



# AGENDA

## Historic District Commission Meeting

6:00 PM - Thursday, June 23, 2022

Frostburg Municipal Center Meeting Room - 37 Broadway

Page

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE

3. AUTHORITY

*The Frostburg Historic District Commission implements the City's Historic Preservation Overlay District, of the Frostburg Zoning Ordinance, Section 4, as adopted in 2014, pursuant to the authority granted by the Maryland Land Use Article, Section 8, as adopted in 2012, of the Annotated Code of Maryland. This meeting is open to the public and is conducted in compliance with the State of Maryland's Open Meetings Act.*

4. STATEMENT OF PURPOSE

*The Frostburg Historic District Commission is charged with the preservation of historic structures and the surroundings within the designated district in order to safeguard the heritage of the City, stabilize and improve property values, strengthen the local economy and foster civic beauty.*

5. ROLL CALL

Chair Dawn Hein, Vice Chair Joseph Hoffman, William Determan, Robert Rephan, Maureen Brewer, Alternate Member Daniel Filer

6. REVIEW AND APPROVAL OF THE AGENDA

7. REVIEW AND APPROVAL OF THE MINUTES

7.1. [05.May 2022 HDC Minutes](#)

3 - 5

8. PROJECT PRESENTATIONS

8.1. **St. Michael Catholic Church - Roof Replacement**

6 - 8

*Presented by Ed Jones*

*\*\*Please note that in lieu of photos of the proposed roof replacement material, Mr. Jones will be bringing a sample of the proposed synthetic slate material to the meeting\*\**

**Proposed Roofing Material**

I have studied the application and all relevant documents and presentation related to this case, and I am familiar with the property in question. I find that:

- The proposed changes [are/are not] compatible with the neighborhood because there [is/is not] a general compatibility of exterior design, scale, proportion, arrangement, texture, and materials to be used.

Based on these findings I move to [approve/disapprove] the proposal because the use of exterior materials [are/are not] closely similar in appearance to original materials or significant buildings in the District, pursuant to Section 4.1.J.1.b, c, and d.

[St Michael rectory roof](#)

[St. Michael HDC App](#)

8.2. **St. Michael Catholic Church - ADA Access Ramp**

9 - 62

*Presented by Ed Jones*

I have studied the application and all relevant documents and presentation related to this case, and I am familiar with the property in question. I find that:

- The proposed changes [are/are not] compatible with the neighborhood because there [is/is not] a general compatibility of exterior design, scale, proportion, arrangement, texture, and materials to be used.

Based on these findings I move to [approve/disapprove] the proposal because the use of exterior materials [are/are not] closely similar in appearance to original materials or significant buildings in the District, pursuant to Section 4.1.J.1.b, c, and d.

[St. Michael Church ADA Ramp](#)

[St Michaels Hall Renovations](#)

9. OLD BUSINESS

10. NEW BUSINESS

10.1. **Staff Update: MHT Commercial Tax Credit Program**

[Link to application and more information](#)

[GIS Map of Maryland Opportunity Zones](#)

[Map of Allegany County Opportunity Zones](#)

11. ADJOURNMENT



## MINUTES

### Historic District Commission Meeting

Monday, May 9, 2022 - 6:00 PM

Frostburg Municipal Center Meeting Room - 37 Broadway

The Historic District Commission Meeting of the City of Frostburg was called to order on Monday, May 9, 2022, at 6:00 PM, at the Frostburg Municipal Center, 37 Broadway, with the following members present:

**PRESENT:** Dawn Hein, Mrs.  
Maureen Brewer, Mrs.  
Joseph Hoffman, Dr.  
Robert Rephan, Mr.

**EXCUSED:** William Determan, Mr.  
Daniel Filer, Mr.

**1. CALL TO ORDER**

Chair Hein called the meeting to order at 5:58 PM.

**2. PLEDGE OF ALLEGIANCE**

**3. Authority**

*The Frostburg Historic District Commission implements the City's Historic Preservation Overlay District, of the Frostburg Zoning Ordinance, Section 4, as adopted in 2014, pursuant to the authority granted by the Maryland Land Use Article, Section 8, as adopted in 2012, of the Annotated Code of Maryland. This meeting is open to the public and is conducted in compliance with the State of Maryland's Open Meetings Act.*

**4. STATEMENT OF PURPOSE**

*The Frostburg Historic District Commission is charged with the preservation of historic structures and the surroundings within the designated district in order to safeguard the heritage of the City, stabilize and improve property values, strengthen the local economy and foster civic beauty.*

**5. ROLL CALL**

Chair Dawn Hein, Vice Chair Joseph Hoffman, Robert Rephan, and Maureen Brewer were present. William Determan was absent. Since a quorum was achieved, Alternate Member Daniel Filer was not required to attend.

**6. REVIEW AND APPROVAL OF THE AGENDA**

After reviewing the agenda for this evening's meeting, Commissioner Brewer made a motion to approve the agenda as presented. Commissioner Rephan seconded the motion, a vote was taken, and the motion passed unanimously.

**7. REVIEW AND APPROVAL OF THE MINUTES**

After reviewing the minutes from the April 2022 Historic District Commission meeting, Commissioner Hoffman made a motion to approve the minutes as presented. The motion was seconded by Commissioner Brewer, a vote was taken, and the motion passed unanimously.

**8. PROJECT PRESENTATIONS**

**8.1. 81 W. Main Street - Slate Roof Replacements & Addition of "Snowbirds"**

*Presented by Kevin Moroney*

Mr. Moroney, owner of 81 W. Main Street described his proposal to repair the home's existing slate roof and add additional roof-mounted snow guards. Repairs include the removal of 6 1/2 courses of 10" x 18" Peach bottom slate from eaves and salvage; removing the old snow guards; installing Ice & Water shield to the exposed decking; reinstalling the salvaged slate, replacing any broken ones; installing approx. 80 copper & bronze snow guards in 2 rows; and removing deteriorated valley and chimney flashings and installing new 20oz. copper flashings. Mr. Moroney brought a sample of the existing slate shingles for the Commissioners.

Commissioner Rephan asked if staggering the snow guards is a standard installation practice, and Mr. Moroney indicated that yes, it is. Commissioner Hoffman inquired how many slate shingles will need to be replaced, and Mr. Moroney indicated that at least the first two rows will need to be replaced; however, many of the fastenings are still in good shape and will be able to be salvaged.

With no further discussion, Commissioner Brewer made a motion to approve the proposal.

Moved by Mrs. Maureen Brewer, seconded by Mr. Robert Rephan

*Maureen Brewer made a motion to approval the proposal, stating, "I have studied the application and all relevant documents and presentation related to this case, and I am familiar with the property in question. I find that the proposed changes are compatible with the neighborhood because there is a general compatibility of exterior design, scale, proportion, arrangement, texture, and materials to be used. Based on these findings I move to approve the proposal because the use of exterior materials are closely similar in appearance to original materials or significant buildings in the District, pursuant to Section 4.1.J.1.c."*

Carried



**9. OLD BUSINESS**

Commissioner Hoffman asked about the awning at 82 E. Main Street, which will soon be home to the Baker Babes bakery. Director Bennett clarified that the proprietors of the business plan to paint the awning in a historic palette and apply lettering, which is permissible per the Frostburg Zoning Ordinance. Director Bennett is also working with the proprietor to prepare an application for the next round of facade grant funding.

**10. NEW BUSINESS**

**10.1. 14 W. Main Street Wall Repair Update**

Community Development Director, L.J. Bennett, described repairs that are currently underway at 14 W. Main Street following the partial collapse of a rear exterior wall. The existing brick had deteriorated and had received water damage over the years, causing the eventual wall failure. The damaged portion of the wall has since been reinforced with framing, and a repair plan from the basement up has been prepared by a local engineering firm.

**11. ADJOURNMENT**

Commissioner Rephan made a motion to adjourn, the motion was seconded by Commissioner Brewer, and the Chair Hein adjourned the meeting at 6:22.

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L.J. Bennett, Community  
Development Director



# CITY OF FROSTBURG

HISTORIC DISTRICT COMMISSION

CERTIFICATE OF APPROPRIATENESS APPLICATION



DEPARTMENT OF COMMUNITY DEVELOPMENT

CITY HALL

59 E. MAIN STREET, P.O. BOX 440

FROSTBURG, MD 21532

Applicant Name: Divine Mercy Parish

Applicant's Address: 44 East Main Street

Phone Number(s): 301-689-6767

Property Owner Name: Archdiocese of Baltimore

Property Address and Location: 44 East Main Street

Type of Change: ☐ Alteration ☐ Demolition ☐ Grading  
☐ Addition ☒ Repair ☐ Excavation  
☒ New Building ☐ Sign ☐ Other: \_\_\_\_\_

Work to be performed:

☐ PLANS – Architect, Engineer, or Other: \_\_\_\_\_  
☐ DEMOLITION - Contractor: \_\_\_\_\_  
☒ RENOVATION/CONSTRUCTION – Building Contractor(s): \_\_\_\_\_

Scope of Work *(describe project in detail, list materials and dimensions):*

Replace existing roof over rectory and adjoining porch areas with  
synthetic slate

Is the property subject to an historic preservation easement?

☐ NO

☒ YES

Is the easement held by a third party organization other than the property owner?

☒ NO

☐ YES

If yes, please provide a copy.

Requirements for Complete Application (TO BE DETERMINED BY STAFF; IF CHECKED INCLUDE AS AN ATTACHMENT):

- ☐ SITE PLAN OR ACCURATE SCALED DRAWING DEPICTING PROPORTIONS AND DISTANCES
- ☐ CLEAR AND LEGIBLE SKETCH OF EXTERIOR DETAILS OR AREA TO BE CHANGED
- ☒ PHOTOGRAPH(S) OF AREA TO BE CHANGED
- ☒ MANUFACTURER'S SAMPLES OR TEAR SHEETS OF MATERIAL(S) PROPOSED TO BE USED
- ☐ FOR NEW CONSTRUCTION:
- ☐ SITE PLAN TO SCALE
- ☐ ELEVATION DRAWINGS
- ☐ MATERIAL SAMPLES/TEAR SHEETS
- ☐ CURRENT PHOTOGRAPHS OF PROPERTY
- ☐ OTHER: \_\_\_\_\_

Optional Attachments:

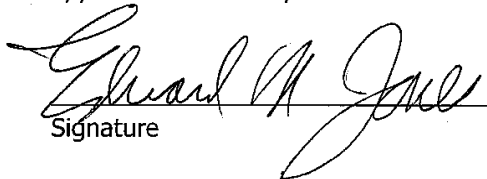
- ☐ HISTORIC PHOTOGRAPHS OR OTHER DOCUMENTATION

**You are encouraged to attend the Frostburg Historic District Commission meeting. The next meeting is Monday June 13, at 6:15 pm at the Frostburg Library, 65 E. Main St., Frostburg, Maryland. Failure to provide sufficient information for review may result in an unfavorable recommendation by the Historic District Commission.**

PLEASE READ AND SIGN BELOW

*I hereby certify that I am the owner of the property or I have advised to owner of the property in regard to the proposed work. Further, the information provided by this application represents an accurate description of the proposed work and nothing has been intentionally omitted that would be necessary for the Historic District Commission's decision making process.*

*I understand that a favorable review finding by the Frostburg Historic District Commission does not constitute approval of other require land use or building permits obtained by a separate application.*

  
Signature

6-3-22  
Date

FOR CITY USE ONLY

Approval to be granted by: ☐ FROSTBURG HISTORIC DISTRICT ☐ STAFF

Staff Review: ☐ APPROVED ☐ NOT APPROVED

Staff Reviewer: \_\_\_\_\_ Date: \_\_\_\_\_

SIGNATURE

Page 2 of 2

**ARCHDIOCESE OF BALTIMORE  
SAINT MICHAELS CHURCH  
SOCIAL HALL RENOVATION PROJECT**

**ADDENDUM # 01**

**02 MAY 2022**



**Prepared By:**

**EADS Architects, Inc.  
450 Aberdeen Drive  
Somerset, PA 15501  
Phone: (814) 445-2470  
EADS Project No. 0380-19-347**

***EADS  
ARCHITECTS INC.***

# **SAINT MICHAELS CHURCH SOCIAL HALL RENOVATION PROJECT**

## **ADDENDUM #01**

### **ISSUED 02 MAY 2022 VIA EMAIL**

All bidding contractors are to note that all items contained in this Addendum #01 are issued to amend, clarify, or supersede the drawings, Project Manual and technical specifications, as applicable, and shall become a part of the Contract Documents for the subject project as if fully incorporated and bound therein. All bidding contractors are to read this Addendum and make provisions for the following revisions and additions to the Contract Documents.

#### **GENERAL:**

1. In accordance with the Bid Advertisement, all Contractors submitting a bid for this project must purchase the documents from EADS in order to be registered to receive addenda and notices. Bids will be deemed non-responsive and rejected from Contractors who did not purchase drawings from EADS. Refer to the Bid Advertisement for direction.
2. Hardcopy bids remain due by 2:00 p.m. on Friday, May 06, 2022. Bids will be opened in public and read aloud.
3. EADS Architects has not prepared a cost estimate for this project.
4. A non-mandatory pre-bid conference was held on Wednesday, April 20. A copy of the meeting notes and attendance/sign-in sheet is attached herein. Please review the meeting notes as they are part of the addendum.
5. No additional Addenda are expected to be issued for this project.
6. The Knights of Columbus may want the existing 2 oven/10 cooktop piece of kitchen equipment. If so, the church will coordinate removal prior to construction start. If not, contractor to remove and dispose.
7. Selected contractor to disconnect all plumbing, gas and electrical connections and move kitchen equipment as necessary to facilitate asbestos abatement and new floor installation.
8. Ramp handrails to have all welded connections.

#### **MECHANICAL, ELECTRICAL & PLUMBING REVISIONS AND CLARIFICATIONS:**

1. Installation of the new kitchen hood shall be such that it does not enter into the dedicated electrical space that extends above the existing electrical distribution panel. Exact dimensions of the new hood shall be field verified by the selected contractor prior to ordering.
2. The kitchen hood should be manufactured by either CaptiveAire or Greenheck.
3. Light fixture installed in adjacent building's lean-to, is to be removed. Conduit and conductors to be removed back to source or terminated in a junction box.
4. Final gas, plumbing and electrical connections of new kitchen equipment shall be by the selected contractor.
5. Four countertop height duplex receptacles, split between two dedicated 20A circuits, shall be installed on wall between the new Women's Room and ramp. Utilize surface-mount receptacles and wire mold.

6. Two additional exterior receptacles shall be installed on opposite side of the existing cooler. Final locations to be determined by Owner.
7. All exterior receptacles shall be equipped with a lockable, metallic, weatherproof, while-in-use cover.
8. All existing and proposed receptacles installed beneath the proposed kitchen hood, that serve heat generating appliances, shall be equipped with shunt trip circuit breakers that trip upon activation of the hood's ansul system.
9. A manual reset gas solenoid valve shall be installed in the new gas supply line serving the kitchen cooking appliances, that shall immediately close upon activation of the hood's fire suppression system.
10. Duct sizes indicated as "12/12" on sheet M-3 (4 locations) shall be replaced with "16/8", flat oval spiral duct.
11. All exposed ductwork shall be spiral round or flat oval duct, primed & painted to match adjacent ceiling color.

#### **RESPONSES TO RFI'S FROM BIDDING CONTRACTORS:**

1. The ceramic tile spec calls for Dal Tile Society Series: 12x12 for floors 6 x 6 for walls. The Society Tile only comes in 12 x 24 tiles. **Response: Remove (Basis-of Design: Daltile "Society" Series.): from Division 093000-4 Section 2.2 TILE PRODUCTS A.2.**
2. The Resilient Flooring Spec shows: LVT 18.5 x 18.5 Tiles and 7.2 x 37.4 planks. Do you know if the border tile they show between the LVT and VCT is the 18 x 18 tile or the planks? **Response: Planks; two widths wide.**
3. Is there a spec for the stone? **Response: No specification. Stone is to match existing in terms of size, cut, color, joints, etc. Mortar is to match existing in terms of width and color. Mortar type is by contractor based on below-grade or above-grade applications and whether the stone is a veneer. Openings to be filled with stone may be done with CMU and a stone veneer provided such stone is real cut stone with a thickness of 4" or greater. Contractor is to match adjacent finish on both sides (exterior and interior) of the opening.**
4. Drawing A-3 list the door hardware to be installed but there is no door schedule. **Response: There IS a Door Schedule on Drawing A-3. Refer to technical specification section 087100 – Door Hardware added to end of this addendum.**
5. Will all questions involving the exhaust hood-shunt trip breakers-panels located under the hood and misc. be resolved after bid and after the fire marshal review of the plans? **Response: See MEP Revisions and Clarifications above for answers to these questions.**
6. Will a full asbestos report be issued? **Response: The Asbestos Abatement Specification was included in the original bid documents. Attached at the end of this Addendum is the Asbestos Survey completed in 2019.**
7. The distributor for the Adore LVT, called today to inform me that the Decoria 18.5 x 18.5 tile is being revamped and more than likely will not be available by the time this project installs. **Response: Contractor to price a comparable class/performance product with similar texture/color choices.**

8. What floor covering is to be installed after removal of existing VCT and abatement of mastic? ***Response: Outside of the restrooms, LVT and VCT. Abatement measures must take this into account to create an acceptable floor substrate which the LVT and VCT manufacturers will accept for warranty purposes.***

#### **REVISIONS TO DRAWINGS:**

##### **SKETCHES**

- SK-1 Partial First Floor Plan
- SK-2 Photo depicting infill of existing opening
- SK-3 Photo depicting exterior revisions
- SK-4 Photo depicting existing interior stone veneer wainscot to be removed

##### **FULL-SIZE DRAWINGS**

None.

#### **REVISIONS TO PROJECT MANUAL:**

1. Add the attached technical specification section 087100- Door Hardware.
2. Replace Page 4 of technical specification section 093000-Tile with the attached. Daltile "Society" Series has been deleted as the basis of design.

#### **ATTACHMENTS:**

1. Pre-Bid Conference Meeting Notes
2. Pre-Bid Conference Attendance Sheet
3. 2019 Asbestos Survey

END OF ADDENDUM #01\*

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## **SAINT MICHAELS CHURCH SOCIAL HALL RENOVATION PROJECT**

### **Pre-Bid Conference Notes**

(Date: Wednesday, 20 April 2022 at 1:30 p.m.)

1. Non-Mandatory Pre-bid Conference – Please sign attendance sheet being passed around.
2. Introductions
3. Purpose – To discuss standard agenda items, questions from contractors, and a tour of the project area.
4. Private Bid by invitation only. Prevailing wage rates are not applicable to this project.
5. Contract Documents consist of Drawings and Project Manual with Technical Specifications. Addendum #01 will be issued next week which will address the contractor's final hookups of kitchen equipment and painting of the ductwork.
6. All Contractors submitting a bid for this project must purchase the documents in order to be registered to receive addenda and notices. Contact Connie Long at 814-445-6551 Ext. 321 or [clong@eadsgroup.com](mailto:clong@eadsgroup.com) to purchase documents or mail a \$40.00 check to Connie's attention at 450 Aberdeen Drive, Somerset, PA 15501.
7. Project Description: The project consists of demolition of the existing restrooms and finishes in the Social Hall, exterior additions and the concrete walkway between the Church and the adjacent museum. New work will include but is not limited to new ADA restrooms in the Social Hall, new floor and wall finishes, new windows, heated concrete walkway between the Church and museum including a new ADA ramp, and miscellaneous MEP improvements. Initial work will include asbestos abatement.
8. One contract will be awarded to include asbestos abatement, GC and MEP.
9. Bids due: Friday, 06 May 2022 until 2:00 P.M. Bid Opening: Bids will be opened in public immediately upon Bids being due.
10. Bid Forms
  - Bid Form (project is lump sum)
  - Bid Bond
  - Non-Collusion Affidavit
  - Any Addenda
  - Bids are to be accompanied by a Bid Bond or Certified Check in the amount of 10% of the Base Bid and made payable to the Archdiocese of Baltimore.
11. Building Permit is the responsibility of the selected Contractor to prepare application and submit drawings. The Owner will pay application, review and inspection fees assessed by the Code Agency provided construction is performed in accordance with the approved Building Permit and the Contract Documents.
12. Construction Period: 150 consecutive calendar days from the date specified on the Notice to Proceed.
13. No activities planned at the Church during the anticipated construction period.
14. Performance Bond, Payment Bond, Insurance Certificate will be required of the contractor. (Archdiocese of Baltimore is Cert. Holder of the insurance certificate); Archdiocese of Baltimore, Divine Mercy Parish, The EADS Group, Inc. and EADS Architects, Inc. are to be named as additionally insured.

**EADS PROJECT # 0380-19-347**

15. Liquidated Damages \$300.00/calendar day.
16. Owner Occupancy of building:
  - Contractor - free parking at the City parking lot.
17. Temporary Facilities: (sanitary, power, water, etc.) Refer to Project Manual Section 01500.
18. Working hours 7:00 AM to 7:00 PM M-F
19. Museum bump out has a light fixture that needs eliminated.
20. Knights of Columbus may want existing 2 oven/10 cooktop – Church to coordinate.
21. Fire Marshall review - will be submitted by EADS. Contractor to submit Building Permit Application.
22. Contractor to disconnect and move existing kitchen equipment to facilitate asbestos abatement and new floor installation.
23. Add four (4) receptacle along new countertop.
24. Add two (2) new exterior receptacles near existing cooler area.
25. Ansul hood operation per code mentioned by contractor.
26. Hood Manufacturer? Two provided; must have service tech locally. Identify in addendum.
27. Electrical panel boxes under range hood. Address in addendum.
28. Church personnel to make outdoor repair/revision to downspout contributing to moisture damage.
29. See photos for additional exterior work to be added to the contract (see addendum sketches).
30. Notes from this meeting and the attendance list will be included in Addendum No. 01.
31. Comments by Owner?
32. Questions from Contractors to be submitted to Greg by Wednesday, April 27.
33. Toured project area.

Respectfully submitted,  
EADS Architects, Inc.  
An EADS Group Company

By:  Gregory L. Elliott, RLA – Principal & Vice President  
Manager of Architecture

cc: All Attendees, w/Sign-In Sheet

*r:\1011 archdio of baltimore\19347 st michael hall reno\09 construction\specifications\pre-bid meeting notes.doc*

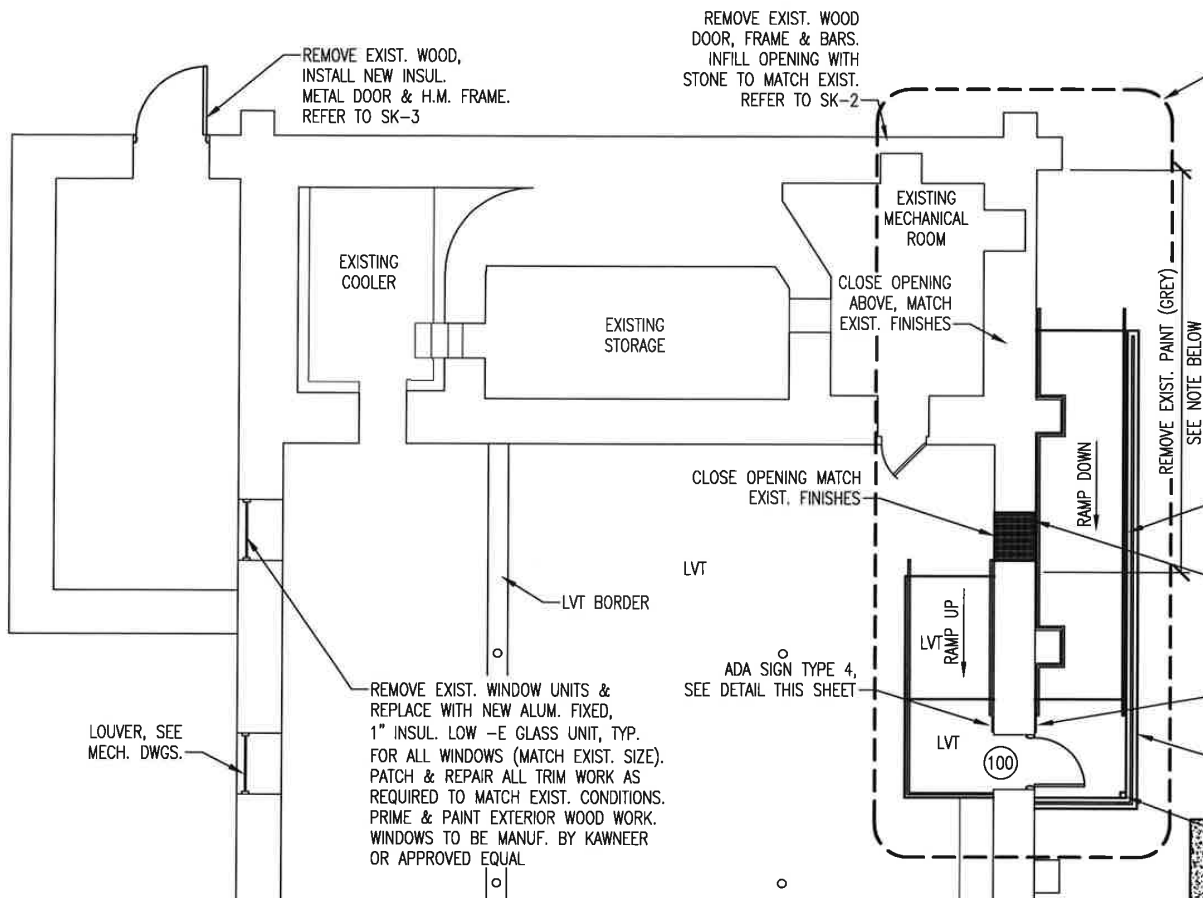
**EADS PROJECT # 0380-19-347**

Social Hall Renovation Project  
Saint Michaels Church  
Pre-Bid Meeting

Wednesday, April 20, 2022 - 1:30 p.m.

Attendance Sign-In Sheet

<u>Name</u>	<u>Company</u>	<u>Phone</u>	<u>e-mail</u>
1. Gregory L. Elliott, RLA	EADS Architects, Inc.	814-445-2470	gelliott@eadsarchitects.com
2. Dixie Yooer	Daystar Builders Inc	301-707-3882	dixie@daystarbuildersinc.com
3. Tristan Kimble	Hackel Inc.	301-729-8900	tkimble@thebelfgroup.com
4. Ed Jones	Divine Mercy Parish	301-707-9001	edward.jones@archbalt.org
5. Fr. Ed Hendricks	Divine Mercy Parish	301-707-3747	ehendricks@archbalt.org
6. Michael Shelley	DAYSTAR BUILDERS INC.	301-707-8818	mike.shelley@daystarbuildersinc.com
7. Wayne Stevens	STEVENS ELECTRICAL INC.	301-268-4364	stevens.electrical@atlanticbb.net
8.			



## PARTIAL FIRST FLOOR PLAN

NOT TO SCALE

### NOTE:

CONTRACTOR TO CAREFULLY REMOVE EXIST. "GRAY" PAINT IN THIS AREA BY PROCESS REVIEWED BY ARCHITECT. CONTRACTOR SHALL REPOINT MORTAR JOINTS THAT MAY BE DAMAGED DUE TO PAINT REMOVAL PROCESS.

### NOTE: DO NOT SCALE DRAWING

IT IS THE RESPONSIBILITY OF EACH CONTRACTOR AND SUBCONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND ALL DIMENSIONS PRIOR TO BIDDING AND BEFORE BEGINNING ANY WORK. EACH CONTRACTOR IS TO FULLY COORDINATE HIS WORK WITH THAT OF OTHER TRADES. REFER TO THE CONTRACT AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

Scale  
AS NOTED

Date

04/29/2022

Drawn By

BEF

Checked By

GLE

DRAWING SHEET

CHANGED

A-1

**EADS**  
ARCHITECTS INC.

AN EADS GROUP COMPANY

450 ABERDEEN DRIVE  
SOMERSET, PA. 15501

Phone: 814-445-6551

Fax: 814-443-2748

www.eadsgroup.com

WILKESBORO, PA.  
ALTOONA, PA.  
CLARION, PA.  
JOHNSTOWN, PA.  
PITTSBURGH, PA.  
SOMERSET, PA.  
CUMBERLAND, MD.

**ARCHDIOCESE OF BALTIMORE  
SAINT MICHAELS CHURCH**

**SOCIAL HALL RENOVATION PROJECT**

**44 EAST MAIN STREET  
FROSTBURG, MARYLAND 21532**

**ADDENDUM 1**

Sketch No.

**SK-1**



NOTE:  
INFILL OPENING WITH STONE & MORTAR  
TO MATCH EXIST.

NOTE: DO NOT SCALE DRAWING  
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SUBCONTRACTOR TO VERIFY ALL EXISTING CONDITIONS  
AND ALL DIMENSIONS PRIOR TO BIDDING AND BEFORE  
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COORDINATE HIS WORK WITH THAT OF OTHER TRADES.  
REFER TO THE CONTRACT AND SPECIFICATIONS FOR  
ADDITIONAL REQUIREMENTS.

