Aruna Miller Lt Governor



Atif Chaudhry Secretary

Nelson E. Reichart Deputy Secretary

OFFICE OF DESIGN, CONSTRUCTION, & ENERGY

ADDENDUM # 3

Date: May 7, 2024

STATE OF MARYLAND DEPARTMENT OF GENERAL SERVICES

Atif Chaudhry, Secretary

PROJECT NO.: SM-023-230-002 HSMC HVAC System in Chapel Exhibit Historic St. Mary's City

This Addendum is issued to clarify, add to, delete from, correct and/or change the bid documents to the extent indicated and is hereby made a part of the said bid documents on which the construction contract will be based. Acknowledge receipt of the Addendum by inserting its number and date on the Invitation to Bid Form. Failure to acknowledge receipt of this Addendum may subject offer to disqualification. All questions should be addressed to the Procurement Officer, Justin Whitcome at justin.whitcome@maryland.gov.

This Addendum, #2, includes:

• <u>Pre-Bid Question</u> #1:

We are having issues with the architects files...the CD drawings. They were created as pdf's and they do not accurately allow us to measure at all and in some cases even read what is written. What we downloaded will only print out as 11×17 and we need to print them at a minimum as 24×36 .

Answer: Two additional drawings have been attached for downloading and printing.

End of Addendum #3

Issued by:
State of Maryland
Office of State Procurement
301 W. Preston Street, Room M-7
Baltimore, MD 21201
Justin Whitcome



ST. MARY'S CHAPEL HISTORIC ST. MARY'S CITY COMMISSION DESIGN AND INSTALL INTERPRETIVE ELEMENTS OF CHAPEL EXHIBIT AND ADD A/C PROJECT NO: SM-023-230-002

ARCHITECTURAL CONSULTANT

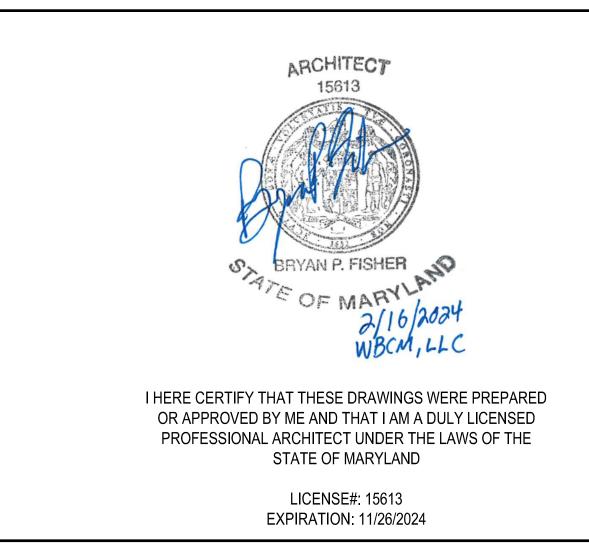
WHITNEY, BAILEY, COX, MAGNANI, LLC.

300 EAST JOPPA ROAD, SUITE 200 BALTIMORE, MARYLAND 21286 PHONE: (410) 512-4500 FAX: (410) 324-4100

MECHANICAL, ELECTRICAL, PLUMBING **ENGINEERING CONSULTANT**

HENRY ADAMS

600 BALTIMORE AVENUE TOWSON, MARYLAND 21204 PHONE: (410) 296-6500 FAX: (410) 296-6501







ST. MARYS CITY, MD 20686

ST. MARYS COUNTY, MARYLAND

PROJECT MANAGER CHIEF OF PM&D

DEPARTMENT OF GENERAL SERVICES

ATIF CHAUDHRY, SECRETARY ROOM 1405 301 WEST PRESTON STREET BALTIMORE, MARYLAND 21201

DRAWING SHEET INDEX		
DWG. NO.	SHEET NO.	SHEET TITLE
GENERAL		
G101	1	COVERSHEET
ARCHITECTU	IRAL	
A101	2	OVERALL FLOOR PLAN
A301	3	SECTIONS
A302	4	SECTIONS AND DETAILS
A501	5	ALTAR DETAILS
A502	6	BENCH DETAILS
A503	7	RAILING DETAILS
MECHANICAL		
M001	8	MECHANICAL COVER SHEET
M101	9	FLOOR PLAN - DUCTWORK
M201	10	FLOOR PLAN - MECHANICAL PIPING
M401	11	MECHANICAL SECTIONS
M501	12	MECHANICAL DETAILS
M801	13	MECHANICAL SCHEDULES AND CONTROLS
ELECTRICAL		
E001	14	ELECTRICAL COVER SHEET
E101	15	FLOOR PLANS - POWER - NEW WORK
E102	16	ELEVATIONS - POWER - NEW WORK
E801	17	ELECTRICAL SCHEDULES AND DETAILS

APPLICABLE CODES 2018 INTERNATIONAL BUILDING CODE (IBC) 2018 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), NFPA 1 (FIRE CODE) & 2018 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), 54 FUEL GAS CODE 2011 SEDIMENT CONTROL ORDINANCE 2015 NATIONAL STANDARD PLUMBING CODE (NSPC) CODE EVALUATION BASED ON 2018 INTERNATIONAL PLUMBING CODE (IPC) 2011 NATIONAL ELECTRICAL CODE (NEC) 2018 INTERNATIONAL ENERGY CODE MARYLAND ACCESSIBILITY CODE: MAC 2012 COMAR 05.02.02 2019 DGS PROCEDURE MANUAL

BOARD OF PUBLIC WORKS

WES MOORE, GOVERNOR BROOKE LIERMAN, COMPTROLLER DERECK DAVIS TREASURER

USING AGENCY

USING AGENCY APPROVAL

DGS APPROVAL

DATE

DATE

Historic St. Mary's City Commission 18751 Hogaboom Lane St Marys City, MD 20686

ARCHITECTURAL / STRUCTURAL / CIVIL CONSULTANTS: WHITNEY, BAILEY,

COX, MAGNANI,LLC/ WBCM, LLC.

300 EAST JOPPA ROAD, BALTIMORE, MARYLAND 21286 PHONE: (410) 512-4500 FAX: (410) 324-4100

HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS



UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE#: 15613 EXPIRATION:11/26/2024

ST. MARY'S CHAPEL

DESIGN AND INSTALL INTERPRETIVE ELEMENTS OF CHAPEL EXHIBIT AND ADD A/C PROJECT NO: SM-023-230-002 16721 POINT LOOKOUT RD., ST. MARYS CITY, MD 20686 ST. MARYS COUNTY, MARYLAND

USING	AGENCY	APPROVAL

Name		Date
Title		

DGS APPROVAL	

Chief of	PM&D	Date
	03/15/24	ISSUED FOR BID
MARK	DATE	DESCRIPTION
CAD DW	G FILE: -	
DRAWN I	BY: DAKO	TA ASH

CHK'D BY:

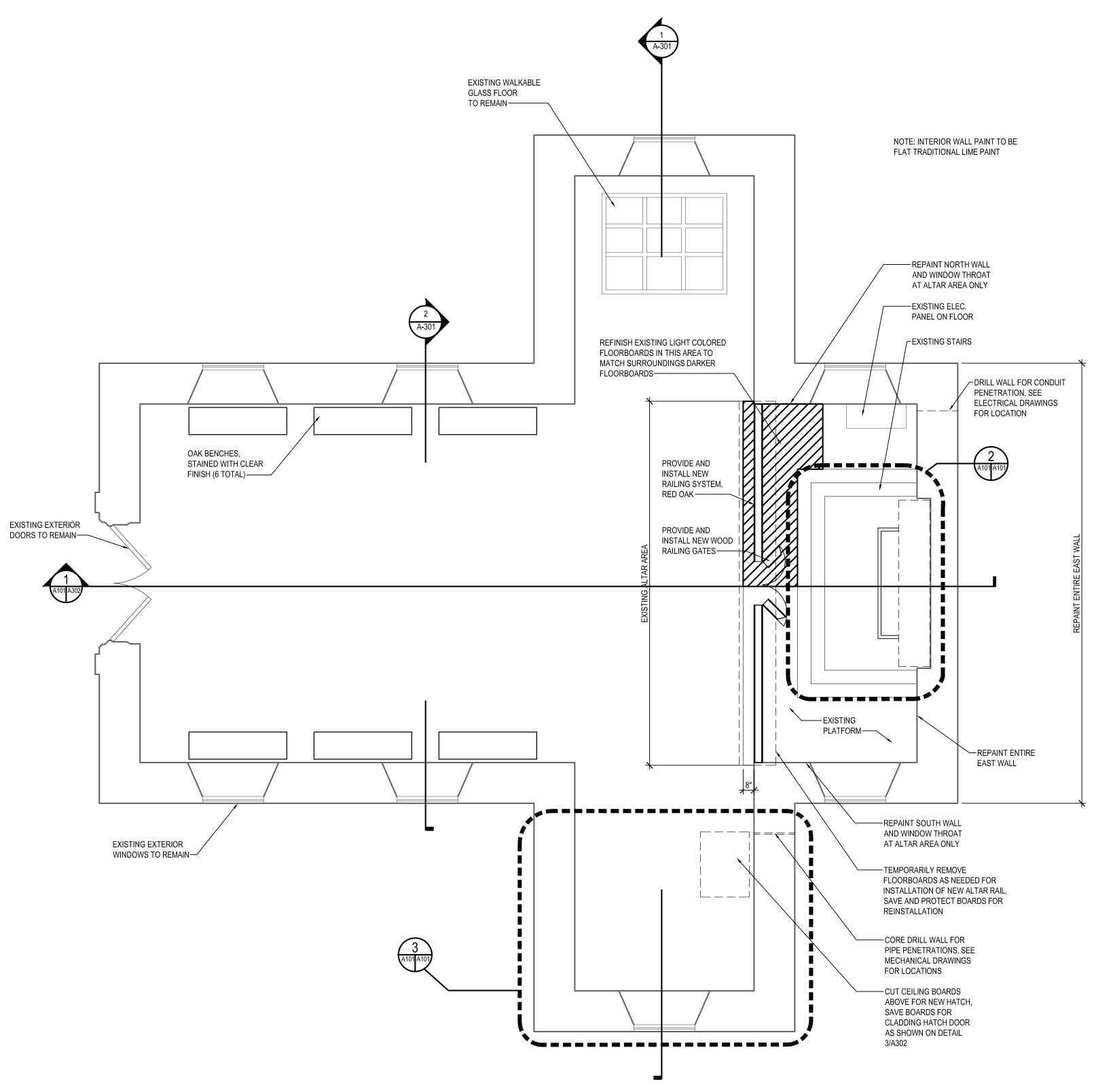
PROJECT No.: SM-023-230-002

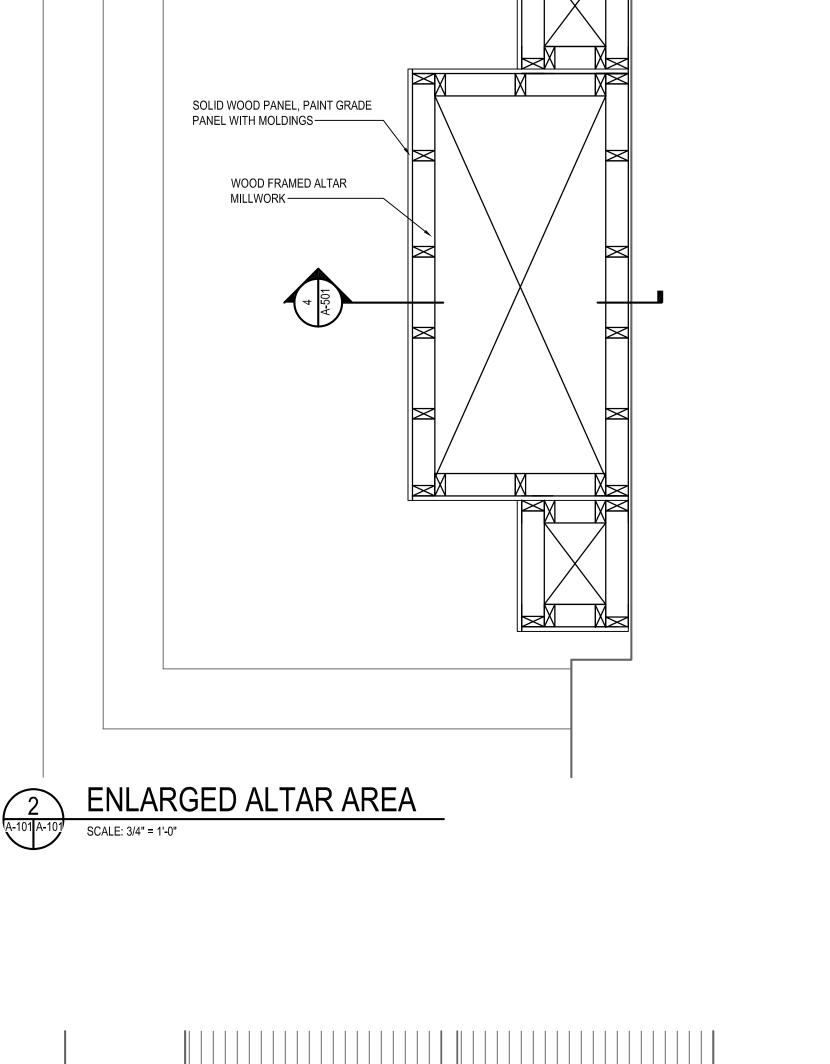
DATE: 03/15/2024

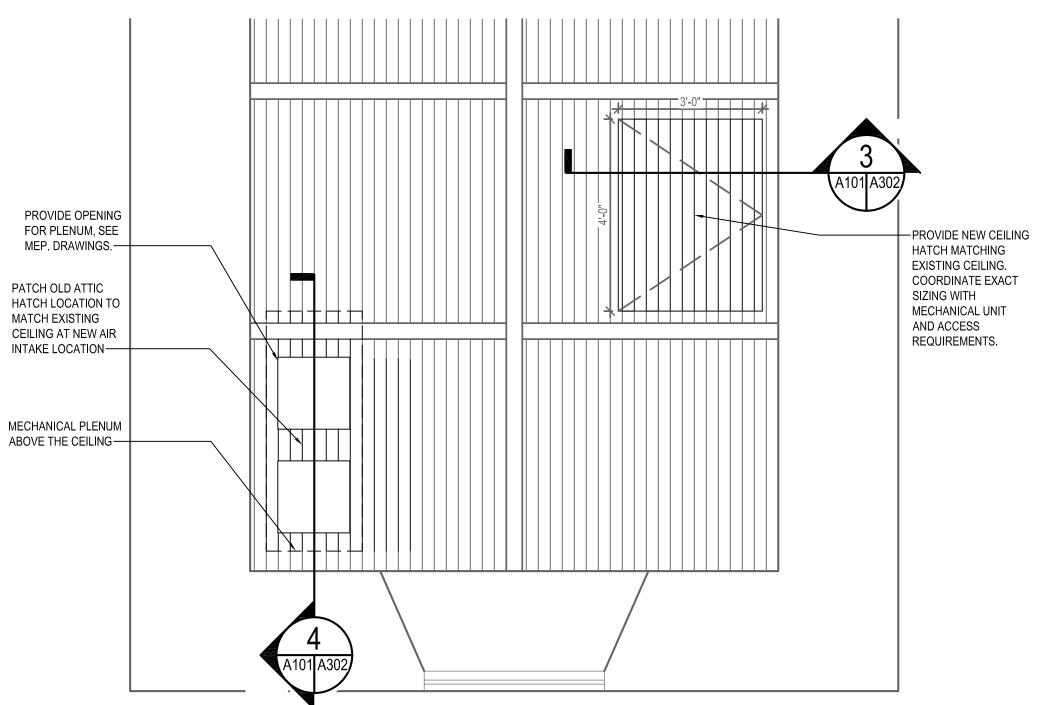
COVER SHEET

G101

SHEET 01 OF 17







REFLECTED CEILING PLAN DETAIL SCALE: 1/2" = 1'-0"

