _____

**THE FOLLOWING ITEMS MUST BE COMPLETED AND THE
REQUIRED DOCUMENTS MUST ACCOMPANY THIS APPLICATION.**

1. **WRITTEN DESCRIPTION OF PROJECT**

- a. Description of existing structure(s) and environmental setting, including their historical features and significance:

see attached

- b. General description of project and its effect on the historic resource(s), the environmental setting, and, where applicable, the historic district:

see attached

Additional materials will be sent electronically
to Historic Preservation staff.

2. **SITE PLAN**

Site and environmental setting, drawn to scale. You may use your plat. Your site plan must include:

- a. the scale, north arrow, and date;
- b. dimensions of all existing and proposed structures; and
- c. site features such as walkways, driveways, fences, ponds, streams, trash dumpsters, mechanical equipment, and landscaping.

3. **PLANS AND ELEVATIONS**

You must submit 2 copies of plans and elevations in a format no larger than 11" x 17". Plans on 8 1/2" x 11" paper are preferred.

- a. *Schematic construction plans*, with marked dimensions, indicating location, size and general type of walls, window and door openings, and other fixed features of both the existing resource(s) and the proposed work.
- b. Elevations (facades), with marked dimensions; clearly indicating proposed work in relation to existing construction and, when appropriate, context. All materials and fixtures proposed for the exterior must be noted on the elevations drawings. An existing and a proposed elevation drawing of each facade affected by the proposed work is required.

4. **MATERIALS SPECIFICATIONS**

General description of materials and manufactured items proposed for incorporation in the work of the project. This information may be included on your design drawings.

5. **PHOTOGRAPHS**

- a. Clearly labeled photographic prints of each facade of existing resource, including details of the affected portions. All labels should be placed on the front of photographs.
- b. Clearly label photographic prints of the resource as viewed from the public right-of-way and of the adjoining properties. All labels should be placed on the front of photographs.

~~X~~ 6. **TREE SURVEY**

If you are proposing construction adjacent to or within the dripline of any tree 6" or larger in diameter (at approximately 4 feet above the ground), you must file an accurate tree survey identifying the size, location, and species of each tree of at least that dimension.

✓ 7. **ADDRESSES OF ADJACENT AND CONFRONTING PROPERTY OWNERS**

For **ALL** projects, provide an accurate list of adjacent and confronting property owners (not tenants), including names, addresses, and zip codes. This list should include the owners of all lots or parcels which adjoin the parcel in question, as well as the owner(s) of lot(s) or parcel(s) which lie directly across the street/highway from the parcel in question.

PLEASE PRINT (IN BLUE OR BLACK INK) OR TYPE THIS INFORMATION ON THE FOLLOWING PAGE.
PLEASE STAY WITHIN THE GUIDES OF THE TEMPLATE, AS THIS WILL BE PHOTOCOPIED DIRECTLY ONTO MAILING LABELS.

1a. Description of existing structures and environmental setting, including their historical features and significance:

The Spencer-Carr farmhouse was built by William Spencer ca. 1850. It is a rare example of the "Spencerville style" farmhouse: a symmetrical 3-bay, 2-1/2 story house with a distinctive row of 1/2-size double hung windows on the third level directly below the cornice. Circa 1870 a 2-story addition with a low slope roof was added to the rear of the farmhouse. An in-depth description of the farmhouse is attached.

The farmhouse is owned by the Cedar Ridge Community Church, which built a large sanctuary to the rear of the farmhouse and restored the barn for classroom uses. The unrestored second barn is used to house maintenance equipment. The original silo is in the circle in front of the sanctuary building, and is in need of structural stabilization. With the exception of some small farming activity, the balance of the site is undeveloped.

1b. General description of the project and its effect on the historic resources, the environmental setting, and where applicable, the historic district:

Cedar Ridge Community Church is seeking to remove the 1870's addition to the farmhouse due to its advanced structural deterioration (see attached letter from Rathgeber/Goss consulting structural engineers), and structurally stabilize the original 1850's farmhouse. We have included measured drawings of the farmhouse and addition, and photo-documented the addition. The funding available to the church will go toward rebuilding the stone foundation where it is collapsing, replacing insect damaged wood framing, and making it weather tight and vermin free. When additional funds are available, the church intends to restore the farmhouse, potentially using it for temporary quarters or as a teaching farm.

HAWP APPLICATION: MAILING ADDRESSES FOR NOTIFYING
 [Owner, Owner's Agent, Adjacent and Confronting Property Owners]

<p>Owner's mailing address Cedar Ridge Community Church 2410 Spencerville Rd. Spencerville, MD 20868</p>	<p>Owner's Agent's mailing address CEM Design 520 Anderson Ave Rockville, MD 20850</p>
<p align="center">Adjacent and confronting Property Owners mailing addresses</p>	
<p>Resident 2352 Spencerville Rd. Spencerville, MD 20868</p>	<p>Ben Girons 2308 Spencerville Rd Spencerville, MD 20868</p>
<p>Spencerville Adventist Academy 2502 Spencerville Rd Spencerville, MD 20868</p>	<p>United States Postal Service 2323 Spencerville Rd. Spencerville, MD 20868</p>

Cedar Ridge Farmhouse

Brief History of the Cedar Ridge Property

In 1703, a 600-acre tract of land was conveyed by the Lord Proprietor of Maryland and surveyed for Mark Richardson.¹ This land was named Bear (or Bare) Bacon—reputedly because of the wild animals that roamed the area.² Adjoining or possibly overlapping land in the same vicinity was patented in 1715 as “Snowden’s Manor Enlarged” in what was then Prince George’s County.³ Montgomery County was formed out of Prince George’s County in 1776.

In the 1740s, Anglicans began moving into this part of Maryland, including the Duvall family.⁴ Lewis (Louis) H. Duvall was born in Prince George’s County in 1827. He purchased 251 acres of Bear Bacon from Isaac B. Igelhart in 1851 for \$600.⁵ Igelhart had bought the property the previous year from Elias Ellicott of Prince George’s County in payment of a debt of \$333.34 plus interest.⁶ This may be the same Elias Ellicott who co-founded the Muirkirk Furnace in Prince George’s County in 1847 with his brother Andrew. Although Quakers had long opposed slavery (Sandy Spring Quakers, for example, banished households from meetings for holding slaves in 1781), the brothers relied on slave labor to operate the furnace.⁷

Duvall married Mary Jane Spencer (1834-1904) in 1853, and they had 8 children. Mary Jane’s passing was noted in the Annals of Sandy Spring:

“Also on 20 November, Mary J., wife of Louis H. Duvall, of Spencerville, passed from earth. Although not actually a resident of Sandy Spring, she was well known to many of our people, for she was active in the temperance movement, and ready to help in any good work. She will be keenly missed and long remembered by many outside her own immediate circle of relatives and friends.”⁸

In April 1855, Lewis Duvall sold 122 acres of Bear Bacon to his father-in-law, William H. Spencer (1805-1892) for \$610.⁹ William Spencer, together with his wife and five children, other relatives and neighbors from Southhampton Township, Pennsylvania, arrived in this area, originally called Drayton,¹⁰ in 1848.¹¹ This small community, formed by Spencer on the Laurel Road

¹ “The History of Montgomery County, Maryland” by Thomas H. S. Boyd (1879), p 32

² Volume 1 of the Annals of Sandy Spring, p xvii

³ Maryland Historical Trust Addendum Sheet M:15-80 (PACS D3.39)

⁴ Volume 6 of the Annals of Sandy Spring, p 14

⁵ Land Records of Montgomery County, Md., STS 5/449

⁶ Land Records of Montgomery County, Md., STS 4/367

⁷ Meyer, Eugene L. (February 3, 1999). *Reliving A Time Cast In Iron*. Washington Post

⁸ The Annals of Sandy Spring, Volume 3, p 303-304

⁹ Land Records of Montgomery County, Md., JGH 4/485

¹⁰ Maryland Historical Trust Addendum Sheet M:15-80 (PACS D3.39)

¹¹ Lord, Elizabeth, M. (1976). *Burtonsville Heritage: Genealogically Speaking*.

(present Spencerville Road), connected the Quaker settlements of Sandy Spring and Ashton with the railroad line at Laurel. Drayton was renamed Spencerville in William Spencer's honor, and he became the first postmaster of Spencerville in 1859.¹²

William Spencer bought 9 $\frac{3}{4}$ acres from the William Holmes estate (also known as Bealls Manor) in or before 1856¹³ and farmed the land, which was noted as being productive for wheat, corn and hay.¹⁴ He is thought to have built the front part of the farmhouse around 1855 and the addition circa 1870.¹⁵ Since William Spencer owned several parcels of land, and there are no maps available showing the property lines for these parcels, there is confusion in the records as to whether the farmhouse was built on Bare Bacon,¹⁶ or (more likely) on adjoining land, such as land from the William Holmes estate.

William Spencer sold both the 9 $\frac{3}{4}$ acres from the William Holmes estate and the 122-acre Bare Bacon tract to his son-in-law Charles Dickenson in 1857 for \$2000—together with 3 horses, 2 mules, 5 cows, 3 wagons, a cart, 4 ploughs, 3 harnesses, 7 beds, 500 bushels of corn, winter grain, furniture and farming implements for an additional \$1000.¹⁷ William Spencer repurchased the land for the same price of \$2000 from his daughter Amelia A. Dickenson in 1859,¹⁸ following the death of Charles the previous year.

William Spencer sold Bare Bacon to his son Hiriam Spencer in 1861 for \$1000.¹⁹ Hiriam married in 1868,²⁰ and died two years later from tuberculosis at the age of 31. In compliance with a court order, his property was sold at auction. Hiriam had greatly increased the value of Bare Bacon with a large house (the Spencer/Oursler house located behind Burtonsville Park at 15920 Oursler Road²¹) smokehouse, icehouse, and orchards.²² William Spencer repurchased Bare Bacon in 1873 for \$4650 through the court-ordered Trustee sale²³ and one month later, took out a mortgage on the property for \$1000 from Thomas Conley, which was transferred to Joseph Stabler in 1886.²⁴

¹² Geraci, Ron, Vicki Walker, and Linda Donnaray. (1976). *Old Building Survey of Burtonsville Area*. Sponsored by the Bicentennial Committee, Burtonsville, Md. See also *The Annals of Sandy Spring*, Volume 6.

¹³ Montgomery County Commissioners Tax Assessment Book of 1853-63, p 326

¹⁴ Boyd, T.H.S. (1879) *The History of Montgomery County, Maryland, from its Earliest Settlement in 1650 to 1879*. p.142

¹⁵ The date is based on the date that William Spencer purchased the property, tax assessments, and appearance on the Martenet and Bond map of 1865.

¹⁶ As claimed in Maryland Historical Trust Addendum Sheet M:15-55 (PACS D3.32)

¹⁷ Land Records of Montgomery County, Md., JGH 5/593

¹⁸ Land Records of Montgomery County, Md., JGH 7/349

¹⁹ Land Records of Montgomery County, Md., JGH 8/485

²⁰ Lord, Elizabeth, M. (1976). *Burtonsville Heritage: Genealogically Speaking*.

²¹ See Maryland Historical Trust Addendum Sheet M:15-58 (PACS D3.29)

²² Montgomery County Equity Case Record, 193 (1870).

²³ Land Records of Montgomery County, Md., EBP 11/165

²⁴ Land Records of Montgomery County, Md., EBP 10/201

In 1871, William Spencer purchased 35¼ acres of Snowden's Manor Enlarged from Charles and Sarah Stabler for \$616.87. Ten years later, he sold this land, the 122-acre Bare Bacon and the 91¾-acre William Holmes estate—less 23 acres, which had been sold off previously—together with 3 horses, 5 wagons, 4 cows, 9 hogs, 4 harnesses, crops of wheat and corn, a mule, a hay rack, a mower and household and kitchen furniture to his daughter, Margaret Jamison for \$3,000.²⁵

The William Spencer household is described in the 1880 census as including William (a 75 year old widowed farmer); John Spencer (his 36 year old son) and U.W. Jamison (his son-in-law) who worked on the farm; Margaret Jamison (his 47 year old daughter); and Laura Johnson, an 18 year old black servant.²⁶

William Spencer died in 1892, and Joseph Stabler began mortgage foreclosure procedures against Margaret Jamison the following year, which led to the sale in 1894 of Bare Bacon for \$1342.²⁷

Margaret lived on the remaining property until her death about 1905, at which point, her only living child, Anna Wilson,²⁸ sold the house on 62½ acres, referred to as Snowden's Manor Enlarged (or "whatever name or names the same may be known or called"), to farmer Edward Carr for \$3,100.²⁹ The Carr family added outbuildings to the property during the 1920s.³⁰ Edward died in 1956, leaving the farm to his wife Laura and their children Gilbert and Clara. At that time, the farm consisted of the farmhouse, two tenant houses and various outbuildings.³¹ Later, Laura conveyed the house to Gilbert and Clara.³² Clara Carr was the owner of the farm until her death in 1986. Cedar Ridge Community Church purchased the farm from the estates of Gilbert and Clara Carr in December 1995.

Description of the Farmhouse

The farmhouse (Spencer/Carr House) was originally constructed ca. 1855, and is a rare surviving example of a once common farmhouse type locally identified as the "Spencerville style." The symmetrical building, with a near flat roof, is a variation of the three-bay I-house form that adds a distinctive third (attic) level decorated by vernacular Greek Revival frieze band windows directly beneath the cornice.

²⁵ Land Records of Montgomery County, Md., EBP 25/36

²⁶ 1880 Census cited in Maryland Historical Trust Addendum Sheet M:15-58 (PACS D3.29)

²⁷ Land Records of Montgomery County, Md., JA 44/164

²⁸ Jenkins, Howard, M. (1904), *Genealogical Sketch of the Descendants of Samuel Spencer of Pennsylvania*.

²⁹ Land Records of Montgomery County, Md., 184/167

³⁰ Montgomery County Commissioners Tax Assessment Books cited in Maryland Historical Trust Addendum Sheet M:15-55 (PACS D3.32)

³¹ Will #19407, Montgomery County Register of Wills cited in Maryland Historical Trust Addendum Sheet M:15-58 (PACS D3.29)

³² Land Records of Montgomery County, Md., 320/174



The farmhouse in 1973

The main block of this three-story house has six-over-six sash windows on the first and second floors, and shorter three-over-three windows on the third floor. The hip-roofed front porch is shorter than most front porches found in Burtonsville; it being only half as long as the house. It has chamfered posts and elaborate corner brackets. The gable ends are plain, with a pair of small two-over-four windows in the gable. A chimney rises from within each gable end. This main block contains a central stair flanked by one room on either side. There is a full depth basement under this portion of the house, which was rare for the time. There is no stair hall, and access to the slightly later rear addition is through the room to the left.

The frame rear addition containing the kitchen is only two stories high. There are two box stairs, each containing winder steps, at each end of this addition, providing access to the second floor. A box spiral stair in the main house connects the second and third floors. The rear wing originally consisted of a frame two-story room. The kitchen room was added later, probably during the 1870s, and the porch to the west of the wing is enclosed. Unusually for farmhouses of this period, the studs, second floor and roof framing are milled (rather than hand-hewn) lumber. Species range from pine to oak, and both circular and band saws were used, suggesting the lumber came from different mills. The house was sheathed in dimensional boards (of varying widths but consistent thickness) laid diagonally, and then lap

siding was applied. This was uncommon for the day—typical practice being lap siding only—and would have made the frame exceptionally strong.

The lack of an open-hearth fireplace and the presence of chimneys with thimbles (holes to receive stovepipes) suggest the house was heated with iron stoves, as pioneered by Benjamin Franklin a generation before. The presence of an old well under the rear addition to the house may indicate early indoor plumbing, with a hand pump at the wellhead, later replaced by an electrical pump.

Recent Changes to the Property

In 1973, the Spencer/Carr farm was visited by a park historian for the Park and Planning Commission, and nominated for inclusion on the National Register of Historic Places with the National Parks Service. The property was visited and inventoried by the Maryland Historical Trust in 1982, and the farmhouse was described at that time as being “well preserved.” In 1986, the entire property was designated on the Master Plan for Historic Preservation and therefore protected under the Historic Preservation Ordinance, Chapter 24A of the Montgomery County Code.

When Cedar Ridge purchased the property in 1995, the farmhouse was in very poor condition: it had been unoccupied for at least nine years, had been vandalized by local youth, and was infested with various animals and insects. While restoring the farmhouse was a priority for Cedar Ridge (as indicated by the repeated discussions held with the Department of Park and Planning, as well as internal Cedar Ridge communications), all available funds were required for the construction of the church building.

In late 1996, Cedar Ridge contacted Neubauer-Sohn Consulting Engineers to conduct a structural study of the farmhouse. The technical drawings were reviewed in 1997 by Dave Morrison, who noted access issues with shoring up the basement under the main block of the house. Additional studies of the basement were conducted by WQQM Architects, who described the foundational problems as “very severe.” They recommended temporary support through shoring, cribbing and jacks, and the replacement of the foundation walls and footings.

In 1998, Cedar Ridge requested a proposal from WQQM Architects for design services to rehabilitate the main block of the farmhouse and seal up the connection to the rear addition. The proposal was priced at \$7,360. SPN, Inc., provided a proposal for the renovation based on WQQM Architects design, and estimated the cost to be \$175,883.

Such funds were unavailable at the time, as the church building was still under construction, but volunteer work was undertaken to remove debris from the farmhouse, and ready it for rehabilitation. However, work was halted when bee/wasp infestation was discovered in entire exterior wall.

The Cedar Ridge property was again inspected by the Maryland Historical Trust in 2001, to ensure the new church building had not interfered with the “architectural integrity and distinction of the house.” The official noted: “The house itself remains intact, if in a somewhat deteriorated condition.”

In 2001, the historic barn was determined to be in need of immediate attention as the barn sills were rotten, and this was noted by professionals to be a liability. All Cedar Ridge resources were therefore put to barn renovation. Robert Schwartz Associates Architects was hired and SPN Construction completed the barn renovation at a cost of approximately \$750K.

In 2003, the Park and Planning Commission conducted a site visit to inspect the farmhouse. They described the house as “in extremely poor condition... Damage is severe, even apparently structurally threatening on 1870s wing. Building is open to the elements... Windows were recently vandalized...” The officials noted the immediate need to close the house to protect it from the elements, as well as the longer-term need to develop and implement a preservation plan. Cedar Ridge staff again asked about demolishing the addition, and was told that it was not usually permissible, but could be possible as part of a restoration plan, particularly if the restored house was opened to the public.

The following repairs were made by Cedar Ridge in an effort to preserve the structure: All the windows were boarded with plywood to protect further vandalism of the windows. The plywood was painted to mimic a 6-over-6 window to preserve the view from the road. The exterior siding was scrapped and painted to preserve the original wood siding. The gutters were cleaned and repaired to keep water away from the building.

In 2003 and 2004, Cedar Ridge made inquiries about available grants to support the rehabilitation of the farmhouse, but these inquiries did not lead to concrete funding opportunities. Discussions with Habitat for Humanity to restore the farmhouse fell through when their plans to build other structures on the property conflicted with zoning limitations.

From 2003 to 2008 a local contractor worked extensively to restore and maintain the front porch and siding, seal up the foundations to prevent further pest infestation, and patch the roof to prevent water infiltration.

In 2008, the historical barn was inspected by a structural engineer, who determined it was still not stable, despite the expensive professional renovation. Cedar Ridge raised an additional \$250K and employed Fitzgerald’s Heavy Timber for one year to secure, restore and re-open the barn. This effort left no funds for work on the farmhouse restoration.

In 2015, Cedar Ridge hired ARC Environmental to conduct an assessment of the property, including the farmhouse. The report read: “The rear addition is dilapidated and beyond feasible rehabilitation. It is unstable, unsafe, and at risk of collapse, creating a dangerous condition.” The report noted that the first priority should be the removal of the electrical drop from this part of the house. The main block of the farmhouse was considered to be in better condition,

and could be eventually restored. The estimated cost of repairing the exterior of the main block and demolishing the rear portion was up to \$91,500.

Despite ongoing efforts to keep water away from the house and keep it sealed from the elements, the side wall of the addition to the farmhouse separated from the floor joists and the second story partially collapsed in late 2015 while Cedar Ridge was in the process of renegotiating the mortgage to release funds for needed property repairs.

Cedar Ridge has relocated the electrical drop, as instructed by ARC Environmental, and is moving forward with recommended repairs to other structures on the property.

Farmhouse Maintenance Plan

Once the Spencer-Carr Farmhouse has been stabilized, we will implement a comprehensive maintenance plan. Our Property and Facilities Manager will conduct a monthly walkthrough of the house, checking the exterior, all interior floors, window panes, entrances, and the crawlspace for any signs of leakage, animal intrusion, or other problems, and will promptly ensure that any necessary repairs are made. In addition to these regular walkthroughs, the Property and Facilities Manager will also make inspections after any intense weather conditions or upon any signs of rodent activity around the house.