Scale  
AS NOTED  
Date  
04/29/2022  
Drawn By  
BEF  
Checked By  
GLE  
**DRAWING SHEET  
CHANGED**

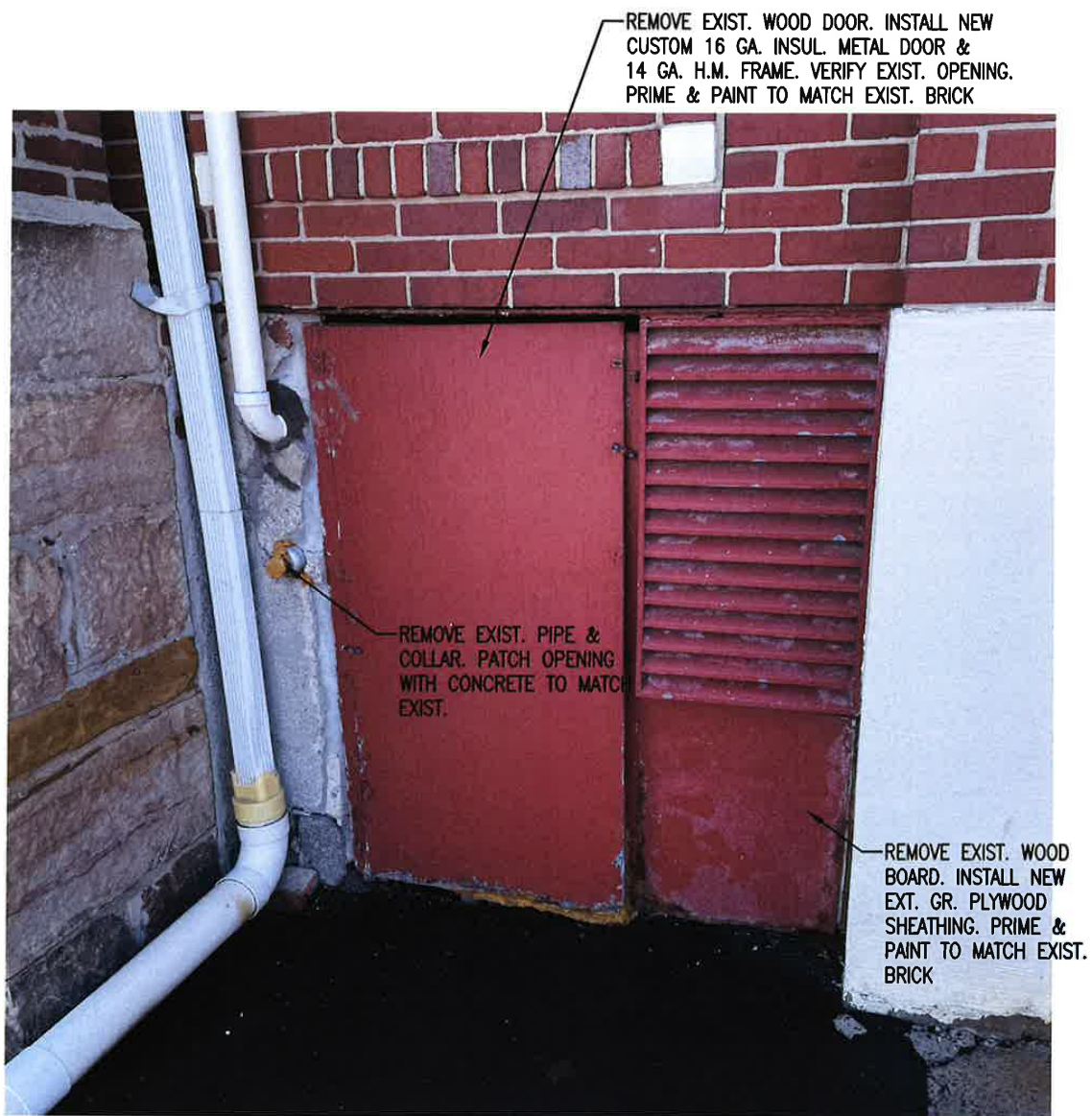
**EADS**  
ARCHITECTS INC.  
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**ARCHDIOCESE OF BALTIMORE  
SAINT MICHAELS CHURCH  
SOCIAL HALL RENOVATION PROJECT  
44 EAST MAIN STREET  
FROSTBURG, MARYLAND 21532**

**ADDENDUM 1**

Sketch No.  
**SK-2**





**NOTE: DO NOT SCALE DRAWING**

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**Scale**  
AS NOTED  
**Date**  
04/29/2022  
**Drawn By**  
BEF  
**Checked By**  
GLE  
**DRAWING SHEET**  
**CHANGED**

**EADS**  
**ARCHITECTS INC.**  
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**ARCHDIOCESE OF BALTIMORE**  
**SAINT MICHAELS CHURCH**  
**SOCIAL HALL RENOVATION PROJECT**  
**44 EAST MAIN STREET**  
**FROSTBURG, MARYLAND 21532**

**ADDENDUM 1**

**Sketch No.**  
**SK-3**

CONTRACTOR IS TO REMOVE AND DISPOSE OF EXIST STONE VENEER WAINSCOT LOCATED ON THE INTERIOR WALL FACING THE ADJACENT MUSEUM. PATCH, PRIME AND PAINT PLASTER FINISH BEHIND STONE AS NECESSARY TO MATCH NEW FINISHES.



**NOTE: DO NOT SCALE DRAWING**

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Scale  
AS NOTED  
Date  
05/02/2022  
Drawn By  
KAC  
Checked By  
GLE  
**DRAWING SHEET  
CHANGED**  
---

**EADS**  
**ARCHITECTS INC.**  
AN EADS GROUP COMPANY  
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FROSTBURG, MARYLAND 21532**

**ADDENDUM 1**

Sketch No.  
**SK-4**

## SECTION 087100 - DOOR HARDWARE

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes commercial door hardware for the following:
  - 1. Swinging doors.
- B. Door hardware includes, but is not necessarily limited to, the following:
  - 1. Mechanical door hardware.
  - 2. Cylinders specified for doors in other sections.
- C. Related Sections:
  - 1. Division 08 Section "Hollow Metal Doors and Frames".
- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
  - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
  - 2. ICC/IBC - International Building Code.
  - 3. NFPA 70 - National Electrical Code.
  - 4. NFPA 80 - Fire Doors and Windows.
  - 5. NFPA 101 - Life Safety Code.
  - 6. NFPA 105 - Installation of Smoke Door Assemblies.
  - 7. State Building Codes, Local Amendments.
- E. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:
  - 1. ANSI/BHMA Certified Product Standards - A156 Series.
  - 2. UL10C - Positive Pressure Fire Tests of Door Assemblies.
  - 3. ANSI/UL 294 - Access Control System Units.
  - 4. UL 305 - Panic Hardware.
  - 5. ANSI/UL 437- Key Locks.



### 1.3 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
  - 1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
  - 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
  - 3. Content: Include the following information:
    - a. Type, style, function, size, label, hand, and finish of each door hardware item.
    - b. Manufacturer of each item.
    - c. Fastenings and other pertinent information.
    - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    - e. Explanation of abbreviations, symbols, and codes contained in schedule.
    - f. Mounting locations for door hardware.
    - g. Door and frame sizes and materials.
    - h. Warranty information for each product.
  - 4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- C. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.
- D. Informational Submittals:
  - 1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

- E. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

#### 1.4 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
- B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).
- C. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.
- E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.
  - 1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
- F. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.
- G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
  - 1. Function of building, purpose of each area and degree of security required.
  - 2. Plans for existing and future key system expansion.
  - 3. Requirements for key control storage and software.
  - 4. Installation of permanent keys, cylinder cores and software.
  - 5. Address and requirements for delivery of keys.
- H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
  2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
  3. Review sequence of operation narratives for each unique access controlled opening.
  4. Review and finalize construction schedule and verify availability of materials.
  5. Review the required inspecting, testing, commissioning, and demonstration procedures
- I. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

#### 1.6 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

#### 1.7 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

- B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
  - 1. Structural failures including excessive deflection, cracking, or breakage.
  - 2. Faulty operation of the hardware.
  - 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
  - 4. Electrical component defects and failures within the systems operation.
- C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.
- D. Special Warranty Periods:
  - 1. Ten years for mortise locks and latches.
  - 2. Five years for exit hardware.
  - 3. Twenty five years for manual overhead door closer bodies.

## 1.8 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

## PART 2 - PRODUCTS

### 2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.
- B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:
  - 1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
- C. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

## 2.2 HANGING DEVICES

A. Hinges: ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.

1. Quantity: Provide the following hinge quantity:
  - a. Two Hinges: For doors with heights up to 60 inches.
  - b. Three Hinges: For doors with heights 61 to 90 inches.
  - c. Four Hinges: For doors with heights 91 to 120 inches.
  - d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.
2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:
  - a. Widths up to 3'0": 4-1/2" standard or heavy weight as specified.
  - b. Sizes from 3'1" to 4'0": 5" standard or heavy weight as specified.
3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:
  - a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
  - b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.
4. Hinge Options: Comply with the following:
  - a. Non-removable Pins: With the exception of electric through wire hinges, provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.
5. Manufacturers:
  - a. Hager Companies (HA).
  - b. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK).
  - c. Stanley Hardware (ST).

B. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 certified continuous geared hinge. with minimum 0.120-inch thick extruded 6060 T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.

1. Manufacturers:
  - a. Pemko (PE).

## 2.3 DOOR OPERATING TRIM

- A. Door Push Plates and Pulls: ANSI/BHMA A156.6 certified door pushes and pulls of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.
1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
  2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
  3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
  4. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.
  5. Manufacturers:
    - a. Hiawatha, Inc. (HI).
    - b. Rockwood (RO).
    - c. Trimco (TC).

## 2.4 CYLINDERS AND KEYING

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
1. Manufacturers:
    - a. Match Existing, Field Verify.
- B. Cylinder Types: Original manufacturer cylinders able to supply the following cylinder formats and types:
1. Threaded mortise cylinders with rings and cams to suit hardware application.
  2. Rim cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
  3. Bored or cylindrical lock cylinders with tailpieces as required to suit locks.
  4. Tubular deadlocks and other auxiliary locks.
  5. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
  6. Keyway: Match Facility Standard.
- C. Keying System: Each type of lock and cylinders to be factory keyed.
1. Supplier shall conduct a "Keying Conference" to define and document keying system instructions and requirements.
  2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
  3. Existing System: Field verify and key cylinders to match Owner's existing system.
- D. Key Quantity: Provide the following minimum number of keys:

1. Change Keys per Cylinder: Two (2)
2. Master Keys (per Master Key Level/Group): Five (5).
3. Construction Keys (where required): Ten (10).

E. Key Registration List (Bitting List):

1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
2. Provide transcript list in writing or electronic file as directed by the Owner.

2.5 MECHANICAL LOCKS AND LATCHING DEVICES

- A. Mortise Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.13, Series 1000, Operational Grade 1 Certified Products Directory (CPD) listed. Locksets are to be manufactured with a corrosion resistant steel case and be field-reversible for handing without disassembly of the lock body.
1. Where specified, provide status indicators with highly reflective color and wording for "locked/unlocked" or "vacant/occupied" with custom wording options if required. Indicator to be located above the cylinder with the inside thumb-turn not blocking the visibility of the indicator status. Indicator window size to be a minimum of 2.1" x 0.6" with a curved design allowing a 180 degree viewing angle with protective covering to prevent tampering.
  2. Manufacturers:
    - a. Corbin Russwin Hardware (RU) - ML2000 Series.
    - b. Sargent Manufacturing (SA) - 8200 Series.
    - c. Yale Commercial(YA) - 8800FL Series.

2.6 LOCK AND LATCH STRIKES

- A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:
1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
  2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
  3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
  4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.
- B. Standards: Comply with the following:
1. Strikes for Mortise Locks and Latches: BHMA A156.13.
  2. Strikes for Bored Locks and Latches: BHMA A156.2.
  3. Strikes for Auxiliary Deadlocks: BHMA A156.36.

4. Dustproof Strikes: BHMA A156.16.

## 2.7 CONVENTIONAL EXIT DEVICES

### A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.
3. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
4. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
5. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.
  - a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
  - b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.
6. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
7. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
8. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
9. Rail Sizing: Provide exit device rails factory sized for proper door width application.
10. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.

### B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be stainless steel, pullman type, with deadlock feature.

1. Manufacturers:



- a. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
- b. Sargent Manufacturing (SA) - 80 Series.
- c. Yale (YA) - 7000 Series.

## 2.8 DOOR CLOSERS

- A. All door closers specified herein shall meet or exceed the following criteria:
  - 1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers.
  - 2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
  - 3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.
  - 4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
  - 5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
  - 6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.
- B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard.
  - 1. Manufacturers:
    - a. Corbin Russwin Hardware (RU) - DC6000 Series.
    - b. Norton Rixson (NO) - 7500 Series.
    - c. Sargent Manufacturing (SA) - 351 Series.
    - d. Yale Commercial(YA) - 4400 Series.

## 2.9 ARCHITECTURAL TRIM

- A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1" LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
3. Where plates are applied to fire rated doors with the top of the plate more than 16" above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer's catalog and template book for specific requirements for size and applications.
4. Protection Plates: ANSI/BHMA A156.6 certified protection plates (kick, armor, or mop), fabricated from the following:
  - a. Stainless Steel: 300 grade, .050-inch thick.
5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.
6. Manufacturers:
  - a. Hiawatha, Inc. (HI).
  - b. Rockwood (RO).
  - c. Trimco (TC).

## 2.10 DOOR STOPS AND HOLDERS

- A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.
- B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 certified door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.
  1. Manufacturers:
    - a. Hiawatha, Inc. (HI).
    - b. Rockwood (RO).
    - c. Trimco (TC).

## 2.11 ARCHITECTURAL SEALS

- A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.

- B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.

1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.

- C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.

1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NPFA 252, Standard Methods of Fire Tests of Door Assemblies.

- D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.

- E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

- F. Manufacturers:

1. National Guard Products (NG).
2. Pemko (PE).
3. Reese Enterprises, Inc. (RE).

## 2.12 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

## 2.13 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

#### 3.2 PREPARATION

- A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.
- B. Wood Doors: Comply with ANSI/DHI A115-W series.

#### 3.3 INSTALLATION

- A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.
  - 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.
- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
  - 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
  - 2. DHI TDH-007-20: Installation Guide for Doors and Hardware.
  - 3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
  - 4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.
- C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
- D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

- E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

#### 3.4 FIELD QUALITY CONTROL

- A. Field Inspection (Punch Report): Reference Division 01 Sections "Closeout Procedures". Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.
  - 1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

#### 3.5 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

#### 3.6 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.
- C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

#### 3.7 DEMONSTRATION

- A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

#### 3.8 DOOR HARDWARE SETS

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

1. Quantities listed are for each pair of doors, or for each single door.
2. The supplier is responsible for handing and sizing all products.
3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.
4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.

#### Hardware Sets

##### Set: 1.0

Doors: 100

3 Spring Hinge Stainless Steel	Hinge Outlet S4545-SQ-US32D	US32D	OT
1 Exit Device (nightlatch)	<a href="#">12 8804</a>	US32D	SA
1 Pull	<a href="#">RM201 Mtg-Type 12XHD</a>	US32D-316	RO
1 Conc Overhead Stop	<a href="#">6-X36</a>	630	RF
1 Kick Plate	<a href="#">K1050 10" high BEV CSK</a>	US32D	RO
1 Threshold	<a href="#">271A MSES10SS</a>		PE
1 Gasketing	<a href="#">S88BL (Head &amp; Jamb)</a>		PE
1 Sweep	<a href="#">307APK</a>		PE

##### Set: 3.0

Doors: 103

3 Hinge, Full Mortise	TA2714	US26D	MK
1 Storeroom Lock	8204 LNL	US26D	SA
1 Surface Closer	7500 (brackets and drop plate as required)	689	NO
1 Kick Plate	K1050 10" high BEV CSK	US32D	RO
1 Wall/ Floor Stop	RM861 / RM850	US32D	RO
3 Silencer	608		RO

**Set: 2.0**

Doors: 101, 102

3 Hinge, Full Mortise	TA2714	US26D	MK
1 Privacy Lock (with indicators both sides)	V21 8265 LNL	US26D	SA
1 Wall/ Floor Stop	RM861 / RM850	US32D	RO
3 Silencer	608		RO

**Set: 4.0**

Door: 104

1 Continuous Hinge	CFM_HD1 X LAR		PE
1 Exit Device (passage)	16 8815 ETL	US32D	SA
1 Surface Closer	CPS7500 (brackets and drop plate as required)	689	NO
1 Kick Plate	K1050 10" high BEV CSK	US32D	RO
3 Silencer	608		RO

END OF SECTION 087100

## ALLEGHENY MOUNTAIN RESEARCH, INC.

540 John Street, P.O. Box 133, Shanksville, PA 15560  
(814) 267-4404 • Fax (814) 267-6034

January 10, 2017

Mr. Greg Elliott  
EADS Architects  
450 Aberdeen Drive  
Somerset, PA 15501

RE: Asbestos Building Survey/St. Michaels Church

On December 27, 2019, Allegheny Mountain Research, Inc. (AMR), conducted a survey of building materials and collected representative bulk samples of suspect building materials @ St. Michaels Church, 44 E. Main St., Frostburg, MD. The survey was limited to the Social Hall areas that will be impacted by a planned renovation project. This survey is to identify any asbestos containing building materials (ACBM) that might be disturbed during renovation activities. ACBM is any material that contains greater than one percent (>1.0 %) asbestos content and disturbance of these ACBMs must be conducted according to Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA) and other applicable regulations.

The survey was completed in accordance with OSHA requirements and EPA guidelines. MD-licensed asbestos building inspector Gary W. Miller (#19004791) conducted the survey. All bulk samples were analyzed by EMSL Analytical, Inc., a laboratory accredited by the American Industrial Hygiene Association (AIHA) under the National Voluntary Laboratory Accreditation Program (NVLAP). The asbestos samples were analyzed by Polarized Light Microscopy (PLM), following EPA Method 600/R-93/116.

### **Findings:**

A total of twenty-three (23) bulk sample results were received. Some of the samples contained multiple layers and were analyzed accordingly. Building materials sampled included 12" floor tile/black mastic, rubber base molding/adhesive, wall plaster, ceiling tile and ext. window caulking.

Two (2) black mastic bulk sample results indicated 2% Chrysotile asbestos content. AMR requested an additional more exact type of analysis called PLM 400 point-counting, with the intent to lower the result to 1% or less asbestos content (and not an ACBM). This is used on certain bulk samples when the initial result is @ such a low concentration (i.e. 2%). Point-counting reduced one of the mastic samples down to 0.4% asbestos content, but the other one only went down to 1.7% asbestos content (still >1%). Since this sample remains a regulated ACBM, all of the black mastic present must be considered to be an ACBM.

**All other sample results were No Asbestos Detected.**

*Please reference enclosed bulk sample log and laboratory sample analysis sheets for additional information.*



**ACBM Summary:**

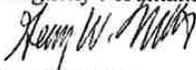
Black mastic/located under 12" floor tile/throughout Social Hall/~3,000 SF

**Limitations:**

*This limited survey was conducted according to generally accepted standards of good professional practice. All suspect building materials identified by the inspector were sampled. Samples collected for analysis are representative of the suspect building materials found in the structure. This was a non-destructive survey and existing conditions in the building, such as building material inaccessibility, could be present and impact the survey. No representation is made that all incidences of ACBM have been identified.*

Enclosed please find complete bulk sampling information and laboratory analysis results for this asbestos building survey. If you need additional information, please call our office. Thank you for considering AMR on this project.

Sincerely,  
Allegheny Mountain Research, Inc.

  
Gary W. Miller  
Asbestos Building Inspector  
MD #19004791

enclosures

①

EMSL: 041936706

BULK SAMPLE LOG

PROJECT NAME: St. Michaels Church

Date: 12-27-19

SAMPLE NO.	TYPE OF MATERIAL	SAMPLE LOCATION	CONDITION	ASBESTOS CONTENT	HOMOGENEOUS AREA NO.
SM-1	12" Floor tile / mastic	Social Hall	(large)	NAD FT * 1.7% M	
SM-2	Rubber base		"	NAD FT * 0.49% M	
SM-3	molding / Adhesive		(large)	NAD	
SM-4			"		
SM-5	Wall plaster				
SM-6					
SM-7					
SM-8					
SM-9		Mech. Room			
SM-10	2' x 4' Ceiling tile	Ladies Restroom (perfor.)			

RECEIVED  
EMSL  
CINNAMINSON, N.J.  
2019 DEC 30 AM 9:33

ALLEGHENY MOUNTAIN RESEARCH, INC.  
GARY W. MILLER, ACCREDITED BUILDING INSPECTOR/PA# 001588  
814-267-4404

NAD = No Asbestos Detected

\* Per Rm 460 print count analysis

OrderID: 041936706

②

EMSL: QA1936706

BULK SAMPLE LOG

PROJECT NAME: St. Michaels Church

Date: 12-27-19

SAMPLE NO.	TYPE OF MATERIAL	SAMPLE LOCATION	CONDITION	ASBESTOS CONTENT	HOMOGENEOUS AREA NO.
SM-11	2' x 4' Ceiling Tile	Social Hall / Ladies Restroom (Synth)		NAD	
SM-12	Ext. window caulking	Ext. window / Social Hall (Smaller)			
SM-13					
SM-14					

RECEIVED  
EMSL  
CINNAMINSON, N.J.  
2019 DEC 30 AM 9:33

ALLEGHENY MOUNTAIN RESEARCH, INC.  
GARY W. MILLER, ACCREDITED BUILDING INSPECTOR/PA# 001588  
814-267-4404

NAD = No Asbestos Detected

OrderID: 041936706

**EMSL Analytical, Inc.**

200 Route 130 North Cinnaminson, NJ 08077  
Phone/Fax: (800) 220-3675 / (856) 786-5974  
<http://www.EMSL.com> / [cinnasblab@EMSL.com](mailto:cinnasblab@EMSL.com)

EMSL Order ID: 041936706  
Customer ID: ALLE53  
Customer PO:  
Project ID:

**Attn:** Gary W. Miller  
Allegheny Mountain Research, Inc.  
540 John Street  
Shanksville, PA 15560

**Phone:** (814) 267-4404  
**Fax:** (814) 267-6034  
**Collected:** 12/27/2019  
**Received:** 12/30/2019  
**Analyzed:** 1/04/2020

**Proj:** St. Michaels Church

**Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116**

**Client Sample ID:** SM-1-Floor Tile **Lab Sample ID:** 041936706-0001

**Sample Description:** Social Hall (Beige)/12" Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Beige	0.0%	100.0%	None Detected	

**Client Sample ID:** SM-1-Mastic **Lab Sample ID:** 041936706-0001A

**Sample Description:** Social Hall (Beige)/Black Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Black	0.0%	98.0%	2% Chrysotile	
400 PLM PICt Grav. Red.	1/04/2020	Black	0.0%	98.3%	1.7% Chrysotile	

**Client Sample ID:** SM-2-Floor Tile **Lab Sample ID:** 041936706-0002

**Sample Description:** Social Hall (Beige)/12" Floor Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Beige	0.0%	100.0%	None Detected	

**Client Sample ID:** SM-2-Mastic **Lab Sample ID:** 041936706-0002A

**Sample Description:** Social Hall (Beige)/Black Mastic

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Black	0.0%	98.0%	2% Chrysotile	
400 PLM PICt Grav. Red.	1/04/2020	Black	0.0%	99.6%	0.4% Chrysotile	

**Client Sample ID:** SM-3-Base Molding **Lab Sample ID:** 041936706-0003

**Sample Description:** Social Hall (Brown)/Rubber Base Molding

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Brown	0.0%	100.0%	None Detected	

**Client Sample ID:** SM-3-Adhesive **Lab Sample ID:** 041936706-0003A

**Sample Description:** Social Hall (Brown)/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Yellow	0.0%	100.0%	None Detected	

**Client Sample ID:** SM-4-Base Molding **Lab Sample ID:** 041936706-0004

**Sample Description:** Social Hall (Brown)/Rubber Base Molding

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Brown	0.0%	100.0%	None Detected	

**EMSL Analytical, Inc.**

200 Route 130 North Cinnaminson, NJ 08077  
Phone/Fax: (800) 220-3675 / (856) 786-5974  
<http://www.EMSL.com> / [cinnaslab@EMSL.com](mailto:cinnaslab@EMSL.com)

EMSL Order ID: 041936706  
Customer ID: ALLE53  
Customer PO:  
Project ID:

**Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116**

Client Sample ID: SM-4-Adhesive

Lab Sample ID: 041936706-0004A

Sample Description: Social Hall (Brown)/Adhesive

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: SM-5-Skim Coat

Lab Sample ID: 041936706-0005

Sample Description: Social Hall/Wall Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	White	0.0%	100.0%	None Detected	

Client Sample ID: SM-5-Base Coat

Lab Sample ID: 041936706-0005A

Sample Description: Social Hall/Wall Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Gray	0.0%	100.0%	None Detected	

Client Sample ID: SM-5-Skim Coat

Lab Sample ID: 041936706-0006

Sample Description: Social Hall/Wall Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	White	0.0%	100.0%	None Detected	

Client Sample ID: SM-6-Base Coat

Lab Sample ID: 041936706-0006A

Sample Description: Social Hall/Wall Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Gray	0.0%	100.0%	None Detected	

Client Sample ID: SM-7-Plaster

Lab Sample ID: 041936706-0007

Sample Description: Social Hall/Wall Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Tan	0.0%	100.0%	None Detected	

Client Sample ID: SM-7-Texture

Lab Sample ID: 041936706-0007A

Sample Description: Social Hall/Wall Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: SM-8-Plaster

Lab Sample ID: 041936706-0008

Sample Description: Social Hall/Wall Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Gray	0.0%	100.0%	None Detected	

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<http://www.EMSL.com> / [cinnaslab@EMSL.com](mailto:cinnaslab@EMSL.com)

EMSL Order ID: 041936706  
Customer ID: ALLE53  
Customer PO:  
Project ID:

**Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116**

**Client Sample ID:** SM-8-Texture **Lab Sample ID:** 041936706-0008A

**Sample Description:** Social Hall/Wall Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Yellow	0.0%	100.0%	None Detected	

**Client Sample ID:** SM-9-Plaster **Lab Sample ID:** 041936706-0009

**Sample Description:** Social Hall / Mech Room/Wall Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Gray	0.0%	100.0%	None Detected	

**Client Sample ID:** SM-9-Texture **Lab Sample ID:** 041936706-0009A

**Sample Description:** Social Hall / Mech Room/Wall Plaster

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Blue/Yellow	0.0%	100.0%	None Detected	

**Client Sample ID:** SM-10 **Lab Sample ID:** 041936706-0010

**Sample Description:** Social Hall / Ladies Room/2'x4' Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Gray	80.0%	20.0%	None Detected	

**Client Sample ID:** SM-11 **Lab Sample ID:** 041936706-0011

**Sample Description:** Social Hall / Ladies Room (Smooth)/2'x4' Ceiling Tile

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Brown/White	85.0%	15.0%	None Detected	

**Client Sample ID:** SM-12 **Lab Sample ID:** 041936706-0012

**Sample Description:** Ext. Windows / Social Hall (Smaller)/Ext. Window Caulking

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Gray	0.0%	100.0%	None Detected	

**Client Sample ID:** SM-13 **Lab Sample ID:** 041936706-0013

**Sample Description:** Ext. Windows / Social Hall (Smaller)/Ext. Window Caulking

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	White	0.0%	100.0%	None Detected	

**Client Sample ID:** SM-14 **Lab Sample ID:** 041936706-0014

**Sample Description:** Ext. Windows / Social Hall (Smaller)/Ext. Window Caulking

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	12/31/2019	Gray	0.0%	100.0%	None Detected	

**EMSL Analytical, Inc.**

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Phone/Fax: (800) 220-3675 / (856) 786-5974  
<http://www.EMSL.com> / [cinnaslab@EMSL.com](mailto:cinnaslab@EMSL.com)

EMSL Order ID: 041936706  
Customer ID: ALLE53  
Customer PO:  
Project ID:

---

**Summary Test Report for Asbestos Analysis of Bulk Material via EPA 600/R-93/116**

---

**Analyst(s):**

Gregory Barry 400 PLM P1Ct Grav. Red (2)  
Laura Kantor PLM (8)  
Tyler Hurwitt PLM (15)

**Reviewed and approved by:**

Samantha Rundstrom, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. This test report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. EMSL bears no responsibility for sample collection activities or analytical method limitations. The laboratory is not responsible for the accuracy of results when requested to physically separate and analyze layered samples. PLM alone is not consistently reliable in detecting asbestos in floor coverings and similar NOBs

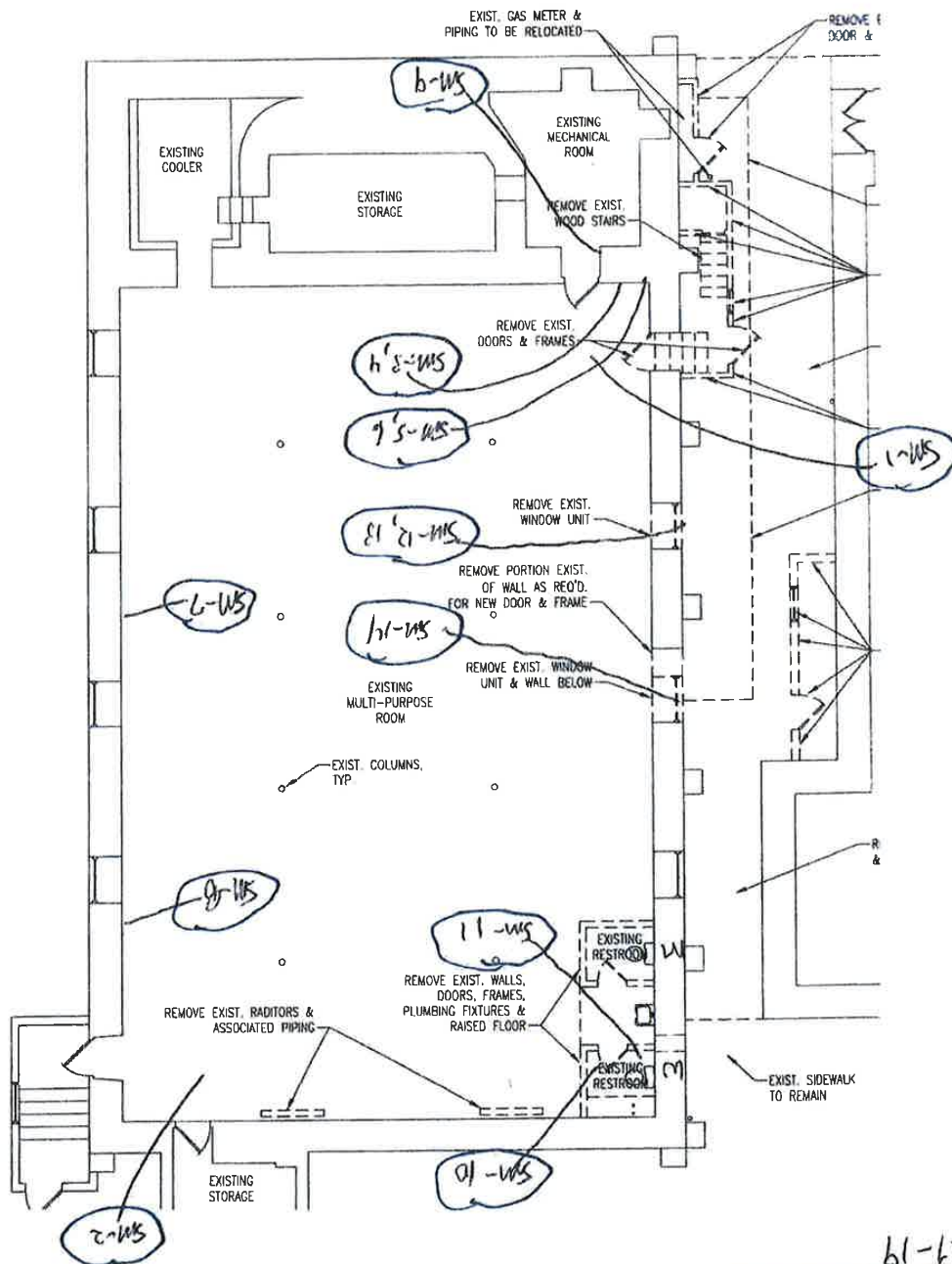
Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, LA #04127

Report amended: 01/04/2020 10:13:59 Replaces initial report from: 12/31/2019 12:43:32 Reason Code: Client-Additional Analysis

Test Report:EPAMultiTests-7.32.2.D Printed: 1/04/2020 10:13AM

Page 4 of 4





\* St. Michael's Church  
 Social Hall  
 bulk sample locations  
 12-21-19

$$(Ft = 69' \times 43')$$



ASBESTOS LICENSE



Gary Miller  
Name

Signature

Inspector Review  
Course Title

Course Date: 01/24/2019  
Exp Date: 01/24/2020  
Exam Date: 02/28/2019

STATE OF MARYLAND

*Environmental and Safety Training, Inc.*  
19004791

1493 Butler Plank Road, Suite 7  
Glenshaw, PA 15116  
Phone: (412) 486-8971  
FAX: (412) 486-8973

This is to certify that

**GARY W. MILLER**  
**M8911Z**

has successfully completed the following training course  
with a passing score of 70 percent or better for  
asbestos accreditation under TSCA Title II

**ASBESTOS BUILDING INSPECTOR RECERTIFICATION COURSE**

M8911Z  
Certificate Number  
January 24, 2019  
Course Date  
January 24, 2019  
Exam Date  
January 24, 2020  
Expiration Date

Joseph W. Grad  
Director of Training



- E. Factory Blending: For tile exhibiting color variations within ranges, blend tile in factory and package so tile units taken from one package show same range in colors as those taken from other packages and match approved Samples.
- F. Mounting: For factory-mounted tile, provide back- or edge-mounted tile assemblies as standard with manufacturer unless otherwise indicated.
  - 1. Where tile is indicated for installation in wet areas, do not use back- or edge-mounted tile assemblies unless tile manufacturer specifies in writing that this type of mounting is suitable for installation indicated and has a record of successful in-service performance.
- G. Factory-Applied Temporary Protective Coating: Where indicated under tile type, protect exposed surfaces of tile against adherence of mortar and grout by precoating with continuous film of petroleum paraffin wax, applied hot. Do not coat unexposed tile surfaces.