WHITNEY, BAILEY, COX, MAGNANI,LLC/ WBCM, LLC. 300 EAST JOPPA ROAD, SUITE 200 BALTIMORE, MARYLAND 21286 PHONE: (410) 512-4500 FAX: (410) 324-4100 Henry Adams Consulting Engineers MECHANICAL ELECTRICAL & PLUMBING ENGINEERS



ARCHITECTURAL / STRUCTURAL / CIVIL

CONSULTANTS:

A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE#: 15613 EXPIRATION:11/26/2024 ST. MARY'S CHAPEL

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Date Name

USING AGENCY APPROVAL

DGS APPROVAL

Project Manager Date Chief of PM&D Date 03/15/24 ISSUED FOR BID DESCRIPTION MARK DATE

CAD DWG FILE: -

DRAWN BY: DAKOTA ASH

CHK'D BY:

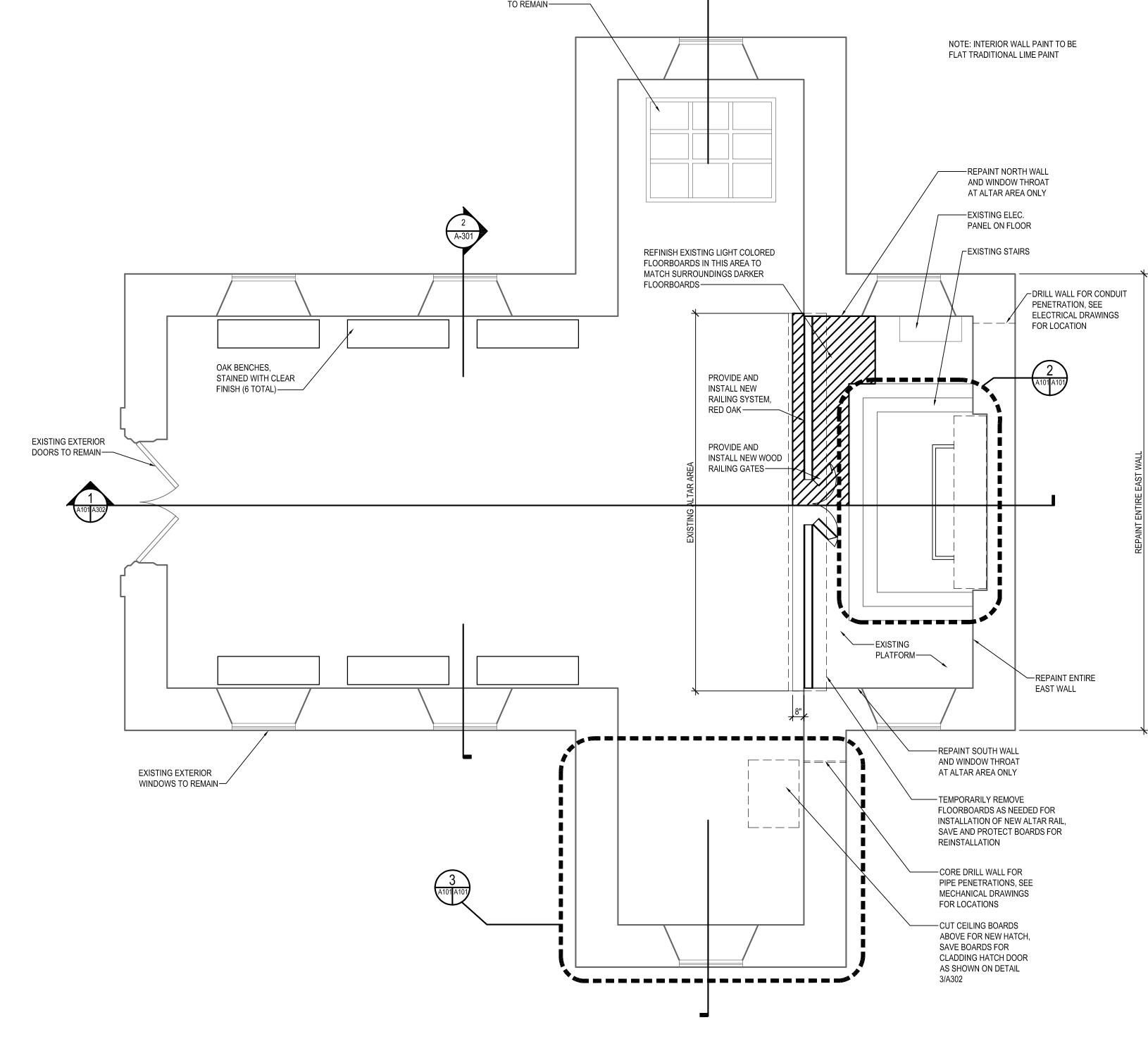
PROJECT No.: SM-023-230-002

DATE: 03/15/2024

FLOOR PLANS

A101

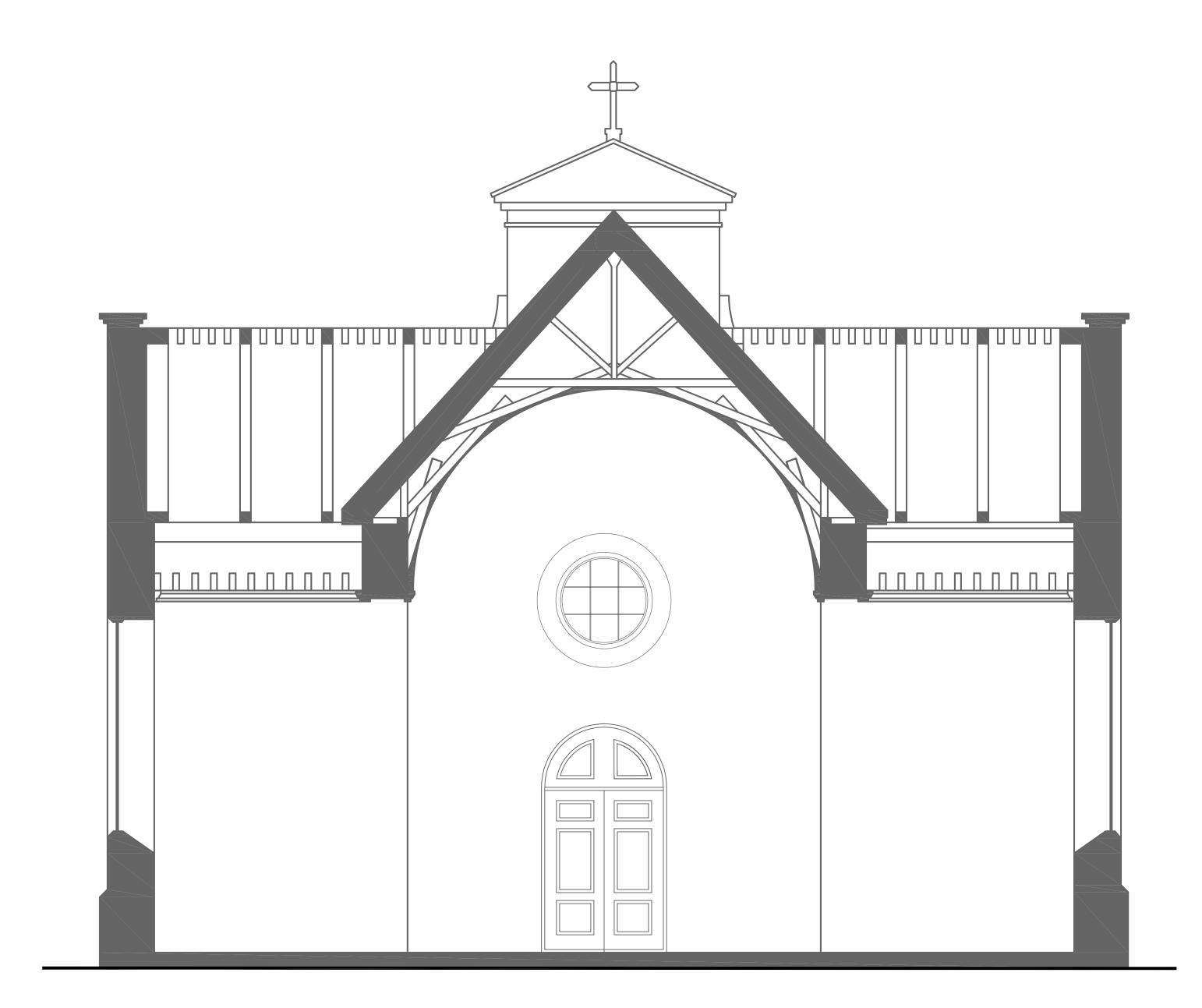
SHEET 02 OF 17



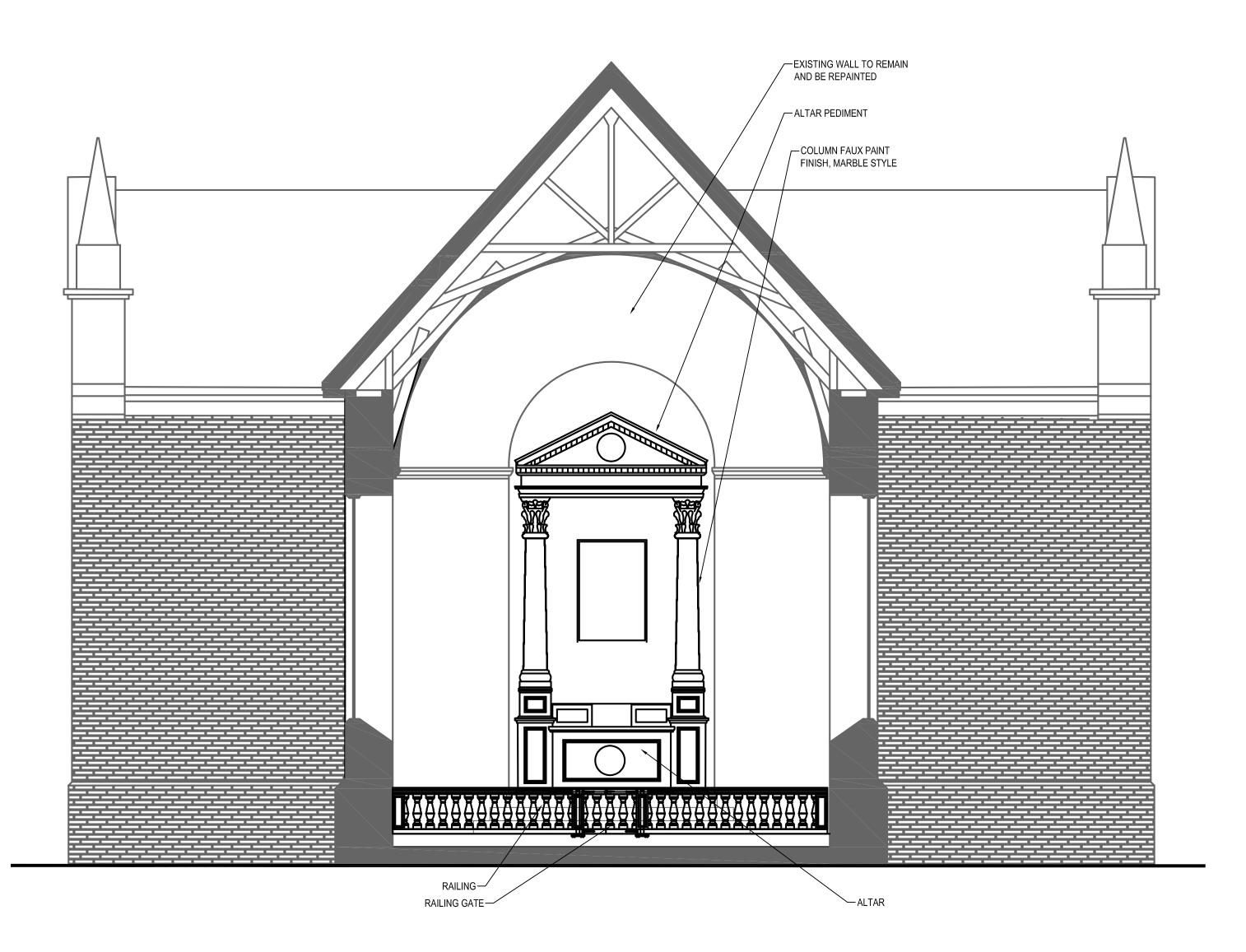
PROJECT

NORTH

EXISTING GROUND FLOOR PLAN







2 EXISTING BUILDING SECTION
SCALE: 1/4" = 1'-0"

ARCHITECTURAL / STRUCTURAL / CIVIL CONSULTANTS:

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MECHANICAL ELECTRICAL & PLUMBING ENGINEERS



I HERE CERTIFY THAT THESE DRAWINGS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE#: 15613 EXPIRATION:11/26/2024

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DESCRIPTION

CAD DWG FILE: -

DRAWN BY: DAKOTA ASH

MARK DATE

CHK'D BY:

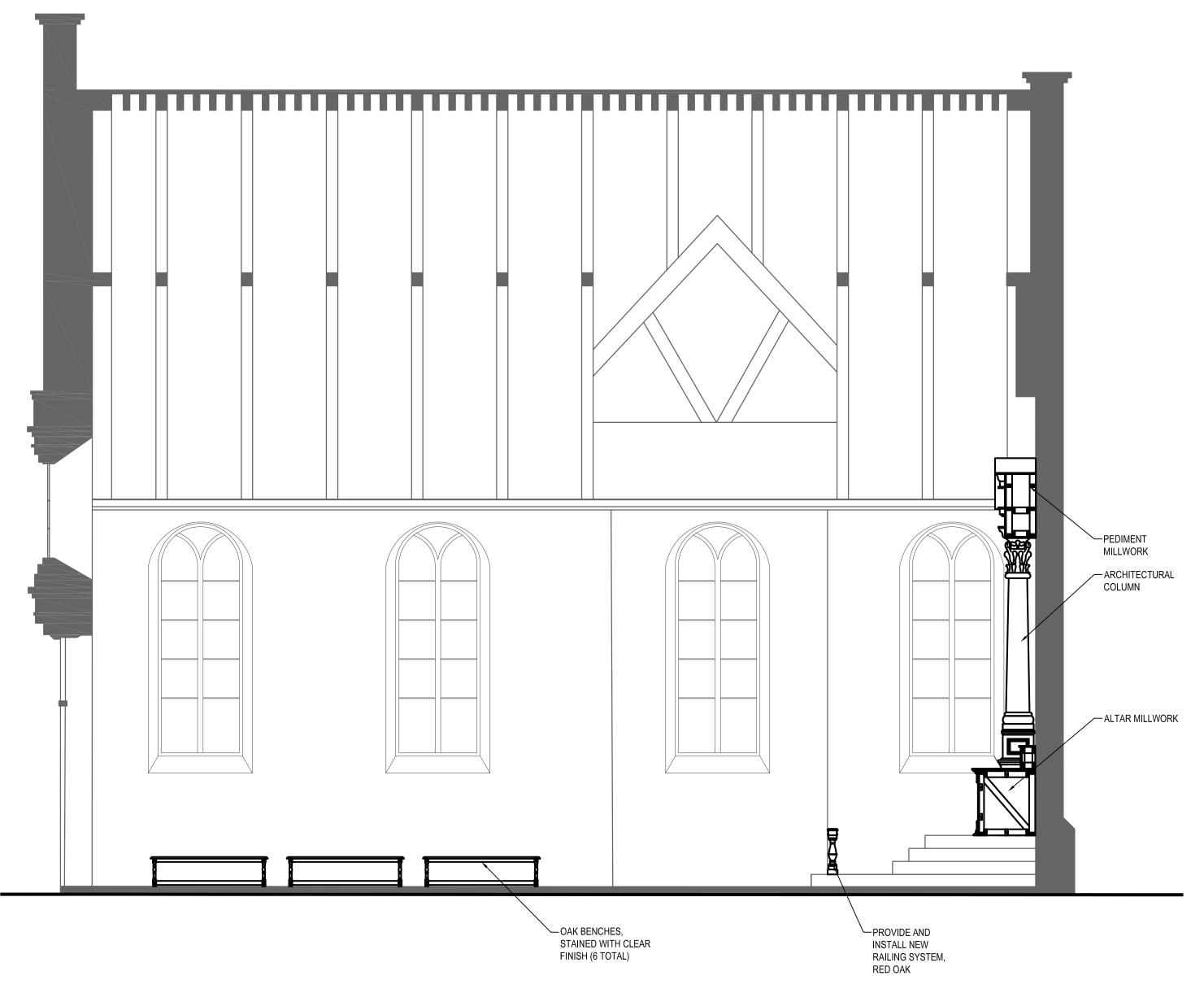
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DATE: 03/15/2024

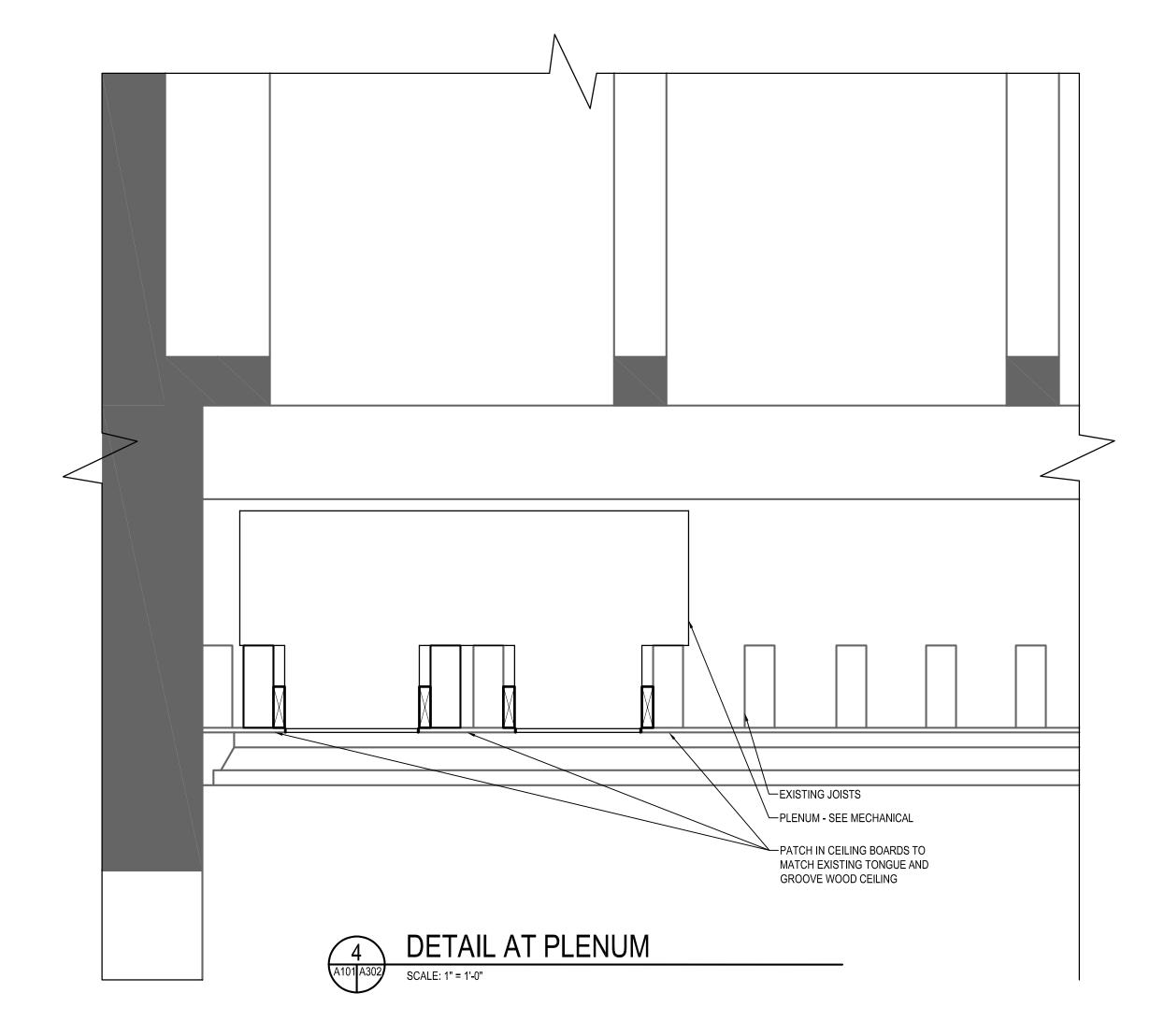
SECTIONS

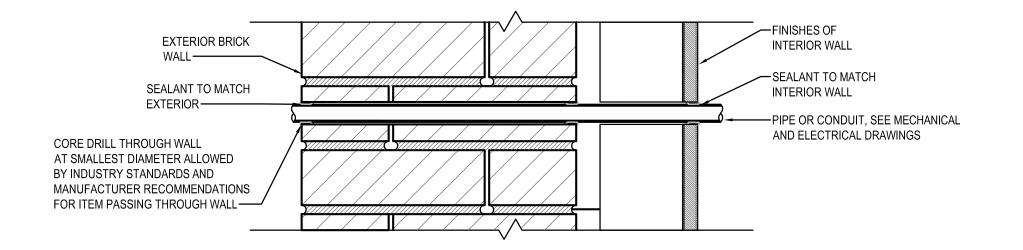
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SHEET 03 OF 17

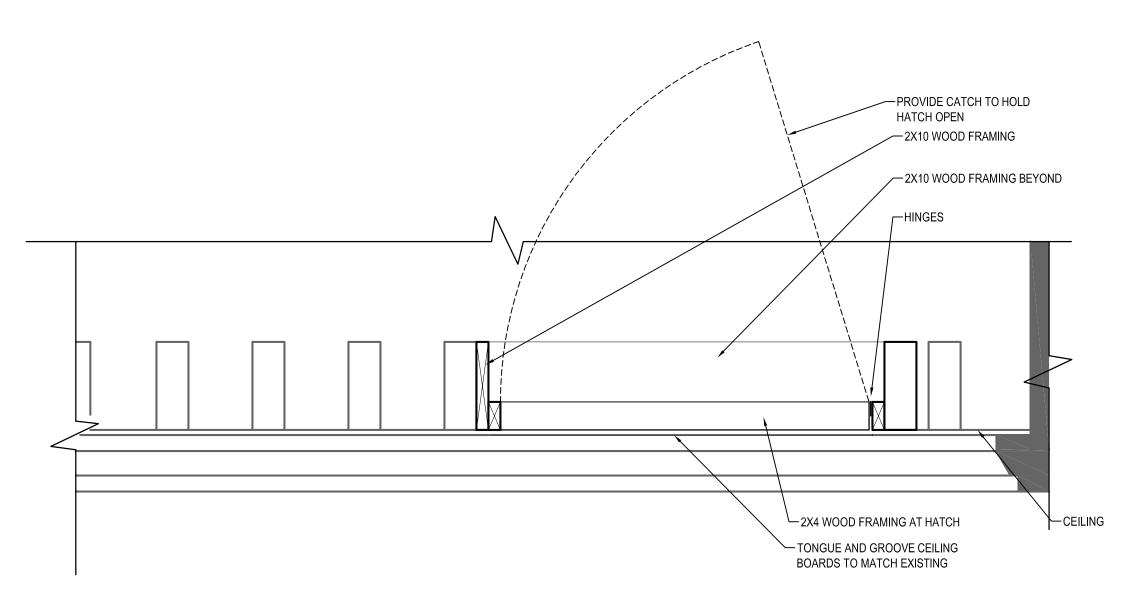














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Chief of	PM&D	Date	
	03/15/24	ISSUED FOR BID	
MARK	DATE	DESCRIPTION	

CAD DWG FILE: -

DRAWN BY: DAKOTA ASH

CHK'D BY:

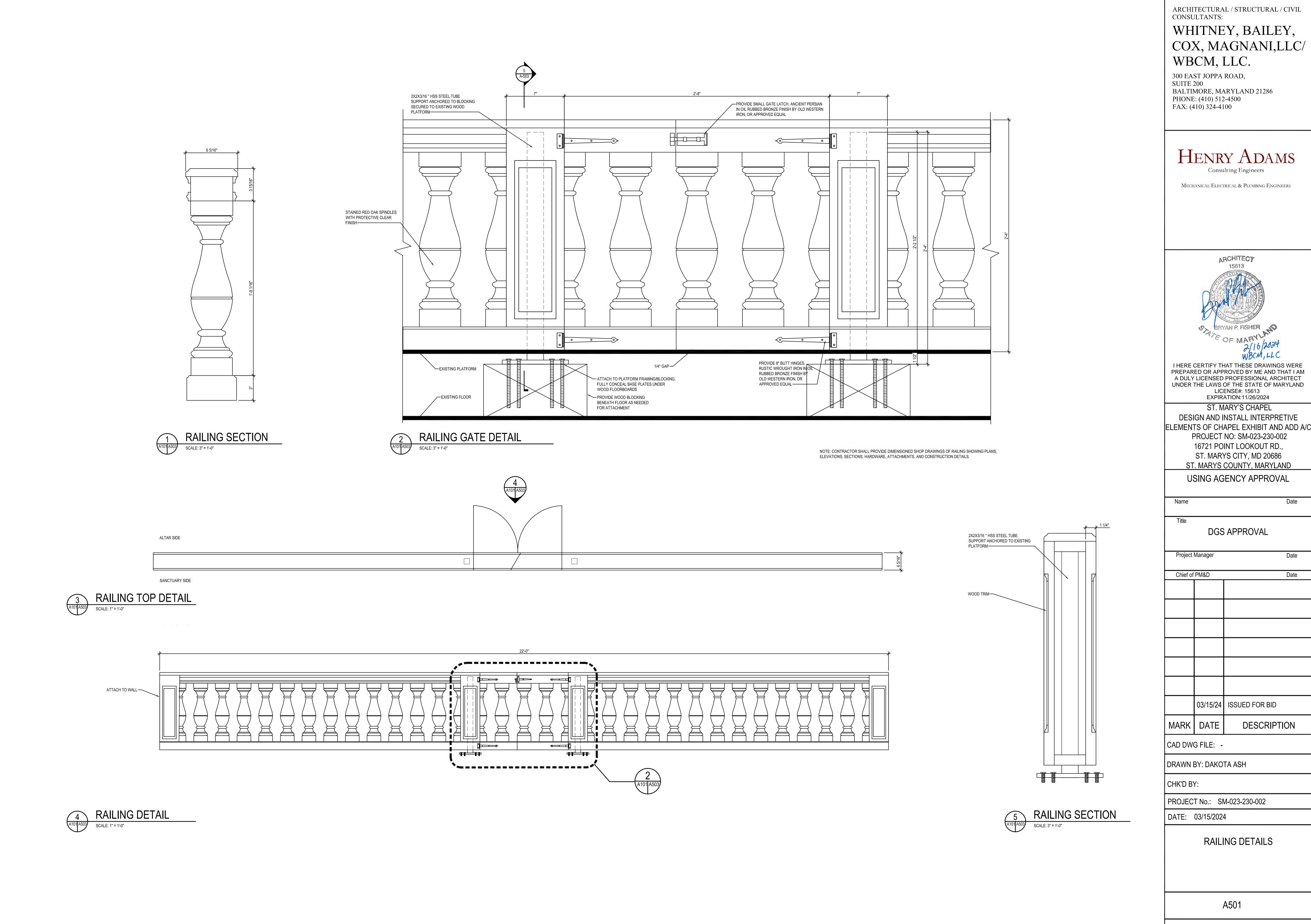
PROJECT No.: SM-023-230-002

DATE: 03/15/2024

SECTION AND DETAILS

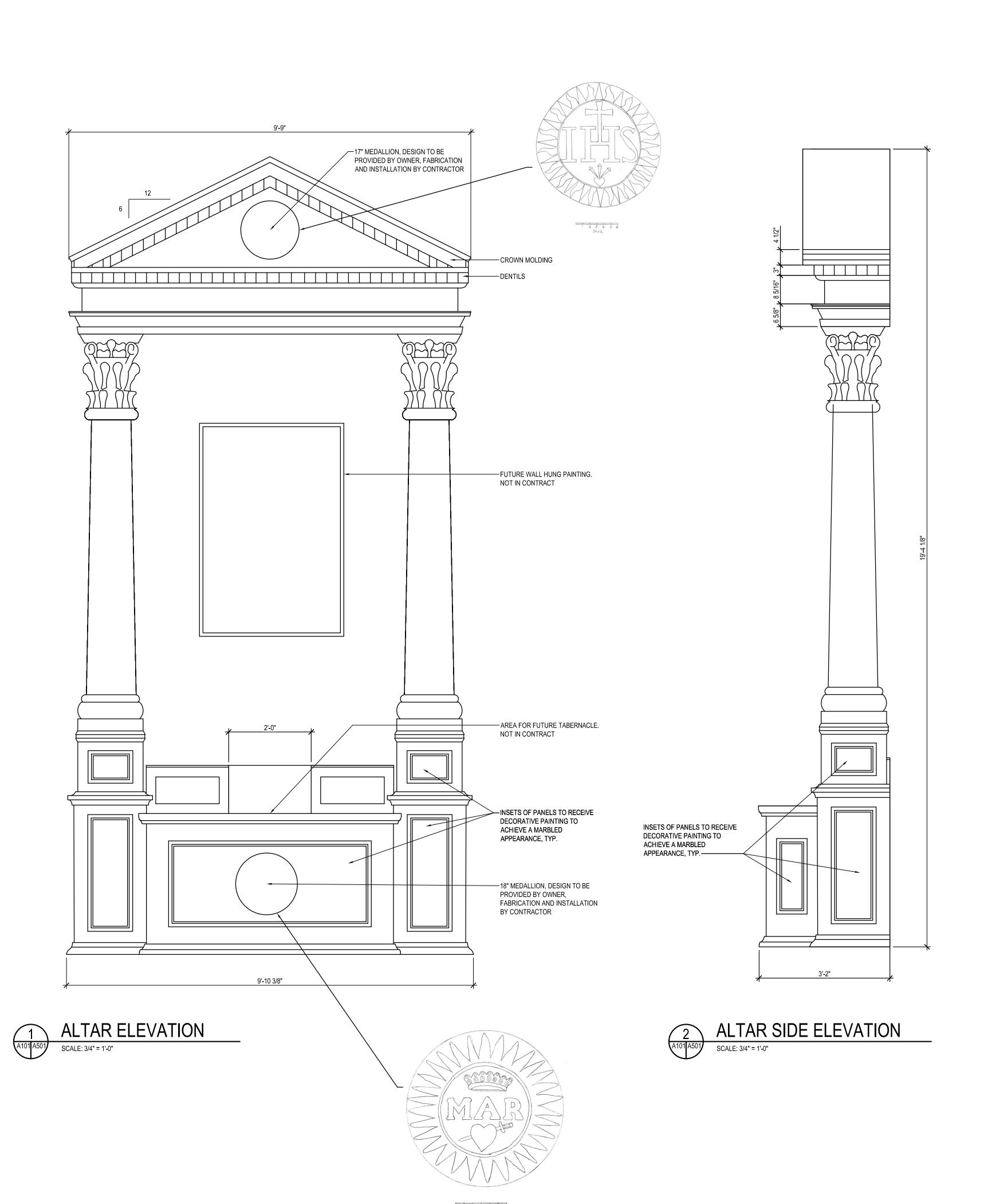
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SHEET 04 OF 17

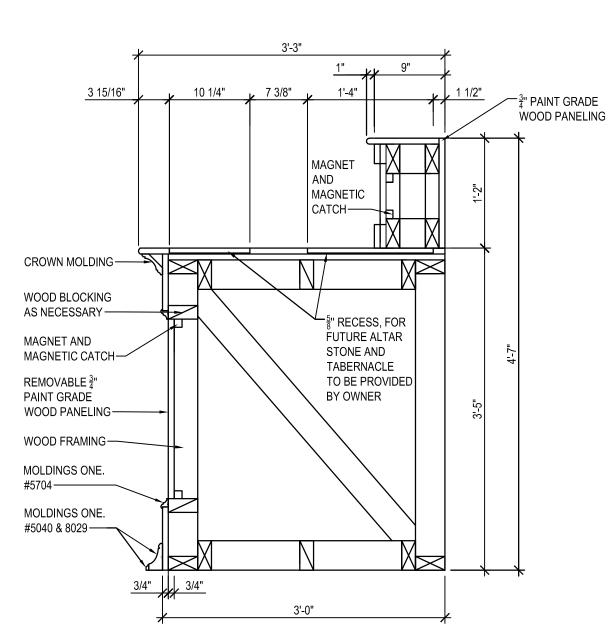


COX, MAGNANI,LLC/

SHEET 05 OF 18



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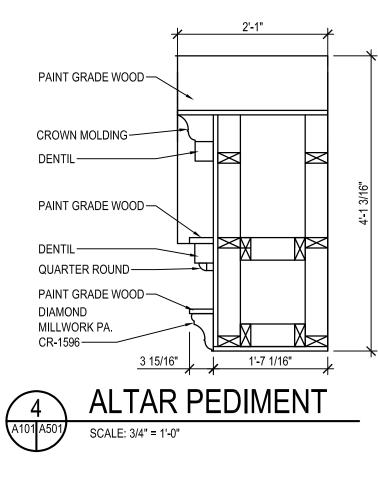


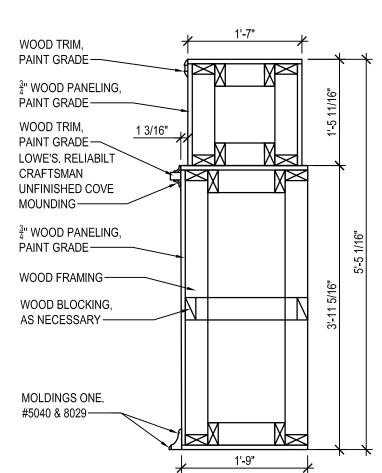


NOTES: 1. ALL MILLWORK THIS SHEET TO BE PLAIN PAINTED WITH SEMI-GLOSS FINISH UNLESS OTHERWISE NOTED, COLOR IS TO BE DETERMINED

2. PAINTING SHALL BE PERFORMED BY HAND BRUSHING SO AS TO CREATE AN AGED APPEARANCE.

3. CONTRACTOR SHALL PROVIDE DIMENSIONED SHOP DRAWINGS OF ALTAR SHOWING PLANS, ELEVATIONS, SECTIONS, HARDWARE, ATTACHMENTS, AND CONSTRUCTION DETAILS.







WHITNEY, BAILEY, COX, MAGNANI,LLC/WBCM, LLC.

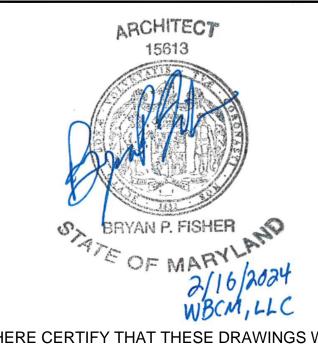
ARCHITECTURAL / STRUCTURAL / CIVIL

300 EAST JOPPA ROAD, SUITE 200 BALTIMORE, MARYLAND 21286 PHONE: (410) 512-4500 FAX: (410) 324-4100

CONSULTANTS:



MECHANICAL ELECTRICAL & PLUMBING ENGINEERS



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ST. MARYS COUNTY, MARYLAND
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DGS APPROVAL

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Chief of	PM&D	Date	
	03/15/24	ISSUED FOR BID	
MARK	DATE	DESCRIPTION	

CAD DWG FILE: -

DRAWN BY: DAKOTA ASH

CHK'D BY:

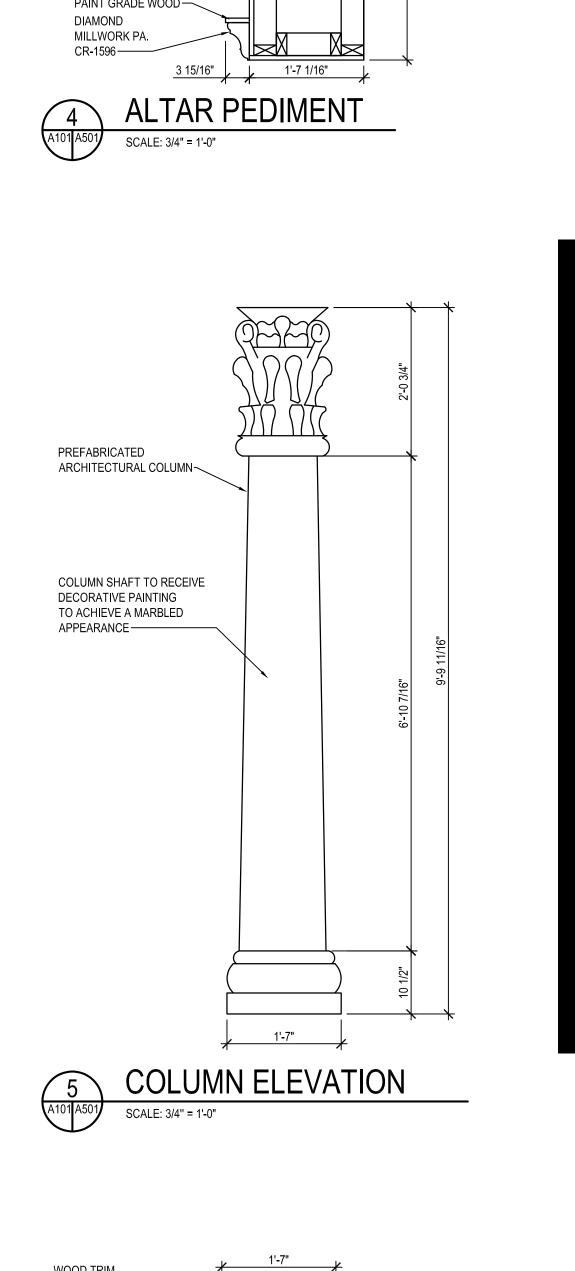
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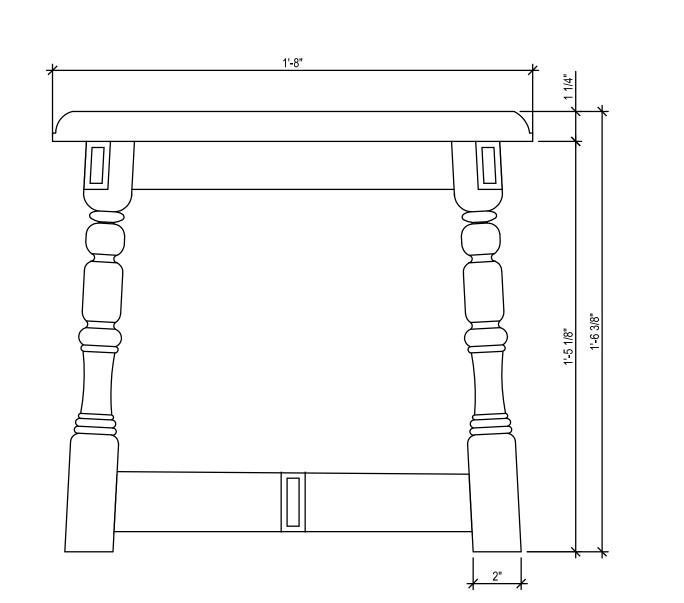
DATE: 03/15/2024

DETAILS

A502

SHEET 06 OF 17



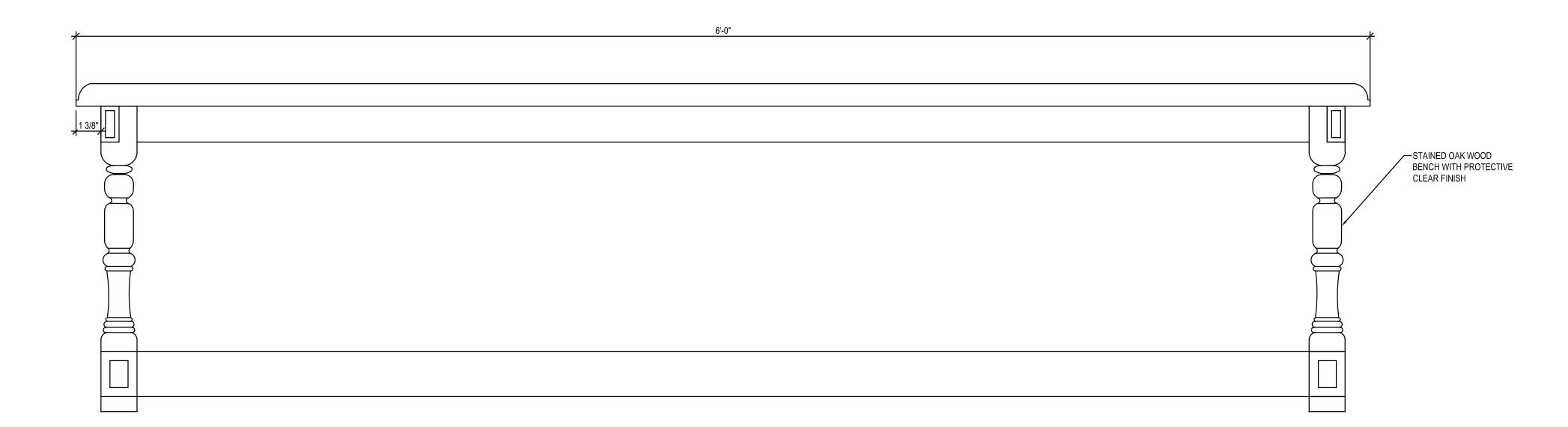


NOTES: 1. WOOD BENCH ASSEMBLY TO HAVE NO VISIBLE FASTENERS. ASSEMBLY TO UTILIZED WOOD JOINERY TO THE GREATEST EXTENT.

2. CONTRACTOR SHALL PROVIDE DIMENSIONED SHOP DRAWINGS OF TYPICAL BENCH SHOWING PLANS, ELEVATIONS, SECTIONS, HARDWARE, ATTACHMENTS, AND CONSTRUCTION DETAILS.

BENCH SIDE ELEVATION

SCALE: 3" = 1'-0"



3 BENCH ELEVATION

A101 A502 SCALE: 3" = 1'-0"

ARCHITECTURAL / STRUCTURAL / CIVIL CONSULTANTS:

WHITNEY, BAILEY, COX, MAGNANI,LLC/WBCM, LLC.