Other regular maintenance will take place biannually and annually, in adherence to the Maintenance Chart in "Preservation Briefs 31: Mothballing Historic Buildings," published by the U.S. Department of the Interior. The farmhouse is in a central location on our property, so mowing around the building will continue on a weekly basis.

Our annual operating budget will allocate funds (in addition to staff time) for routine farmhouse maintenance and repairs.

Plan for the Restored Spencer-Carr Farmhouse

The circa 1850 Spencer-Carr farmhouse is one of the most significant defining features of the Cedar Ridge property—together with the historic barn and the silo, all of which are visible from route 198. The architectural charm and historical significance of the farmhouse lead to its regular use as the backdrop for Cedar Ridge and other community functions. The porch on the south façade is used regularly throughout the year as a stage for musicians and speakers—particularly during farm events and the annual community harvest festival. The farmhouse is also one of 17 stations on the 40-minute prayer walk around the property, which is open to the public. Careful mothballing of the farmhouse will greatly enhance the attractiveness of this structure, and ongoing maintenance will ensure this remains a key feature in the life of the Cedar Ridge community.

As part of a yearlong church community consultation process, Cedar Ridge Board of Trustees and Pastoral Team have developed a plan for use of the Spencer-Carr farmhouse in its restored

condition. Fully cognizant of the rich history of the farmhouse, its architectural significance and the role of its original owner in establishing the town of Spencerville, Cedar Ridge Community Church wishes to preserve and use the house in three ways: (i) for the charitable purposes of the church, (ii) as a productive, revenue-generating space, and (iii) as an educational resource accessible to the public.

On the first floor are two parlors, separated by a box spiral stair. These two rooms will be designed as multi-purpose meeting spaces, available for church use and community rentals. Based on experience with renting the historic barn, and given the unique characteristics of the farmhouse, and the picturesque setting (with mature trees and picnic tables), we anticipate this being a valued space for small functions held by church and neighboring community members.

The parlors will maintain their original wood floors and current shelving. Any artifacts in the house will be displayed on the shelves, together with a display case of photos and documents. The simple furniture will be compatible with the style and age of the building, such as a faux wood-burning stove, rocking chairs, and a woven rug on the floor. Interpretative panels will be installed describing the history and architecture of the farmhouse, the history of the property as a whole, and of the Spencerville area. A particular focus will be placed on the history of agriculture in and around the property, including the Cedar Ridge farm, and information will be provided on hunger issues and opportunities for advocacy and action in Montgomery County. The farmhouse will be open to the public periodically, including during monthly farm events, the annual harvest festival, and Advent and Christmas events.

On the second floor, the two bedrooms will be restored, and a bathroom will be installed in the small third room. Hospitality facilities (microwave and refrigerator) will also be installed. This living space will be used to accommodate short- or medium-term guests at Cedar Ridge, such as farm apprentices, volunteers through Worldwide Opportunities on Organic Farms, pastoral interns, and/or people on spiritual retreats. This space will either provide rental income, or defray the expense of renting accommodation for guests elsewhere.

The third floor has less potential because the egress windows are not large enough to permit regular use. This area will be preserved, and used for temporary storage of seasonal items—such as Christmas decorations and harvest festival supplies.

The foundations of the addition to the farmhouse will be delineated by stones flush with the ground to prevent tripping or puddle hazards. Grass will be planted inside this stone outline to create an attractive picnic area.

Notwithstanding these plans, Cedar Ridge Community Church will continue to seek out other partnership opportunities—such as long-term rental to a charitable organization—that might allow for a more timely restoration of the farmhouse.

Funding for the Farmhouse Restoration

If an Historic Area Work Permit is granted, we will immediately begin seeking specific quotes for completion of the mothballing process from experienced contractors, and expect this to be in the region of \$200,000. We will draw on our cash reserves to the extent possible, we have a planned fundraising campaign within our church community, and we are currently arranging financing with Sandy Spring Bank (with whom we have a mortgage for our whole property) for the remainder. We are also actively seeking any grants available for this phase, including Preservation Maryland Heritage Fund grants, Maryland Historic Trust Historic Preservation capital grants, as well as smaller private funding sources.

In addition to these funding efforts, which will supplement our regular congregational donations, we currently have a steady stream of revenue from two churches and one middle school that rent our facilities. We are also actively working to increase rental income, and are engaged in serious discussions with a community solar developer and an elementary school program. Once the restored farmhouse is operational, we will explore income-generating activities such as short- or medium-term guest accommodation, rentals for community events, and/or leasing office space to nonprofit organizations.

We expect the restoration phase work to cost in the range of \$300-400,000, based on ballpark estimates made by a contractor who visited the site. For this phase, we will pursue similar sources of funding, including community fundraising events, grants, and loans. Based on our past experience of raising close to \$1 million to restore the historic barn on our property--transforming it into a beautiful and productive resource--we are confident of our community's ability and commitment to the future restoration of the farmhouse.

Property Condition Report

Cedar Ridge Community Church

2410 Spencerville Road

Spencerville, MD 20868

Historic Farmhouse



Inspected on 31 AUGUST 2015

EXECUTIVE SUMMARY

The historic farmhouse consists of two attached main structures – the original front portion constructed circa 1850; and the rear addition dating to the 1870's. This rear addition is dilapidated and beyond feasible rehabilitation. It is unstable, unsafe, and at risk of collapse creating a dangerous condition. The electrical service drop is connected to this part of the structure as well and poses a serious hazard should the building shift or collapse, separating the service drop from the SE cables. Further, the electrical distribution panel to the farmhouse is hazardous, improperly maintained and unprotected, and is directly exposed to rainwater.

These dangerous conditions should be immediately addressed to lessen the risks. The electrical service drop is recommended to be relocated; one of the two (2) electrical services considered for termination of service; and, rear portion of the farmhouse is recommended to be demolished.

If there are any historic preservation covenants or requirements to retain the rear portion of the farmhouse, an appeal or discussion should be initiated to negotiate alternative means for still meeting the spirit of the preservation standards for the farmhouse, but within more realistic financial parameters than reconstructing it, as repair and restoration are no longer possible.

The front portion of the structure is in comparatively better structural condition, though not habitable and is infested with rodents. Nonetheless, this portion can eventually be rehabilitated and restored. The first priority should be to repair the envelope of this section of the farmhouse to weatherproof it and prevent further damage from continued exposure.

Please refer to the Appendix-A for terminology used in this report to categorize the type of condition, defect, or deficiency observed.

Historic Farmhouse Conditions

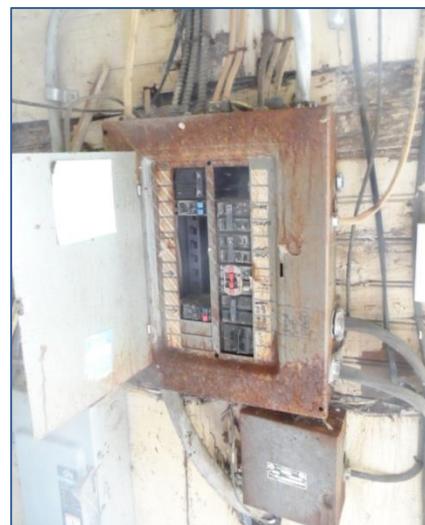
Dangerous Condition: The overhead electrical service drop is connected to an unstable portion of the structure which is at risk of collapsing. If the structure shifts or does collapse, the service entrance cable (“SE cable”) could pull away from the connection at the structure and potentially drop a live wire onto the ground endangering persons nearby until the local utility provider responds.



The electrical panel mounted inside the structure is exposed to weather with evidence of water on the panel (*see inset photo*). The circuit breakers are exposed with no blank plates over empty breaker slots. The panel and breakers are not intended for an exterior application, which is essentially the case given the weather exposure, and poses serious risks and creates a hazardous condition.

Both electrical services do not appear to serve the farmhouse. One is fed underground to outbuildings and does not necessarily have to be mounted to the building.

Immediate steps should be taken to minimize the risk of an electrical fire and the risk of electrocution. See the below recommendations.



Dangerous Condition: The rear portion of the farmhouse is dilapidated and at risk of collapse. The east



exterior wall (*inset photo left*) is load-bearing and is buckling. Sections of 2nd floor are no longer connected at the wall studs on this wall and are exerting outward pressure on the wall causing it to buckle. Missing portions of the wood lap siding have exposed the structural wood framing to weather and precipitation (*see photo below*). This exposure will advance the deterioration and further undermine the structural integrity increasing the risk of collapse for this portion of the building.

The west exterior wall (opposite to the wall depicted in the left photo) appears be leaning to the east, which is very likely due to the drop of the 2nd floor at the buckled east wall pulling the west wall studs eastward.

Areas of the roof on the rear west portion of the farmhouse have collapsed allowing rainwater and precipitation to enter the

interior and exacerbate deterioration. This portion of the structure is unsafe to enter; cannot be occupied; is infested with rodents; and, condemnable by the government authorities having jurisdiction.

Deferred Maintenance

Conditions: While not habitable and also rodent-infested, the front portion of the farmhouse was in comparatively better structural condition than the rear portion, but a number of conditions were observed that require repair and restoration in order to preserve the structure for this part of the historic building.



Deferred Maintenance Condition - Foundation and Cellar: The stone foundation along the rear wall of the cellar is crumbling where an access door opening was created at some time after the original construction to enter the crawlspace under the rear portion of the farmhouse, which was a later addition according to information provided by the facilities manager, Mark Hartley. The stonework around the access opening appears to not have been properly re-laid for a fenestration, and has subsequently crumbled. The floor joists and support members bear on this part of the foundation as does the original rear of building and roof structure above (the rafters run perpendicular to this foundation wall).



This area of the foundation is compromising the structural support for the building and should be addressed to prohibit further damage.

The exterior cellar doors over the stairs to the cellar are not watertight. Precipitation entering around the cellar doors further increases the humid and moist conditions of the cellar promoting rot of the structural wood elements of the building from below such as the floor supports and sill beams.

Other small sections of the foundation for the front portion of the farmhouse are in disrepair and are being undermined by rodents (*see the below photo*). Note stonework missing at the southwest corner of the farmhouse behind the safety cone.



At the northeast corner of the cellar daylight entering between the wood structure and the stone foundation is due to missing stonework which should be repaired for preserving the structure. See recommendations below.



Some repointing work appears to have been performed along the east wall of the foundation in the cellar; however, the appearance of the mortar used for repointing indicates a high content of portland cement which further damages stone foundations, especially below grade.



Deferred Maintenance Condition – Wood Lap Siding: Generally the lap siding of the front portion of the farmhouse is in moderate condition with only a few defective areas. On the west gable wall of the building a siding board has twisted out from under the course above and is exposing the building fabric underneath to weather and precipitation. On the southeast corner the first two courses of siding have apparently been removed possibly by rodents as evidenced by the wear on the bottom of the 3rd course and on exposed edges of the lower two courses.



Deferred Maintenance Condition – Front Porch Floor: The front porch floor is showing signs of rot and deterioration. Although the floor boards were painted at some point in time, the wood appears to have been still absorbing and retaining moisture – probably due to their orientation perpendicular to the floor slope. Additionally, if the other three surfaces of each board are not primed or treated to resist absorption, the paint on the top surface will lose its adhesion and peel away due to the high moisture content within the lumber.



Most porch floors are sloped away from the front façade and thus the porch boards are typically oriented parallel with the slope for sheeting rainwater along the length of the boards. The existing boards, however, appear instead to be oriented perpendicular to the slope, which allows water to trap in the joints between the boards, and eventually causes rot as seen in the photo.

Most porch floors are sloped away from the front façade and thus the porch boards are typically oriented parallel with the slope for sheeting rainwater along the length of the boards. The existing boards, however, appear instead to be oriented perpendicular to the slope, which allows water to trap in the joints between the boards, and eventually causes rot as seen in the photo.

Deferred Maintenance Condition – Standing Seam Roof: Only the front porch was accessible for inspection. Overall the metal and seams were observed to be in moderately good condition; however, the coating has not been maintained and has peeled away with rust forming on the surfaces of the pans.



NOT included in the Property Conditions Assessment:

- **Heating and A/C Units:** No operable air-conditioning or heating system in the building.
- **Plumbing:** No operable plumbing fixtures in the building.
- **Windows:** According to information provided by the facilities manager, Mark Hartley, the windows were ordered to be boarded by Montgomery County. If any of the original double-hung window sashes have been salvaged or stored or remain place, they were not inspected.

RECOMMENDATIONS

ELECTRICAL: Relocate the electrical service drop off of the unstable building structure. The most efficient method is to erect a 14'-0" post (18'-0" total length with 4'-0" in the ground) in accordance with the local electric utility's specifications, which are available at:

https://www.bge.com/customerservice/servicerequests/constructionremodeling/documents/combinedcustomerbooklet_single%20pages_rev102313.pdf

An application for service relocation/change of service will have to be submitted to BGE for relocating the service drop to the new post.

Because there are currently two (2) separate electrical services, consider terminating one of the services since the farmhouse is not currently occupied and will likely not be occupied in the near future. Electrical power needed for any lighting in the farmhouse and for the well pump can be fed from the other service.

The electrical distribution panel mounted in the rear portion of the farmhouse should be disconnected and removed.

REAR PORTION of Farmhouse: Demolish the dilapidated rear portion of the farmhouse. Its condition is dangerous and beyond feasible reparations or restoration. If there are any deed covenants or other historic preservation requirements imposed by the authorities having jurisdiction (AHJ) to retain the rear structure, an appeal or discussions can be initiated to consider alternatives or compromises to any such covenants or requirements due to the added financial hardship of restoring/rebuilding this portion of the farmhouse. The spirit of historic preservation standards for retaining the historic significance and value of many other properties is often achieved through various negotiated means that are mutually agreeable and financially realistic.

Extreme care should be taken when dismantling the rear structure for both safety reasons and to protect the remaining front portion of the farmhouse, which is presumed to be preserved. Appropriately skilled and experienced contractors should be qualified and interviewed before negotiating a contract for demolishing the structure as well as for repairing the back of the original farmhouse where residual openings and penetrations will have to be closed-in; restored to their original design; and weather-proofed.

STONE FOUNDATION: Repair the crumbled areas of the foundation as described above. Also, removal of the high-portland cement mortar and repointing with an appropriate mortar will improve the integrity of the stonework by minimizing the destructive effects of subflorescence and efflorescence caused by high-portland mortars. The proper mix of mortar for historic stone walls is similar to a Type-O mortar mix using 1:2:9 ratio with a Type-S hydrated lime.

CELLAR DOORS: Replace the existing plywood doors with watertight basement stair doors to prevent water infiltration and prohibit rot of the adjacent structural wood members. Bilco® is a popular product for pre-fabricated/pre-hung cellar doors. Properly sealing and flashing the cellar door unit is critical to ensure a watertight connection to the building and at the foundation surrounding the cellar stairwell.

WOOD LAP SIDING: Repair the areas of lap siding to maintain a weatherproof envelope around the front portion of the structure. Repainting the siding after repairs are complete is also recommended.

PORCH FLOOR: Remove the porch floor boards and inspect the framing. If the joists are running parallel with the slope of the porch, this explains the orientation of the porch flooring running perpendicular to the floor slope. The porch floor joists should run perpendicular to the slope and so the flooring will parallel the slope for shedding rainwater along the length of the flooring boards.

Proper flashings are critical between the framing and the underside of the porch flooring for maintaining a rot-free wooden porch. There are several detail drawings available depicting the proper installations of flashing at each typical section of porch construction. Because pressure-treated framing lumber is commonly used for porches, the flashing material should be compatible with the chemicals contained in the pressure-treated lumber to avoid corrosive reaction.

STANDING SEAM ROOF: Assuming the front portion of the farmhouse will be preserved, the standing seam roof should be replaced based on the conditions observed on the porch roof. These conditions may or may not be the same on the upper main roof. However, rust has formed on the pans of the porch roof because the coating applied over the roofing has worn away over time exposing the metal to oxygen and moisture causing corrosion. This is likely the same condition on the upper roof considering the factor of time and the probability of infrequent maintenance.

Although cleaning and preparing the existing metal for re-coating is an option, the callbacks on recoated residential standing seam metal roofing are high. In order to prevent future rust, the existing metal has to be meticulously cleaned and prepared ensuring that the surfaces are 100% free of any residual, deleterious material that may cause a loss of adhesion with the new coating sealant. This is a painstakingly labor-intensive process which can sometimes exceed the labor cost for installing a new roof.

Most of the coating products available on the market are for commercial roof applications where appearance is not particularly scrutinized. New and improved products are continually offered by manufacturers; however, a proven track-record over a satisfactorily long period of time is preferred before committing funds to these applications.

Therefore, the recommendation is roof replacement whichever roofing material is historically accurate or acceptable to the AHJ. Note that the original roof under the existing standing seam is cedar shingles, which are still in place. A new roof of new cedar shingles may not be necessarily required for meeting historic preservation criterion. Other less expensive modern roofing products closely simulate many historic roof materials, one or more of which may be accepted by the AHJ.

OPINIONS OF PROBABLE COSTS

The opinions of probable costs are to assist in a general understanding of the physical condition of the subject property or building. The costs do not include capital replacement costs; routine maintenance expenses; costs for usual and customary repairs; cosmetic and/or decorative enhancements; and, leasehold improvements.

Actual costs may vary from the dollar amounts approximated in this report. The probable cost values are only to be construed as rough order of magnitude estimates. Many factors such as the extent of actual scope, design details, quality of materials, phasing of the work, contractor performance, and other variables will influence the actual costs either greater or less than the amounts provided herein.

RELOCATE ELECTRICAL SERVICE DROP: \$3,500 - \$4,500

DEMOLISH REAR PORTION of BUILDING: \$20,000 - \$25,000

NOTE: Included are the costs of 30-yard containers, landfill fees, equipment, and carpentry labor to disconnect attachments to the original section (front portion) of the farmhouse and infill residual openings in the rear wall.

STONE FOUNDATION REPAIRS: \$3,000 - \$4,000

NEW PRE-FABRICATED CELLAR DOORS: \$4,500 - \$5,000

NOTE: Assumes masonry and carpentry labor for properly seating pre-fabricated cellar door unit on stairs foundation.

RE-FRAME FRONT PORCH and NEW FLOORING: \$5,000 - \$5,500

REPLACE STANDING SEAM METAL ROOFING: \$20,000 - \$25,000

ALTERNATE: NEW CEDAR SHINGLE ROOF: \$17,500 - \$22,500

APPENDIX-A

Types of Physical Deficiencies

- **Dangerous or Adverse Conditions** – Observed defect, deficiency, and/or condition that poses a danger, risk of injury, or hazardous situation.
- **Design Conditions** – Observed defect, deficiency, and/or condition resulting from an error, fault, and/or oversight in the design.
- **Improper Installation Conditions** – Observed defect, deficiency, and/or condition caused by a failure to install in accordance with the intended design, the specifications, and/or the manufacturer's installation requirements.
- **Deferred Maintenance Conditions** – Observed defect, deficiency, and/or condition that could have been averted or lessened by routine and regular maintenance.
- **De Minimis Conditions** – Observed defect, deficiency, and/or condition which is comparatively minor and generally not recognized as problematic, such as due to normal wear and tear, but is mentioned in the report for information only, however, is *not* included in the Opinions of Probable Costs



RATHGEBER/GOSS ASSOCIATES

Consulting Structural Engineers

19 September 2018

Craig Moloney, AIA, LEED AP
CEM Design
520 Anderson Avenue
Rockville, MD 20850

RE: Cedar Ridge Farmhouse- Demolition of Previous Addition
Spencerville, MD

Dear Craig,

Rathgeber/Goss Associates visited the site of the historic farm house to assess the current structural condition on 23 May 2018. The house is composed of two main sections, the original three-story building to the south and two-story addition to the north. The original building can be stabilized and repaired such that it can eventually be restored and occupied. However, the addition to the north is currently a safety hazard. The roof has been partially collapsed for some time resulting in direct exposure of the structure to weather. This has resulted in the collapse of the second floor due to the structure continuing to rot and decay. The walls are bowed out due to the lack of second floor bracing and there are significant areas of rotten members. In our professional opinion, the north addition is beyond repair and should be demolished. The original section of the house can be stabilized and repaired.

Please do not hesitate to contact us with any questions or concerns.

Sincerely,

RATHGEBER/GOSS ASSOCIATES, P.C.