## 2.2 TILE PRODUCTS

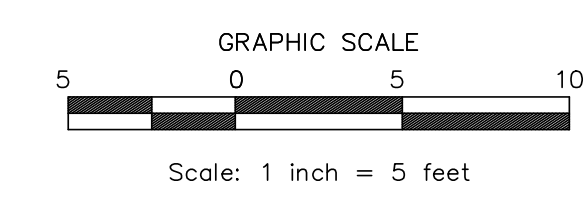
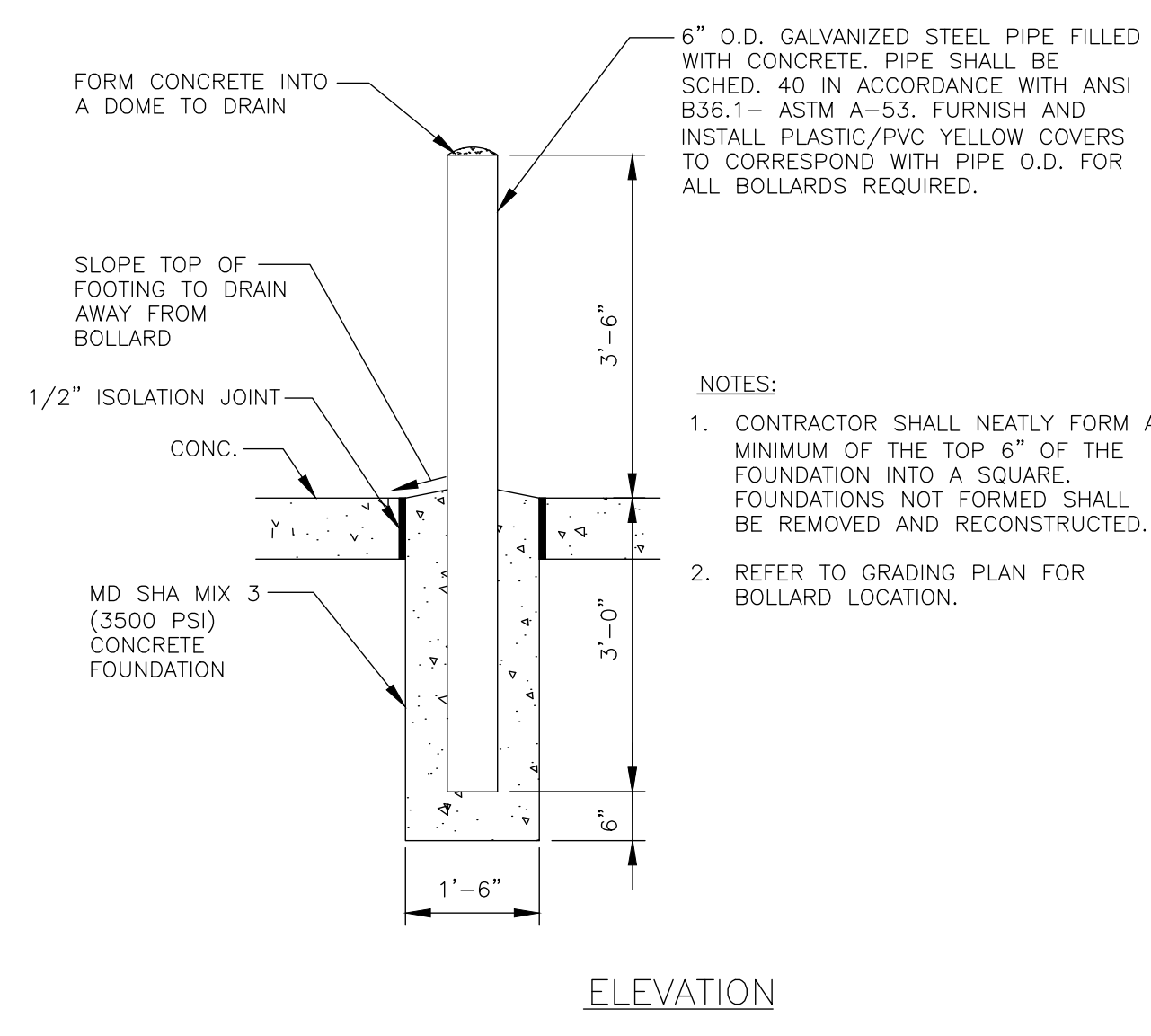
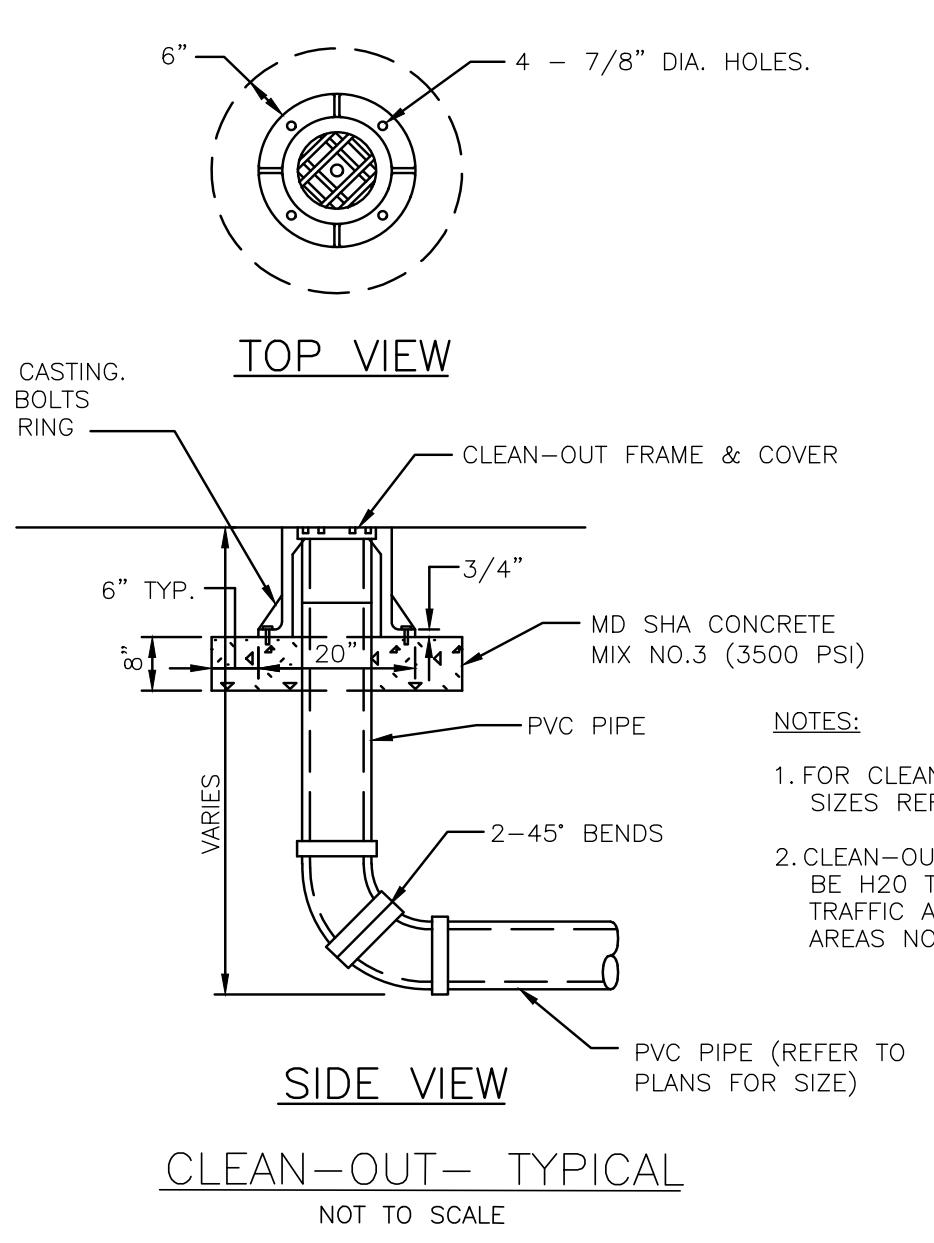
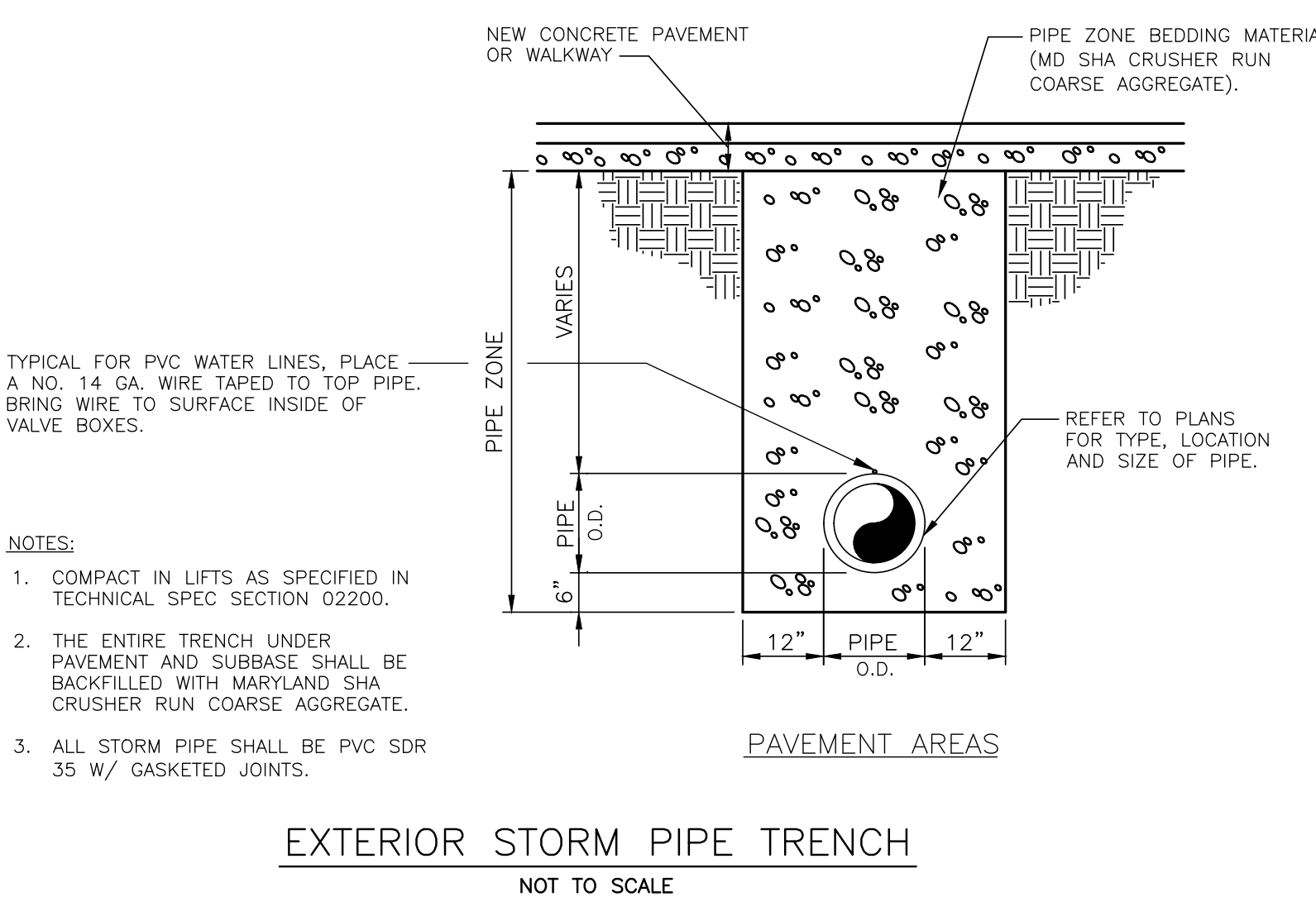
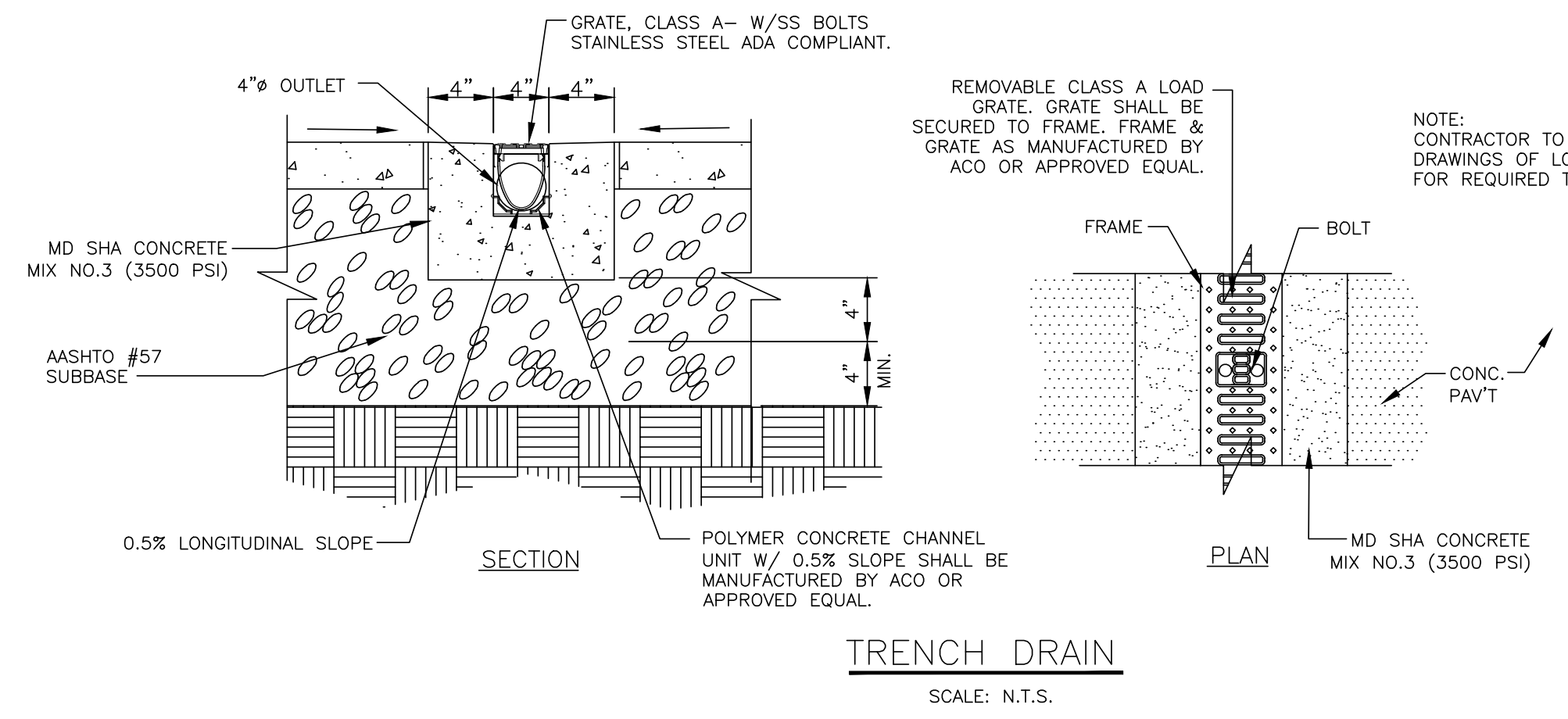
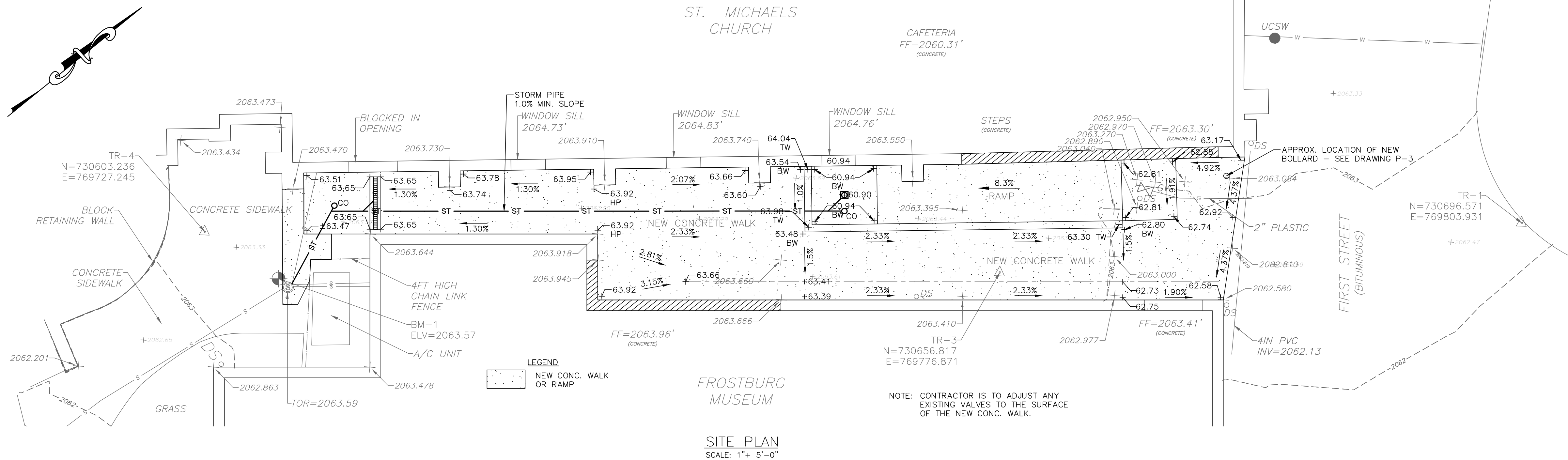
- A. Tile: Through body porcelain.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 2. Basis-of-Design Product: Subject to compliance with requirements, provide product by one of the following:
    - a. American Olean; Division of Dal-Tile International Inc.
    - b. Crossville, Inc.
    - c. Daltile; Division of Dal-Tile International Inc.
    - d. Or approved equivalent
  - 3. Composition: Porcelain.
  - 4. Module Size: – 12 inch x 12 inch floor tile.
  - 5. Module Size: – 6 inch x 6 inch wall tile.
  - 6. Thickness: 3/8 inch
  - 7. Face: Plain with cushion edges.
  - 8. Surface: UNPOLISHED, Slip-resistant.
  - 9. Finish: UNPOLISHED.
  - 10. Tile Color and Pattern: As selected by Owner from manufacturer's full range.
  - 11. Grout Color: As selected by Owner from manufacturer's full range.
  - 12. Trim Units: Coordinated with sizes and coursing of adjoining flat tile where applicable. Provide shapes as follows, selected from manufacturer's standard shapes:
    - a. Base Cove: Cove, module size 6 inch x 12 inch.

## 2.3 THRESHOLDS

- A. General: Fabricate to sizes and profiles indicated or required to provide transition between adjacent floor finishes.



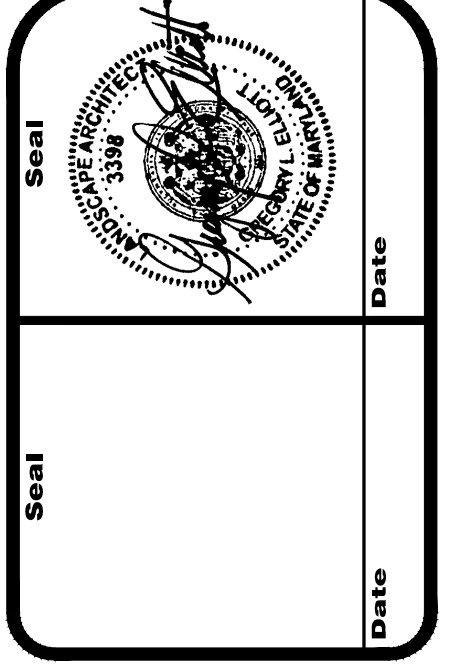




CALL BEFORE YOU DIG!  
MARYLAND LAW REQUIRES  
2 WORKING DAYS NOTICE FOR  
CONSTRUCTION PHASE AND 10 WORKING  
DAYS IN DESIGN STAGE-STOP CALL  
One Call Systems International  
CALL  
1-800-257-7777  
MISS UTILITY  
811 TICKET NO. 21806032

NOTE: DO NOT SCALE DRAWING  
IT IS THE RESPONSIBILITY OF EACH CONTRACTOR AND  
SUBCONTRACTOR TO VERIFY ALL EXISTING CONDITIONS  
AND ALL DIMENSIONS PRIOR TO BIDDING AND BEFORE  
BEGINNING ANY WORK. EACH CONTRACTOR IS TO FULLY  
COORDINATE HIS WORK WITH THAT OF OTHER TRADES.  
REFER TO THE CONTRACT AND SPECIFICATIONS FOR  
ADDITIONAL REQUIREMENTS.

Professional Certification  
I certify that these documents were prepared or  
approved by me, and that I am a duly licensed  
Professional Engineer in the State of Maryland  
license number 3898, expiration date 03/28/2023.



Scale	Date	Revisions	No.
AS NOTED	APRIL 2022		
Drawn By	REF		
Checked By	GLE/TBH		
Project No.	0380-19-347 (1011)		
File Name	Floor Plans		

**EADS ARCHITECTS INC.**  
AN EADS GROUP COMPANY  
450 ABERDEEN DRIVE  
SOMERSET, PA. 15501  
Phone: 814-445-6551  
Fax: 814-445-2748  
www.eadsgroup.com

ARCHDIOCESE OF BALTIMORE  
SAINT MICHAELS CHURCH  
SOCIAL HALL RENOVATION PROJECT  
44 EAST MAIN STREET  
FROSTBURG, MARYLAND 21532  
SITE PLAN

Drawing No.  
**C-1**







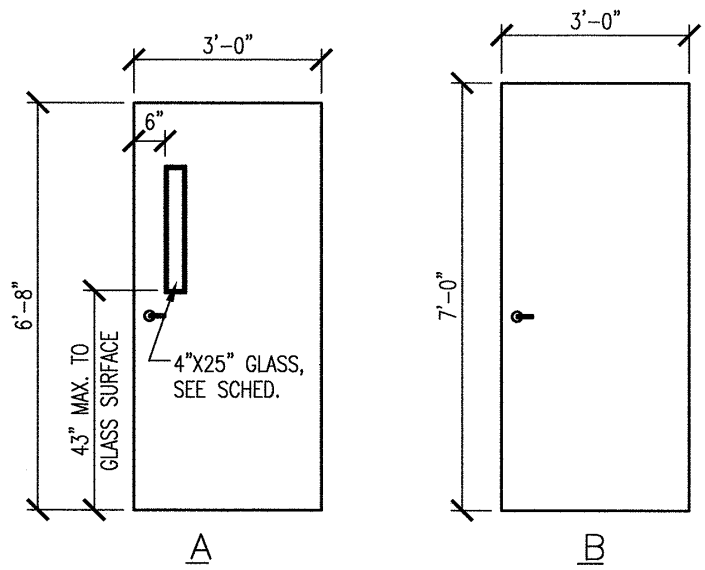


ROOM FINISH SCHEDULE							
ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING		REMARKS
					MATERIAL	HGT.	
100	EXISTING MULTI-PURPOSE ROOM	VCT	RUBBER	EXIST./NEW GYPSUM WALLBOARD, PRIMED & PAINTED	EXISTING	---	PATCH & REPAIR EXIST. TIN CEILING. PREP, PRIME & PAINT CEILING
101	WOMENS RESTROOM	PORCELAIN TILE	PORCELAIN TILE	PORCELAIN WALL TILE	S.A.T.C.	8'-0"	
102	MENS RESTROOM	PORCELAIN TILE	PORCELAIN TILE	PORCELAIN WALL TILE	S.A.T.C.	8'-0"	
103	AIR HANDLING ROOM	EXISTING CONCRETE W/ NEW CONCRETE SEALER	RUBBER	EXIST./NEW GYPSUM WALLBOARD, PRIMED & PAINTED	S.A.T.C.	8'-0"	

NOTES:  
1. CONTRACTOR TO PROVIDE ADA APPROVED VINYL TRANSITION STRIPS BETWEEN FLOORING MATERIALS AS APPLICABLE.  
2. ALL FINISHES SHALL CONFORM TO FINISH CLASSIFICATIONS INDICATED ON THE CODE REVIEW SHEET CS-2. CONTRACTOR SHALL HIGHLIGHT EACH MATERIALS CLASSIFICATION ON ALL SHOP DRAWINGS SUBMITTED FOR APPROVAL BY ARCHITECT.

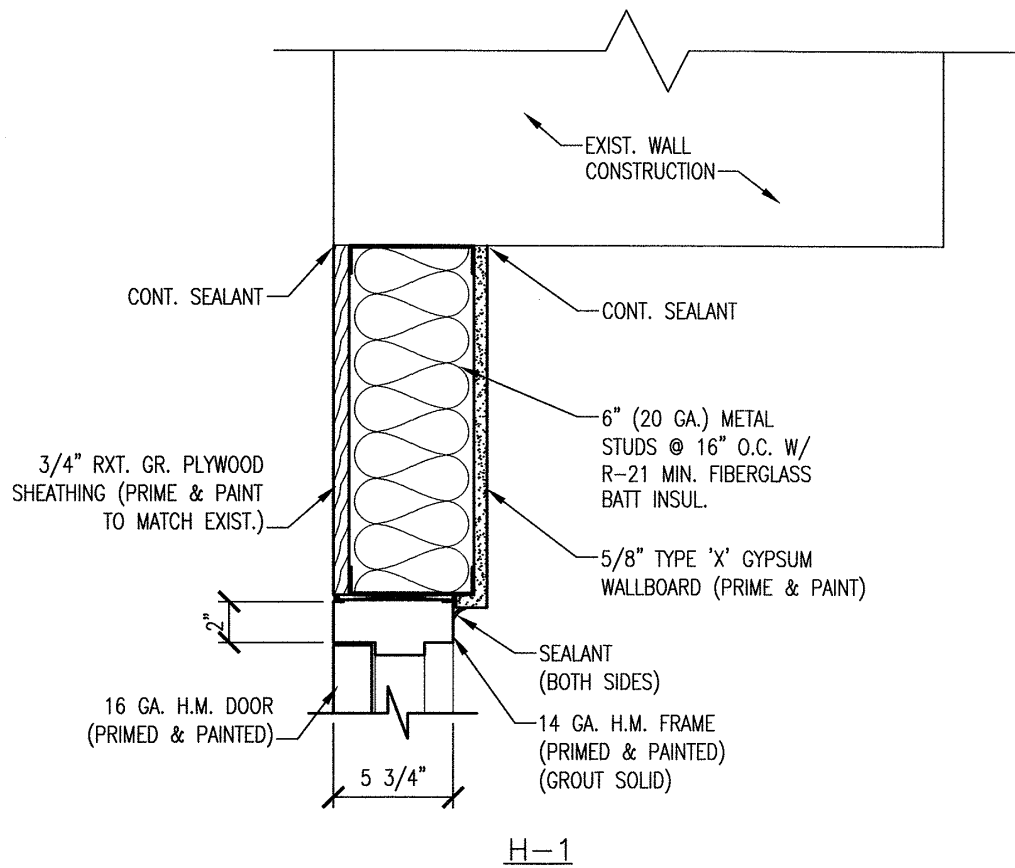
DOOR SCHEDULE												
DOOR NO.	DOORS					FRAMES			GLASS	HARDWARE SET NO.	LABEL	REMARKS
	TYPE	MATERIAL & GAGE	SIZE			MATERIAL & GAGE	DETAILS					
			WIDTH	HEIGHT	THICK		JAMB	HEAD				
100	A	16 GA. INSUL. HOLLOW METAL	3'-0"	6'-8"	1 3/4"	14 GA. H.M.	J-1	H-1	FIRE RATED	1	120 MIN.	
101	B	18 GA. HOLLOW METAL	3'-0"	7'-0"	1 3/4"	16 GA. H.M.	J-2	H-2	----	2	----	
102	B	18 GA. HOLLOW METAL	3'-0"	7'-0"	1 3/4"	16 GA. H.M.	J-2	H-2	----	2	----	
103	B	18 GA. HOLLOW METAL	3'-0"	7'-0"	1 3/4"	16 GA. H.M.	J-2	H-2	----	3	----	
104	A	16 GA. INSUL. HOLLOW METAL	3'-0"±	7'-0"±	1 3/4"	14 GA. H.M.	----	----	INSUL.	4	----	VERIFY EXISTING OPENING

NOTES:  
1. ALL INSULATED GLASS TO BE "ENERGY STAR" RATED.  
2. PROVIDE A MINIMUM OF 12" CLEAR LATCH SIDE FOR ADA ON PUSH SIDE, UNLESS NOTED OTHERWISE.  
3. PROVIDE A MINIMUM OF 18" CLEAR LATCH SIDE FOR ADA ON PULL SIDE, UNLESS NOTED OTHERWISE.  
4. ALL FRAMES SHALL BE PAINTED. OWNER TO SELECT COLOR.  
5. ALL DOOR HARDWARE TO BE ADA COMPLIANT AND COORDINATED WITH OWNER'S KEYING SYSTEM.