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Name	Date

DGS APPROVAL

Project	Date	
Chief of	PM&D	Date
	03/15/24	ISSUED FOR BID
MARK	DATE	DESCRIPTION

CAD DWG FILE: -

DRAWN BY: DAKOTA ASH

CHK'D BY:

PROJECT No.: SM-023-230-002

DATE: 03/15/2024

BENCH DETAILS

A503

SHEET 07 OF 17

MECHANICAL LEGEND							
SYMBOL	DESCRIPTION						
D	CONDENSATE DRAIN						
	VOLUME DAMPER						
XXXXX	FLEXIBLE CONNECTION						
(T)	THERMOSTAT						
\boxtimes	OUTDOOR AIR OR SUPPLY AIR DUCT						
	RETURN AIR DUCT						
1 M101	CALLOUT DESIGNATION TOP - VIEW REFERENCE BOTTOM - REFERENCED DRAWING						
——RL ——	REFRIGERANT LIQUID						
——RS——	REFRIGERANT SUCTION						

		i	
AFF	ABOVE FINISHED FLOOR	L	LENGTH
APD	AIR PRESSURE DROP	LAT	LEAVING AIR TEMPERATURE
APPROX	APPROXIMATELY	LFT	LEAVING FLUID TEMPERATURE
ATC	AUTOMATIC TEMPERATURE CONTROLS	LLS	LIQUID LEVEL SENSOR
		LWT	LEAVING WATER TEMPERATURE
BAS	BUILDING AUTOMATION SYSTEM	,,	MEQUANIQAI
BDD	BAROMETRIC BACKDRAFT DAMPER	M	MECHANICAL
BHP	BRAKE HORSEPOWER BRITISH THERMAL UNITS	MAX MBH	
BTU	BRITISH THERMAL UNITS	MD MD	THOUSAND BRITISH THERMAL UNITS PER HOMECHANICAL DEMOLITION
CC	COOLING COIL	MIN	MINIMUM
CFM	CUBIC FEET PER MINUTE	MOD	MOTOR OPERATED DAMPER
CLG	COOLING		MOTOR OF LIVELD DAWN LIV
CS	CURRENT SENSOR	N	NORTH
CX	CONNECT TO EXISTING	NC	NORMALLY CLOSED
•		NO	NUMBER
D	DAMPER / DEEP / DEPTH / DIAMETER / DIFFUSER /	NOM	NOMINAL
	DRAIN	NTS	NOT TO SCALE
DB	DRY BULB		
DIA	DIAMETER	OA	OUTDOOR AIR
DN	DOWN	OC	ON CENTER
DPS	DIFFERENTIAL PRESSURE SWITCH		
		Р	PRESSURE
EAT	ENTERING AIR TEMPERATURE	PD	PRESSURE SWITCH
EFT	ENTERING FLUID TEMPERATURE	PH	PHASE
ELEC	ELECTRICAL EXTERNAL OFFICE PRESCRIPE	_	DADUIO
ESP	EXTERNAL STATIC PRESSURE	R	RADIUS
EWT	ENTERING WATER TEMPERATURE	RA	RETURN AIR
EX	EXISTING	RHC	REHEAT COIL
F	FAHRENHEIT	RL RPM	REFRIGERANT LIQUID ROTATIONS PER MINUTE
FC FC	FLEX CONNECTION	RPIVI RS	REFRIGERANT SUCTION
FCU	FAN COIL UNIT	RX RX	REMOVE EXISTING
FPD	FLUID PRESSURE DROP	1//	NEWOVE EXISTING
FT	FEET / FOOT	SA	SUPPLY AIR
FV	FACE VELOCITY	SENS	SENSIBLE
. •		SEER	SEASONAL ENERGY EFFICIENCY RATIO
G	GRILLE	SP	STATIC PRESSURE
GPM	GALLONS PER MINUTE		
		T	THERMOSTAT / TEMPERATURE SENSOR
Н	HEIGHT / HIGH / HUMIDISTAT / HUMIDITY SENSOR	TSP	TOTAL STATIC PRESSURE
HC	HEATING COIL	TYP	TYPICAL
HP	HORSEPOWER		
HPU	HEAT PUMP UNIT	UMD	UNIVERSITY OF MARYLAND
HR	HEATING WATER RETURN		
HS	HEATING WATER SUPPLY	V	VALVE / VOLTS
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING	VD	VOLUME DAMPER
HZ	HERTZ	VIF	VERIFY IN FIELD
INI	INIOLI	14/	MIDE / MIDTH
IN	INCH	W	WIDE / WIDTH
		WB WC	WET BULB
		WG WPD	WATER GAGE WATER PRESSURE DROP

MECHANICAL GENERAL NOTES (APPLICABLE TO ALL MECHANICAL DRAWINGS)

- 1. COORDINATE ALL MECHANICAL WORK WITH ELECTRICAL WORK, AND WORK OF OTHER TRADES SHOWN ON OTHER DRAWINGS.
- 2. RUN ALL DRAIN PIPING WITH 2 PERCENT MINIMUM GRADE UNLESS OTHERWISE NOTED.
- 3. INSTALL PIPING AND DUCTWORK SO THAT ALL VALVES AND DAMPERS ARE ACCESSIBLE PER INTERNATIONAL MECHANICAL CODE SECTION 306.
- 4. CERTAIN ITEMS SUCH AS ACCESS DOORS, CLEANOUTS, RISE AND DROPS IN DUCTWORK AND PIPING, ETC., ARE INDICATED ON THE DRAWINGS FOR CLARITY OR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE ITEMS AS REQUIRED ELSEWHERE IN THE CONTRACT DOCUMENTS.
- 5. WHERE THE INSTALLATION OF NEW SERVICES OR THE EXTENSION OF EXISTING SERVICES REQUIRES CUTTING OF EXISTING FLOORS, WALLS, PARTITIONS, ETC., CHECK FOR THE PRESENCE OF EXISTING MECHANICAL, PLUMBING AND ELECTRICAL SERVICES WITHIN OR IMMEDIATELY BENEATH CONSTRUCTION. EXERCISE NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO THE SERVICES OR INJURY TO PERSONNEL DUE TO CONTACT WITH SAME. TEMPORARILY DISCONNECT SERVICES DURING THE CUTTING OPERATION. SCHEDULE SERVICE OUTAGES IN ADVANCE WITH THE OWNER.
- THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS.
- CONCRETE HOUSEKEEPING PADS TO SUIT MECHANICAL EQUIPMENT SHALL BE SIZED AND LOCATED BY THE MECHANICAL CONTRACTOR. MINIMUM CONCRETE PAD THICKNESS SHALL BE 4" OR AS INDICATED OTHERWISE ON DRAWINGS. PAD SHALL EXTEND BEYOND THE EQUIPMENT A MINIMUM OF 6" ON EACH SIDE.
 PROVIDE FLEXIBLE CONNECTIONS AT ALL DUCTWORK SYSTEMS (SUPPLY AND RETURN) CONNECTED TO FAN COIL UNITS WHICH REQUIRE VIBRATION ISOLATION. FLEXIBLE
- 9. EXCEPT AS OTHERWISE NOTED, LOCATE ALL ROOM THERMOSTATS ABOVE FINISHED FLOOR ON SAME HORIZONTAL CENTERLINE AS LIGHT SWITCH. WHERE LIGHT SWITCH AND TEMPERATURE SENSOR ARE NEXT TO EACH OTHER, LIGHT SWITCH SHALL BE CLOSEST TO THE DOOR. COORDINATE WITH ELECTRICAL CONTRACTOR. NOTIFY THE ENGINEER OF ANY ROOMS WHERE THE ABOVE LOCATION CANNOT BE MAINTAINED OR WHERE THERE IS A QUESTION ON LOCATION.

APPLICABLE CODES, STANDARDS, AND REGULATIONS

CONNECTORS SHALL BE PROVIDED AT THE POINT OF CONNECTION TO THE EQUIPMENT.

- 1. 2021 INTERNATIONAL MECHANICAL CODE
- 2. 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 3. 2021 INTERNATIONAL BUILDING CODE
- 4. 2021 INTERNATIONAL EXISTING BUILDING CODE
- 5. 2021 INTERNATIONAL GREEN CONSTRUCTION CODE6. MARYLAND BUILDING REHABLITATION CODE REGULATIONS
- 7. DGS PROCEDURE MANUAL FOR PROFESSIONAL SERVICES, REV 2019

ARCHITECTURAL / STRUCTURAL / CIVIL CONSULTANTS:

WHITNEY, BAILEY, COX, MAGNANI,LLC/WBCM, LLC.

300 EAST JOPPA ROAD, SUITE 200 BALTIMORE, MARYLAND 21286 PHONE: (410) 512-4500 FAX: (410) 324-4100



Mechanical Electrical & Plumbing Engineers



PROFESSIONAL CERTIFICATION. I HERE BY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO.: 36608 EXPIRATION DATE: 12/23/2025

ST. MARY'S CHAPEL

DESIGN AND INSTALL
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PROJECT NO: SM-023-230-002

USING AGENCY APPROVAL

lame Date

Tit

DGS APPROVAL

Project Manager Date

Chief of PM&D Date

03/15/24 ISSUED FOR BID

MARK DATE DESCRIPTION

CAD DWG FILE: -

DRAWN BY: MAV

CHK'D BY: CEL

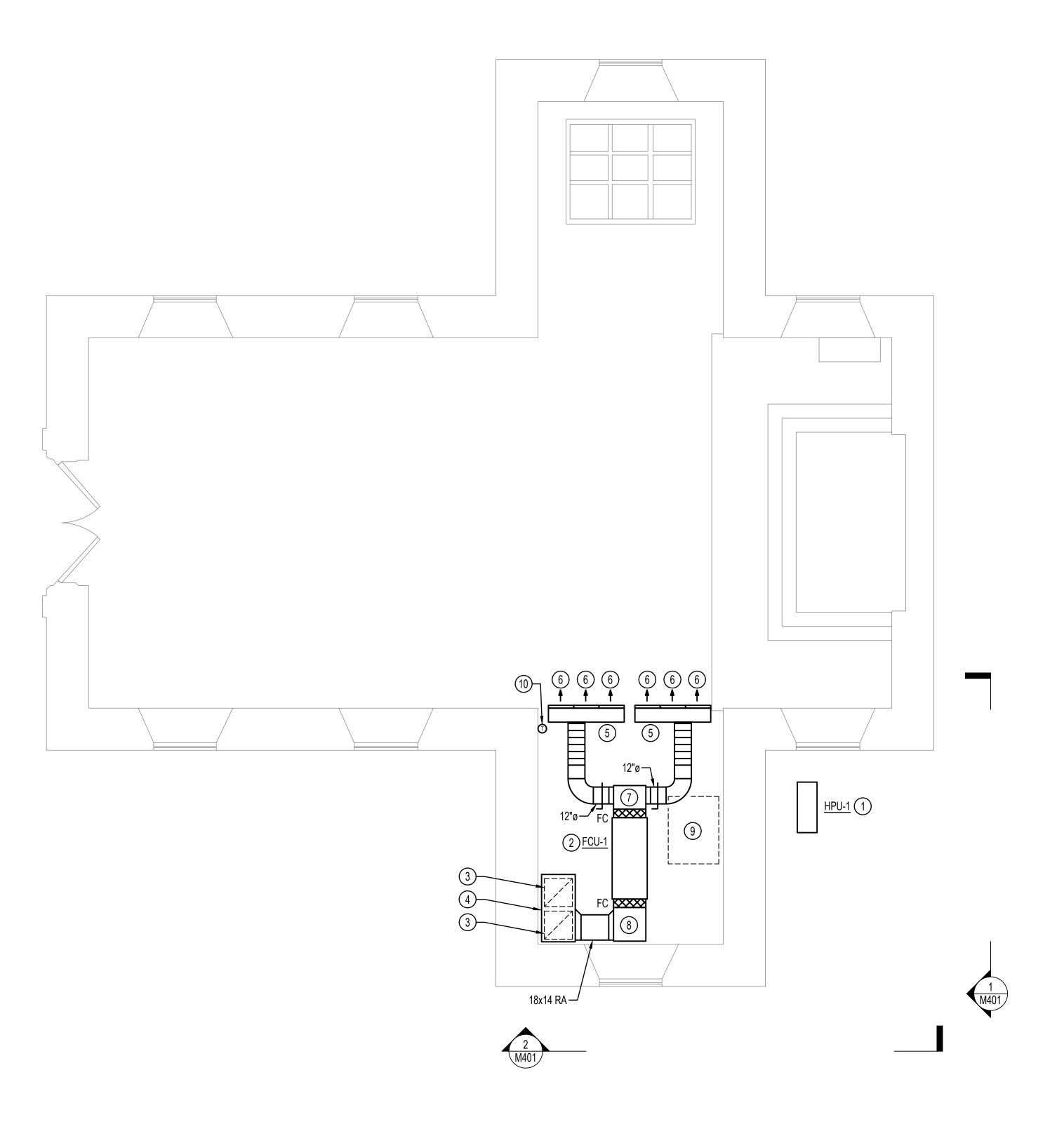
PROJECT No.: SM-023-230-002

DATE: 03/15/2024

MECHANICAL COVER SHEET

M001

SHEET 8 OF 17



FIRST FLOOR - DUCTWORK - NEW WORK PLAN

M101 1/4" = 1'-0"

DRAWING NOTES: (APPLICABLE TO THIS DRAWING ONLY)

EXISTING SHOWN WITH LIGHT WEIGHT LINE, ————

NEW WORK SHOWN WITH HEAVY WEIGHT LINE, ———— INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. EXISTING CONDITIONS ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, OR THERE IS A QUESTION

REGARDING SCOPE OF WORK OR LIMITS OF DISTURBANCE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT WRITTEN DIRECTION BEFORE PROCEEDING WITH THE WORK.

UNLESS OTHERWISE NOTED, RUNOUTS TO DIFFUSERS SHALL BE SAME SIZE AS DIFFUSER NECK SIZE.

CONSULTANTS: WHITNEY, BAILEY,

ARCHITECTURAL / STRUCTURAL / CIVIL

COX, MAGNANI,LLC/ WBCM, LLC.

300 EAST JOPPA ROAD, SUITE 200 BALTIMORE, MARYLAND 21286 PHONE: (410) 512-4500 FAX: (410) 324-4100

Henry Adams

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

SPECIAL NOTES: (APPLICABLE TO THIS DRAWING ONLY)

1) MOUNT ON 4" HOUSEKEEPING PAD

(2) <u>FCU-1</u> AND ASSOCIATED DUCTWORK LOCATED WITHIN ATTIC SPACE. MOUNT FROM ABOVE. PROVIDE SECONDARY DRAIN PAN BENEATH FCU.

3 20x20 R-1. 900 CFM.

48" L x 24" W x 18" H INSULATED PLENUM.

(5) 54" L x 10" W x12" H INSULATED PLENUM. 900 CFM

6) APPROX 18" LONG D-1 (THE DIFFUSER SHALL FIT BETWEEN THE EXISTING STUDS. VERIFY EXACT DIMENSION IN FIELD) WITH (5) 1" SLOTS. CONTRACTOR SHALL VERIFY IN FIELD IF EXISTING STUDS ARE LOAD BEARING. IF THEY ARE NOT LOAD BEARING MODIFY FRAMING AND USE A SINGLE 9 FT LONG D-1 IN LIEU OF THE MULTIPLE 18" LONG DIFFUSERS. LOCATE DIFFUSER IN BARREL VAULT CEILING AND MATCH STAINED WOOD.

7) 14" LONG INSULATED PLENUM. PLENUM SHALL BE 16" DEEP AND WIDTH SHALL MATCH WIDTH OF FCU CONNECTION.

8) 24" LONG INSULATED PLENUM. PLENUM SHALL BE 16" DEEP AND WIDTH SHALL MATCH WIDTH OF FCU CONNECTION.