Bill Duvall, P.E.
Vice-President







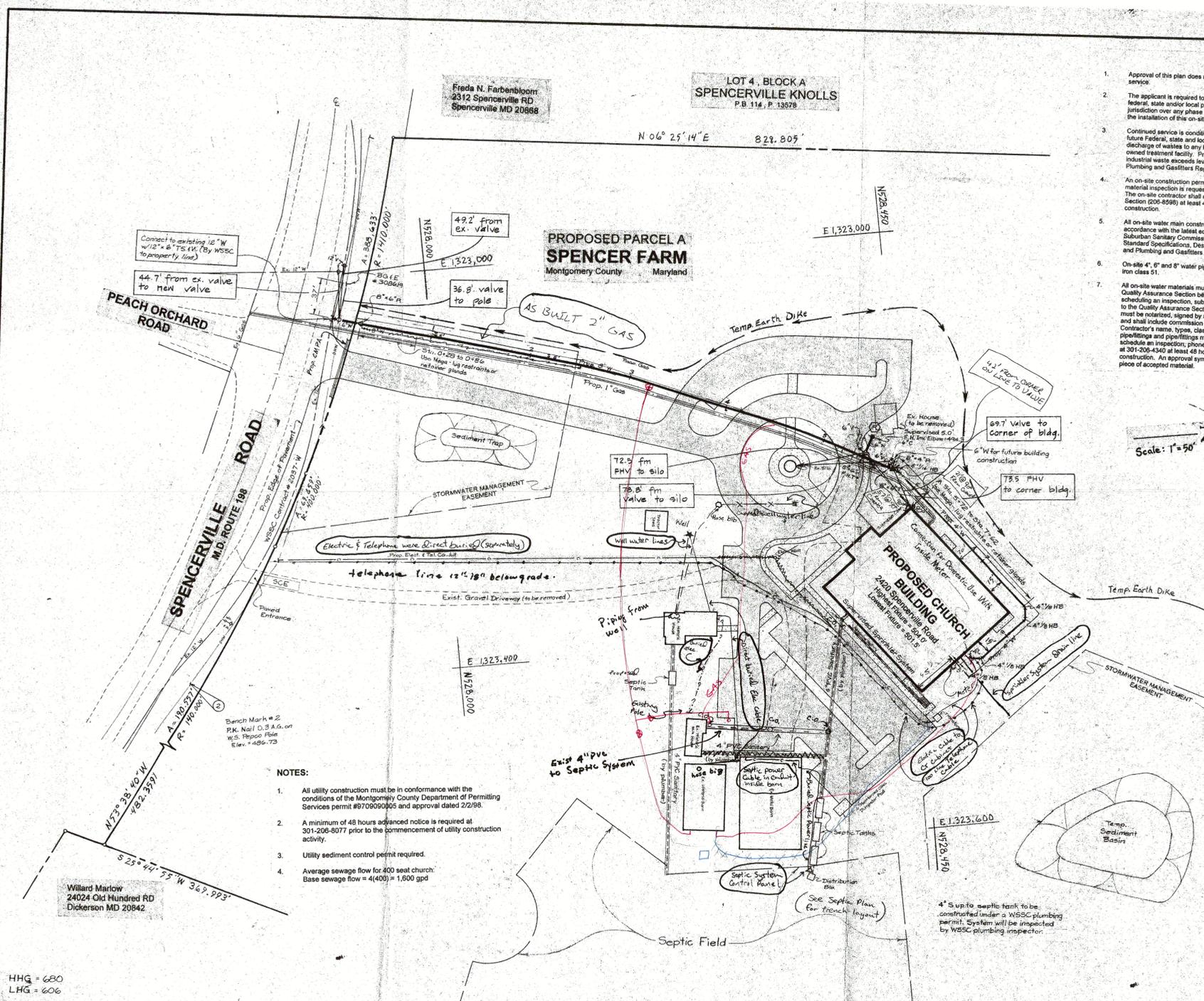






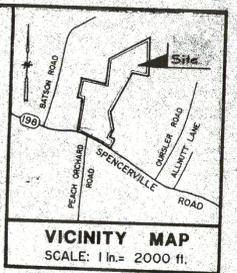
2420

WSSC RELEASE DATE 6-2-98



- NOTES:**
- All utility construction must be in conformance with the conditions of the Montgomery County Department of Permitting Services permit #970500005 and approval dated 2/2/98.
 - A minimum of 48 hours advanced notice is required at 301-206-8077 prior to the commencement of utility construction activity.
 - Utility sediment control permit required.
 - Average sewage flow for 400 seat church: Base sewage flow = 4(400) = 1,600 gpd

- GENERAL WATER NOTES**
- Approval of this plan does not constitute a commitment for service.
 - The applicant is required to obtain permission from any federal, state and/or local permit authority having jurisdiction over any phase of construction associated with the installation of this on-site system.
 - Continued service is conditional upon compliance with any future Federal, state and local regulations governing the discharge of wastes to any body of water or to a publicly-owned treatment facility. Pretreatment will be required if industrial waste exceeds levels indicated in WSSC Plumbing and Gasfitters Regulations.
 - An on-site construction permit must be acquired before material inspection is requested and construction start-up. The on-site contractor shall notify the Code Enforcement Section (206-8558) at least 48 hours prior to commencing construction.
 - All on-site water main construction and materials to be in accordance with the latest edition of the Washington Suburban Sanitary Commission's General Conditions and Standard Specifications, Design Manual, Standard Details and Plumbing and Gasfitters Regulations.
 - On-site 4", 6" and 8" water pipe to be cement-lined, ductile iron class 51.
 - All on-site water materials must be inspected by the WSSC Quality Assurance Section before installation. Prior to scheduling an inspection, submit certificates of compliance to the Quality Assurance Section for approval. Certificates shall include commission Contract No., job location, Contractor's name, type, classes and strengths of pipe/fittings and pipe/fittings manufacturer's name. To schedule an inspection, phone Quality Assurance Section at 301-206-4340 at least 48 hours prior to the start of construction. An approval symbol will be stamped on each piece of accepted material.
 - Inspection and certification of the on-site water system shall be performed in accordance with the WSSC Plumbing and Gasfitters Regulations, General Conditions and Standard Specifications, Design Manual, Standard Details and Approved Plan.
 - The engineer's certification of compliance and two (2) sets of Final As-built drawings shall be submitted to the Code Enforcement Section prior to final plumbing inspection of the building. The "As-Built" drawings must reflect any field changes and indicate ties for the location of valves, bends, manholes, fire hydrants and laterals, etc.
 - If on-site water system installation precedes WSSC service connection installation, applicant accepts full responsibility for on-site water coordination to meet line and grade of WSSC water system.
 - Contractor to verify location and elevation of WSSC facilities prior to beginning construction. No connection of the building plumbing system to the on-site water system is allowed until the on-site system is approved by WSSC.
 - Connection with the WSSC water system shall be prohibited until chlorination and bacteriological tests have been completed and passed. Results are to be submitted to the Code Enforcement Section (301-206-8558).
 - All water connections to be built by on-site contractor and to terminate 5" from the outside wall of the building.
 - Curb boxes shall not be set in paved areas.
 - On-site fire hydrants are to be painted red.



BILL OF MATERIALS

Item	Quantity
12" x 6" Tapping Sleeve & Valve	1
8" x 6" Reducer	1
8" x 6" F. H. Tee	1
6" Valve	2
50' F. H.	1
8" x 6" Tee	1
6" Cap	1
8" x 4" Reducer	1
4" 1/16 H. B.	1
4" 1/8 H. B.	4
4" Cap	1

*By WSSC

WATER PIPE SCHEDULE

Diameter	Length	Type	Remarks
4"	274	Ductile Iron Cl. 51	Water
6"	53	Ductile Iron Cl. 51	Water
8"	548	Ductile Iron Cl. 51	Water

- BLOCKING**
- Fire hydrant marked thus (R) to be restrained with mega-lug or restraint glands. See WSSC Std. Details B/2.1 & B/2.4. Do not block fire hydrant or fire hydrant tee.
 - Block H.B.'s with concrete. See WSSC Std. Detail B/1.0.
 - Block all other fittings with concrete. See WSSC Std. Details B/1.3 & B/1.4.



6-2-98
6-2-98
6-2-98

DATE: 9-11-98	REVISION: As built ties added	DRAFTING: [Blank]	OWNER/APPLICANT: CEDAR RIDGE COMMUNITY CHURCH 8919 Hickory Hill Avenue Lanham, MD 20706 (301) 458-4024	DESIGN: [Blank]	ENGINEER: OYSTER, IRMS & PETZOLD, INC. CIVIL ENGINEERS & LAND PLANNERS & SURVEYORS 11230-B GRANDVIEW AVENUE • WHEATON, MARYLAND 20912 • (301) 948-3011 Contractor: Walter J. Petzold, P.E.	PROJECT: PROPOSED PARCEL A PARCEL 149 & PARCEL 309 SPENCER FARM Montgomery County Maryland	DATE: May 1998	JOB NO.: 2557 A-1
HHG = 680 LHG = 606						WSSC 2001 scale sheet 22 INE 3	SCALE: 1" = 50'	SHEET NO.: 1 of 2

FILE

C-1
8/16/00
38

PARTIAL DEMOLITION AND STABILIZATION OF THE SPENCER-CARR FARMHOUSE

2420 SPENCERVILLE ROAD, SPENCERVILLE, MD

ARCHITECT:

CRAIG MOLONEY, AIA, LEED AP
CEM DESIGN

520 ANDERSON AVENUE, ROCKVILLE, MD
301-294-0682

STRUCTURAL ENGINEER:

BILL DUVALL, PE
RATHGEBER/GOSS ASSOCIATES, P.C.

15871 CRABBS BRANCH WAY, ROCKVILLE, MD
301-590-0071

CODE ANALYSIS

Project Description:

Demolition and removal of rear wood frame addition.
Remove foundation of wood frame addition to grade
(coordinate with Architect).
Repair existing stone foundation and re-paint. Repair
damaged wood frame structure. Repaint.

Applicable Codes:

Building Code:
2015 ICC International Existing Building Code
2015 ICC International Building Code
Electrical Code: 2014 NFPA 70 National Electrical
Code
Mechanical Code: 2015 ICC International Mechanical
Code
2015 ICC International Fuel Gas Code
Plumbing and Gas Code: NSBC Plumbing Code
Life Safety Code: NFPA-1 & 101/2015
Fire Alarm Code: NFPA-72/2013, COMAR NFPA-72/2013
Sprinkler Code: NFPA-13/2013
Accessibility: COMAR 05.02.02, ADAAG, & FFHAG
Energy Conservation: 2015 ICC International Energy
Conservation Code

Use and Occupancy Classification:

R-3 (Residential)

Construction Type:

VB
Fire ratings: Structural frame - 0
Exterior bearing walls - 0
Interior bearing walls - 0
Non-bearing walls - 0
Floor construction - 0
Roof construction - 0

Height and Area Limitations:

R-3 - 3-Story, Unlimited s.f. (non-sprinklered)

Highrise: No
Covered Mall: No
Sprinklered: No
Fire Alarm Provided: No

Finishes:

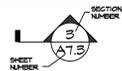
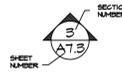
R-3 - Exits - Class C walls & ceiling (nonsprinklered)
- Rooms - Class C walls & ceilings (nonsprinklered)
- Corridors - Class C walls & ceiling (nonsprinklered)

Floor finishes - Class II

Egress:

Exit access travel distance - <200' (unsprinklered)
Existing to remain

SYMBOL LEGEND

SYMBOL	SYMBOL DESCRIPTION
	SECTION/DETAIL SYMBOL
	ELEVATION SYMBOL
	DETAIL SYMBOL
	DETAIL WINDOW REFERENCE
	WALL TYPE SYMBOL
	DEMOLITION SYMBOL
	ROOM/ AREA NAME
	KEYED ELEVATION REFERENCE
	REVISION SYMBOL
	REVISION CLOUD

DRAWING INDEX

SHT. #	SHEET DESCRIPTION
CI	CODE ANALYSIS, SHEET INDEX
GRI	GENERAL REQUIREMENTS
D1	CRAWL SPACE & 1ST FLOOR DEMOLITION PLANS
D2	2ND FLOOR & 3RD FLOOR DEMOLITION PLANS
A1	CRAWL SPACE & 1ST FLOOR PLANS
A2	2ND FLOOR & 3RD FLOOR PLANS
A3	EXTERIOR ELEVATIONS
A4	SECTIONS & DETAILS
SO	GENERAL NOTES
S1	STRUCTURAL PLANS
S2	STRUCTURAL PLANS
S3	STRUCTURAL PLAN
S4	TYPICAL DETAILS

CEM DESIGN

520 ANDERSON AVENUE
ROCKVILLE, MARYLAND
301.294.0682 20850



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE
DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I
AM A FULLY LICENSED ARCHITECT
UNDER THE LAWS OF THE STATE
OF MARYLAND, LICENSE NO. 8059
EXPIRATION DATE: 6/30/2020

PARTIAL DEMOLITION AND STABILIZATION OF THE
SPENCER-CARR FARMHOUSE
2420 SPENCERVILLE ROAD, SPENCERVILLE, MD

Issue Date
11/2/18

Revisions			
Rev	Date	Description	By
△			
△			
△			
△			
△			

Sheet Title

COVER SHEET

Sheet Number

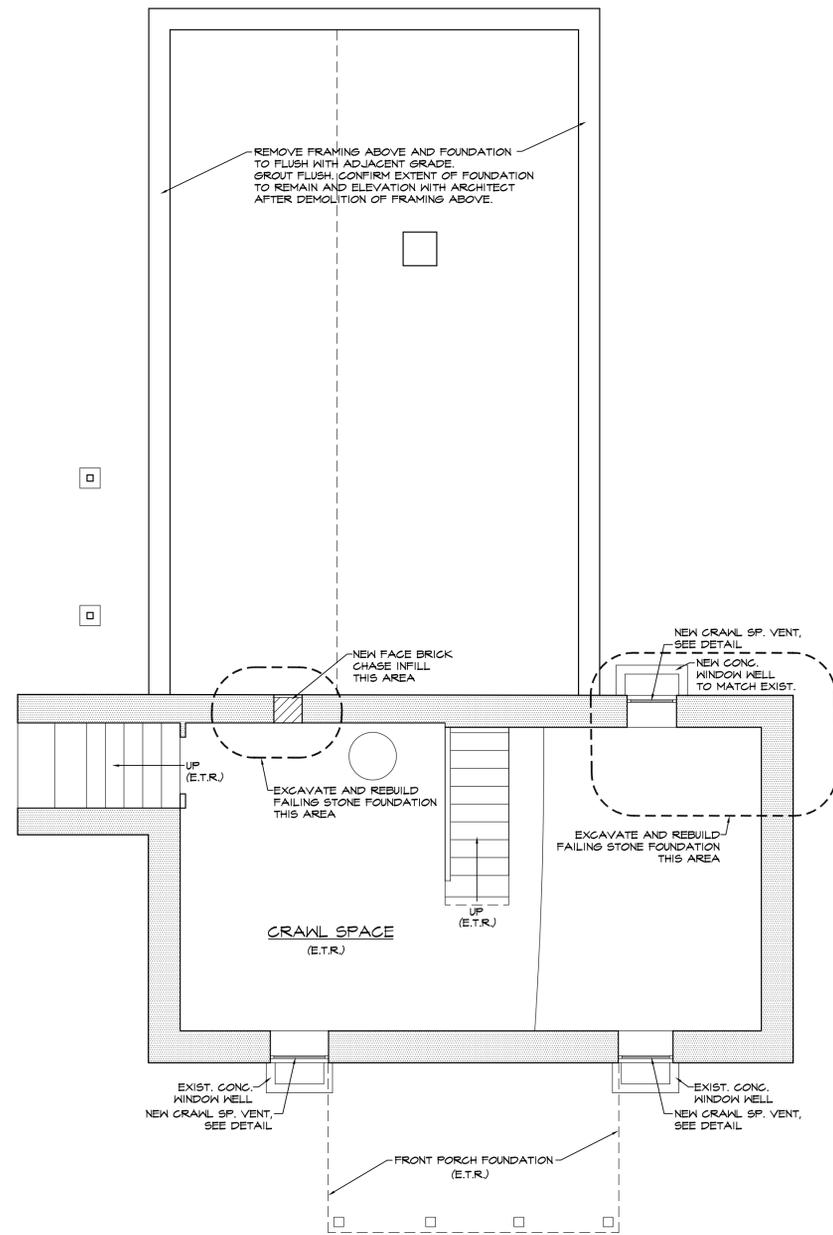
C1

SHEET 1 OF 1

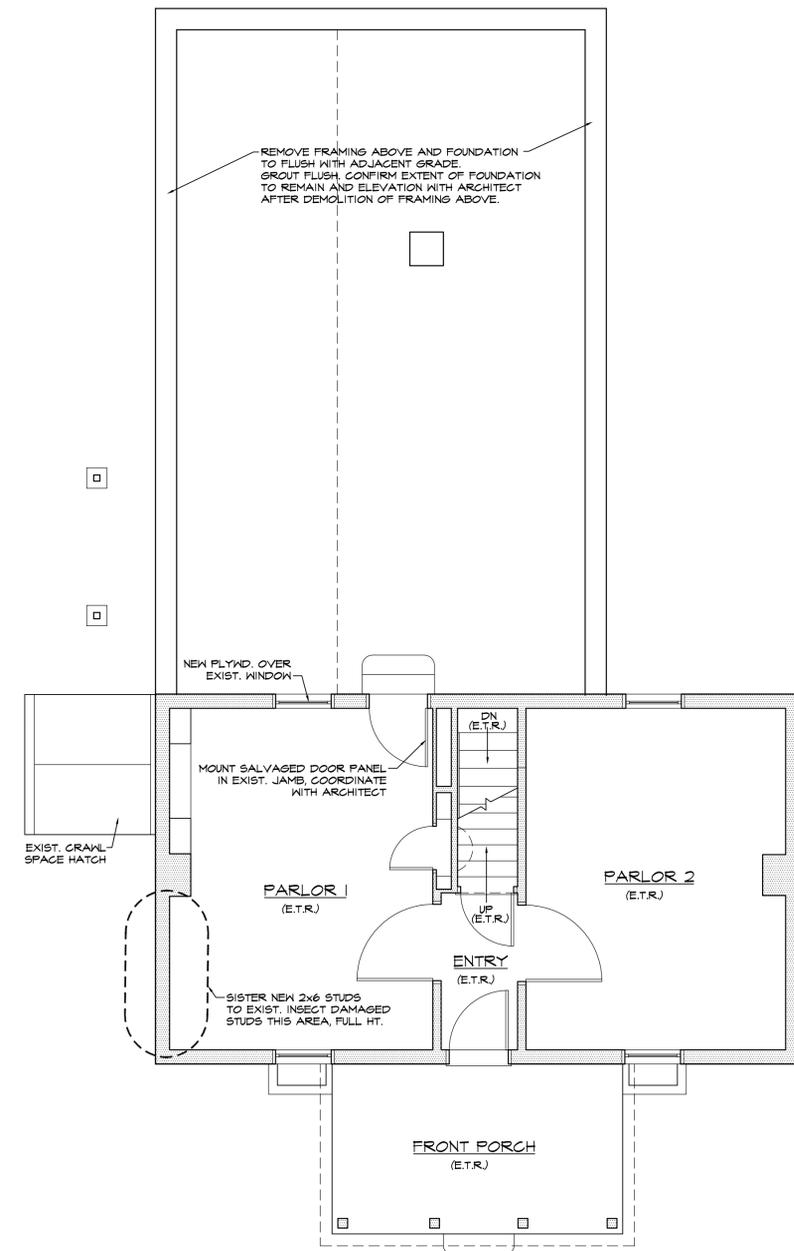


PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE
 DOCUMENTS WERE PREPARED OR
 APPROVED BY ME, AND THAT I
 AM A DULY LICENSED ARCHITECT
 UNDER THE LAWS OF THE STATE
 OF MARYLAND, LICENSE NO. 8659
 EXPIRATION DATE: 6/30/2020

PARTIAL DEMOLITION AND STABILIZATION OF THE
SPENCER-CARR FARMHOUSE
 2420 SPENCERVILLE ROAD, SPENCERVILLE, MD



1 CRAWL SPACE PLAN
 SCALE: 1/4" = 1'-0"



2 FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"



Issue Date
11/2/18

Revisions

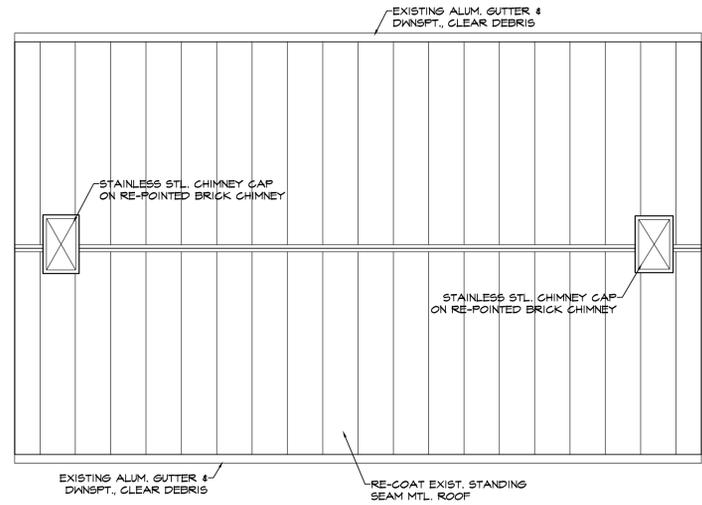
Rev	Date	Description	By
Δ			
Δ			
Δ			
Δ			
Δ			