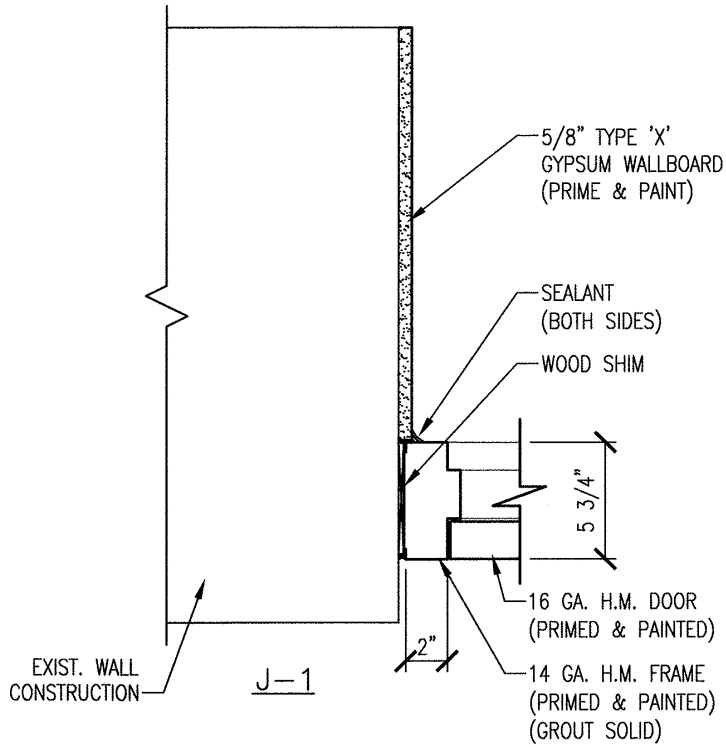


## DOOR TYPES

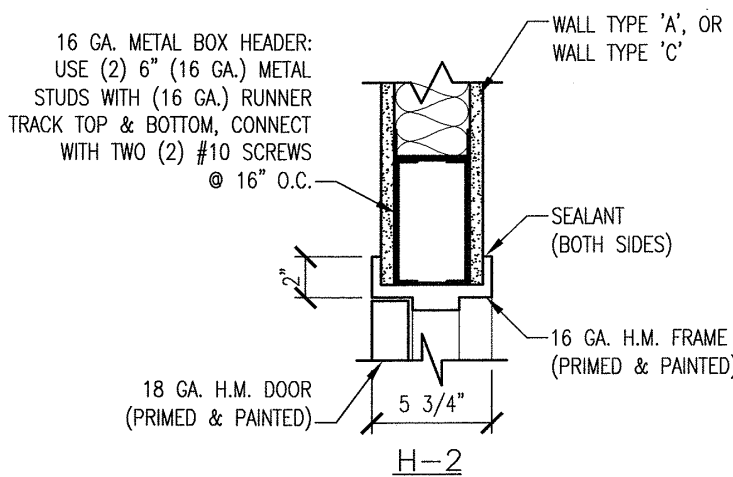
SCALE: 3/8" = 1'-0"



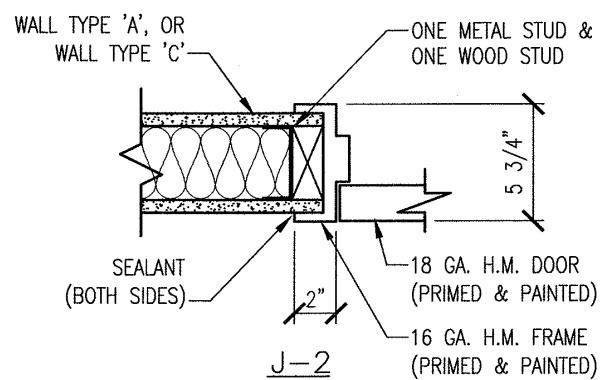
H-1



J-1



H-2



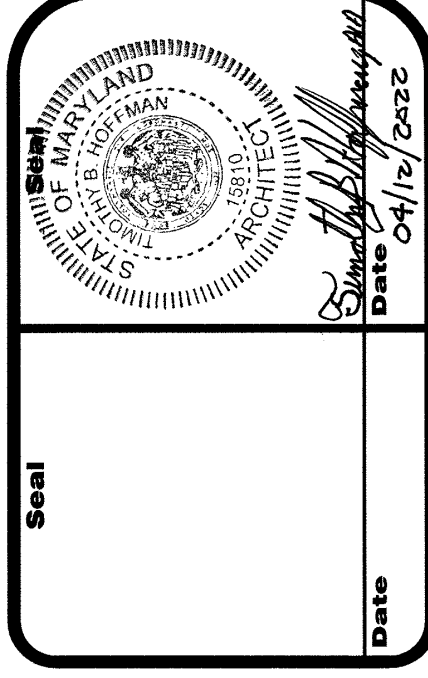
J-2

## DOOR DETAILS

SCALE: 1 1/2" = 1'-0"

NOTE: DO NOT SCALE DRAWING  
IT IS THE RESPONSIBILITY OF EACH CONTRACTOR AND SUBCONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND ALL DIMENSIONS PRIOR TO BIDDING AND BEFORE BEGINNING ANY WORK. EACH CONTRACTOR IS TO FULLY COORDINATE HIS WORK WITH THAT OF OTHER TRADES. REFER TO THE CONTRACT AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

Professional Certification  
I 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 number 18616, expiration date 08/31/2023.

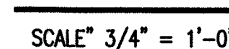
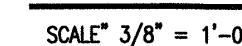
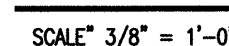
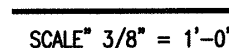
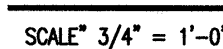
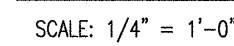


Scale	AS NOTED	No.	Revisions	Date
Date	APRIL 2022			
Drawn By	BEF			
Checked By	GLE/TBH			
Project No.	0380-19-547 (1011)			
File Name	Schedules & Details			



ARCHDIOCESE OF BALTIMORE  
SAINT MICHAELS CHURCH  
SOCIAL HALL RENOVATION PROJECT  
44 EAST MAIN STREET  
FROSTBURG, MARYLAND 21532  
DOOR SCHEDULE, TYPES & DETAILS  
AND ROOM FINISH SCHEDULE

Drawing No.  
**A-3**



Professional Certification  
I 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 number 15810, expiration date 08/31/2023.

**Drawing No.**  
**A-4**



STRUCTURAL NOTES:  
GENERAL

1. GENERAL CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS THROUGH ROOF AND WALLS.
2. THE STRUCTURE SHALL BE TEMPORALLY BRACED AGAINST ALL VERTICAL AND LATERAL LOADS UNTIL ALL MEMBERS HAVE BEEN ERECTED AND HAVE ATTAINED ULTIMATE STRENGTHS.
3. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE ARCHITECTURAL, SITE AND MECHANICAL DRAWINGS.
4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE. ALL DISCREPANCIES FOUND SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH THE WORK.
5. OBSERVATION VISITS TO THE JOB SITE BY THE OWNER'S REPRESENTATIVE DO NOT INCLUDE INSPECTION OF CONSTRUCTION METHODS OR SAFETY CONDITIONS AT THE JOB SITE. THESE VISITS SHALL NOT BE CONSIDERED AS CONTINUOUS AND DETAILED INSPECTIONS.
6. CONTRACTOR SHALL NOT APPLY TEMPORARY CONSTRUCTION LOADS ON EXISTING FLOORS THAT WILL RESULT IN A UNIFORM PRESSURE IN EXCESS OF 50 PSF. CONCENTRATED LOADS IN EXCESS OF 300 POUNDS SHALL ALSO BE AVOIDED. THE NEED FOR TEMPORARY SHORING SHALL BE INVESTIGATED AND, IF REQUIRED, IT SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER. SUBMIT SIGNED AND SEALED DRAWINGS AND CALCULATIONS TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

FOUNDATION NOTES:

1. ALL SPREAD FOOTINGS HAVE BEEN DESIGNED FOR A SAFE BEARING CAPACITY OF 1500 PSF. ALL EXCAVATIONS SHALL BE VERIFIED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FOUNDATIONS.
2. A GEOTECHNICAL INVESTIGATION ENGINEERING REPORT HAS NOT BEEN PREPARED FOR THE PROJECT SITE. THE CONTRACTOR SHALL MAKE AN INVESTIGATION HE/SHE FEELS NECESSARY TO DETERMINE THE SUBSURFACE CONDITIONS PRIOR TO SUBMITTING A BID. THE CONTRACTOR SHALL PAY ALL COSTS FOR SUBSURFACE INVESTIGATIONS.
3. ALL REINFORCING BARS SHALL BE DEFORMED BILLET STEEL BARS MEETING A.S.T.M. A-615 SPECIFICATIONS, LATEST EDITION, WITH A MINIMUM YIELD STRENGTH OF 60,000 PSI.
4. POSITION OF CONTROL OR CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON THE DRAWINGS SHALL BE SUBMITTED TO THE OWNERS REPRESENTATIVE FOR APPROVAL.
5. CONSULT ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR EMBEDDED ITEMS SUCH AS INSERTS, PIPE SLEEVES, HANGER STRAPS, ETC. PRIOR TO PLACEMENT OF FOUNDATIONS.
6. ALL DETAILING OF REINFORCING BARS, UNLESS OTHERWISE NOTED, SHALL FOLLOW THE ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES.
7. CONCRETE TESTING:

CONCRETE MANUFACTURER QUALIFICATIONS: A FIRM IN MANUFACTURING READY-MIXED CONCRETE PRODUCTS AND THAT COMPLIES WITH ASTM C 94/CSA4 REQUIREMENTS FOR PRODUCTION FACILITIES AND EQUIPMENT. FURNISH BATCH TICKET INFORMATION. ENGAGE A QUALIFIED INDEPENDENT TESTING AGENCY TO PERFORM MATERIAL EVALUATION TESTS AND TO DESIGN CONCRETE MIXTURES.

CONCRETE TESTING AGENCY QUALIFICATIONS: AN INDEPENDENT AGENCY, ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, QUALIFIED ACCORDING TO ASTM C 1077 AND ASTM E 329 FOR TESTING. ENGAGE A QUALIFIED TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS AND PREPARE TEST REPORTS.

ACI PUBLICATIONS: COMPLY WITH THE FOLLOWING:

1. ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE", SECTIONS 1 THROUGH 5.
2. ACI 117, "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS."

DESIGN CRITERIA NOTES:

1. IBC 2015 - 2015 INTERNATIONAL BUILDING CODE
2. ACI 318 - BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
3. ASCE 7-10 - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

\* SHOULD THERE BE A CONFLICT BETWEEN THE ABOVE REFERENCED CODES THE MORE STRINGENT REQUIREMENTS SHALL APPLY.

DESIGN LOADS AND PARAMETERS:

1. DEAD LOAD:  
  
THE ACTUAL WEIGHTS OF MATERIALS AND CONSTRUCTION.
2. LIVE LOAD:  
  
ROOF 20 PSF  
FLOOR 100 PSF
3. SNOW LOAD:  
  
GROUND SNOW LOAD (Pg) 55 PSF  
FLAT ROOF SNOW LOAD (Pf) 42.35 PSF MIN.  
SLOPED ROOF SNOW LOAD (Ps) 42.35 PSF MIN.  
EXPOSURE FACTOR (Ce) 1.0  
IMPORTANCE FACTOR (Ia) 1.0  
THERMAL FACTOR (Ct) 1.0
4. WIND LOAD:  
  
BASIC WIND SPEED 115 MPH  
IMPORTANCE FACTOR (Iw) 1.0  
EXPOSURE CATEGORY C  
COMPONENTS & CLADDING PER ASCE 7-10 AND IBC 2015
5. SEISMIC CRITERIA  
  
IMPORTANCE FACTOR (Ia) 1.0  
MAPPED SPECTRAL RESPONSE (Sa) 0.1140  
MAPPED SPECTRAL RESPONSE (S1) 0.0536  
SITE CLASS D  
SPECTRAL RESPONSE COEF. (Sds) 0.122  
SPECTRAL RESPONSE COEF. (Sd1) 0.086  
SEISMIC DESIGN CATEGORY B  
  
BASIC FORCE RESISTING SYSTEM ORDINARY REINFORCED CONCRETE WALLS  
  
RESPONSE COEFFICIENT (Ca) 0.0304  
MODIFICATION FACTOR (R) 4.0  
ANALYSIS PROCEDURE USED EQUIVALENT LATERAL FORCE METHOD
6. EQUIPMENT LOAD:  
  
ESTIMATED LOADS AND APPROXIMATE LOCATIONS FOR MECHANICAL EQUIPMENT ARE PROVIDED ON THE MECHANICAL DRAWINGS. ACTUAL LOADS AND LOCATIONS FOR THE APPROVED EQUIPMENT SHALL BE ACCOUNTED FOR IN THE DESIGN.

CONSTRUCTION RECOMMENDATIONS:

SITE PREPARATION AND EARTHWORK CONSTRUCTION:

ALL THE UNSUITABLE FILL SOILS AND ORGANIC CLAY SOILS SHALL BE COMPLETELY REMOVED FROM THE PROPOSED BUILDING AREAS. PRIOR TO PLACING ANY ENGINEERED FILL ON THE SITE, GENERAL SITE AREA CLEARING SHALL BE CARRIED OUT. ALL EXISTING GRASS, TREES, ORGANIC SOILS, EXCESSIVELY WET SOILS AND SOFT/LOOSE OR OBVIOUSLY COMPRESSIBLE MATERIALS, SHALL BE COMPLETELY REMOVED FROM THE PROPOSED CONSTRUCTION AREAS. THE DECISION IN CONNECTION WITH THE PROPOSED EXTENT OF REQUIRED CUT AND FILL SHALL BE DETERMINED IN THE FIELD BY A QUALIFIED GEOTECHNICAL ENGINEER FOLLOWING OBSERVATION OF THE EXPOSED SUBGRADES AND PROOF-ROLLING OPERATIONS. UNDER NO CIRCUMSTANCES SHALL ORGANIC-LOADED SOIL BE PLACED AS FILL BENEATH THE BUILDING AREAS. IF ENCOUNTERED, TREE ROOTS AND STUMPS SHALL BE PROPERLY GRUBBED AND THE RESULTING DEPRESSIONS BACKFILLED IN LIFTS IN ACCORDANCE WITH THE ENGINEERED FILL SECTION BELOW. FOLLOWING THE SITE CLEARING, STRIPPING AND UNDERCUTTING, AND PRIOR TO PLACING ENGINEERED FILL, THE EXPOSED SUBGRADES SHALL BE CRITICALLY PROOF-ROLLED UNTIL THE GRADE OFFERS A RELATIVELY UNYIELDING SURFACE. AREAS OF EXCESSIVE YIELDING, AS OBSERVED BY THE GEOTECHNICAL REPRESENTATIVE, SHALL BE EXCAVATED AND BACKFILLED WITH COMPACTED ENGINEERED FILL AND/OR THE UNSTABLE SOILS WILL BE STABILIZED BY CHOKING THE EXPOSED BEARING SURFACE WITH CRUSHED LIMESTONE OR SIMILAR COARSE AGGREGATE. AFTER THE EXISTING SUBGRADE MATERIALS ARE EXCAVATED TO DESIGN GRADE, PROPER CONTROL OF SUBGRADE COMPACTION AND THE PLACEMENT AND COMPACTION OF NEW FILL MATERIALS SHALL BE OBSERVED AND TESTED BY A GEOTECHNICAL REPRESENTATIVE. IT IS RECOMMENDED THAT THE SITE PREPARATION, PROOF-ROLLING AND EARTHWORK ACTIVITIES SHALL BE PERFORMED DURING A PERIOD OF DRY WEATHER, WHICH CAN SIGNIFICANTLY REDUCE THE REQUIRED EXTENT OF SOIL STABILIZATION, DRAINAGE AND SURFACE REPAIRS. DURING SITE PREPARATION, BURN PITS, TRASH PITS OR OTHER ISOLATED DISPOSAL AREAS MAY BE ENCOUNTERED. ANY SUCH MATERIALS ENCOUNTERED DURING SITE WORK OR CONSTRUCTION SHALL BE COMPLETELY EXCAVATED AND REMOVED FROM THE SITE.

ENGINEERED FILL:

ENGINEERED FILL MATERIALS SHALL CONSIST OF NON-EXPANSIVE MATERIALS. MATERIALS SELECTED FOR USE AS ENGINEERED FILL SHALL GENERALLY CONTAIN LESS THAN THREE (3) PERCENT BY WEIGHT OF ORGANIC MATTER, WASTE CONSTRUCTION DEBRIS OR OTHER DELETERIOUS MATERIALS. THE ON-SITE NATURAL SOILS ARE SUITABLE FOR ENGINEERED FILL. FILL MATERIALS SHALL GENERALLY HAVE A STANDARD PROCTOR MAXIMUM DRY DENSITY GREATER THAN 110 POUNDS PER CUBIC FOOT (PCF), AN ATTERBERG LIQUID LIMIT LESS THAN 40, A PLASTICITY INDEX OF LESS THAN 20 AND MAXIMUM PARTICLE SIZE OF THREE (3) INCHES OR LESS. REPRESENTATIVE SAMPLES OF THE PROPOSED FILL MATERIALS SHALL BE COLLECTED AT LEAST ONE WEEK PRIOR TO THE START OF THE FILLING OPERATIONS. THE SAMPLES SHALL BE TESTED TO DETERMINE THE MAXIMUM DRY DENSITY, OPTIMUM MOISTURE CONTENT, PARTICLE SIZE DISTRIBUTION AND PLASTICITY CHARACTERISTICS. THESE TESTS ARE NEEDED TO DETERMINE IF THE MATERIAL IS ACCEPTABLE AS STRUCTURAL FILL AND FOR QUALITY CONTROL DURING THE COMPACTION PROCESS. THE TYPE OF ENGINEERED FILL MATERIAL SHALL BE VERIFIED AND APPROVED BY THE PROJECT'S GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.

THE FILL SHALL BE PLACED IN LAYERS OF NOT MORE THAN EIGHT (8) INCHES IN THICKNESS, WITH EACH LAYER BEING COMPACTED TO A MINIMUM DENSITY OF 98 PERCENT OF THE MAXIMUM DRY DENSITY AND WITHIN  $\pm$  2% OF THE OPTIMUM MOISTURE CONTENT, AS DETERMINED BY THE STANDARD PROCTOR METHOD ASTM D-698. MOISTURE CONTROL (INCREASING OR DECREASING THE NATURAL MOISTURE CONTENT) OF THE ENGINEERED FILL MATERIALS MAY BE NECESSARY FOR COMPACTION.

FOUNDATION RECOMMENDATIONS:

FOOTING BEARING SURFACES EVALUATIONS SHALL BE PERFORMED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF REINFORCING STEEL AND CONCRETE. THE FOUNDATION AREAS SHALL BE CRITICALLY INSPECTED AND TESTED TO VERIFY CONSISTENCY AND COMPATIBILITY WITH SUBSURFACE EXPLORATION DATA AND TO ASSURE THAT THE RECOMMENDED BEARING CAPACITY IS BEING ACHIEVED. ANY UNSUITABLE, EXCESSIVELY SOFT/LOOSE, ORGANIC SOILS OR WET SOILS ENCOUNTERED DURING FOUNDATION EXCAVATION AND CONSTRUCTION SHALL BE REMOVED AND REPLACED WITH COMPACTED ENGINEERED FILL OR THE FOUNDATIONS WILL BE EXTENDED TO BEAR ON THE UNDERLYING HIGHER STRENGTH SOILS. A GEOTECHNICAL REPRESENTATIVE SHALL BE PRESENT AT THE SITE DURING FOUNDATION EXCAVATION AND CONSTRUCTION IN ORDER TO DETERMINE THE EXTENT OF REMEDIAL MEASURES THAT MAY BECOME NECESSARY SHOULD UNSUITABLE SOILS BE ENCOUNTERED.

AFTER OPENING EXCAVATIONS, FOOTING SUBGRADE SHALL BE EVALUATED AND CONCRETE PLACED IMMEDIATELY TO AVOID EXPOSURE OF THE FOOTING BOTTOMS TO WETTING AND DRYING. IF IT IS REQUIRED THAT FOOTING EXCAVATIONS BE LEFT OPEN FOR MORE THAN ONE DAY, THEY SHALL BE PROTECTED TO REDUCE EVAPORATION OR ENTRY OF SOIL MOISTURE.

PREPARATION OF FLOOR SLAB SUBGRADES SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OUTLINED IN THE SITE PREPARATION AND ENGINEERED FILL SECTIONS ABOVE. IF SUBSURFACE MATERIALS AT THE FINISHED SUBGRADE ELEVATIONS EXHIBIT EXCESSIVE MOISTURE CONTENTS AND UNSTABLE SUBGRADE CONDITIONS, THEN UNDERCUTTING AND REPLACEMENT OF THE OBJECTIONABLE SOILS SHALL BE PERFORMED TO ACHIEVE FIRM SUBGRADE SUPPORT. ALTERNATIVELY, THE UNSTABLE SOILS WILL BE STABILIZED BY CHOKING THE EXPOSED BEARING SURFACE WITH CRUSHED LIMESTONE OR SIMILAR COARSE AGGREGATE.

CAREFUL FIELD CONTROL IS TO BE EXERCISED IN FINISH GRADING OPERATIONS IN ORDER TO ASSURE THAT SUBGRADE TOLERANCES ARE MAINTAINED. IT IS PARTICULARLY IMPORTANT THAT NO LOW SECTORS OR DEPRESSIONS BE ALLOWED TO EXIST WITHIN THESE AREAS, WATER MAY ACCUMULATE AND LEAD TO SERIOUS LOSS OF SUPPORTING CAPACITY.

EXCAVATIONS:

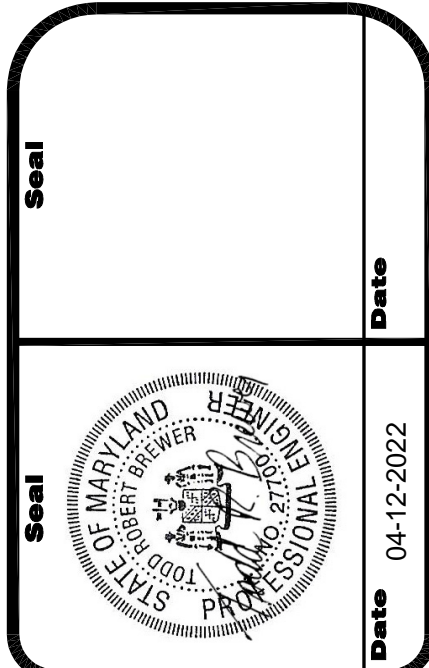
IN FEDERAL REGISTER, VOLUME 54, NO. 209 (OCTOBER, 1989), THE UNITED STATES DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AMENDED ITS "CONSTRUCTION STANDARDS FOR EXCAVATION, 29CFR, PART 1926, SUBPART P." THIS DOCUMENT WAS ISSUED TO BETTER ENSURE THE SAFETY OF WORKERS ENTERING TRENCHES OR EXCAVATIONS. IT IS MANDATED BY THE FEDERAL REGULATION THAT ALL EXCAVATIONS, WHETHER THEY BE UTILITY TRENCHES, BASEMENT EXCAVATIONS OR FOUNDATION EXCAVATIONS, BE CONSTRUCTED IN ACCORDANCE WITH THE NEW OSHA GUIDELINES.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGNING AND CONSTRUCTING STABLE, TEMPORARY EXCAVATIONS AND SHALL SHORE, SLOPE OR BENCH THE SIDES OF THE EXCAVATIONS AS REQUIRED TO MAINTAIN STABILITY OF BOTH THE EXCAVATION SIDES AND BOTTOM. THE CONTRACTOR'S "RESPONSIBLE PERSON" AS DEFINED IN "CFR PART 1926," SHALL EVALUATE THE SOIL EXPOSED IN THE EXCAVATIONS AS PART OF THE CONTRACTOR'S SAFETY PROCEDURES. IN NO CASE SHALL SLOPE HEIGHT, SLOPE INCLINATION OR EXCAVATION DEPTH, INCLUDING UTILITY TRENCH EXCAVATION DEPTH, EXCEED THOSE SPECIFIED IN LOCAL, STATE AND FEDERAL SAFETY REGULATIONS.

QUALITY ASSURANCE AND CONTROL:

THE CONTRACTOR SHALL EMPLOY AND PAY AN INDEPENDENT QUALIFIED GEOTECHNICAL ENGINEER TO PERFORM QUALITY CONTROL SERVICES SPECIFIED. ALL FIELD AND LABORATORY TESTING SHALL BE AT THE CONTRACTOR'S EXPENSE. COSTS FOR THESE SERVICES SHALL BE INCLUDED IN THE CONTRACT SUM.

Professional Certification  
I certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer in the State of Maryland, license number 27700, expiration date 07/18/2022.



Scale	AS NOTED	Date	Revisions	No.
DATE	APRIL 2022			
DESIGNED BY	REF			
CHECKED BY	GLE/TH			
PROJECT NO.	0380-19-347 (1011)			
FILE NAME	Floor Plans			

AN EADS GROUP COMPANY

450 ABERDEEN DRIVE  
SOMERSET, PA. 15501  
Phone: 814-445-6551  
Fax: 814-445-2748  
www.eadsgroup.com

REGISTERED PROFESSIONAL ENGINEER  
ALTON, PA.  
JOHNSTOWN, PA.  
SOMERSET, PA.  
CUMBERLAND, MD.