9 36" x 48" ATTIC HATCH

10 LOCATE THERMOSTAT AT THE SAME ELEVATION AS LIGHT SWITCHES

PROFESSIONAL CERTIFICATION. I HERE BY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO.: 36608 EXPIRATION DATE: 12/23/2025

ST. MARY'S CHAPEL **DESIGN AND INSTALL** INTERPRETIVE ELEMENTS OF CHAPEL EXHIBIT AND ADD A/C PROJECT NO: SM-023-230-002

USING AGENCY APPROVAL

Date

Date

DGS APPROVAL

Project Manager

Chief of PM&D Date 03/15/24 ISSUED FOR BID DESCRIPTION MARK DATE

DRAWN BY: MAV

CAD DWG FILE: -

CHK'D BY: CEL

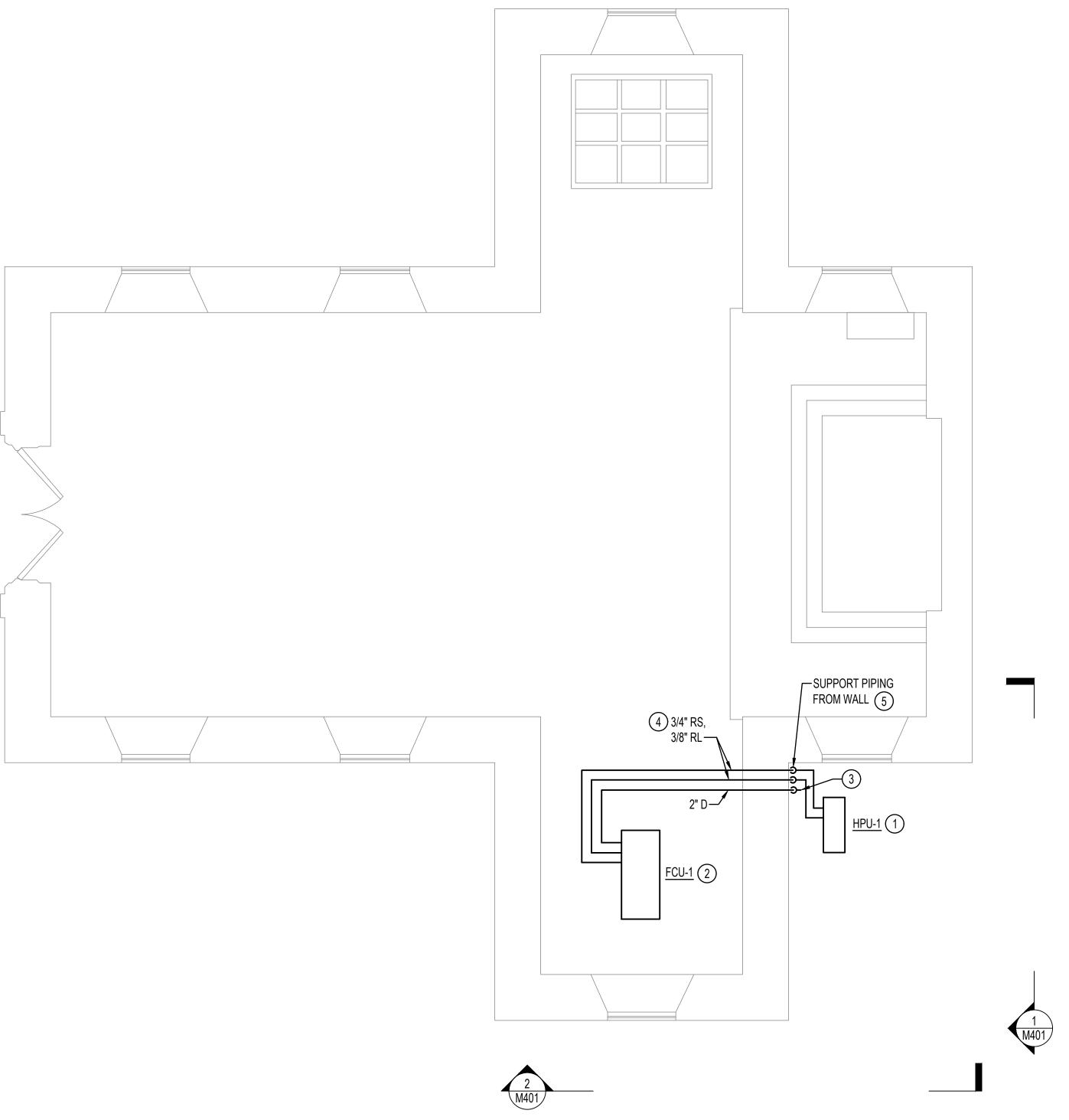
PROJECT No.: SM-023-230-002

DATE: 03/15/2024

FIRST FLOOR - DUCTWORK -NEW WORK PLAN

M101

SHEET 9 OF 17



FIRST FLOOR - MECHANICAL PIPING - NEW WORK PLAN

M201 1/4" = 1'-0"

DRAWING NOTES: (APPLICABLE TO THIS DRAWING ONLY)

EXISTING SHOWN WITH LIGHT WEIGHT LINE, ————

NEW WORK SHOWN WITH HEAVY WEIGHT LINE, ———— INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. EXISTING CONDITIONS ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, OR THERE IS A QUESTION

REGARDING SCOPE OF WORK OR LIMITS OF DISTURBANCE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT WRITTEN DIRECTION BEFORE PROCEEDING WITH THE WORK.

PATCH, FINISH, AND PAINT ANY WALLS FROM CORNER TO CORNER THAT ARE OPENED UP FOR INSTALLATION OF NEW WIRING, DUCTWORK, PIPING, ETC. MATCH EXISTING FINISH.

SPECIAL NOTES: (APPLICABLE TO THIS DRAWING ONLY)

- 1) MOUNT ON 4" HOUSEKEEPING PAD
- 2 FCU-1 AND ASSOCIATED PIPING LOCATED WITHIN ATTIC SPACE. MOUNT FROM ABOVE.
- 3 TERMINATE 2" D 6" ABOVE FINISHED GRADE WITH ELBOW DN
- 4) ASSOCIATED EQUIPMENT MANUFACTURER SHALL CONFIRM FINAL PIPE SIZES
- 5 PROVIDE PENETRATION OUTLET EQUAL TO AIREX PROSYSTEM KIT MODEL TGS AT PIPE PENETRATIONS THROUGH WALL.

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MECHANICAL ELECTRICAL & PLUMBING ENGINEERS



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Project Manager

Date Chief of PM&D Date 03/15/24 ISSUED FOR BID DESCRIPTION MARK DATE

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DRAWN BY: MAV

CHK'D BY: CEL

PROJECT No.: SM-023-230-002

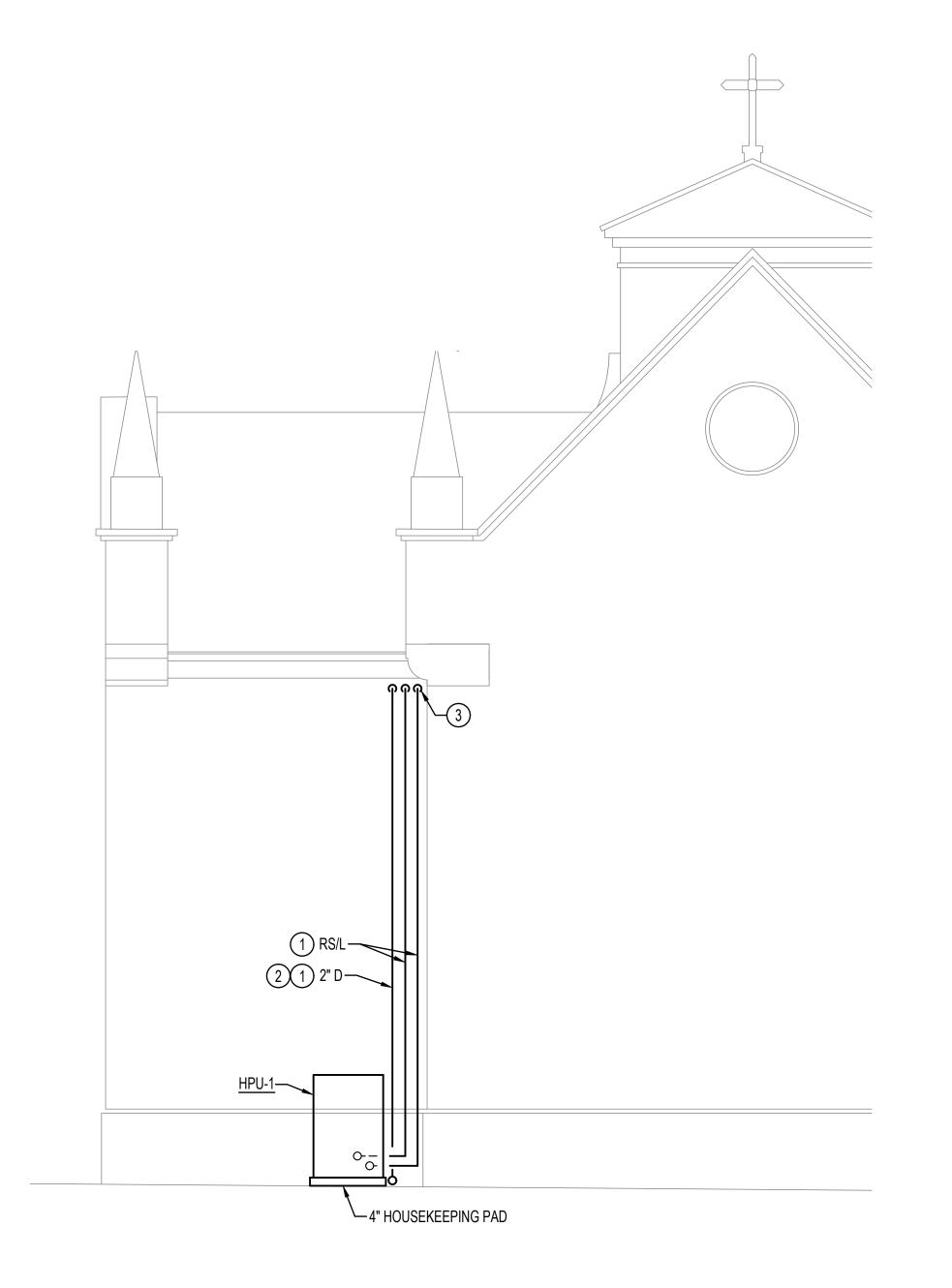
DATE: 03/15/2024

FIRST FLOOR - MECHANICAL PIPING - NEW WORK PLAN

M201

SHEET 10 OF 17





MECHANICAL - SECTION 2

M401 1/4" = 1'-0"

MECHANICAL - SECTION 1

M401 1/4" = 1'-0"

DRAWING NOTES: (APPLICABLE TO THIS DRAWING ONLY)

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HENRY ADAMS Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

SPECIAL NOTES: (APPLICABLE TO THIS DRAWING ONLY)

1 SUPPORT PIPES FROM WALL

(2) TERMINATE 2" D 6" ABOVE FINISHED GRADE WITH ELBOW DN

3 PROVIDE PENETRATION OUTLET EQUAL TO AIREX PROSYSTEM KIT MODEL TGS AT PIPE PENETRATIONS THROUGH WALL.



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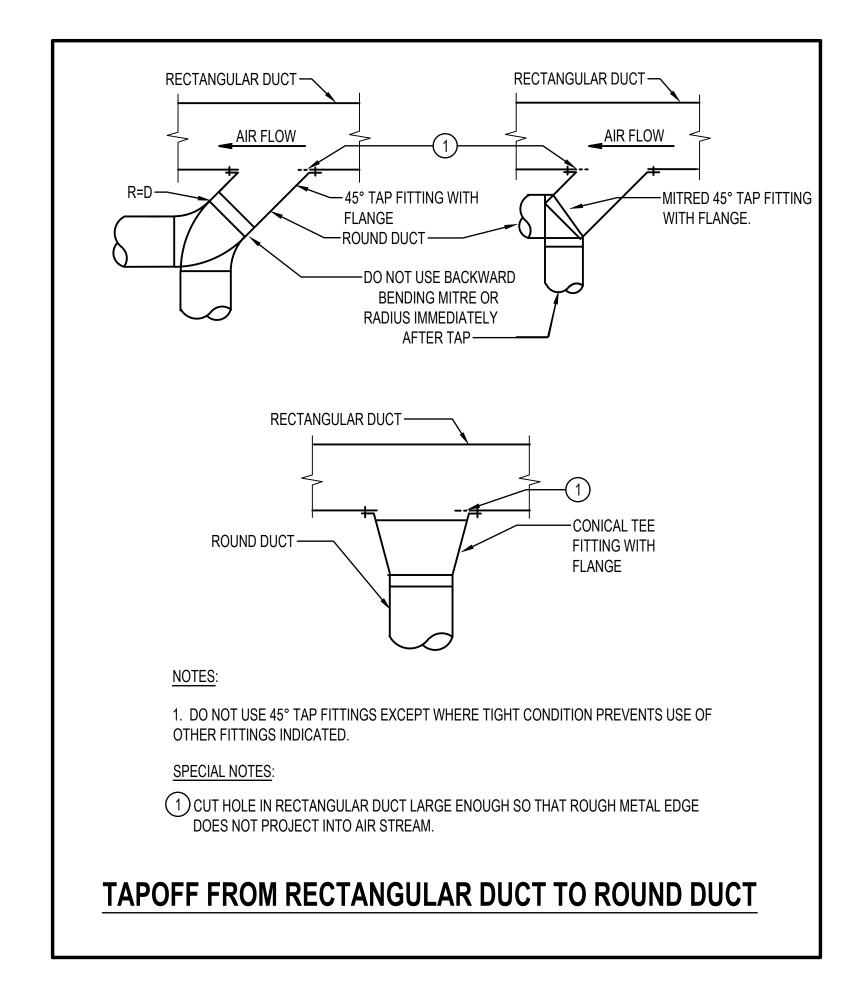
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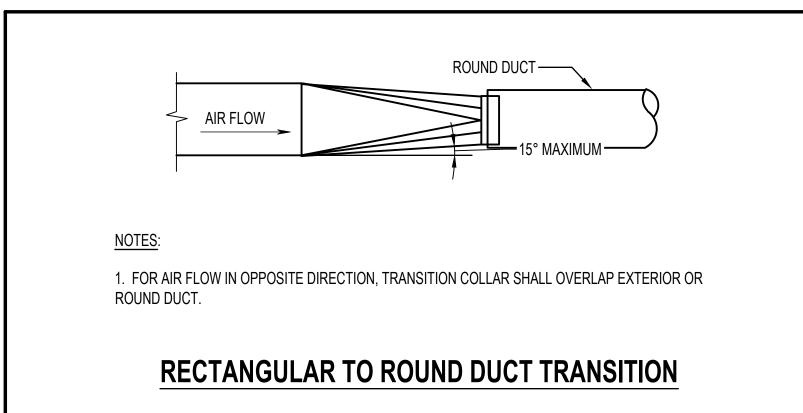
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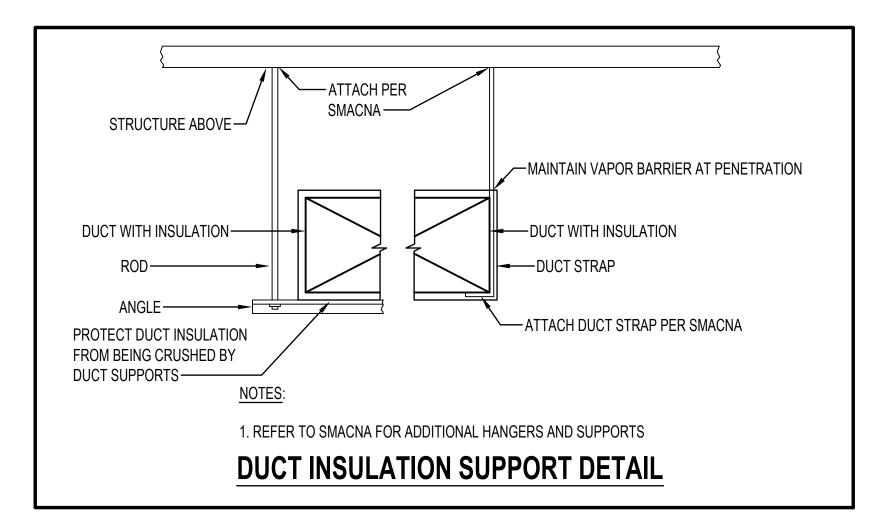
MECHANICAL SECTIONS