Sheet Title
 PROPOSED FLOOR PLANS

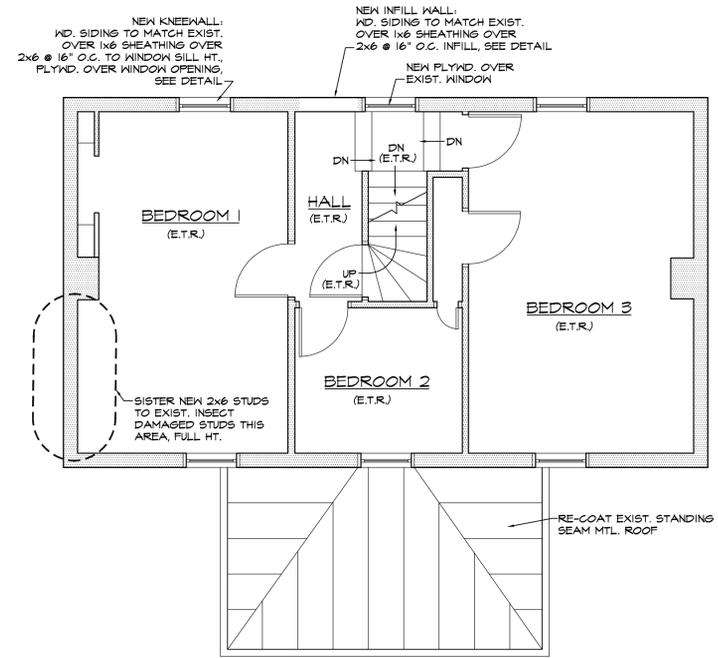


PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE
 DOCUMENTS WERE PREPARED OR
 APPROVED BY ME, AND THAT I
 AM A FULLY LICENSED ARCHITECT
 UNDER THE LAWS OF THE STATE
 OF MARYLAND, LICENSE NO. 8659
 EXPIRATION DATE: 6/30/2020

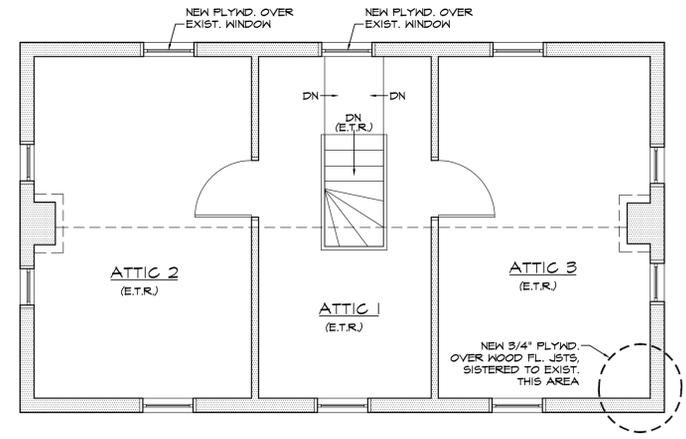
**PARTIAL DEMOLITION AND STABILIZATION OF THE
 SPENCER-CARR FARMHOUSE**
 2420 SPENCERVILLE ROAD, SPENCERVILLE, MD



3 ROOF PLAN
 SCALE: 1/4" = 1'-0"



1 SECOND FLOOR PLAN
 SCALE: 1/4" = 1'-0"



2 THIRD FLOOR PLAN
 SCALE: 1/4" = 1'-0"



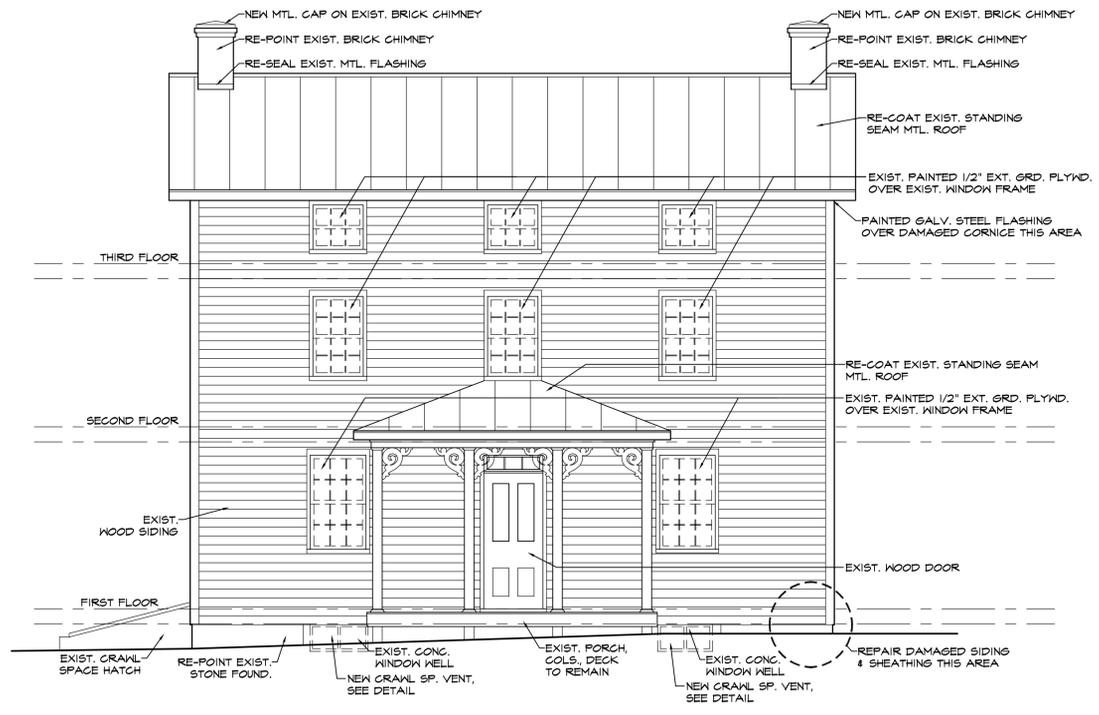
Issue Date			
11/2/18			
Revisions			
Rev	Date	Description	By
Δ			
Δ			
Δ			
Δ			
Δ			

Sheet Title
PROPOSED FLOOR PLANS

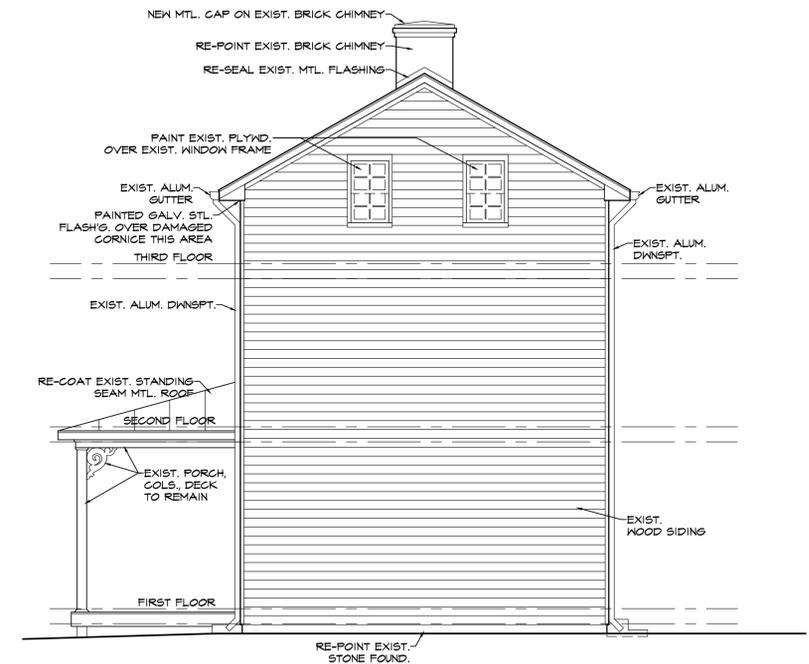


PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE
 DOCUMENTS WERE PREPARED OR
 APPROVED BY ME, AND THAT I
 AM A FULLY LICENSED ARCHITECT
 UNDER THE LAWS OF THE STATE
 OF MARYLAND, LICENSE NO. 6059
 EXPIRATION DATE: 6/30/2020

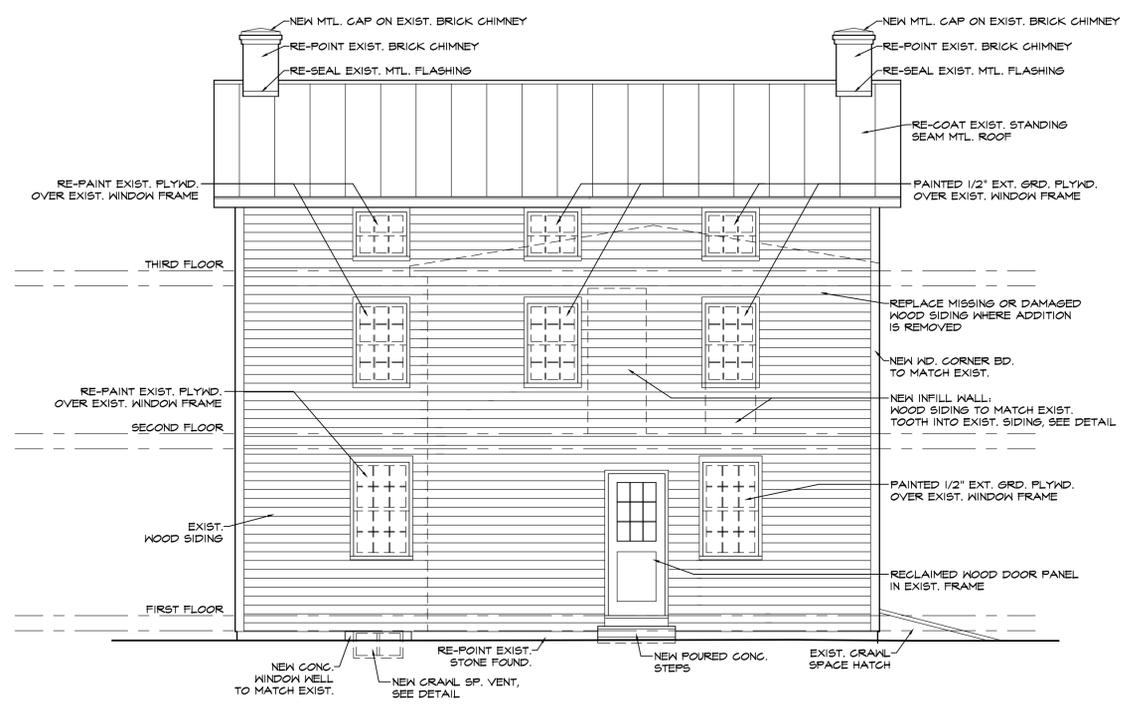
PARTIAL DEMOLITION AND STABILIZATION OF THE
SPENCER-CARR FARMHOUSE
 2420 SPENCERVILLE ROAD, SPENCERVILLE, MD



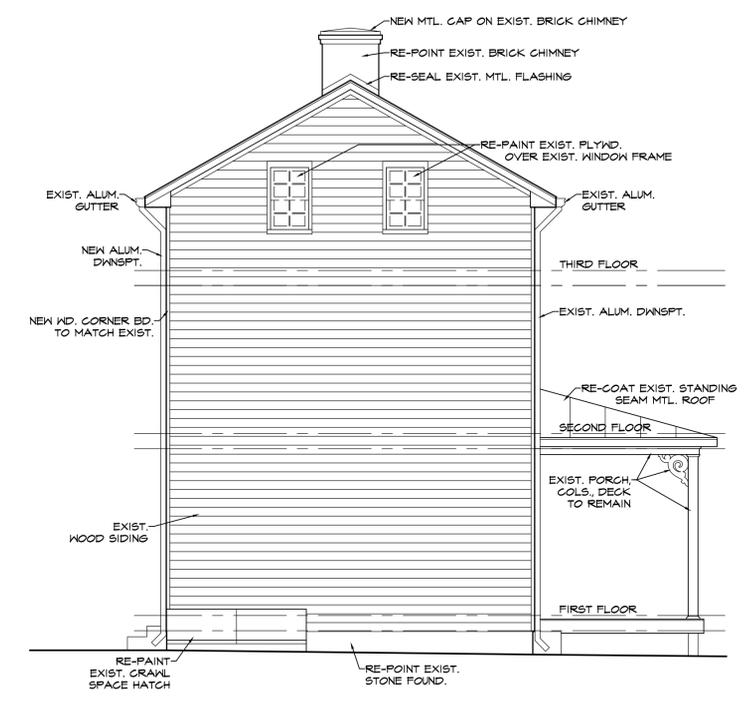
1 FRONT (SOUTH) ELEVATION
 SCALE: 1/4" = 1'-0"



2 EAST ELEVATION
 SCALE: 1/4" = 1'-0"



3 NORTH ELEVATION
 SCALE: 1/4" = 1'-0"



4 WEST ELEVATION
 SCALE: 1/4" = 1'-0"

Issue Date			
11/2/18			
Revisions			
Rev.	Date	Description	By

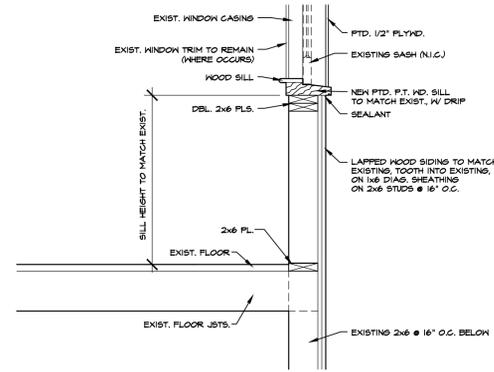
Sheet Title
PROPOSED EXTERIOR ELEVATIONS

Sheet Number
A3
 SHEET 3 OF 4

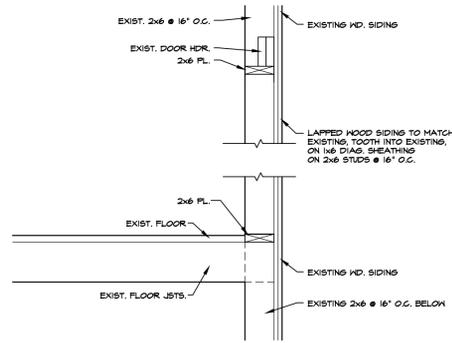




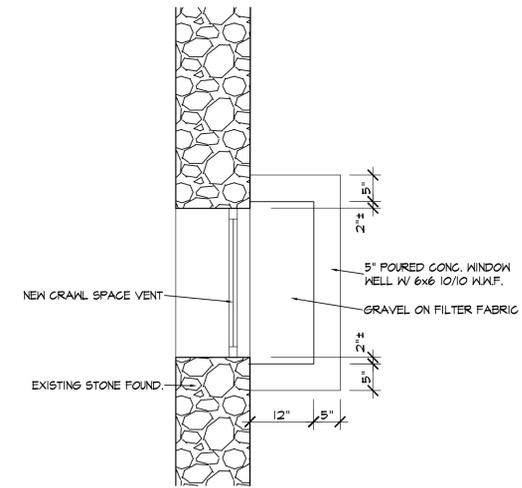
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE
 DOCUMENTS WERE PREPARED OR
 APPROVED BY ME AND THAT I
 AM A DULY LICENSED ARCHITECT
 UNDER THE LAWS OF THE STATE
 OF MARYLAND, LICENSE NO. 6059
 EXPIRATION DATE: 6/30/2020



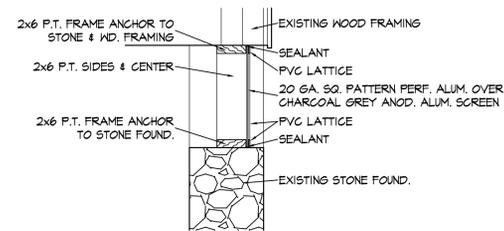
1 WINDOW SILL INFILL DETAIL
 SCALE: 3/4" = 1'-0"



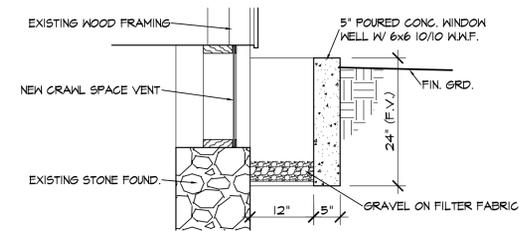
2 DOOR INFILL DETAIL
 SCALE: 3/4" = 1'-0"



3 WINDOW WELL PLAN
 SCALE: 3/4" = 1'-0"



4 CRAWL SPACE VENT DETAIL
 SCALE: 3/4" = 1'-0"



5 WINDOW WELL DETAIL
 SCALE: 3/4" = 1'-0"

PARTIAL DEMOLITION AND STABILIZATION OF THE
SPENCER-CARR FARMHOUSE
 2420 SPENCERVILLE ROAD, SPENCERVILLE, MD

Issue Date			
11/2/18			
Revisions			
Rev	Date	Description	By
Δ			
Δ			
Δ			
Δ			
Δ			

Sheet Title
 DETAILS,
 WALL SECTIONS



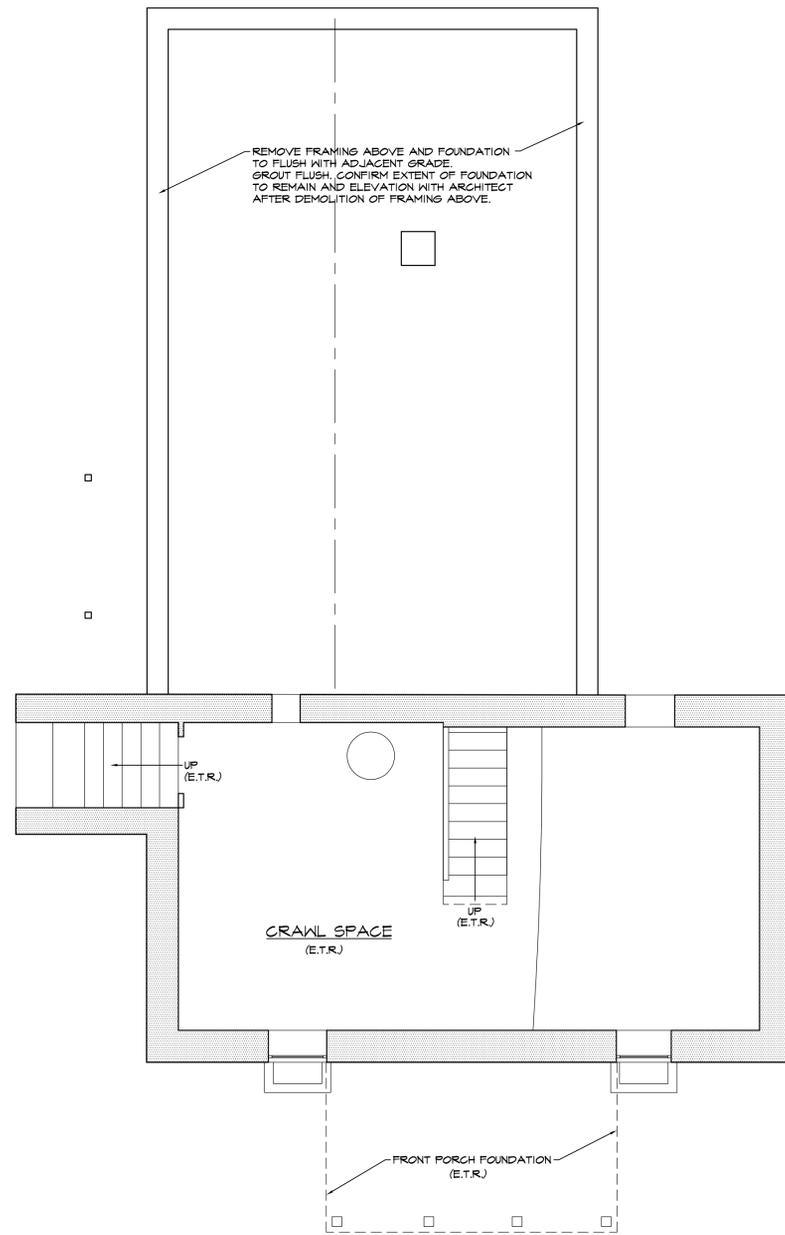


PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE
 DOCUMENTS WERE PREPARED OR
 APPROVED BY ME AND THAT I
 AM A DULY LICENSED ARCHITECT
 UNDER THE LAWS OF THE STATE
 OF MARYLAND, LICENSE NO. 86659
 EXPIRATION DATE: 6/30/2020