ARCHDIOCESE OF BALTIMORE  
SAINT MICHAELS CHURCH  
SOCIAL HALL RENOVATION PROJECT

44 EAST MAIN STREET  
FROSTBURG, MARYLAND 21532

STRUCTURAL NOTES

Drawing No.  
**S-1**

NOTE: DO NOT SCALE DRAWING  
IT IS THE RESPONSIBILITY OF EACH CONTRACTOR AND SUBCONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND ALL DIMENSIONS PRIOR TO BIDDING AND BEFORE BEGINNING ANY WORK. EACH CONTRACTOR IS TO FULLY COORDINATE HIS WORK WITH THAT OF OTHER TRADES. REFER TO THE CONTRACT AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

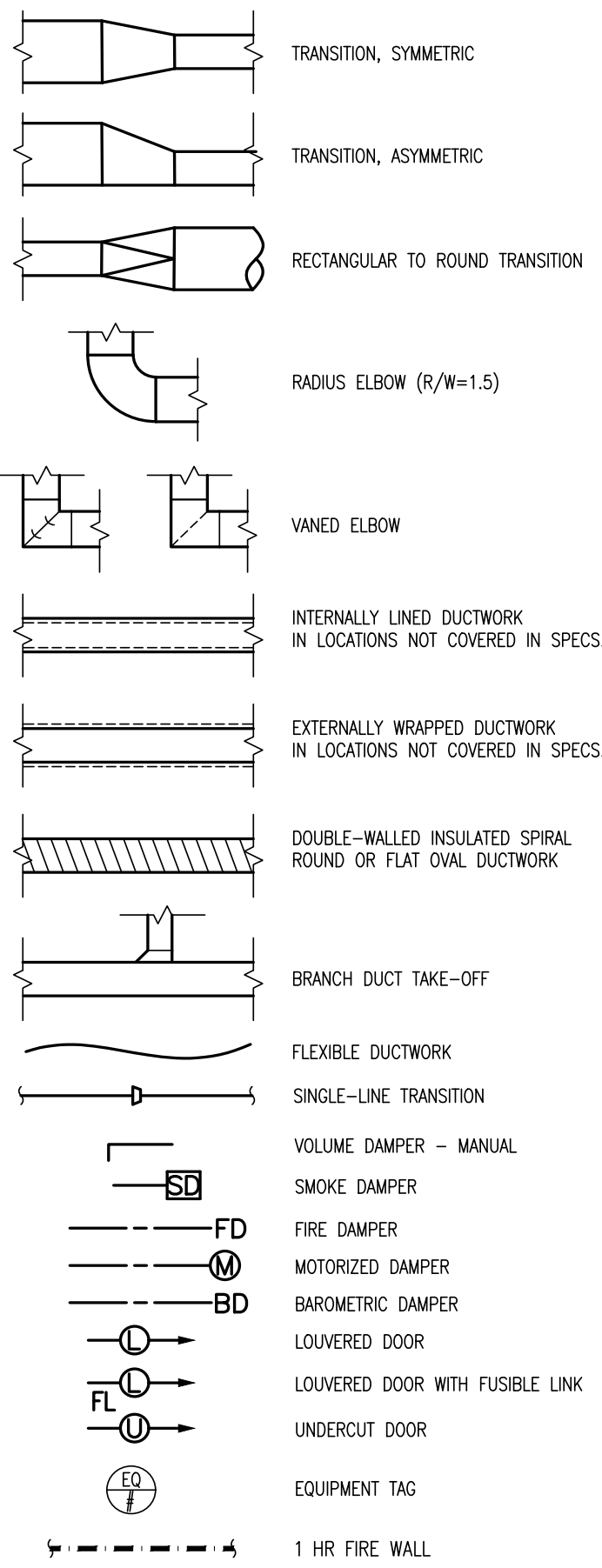
ABBREVIATIONS

ABV	ABOVE
AD	ACCESS DOOR
AFT	ABOVE FINISHED FLOOR
ALUM	ALUMINUM
APD	AIR PRESSURE DROP
APPROX.	APPROXIMATE
ARCH.	ARCHITECT
ARRG.	ARRANGEMENT
ATC	AUTOMATIC TEMPERATURE CONTROL
AVG.	AVERAGE
B.F.F.	BELOW FINISHED FLOOR
B.F.G.	BELOW FINISHED GRADE
BLDG	BUILDING
BLW	BELOW
B.O.D.	BOTTOM OF DUCT
BTU	BRITISH THERMAL UNITS
CAP	CAPACITY
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CHR	CHILLED WATER RETURN
CHS	CHILLED WATER SUPPLY
CI	CAST IRON
CL	CENTERLINE
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
COMP	COMPRESSOR
CON	CONCENTRIC
CONC	CONCRETE
COND	CONDENSATE
CONN	CONNECTION
CONTR	CONTRACTOR
COP	COEFFICIENT OF PERFORMANCE
CVS	CONTROL VALVE SYSTEM
CW	COLD WATER
DB	DRY BULB
DA	DIAMETER
DIFF	DIFFUSER
DISCH	DISCHARGE
DN	DOWN
DP	PRESSURE DROP
DPR.	DAMPER
DWG	DRAWING
DX	DIRECT EXPANSION
E	EXHAUST
EA	EACH
E/A	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR OR .4 CONTRACT
ECC	ECCENTRIC
EDB	ENTERING DRY BULB TEMP.
EER	ENERGY EFFICIENCY RATIO
EFF	EFFICIENCY
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATION
ENT	ENTERING
EQ	EQUAL
EQUIP	EQUIPMENT
ESP	EXTERNAL STATIC PRESSURE
EWB	ENTERING WET BULB TEMP.
'WT	ENTERING WATER TEMPERATURE
EXIST.	EXISTING
EXP	EXPANSION
EXT	EXTERNAL
F	DEGREES FAHREHEIT
F/A	FRESH AIR
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE
FLR	FLOOR
PPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET
FV	FACE VELOCITY
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
G.C.	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
H	HEIGHT
HP	HORSEPOWER
HR	HOURLY
HTR	HEATER
IN	INCH

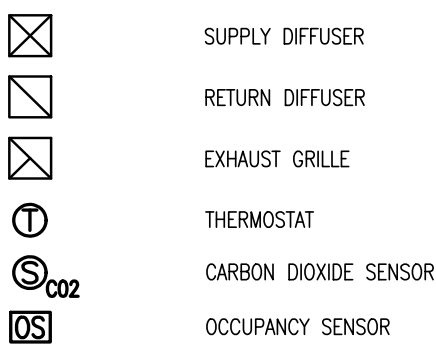
NOTE: NOT ALL SYMBOLS OR ABBREVIATIONS INDICATED MAY APPEAR ON THESE CONTRACT DRAWINGS.

INCL	INCLUDING
INT	INTERLOCK
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LD	LINEAR DIFFUSER
LDB	LEAVING DRY BULB TEMPERATURE
LF	LINEAR FEET
LIN	LINEAR
LWB	LEAVING WET BULB TEMPERATURE
MAX	MAXIMUM
MBH	THOUSANDS OF BTU PER HOUR
M.C.	MECHANICAL CONTRACTOR
MCA	MAXIMUM CIRCUIT AMPACITY
MED	MEDIUM
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
NC	NOISE CRITERIA
NC	NORMALLY CLOSED
NEG	NEGATIVE
NG	NATURAL GAS
NC	NOT IN CONTRACT
NO	NORMALLY OPEN
NOM	NOMINAL
NTS	NOT TO SCALE
O/A OR OA	OUTSIDE AIR
OAT	OUTSIDE AIR TEMPERATURE
OC	ON CENTER
OCC	OCCUPANCY OCCUPIED
OPG	OPENING
PART	PARTIAL
P.C.	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PH	PHASE
POS	POSITIVE
PRES	PRESSURE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
R/A	RETURN AIR
REL	RELIEF
REQ'D	REQUIRED
RET	RETURN
RH	RELATIVE HUMIDITY
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
S/A	SUPPLY AIR
SC	SENSIBLE COOLING
SCH	SCHEDULE
S-DET	SMOKE DETECTOR
SENS	SENSIBLE
SF	SQUARE FEET
SP	STATIC PRESSURE
SPD	STATIC PRESSURE DROP
SPEC	SPECIFICATIONS
STD	STANDARD
STL	STEEL
STR	STRUCTURAL
SUCT	SUCTION
SUP	SUPPLY
TC	TOTAL COOLING
TEMP	TEMPERATURE
TH	TOTAL HEAT
TOT	TOTAL
TP	TOTAL PRESSURE
TRAN	TRANSITION
TSP	TOTAL STATIC PRESSURE
T-STAT	THERMOSTAT
TYP	TYPICAL
UC	UNDERCUT
V	VOLTS
VEL	VELOCITY
VIB ISO	VIBRATION ISOLATOR
V/P/C	VOLTAGE/PHASE/CYCLE
W	WIDTH
W/	WITH
WB	WET BULB
WC	WATER COLUMN
WG	WATER GAUGE
WMS	WIRE MESH SCREEN
W/O	WITHOUT

DUCTWORK SYMBOLS



GENERAL SYMBOLS



THE SCOPE OF WORK SHALL INCLUDE PROVIDING ALL WORK INDICATED, AND COORDINATION WITH ALL TRADES. SCOPE OF WORK IS INDICATED ON THE CONTRACT DOCUMENTS INCLUDING THE DRAWINGS AND THE SPECIFICATIONS, WHICH ARE COMPLEMENTARY. WORK INDICATED IN ANY CONTRACT DOCUMENT SHALL BE CONSIDERED PART OF THE SCOPE OF WORK. IN GENERAL, WORK REQUIREMENTS ARE NOT INDICATED IN BOTH DOCUMENTS. WHERE DOCUMENTS CONFLICT WITHIN THEMSELVES OR WITH CODES AND REGULATIONS, PROVIDE THE HIGHER QUANTITY AND QUALITY AND FOLLOW THE STRICTER REQUIREMENTS.

VISIT THE SITE TO DETERMINE PRE-EXISTING CONDITIONS AND WORK NECESSARY PRIOR TO SUBMISSION OF BID PRICE. INCLUDE ALL REQUIRED WORK IN BID PRICE.

PROJECT NOTES

PRIOR TO CONSTRUCTION OR INSTALLATION, CONTRACTOR WILL COORDINATE WITH GENERAL CONTRACTOR AND ALL TRADES, ROUGH-IN OF PLUMBING EQUIPMENT OR EQUIPMENT FURNISHED BY OWNER. REFER TO SHOP DRAWINGS OR EQUIPMENT SPECIFICATIONS FOR EXACT REQUIREMENTS OF EQUIPMENT TO BE INSTALLED. PROVIDE ALL FITTINGS, GAUGES AND ACCESSORIES FOR A COMPLETE INSTALLATION.

ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE CODES.

EQUIPMENT COORDINATION NOTES

DWG #	DRAWING TITLE
M-1	MECHANICAL PROJECT INFORMATION
M-2	MECHANICAL DEMO PLAN
M-3	MECHANICAL FLOOR PLAN
M-4	MECHANICAL SCHEDULES AND DETAILS
M-5	MECHANICAL DETAILS

DRAWING INDEX

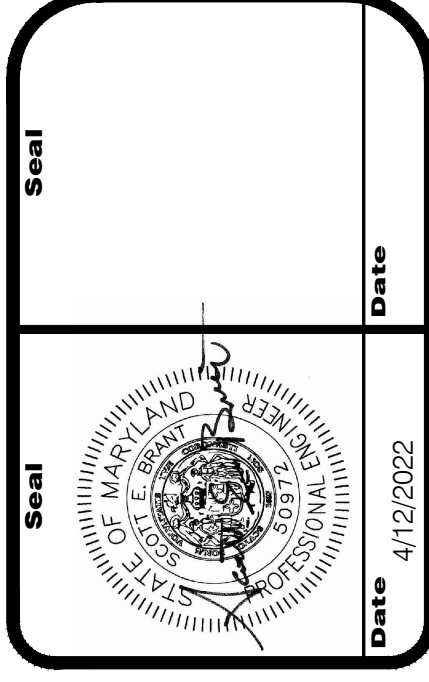
CODES AND DESIGN INFORMATION			
1	OCCUPANCY TYPE	A - ASSEMBLY	
2	GOVERNING CODES AND REFERENCES	2018 INTERNATIONAL BUILDING CODE	
		2018 INTERNATIONAL MECHANICAL CODE	
		2018 INTERNATIONAL FUEL GAS CODE	
		2018 INTERNATIONAL ENERGY CONSERVATION CODE	
3	DESIGN CITY	GREATER CUMBERLAND REGIONAL, MD	
4	DESIGN CONDITIONS	COOLING	
		DB	MCWB
		91.4° F	71.9° F
		HEATING	
		12.0° F	

PROJECT DESIGN INFORMATION

VENTILATION RATE SCHEDULE									
ROOM NAME	CLASSIFICATION	ROOM AREA (SF)	AREA O/A RATE (CFM/SF)	DEFAULT OCCUPANCY (#/1,000SF)	NUMBER OF PERSONS	MIN O/A RATE PER PERSON (CFM)	MIN BREATHING ZONE O/A	AIR DISTRIBUTION EFFICIENCY	DESIGN O/A
MULTI-PURPOSE ROOM	MULTIPURPOSE ASSEMBLY	2650	0.06	120	318	5	1749	1.0	1749
TOTAL SF		2650						TOTAL VENTILATION	1749

MECHANICAL VENTILATION SCHEDULES - ST. MICHAEL'S HALL  
ASHRAE 62.1 2013/INTERNATIONAL MECHANICAL CODE 2018 SECTION 403

Professional Certification  
I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer in the State of Maryland, license number 50922, expiration date 07/14/2023.



Scale	Date	Revisions	No.
AS NOTED			
DATE			
APRIL 2022			
DESIGNED BY			
SEE			
CHECKED BY			
GLE			
PROJECT NO.			
0380-19-347 (1011)			
FILE NO.			
19347 Mech Plan			

450 ABERDEEN DRIVE  
SOMERSET, PA. 15501  
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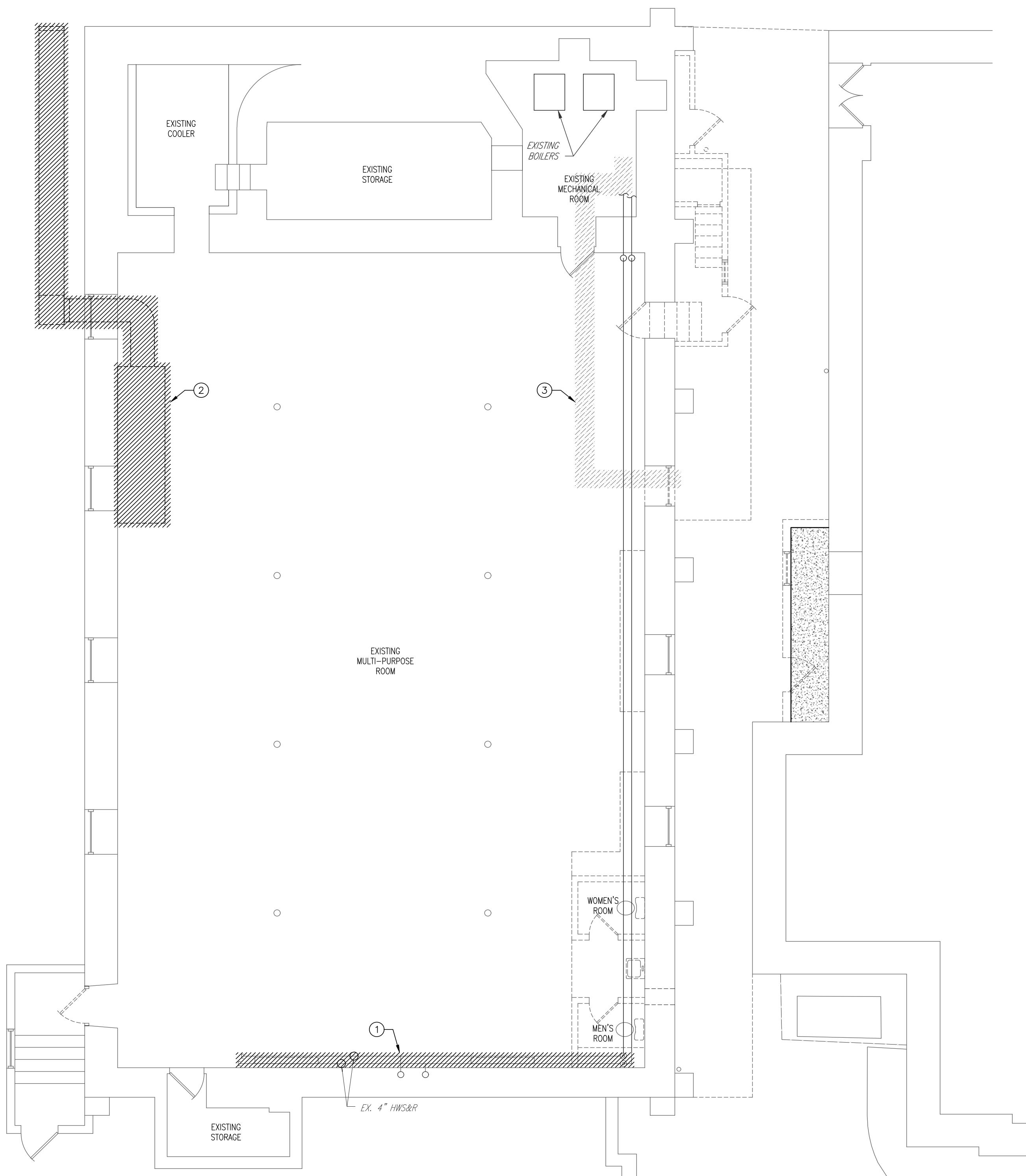
ARCHDIOCESE OF BALTIMORE  
SAINT MICHAELS CHURCH  
SOCIAL HALL RENOVATION PROJECT

44 EAST MAIN STREET  
FROSTBURG, MARYLAND 21532

MECHANICAL PROJECT INFORMATION

Drawing No.  
M-1





MECHANICAL DEMO PLAN  
SCALE: 3/16" = 1'-0"

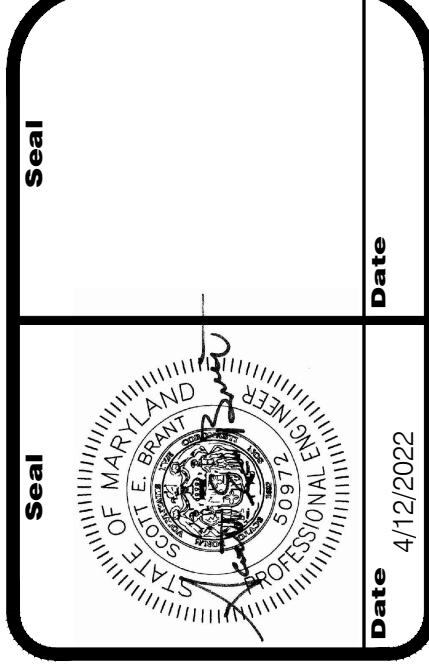
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- PROVIDE ANY/ALL MISCELLANEOUS FITTINGS, BENDS, CONNECTORS AND APPURTENANCES NECESSARY FOR A COMPLETE AND FUNCTIONAL SYSTEM WHETHER EXPLICITLY SHOWN OR NOT.
- COORDINATE FINAL LOCATION AND MOUNTING HEIGHTS FOR EQUIPMENT, OUTLETS, SWITCHES, ETC. WITH THE OWNER, ANSI A117.1 AND CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN.
- CONTRACTOR SHALL USE ONLY NEW, HEAVY DUTY, COMMERCIAL GRADE MATERIALS. ALL MATERIALS AND EQUIPMENT USED SHALL BE LISTED AND LABELED FOR THE APPLICATION IN WHICH THEY ARE USED.
- COORDINATE INSTALLATION OF MECHANICAL, PLUMBING, FUEL GAS AND ELECTRICAL INSTALLATIONS AROUND OTHER SYSTEMS AND BUILDING STRUCTURE TO AVOID OBSTRUCTIONS AND PRESERVE CLEARANCES. LOCATE AND INSTALL COMPONENTS REQUIRING ACCESS SO THAT THEY MAY BE SERVICED, RESET, REPLACED AND/OR RECALIBRATED WITH NORMAL TOOLS AND EQUIPMENT. PROVIDE ARCHITECT-APPROVED ACCESS DOORS IN BUILDING CONSTRUCTION WHEN ACCESS CANNOT OTHERWISE BE PROVIDED. ALLOW PIPING SYSTEMS WITH SLOPE REQUIREMENTS TO HAVE PRIMARY PLACEMENT.
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○ DEMO NOTES

- REMOVE EXISTING RADIATORS, HOT WATER SUPPLY AND RETURN PIPING AND ACCESSORIES. SUPPLY AND RETURN TO RADIATOR ABOVE TO BE RECONNECTED.
- REMOVE EXISTING RANGE HOOD, EXHAUST DUCT, FAN AND EXHAUST LOUVER. HOOD FIRE SUPPRESSION SYSTEM TO BE RETAINED AND REUSED WITH NEW HOOD.
- FLOOR IN THIS AREA TO BE SAWCUT AND TRENCHED TO ALLOW INSTALLATION OF SNOW MELT SYSTEM LINES.

Professional Certification  
I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer in the State of Maryland, license number 50922, expiration date 07/14/2023.



Scale	Date	Revisions	No.
AS NOTED	APRIL 2022		
Drawn By	SEB		
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File No.	19347 Mech Plan		

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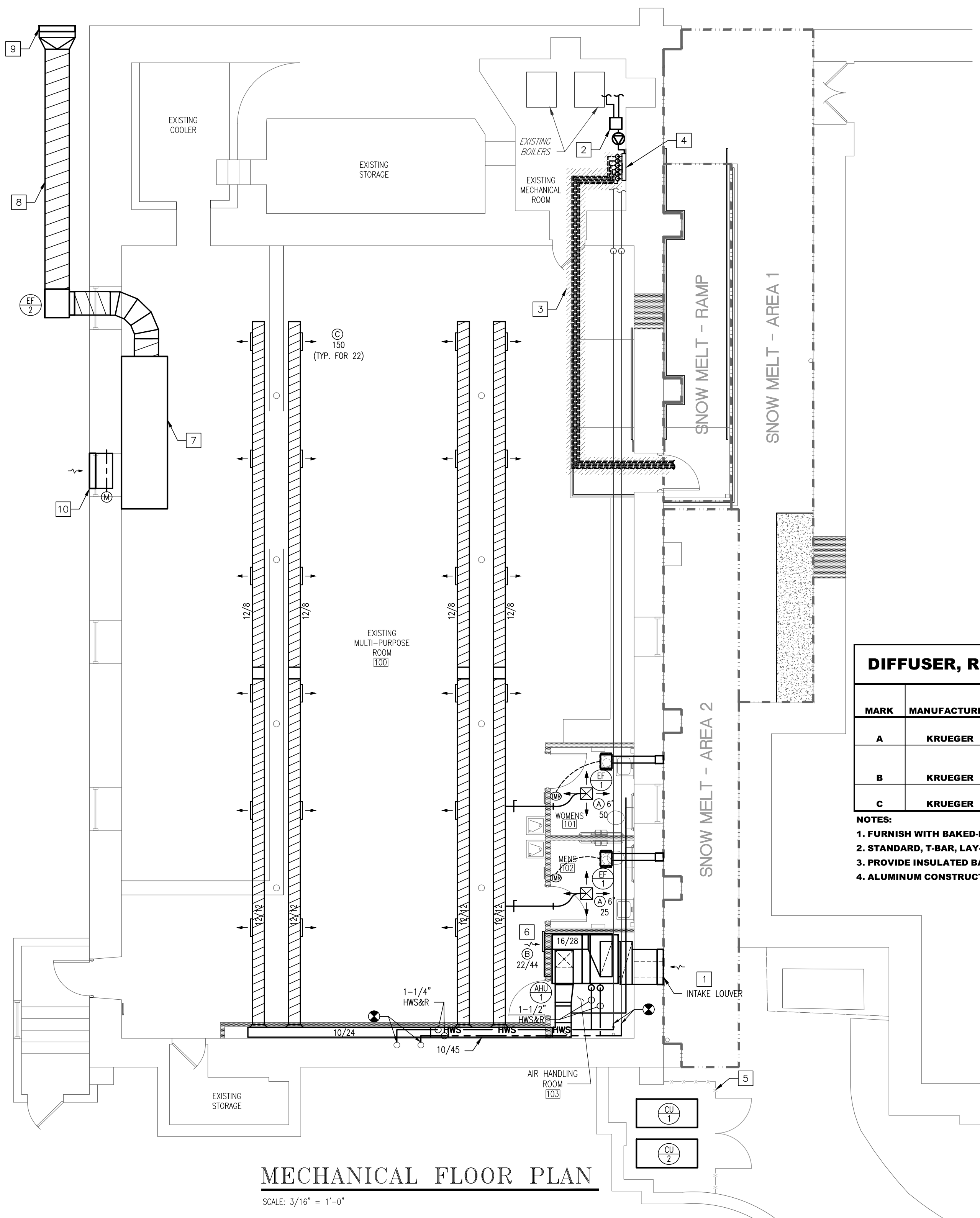
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ARCHDIOCESE OF BALTIMORE  
SAINT MICHAELS CHURCH  
SOCIAL HALL RENOVATION PROJECT

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MECHANICAL DEMO PLAN

Drawing No.  
**M-2**



MECHANICAL FLOOR PLAN  
SCALE: 3/16" = 1'-0"

DIFFUSER, REGISTER AND GRILLE SCHEDULE						
MARK	MANUFACTURER	SERIES AND MODEL NO.	TYPE	MAX. NC	INLET SIZE	REMARKS
A	KRUEGER	SPLQ	24"x 24" ALUMINUM SQUARE PLAQUE DIFFUSER	25	AS SHOWN	1 - 4
B	KRUEGER	S585	HORIZONTAL LOUVERED RETURN GRILLE, 35" DEFLECTION	30	AS SHOWN	1, 4
C	KRUEGER	5DMGSR	SINGLE DEFLECTION SPIRAL DUCT GRILLE	25	14"x4"	4

NOTES:  
1. FURNISH WITH BAKED-ENAMEL FINISH: STANDARD WHITE, UNLESS INDICATED OTHERWISE  
2. STANDARD, T-BAR, LAY-IN CEILING FRAME  
3. PROVIDE INSULATED BACKPAN  
4. ALUMINUM CONSTRUCTION

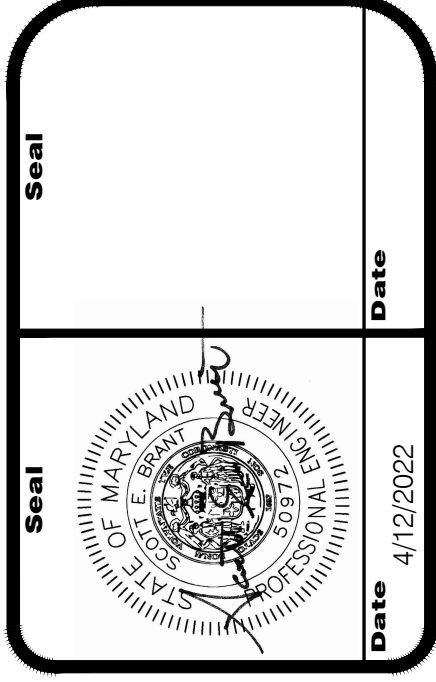
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SHEET KEYNOTES

- 6" DEEP ALUMINUM LOUVER, GREENHECK MODEL ESD-635 OR APPROVED EQUAL, SIZED TO FIT WINDOW OPENING (MIN. SIZE 28"x28"). LOUVER TO BE FURNISHED WITH BIRD SCREEN, BACKDRAFT DAMPER AND FACTORY KYNAR FINISH, COLOR SELECTED BY OWNER. PROVIDE TRIPLE 2X6 UNTEL WITH 1/2" PLYWOOD FILLERS (SEE WINDOW FRAMING DETAIL H-2 ON SHEET A-7).
- STAINLESS STEEL GLYCOL SNOW MELT SYSTEM HEAT EXCHANGER. SEE SCHEDULE AND DETAILS ON SHEET M-4.
- SAWTOOTH FLOOR AND INSTALL SNOW MELT RADIANT TUBING LINES IN TRENCH BENEATH FLOOR SLAB.
- SNOW MELT SYSTEM SUPPLY AND RETURN MANIFOLDS. EXACT LOCATION TO BE DETERMINED IN FIELD.
- 6' TALL CHAIN LINK FENCING TO BE INSTALLED AROUND CONDENSING UNITS. INSTALL FULL HEIGHT DOUBLE SWING GATE WITH LOCKING LATCH.
- TRANSITION AS REQUIRED TO ACCOMMODATE RETURN GRILLE SIZE AND EXISTING STRUCTURE LIMITATIONS. FIELD VERIFY CONDITIONS AND INTERFERENCES.
- NEW TYPE 1 SINGLE CANOPY KITCHEN HOOD, APPROXIMATELY 13' WIDE. COORDINATE WITH KITCHEN EQUIPMENT VENDOR FOR EXACT SIZE AND LOCATION. HOOD TO BE CONNECTED TO EXISTING FIRE SUPPRESSION SYSTEM.
- 24" INTERNAL DIAMETER UL-1579 DOUBLE-WALLED STAINLESS STEEL MANUFACTURED GREASE DUCT OR 24"x24" WELDED STAINLESS DUCT. MAINTAIN ALL CLEARANCE TO COMBUSTIBLES AND INSTALL FIRE RATED INSULATION AND COVERING WHERE REQUIRED BY CODE. PROVIDE GREASE COLLECTION RESERVOIRS AND CLEANOUTS AS REQUIRED.
- 36"x36" DEEP STAINLESS STEEL LOUVER, GREENHECK MODEL ESD-635 OR APPROVED EQUAL.
- 6" DEEP ALUMINUM MAKEUP AIR LOUVER, GREENHECK MODEL ESD-635 OR APPROVED EQUAL, SIZED TO FIT AVAILABLE WINDOW OPENING (MIN. SIZE 28"x28"). LOUVER TO BE FURNISHED WITH BIRD SCREEN, INSULATED MOTORIZED DAMPER AND FACTORY KYNAR FINISH, COLOR SELECTED BY OWNER. INTERLOCK MOTORIZED DAMPER TO KITCHEN EXHAUST FAN INTAKE AND SEAL AROUND ELECTRICAL CONDUITS AND UNUSED PORTIONS OF WINDOW AREA AND PAINT TO MATCH ADJACENT FINISH.

Professional Certification  
I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer in the State of Maryland, license number 80922, expiration date 07/11/2023.



Scale	Date	Revisions	No.
AS NOTED	APRIL 2022		
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MECHANICAL FLOOR PLAN

Drawing No.  
**M-3**

VERTICAL AIR HANDLING UNIT SCHEDULE																						
MARK	BASIS OF DESIGN		MAX SUPPLY AIR FLOW	DESIGN OUTSIDE AIR FLOW	EXT STATIC PRESSURE	COOLING CAPACITY					HEATING CAPACITY						ELECTRICAL DATA			TOTAL WEIGHT (LBS)	REMARKS	
						MIN TOTAL CAPACITY	MIN SENS CAPACITY	EAT		OSA DESIGN TEMP	HW COIL CAPACITY				EAT	LAT	UNIT POWER CONNECTION					
	DB	WB	MBH	T(IN)	T(OUT)			GPM	MAX P.D.		MCA	MOCP	TYPE									
	MANUFACTURER	MODEL NUMBER	CFM	CFM	IN	MBH	MBH	°F	°F	°F	MBH	°F	°F	°F	°F	°F	°F	°F	°F			°F
AHU-1	AAON	V3CRB80162C12F	3,500	1,750	1.0	162	107	85	69	91	238	180	164	30	1.5	65	127	11	15	208/3/60	850	1 - 6

- NOTES:
- UNIT SHALL BE EQUIPPED WITH 100% O/A ECONOMIZER, CONTROLLED WITH COMPARATIVE ENTHALPY SENSORS
  - UNIT SHALL UTILIZE RETURN AIR CO2 DETECTOR FOR DEMAND CONTROL VENTILATION
  - PROVIDE 4 INCH, MERV-13 FILTERS
  - PROVIDE SUPPLY AND RETURN AIR SMOKE DETECTORS
  - PROVIDE MODULATING HOT GAS REHEAT AND DEHUMIDISTAT, FOR MOISTURE REMOVAL

AIR COOLED CONDENSING UNIT SCHEDULE														
MARK	BASIS OF DESIGN		MIN COOLING CAPACITY	REFRIGERANT	MIN EER	COMPRESSOR MOTOR		CONDENSER FAN MOTOR			POWER SUPPLY			REMARKS
	MANUFACTURER	MODEL				# COMP	RLA	# FANS	HP (EA)	FLA (EA)	MCA	MOCP	ELECTRIC	
			TONS											
CU-1	AAON	CFA015BA8DC00K	15	410a	11.4	2	25	2	0.75	3.4	62	80	208/3/60	1 - 4

- NOTES
- INCLUDE NON-FUSED DISCONNECT SWITCH, MODULATING HOT GAS REHEAT AND VARIABLE CAPACITY CONTROL
  - PROVIDE EXTENDED 5-YEAR COMPRESSOR WARRANTY.
  - SOUND BLANKETS SHALL BE PROVIDED ON ALL COMPRESSORS.
  - PROVIDE LOW AMBIENT CONTROLS.