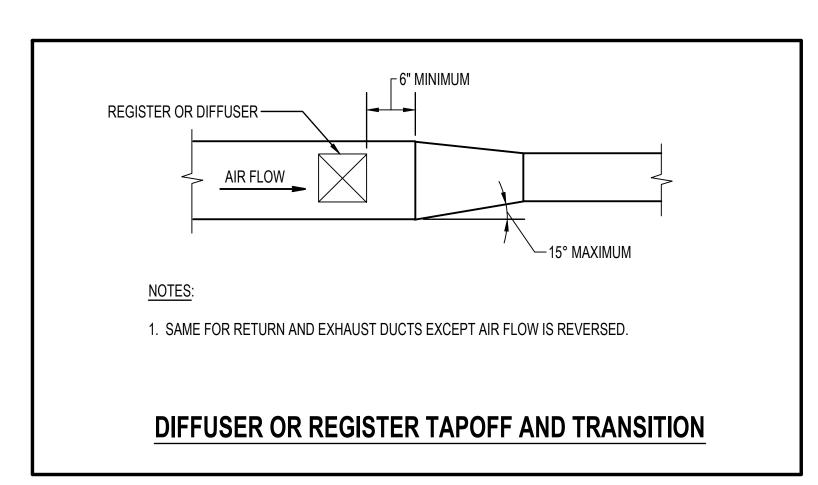
M401

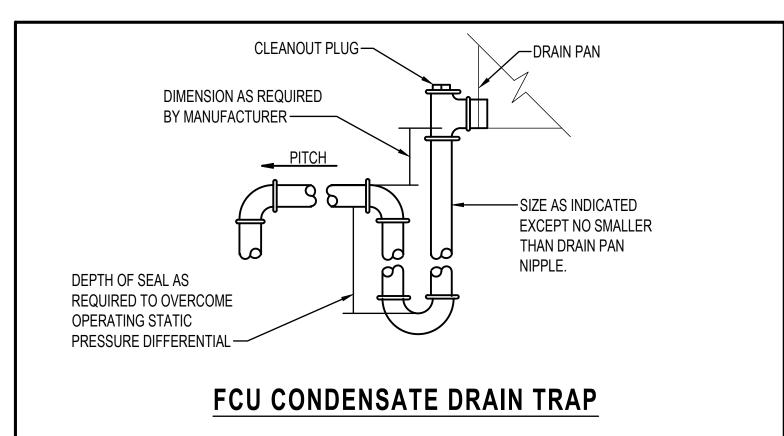
SHEET 11 OF 17

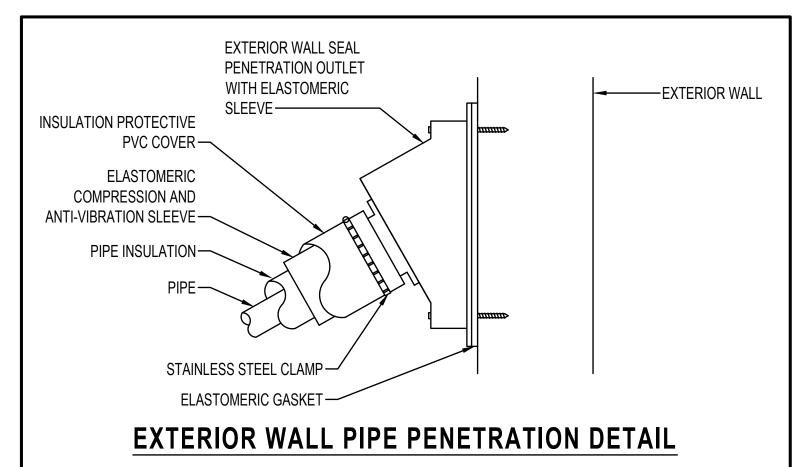


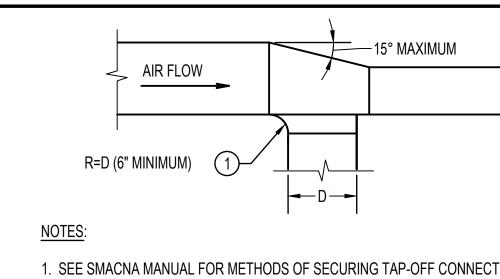










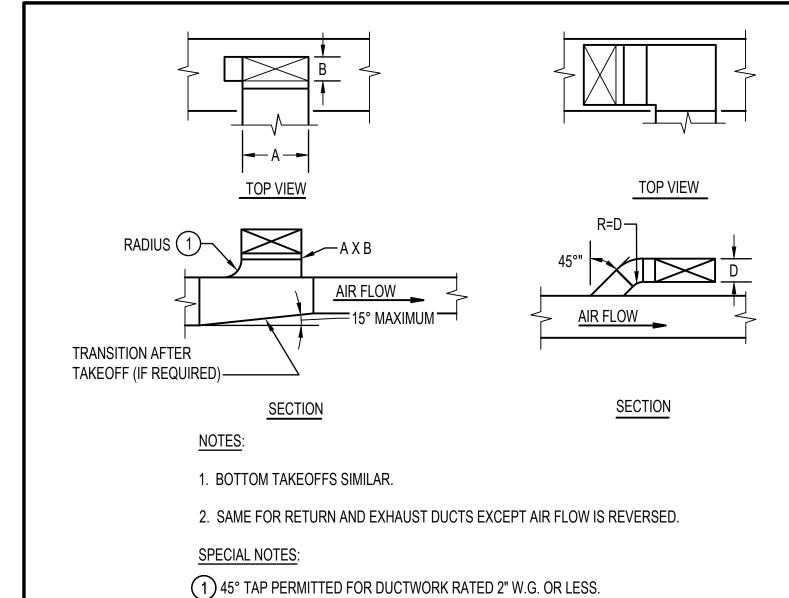


- 1. SEE SMACNA MANUAL FOR METHODS OF SECURING TAP-OFF CONNECTION TO MAIN.
- 2. SAME FOR RETURN AND EXHAUST DUCTS EXCEPT AIR FLOW IS REVERSED.

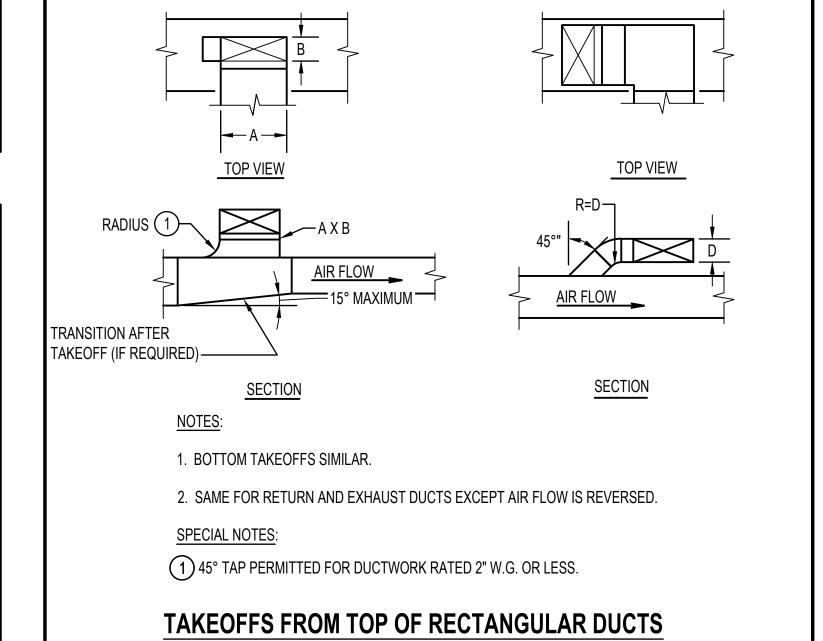
SPECIAL NOTES:

(1) 45° TAP PERMITTED FOR DUCTWORK RATED 2" W.G. OR LESS.

TAPOFF AND TRANSITION FROM SIDE OF DUCT



TAKEOFFS FROM TOP OF RECTANGULAR DUCTS



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MECHANICAL DETAILS

M501

SHEET 12 OF 17

GENERAL NOTES: (APPLICABLE TO ALL MECHANICAL SCHEDULES)

- UNIT NUMBERS ARE INDICATED WHERE ALL UNITS ARE LISTED AND NUMBERED INDIVIDUALLY.
- 2. UNIT TYPES ARE DESCRIBED IN THE SPECIFICATIONS.
- 3. TEMPERATURE VALUES ARE LISTED IN DEGREES FAHRENHEIT.
- 4. AIR PRESSURE VALUES ARE LISTED IN INCHES OF WATER COLUMN.
- 5. AIR VELOCITY VALUES ARE LISTED IN FEET PER MINUTE.
- 6. DUCT AND PIPE SIZES ARE LISTED IN SINGLE-NUMBER INCHES OF NOMINAL DIAMETER OR MULTIPLE NUMBER INCHES OF INDICATED PARAMETER CONNECTION SIZES ARE BRANCH SIZES FROM MAINS TO UNIT INLETS. SINGLE PIPE SIZE IS TYPICAL FOR SUPPLY AND RETURN.

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PROJECT NO: SM-023-230-002

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Name Date

Title

DGS APPROVAL

Project Manager Date

Chief of	PM&D	Date
	03/15/24	ISSUED FOR BID
MARK	DATE	DESCRIPTION

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MECHANICAL SCHEDULES
AND CONTROLS

M801

SHEET 13 OF 19

VARIABLE REFRIGERANT FAN COIL UNITS											
	LOCATION	LOCATION ASSOCIATED HEAT PUMP	SA CFM	ESP (IN WC)	COOLING				HEA		
UNIT NO					TOTAL MBH	SENS MBH	EAT DB	EAT WB	TOTAL MBH	EAT DB	NOTES
FCU-1	ATTIC	HPU-1	1,800	0.5	48.5	36.0	75	63	41.3	70	

NOTES FOR VARIABLE REFRIGERANT FAN COIL UNITS:

1. R-410A REFRIGERANT

VARIABLE REFRIGERANT HEAT PUMP UNITS								
				CAPACITY	Y (NOTE 3)		ELECTRICAL	
UNIT NO.	LOCATION	SERVICE	TOTAL COOLING (MBH)	EAT	TOTAL HEATING (MBH)	EAT	VOLTAGE/PHASE	NOTES
HPU-1	OUTDOORS	CHAPEL	48.5	95	41.3	0	208/1	

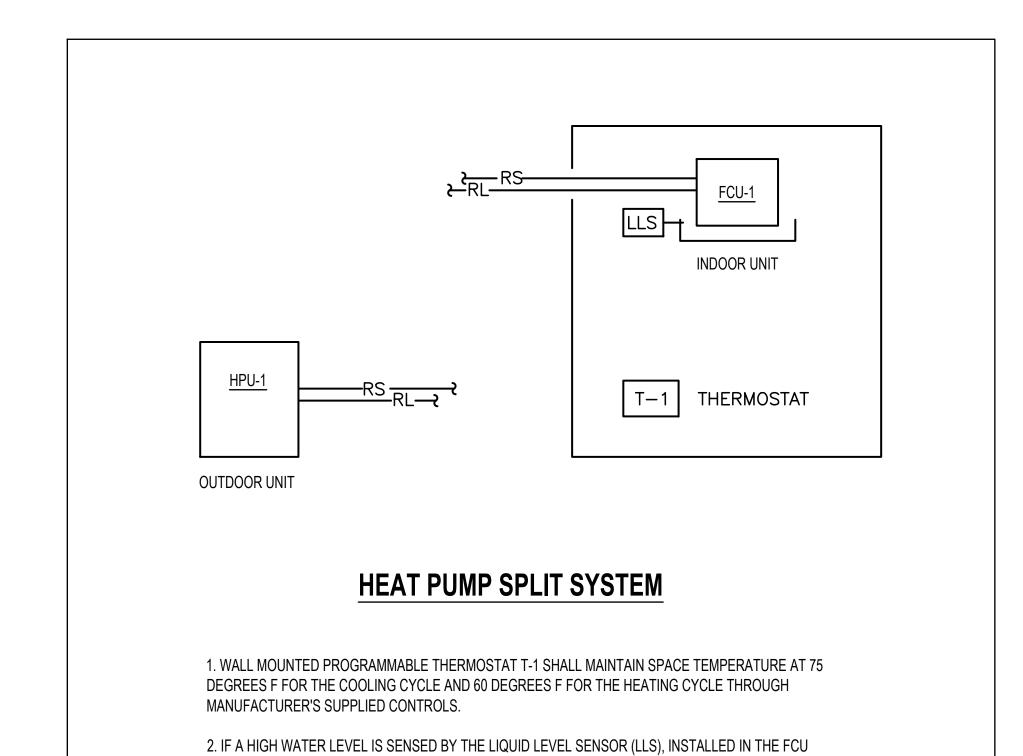
NOTES FOR VARIABLE REFRIGERANT AIR-COOLED CONDENSING UNITS:

SECONDARY DRAIN, THE UNIT SHALL SHUTDOWN.