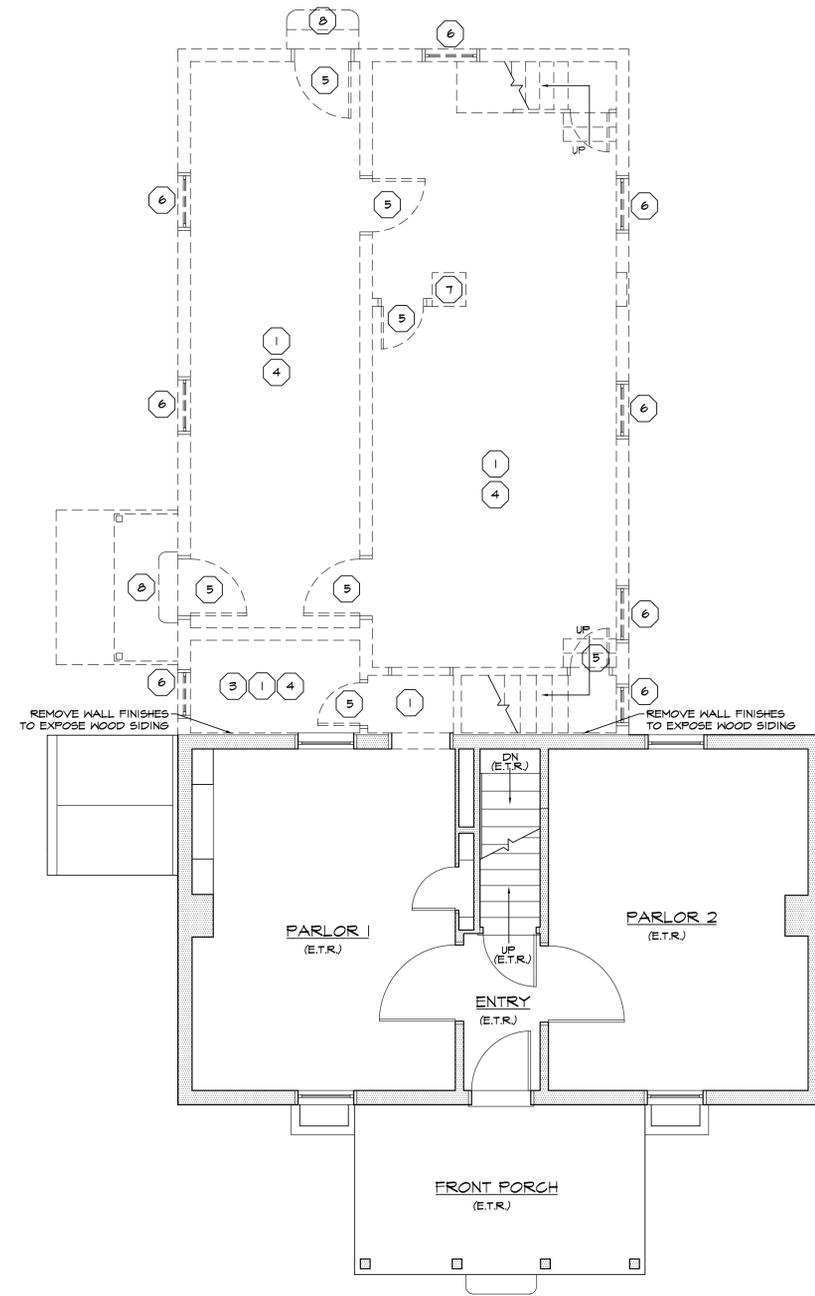
PARTIAL DEMOLITION AND STABILIZATION OF THE
SPENCER-CARR FARMHOUSE
 2420 SPENCERVILLE ROAD, SPENCERVILLE, MD

DEMOLITION NOTES

- 1 - REMOVE FLOOR, WALLS, CEILING FINISHES, STAIRS AND FRAMING
- 2 - REMOVE ROOFING AND ROOF FRAMING
- 3 - REMOVE PLUMBING FIXTURES, SUPPLY, WASTE, AND VENT PIPING
- 4 - REMOVE ELECTRICAL FIXTURES, DEVICES, AND CONDUIT.
- 5 - REMOVE DOOR AND FRAME
- 6 - REMOVE WINDOW AND FRAME
- 7 - REMOVE MASONRY CHIMNEY TO GRADE
- 8 - REMOVE CONCRETE STOOP



1 CRAWL SPACE DEMOLITION PLAN
 SCALE: 1/4" = 1'-0"



2 FIRST FLOOR DEMOLITION PLAN
 SCALE: 1/4" = 1'-0"



Revisions			
Rev	Date	Description	By
Δ			
Δ			
Δ			
Δ			
Δ			

Issue Date: 11/2/18
 Sheet Title: DEMOLITION FLOOR PLANS

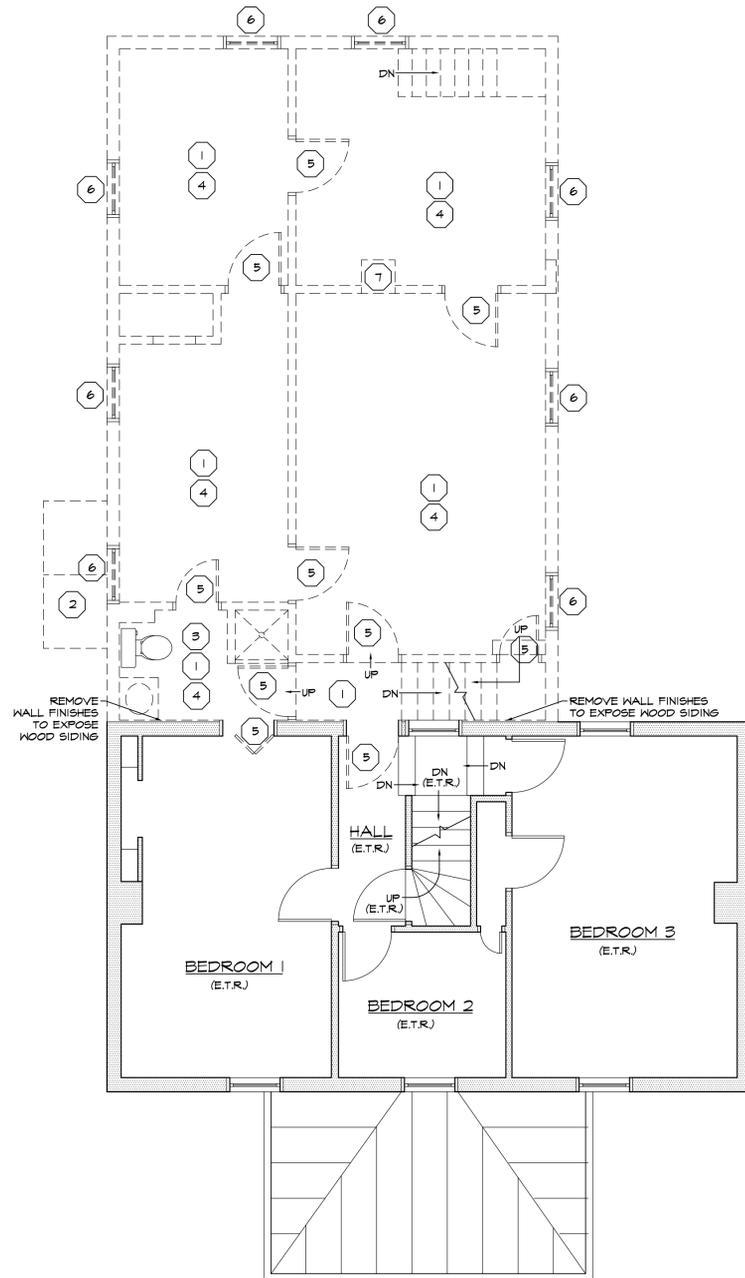


PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE
 DOCUMENTS WERE PREPARED OR
 APPROVED BY ME, AND THAT I
 AM A DULY LICENSED ARCHITECT
 UNDER THE LAWS OF THE STATE
 OF MARYLAND, LICENSE NO. 86599
 EXPIRATION DATE: 6/30/2020

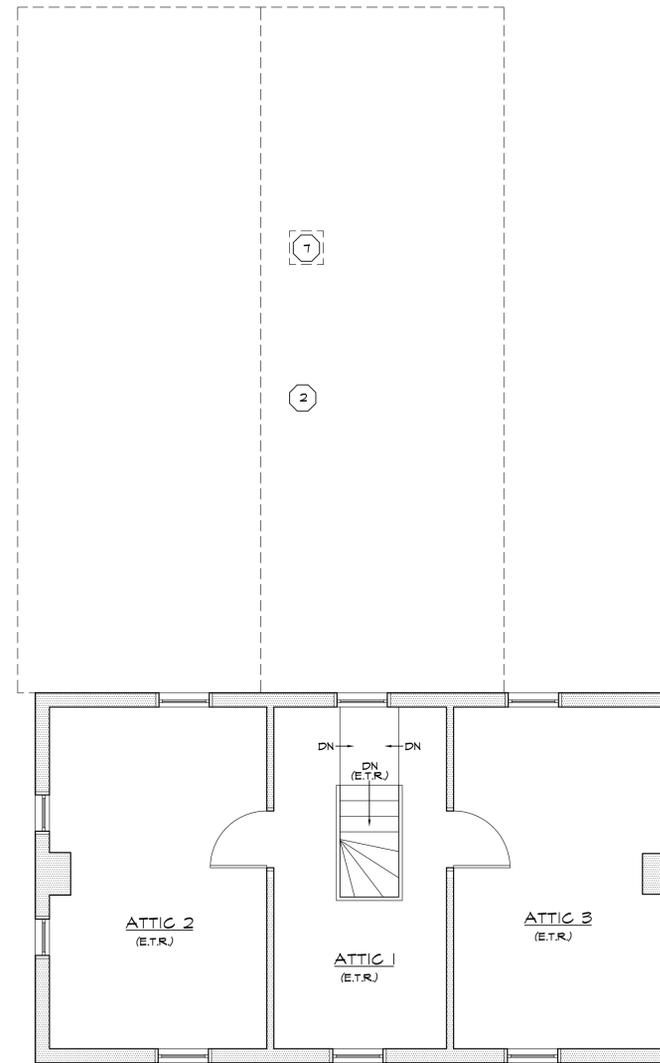
PARTIAL DEMOLITION AND STABILIZATION OF THE
SPENCER-CARR FARMHOUSE
 2420 SPENCERVILLE ROAD, SPENCERVILLE, MD

DEMOLITION NOTES

- 1 - REMOVE FLOOR, WALLS, CEILING FINISHES, STAIRS AND FRAMING
- 2 - REMOVE ROOFING AND ROOF FRAMING
- 3 - REMOVE PLUMBING FIXTURES, SUPPLY, WASTE, AND VENT PIPING
- 4 - REMOVE ELECTRICAL FIXTURES, DEVICES, AND CONDUIT
- 5 - REMOVE DOOR AND FRAME
- 6 - REMOVE WINDOW AND FRAME
- 7 - REMOVE MASONRY CHIMNEY TO GRADE
- 8 - REMOVE CONCRETE STOOP



1 SECOND FLOOR DEMOLITION PLAN
 SCALE: 1/4" = 1'-0"



2 THIRD FLOOR DEMOLITION PLAN
 SCALE: 1/4" = 1'-0"

Issue Date: 11/2/18

Revisions			
Rev	Date	Description	By
Δ			
Δ			
Δ			
Δ			
Δ			

Sheet Title
 DEMOLITION FLOOR PLANS



GENERAL REQUIREMENTS

DIVISION 1 - GENERAL REQUIREMENTS

- The work includes careful demolition and removal of the wood frame addition to the 1855 Spencer-Carr farmhouse, and removal of the addition foundation to adjacent grade level and repointing the remaining addition foundation (coordinate with the Architect). The remaining farmhouse exterior will be patched and repaired, the wood framing and stone foundation will be repaired where noted, and the building will be "mothballed".
The members of the Cedar Ridge Community Church are referred to herein as the Owner. The contract shall include the partial demolition and repair construction of this facility in its entirety, as outlined in this set of construction documents, and to secure and pay for any government or regulatory fees, licenses, and permits.
- The General Contractor shall have successfully completed a minimum of (5) similar projects utilizing the Secretary of the Interior Standards for the restoration and rehabilitation of an historic resource. Evidence of such experience will be submitted to the Owner on the Contractor's and Sub-Contractor's Qualification Forms. All work on this project will be performed according to the Secretary of the Interior's Standards for Rehabilitation (<http://www.nps.gov/history/nps/tpr/tax/rhb/index.htm>).
- Contractors shall visit the premises while bidding and shall familiarize themselves with existing conditions & the requirements of the project prior to developing their bid. Material quantities shall be based on actual field conditions and measurements. Do not scale plans.
- The General Contractor shall compare and coordinate the drawings and shall verify existing conditions. When, in the opinion of the Contractor, a discrepancy exists he shall promptly report it to the Architect for proper adjustment before proceeding with the work.
- In areas where the drawings do not address methodology, the Contractor shall perform in strict compliance with the manufacturer's specifications and/or recommendations, and the Secretary of the Interior's Guidelines.
- Unless specifically noted, the General Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, and other facilities and services necessary for proper execution and completion of the work. General Contractor shall furnish all required temporary facilities and temporary utilities immediately after receipt of the notice to proceed, for use of all those engaged in the project work.
- The General Contractor shall purchase and maintain insurance coverage in accordance with the requirements of the Owner. Contractor shall maintain an active fire-extinguisher at the project throughout all phases of the construction. Verify and coordinate any additional requirements with the Owner.
- The Contractor shall be responsible for compliance with the orders of any public authority bearing on the performance of the work.
- All work shall be completed by the General Contractor unless noted. All references to the "Contractor" include the General Contractor and the Sub-contractors. The Contractor shall be responsible for and have control over all construction means, techniques, sequences and procedures, and for coordinating all portions of the work required by the Contract Documents. The Contractor shall be responsible for acts and omissions of the Contractor's employees, Sub-contractors and their agents and employees, and any other persons performing any of the work under a contract with the Contractor.
- The General Contractor shall coordinate the work of the various trades and subcontractors to assure efficient and orderly installation, provide accommodation for items installed at a later date, verify that characteristics of elements of interrelated operating equipment are compatible, and coordinate the work of various sections which have interdependent responsibilities for installing, connecting to, and placing in service, such equipment. Coordinate space requirements and installation of mechanical and electrical work, which is indicated, detailed, or implied diagrammatically on the drawings.
- Perform all work in accordance with the Secretary of Interior Standards for Preservation and Rehabilitation, and acceptable trade practice to ensure the highest quality finished product, expressed or implied. Perform all work by skilled mechanics in accordance with established standards of workmanship in each of the various trades.
- Contractors shall take care to protect all surfaces of the existing historic structure from dust and damage during the construction process. Maintaining dust barriers and protective walking surfaces are the responsibility of the General Contractor. All refuse shall be removed from the premises each day, and properly disposed of. Coordinate refuse removal with the Owner. Failure to maintain clean premises will result in the Owner cleaning and removing debris, restoring barriers, and all charges will be billed to the General Contractor.
- Work damaged during the construction or not conforming to specified standards, tolerances or manufacturer's instructions for installation shall be replaced by the Contractor at no additional cost to the Owner.
- Where requested by the Owner to certify conformance to trade standards or the project requirements, the Contractor shall enlist a testing laboratory at the Owner's cost. If the requested test shows non-compliance to generally accepted trade standards or the project requirements, the Contractor shall correct the deficiency at no additional cost to the Owner, and shall reimburse the Owner for all costs of the testing, unless the Contractor has used products incorrectly labeled by the manufacturer, or has made changes previously approved by the Owner.
- The Contractor shall provide security of the work, including tools and uninstalled materials. Contractor shall protect the work, stored products, construction equipment, and the Owner's property from theft and vandalism, and the premises from entry by unauthorized personnel until final acceptance by the Owner.
- The Contractor shall warrant to the Owner that all materials and equipment furnished and installed under this contract shall be new, unless otherwise specified, and that all work shall be of good quality, free from faults and defects, and conforms with the Contract Documents. For a period of one year beginning at the date of Substantial Completion, the Contractor shall promptly correct work found not to be in accordance with the Contract Documents. The Contractor shall bear all costs of the corrections. This warranty is in addition to any specific warranties called for in the Contract Documents, or manufacturer's written warranties.
- Provide final clean-up and damage repair at the project conclusion. Leave the premises neat, clean, and clear of tools, equipment, and surplus materials, unless requested by the Owner.
- The Architect accepts no responsibility for changes or deviations from these plans unless made by prior signed letter or change order.
- The Contract Documents are solely for bidding and construction of this project. Copyright 2018, Craig Moloney, AIA, LEED AP, CEM Design. All rights reserved.

GRADING AND LANDSCAPING

- Erosion and sediment control shall comply with all requirements of State and local authorities.
- Fill excavated crawl space under the addition to be removed with topsoil to slope away from the remaining farmhouse foundation. Grade to slope to existing grade, and remaining foundation trace.
- Fill depressed grade and gopher holes around existing foundation with topsoil to provide positive grade slope away from foundation.
- Stabilize disturbed areas with tall drought-resistant fescue seed and straw.

DIVISION 2 - DEMOLITION

- On site verification of all existing conditions shall be the responsibility of the Contractor.
- The demolition shall include removal and proper disposal of hazardous substances encountered in the course of the renovation, in strict accordance with applicable rules, regulations, and standards.
- The Contractor assumes all responsibility and liability for shoring, framing and barriers required for demolition and building integrity.
- No damage to the historic farmhouse to remain will be tolerated. Damage to the building which occurs during the demolition process, or demolition not called for in the drawings or specifications, shall be replaced or repaired by the Contractor at no additional cost to the Owner.

DIVISION 3 - CONCRETE

(See Structural Specifications)

DIVISION 4 - MASONRY AND STONEMWORK

(See Structural Specifications for additional requirements)

BRICK

- Contractor is to salvage any existing unused brick from the site. Salvaged brick is to be sorted by integrity, size, color, texture, and composition. Salvaged brick matching existing adjacent brick may be used for infill where shown on the plans.
- If needed, Contractor is to provide samples of new brick proposed to be used as infill, repair, or to replace missing brick. New brick shall match existing in size, color, shape, texture, and composition. The brick is to be materially compatible with the existing historic brick and manufactured in a manner consistent with the original. All installed materials shall conform to the Architect-approved sample.

STONE

- Contractor is to salvage any existing stone where it has fallen and reuse. Stone removed from demolished addition foundation may be reused with Architect's approval.
- Stone is to be fitted and laid to match existing stonework. Do not alter stone size or shape more than is necessary to lay stonework.

MASONRY AND STONEMWORK REPAIR & REPOINTING

- The Contractor performing the masonry work shall be a Restoration Specialist with at least five years experience working on historic buildings and must be able to:
 - Apply measures to sustain the existing historic fabric, form, integrity and materials of the brickwork and stonework. Brick coursing and joint tooling must match the original.
 - Work such that new mortar blends with original fabric.
- The Contractor must obtain the Architect's approval of all samples and mock-ups before proceeding.
- The Contractor must obtain Architect's approval of removal of existing mortar, raking out the joints and preparation of surfaces before finishing joints.
- The Contractor must obtain the Architect's approval of the extent of replacing damaged or missing bricks, and repairing and re-pointing the two chimneys.
- Mortar and re-pointing mortar is to match existing in mix, consistency, and color. Portland cement mortar will not be considered for re-pointing. Contractor is to provide samples of proposed mortar, including mix data and color, prior to fabricating sample panels.
 - Do not damage brick or stone when removing mortar. Remove mortar to a depth of twice the joint width.
 - Remove mortar by the following method:
 - For horizontal joints saw cut a kerf down the center of the joint with a 4" mechanical grinder. Make only one pass with grinder at each joint. Do not cut mortar to edge of joint. Carefully remove remaining mortar by hand with a chisel.
 - For head joints cut partially with grinder and finish work with hammer and chisel. Brush or vacuum joints to remove all loose mortar from joint.
 - Mortar should be pointed to the same depth as the existing. Point mortar into joints in layers of less than 1 inch. When mortar is firm, tool joint to match original work as selected by Architect. Do not overwork face of joint. Tool head joint first. Allow front edge of brick to stand clear of pointing mortar.
- Contractor is responsible for protecting all existing adjacent materials during the execution of the work. Provide all necessary protection and work procedures to avoid damage to adjacent materials such doors, windows, exterior wood trim, and roofing. The contractor shall repair all damage to adjacent materials caused by the execution of the work of this section at no expense to the Owner. Damaged materials shall be replaced by mechanics experienced in the trade involved.

MORTAR MATERIALS AND MIXES

- Provide mortar mix based on sample analysis. Final mix shall match original mortar in texture, tooling, color, texture, strength and tooling. Final mix will be dependent on successful test panels as judged by the Architect and Owner.
- Mix mortar in accordance with industry standards. Measure materials by volume or weight. Do not measure by shovel. Mix ingredients in clean mechanical batch mortar mixer 3-5 minutes. Let mortar sit 10 minutes prior to use. Do not re-temper partially hardened material.

PROJECT CONDITIONS

- Do not perform any masonry application unless weather conditions meet product specifications. Provide protection from sun and wind prior to beginning and throughout masonry work until the completion of curing. Keep all curing mortar damp and shaded.