HOT WATER RADIANT HEATING LOOP/MANIFOLD SCHEDULE											
MANIFOLD	ROOM NAME	ON- CENTER SPACING	DESIGN HEAT LOSS	LOOPS	APPROX. LOOP LENGTH	DESIGN LOOP FLOW RATE	PIPE SIZE	SPECIFIC PD	EST. LOOP PD		NOTES
			BTU/HR		LF	GPM					
RH-1	SNOW MELT - RAMP	09" O.C.	41000	1	240	2.57	1"	3.7	9.0		1 - 4
	SNOW MELT - AREA 1	09" O.C.	70000	3	220	2.35	1"	3.4	7.5		
	SNOW MELT - AREA 2	09" O.C.	38500	2	220	2.35	1"	3.4	7.5		

- NOTES:
- RADIANT LOOPS SHALL BE LAID OUT TO PROVIDE APPROXIMATELY EQUIVALENT LOOP LENGTHS.
  - SUPPLY AND RETURN MANIFOLDS TO BE 1-1/4" UPONOR STAINLESS STEEL MODEL A2720602, OR APPROVED EQUAL. MANIFOLDS TO BE EQUIPPED WITH 6 OUTLETS, INTEGRATED FLOW METER AND CIRCUIT BALANCING VALVES.
  - ICE MELT SYSTEM TO BE CONTROLLED WITH TEKMAR SNOW MELT CONTROL SYSTEM (671) AND WITH IN-GROUND SENSOR (090), OR APPROVED EQUAL.
  - SYSTEM TO BE DESIGNED FOR AND FILLED WITH 50% PROPYLENE GLYCOL.

SNOW MELT HEAT EXCHANGER SCHEDULE									
MARK	LOCATION	TYPE	CAPACITY*	BOILER WATER SIDE		SNOW MELT SIDE		CONNECTION SIZES	NOTES
				FLOW RATE	PRESSURE DROP	FLOW RATE	PRESSURE DROP		
			BTU/HR	GPM	PSI	GPM	PSI	NPT	
HX-1	MECHANICAL ROOM	BRAZED PLATE	200,000	16	5	16	5	1-1/2"	1 - 4

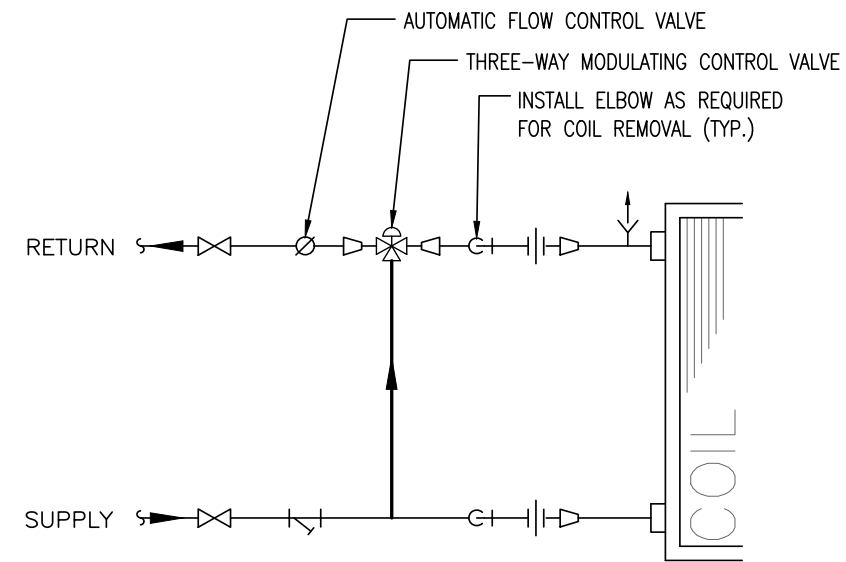
- NOTES:
- ASME CODE STAMPED
  - PLATES SHALL BE 316L STAINLESS STEEL
  - HEAT EXCHANGER SHALL BE EQUIPPED WITH ISOLATION VALVES AND UNIONS FOR EASY REMOVAL, INLET STRAINERS, AND HOSE CONNECTIONS TO ALLOW FLUSING OF BOTH SIDES.
  - HEAT EXCHANGER SHALL BE INSULATED AFTER LEAK TESTING
- \*CAPACITY SHALL BE BASED ON 180 DEG F BOILER SUPPLY WATER AND 100 DEG F SNOW MELT RETURN WATER

PUMP SCHEDULE													
MARK	LOCATION	SYSTEM AND/ OR SERVICE	DESIGN BASIS		CIRCULATING FLUID			ELECTRICAL				NOTES	
			MANUFACTURER	MODEL	FLUID	FLOW	HEAD	MAX TEMP	HP	PHASE	VOLT		SPEED CONTROL
						GPM	FT	DEG F					
P-1	MECHANICAL ROOM	SNOW MELT SYSTEM	ARMSTRONG	E9.2	30% GLYCOL	16	24	230	1/6	1	120	NONE	1, 2

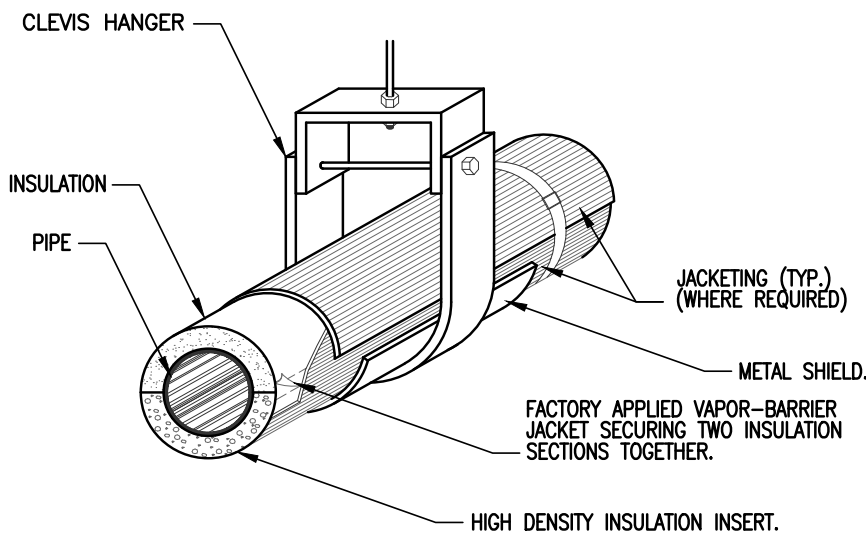
- NOTES:
- PROVIDE ISOLATION VALVES ON BOTH SIDES OF PUMP, TO ALLOW REPLACEMENT WITHOUT DRAINING SYSTEM.
  - PUMP TO BE FULLY CONTROLLED BY SNOW MELT CONTROL SYSTEM WITH. PROVIDE ALL REQUIRED PUMP RELAYS, CONTROL TRANSFORMERS, MAGNETIC STARTERS, ETC. TO PROVIDE A COMPLETE AND FULLY AUTOMATIC CONTROL SYSTEM.

FAN SCHEDULE														
MARK	SYSTEM AND/OR SERVICE	AIR FLOW	TSP	FAN							NOTES			
		CFM	IN	TYPE	BASIS OF DESIGN		DRIVE	FAN RPM	HP	PHASE		VOLT	RPM	SPEED CONTROL
					MANUFACTURER	MODEL								
EF-1	EXHAUST	75	0.2	CEILING	GREENHECK	SP-A90	DIRECT	870	1/40	1	115	1550	NONE	1
EF-2	GREASE EXHAUST	5200	1.0	INLINE	GREENHECK	TCB-1-22-30	BELT	1208	3	1	208	1550	NONE	2

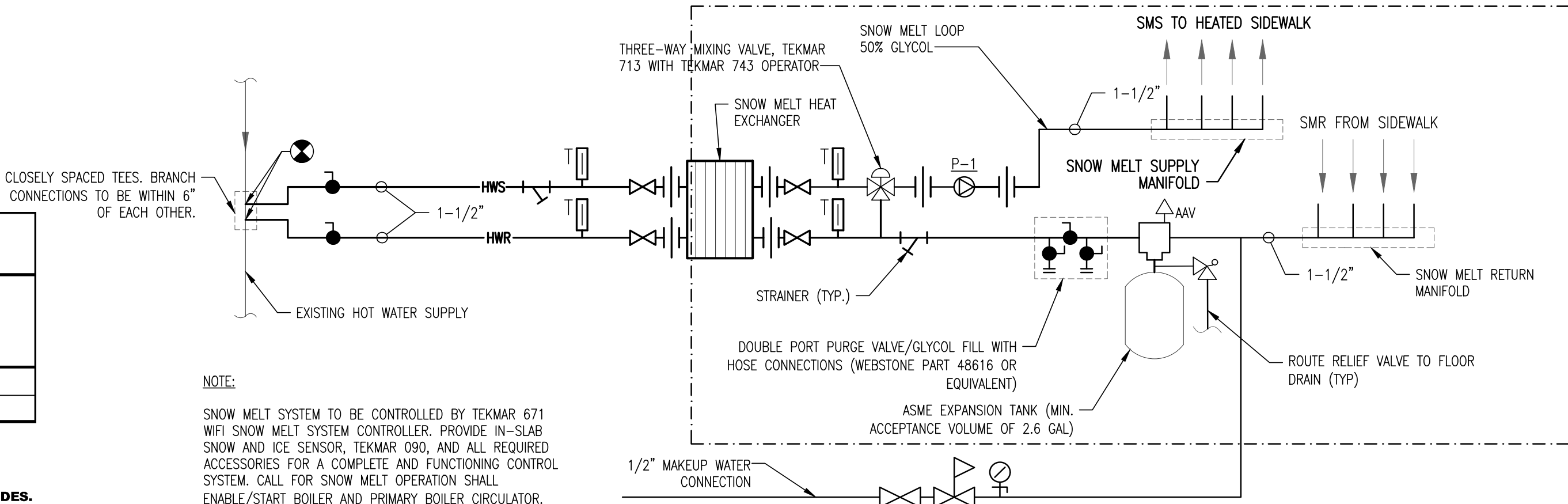
- NOTE
- PROVIDE DISCONNECT, 6" EXHAUST VENT, BAROMETRIC DAMPER AND 12"x12" LOUVER. PROVIDE BIRDSCREEN AND KYNAR FINISH, COLOR TO BE SELECTED BY OWNER.
  - PROVIDE PREMIUM EFFICIENCY MOTOR, SPRING ISOLATORS, PERMATECTOR COATING, UL-762 APPROVAL AND NEMA 3R DISCONNECT SWITCH.



HEATING COIL PIPING DIAGRAM  
(3-WAY VALVE)  
NO SCALE

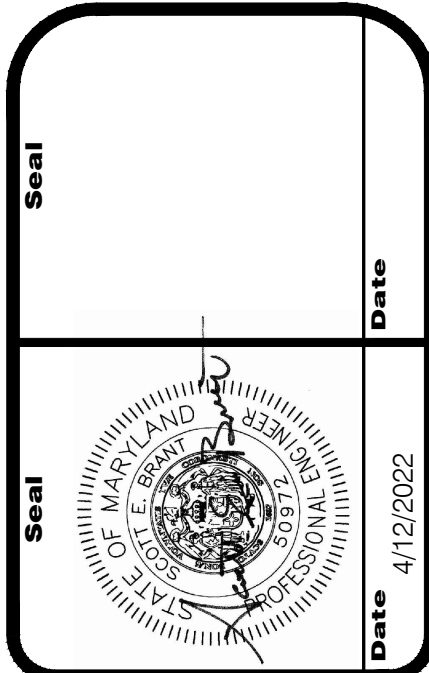


TYPICAL INSULATED PIPE HANGER  
DETAIL  
NO SCALE



SNOW MELT SYSTEM PIPING DIAGRAM  
NO SCALE

Professional Certification  
I certify that these documents were prepared or  
I approved by me, and that I am a duly licensed  
Professional Engineer in the State of Maryland  
License number 50922, expiration date 07/14/2023



Scale	Date	Revisions	No.
AS NOTED			
APRIL 2022			
Drawn By			
Checked By			
Project No.			
0380-19-347 (1011)			
File No.			
19347 Mech Plan			

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ARCHDIOCESE OF BALTIMORE  
SAINT MICHAELS CHURCH  
SOCIAL HALL RENOVATION PROJECT

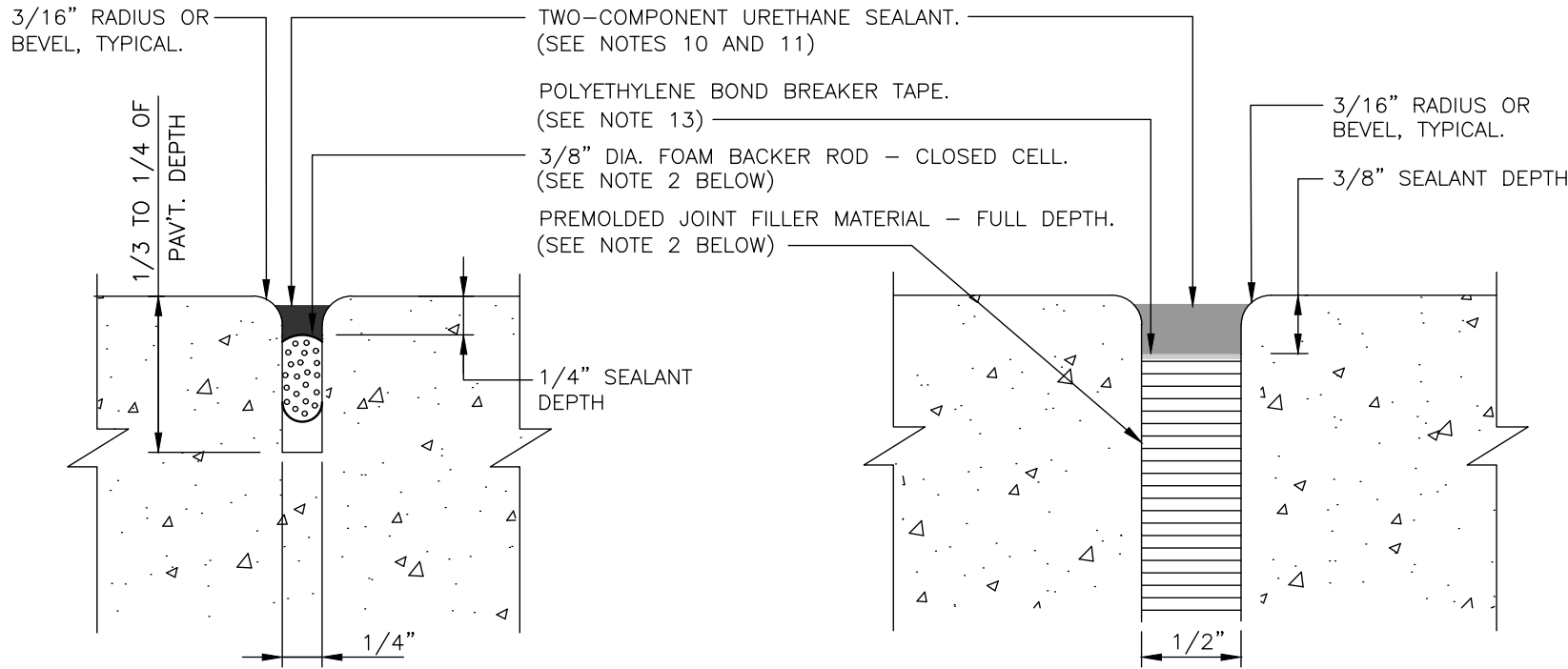
44 EAST MAIN STREET  
FROSTBURG, MARYLAND 21532

MECHANICAL SCHEDULES AND DETAILS

Drawing No.

M-4



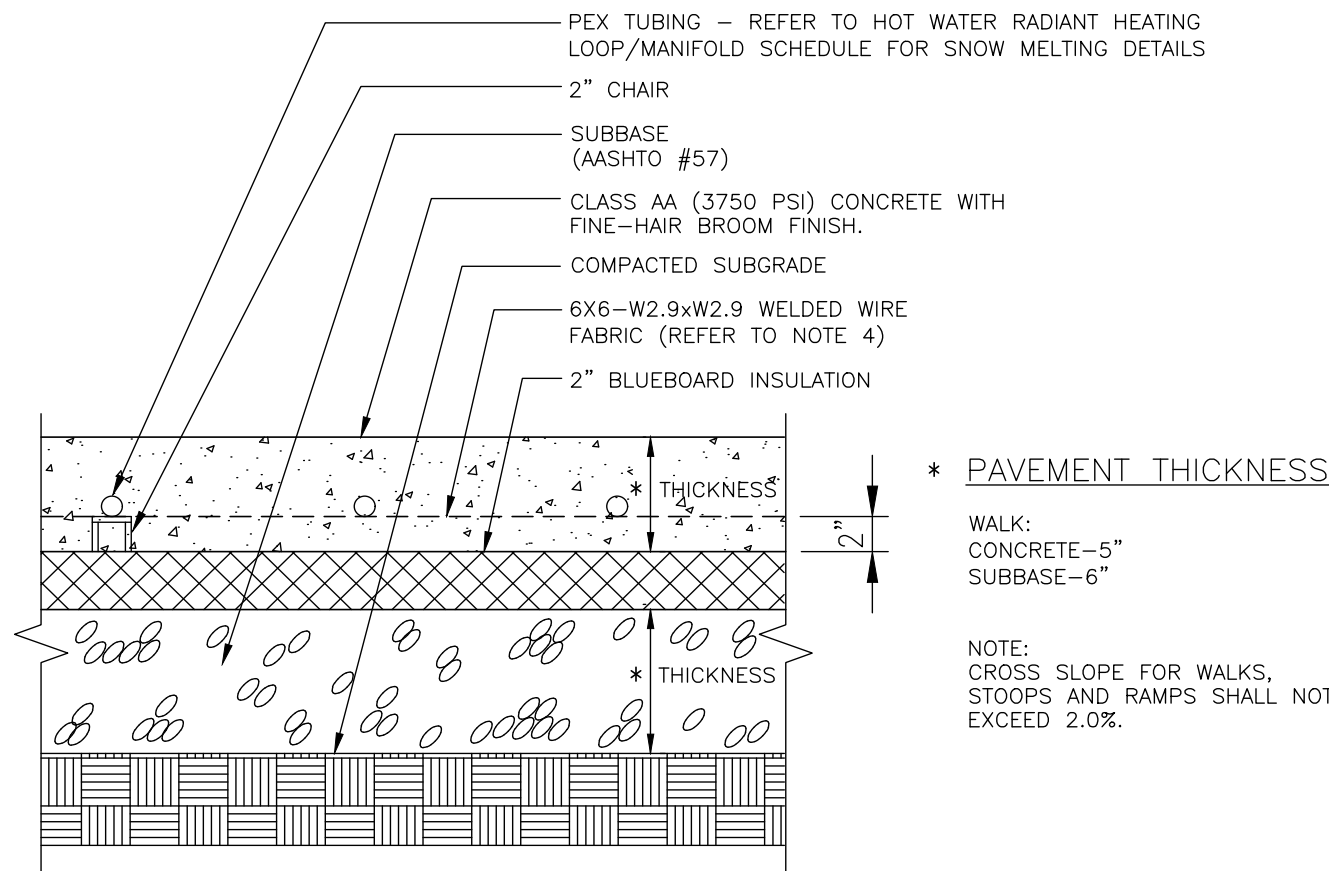


CONTRACTION JOINT - TYPICAL  
(ACTUAL SIZE SHOWN)

ISOLATION JOINT - TYPICAL  
(ACTUAL SIZE SHOWN)

JOINT NOTES

- JOINTS SHALL BE TOOLED, NOT SAWCUT.
- JOINT FILLER MATERIAL (Ø ALL ISOLATION JOINTS) SHALL BE CORK, SPONGE RUBBER OR FIBER IN ACCORDANCE W/ PENNDOT PUBLICATION 408. FOAM BACKER ROD (Ø ALL CONTRACTION JOINTS) SHALL BE MANUFACTURED FOR USE IN PAVEMENT AND WALKWAY JOINTS BY THE JOINT SEALANT MANUFACTURER.
- EADS ARCHITECTS, INC. RESERVES THE RIGHT TO DISASSEMBLE ONE (1) ISOLATION AND ONE (1) CONTRACTION JOINT AT THE CONTRACTOR'S EXPENSE TO DETERMINE COMPLIANCE WITH CONTRACT REQUIREMENTS.

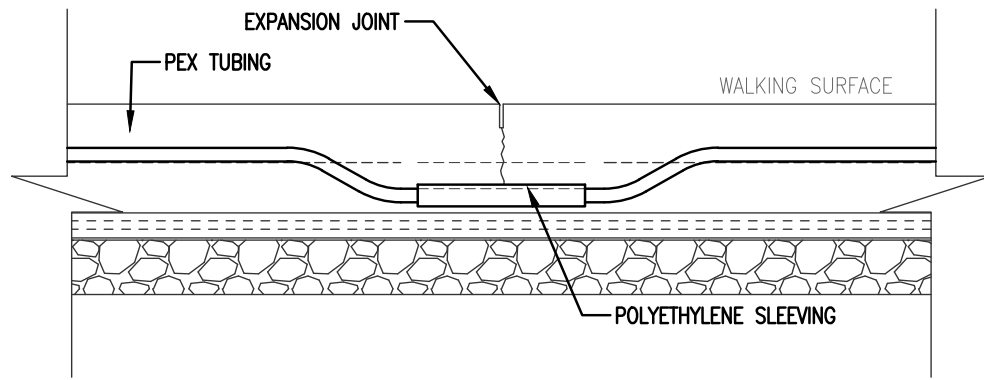


CONCRETE PAVEMENT NOTES

- CONCRETE PAVEMENT SHALL BE CLASS AA, IN ACCORDANCE WITH PENNDOT PUBLICATION 704, LATEST EDITION, UNLESS OTHERWISE NOTED. CONSTRUCTION OF CONCRETE WALKS SHALL BE IN ACCORDANCE WITH SECTION 676.
- COMPACT SUBGRADE TO 95% MAX. MODIFIED PROCTOR DRY DENSITY IN ACCORDANCE WITH ASTM D1557. REFER TO TECHNICAL SPECIFICATION SECTION 02200 FOR ADDITIONAL INFORMATION. NOTIFY ARCHITECT UPON COMPLETING SUBGRADE COMPACTION. DO NOT APPLY SUBBASE UNTIL COMPACTION HAS BEEN APPROVED BY THE TESTING AGENCY.
- DO NOT USE 2x4's FOR FORMING CONCRETE WALKS. 2x4's YIELD A CONCRETE DEPTH OF 3 1/2", WHICH IS UNACCEPTABLE.
- FURNISH WELDED WIRE FABRIC IN FLAT SHEETS, NOT ROLLS. ACCURATELY PLACE AS DETAILED. CHAIRS SHALL BE SPACED AT 2'-0" O.C. FOR MESH SUPPORT.
- ISOLATION JOINTS TO BE LOCATED WHERE CONCRETE MEETS BUILDING WALLS, FOUNDATIONS, STOOPS, AND CURBS. ISOLATION JOINTS SHALL ALSO BE CONSTRUCTED AT ANY CHANGE OF DIRECTION.
- ISOLATION JOINTS TO BE TYPICALLY SPACED AT 20'-0" INTERVALS ON WALKS.
- CONTRACTION JOINTS TO BE TYPICALLY SPACED AT 5'-0" INTERVALS ON WALKS.
- SPACE JOINTS IN CONCRETE PAVEMENT TO FORM SQUARE OR NEARLY SQUARE PANELS. THE PANEL LENGTH SHALL NOT EXCEED WIDTH BY MORE THAN 33% (MAX. ASPECT RATIO = 1.33:1.00).
- JOINT SPACING IN IRREGULAR SHAPED AREAS OF PAVEMENT OR PAVEMENT OTHER THAN WALKS SHALL BE IN COMPLIANCE WITH ACCEPTED CONSTRUCTION PRACTICES.
- THE JOINT SEALANT MATERIAL SHALL BE TWO-COMPONENT URETHANE SPECIFICALLY MANUFACTURED FOR USE AS A PAVEMENT JOINT SEALANT. SEALANT SHALL BE TYPE M, GRADE P OR SL, CLASS 25 AND USE T IN ACCORDANCE WITH ASTM C 920. THE CONTRACTOR SHALL CONSULT THE JOINT SEALANT MANUFACTURER FOR USE OF SPECIFIED SEALANT IN JOINTS OF PAVEMENT OR RAMPS WITH SLOPES GREATER THAN 5%. A GUN GRADE JOINT SEALANT WITH A TOOLED FINISH MAY BE NECESSARY FOR USE AT THESE AREAS. COMPLY WITH MANUFACTURER'S RECOMMENDATIONS. THE SEALANT COLOR SHALL MATCH THE ADJACENT CONCRETE. INSTALL SEALANT, BOND BREAKER TAPE, BACKER ROD/ PREMOLDED JOINT FILLER AS DETAILED AND IN STRICT COMPLIANCE WITH MANUFACTURER'S INSTRUCTIONS.
- THE TOP OF THE JOINT SEALANT MATERIAL SHALL NOT BE LESS THAN 1/16" NOR MORE THAN 3/16" BELOW THE SURFACE OF THE PAVEMENT.
- CUT ISOLATION JOINT FILLER MATERIAL TO CONFORM TO THE CROSS SECTION OF THE PAVEMENT AND FURNISH IN STRIPS EQUAL TO THE WIDTH OF THE PAVEMENT SLAB.
- POLYETHYLENE BOND BREAKER TAPE SHALL BE SPECIFICALLY MANUFACTURED FOR THIS APPLICATION AND RECOMMENDED BY THE SEALANT MANUFACTURER.
- NEW CONCRETE SURFACES WITH SLOPES LESS THAN 5% SHALL HAVE A FINE-HAIR BROOM FINISH PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAFFIC.
- NEW CONCRETE SURFACES WITH SLOPES EQUAL TO OR GREATER THAN 5% (I.E. HANDICAP RAMPS) SHALL HAVE A STIFF BRISTLE BROOM FINISH PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAFFIC.

CONCRETE WALKS AND RAMP DETAIL

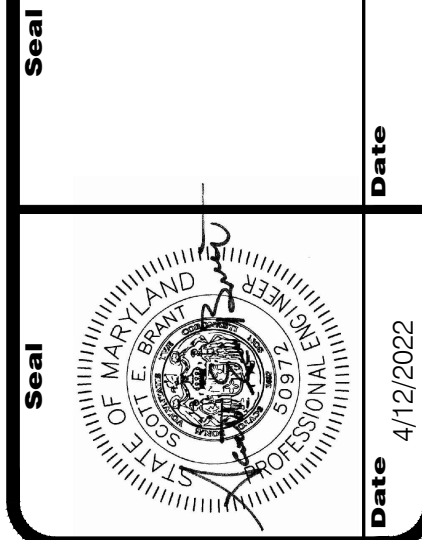
SCALE: NONE



RADIANT HEAT SLEEVE DETAIL AT EXPANSION JOINT

SCALE: NONE

Professional Certification  
I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer in the State of Maryland.  
License number 50922, expiration date 07/14/2023



Scale	Date	Revisions	No.
AS NOTED			
DATE: APRIL 2022			
DESIGNED BY: SEE			
CHECKED BY: GLE			
PROJECT NO.: 0380-19-347 (1011)			
FILE NO.: 19347 Mech Plan			

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ARCHDIOCESE OF BALTIMORE  
SAINT MICHAELS CHURCH  
SOCIAL HALL RENOVATION PROJECT  
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FROSTBURG, MARYLAND 21532  
MECHANICAL DETAILS

Drawing No.  
**M-5**

KEY TO SYMBOLS

NOTE: NOT ALL SYMBOLS INDICATED MAY APPEAR ON THESE CONTRACT DRAWINGS.

LINE LEGEND

	COLD WATER (SUPPLY)
	HOT WATER (SUPPLY)
	HOT WATER (RETURN)
	SANITARY PIPING
	VENT PIPING
	CONDENSATE DRAIN
	HYDRONIC HEATING
	NATURAL GAS
	RAINWATER CONDUCTOR
	STORM DRAIN

PIPING AND VALVE SYMBOLS

	GATE VALVE
	GLOBE VALVE
	BALL VALVE
	BALANCING VALVE
	CHECK VALVE
	SOLENOID VALVE
	AUTOMATIC CONTROL VALVE - 3 WAY
	AUTOMATIC CONTROL VALVE - 2 WAY
	FUSIBLE LINK VALVE (UL LISTED)
	RELIEF/SAFETY VALVE
	NEEDLE VALVE
	VACUUM BREAKER
	STRAINER
	GAS COCK
	PRESSURE REDUCING STATION
	PRESSURE REDUCING VALVE
	STEAM TRAP
	THERMOSTATIC AIR VENT
	PIPE RISING UP

NOTE: DASHED SYMBOLS REPRESENT EXISTING EQUIPMENT.