REPAIRING CHIMNEYS AND FOUNDATIONS

- The extent of rebuilding of the chimney and foundations will be determined by field inspections performed by the Architect and Contractor.
- If re-building is required, the original masonry or stone will be dismantled, cleaned and reinstalled to maintain consistent appearance. Prior to dismantling any masonry or stonework, document existing conditions, recording bonding pattern and joint profiles and widths. Ensure that the rebuilt chimney and foundation are structurally sound.

DIVISION 5 - METALS

(See Structural Specifications)

DIVISION 6 - WOOD AND PLASTICS

(See Structural Specifications for additional requirements)

- Provide rough lumber & plywood in standard dimensions, moisture content not more than 19%.
- Wood in contact with masonry, stone, concrete, etc. to be pressure treated wood.
- Exterior pressure treated wood to be Ecolife, by Viance (website: www.treatedwood.com). Wood is to be used in above-ground applications only, and is to be prepared, primed, and painted per the manufacturer's written instructions. Colors selected by Architect.
- Provide all necessary rough hardware in sizes and quantities required by local code or approved by the Architect.
- Fasteners for exterior pressure treated wood to be per pressure treated wood manufacturer's specifications.
- Protect finished work from damage by other trades working adjacent to the installation. Replace damaged surfaces.
- Install woods and plastics in conformance with the details, with the following considerations and requirements:
 - Install all materials with tight joints.
 - Miter casings and moldings.
 - All running trim one (1) piece up to 10'-0". Match grain and color piece to piece.
 - All members and lines shall be level and plumb.
 - Select and cut material to exclude damaged, marked, or defective areas.
 - Ease all exposed wood edges.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

EXISTING METAL ROOFING

- Existing standing seam metal roof on front porch and farmhouse is existing to remain. Roofing contractor is to examine the roof, flashing, coping, and drip edge and recommend any repairs.
- Provide Gardner Sta-Kool 805 Metal-X elastomeric roof coating or approved equal, installed per manufacturer's written instructions. Roof coating to be limited to match existing roof coating, as approved by the Architect. Do not install roof coating until weather conditions are acceptable to the manufacturer. Clean and prepare the substrate as recommended by the manufacturer. Commencing application of the roof coating indicates acceptance of the substrate and conditions by the roofing contractor.
- Provide manufacturer's standard 10-year coating warranty.

FLASHING, DRIP, AND COPING

- Roofing contractor to examine existing roof-to-wall flashing, chimney flashing, drip edges, and rake coping. Anchor, caulk and seal flashing, drips, and coping as necessary prior to installation of roof coating.

GUTTERS AND DOWNSPOUTS

- Existing aluminum gutters are to remain. Contractor to confirm anchoring at 30" on center minimum, and remove debris.
- Existing downspouts are to remain. Contractor to confirm adequate mounting and integrity, and provide rain leaders min. 5' from foundation.

SEALANTS AND CAULKING

- Provide non-sag sealant complying with the requirements of Federal specifications TTS-1543 or TTS-230, type "II", class "B". Primer shall be made by or recommended by sealant manufacturer for the specific conditions and substrates.
- Provide backing material by Dow "Ethafoam", or approved equal. Apply sealant over backing to uniform thickness in continuous beads, filling all joints and voids solid. Superficial pointing with a skim bead will not be accepted.
- All surfaces shall be adequately cleaned and prepared in accordance with the manufacturer's written instructions prior to installation.

SIDING AND TRIM

- Siding to be vertical grain red spruce or white pine, #1 clear wood, 1x shiplapped with 5" exposure to match existing. Moisture content not to exceed 12%. Nailing to be 16" o.c. with ring-shanked, blunt stainless steel nails. Back prime before installation, and prime all cut ends. Color to match existing. Infill siding to be toothed into existing siding to minimize effect of infill.
- Where necessary, replacement window and door trim, rakes, corner boards, soffits etc. are also #1 clear red spruce or white pine wood, sizes to match existing. Moisture content not to exceed 12%. Back prime before installation, and prime all cut ends. Color to match existing.

DIVISION 8 - DOORS AND WINDOWS

EXISTING DOORS AND HARDWARE

- Where noted on the drawings, existing front door and hardware is to remain.
- Salvage rear door panel and hardware from the demolished rear addition and reuse where noted on the drawings. Coordinate salvage with the Architect. Install hasp and padlock provided by the Owner on the rear door panel.

EXISTING WINDOWS AND HARDWARE

- Existing window frames are to remain. Existing window sashes are in the building adjacent to the frame where they were removed, and are to remain.
- Where noted on the drawings, Contractor is to fabricate and install a replacement wood window sill to match existing, prime and paint.
- Contractor is to install exterior grade plywood over the windows not already covered, cut to match existing window frame. Paint plywood covers to match existing.

DIVISION 9 - FINISHES

PAINTING

- Provide paint finishes for building and other surfaces as scheduled on the drawings, or as specified herein. Scope of painting to include all new and existing exterior wood siding and trim, casing, plywood window covers, etc. No paint finish is required on items having complete factory finish, except as specified herein: non-ferrous metals unless specifically mentioned in the painting schedule; stainless steel; exterior masonry; exterior stone foundation.
- Protect work or other trades from damage and defacement caused by this work. Repair any damage caused by the work of this Section.
- Paint Contractor shall notify the General Contractor if any surface to be painted or stained is found to be unsuitable to produce proper finish. Apply no finish material until the unsuitable surfaces have been made satisfactory.
- Finish work shall be uniform, of approved color, smooth, and free from runs. Make ends of paint adjoining other materials or colors sharp and clean.
- Provide all newly painted surfaces with (1) coat tinted primer and a minimum of (2) coats final color coat (unless recommended by manufacturer's specifications) to provide a solid, uniform, and durable finish. Allow manufacturer recommended drying time between coats.
- Deliver all paint to job site in unopened containers bearing the manufacturer's label and showing the paint type, sheen, and color.
- Paint types used shall be those specifically recommended by the manufacturer for the material to which they will be applied. Painting Contractor shall follow manufacturer's instructions for proper application of paint.
- All surfaces to be painted shall be thoroughly cleaned and prepared for painting prior to application of paint. Provide ventilators as required to prevent build-up of fumes.
- Sandpaper all new wood to smooth and even surface and dust off. After priming coat has been applied, thoroughly fill all nail holes and other surface imperfections with putty tinted with primer or stain to match wood color. Sand all wood work between coats to a smooth surface.
- Existing wood finishes that are alligatored, cracked, or peeling shall be stripped with chemical stripper: FEEL ALWAY T. Product data and technical specifications at <http://www.dumondchemicals.com/>.
- Back prime all new exterior wood siding and trim, and all cut joints, prior to installation. Thoroughly clean surfaces and apply no finish unless surfaces are dry and ready for application. Sandpaper surfaces of trim smooth and wipe clean after stain coat has been applied. Fill cracks and holes with plastic wood or putty. Prime backs of trim. Prime bare wood scheduled to receive paint finish. Finish nail holes, cracks, and other imperfections with putty and sand smooth.
- At completion, touch-up and restore finish where damaged, and leave all surfaces in good and clean condition. Provide for one touch-up trip for entire project prior to completion.
- Paint, stain, primer, etc. is by Benjamin Moore, or equal approved by the Architect.

DIVISION 10 - SPECIALTIES

- Fire extinguishers (provided by General Contractor) shall be 10 pound capacity, UL labels, enamel steel container with pressure indicating gauge for class A, B, or C fires. Install on wall mounted hooks as directed by the Fire Marshal, neatly fitting to finish surfaces. Place fully charged extinguishers on hooks prior to acceptance.

DIVISION 11 - (NOT USED)

DIVISION 12 - (NOT USED)

DIVISION 13 - (NOT USED)

DIVISION 14 - (NOT USED)

DIVISION 15 - MECHANICAL

1. No mechanical systems are anticipated for this phase.

DIVISION 16 - ELECTRICAL

- No electrical systems are anticipated for this phase.
- Existing electrical service to the addition to be demolished is to be relocated to a temporary pole on site, and existing electrical equipment, devices, and conduit is to be removed.

CEM DESIGN
520 ANDERSON AVENUE
ROCKVILLE, MARYLAND
301.294.0682 20850



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE
DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I
AM A FULLY LICENSED ARCHITECT
UNDER THE LAWS OF THE STATE
OF MARYLAND, LICENSE NO. 8659
EXPIRATION DATE: 6/30/2020

PARTIAL DEMOLITION AND STABILIZATION OF THE
SPENCER-CARR FARMHOUSE
2420 SPENCERVILLE ROAD, SPENCERVILLE, MD

Issue Date	11/2/18		
Revisions			
Rev	Date	Description	By
△			
△			
△			
△			

Sheet Title

GENERAL
REQUIREMENTS

Sheet Number

GR1

SHEET 1 OF 1

GENERAL STRUCTURAL NOTES

A. BUILDING CODES AND STANDARDS

- 1. THE FOLLOWING CODES AND STANDARDS, INCLUDING ALL SPECIFICATION REFERENCED WITHIN, SHALL APPLY TO THE DESIGN, CONSTRUCTION, QUALITY CONTROL AND SAFETY OF ALL WORK PERFORMED ON THE PROJECT.
a. MARYLAND BUILDING PERFORMANCE STANDARDS: 2015 INTERNATIONAL BUILDING CODE, 2012 INTERNATIONAL EXISTING BUILDING CODE, 2015 INTERNATIONAL RESIDENTIAL CODE.
b. "MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES", (ASCE/SEI 7-10) AMERICAN SOCIETY OF CIVIL ENGINEERS.
c. LOCAL AMENDMENTS.

- 2. ADDITIONAL CODES FOR MATERIALS SHALL BE FOUND IN THE APPROPRIATE SECTIONS THAT FOLLOW. SEE THOSE SECTIONS FOR THE APPLICABLE CODES.

B. DESIGN LOADS

1. GRAVITY - DEAD LOADS

Table with 3 columns: AREA, ROOF, TYPICAL FLOORS. Values: PSF, 10 PSF, 10 PSF.

2. GRAVITY - LIVE LOADS

LIVE LOAD REDUCTION (LLR) APPLIED PER CODE

Table with 3 columns: AREA, PSF, CONCENTRATED (POUNDS). Values: 100 PSF (INCLUDES PARTITIONS), 2000, 40, 300.

3. GRAVITY - ROOF LIVE LOADS

- a. ROOF LIVE LOAD: 30 PSF MINIMUM (SNOW LOAD IS USED 300 POUNDS WHEN GREATER THAN 30 PSF)
b. ROOF SNOW LOAD (PLUS DRIFTING WHERE APPLICABLE)
(1) Fp = 30
(2) Ff = 25
(3) Gc = 1.0
(4) I = 1.0
(5) Ct = 1.2
(6) DRIFT SURCHARGE LOAD, Pd = NA (INDICATE LOCATION)
(7) WIDTH OF SNOW DRIFT, W = NA

4. LATERAL LOADS - WIND

- a. ULTIMATE WIND SPEED (3-SECOND GUST): 115 MPH
b. NOMINAL WIND SPEED: 84 MPH
c. RISK CATEGORY: II
d. EXPOSURE CATEGORY: B
e. INTERNAL PRESSURE COEFFICIENT: Gcpl = +/- 0.18
f. COMPONENTS AND CLADDING:
(1) ACTUAL PRESSURE(S) ON EVERY COMPONENT AND CLADDING ELEMENT SHALL BE DETERMINED BY THE LICENSED PROFESSIONAL ENGINEER RESPONSIBLE FOR THE STRUCTURAL DESIGN ON SUCH ELEMENTS.
g. LIMITED STRUCTURAL ALTERATIONS DO NOT AFFECT THE DEMAND/CAPACITY RATIO OF THE EXISTING LATERAL LOAD RESISTING ELEMENTS THEREFORE A LATERAL ANALYSIS WILL NOT BE PERFORMED. REFERENCE 2012 IBC 607.5 AND 907.4.3.

5. LATERAL LOADS - SEISMIC

- a. RISK CATEGORY: II
b. SEISMIC IMPORTANCE FACTOR: IE = 1.0
c. MAPPED SPECTRAL RESPONSE ACCELERATIONS:
(1) Ss = 0.125g
(2) Si = 0.055g
d. SITE CLASS: D
e. SPECTRAL RESPONSE COEFFICIENTS:
(1) SDS = .133
(2) SDI = .088
f. SEISMIC DESIGN CATEGORY: B
g. LIMITED STRUCTURAL ALTERATIONS DO NOT AFFECT THE DEMAND/CAPACITY RATIO OF THE EXISTING LATERAL LOAD RESISTING ELEMENTS THEREFORE A LATERAL ANALYSIS WILL NOT BE PERFORMED. REFERENCE 2012 IBC 607.5 AND 907.4.3.
6. LATERAL LOADS - EARTH PRESSURE
a. SOIL DENSITY: 120 PCF (LB/FT^3)
b. LATERAL EQUIVALENT FLUID PRESSURE
(1) AT REST CONDITION (BRACED WALLS): 60 PSF/FT OF DEPTH
(2) ACTIVE CONDITION (CANTILEVERED RETAINING WALLS): 50 PSF/FT OF DEPTH
7. HANDRAILS AND GUARDRAILS: 200 POUNDS CONCENTRATED LOAD OR 50 PLF APPLIED AT ANY POINT IN ANY DIRECTION ON THE HANDRAIL OR TOP RAIL, (NON-CONCURRENT), WHICHEVER PRODUCES THE WORST CASE. INTERMEDIATE RAILS, BALUSTERS AND PANEL FILLERS SHALL BE DESIGNED FOR 50 LB ACTING OVER 12" X 12" AREA. ALL RAILING DESIGNS MUST BE COMPLETED BY THE CONTRACTOR'S ENGINEER AS OUTLINED IN THE CONSTRUCTION SECTION OF THESE GENERAL NOTES WHICH FOLLOWS INCLUDING THE SUBMISSION OF SIGNED AND SEALED DRAWINGS AND CALCULATIONS FOR REVIEW.

- 8. FLOOD DESIGN DATA: NA
9. SPECIAL LOADS: NA
10. NONSTRUCTURAL COMPONENTS AND DESIGNATED SEISMIC SYSTEMS REQUIRING SPECIAL INSPECTION: NA (PER SEISMIC DESIGN CATEGORY C,DEF)
11. PHOTOVOLTAIC PANEL SYSTEMS: DEAD LOAD = NA PSF
12. RAIN LOADS: R = PSF (INDICATE LOCATION).
13. FIRE TRUCK LOADINGS: NA

C. FOUNDATION / EARTH WORK / GEOTECHNICAL REPORT

- 1. DESIGN DATA:
a. FOUNDATIONS HAVE BEEN DESIGNED WITH AN ASSUMED BEARING CAPACITY OF 1500 PSF.
b. ALL FOUNDATIONS SHALL BEAR A MINIMUM OF 2'-6" BELOW GRADE. FOUNDATIONS SHALL STEP DOWN AS REQUIRED TO MAINTAIN THIS MINIMUM BELOW GRADE. IN CASE OF CONFLICT, NOTIFY THE ARCHITECT AND RGA IN ADVANCE OF ANY CONSTRUCTION TO ALLOW FOR ADJUSTMENT.
2. FOUNDATION SYSTEM
a. SPREAD FOOTINGS
(1) BUILDING SPREAD AND STRIP FOOTINGS SHALL BEAR ON UNDISTURBED NATURAL SOILS OR PROPERLY PLACED AND COMPACTED ENGINEERED FILL WITH AN ALLOWABLE BEARING PRESSURE OF 1500 PSF.
(2) NEW FOOTING BEARING ELEVATIONS ARE TO MATCH ADJACENT EXISTING FOOTING BEARING WHERE APPLICABLE UNLESS INDICATED OTHERWISE ON PLANS.
3. GENERAL
a. SEE THE SPECIFICATIONS FOR EXCAVATION AND PREPARATION OF THE FOUNDATION AND SLAB-ON-GRADE SUBGRADE, INCLUDING COMPACTION PROCEDURES, REQUIREMENTS CONTAINED IN THE GEOTECHNICAL REPORT ARE PART OF THIS WORK.
b. CONTRACTOR SHALL VERIFY ALL EXISTING FIELD CONDITIONS THAT MAY AFFECT THE INSTALLATION OF THE FOUNDATION SYSTEM AS SHOWN PRIOR TO STARTING WORK. SEE ALSO NOTES UNDER THE "CONSTRUCTION" SECTION.
c. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES, EXISTING STRUCTURES, ETC., WHETHER INDICATED OR NOT, WHICH MAY BE AFFECTED BY THE CONSTRUCTION PROCESS.

- d. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL ENGINEER'S APPROVAL.
e. BEARING ELEVATIONS INDICATED ON THE DRAWINGS ARE ESTIMATED FROM SOIL BEARING DATA INDICATED IN THE GEOTECHNICAL REPORT. PRIOR TO PLACING FOUNDATIONS, AN EXPERIENCED, QUALIFIED GEOTECHNICAL ENGINEER SHALL MAKE DETERMINATION OF FINAL BEARING ELEVATIONS AND VERIFICATION OF ALLOWABLE BEARING PRESSURE. SHOULD GEOTECHNICAL ENGINEER DETERMINE THAT BEARING ELEVATION MUST BE LOWERED TO ACHIEVE DESIGN SOIL BEARING CAPACITY CONTRACTOR SHALL UNDERCUT AND REPLACE WITH LEAN CONCRETE OR COMPACTED STRUCTURAL FILL.
f. CONCRETE FOR FOUNDATIONS SHALL BE POURED ON THE SAME DAY SUBGRADE APPROVAL IS GIVEN BY THE GEOTECHNICAL ENGINEER.
g. THE SLOPE BETWEEN THE LOWER EDGES OF ADJACENT FOUNDATIONS SHALL NOT EXCEED 45 DEGREES WITH THE HORIZONTAL, UNLESS INDICATED OTHERWISE ON PLANS. MAINTAIN A 1:1 SLOPE FROM BOTTOM EDGE OF ANY EXCAVATION.
h. ALL SHORING, SHEETING, AND DEMATERING SHALL BE THE TOTAL RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR'S ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION SHALL DESIGN SHEETING AND SHORING. ALL SUBMITTALS SHALL BEAR THE ENGINEER'S SEAL AND SIGNATURE.

4. BACKFILL

- a. ALL BACKFILL SHALL BE ACCOMPLISHED USING MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER, WITH OPTIMUM MOISTURE CONTENT FOR COMPACTING AND SHALL BE FREE OF DEBRIS.
b. NO BACKFILL MATERIAL SHALL BE PLACED AGAINST FOUNDATION WALLS UNTIL THE UPPER FLOORS BRACING THE WALLS ARE IN PLACE FOR AT LEAST 3 DAYS AND A MINIMUM OF 75% Fc OR ADEQUATE TEMPORARY BRACING, AS DESIGNED BY THE CONTRACTOR'S ENGINEER, IS INSTALLED. THE CONTRACTOR'S ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION SHALL DESIGN ANY REQUIRED BRACING. ALL SUBMITTALS SHALL BEAR THE ENGINEER'S SEAL AND SIGNATURE.
c. WHERE THE FINAL GRADE ELEVATIONS ARE APPROXIMATELY EQUAL ON BOTH SIDES OF A WALL, BACKFILL IN LIFTS TO MAINTAIN LEVEL ELEVATIONS WITHIN 12" ON BOTH SIDES AT ANY TIME.
d. NO BACKFILL MATERIAL SHALL BE PLACED AGAINST RETAINING WALLS UNTIL THE WALLS ARE IN PLACE FOR AT LEAST 7 DAYS AND A MINIMUM OF 75% Fc IS ACHIEVED, OR ADEQUATE TEMPORARY BRACING, AS DESIGNED BY THE CONTRACTOR'S ENGINEER, IS INSTALLED. THE CONTRACTOR'S ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION SHALL DESIGN ANY REQUIRED BRACING. ALL SUBMITTALS SHALL BEAR THE ENGINEER'S SEAL AND SIGNATURE.

5. STRUCTURAL FILL

- a. REFER TO SPECIFICATIONS FOR COMPACTED STRUCTURAL FILL. INSPECTION OF THE PLACEMENT OF COMPACTED STRUCTURAL FILL SHALL BE BY AN EXPERIENCED, QUALIFIED GEOTECHNICAL ENGINEER.
b. APPROVED MATERIAL SHOULD BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES ON LOOSE THICKNESS. MOISTURE CONDITIONED AS REQUIRED TO ACHIEVE COMPACTION TO A MINIMUM OF 98% OF THE MAXIMUM DENSITY OBTAINED IN ACCORDANCE WITH ASTM SPECIFICATION D-698 (STANDARD PROCTOR) FOR FILL BELOW FOOTINGS. CONSTRUCTION OF FILL SOILS USED AS SUBGRADE FOR SLABS-ON-GRADE CONSTRUCTION SHALL BE SIMILARLY COMPACTION TO 98% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM SPECIFICATION D-698 (STANDARD PROCTOR).