GENERAL SYMBOLS

	OUTSIDE WALL HYDRANT (NON-FREEZE)
	HOSE BIB
	HOSE BIB WITH CAP
	FIRE DEPT. CONNECTION
	FLOOR CLEAN OUT
	CLEAN OUT (WALL)
	FLOOR DRAIN
	ROOF DRAIN
	CONNECTION OF NEW TO EXISTING
	FIXTURE TAG
	INDICATES PLAN NOTE NUMBER
	INDICATES CROSS SECTION SEE DETAIL "A-A"
	PENDENT SPRINKLER HEAD
	UPRIGHT SPRINKLER HEAD
	SIDEWALL SPRINKLER HEAD
	1 HR FIRE WALL
	2 HR FIRE WALL
	FIXTURE OR EQUIPMENT TAG

	PIPE DROPPING DOWN
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	UNION
	ANCHOR (EXPANSION)
	GUIDE (EXPANSION)
	FLOW SWITCH
	FLOW METER
	ELECTRICALLY TRACED PIPE
	CAP OR PLUG
	THERMOMETER
	GAUGE W/GAUGE COCK AND SNUBBER (WATER)
	MANUAL AIR VENT
	AUTOMATIC AIR VENT (EXTEND DISCHARGE TO DRAIN)
	WATER HAMMER ARRESTOR
	MASTER MIXING VALVE
	AUTOMATIC BALANCING VALVE
	AUTOMATIC BALANCING VALVE ASSEMBLY
	X.X DENOTES FLOW GPM (SEE DETAIL)

THE SCOPE OF WORK SHALL INCLUDE PROVIDING ALL WORK INDICATED, AND COORDINATION WITH ALL TRADES. SCOPE OF WORK IS INDICATED ON THE CONTRACT DOCUMENTS INCLUDING THE DRAWINGS AND THE SPECIFICATIONS, WHICH ARE COMPLEMENTARY. WORK INDICATED IN ANY CONTRACT DOCUMENT SHALL BE CONSIDERED PART OF THE SCOPE OF WORK. IN GENERAL, WORK REQUIREMENTS ARE NOT INDICATED IN BOTH DOCUMENTS. WHERE DOCUMENTS CONFLICT WITHIN THEMSELVES OR WITH CODES AND REGULATIONS, PROVIDE THE HIGHER QUANTITY AND QUALITY AND FOLLOW THE STRICTER REQUIREMENTS.

VISIT THE SITE TO DETERMINE PRE-EXISTING CONDITIONS AND WORK NECESSARY PRIOR TO SUBMISSION OF BID PRICE. INCLUDE ALL REQUIRED WORK IN BID PRICE.

PROJECT NOTES

PRIOR TO CONSTRUCTION OR INSTALLATION, CONTRACTOR WILL COORDINATE WITH GENERAL CONTRACTOR AND ALL TRADES, ROUGH-IN OF PLUMBING EQUIPMENT OR EQUIPMENT FURNISHED BY OWNER. REFER TO SHOP DRAWINGS OR EQUIPMENT SPECIFICATIONS FOR EXACT REQUIREMENTS OF EQUIPMENT TO BE INSTALLED. PROVIDE ALL FITTINGS, GAUGES AND ACCESSORIES FOR A COMPLETE INSTALLATION.

ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE CODES.

EQUIPMENT COORDINATION NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS AND FOR COORDINATION OF WORK OF OTHER CONTRACTORS SO THAT WORK OF ALL TRADES WILL BE PERFORMED IN AN ORDERLY MANNER AND WITH THE LEAST POSSIBLE INTERFERENCE.
- ALL INSTALLATION WORK SHALL BE PERFORMED IN A NEAT, WORKMAN LIKE MANNER SO AS NOT TO DAMAGE ANY NEW OR EXISTING SURFACES, EQUIPMENT, ETC.
- ALL PIPING, DUCTWORK, EQUIPMENT, ETC. ON THESE DRAWINGS HAS BEEN SHOWN SCHEMATICALLY FOR CLARITY AND SHOW RELATIVE POSITIONS ONLY.
- THE CONTRACTOR SHALL EXERCISE CARE IN THE DISCONNECTION AND REMOVAL OF EQUIPMENT AND ACCESSORIES.
- PROVIDE EQUIPMENT FOUNDATIONS AS PER MANUFACTURERS RECOMMENDATIONS.
- SUPPORT EQUIPMENT AS PER MANUFACTURERS RECOMMENDATIONS.
- EQUIPMENT INSTALLATION SHALL BE AS PER MANUFACTURERS RECOMMENDATIONS.
- VALVE SIZE SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
- ALL PIPE OR SIMILAR THROUGH-PENETRATIONS OF ALL FIRE RATED WALLS, FLOORS, OR SIMILAR ASSEMBLIES, SHALL BE PATCHED WITH A FIRE STOPPING SYSTEM TO ACHIEVE A TIGHT SEAL THAT WILL MAINTAIN THE FIRE RESISTANCE RATINGS OF THE ASSEMBLY CONTAINING THE PENETRATION.
- UNLESS OTHERWISE NOTED, ALL EXISTING PLUMBING SYSTEMS AND THEIR COMPONENTS, CONTROLS, MOUNTING PADS, SUPPORTS, FITTINGS, CARRIERS, AND OTHER PLUMBING EQUIPMENT RENDERED OBSOLETE BY THE NEW WORK SHALL BE DISCONNECTED AND REMOVED.
- COORDINATE ALL SYSTEM 'SHUTDOWN' WITH THE OWNER.
- PROVIDE A MINIMUM OF 10' CLEARANCE FROM VENT PIPING TO ALL FRESH AIR INTAKES. COORDINATE WITH OTHERS.
- THE CONTRACTOR SHALL REVIEW ALL DRAWING AND SPECIFICATIONS BEFORE BEGINNING WORK.

GENERAL PROJECT NOTES

ABBREVIATIONS

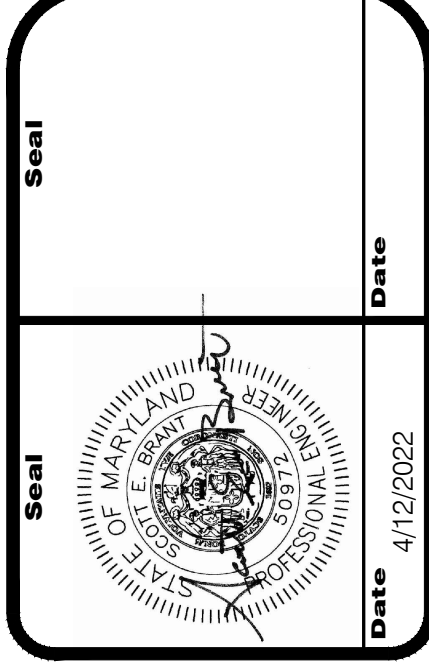
NOTE: NOT ALL ABBREVIATIONS INDICATED MAY APPEAR ON THESE CONTRACT DRAWINGS.

AD AREA DRAIN	EMER. EMERGENCY	ID INTERNAL DIAMETER	QUAN QUANTITY
AFF ABOVE FINISHED FLOOR	EA EACH	IN INCHES	RD ROOF DRAIN
A.F.G. ABOVE FINISHED GRADE	E.C. ELECTRICAL CONTRACTOR	INV INVERT	REQ'D REQUIRED
AP ACCESS PANEL	EL ELEVATION		RM ROOM
APPROX APPROXIMATE	EQUIP EQUIPMENT	KW KILOWATT	RPM REVOLUTIONS PER MINUTE
AHU AIR HANDLING UNIT	EXIST EXISTING	Lb LBS/HR	RWC RAINWATER CONDUCTOR
B.F.F. BELOW FINISHED FLOOR	* F DEGREES FAHREHEIT		
B.G. BELOW FINISHED GRADE	FCV FLOW CONTROL VALVE		
BLDG BUILDING	FD-X FLOOR DRAIN - TYPE	MBH THOUSANDS OF BTU PER HOUR	
BSMT BASEMENT	FE FIRE EXTINGUISHER	M.C. MECHANICAL CONTRACTOR	SAN SANITARY
BTU BRITISH THERMAL UNITS	FEC FIRE EXTINGUISHER CABINET	MCA MEDICAL COMPRESSED AIR	SP.C. SPRINKLER CONTRACTOR
BV BUTTERFLY VALVE	FLEX FLEXIBLE	MAX MAXIMUM	SQ SQUARE
CA COMPRESSED AIR	FLR FLOOR	MFR MANUFACTURER	SS STAINLESS STEEL
CFH CUBIC FEET PER HOUR	FOT FLAT ON BOTTOM	MIN MINIMUM	ST STANDARD
CFM CUBIC FEET PER MINUTE	FOT FLAT ON TOP	MISC MISCELLANEOUS	STD STANDARD
CI CAST IRON	FP FIRE PROTECTION	MTD MOUNTED	STL STEEL
C CL	FPM FEET PER MINUTE		
CLG CULING	FPS FEET PER SECOND	NRS NON RISING SYSTEM	TC TERRA COTTA
COL COLUM	FT FEET	NC NORMALLY CLOSED	TDH TOTAL DYNAMIC HEAD
CONC CONCRETE		NO NOT IN CONTRACT	TEMP TEMPERATURE
COND CONDENSATE		NTS NOT TO SCALE	TP TOTAL PRESSURE
CW COLD WATER	GAL GALLON		TYP TYPICAL
	GALV GALVANIZED		UV ULTRAVIOLET
	G.C. GENERAL CONTRACTOR	OCC OCCUPIED	
	GND. GROUND	OFE OWNER FURNISHED EQUIPMENT	
	GPD GALLONS PER DAY	OZ OUNCE	V VOLTS
	GPH GALLONS PER HOUR	O2 OXYGEN	VAC VACUUM
	GPM GALLONS PER MINUTE	ORD OVERFLOW ROOF DRAIN	VCP VITRIFIED CLAY PIPE
			VEL VELOCITY
			VOLT VOLTAGE
			VTR VENT THRU ROOF
	HB HOSE BIB	P.C. PLUMBING CONTRACTOR	
	H.C. HEATING CONTRACTOR	PD PRESSURE DROP	
	HD HEAD	PERF PERFORATED	
	HP HORSEPOWER	PRES PRESSURE	W/ WITH
	HR HOUR	PSI POUNDS PER SQUARE INCH	W/O WITHOUT
	HT HEIGHT	PS PRESSURE SWITCH	WC WATER COLUMN
	HW HOT WATER	PVC POLYVINYL CHLORIDE	WG WATER GAUGE
	HW HOT WATER RETURN		WH WATER HEATER
	HZ HERTZ		

PIPING MATERIALS							
SERVICE	LOCATION	SIZE	MATERIAL	FITTINGS	UNIONS & FLANGES	JOINTS	INSULATION/ EXTERIOR COATING
SANITARY WASTE	ALL	ALL	SOLID WALL PVC SCHEDULE 40	-	-	SOLVENT CEMENT APPLY PURPLE PRIMER PRIOR TO APPLYING CEMENT	-
SANITARY VENT	ALL	ALL	SOLID WALL PVC SCHEDULE 40	-	-	SOLVENT CEMENT APPLY PURPLE PRIMER PRIOR TO APPLYING CEMENT	-
DOMESTIC COLD WATER	ABOVE GRADE	ALL	COPPER TUBE SEAMLESS - TYPE "L"	COPPER	SWEAT-END UNIONS #150 BRASS GROUND JOINT CONNECT TO STEEL OR WITH DIELECTRIC ADAPTERS	SOLDERED 95-5 TIN ANTIMONY (LEAD CONTENT CERTIFIED LESS THAN 0.2%) OR VIEGA PROGRESS	1/2" FIBERGLASS WITH ASJ OR CLOSED-CELL FLEXIBLE ELASTOMERIC WITH INTEGRATED VAPOR BARRIER (k < 0.27)
DOMESTIC COLD WATER	BELOW GRADE	ALL	POLYETHYLENE (PE) PLASTIC PIPE	NO FITTINGS ALLOWED BELOW GRADE	NO FITTINGS ALLOWED BELOW GRADE	NO FITTINGS ALLOWED BELOW GRADE	-
DOMESTIC HOT WATER AND HOT WATER RECIRCULATION	ALL	ALL	COPPER TUBE SEAMLESS - TYPE "L"	COPPER	SWEAT-END UNIONS #150 BRASS GROUND JOINT CONNECT TO STEEL OR WITH DIELECTRIC ADAPTERS	SOLDERED 95-5 TIN ANTIMONY (LEAD CONTENT CERTIFIED LESS THAN 0.2%) OR VIEGA PROGRESS	1-1/2" FIBERGLASS WITH ASJ OR CLOSED-CELL FLEXIBLE ELASTOMERIC (k < 0.27)
GAS PIPING	< 1/2 PSIG	ALL	BLACK STEEL SCHEDULE 40 ASTM A53	#150 BLACK MALLEABLE IRON SCREWEDANSI B16.3 BUSHINGS AND STREET ELBOWS PROHIBITED	-	THREADED	PAINTED YELLOW

NOTE: DO NOT SCALE DRAWING.  
IT IS THE RESPONSIBILITY OF EACH CONTRACTOR AND SUBCONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND ALL DIMENSIONS PRIOR TO BIDDING AND BEFORE BEGINNING ANY WORK. EACH CONTRACTOR IS TO FULLY COORDINATE HIS WORK WITH THAT OF OTHER TRADES. REFER TO THE CONTRACT AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

Professional Certification  
I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer in the State of Maryland, license number 50922, expiration date 07/14/2023.



Scale	Date	Revisions	No.
AS NOTED			
DATE			
APRIL 2022			
DESIGNED BY			
SEEN			
CHECKED BY			
GLE			
PROJECT NO.			
0380-19-347 (1011)			
FILE NO.			
19347 Mech Plan			

450 ABERDEEN DRIVE  
SOMERSET, PA. 15501  
Phone: 814-445-6851  
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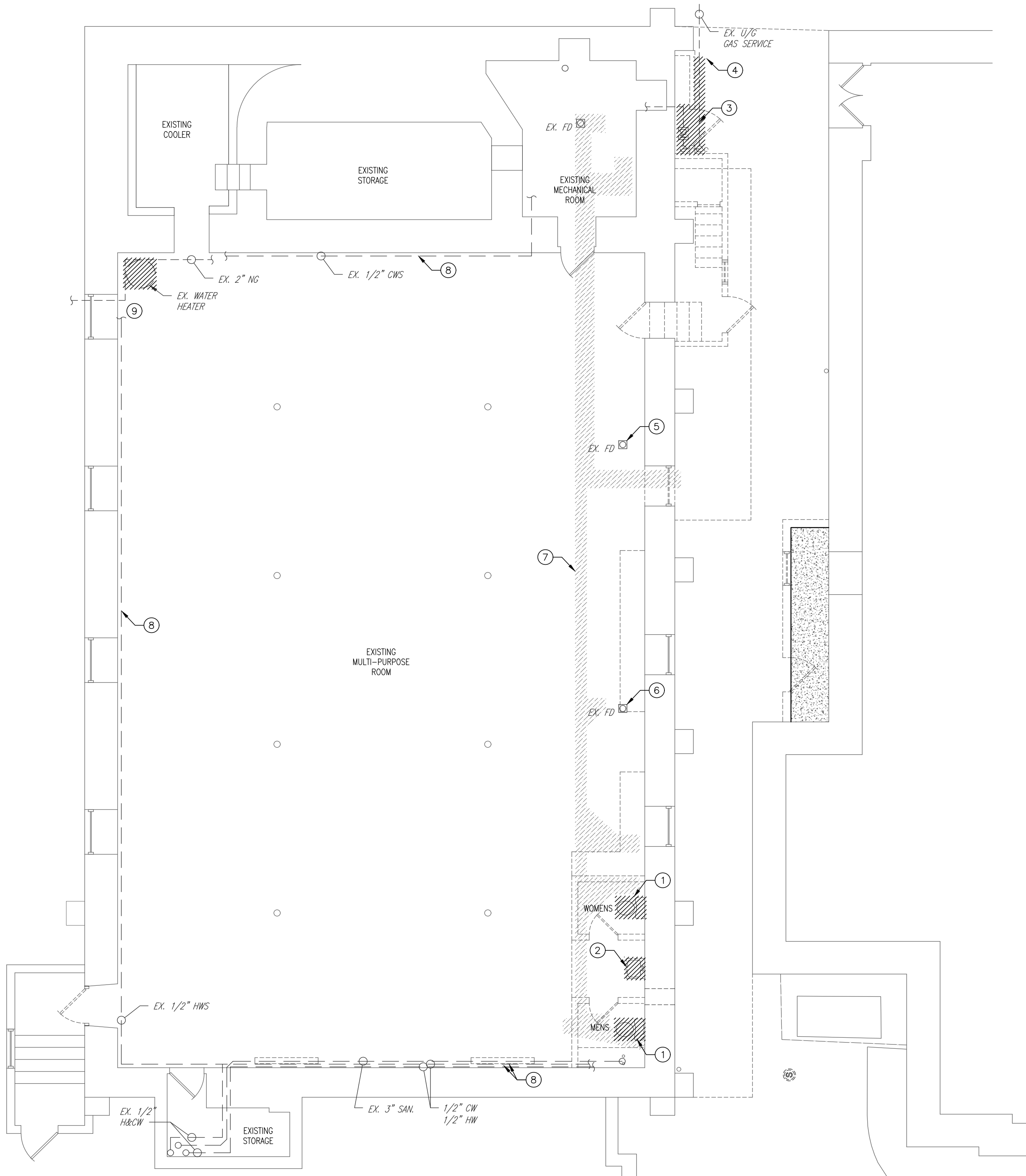
REGISTERED IN  
ALABAMA, PA.  
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ARCHDIOCESE OF BALTIMORE  
SAINT MICHAELS CHURCH  
SOCIAL HALL RENOVATION PROJECT

44 EAST MAIN STREET  
FROSTBURG, MARYLAND 21532

PLUMBING PROJECT INFORMATION

Drawing No.  
**P-1**



PLUMBING DEMO PLAN

SCALE: 3/16" = 1'-0"

GENERAL NOTES

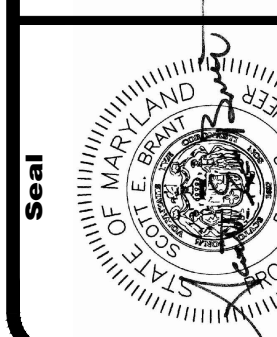
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3. EQUIPMENT INSTALLATION SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS.
4. PIPING, DUCTWORK, CONDUITS, ETC. SHALL NOT BE LOCATED BELOW HVAC EQUIPMENT OR INTERFERE IN ANY WAY WITH EQUIPMENT ACCESS.
5. PROVIDE MATERIALS AND EQUIPMENT WITH LESS THAN 8-PERCENT LEAD CONTENT. FLUXES AND SOLDERS SHALL BE LEAD FREE.
6. SLOPE DRAINAGE AND VENT PIPING APPROPRIATELY FOR SIZE, AS REQUIRED BY CODE. ALL CHANGES OF DIRECTION SHALL BE MADE WITH APPROPRIATE SWEEPS AND BENDS. DO NOT CHANGE DIRECTION OF FLOW GREATER THAN 90 DEGREES. INSTALL BURIED DRAINAGE PIPING BEGINNING AT LOW POINT OF SYSTEM. PLACE HUB ENDS OF PIPING UPSTREAM. REDUCING SIZE OF DRAINAGE PIPING IN DIRECTION OF FLOW IS PROHIBITED. PROVIDE CLEANOUTS AS REQUIRED BY CODE, WHETHER EXPLICITLY SHOWN OR NOT.
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9. PROVIDE FLASHINGS REQUIRED FOR BUILDING ENVELOPE PENETRATIONS ASSOCIATED WITH THE PLUMBING SYSTEMS TO MAINTAIN THE BUILDING ENVELOPE IN ITS UNALTERED CONDITION. PROVIDE INSULATION SHIELDS WHERE FUEL GAS VENTS PENETRATE INSULATED ASSEMBLIES.
10. LOCATE PLUMBING AND FUEL GAS VENTS AS REQUIRED BY THE CODE, AWAY FROM BUILDING OPENINGS, AND AS AUTHORIZED BY THE ARCHITECT. PROVIDE INSECT SCREENS AND TERMINATIONS, AS REQUIRED BY CODE.
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12. PROVIDE DIELECTRIC NIPPLES AT ALL TRANSITIONS BETWEEN FERROUS AND NON-FERROUS PIPING. NIPPLES SHALL BE STEEL, THREADED, LINED WITH AN INERT MATERIAL AND RATED AT 300 PSI. PROVIDE SHUTOFF VALVE IMMEDIATELY UPSTREAM OF EACH DIELECTRIC FITTING.
13. ALL PIPING SHALL BE RUN PARALLEL OR PERPENDICULAR TO BUILDING WALLS. PROVIDE PIPING, FITTINGS AND JOINTS PER THE PIPING SCHEDULE AND SPECIFICATIONS.
14. INSTALL ALL DISTRIBUTION PIPING ON THE INTERIOR SIDE OF THE WALL CAVITY INSULATION, FOR ANY LOCATIONS IN EXTERIOR WALLS.
15. ALL UNDER SLAB DRAIN PIPING SHALL BE 3" (MIN.) IN SIZE, OR IN ACCORDANCE WITH ANY AND ALL LOCAL REQUIREMENTS.
16. PROVIDE UNIONS, DRIPS AND SEDIMENT TRAPS AT EACH PIECE OF GAS UTILIZING EQUIPMENT, AS REQUIRED BY CODE AND/OR MANUFACTURER RECOMMENDATIONS.
17. PROVIDE PRESSURE REGULATORS AT EACH PIECE OF GAS UTILIZING EQUIPMENT SUITABLE FOR THE SYSTEM PRESSURE AND EQUIPMENT, AS REQUIRED. PROVIDE A VENT IN ACCORDANCE WITH CODE FOR ALL PRESSURE REGULATORS.
18. PROVIDE CONDENSATE DRAIN SYSTEM FOR ALL REQUIRED FUEL BURNING APPLIANCES AND AIR CONDITIONING COILS INCLUDING TRAP, AUXILIARY DRAIN SYSTEM AND PIPING FROM DRAINS. CONNECT FUEL BURNING APPLIANCE AND AIR CONDITIONING CONDENSATE DRAIN TO SANITARY WASTE OR STORM SYSTEM, AS PERMITTED BY THE LOCAL AUTHORITY. PROVIDE AND INSTALL CONDENSATE NEUTRALIZATION KITS, IN ACCORDANCE WITH FUEL BURNING APPLIANCE MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS OF LOCAL AUTHORITY. PROVIDE COMPLETE CODE MANDATED AUXILIARY DRAIN SYSTEM OF PIPING OR WATER LEVEL DETECTION AT CONTRACTORS OPTION.
19. COORDINATE WITH THE LOCAL WATER, WASTEWATER AND NATURAL GAS AUTHORITIES/UTILITIES FOR CONNECTION DETAILS AND REQUIREMENTS. PROVIDE ALL "CUSTOMER SUPPLIED" MATERIALS REQUIRED BY THE AUTHORITIES/UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
20. ALL INDOOR FUEL GAS PIPING SHALL BE PAINTED YELLOW OR OTHERWISE IDENTIFIED ALONG ITS ENTIRE LENGTH. ALL OUTDOOR FUEL GAS PIPING SHALL BE PAINTED YELLOW.
21. CONTRACTOR IS RESPONSIBLE FOR PATCHING ALL EXISTING AND NEW PENETRATIONS TO WALLS, FLOORS OR OTHER FINISHES RESULTING FROM THE DEMOLITION, REPLACEMENT OR INSTALLATION OF WORK INDICATED WITHIN THESE PLANS.

DEMOLITION NOTES

1. REMOVE EXISTING WATER CLOSET, WATER SUPPLY AND DRAIN PIPING AND ACCESSORIES.
2. REMOVE EXISTING WALL MOUNTED LAVATORY, FAUCET, HOT AND COLD WATER SUPPLY AND DRAIN PIPING AND ACCESSORIES.
3. EXISTING GAS SERVICE TO BE RELOCATED. COORDINATE WITH UTILITY TO DISCONNECT AND RELOCATE METER. SAWCUT AND TRENCH AS REQUIRED TO EXPOSE GAS SERVICE LINE, CONNECT AND RUN NEW UNDERGROUND LINE TO PROPOSED GAS METER LOCATION.
4. INSTALL 6" CONCRETE FILLED BOLLARD. BOLLARD TO BE PAINTED. PAINT COLOR TO BE SELECTED BY OWNER AND/OR ARCHITECT.
5. EXISTING FLOOR DRAIN TO BE REMOVED. CUT AND CAP PIPE BELOW FLOOR SLAB.
6. EXISTING FLOOR DRAIN TO BE RELOCATED. FLOOR DRAIN BODY AND TRAP TO BE REPLACED WITH NEW.
7. FLOOR IN THIS AREA TO BE SAWCUT AND TRENCHED TO ALLOW NEW UNDERSLAB DRAIN AND SNOW MELT SYSTEM LINES.
8. EXISTING 1/2" WATER SUPPLY LINE TO BE REMOVED.
9. REMOVE EXISTING COOKING APPLIANCE GAS LINES BACK TO AND INCLUDING THE PRESSURE REGULATORS.

NOTE: DO NOT SCALE DRAWING.  
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Professional Certification  
I certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer in the State of Maryland, license number 50922, expiration date 07/14/2023.



Scale	Date	Revisions	No.
AS NOTED			
DATE: APRIL 2022			
DESIGNED BY: SEE			
CHECKED BY: GLE			
PROJECT NO.: 0380-19-347 (1011)			
FILE NO.: 19347 Mech Plan			



**EADS ARCHITECTS INC.**  
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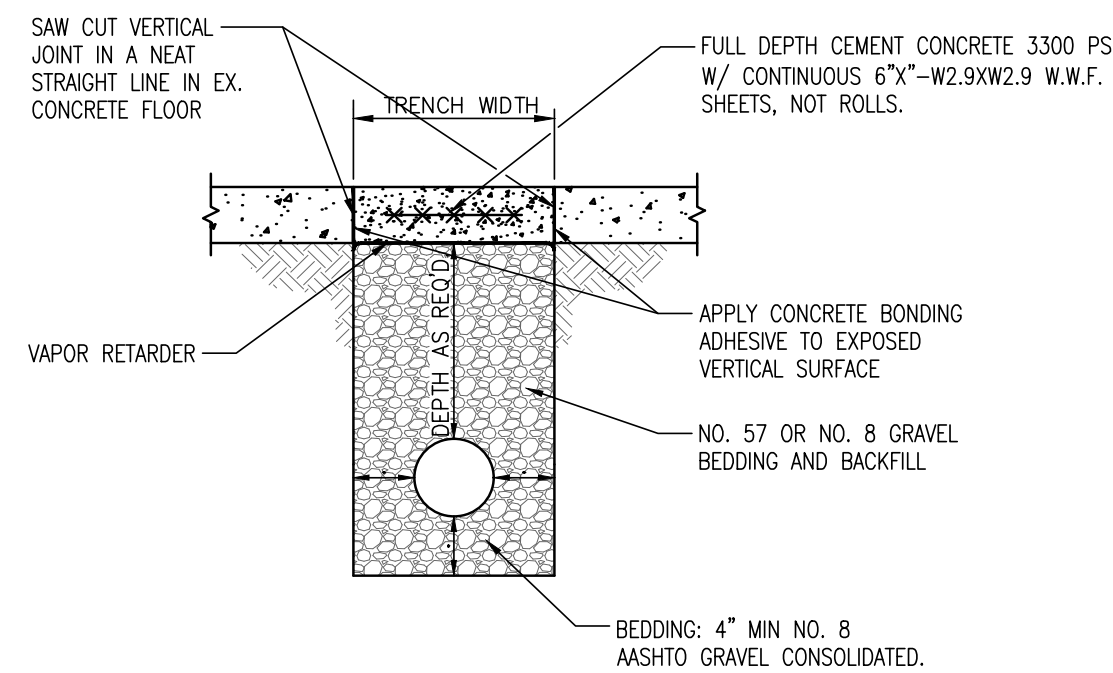
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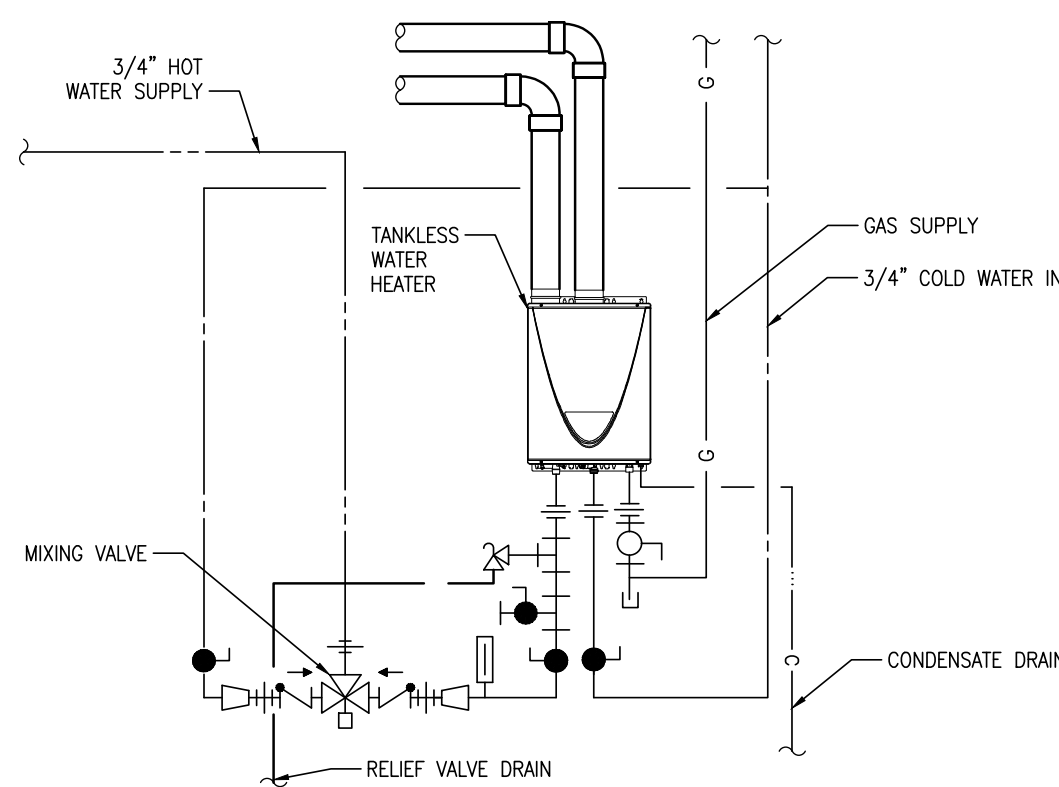
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PLUMBING DEMO PLAN

Drawing No.  
**P-2**









## TRENCH BEDDING AND BACKFILL INSIDE BUILDING



LINE LEGEND

	COLD WATER SUPPLY
	HOT WATER SUPPLY
	HOT WATER RETURN
	SANITARY PIPING
	VENT PIPING

MARK	IDENTIFICATION	MANUFACTURER AND MODEL	ADA / ANSI A117.1 COMPLIANT	REMARKS
WC-1	ADA WATER CLOSET	KOHLER K-25077	YES	- FLOOR MOUNTED, ADA HEIGHT, ELONGATED BOWL - PROVIDE FLUSH VALVE LEVER TOWARDS THE OPEN SIDE OF THE RESTROOM - PROVIDE OPEN FRONT MATCHING TOILET SEAT
L-1	WALL MOUNTED LAVATORY	KOHLER K-2084	YES	- PROVIDE TRUEBRO LAV GUARD 2 UNDERSINK COVERS - SINGLE FAUCET HOLE
	FAUCET	KOHLER K-13472	YES	- 0.5 GPM FLOW RATE, BATTERY POWERED TOUCHLESS SENSOR, INTEGRATED MIXING VALVE
DF-1	BI-LEVEL WATER COOLER	ELKAY LZSTL8WSLK	YES	- REFRIGERATED, FILTERED AND EQUIPPED WITH BOTTLE FILLING STATION
HB-1	NON-FREEZE HOSE BIB	ZURN Z1320XL	-	- HINGED LOCKING COVER - COORDINATE HOSE BIB WITH WALL THICKNESS

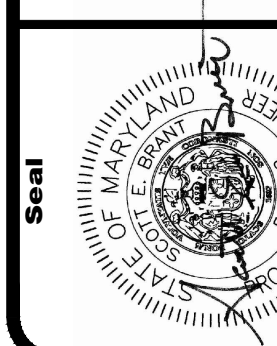
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☐ SHEET KEYNOTES

1. 60" LONG TRENCH DRAIN WITH ADA COMPLIANT GRATE.
2. CONNECT 4" DRAIN TO EXISTING SANITARY LATERAL OR MANHOLE STRUCTURE.
3. SPRINKLER LEAN IN REMOVED LEAN-TO STRUCTURE TO BE REMOVED. CUT AND CAP SPRINKLER PIPE BACK INSIDE BUILDING NEXT DOOR.
4. NEW SANITARY LINE TO BE INSTALLED IN TRENCH BENEATH SLAB. BACKFILL TRENCH AND PATCH CONCRETE.
5. 4.5 KW TANKLESS WATER HEATER, AO SMITH RPIA-45E OR APPROVED EQUAL. PROVIDE ASSE 1070 TEMPERATURE LIMITING DEVICE.
6. ROUTE 2" VENT AND CONNECT TO EXISTING VENT SYSTEM.
7. NEW CONCRETE FILLED BOLLARD. SEE SITE PLANS FOR DETAILS.
8. INSTALL NEW GAS LINE PRESSURE REGULATOR AND NEW 1-1/4" B.S. GAS LINE TO COOKING LINE. PROVIDE TEE AND 1" SHUTOFF VALVE BEHIND EACH (4) COOKING APPLIANCE. COORDINATE WITH EQUIPMENT SUPPLIER FOR PRESSURE REQUIREMENTS AND SUPPLY LOCATIONS.
9. 9" DRAINAGE HEAVY DUTY AREA DRAIN, ZURN MODEL 2520, OR APPROVED EQUAL. PROVIDE HEEL-PROOF GRATE, 4" OUTLET AND FULL SIZE TRAP.