D. CONSTRUCTION

1. GENERAL

- (NOTE: RGA SHALL REFER TO RATHGEBER/GOSS ASSOCIATES, THE STRUCTURAL ENGINEER OF RECORD.)
a. THESE DRAWINGS REPRESENT THE COMPLETED PROJECT WHICH HAS BEEN DESIGNED FOR THE WEIGHTS OF MATERIALS AND FOR THE SUPERIMPOSED LOADS INDICATED ON THE DRAWINGS IN THE DESIGN LOADS SECTION OF THE GENERAL NOTES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE PROPER DESIGN AND CONSTRUCTION OF FORMWORK, STAGINGS, BRACING, SHEETING AND SHORING, RESHORING ETC. THIS INCLUDES ANY DESIGN REQUIRED FOR THE CONTRACTOR VEHICLES, FORKLIFTS, MATERIAL STORAGE, MOBILE CRANES, ETC. MEANS AND METHODS OF CONSTRUCTION IS SOLELY THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. ANY DRAWINGS AND/OR CALCULATIONS RELATED TO THE MEANS AND METHODS OF CONSTRUCTION (AS NOTED ABOVE) SHALL BE SUBMITTED TO RGA FOR REVIEW AND SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION AND RETAINED BY THE CONTRACTOR.
b. IN CASE OF CONFLICT BETWEEN THE GENERAL NOTES, DETAILS AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
c. WORK NOT INCLUDED ON THE DRAWINGS BUT IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES ELSEWHERE ON THE DRAWINGS SHALL BE REPEATED.
d. IMPLEMENTING JOB SITE SAFETY AND CONSTRUCTION PROCEDURES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
e. DRAWINGS SHALL NOT BE SCALED TO OBTAIN LAYOUT INFORMATION OR DIMENSIONS.
f. ALL DIMENSIONS LOCATING STRUCTURAL ELEMENTS AND SLAB EDGES, ETC., MUST BE VERIFIED WITH THE ARCHITECTURAL DRAWINGS BY THE GENERAL CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCY.
g. ALL ASSEMBLIES AND PRE-ENGINEERED SYSTEMS THAT ARE SUPPORTED BY AND FIT WITHIN THE NEWLY CONSTRUCTED OR EXISTING STRUCTURE, SHALL BE FABRICATED AND INSTALLED ONLY FOLLOWING AN EXTENSIVE FIELD MEASUREMENT SURVEY AND CONSIDERATION OF: LIVE LOAD DEFLECTIONS; DEFLECTIONS DUE TO SPECIFIED SNOW, WIND AND EARTHQUAKE LOADS; AND LONG TERM (CREEP) MOVEMENT OF THE PRIMARY STRUCTURE TO WHICH THEY ARE ATTACHED AND FIT BETWEEN.
h. ALL COSTS OF INVESTIGATION AND/OR REDESIGN DUE TO THE CONTRACTOR MIS-LOCATION OF STRUCTURAL ELEMENTS OR OTHER LACK OF CONFORMANCE WITH THE PROJECT DOCUMENTS SHALL BE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL PROVIDE THEIR OWN ENGINEERING OR CONTRACT DIRECTLY WITH RGA FOR THESE SERVICES. IN THE LATTER CASE, RGA SHALL BE PAID BY THE CONTRACTOR FOR ITS TIME SPENT IN REVIEWING THE CONTRACTOR'S ENGINEER'S WORK IN RESOLVING EACH SUCH ISSUE.
i. CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, LAUNDRY AND FOOD SERVICE DRAWINGS FOR SIZE AND LOCATIONS OF OPENINGS, SLEEVES, CONCRETE HOUSEKEEPING PADS, INSERTS, AND DEPRESSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
j. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR DETAILED INFORMATION REGARDING FINISHES, FIREPROOFING, WATERPROOFING, ETC.
k. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY AND DRYWALL NON-LOADBEARING PARTITIONS. PROVIDE SLIP CONNECTIONS THAT ALLOW VERTICAL MOVEMENT AT THE HEADS OF ALL SUCH PARTITIONS, UNLESS SHOWN ON THE DRAWINGS, THE CONNECTIONS SHALL BE DESIGNED TO SUPPORT THE TOP OF THE WALLS LATERALLY FOR THE CODE REQUIRED LATERAL LOAD. PROVIDE COMPRESSIBLE FIRESAFING AT THE TOP OF WALL AS REQUIRED BY ARCHITECTURAL DRAWINGS.
i. UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS, CONSTRUCTION SEQUENCE OF THE PRIMARY STRUCTURE SHALL BEGIN AT THE LOWEST LEVEL SHOWN AND PROGRESS UPWARD FROM THAT LEVEL.
2. SHOP DRAWINGS
a. UNAUTHORIZED REPRODUCTION OF ANY PORTION OF STRUCTURAL CONTRACT DRAWINGS FOR RESUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED.
b. IF AUTHORIZED BY RGA, USE OF ELECTRONIC FILES FOR PRODUCTION OF THESE PLANS AS SHOP DRAWINGS IS PERMITTED. THE GENERAL CONTRACTOR MUST SIGN AND RETURN RATHGEBER/GOSS ASSOCIATES' STANDARD CADD FILE INDEMNIFICATION LETTER PRIOR TO RECEIVING THE FILES.

- c. SHOP DRAWINGS SUBMITTED FOR STRUCTURAL REVIEW WILL BE RETURNED BY RGA IN THE SAME FORMAT AS THEY ARE RECEIVED. ANY REPRODUCTION COST WILL BE AT THE EXPENSE OF THE CONTRACTOR. IF LOCAL JURISDICTION REQUIRES HARD COPIES TO BE SUBMITTED FOR RECORD IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND PROVIDE DOCUMENTS.
d. SUBMIT SHOP DRAWINGS TO ALLOW AT LEAST 15 BUSINESS DAYS FOR STRUCTURAL REVIEW BEFORE DATE REVIEWED SUBMITTALS WILL BE NEEDED. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE SUBMITTAL PACKAGE IS COMPLETE AND SUBMITTED WITH AMPLE TIME FOR REVIEW. SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S STAMP OF APPROVAL WHICH SHALL CONSTITUTE CERTIFICATION THAT THE CONTRACTOR HAS VERIFIED ALL FIELD MEASUREMENTS, CONSTRUCTION CRITERIA, MATERIALS AND SIMILAR DATA AND HAVE CHECKED EACH DRAWING FOR COMPLETENESS, COORDINATION AND COMPLIANCE WITH THE CONTRACT DOCUMENTS.

3. ASSEMBLIES/PRE-ENGINEERED SYSTEMS

- a. THE CONTRACTOR SHALL SUBMIT, FOR REVIEW, DRAWINGS AND CALCULATIONS BOTH SIGNED AND SEALED BY A STRUCTURAL ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION FOR THE FOLLOWING ASSEMBLIES AS WELL AS ANY OTHER PRE-ENGINEERED SYSTEMS. THIS REVIEW SHALL BE FOR GENERAL CONFORMANCE WITH THE PROJECT PARAMETERS AS INDICATED ON THE DRAWINGS AND IN THE GENERAL NOTES. THE DESIGN OF THESE ASSEMBLIES AND THEIR CONNECTION TO THE PRIMARY BUILDING STRUCTURE IS THE RESPONSIBILITY OF THE ENGINEER WHO HAS SIGNED AND SEALED THESE DRAWINGS AND CALCULATIONS.
(1) STAIRS, RAILINGS, AND LADDERS OF ANY KIND. DESIGNS SHALL TAKE INTO ACCOUNT ALL VERTICAL AND LATERAL LOADS REQUIRED BY APPLICABLE BUILDING CODES, WHERE HEADERS OR OTHER TYPES OF STRUCTURAL MEMBERS HAVE BEEN DESIGNATED BY THE STRUCTURAL ENGINEER OF RECORD TO SUPPORT THE STAIRS, THE CONNECTIONS FROM THE STAIRS SHALL BE DESIGNED SO THAT NO ECCENTRIC OR TORSIONAL FORCES ARE INDUCED IN THESE STRUCTURAL MEMBERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING EMBEDS AND HARDWARE AS REQUIRED BY THE STAIR DESIGN.
4. EXISTING BUILDING
a. EXISTING BUILDING INFORMATION SHOWN IS BASED ON EXISTING BUILDING DRAWINGS, FIELD OBSERVATIONS, AND /OR ARCHITECTURAL DRAWINGS.
b. THE CONTRACTOR SHALL PROVIDE SURVEY OF ALL EXISTING BUILDING INFORMATION SHOWN (COLUMN CENTERLINES, SLAB EDGES, DIMENSIONS, ELEVATIONS, MEMBER SIZES, ETC.) AND NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES PRIOR TO SHOP DRAWING PRODUCTION AND FABRICATION.

E. CONCRETE

- 1. CODES
a. "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318-14", AMERICAN CONCRETE INSTITUTE.
b. "SPECIFICATIONS FOR STRUCTURAL CONCRETE, ACI 301-10".
c. "MANUAL OF STANDARD PRACTICE", CONCRETE REINFORCING STEEL INSTITUTE.
2. MATERIALS
a. THE FOLLOWING ASTM STANDARDS AND DESIGN STRESSES SHALL BE USED FOR THE APPROPRIATE MATERIALS USED IN THE CONSTRUCTION OF THIS PROJECT.

Table with 4 columns: APPLICATION, Fc @ 28 DAYS, WEIGHT [PCF], W/C (MAX). Rows include SLABS-ON-GRADE (INTERIOR), SLABS-ON-GRADE (EXTERIOR), WALLS, FOOTINGS.

- *PUMP MIXES: MAXIMUM WATER/CEMENT RATIO MUST BE MAINTAINED. IF ADDITIONAL WORKABILITY IS REQUIRED FOR PUMPED PLACEMENT, THE HIGH OR MID-RANGE WATER REDUCERS SHALL BE USED IN LIEU OF ADDITIONAL WATER. WATER HELD BACK AT THE PLANT SHALL BE NOTED ON THE BATCH TICKET AND RECORDED ON THE INSPECTOR'S REPORT WHEN SAMPLE CYLINDERS ARE MADE.
b. CEMENT:
ASTM C150, TYPE I OR III
ASTM C150, TYPE II FOR CONCRETE IN CONTACT WITH EARTH
c. CEMENT SUBSTITUTES:
ASTM C645, TYPE IS (LIMIT TO 50% MAX OF CEMENTITIOUS CONTENT BY WEIGHT)
d. AGGREGATES:
ASTM C33 (NORMAL WEIGHT)
e. AIR - AIR-ENTRAINING ADMIXTURE TO COMPLY WITH ASTM C260.
PLAZA (BEAMS AND SLABS) 6% ± 1/2%
SLAB ON GRADE (EXTERIOR) 6% ± 1/2%
FOUNDATIONS 6% ± 1/2%
COLUMNS AND WALL 6% ± 1/2%
*AIR CONTENT OF TROWEL FINISHED FLOORS SHALL NOT EXCEED 3%
f. REINFORCEMENT:
DEFORMED REINFORCING BARS ASTM A615, GRADE 60
WELDED WIRE FABRIC (WVF) ASTM A185

3. CAST-IN-PLACE

- a. REINFORCING STEEL CLEAR COVER SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE.
(1) NON-POST-TENSIONED CONCRETE:
- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
- CONCRETE EXPOSED TO EARTH OR WEATHER #6 BARS AND LARGER 2"
#5 BARS AND SMALLER 1-1/2"
- CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND SLABS, WALLS AND JOISTS #1 BARS AND SMALLER 3/4"
BEAMS, AND COLUMNS:
PRIMARY REINFORCEMENT, TIES, STIRRUPS, AND SPIRALS 1-1/2"
b. NO SPLICES OF REINFORCEMENT SHALL BE PERMITTED EXCEPT AS DETAILED OR AUTHORIZED BY THE STRUCTURAL ENGINEER. MAKE BARS CONTINUOUS AROUND CORNERS. WHEN PERMITTED, SPLICES SHALL BE MADE BY CONTACT TENSION LAP SPLICES, UNLESS OTHERWISE NOTED.
c. WELDED WIRE FABRIC REINFORCEMENT SHALL BE SUPPLIED IN SHEETS, EXCEPT FOR SLAB ON GRADE CONSTRUCTION WHERE ROLLS MAY BE USED. LAP TWO FULL MESH LENGTHS AT SPLICES AND WIRE TOGETHER.
d. NO WELDING OF REINFORCING SHALL BE PERMITTED UNLESS SPECIFICALLY CALLED FOR OR APPROVED BY THE STRUCTURAL ENGINEER.
e. PROVIDE PLASTIC TIPPED BOLSTERS AND CHAIRS AT ALL LOCATIONS WHERE THE CONCRETE SURFACE IN CONTACT WITH THE BOLSTERS OR CHAIRS IS EXPOSED.
k. ALL FORMWORK, SHORING, AND RESHORING, SHALL BE DESIGNED BY THE CONTRACTOR'S ENGINEER REGISTERED IN THE PROJECT'S JURISDICTION. ALL SUBMISSIONS SHALL BEAR THEIR ENGINEER'S SEAL AND SIGNATURE.

- 4. INSPECTION AND TESTING
a. THE OWNER WILL ENGAGE A TESTING AGENCY TO PROVIDE SERVICES AS INDICATED BELOW AND SUBMIT REPORTS.
b. CAST-IN-PLACE CONCRETE:
(1) THE AGENCY SHALL INSPECT THE FORM WORK AND REINFORCING STEEL PLACEMENT FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS AND SHOP DRAWINGS. THE AGENCY SHALL MONITOR ALL STRUCTURAL CONCRETE PLACEMENT FOR CONFORMANCE WITH APPLICABLE ACI REQUIREMENTS.
(2) SAMPLE FRESH CONCRETE IN ACCORDANCE WITH ASTM C172. MOLD TEST CYLINDERS IN ACCORDANCE WITH ASTM C31.
(3) THE FOLLOWING NUMBER OF 4" DIAMETER X 8" LONG TEST CYLINDERS SHALL BE CAST FOR EACH DAY'S POUR OR EACH 100 CUBIC YARDS, WHICHEVER RESULTS IN MORE TEST CYLINDERS.
FOR FOOTINGS AND OTHER STRUCTURAL CONCRETE:
3 @ 7 DAYS, LAB CURED
3 @ 28 DAYS, LAB CURED
3 @ 56 DAYS, LAB CURED
(4) THE AGENCY WILL MAKE ADDITIONAL TESTS OF IN-PLACE CONCRETE AT THE CONTRACTOR'S EXPENSE WHEN THE TEST RESULTS INDICATE SPECIFIED CONCRETE STRENGTHS HAVE NOT BEEN ATTAINED, AS DIRECTED BY THE STRUCTURAL ENGINEER.

F. MASONRY

- 1. CODES
a. "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, ACI 530-13 / ASCE 5-13" AND "SPECIFICATIONS FOR MASONRY STRUCTURES, ACI 530-13 / ASCE 6-13".
2. MATERIALS
a. NET COMPRESSIVE STRENGTH OF MASONRY (ASSEMBLY) Fm = 1900 PSI, UNIT STRENGTH METHOD OR PRISM TEST METHOD PER ACI 530/ASCE 5
b. LOAD BEARING CONCRETE
HOLLOW AND SOLID - ASTM C90, NORMAL MASONRY UNITS WEIGHT, NET AREA COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNITS = 1900 PSI.
BRICK - ASTM C85, MINIMUM COMPRESSIVE STRENGTH ON NET AREA = 2000 PSI.
ASTM C216 (CLAY OR SHALE), MINIMUM COMPRESSIVE STRENGTH ON NET AREA = 2000 PSI.
ASTM C26 SOLID CLAY MASONRY UNITS WHERE EXTERNAL APPEARANCE NOT REQ'D
ASTM C210 - TYPE N (NO PORTLAND CEMENT)
ASTM C476, MINIMUM COMPRESSIVE STRENGTH ON NET AREA = 2000 PSI.
c. FACE BRICK
d. CLAY BRICK
e. MORTAR
f. GROUT
ASTM C476, MINIMUM COMPRESSIVE STRENGTH ON NET AREA = 2000 PSI.

3. INSPECTION AND TESTING

- a. THE OWNER WILL ENGAGE A TESTING AGENCY TO PROVIDE SERVICES AS INDICATED BELOW AND SUBMIT REPORTS PER LEVEL C QUALITY ASSURANCE OF ACI 530.
b. THE AGENCY SHALL CONTINUOUSLY MONITOR THE FOLLOWING FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS, PROPORTIONS, MIXING AND CONSISTENCY OF MORTAR AND GROUT, THE PLACEMENT OF MASONRY UNITS, GROUT, REINFORCEMENT, AND CONNECTORS, CONSTRUCTION OF MORTAR JOINTS AND GROUT SPACE PRIOR TO GROUTING.
c. SUBMIT GROUT AND MORTAR MIX DESIGNS AND MASONRY UNIT AND MATERIAL CERTIFICATIONS TO THE STRUCTURAL ENGINEER FOR APPROVAL.
d. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS IN ACCORDANCE WITH THE MASONRY CODE.
e. THE CONTRACTOR SHALL PREPARE ONE SET OF PRISMS PER ASTM C-1314 FOR TESTING AT 7 DAYS AND ON SET FOR TESTING AT 28 DAYS. TESTS ARE TO BE CONDUCTED BY THE AGENCY FOR EACH 5000 SQUARE FEET OF WALL INSTALLED, BUT NOT LESS THAN TWO TESTS.

6. WOOD

- 1. CODES
a. "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" (WITH SUPPLEMENT), NATIONAL FOREST AND PAPER ASSOCIATION.
b. "PERFORMANCE STANDARD AND POLICIES FOR STRUCTURAL USE PANELS," PRF-108, AMERICAN PLYWOOD ASSOCIATION (APA).
c. "AMERICAN NATIONAL STANDARD FOR WOOD PRODUCTS - STRUCTURAL GLUED LAMINATED TIMBER," ANSI/AITC A190.1-A199.2, AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.
2. SAWN LUMBER
a. ALL SAWN LUMBER SHALL HAVE 19% MAXIMUM MOISTURE CONTENT AND SHALL BE SURFACE DRY SPRUCE-PINE-FIR OR HEM FIR WITH THE FOLLOWING BASE DESIGN VALUES PER NDS SUPPLEMENT TABLE 4A (FOR 100% LOAD DURATION):
(1) CEILING JOISTS / RAFTER / BEAMS: SELECT STRUCTURAL
Fb = 1250 psi Fc (PAR) = 1400 psi Fv = 135 psi
Ft = 700 psi Fc (PERP) = 425 psi E = 1,500,000 psi
(2) LOAD BEARING WALLS / COLUMNS: NO. 1 NO. 2
Fb = 875 psi Fc (PAR) = 1150 psi Fv = 135 psi
Ft = 450 psi Fc (PERP) = 425 psi E = 1,400,000 psi
(3) NON-LOAD BEARING WALLS: STUD GRADE
Fb = 675 psi Fc (PAR) = 725 psi Fv = 135 psi
Ft = 350 psi Fc (PERP) = 425 psi E = 1,300,000 psi
b. SEE INTERNATIONAL BUILDING CODE CHAPTER 23, TABLE 2304.10.1 FOR MINIMUM BRACING AND FASTENING.
c. MEMBERS SHALL BE SET WITH CROWN SIDE UP AND HAVE A MINIMUM OF 3" BEARING.
d. MEMBERS FRAMING TO BEAMS, HEADERS, ETC. SHALL BE SECURED WITH SIMPSON STRONG-TIE FRAMING ANCHORS OR APPROVED EQUAL, UNLESS OTHERWISE NOTED OR SHOWN.
e. ALL JOISTS AND RAFTERS SHALL BE RIGIDLY BRIDGED AT INTERVALS NOT EXCEEDING 8'-0".
f. USE 1/2" DIAMETER LAG SCREWS OR THRU BOLTS AT 24" O.C. TO JOIN MULTIPLE 2X BEAMS OR GIRDETS SO THAT LOAD DISTRIBUTES EQUALLY.
g. PROVIDE CONTINUOUS SOLID BLOCKING UNDER CONCENTRATED LOADS DOWN THROUGH FLOOR FRAMING TO SLAB ON GRADE OR FOUNDATIONS.
h. ALL WOOD SILL PLATES SHALL BE ANCHORED TO GROUT FILLED CMU OR CONCRETE FOUNDATIONS WITH 1/2" DIAMETER ANCHORS AT 4'-0" O.C. OR 2 ANCHORS MINIMUM PER MEMBER. ANCHOR BOLTS SHALL BE EMBEDDED A MINIMUM OF 15" INTO MORTAR GROUT AND 8" INTO CAST-IN-PLACE CONCRETE FOUNDATIONS.
i. ALL BOLTS AND LAG SCREWS SHALL BE FITTED WITH GALVANIZED, MALLEABLE IRON OR STEEL PLATE WASHERS.

3. ENGINEERED WOOD PRODUCTS

- a. MEMBER DESIGNATIONS AND PROPERTIES ARE BASED ON WEYERHAEUSER CATALOG. FRAMING BY OTHER MANUFACTURERS MAY BE SUPPLIED PROVIDED SECTION PROPERTIES EQUAL OR EXCEED THOSE SPECIFIED AND IF APPROVED BY THE ARCHITECT AND STRUCTURAL ENGINEER.
(1) ENGINEERED WOOD BEAMS
MEMBERS SHALL BE "1.4E MICROLAM LVL," "2.0 E PARALLAM PSL" OR APPROVED EQUAL WITH THE FOLLOWING MECHANICAL PROPERTIES AND MINIMUM STRENGTH VALUES (FOR 100% LOAD DURATION):
Fb = 2600 psi Fc (PAR) = 2510 psi Fv = 285 psi
Fc (PERP) = 750 psi E = 1,900,000 psi
SIZE SHEAR MOMENT
1 3/4" x 5 1/2" 1830 LBS 2125 FT-LBS
1 3/4" x 7 1/4" 2410 LBS 3555 FT-LBS
1 3/4" x 9 1/4" 3075 LBS 5600 FT-LBS
1 3/4" x 9 1/2" 3160 LBS 5885 FT-LBS
1 3/4" x 11 1/4" 3740 LBS 8070 FT-LBS
1 3/4" x 11 3/8" 3450 LBS 8425 FT-LBS
1 3/4" x 14" 4655 LBS 12130 FT-LBS
1 3/4" x 16" 5320 LBS 15555 FT-LBS
1 3/4" x 18" 5485 LBS 14375 FT-LBS
* MUST BE USED IN PAIRS.
SEE MANUFACTURER'S SPECIFICATIONS FOR MULTIPLE MEMBER CONNECTION REQUIREMENTS
(2) ENGINEERED I-JOISTS:
MEMBERS SHALL BE "TJI JOISTS" OR APPROVED EQUAL. SEE MANUFACTURER SPECIFICATIONS FOR MECHANICAL PROPERTIES AND MINIMUM STRENGTH VALUES.
(3) ENGINEERED WOOD COLUMNS:
MEMBERS SHALL BE "1.0E PARALLAM PSL" OR APPROVED EQUAL WITH THE FOLLOWING MECHANICAL PROPERTIES:
Fb = 2400 psi Fc (PAR) = 2500 psi Fv = 190 psi
Fc (PERP) = 425 psi E = 1,800,000 psi
SEE MANUFACTURER'S SPECIFICATIONS FOR MINIMUM STRENGTH VALUES.

4. PLYWOOD PANELS

- a. APA PERFORMANCE RATED PLYWOOD PANELS
(1) PLYWOOD ROOF SHEATHING 1/4" THICK, EXPOSURE I, SPAN RATINGS 40/20
(2) PLYWOOD WALL SHEATHING 1/2" THICK, EXPOSURE I, SPAN RATING 32/16
(3) PLYWOOD FLOOR SHEATHING 23/32" THICK, STURD-I-FLOOR, TONGUE AND GROOVE EDGES, EXPOSURE I, SPAN RATING 24'0.C.
b. FACTORY-MARK EACH CONSTRUCTION PANEL WITH APA TRADEMARK EVIDENCING COMPLIANCE WITH GRADE REQUIREMENTS.
c. INSTALL PANELS WITH FACE GRAIN PERPENDICULAR TO THE SUPPORTING MEMBERS, UNLESS SHOWN OTHERWISE.
d. FLOOR SHEATHING SHALL BE GLUED AND SCREWED TO ALL SUPPORTS. ALL PANEL EDGES SHALL BE BLOCKED. ALL TONGUE AND GROOVE JOINTS SHALL BE GLUED.
5. WOOD PRESERVATIVE TREATMENT
a. WHERE LUMBER OR PLYWOOD IS INDICATED AS "TREATED", COMPLY WITH APPLICABLE REQUIREMENTS OF AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA) STANDARDS U1 (FOR LUMBER AND PLYWOOD) AND WITH ANFP STANDARDS LISTED BELOW. MARK EACH TREATED ITEM WITH THE ANFP QUALITY MARK REQUIREMENTS.
b. PRESSURE TREAT ABOVE-GROUND ITEMS WITH WATER-BORNE PRESERVATIVES TO COMPLY WITH AMERICAN WOOD PRESERVERS BUREAU (AWPB) STANDARD U1, AND FOR THE APPLICABLE USE CODE (UC). AFTER TREATMENT, KILN-DRY LUMBER AND PLYWOOD TO A MAXIMUM MOISTURE CONTENT, RESPECTIVELY, OF 10 PERCENT AND 15 PERCENT.
c. TREAT INDICATED ITEMS AND WOOD SILLS, SLEEPERS, BLOCKING AND SIMILAR CONCEALED MEMBERS IN CONTACT WITH MASONRY OR CONCRETE.

CEM DESIGN
520 ANDERSON AVENUE
ROCKVILLE, MARYLAND
301.284.0682 20850



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 27100. EXPIRATION DATE: 1-25-2020.

PARTIAL DEMOLITION AND STABILIZATION OF THE SPENCER - CARR FARMHOUSE
2420 SPENCERVILLE ROAD, SPENCERVILLE, MD

Table with 4 columns: Rev, Date, Description, By. Row 1: 1, 11/2/18, Issue Date, [blank].

GENERAL NOTES

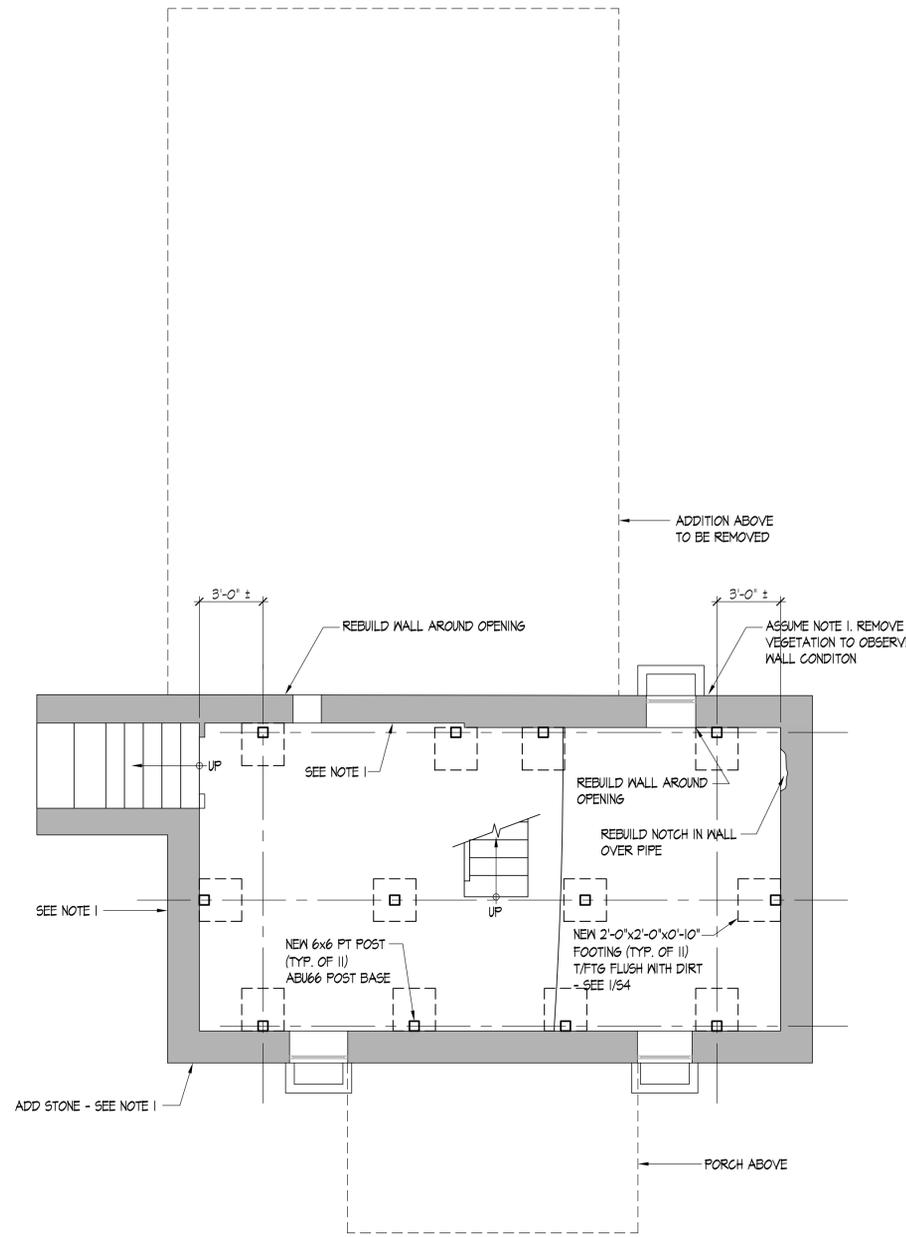
Sheet Number: 50
SHEET - OF -

RATHGEBER/GOSS ASSOCIATES
Consulting Structural Engineers
15871 Crabbs Branch
Rockville, Maryland 20855
Phone: (301) 590-0071 Fax: (301) 590-0073
www.rath-goss.com
PROJECT NO: 18002.21



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 27100. EXPIRATION DATE: 1-25-2020.

PARTIAL DEMOLITION AND STABILIZATION OF THE
SPENCER - CARR FARMHOUSE
2420 SPENCERVILLE ROAD, SPENCERVILLE, MD

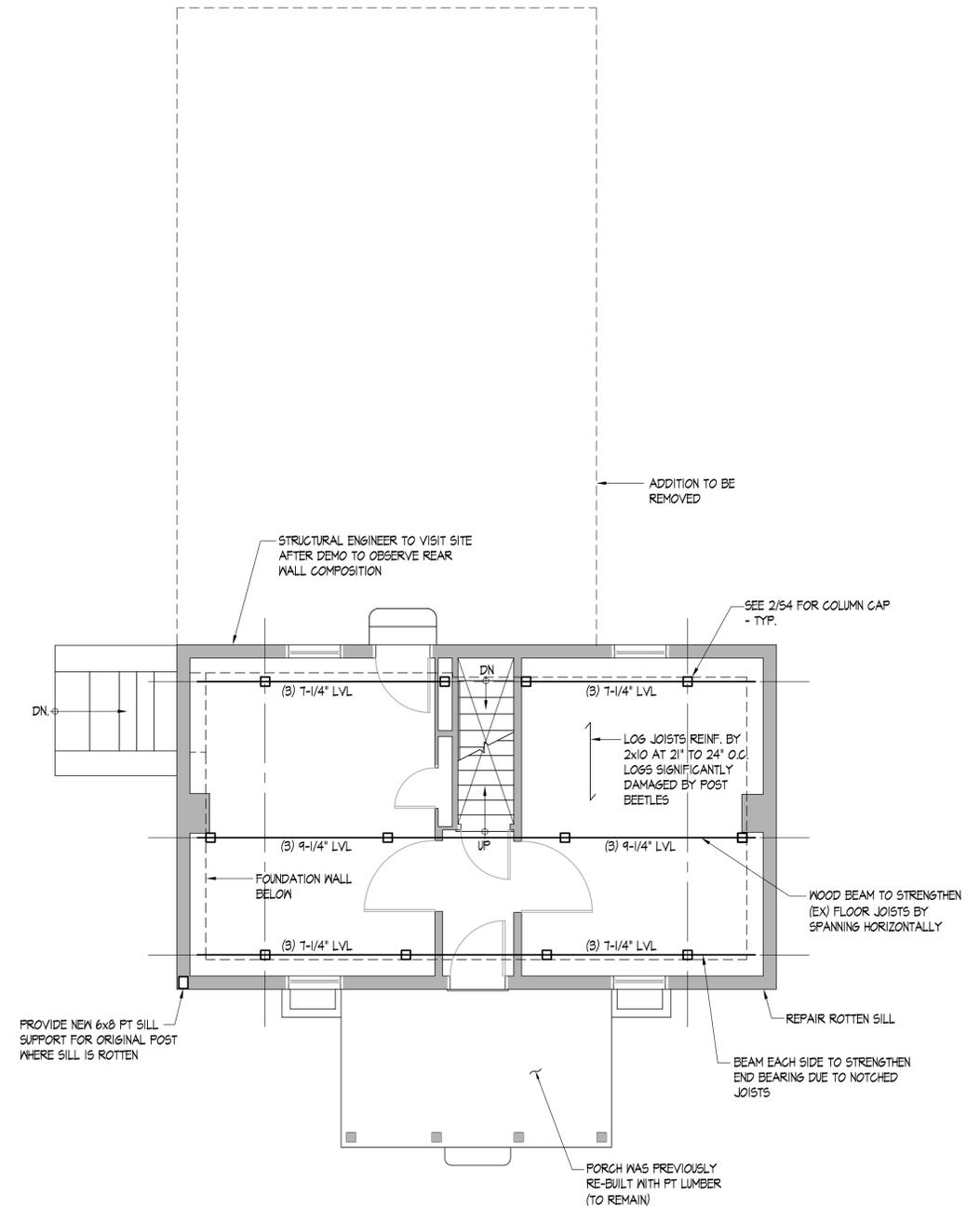


FOUNDATION/CRAWL SPACE PLAN

SCALE: 1/4"=1'-0"

PLAN NOTES:

- 1) RE-POINT STONE FOUNDATION WALL. ADDITIONAL STONES MAY BE FOUND IN THE CELLAR.
- 2) SEE S0 FOR GENERAL NOTES.
- 3) SEE S4 AND S5 FOR DETAILS.



FIRST FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0"

PLAN NOTES:

- 1) SEE S0 FOR GENERAL NOTES.
- 2) SEE S4 AND S5 FOR DETAILS.
- 3) BEAMS SUPPORTED ON POSTS WITH SIMPSON CCG POST CAPS TYP. SEE 2/54.
- 4) WOOD WALL REPAIRS ARE BETWEEN 1ST AND 2ND FLOORS.

Issue Date
11/2/18

Rev.	Date	Description	By
1			
2			
3			
4			

Sheet Title

STRUCTURAL PLANS

Sheet Number

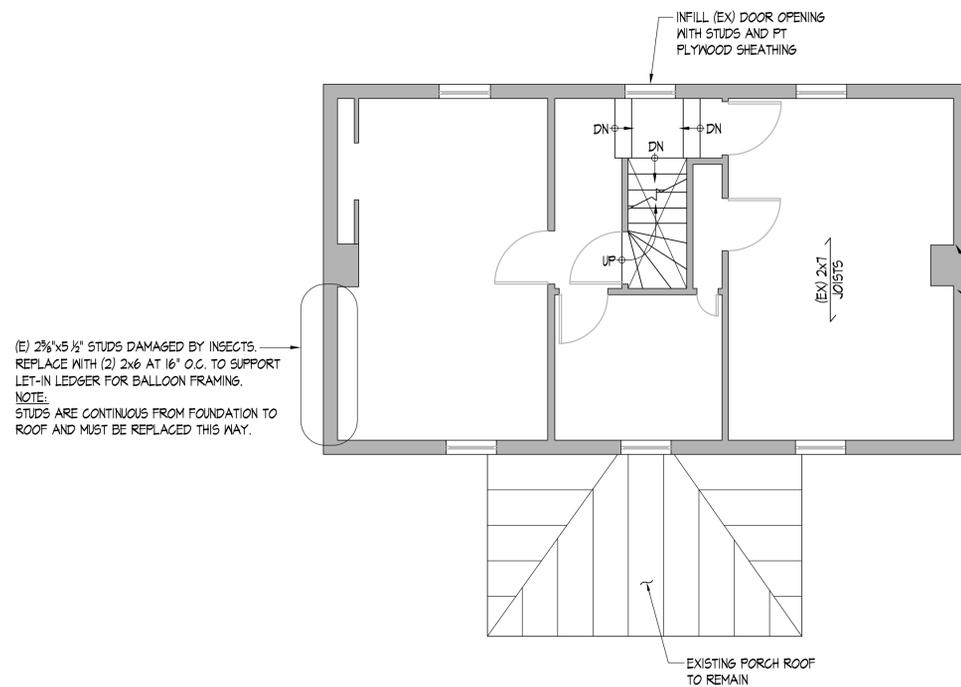
S1

SHEET _ OF _



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 27100. EXPIRATION DATE: 1-25-2020

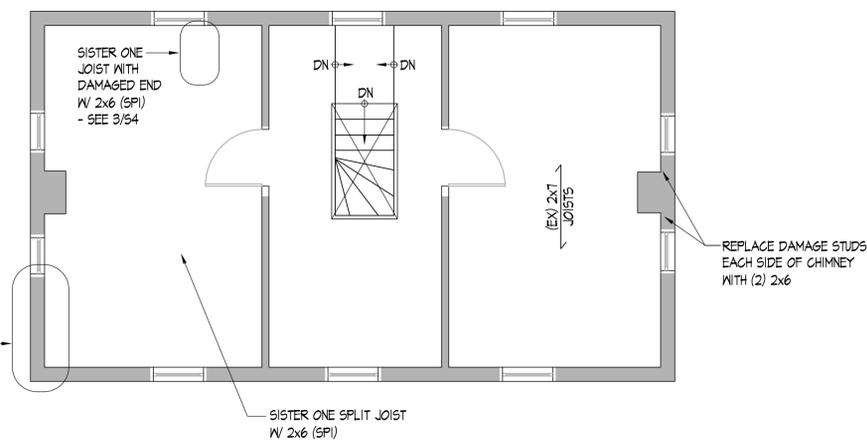
**PARTIAL DEMOLITION AND STABILIZATION OF THE
SPENCER - CARR FARMHOUSE**
2420 SPENCERVILLE ROAD, SPENCERVILLE, MD



SECOND FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0"

- PLAN NOTES:
- 1) SEE S0 FOR GENERAL NOTES.
 - 2) SEE S4 AND S5 FOR DETAILS.
 - 3) WALL REPAIRS SHOWN ARE BETWEEN 2ND AND 3RD FLOORS.



THIRD FLOOR FRAMING PLAN

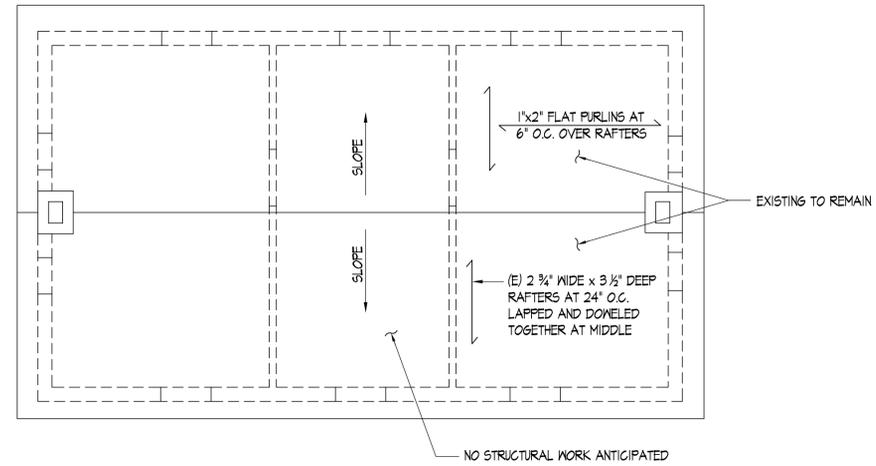
SCALE: 1/4"=1'-0"

- PLAN NOTES:
- 1) SEE S0 FOR GENERAL NOTES.
 - 2) SEE S4 AND S5 FOR DETAILS.
 - 3) WALL REPAIRS SHOWN ARE BETWEEN 3RD FLOOR TO ROOF.

Issue Date			
11/2/18			
Revisions			
Rev	Date	Description	By
△			
△			
△			
△			
△			
Sheet Title			
STRUCTURAL PLANS			



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 27100. EXPIRATION DATE: 1-25-2020



ROOF FRAMING PLAN

SCALE: 1/4"=1'-0"

- PLAN NOTES:
 1) SEE 50 FOR GENERAL NOTES.
 2) SEE 54 AND 55 FOR DETAILS.

**PARTIAL DEMOLITION AND STABILIZATION OF THE
 SPENCER - CARR FARMHOUSE
 2420 SPENCERVILLE ROAD, SPENCERVILLE, MD**

Issue Date			
11/2/18			
Revisions			
Rev.	Date	Description	By
△			
△			
△			
△			
Sheet Title			
STRUCTURAL PLAN			

RATHGEBER/GOSS ASSOCIATES
 Consulting Structural Engineers
 15871 Crabbs Branch Way
 Rockville, Maryland 20855
 Phone: (301) 590-0071 Fax: (301) 590-0073
 www.rath-goss.com
 PROJECT NO. 18002.21

Sheet Number
S3
 SHEET _ OF _