Professional Certification  
I 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 number 50972, expiration date 07/14/2023.



Scale	No.	Revisions	Date
AS NOTED			
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**ARCHDIOCESE OF BALTIMORE  
SAINT MICHAELS CHURCH  
SOCIAL HALL RENOVATION PROJECT**

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**44 EAST MAIN STREET  
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**PLUMBING FLOOR PLAN**

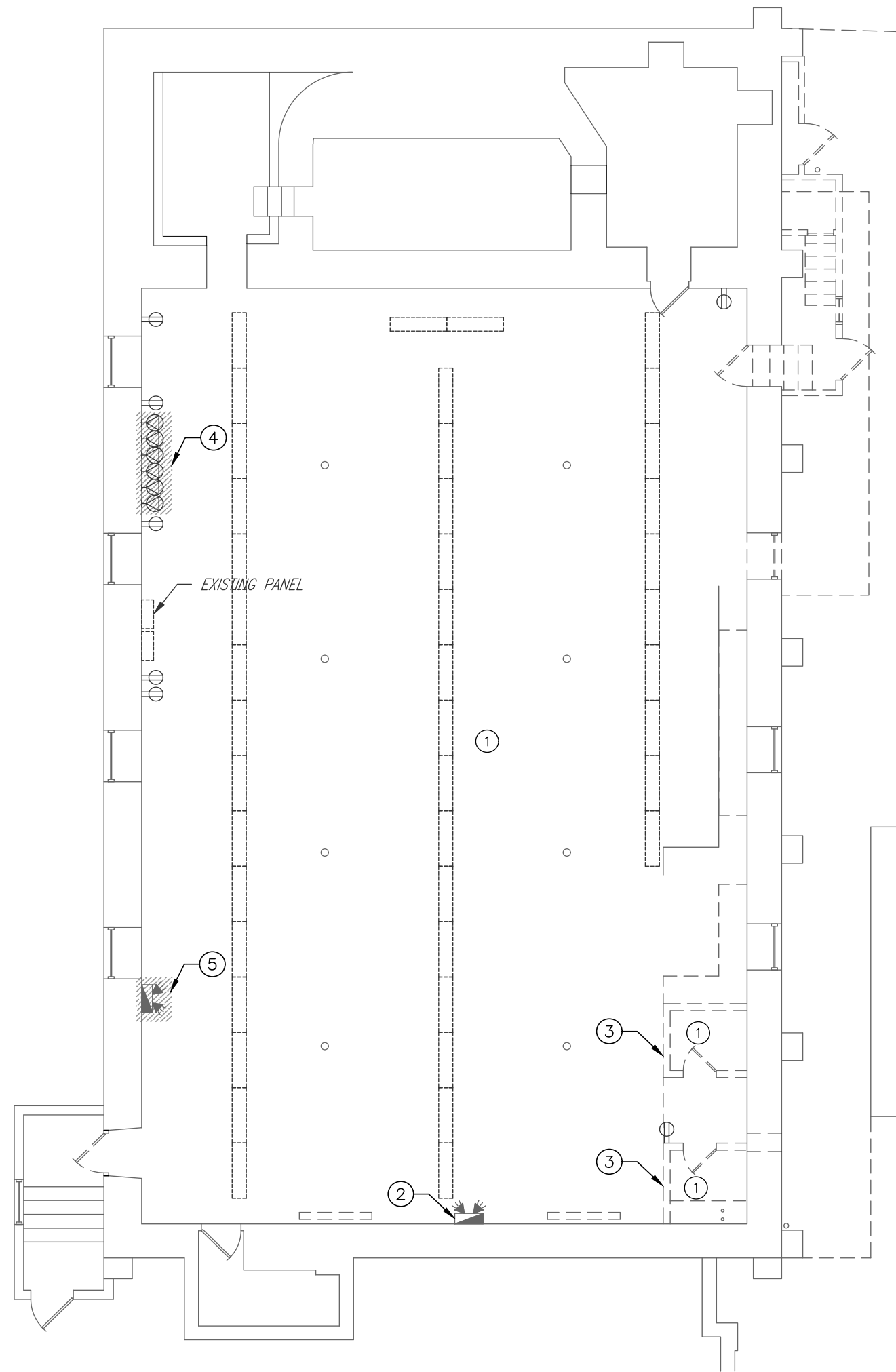
**Drawing No.**  
**P-3**

SERVICE WATER HEATER SCHEDULE											
MARK	LOCATION	TYPE	BASIS OF DESIGN		STORAGE CAPACITY	FLOW RATE @ 90 °F RISE	FUEL		ELECTRICAL CONNECTION		REMARKS
			MANUFACTURER	MODEL			GAL	GPM	TYPE	INPUT (MBH)	
WH-1	KITCHEN AREA	TANKLESS - CONDENSING	A.O. SMITH	CT-199	-	4.0	NG	199	15	120	1 - 2

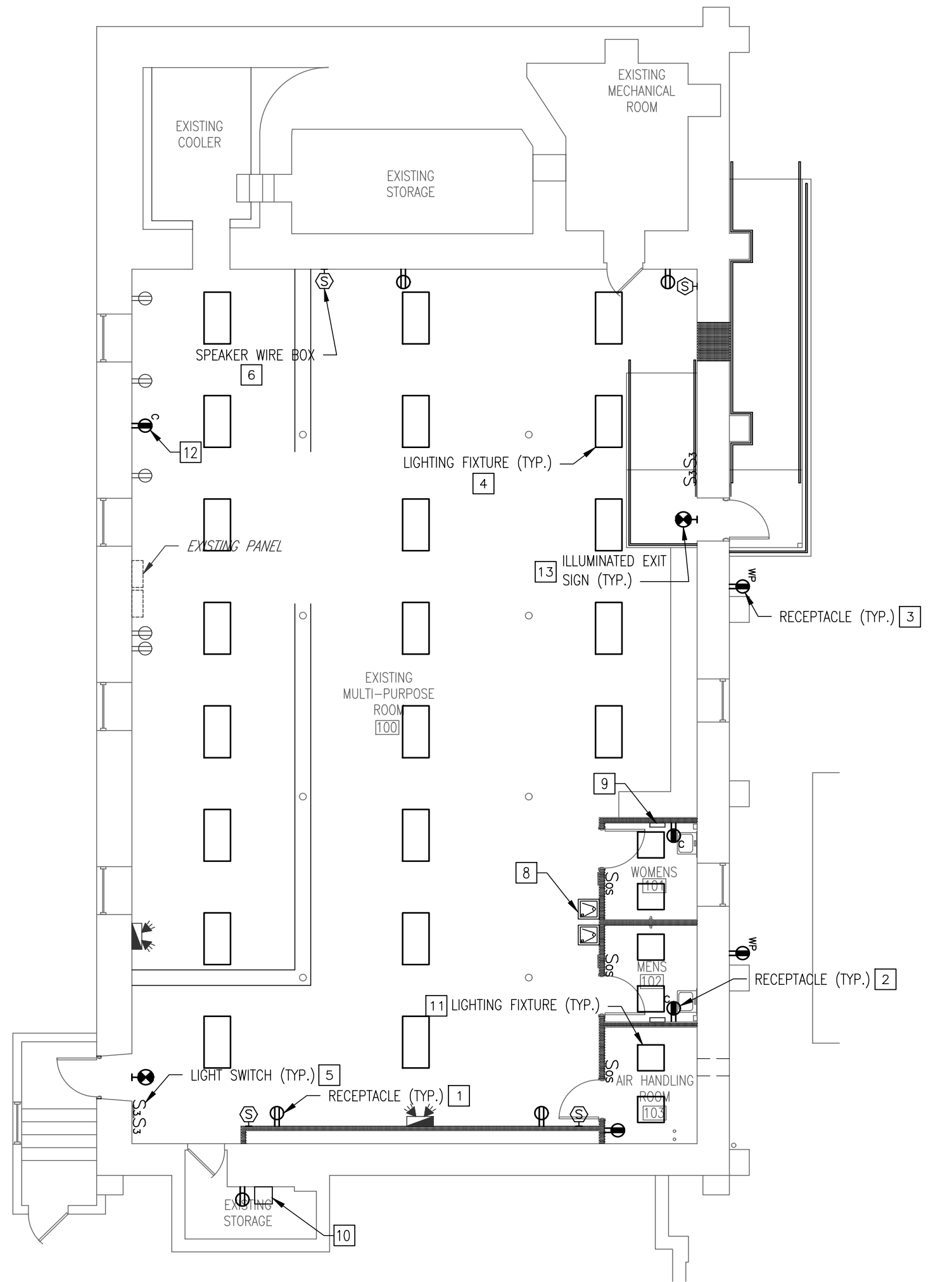
**NOTES:**

- 1. PROVIDE 3" APPROVED PLASTIC VENT AND COMBUSTION AIR INTAKE THROUGH WALL. INSTALL AND TERMINATE PER MANUFACTURER RECOMMENDATIONS. INSTALL VENT AT LEAST 10' FROM ANY OUTDOOR AIR INTAKES.**
- 2. PROVIDE CONDENSATE NEUTRALIZATION KIT AND ROUTE TO APPROVED DRAIN RECEPTOR.**





EXISTING BASEMENT FLOOR PLAN - ELECTRICAL DEMOLITION  
SCALE: 1/8" = 1'-0"



PROPOSED BASEMENT FLOOR PLAN - POWER AND LIGHTING PLAN  
SCALE: 1/8" = 1'-0"

## ELECTRICAL LEGEND

**NOTES:**  
A. NOT ALL SYMBOLS INDICATED MAY APPEAR ON THESE CONTRACT DRAWINGS.  
B. DASHED SYMBOLS REPRESENT EXISTING EQUIPMENT TO REMAIN AND BE RECONNECTED.

## LIGHTING

LED LIGHTING FIXTURE - 2'X2'  
LED LIGHTING FIXTURE - 4' LONG

## POWER EQUIPMENT

EXISTING PANEL - SURFACE  
NEW PANELBOARD - SURFACE

## WIRING DEVICES

SWITCH - THREE WAY  
SWITCH - WITH OCCUPANCY SENSOR  
RECEPTACLE - DUPLEX  
RECEPTACLE - W/ GROUND FAULT INTERRUPTER  
RECEPTACLE - W/ GROUND FAULT INTERRUPTER MOUNTED ABOVE COUNTER  
RECEPTACLE - W/ GROUND FAULT INTERRUPTER AND WHILE-IN-USE COVERPLATE  
SPECIAL PURPOSE OUTLET - WALL  
SPEAKER WIRE BOX - WALL

## MOUNTING HEIGHTS

DATA OUTLET - WALL:  
SAME AS RECEPTABLES.  
LIGHT FIXTURE - WALL:  
SEE SPECIFICATIONS OR LIGHT FIXTURE SCHEDULE FOR MOUNTING HEIGHT.  
SWITCH - LIGHTING:  
42" ABOVE FLOOR ON STRIKE SIDE OF DOOR. WHERE SWITCHES OCCUR IN BRICK, TILE OR BLOCK WALLS, THEY SHALL BE MOUNTED AT VERTICAL MASONRY JOINT AND IN EITHER TOP OR BOTTOM HORIZONTAL JOINT, WHICHEVER IS CLOSEST TO THE MOUNTING HEIGHT. WHERE SWITCH HEIGHT OCCURS AT POINT OF CHANGE OF FINISH, THEY SHALL BE RAISED OR LOWERED TO OCCUR IN ONE FINISH.

PANELBOARD:  
TOP OF TRIM 6'-0" ABOVE FINISHED FLOOR. IF PANELBOARD IS OVER 6'-0" TALL, MOUNT BOTTOM EDGE OF PANELBOARD 6" ABOVE FINISHED FLOOR.  
RECEPTACLE - WALL:  
RECEPTABLES OCCURRING IN STRUCTURAL TILE, BRICK OR BLOCK WALLS SHALL BE LOCATED ABOVE MASONRY JOINTS NEAREST THE APPROPRIATE MOUNTING HEIGHT AS INDICATED BELOW.

FINISHED SPACE  
STANDARD:  
18" ABOVE FINISHED FLOOR. WHERE INTERFERENCE WITH HEATING EQUIPMENT REQUIRES HIGHER MOUNTING, MOUNT AS DIRECTED BY THE ARCHITECT.  
COUNTERS:  
6" ABOVE BACK SPLASH OF COUNTER. CONSTRUCTION OF COUNTERS AND HEIGHTS OF BACKS SHALL BE VERIFIED BY THE CONTRACTOR BEFORE ROUGHING-IN.  
UNFINISHED SPACE:  
42" ABOVE FINISHED FLOOR EXCEPT WHERE INTERFERENCE WITH MECHANICAL EQUIPMENT REQUIRES HIGHER MOUNTING.  
EXTERIOR - WALL:  
24" ABOVE FINISHED FLOOR. IF RECEPTACLE IS LESS THAN 24" ABOVE FINISHED GRADE, INCREASE MOUNTING HEIGHT TO MAINTAIN 24" ABOVE FINISHED GRADE.

**MOUNTING HEIGHT NOTES**  
MH1. UNLESS INDICATED OTHERWISE ON THE PLANS OR AS DIRECTED BY THE ARCHITECT, CENTER-LINE OF DEVICE SHALL BE AS INDICATED ABOVE.  
MH2. WHERE MOUNTING HEIGHTS ARE NOT DETAILED OR DIMENSIONED, THE CONTRACTOR SHALL INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT TO PROVIDE THE MAXIMUM HEADROOM POSSIBLE AND COMPLY WITH THE REQUIREMENTS OF EQUIPMENT MANUFACTURER.

## GENERAL NOTES

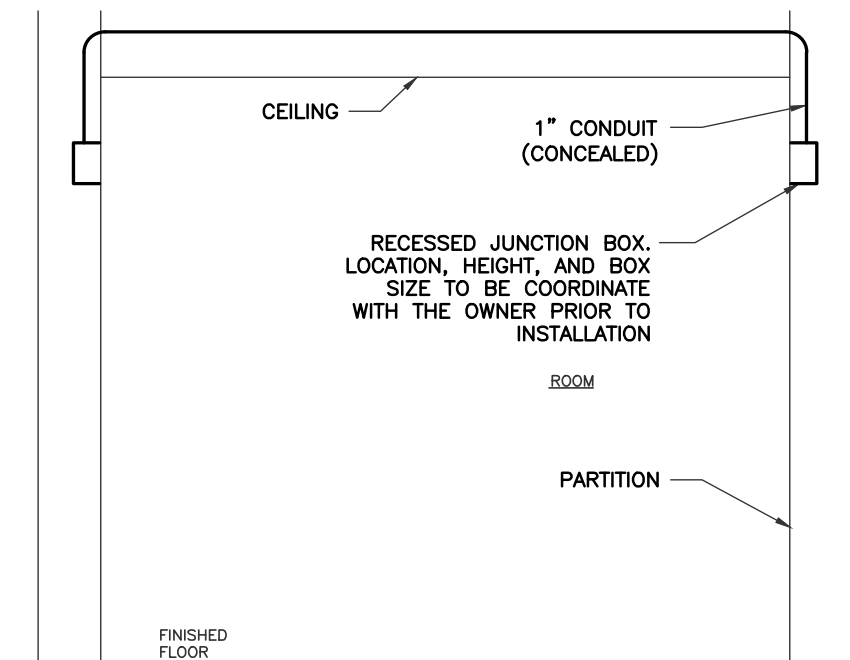
- ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF PUBLIC BODIES BEARING ON THE CONDUCT OF THE WORK ARE HEREBY INCORPORATED AND MADE A PART OF THESE SPECIFICATIONS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
  - INTERNATIONAL CODE COUNCIL (ICC) CODES.
  - CITY AND LOCAL CODES AND ORDINANCES.
  - MARYLAND BUILDING PERFORMANCE STANDARDS.
  - OWNER'S INSURING AGENCY.
- UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL APPLURTEANCE INCLUDING, BUT NOT LIMITED TO, DISTRIBUTION AND GENERATING EQUIPMENT, WIRING DEVICES, LIGHTING FIXTURES, SPECIAL SYSTEMS, ETC. BOTH INTERIOR AND EXTERIOR NOT REQUIRED AS A PART OF THE RENOVATED SYSTEM(S). RACEWAY AND CONDUCTORS ASSOCIATED WITH THE OBSOLETE EQUIPMENT SHALL BE REMOVED, COMPLETE, BACK TO THEIR SOURCE. FURNISH AND INSTALL PROPOSED ELECTRICAL APPLURTEANCE AS INDICATED.
- ALL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, INCLUDING AMENDMENTS, AND ALL APPLICABLE STATE AND LOCAL CODES.
- INSTALL RACEWAYS, BOXES, ENCLOSURES, AND CABINETS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR THE INTENDED INSTALLATION ENVIRONMENT.
- ALL WIRING SHALL BE COORDINATED WITH THE OVERCURRENT PROTECTION DEVICE. MINIMUM SIZE OF CONDUCTORS SHALL BE #12 IN THE EVENT THE CODE WOULD ALLOW A SMALLER SIZE. ALL FEEDER AND BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER TYPE THHN/THWN-2 WITH GROUND IN A METALLIC RACEWAY SYSTEM WITH A MAXIMUM VOLTAGE DROP AS REQUIRED BY CODE. SOLID CONDUCTOR SHALL BE USED FOR #10 AND #12, STRANDED FOR LARGER THAN #10.
- THIS CONTRACTOR SHALL CONTACT THE ELECTRIC UTILITY FOR SPECIFIC INSTRUCTIONS REGARDING THEIR SERVICE REQUIREMENTS. ALL SERVICE WORK SHALL BE IN COMPLETE COMPLIANCE WITH THE UTILITY'S REQUIREMENTS AND THE NEC.
- CODE ANALYSIS:
  - PER THE 2018 IBC:
    - BUILDING CLASSIFICATION - A-3.
    - MEANS OF EGRESS ILLUMINATION - IS REQUIRED. SEE PLAN NOTES FOR SPECIFIC REQUIREMENTS.
    - EMERGENCY LIGHTING - IS REQUIRED.
    - EXIT SIGNAGE - IS REQUIRED.
    - FIRE ALARM - IS NOT REQUIRED.
    - ENERGY COMPLIANCE - IS REQUIRED. SEE PLAN NOTES FOR SPECIFIC REQUIREMENTS.
  - CONTRACTOR SHALL LOCATE AVAILABLE BREAKER SPACE AND PROVIDE NEW BREAKERS AND WIRING AS REQUIRED TO ACCOMMODATE ALL PROPOSED EQUIPMENT AND IN ACCORDANCE WITH REQUIREMENTS OF THE NEC. CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE IN THE CASE THAT BREAKER SPACE OR ELECTRICAL CAPACITY IS DETERMINED TO BE INSUFFICIENT.

## PLAN NOTES - DEMOLITION

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISCONNECTING AND REMOVING ALL LIGHTING FIXTURES, WIRING AND DEVICES. CONDUIT AND CONDUCTORS SHALL BE REMOVED BACK TO THE SOURCE AND ALL PENETRATIONS PATCHED.
- EXISTING EMERGENCY LIGHT TO BE RELOCATED ON PROPOSED WALL.
- DISCONNECT AND REMOVE ALL RECEPTABLES, WIRING AND DEVICES FROM WALLS TO BE DEMOLISHED. RELOCATE AND RECONNECT ANY WIRING THAT MAY SERVE EQUIPMENT AND DEVICES TO REMAIN.
- DISCONNECT AND REMOVE (6) UNUSED 240V RECEPTABLES FROM BEHIND COOKING APPLANCES. REMOVE ALL CONDUIT AND WIRING BACK TO SOURCE.
- REMOVE AND REPLACE EXISTING EMERGENCY LIGHT, TO MATCH EXISTING THE REST OF THE EMERGENCY LIGHTS.

## PLAN NOTES - PROPOSED WORK

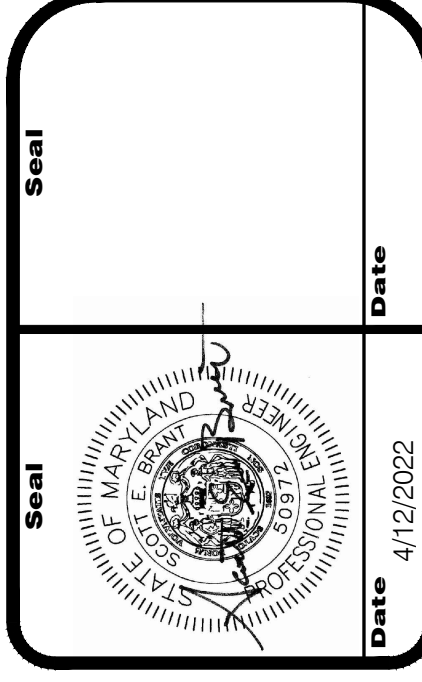
- RECEPTABLES SHOWN ARE FOR DIAGRAMMATICAL PURPOSES ONLY. EXACT LOCATIONS AND QUANTITY TO BE DETERMINED DURING CONSTRUCTION. PROVIDE SINGLE 20A RATED DUPLEX RECEPTABLES IN METALLIC DEVICE BOXES. A MAXIMUM OF 6 DUPLEX RECEPTABLES SHALL BE CONNECTED TO A SINGLE 20A-1P CIRCUIT BREAKER AS REQUIRED.
- RECEPTABLES SHOWN ARE FOR DIAGRAMMATICAL PURPOSES ONLY. EXACT LOCATIONS AND QUANTITY TO BE DETERMINED DURING CONSTRUCTION. PROVIDE SINGLE 20A RATED DUPLEX GFCI RECEPTABLES IN METALLIC DEVICE BOXES. A MAXIMUM OF 6 DUPLEX RECEPTABLES SHALL BE CONNECTED TO A SINGLE 20A-1P CIRCUIT BREAKER AS REQUIRED.
- RECEPTABLES SHOWN ARE FOR DIAGRAMMATICAL PURPOSES ONLY. EXACT LOCATIONS AND QUANTITY TO BE DETERMINED DURING CONSTRUCTION. PROVIDE SINGLE 20A RATED DUPLEX GFCI WEATHER TYPE RECEPTABLES IN METALLIC DEVICE BOXES WITH WHILE-IN-USE COVERPLATES. A MAXIMUM OF 6 DUPLEX RECEPTABLES SHALL BE CONNECTED TO A SINGLE 20A-1P CIRCUIT BREAKER AS REQUIRED.
- SURFACE MOUNTED DIMMABLE LED LIGHT FIXTURE, LITHONIA MODEL STL4-B01, OR APPROVED EQUAL. MAXIMUM LIGHTING LOAD PER CIRCUIT SHALL NOT EXCEED 16 AMPS AND SHALL BE CONNECTED TO A 20A-1P CIRCUIT BREAKER AS REQUIRED. THE LIGHT FIXTURE SHALL BE INSTALLED AS RECOMMENDED BY THE LIGHT FIXTURE MANUFACTURER, AND IN COMPLIANCE WITH SECTION C405 OF THE 2015 IECC WITH EMPHASIS ON THE FOLLOWING REQUIREMENTS:
  - PROVIDE LIGHTING CONTROLS AS REQUIRED BY THE 2015 IECC.
  - INTERIOR LIGHTING POWER REQUIREMENTS: THE TOTAL INTERIOR CONNECTED LIGHT POWER (WATTS) SHALL NOT EXCEED 1.0 WATTS PER SQUARE FOOT TO BE IN COMPLIANCE WITH THIS BUILDING TYPE; RELIGIOUS BUILDING. PROVIDE COMCHECK PAPERWORK TO DEMONSTRATE COMPLIANCE UPON FINAL FIXTURE SELECTION.
- PROVIDE 3-WAY, FULLY DIMMING SWITCHES FOR 2 CONTROL AREAS. ALL SWITCHES SHALL PROVIDE FULL DIMMING CAPABILITY.
- IN-WALL SPEAKER WIRING AND CONNECTION BOXES ARE SHOWN ARE FOR DIAGRAMMATICAL PURPOSES ONLY. EXACT LOCATIONS AND QUANTITY TO BE DETERMINED DURING CONSTRUCTION. COORDINATE WITH THE OWNER AND SYSTEM INSTALLER, E.C. TO PROVIDE 1" CONDUIT BETWEEN BOX LOCATIONS AND SYSTEM HEAD END.
- PROVIDE ALL NECESSARY ELECTRICAL CONNECTIONS TO ALL PROPOSED MECHANICAL AND OWNER EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS, AS REQUIRED BY THE EQUIPMENT MANUFACTURER, IN ACCORDANCE WITH THE NEC. PROVIDE SERVICE RECEPTACLE WHERE REQUIRED.
- PROVIDE NEW ELECTRICAL CONNECTION TO PROPOSED DRINKING FOUNTAIN.
- PROVIDE NEW ELECTRICAL CONNECTION TO PROPOSED WALL MOUNTED HAND DRYER, TYP. FOR 2.
- PROVIDE SHELF FOR STEREO EQUIPMENT AND ROUTE SPEAKER DATA CONDUIT TO THIS LOCATION. COORDINATE WITH OWNER FOR SHELF REQUIREMENTS AND EXACT LOCATION.
- FLAT PANEL DIMMABLE LED LIGHT FIXTURE, LITHONIA MODEL CPANL 2X2, OR APPROVED EQUAL. MAXIMUM LIGHTING LOAD PER CIRCUIT SHALL NOT EXCEED 16 AMPS AND SHALL BE CONNECTED TO A 20A-1P CIRCUIT BREAKER AS REQUIRED. THE LIGHT FIXTURE SHALL BE INSTALLED AS RECOMMENDED BY THE LIGHT FIXTURE MANUFACTURER, AND IN COMPLIANCE WITH IECC REQUIREMENTS, SEE PLAN NOTE 4.
- PROVIDE NEW 120V GFCI RECEPTACLE FOR NEW GAS STOVE WITH ELECTRONIC IGNITION. COORDINATE WITH OWNER FOR EXACT LOCATION.
- PROVIDE OR REINSTALL EXISTING ILLUMINATED EXIT SIGN.



TYPICAL SPEAKER WIRING  
OUTLET INSTALLATION DETAIL  
N.T.S.

**NOTE: DO NOT SCALE DRAWING.**  
IT IS THE RESPONSIBILITY OF EACH CONTRACTOR AND SUBCONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND ALL DIMENSIONS PRIOR TO BIDDING AND BEFORE BEGINNING ANY WORK. EACH CONTRACTOR IS TO FULLY COORDINATE HIS WORK WITH THAT OF OTHER TRADES. REFER TO THE CONTRACT AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

Professional Certification  
I certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer in the State of Maryland, License number 50922, expiration date 07/14/2023.



Scale	Date	Revisions	No.
AS NOTED	APRIL 2022		
Drawn By	SEB		
Checked By	GLE / M/M		
Project No.	0380-19-347 (1011)		
File No.	19347 Mech Plan		

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ELECTRIC POWER AND LIGHTING PLANS

Drawing No.  
**E-1**