1. R-410A REFRIGERANT

2. REFRIGERANT PIPE SIZES AND ROUTING, REFRIGERANT CHARGE, ETC., SHALL BE PROVIDED BY THE MANUFACTURER.
3. CAPACITY INDICATED IS MINIMUM REQUIRED CAPACITY AFTER CORRECTIONS FOR DESIGN CONDITIONS, REFRIGERANT PIPE S

AND LENGTHS, AND CORRECTIONS HAVE BEEN TAKEN INTO ACCOUNT



GENERAL ELECTRICAL DEMOLITION/RENOVATION NOTES

- . THE FACILITY WILL REMAIN OCCUPIED DURING RENOVATIONS.
- . MINIMIZE OUTAGES. COORDINATE OUTAGES WITH OWNER. PERFORM WORK REQUIRING SUSTAINED EQUIPMENT OUTAGE CONTINUOUSLY AROUND THE CLOCK UNTIL WORK IS COMPLETE, UNLESS NOTED OTHERWISE.
- PRIOR TO DEMOLITION, FIELD VERIFY CONDUITS, CONDUCTORS, AND CABLES THAT PASS THROUGH AND SERVE AREAS OUTSIDE THE SCOPE OF WORK, MAINTAIN CONTINUITY OF SYSTEMS, PROTECT OR RELOCATE SYSTEMS TO PREVENT DAMAGE, RESTORE SYSTEMS TO NORMAL OPERATION, COORDINATE SYSTEM OUTAGES WITH
- 4. IDENTIFY NONFUNCTIONING EQUIPMENT AND DEVICES TO REMAIN AFTER DEMOLITION. NOTIFY OWNER IN WRITING PRIOR TO DEMOLITION. UPON COMPLETION OF WORK, ENSURE THAT EXISTING EQUIPMENT AND DEVICES OPERATE PROPERLY.
- 5. IN AREAS REQUIRING THE PERFORMANCE OF WORK OF OTHER TRADES, CAREFULLY DISCONNECT, MAKE SAFE, REMOVE AND STORE ELECTRICAL ITEMS IN PATH OF WORK. REINSTALL AND RECONNECT SAME AFTER COMPLETION OF OTHER TRADE'S WORK. COORDINATE REMOVAL OF EQUIPMENT WITH OTHER TRADES PRIOR TO
- . AFTER DEMOLITION VERIFY AND SUPPORT REMAINING CABLES, WIRES, AND CONDUIT IN ACCORDANCE WITH THE APPLICABLE VERSION OF THE NEC. DISCONNECT, MAKE SAFE AND REMOVE ABANDONED AND TEMPORARY WIRE WITHIN SPACE.
- EXISTING CONDITIONS REFLECT GENERAL OBSERVATIONS AND ARE NOT INTENDED TO INDICATE DETAILS OR DIMENSIONS. NO ATTEMPT HAS BEEN MADE TO SHOW ALL ELECTRICAL EQUIPMENT. VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING WORK. NOTIFY OWNER IN WRITING IF CONDITIONS ARE DISCOVERED THAT PREVENT EXECUTION OF WORK.
- 8. PROTECT REMAINING ELECTRICAL SYSTEMS AND COMPONENTS FROM DAMAGE. REMOVE PROTECTIVE MATERIALS UPON COMPLETION OF WORK.
- 9. IN AREAS NOTED TO REMOVE ELECTRICAL WORK, REMOVE CONDUITS AND ASSOCIATED SUPPORTS BACK TO POINT OF CONCEALMENT AND REMOVE WIRING BACK TO REMAINING ACTIVE DEVICES OR SOURCE.
- 10. PROVIDE OWNER WITH INVENTORY OF MAJOR ELECTRICAL ITEMS TO BE REMOVED. OWNER WILL SELECT ITEMS TO BE SALVAGED. TURN SALVAGED ITEMS OVER TO OWNER. ITEMS REJECTED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR. REMOVE DEMOLISHED ITEMS FROM SITE.
- 11. UPDATE PANELBOARD DIRECTORIES TO INCLUDE MODIFICATIONS BY THIS PROJECT. TRACE CIRCUITS TO IDENTIFY UNLABELED LOADS.
- 12. REPAIR DISTURBED AREAS TO MATCH EXISTING CONDITIONS.
- 13. PROVIDE BLANK COVER PLATES FOR DEVICES REMOVED WHEN A REPLACEMENT DEVICE IS NOT INDICATED.
- 14. MAINTAIN CONTINUITY OF CIRCUITS AND FEEDERS REMAINING AFTER DEMOLITION IN PANELS INDICATED TO BE DEMOLISHED OR REPLACED. EXTEND EXISTING CIRCUITS AND FEEDERS REMAINING AFTER DEMOLITION TO NEW PANELS. CIRCUIT BREAKER, CONDUIT, AND WIRE SHALL MATCH EXISTING TYPES AND SIZES

GENERAL ELECTRICAL NOTES

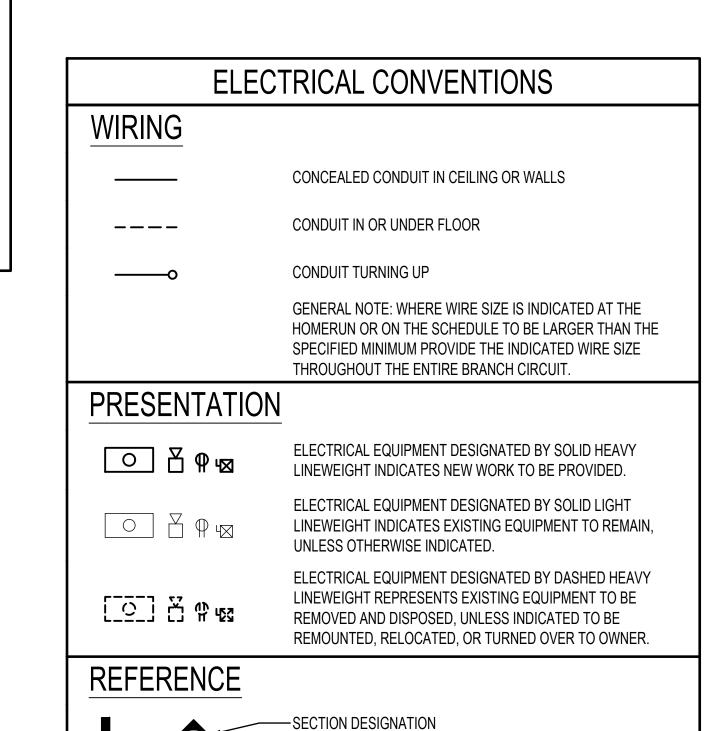
- 1. PROVIDE LABOR, MATERIALS, TOOLS, EQUIPMENT, COORDINATION, DELEGATED DESIGN AND INCIDENTALS NECESSARY TO PROVIDE A COMPLETE AND OPERABLE SYSTEM. 2. PERFORM WORK AS REQUIRED BY APPLICABLE CODES, REGULATIONS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENTS AND OTHER AUTHORITIES WITH LAWFUL JURISDICTION.
- 3. MATERIAL AND EQUIPMENT SHALL BE LISTED AND LABELED BY NATIONALLY RECOGNIZED TESTING LABORATORIES FOR INTENDED SERVICE.
- 4. GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES AND BACK CHARGES, AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES THAT HAVE JURISDICTION.
- 5. MAINTAIN RECORD DRAWINGS ON SITE. RECORD SET SHALL BE COMPLETE, CURRENT, AND AVAILABLE UPON REQUEST.
- 6. SUBMIT FOR APPROVAL, SHOP DRAWINGS FOR EQUIPMENT AND MATERIALS USED ON PROJECT. OBTAIN APPROVAL BY ENGINEER PRIOR TO PURCHASE OF EQUIPMENT AND MATERIALS.
- 7. REPAIR OR REPLACE DAMAGE TO FACILITIES AND EQUIPMENT AT NO ADDITIONAL EXPENSE TO OWNER.
- 8. PATCH AND REPAIR DISTURBED AREAS TO MATCH ADJACENT SURFACES AND FINISHES.
- 9. PROVIDE TEMPORARY POWER AND LIGHTING FOR OTHER TRADES AS REQUIRED TO COMPLETE PROJECT IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.
- 10. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS. PROVIDE COMPONENTS INDICATED ON RISER DIAGRAMS WHETHER OR NOT INDICATED ON PLANS, AND VICE VERSA.
- 11. LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND REQUIRE COORDINATION WITH OTHER TRADES. ROUTING OF CONDUIT IS DIAGRAMMATIC IN NATURE AND NOT INTENDED TO SHOW REQUIRED OFFSETS AND DETAILS. OBTAIN DRAWINGS AND SPECIFICATIONS FROM OTHER TRADES AND COORDINATE WITH OTHER TRADES.
- 12. COORDINATE ELECTRICAL INSTALLATION WITH FIELD CONDITIONS. LOCATIONS SHOWN ARE DIAGRAMMATIC AND MAY REQUIRE ADJUSTMENT IN FIELD.
- 13. PERMANENTLY LABEL NEW ELECTRICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, DEVICE DESIGNATION AND SUPPLY CIRCUIT DESIGNATION.
- 14. CORE DRILL CONCRETE WALLS AND FLOORS TO PROVIDE OPENINGS FOR CONDUIT INSTALLATION. MAXIMUM CORE DRILL SIZE SHALL BE 5-INCH DIAMETER. SPACE CORE DRILL LOCATIONS A MINIMUM OF 6" FROM EACH OTHER. MEASURED FROM CORE DRILL OPENINGS. PROPERLY SEAL OPENINGS ACCORDING TO LOCATION AND APPLICATION. USE GROUND PENETRATING RADAR OR OTHER MEANS TO VERIFY THAT NO UTILITIES OR STRUCTURAL MEMBERS WILL BE DAMAGED FROM THE DRILLING. OFFSET CONDUIT ROUTE AS REQUIRED TO COORDINATE WITH OBSTRUCTION AND WITH NO ADDITIONAL COST TO THE PROJECT.
- 15. PROVIDE EACH CIRCUIT WITH A DEDICATED NEUTRAL UNLESS NOTED OTHERWISE.
- 16. CONDUIT HOMERUNS SHOWN ON DRAWINGS WITH MORE THAN 3 CURRENT CARRYING CONDUCTORS ARE SHOWN DIAGRAMMATICALLY. DO NOT INSTALL MORE THAN 3 CURRENT CARRYING CONDUCTORS IN A SINGLE RACEWAY UNLESS INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
- 17. PROVIDE FIRESTOPPING FOR ELECTRICAL PENETRATIONS IN FIRE RATED ASSEMBLIES.
- 18. INSTALL ELECTRICAL WORK IN A NEAT AND WORKMANLIKE MANNER, RECTILINEAR TO BUILDING STRUCTURE. INSTALL RACEWAYS TIGHT TO STRUCTURAL CEILING AND AS HIGH AS POSSIBLE WITHIN CEILING SPACES TO MAINTAIN MAXIMUM AMOUNT OF CLEAR SPACE BELOW RACEWAY.
- 19. INSTALL RACEWAYS CONCEALED IN BUILDING FINISHES FOR ALL EXTERIOR MOUNTED DEVICES. DO NOT ROUTE EXPOSED ON BUILDING EXTERIOR.
- 20. INSTALL RACEWAYS CONCEALED IN WALLS, UNDER FLOORS, ABOVE CEILINGS, ETC., EXCEPT AS FOLLOWS:
- A. WHERE SUSPENDED CEILINGS ARE NOT PROVIDED.
- B. IN VERTICAL SHAFTS, ELECTRICAL CLOSETS, ETC., MECHANICAL AND ELECTRICAL EQUIPMENT SPACES WHERE CONCEALMENT IS NOT PRACTICAL.
- C. AT SURFACE-MOUNT PANELBOARDS IN OTHERWISE FINISHED SPACES LIMITED TO VERTICAL RUNS ABOVE AND BELOW PANEL.
- D. WHERE REQUIRED FOR EQUIPMENT CONNECTIONS. E. WHERE SPECIFICALLY INDICATED ON DRAWINGS.
- 24. OWNER-FURNISHED EQUIPMENT: VERIFY AND COORDINATE ELECTRICAL ROUGH-IN REQUIREMENTS FOR OWNER-FURNISHED EQUIPMENT WITH OWNER PRIOR TO PULLING CONDUCTORS AND MAKING FINAL CONNECTIONS. LACK OF COORDINATION SHALL NOT JUSTIFY CHANGE ORDERS.
- 25. WHERE SUBMITTED EQUIPMENT REQUIRES REVISION TO OVERCURRENT PROTECTION, CONDUIT, AND WIRING, COORDINATE AND MAKE CHANGE TO PROVIDE A COMPLETE INSTALLATION IN ACCORDANCE WITH APPLICABLE CODES.
- 26. PROVIDE NECESSARY SUPPORTING STRUT CHANNEL AND ALL MISCELLANEOUS HARDWARE FOR MOUNTING ELECTRICAL EQUIPMENT. MAINTAIN NEC WORKING CLEARANCES. COORDINATE EXACT LOCATION IN FIELD. DO NOT MOUNT ON EQUIPMENT ACCESS PANELS OR IN EQUIPMENT MANUFACTURER'S RECOMMENDED MAINTENANCE CLEARANCES.

ELECTRICAL ABBREVIATIONS AMPERE AMPERE INTERRUPTING CAPACITY MAIN CIRCUIT BREAKER MCB AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND MAIN LUGS ONLY MLO AIR-CONDITIONING ENGINEERS MAXIMUM OVERCURRENT PROTECTION AMERICAN WIRE GAUGE NATIONAL ELECTRICAL CODE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION BASIS OF DESIGN NOT TO SCALE CONDUIT CIRCUIT BREAKER RX REMOVE EXISTING CKT CIRCUIT SAFETY SWITCH DISCONNECT SWITCH SW SWITCH DWG DRAWING TRANSFORMER TYP **EXISTING TYPICAL VOLTS GROUND WIRE** VA **VOLT-AMPERES** W WIRE **HEAT PUMP UNIT** XFMR TRANSFORMER JUNCTION BOX ONE THOUSAND THOUSAND AMPERE INTERRUPTING CAPACITY THOUSAND CIRCULAR MILS KILOWATTS LOAD CENTER

ELECTRICAL LEGEND								
SYMBOL	DESCRIPTION	MOUNTING HEIGHT						
	EQUIPMENT, AS NOTED							
ď	SAFETY SWITCH	60" TO TOP						

NOTES: (APPLICABLE TO ELECTRICAL LEGEND ONLY)

- 1. THE MOUNTING HEIGHTS GIVEN ON THIS SHEET IN THE ELECTRICAL LEGEND ARE GENERAL AND SHALL BE USED ONLY WHEN MOUNTING HEIGHTS CANNOT BE ESTABLISHED BY REFERENCE TO DETAILS, ELEVATIONS, AND NOTES ON THE DRAWINGS.
- ALL MOUNTING HEIGHTS, UNLESS OTHERWISE NOTED, SHALL BE MEASURED FROM THE FINISHED FLOOR TO THE CENTERLINE OF THE OUTLET OR DEVICE.
- HEIGHTS OF ALL ITEMS NOT COVERED BY THE ELECTRICAL LEGEND AND NOT SHOWN ON THE DRAWINGS SHALL BE AS DIRECTED BY THE ARCHITECT OR ENGINEER.
- WHERE PLACING ANY ITEM AT THE HEIGHTS LISTED OR NOTED WILL CAUSE INTERFERENCE WITH THE WORK OF OTHER TRADES, OR IS NOT PHYSICALLY POSSIBLE OR DESIRABLE FOR ONE REASON OR ANOTHER, THE ITEM SHALL BE INSTALLED AT A LOCATION APPROVED BY THE ARCHITECT OR ENGINEER.



NUMBER DENOTES SECTION IDENTIFICATION

——DETAIL DESIGNATION

S-1 SPECIAL EQUIPMENT NUMBER

-DRAWING NUMBER WHERE DETAIL IS LOCATED

—NUMBER DENOTES SECTION IDENTIFICATION

- DRAWING NUMBER WHERE DETAIL IS LOCATED

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HENRY ADAMS Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS



PROFESSIONAL CERTIFICATION. I HERE BY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO.: 51082 EXPIRATION DATE: 06/07/2025

ST. MARY'S CHAPEL DESIGN AND INSTALL INTERPRETIVE ELEMENTS OF CHAPEL EXHIBIT AND ADD A/C PROJECT NO: SM-023-230-002

USING AGENCY APPROVAL

Date

DGS APPROVAL

Project Manager Date Chief of PM&D Date 03/15/24 | ISSUED FOR BID MARK DATE DESCRIPTION CAD DWG FILE: -

DRAWN BY: ZAJ

CHK'D BY: JLW

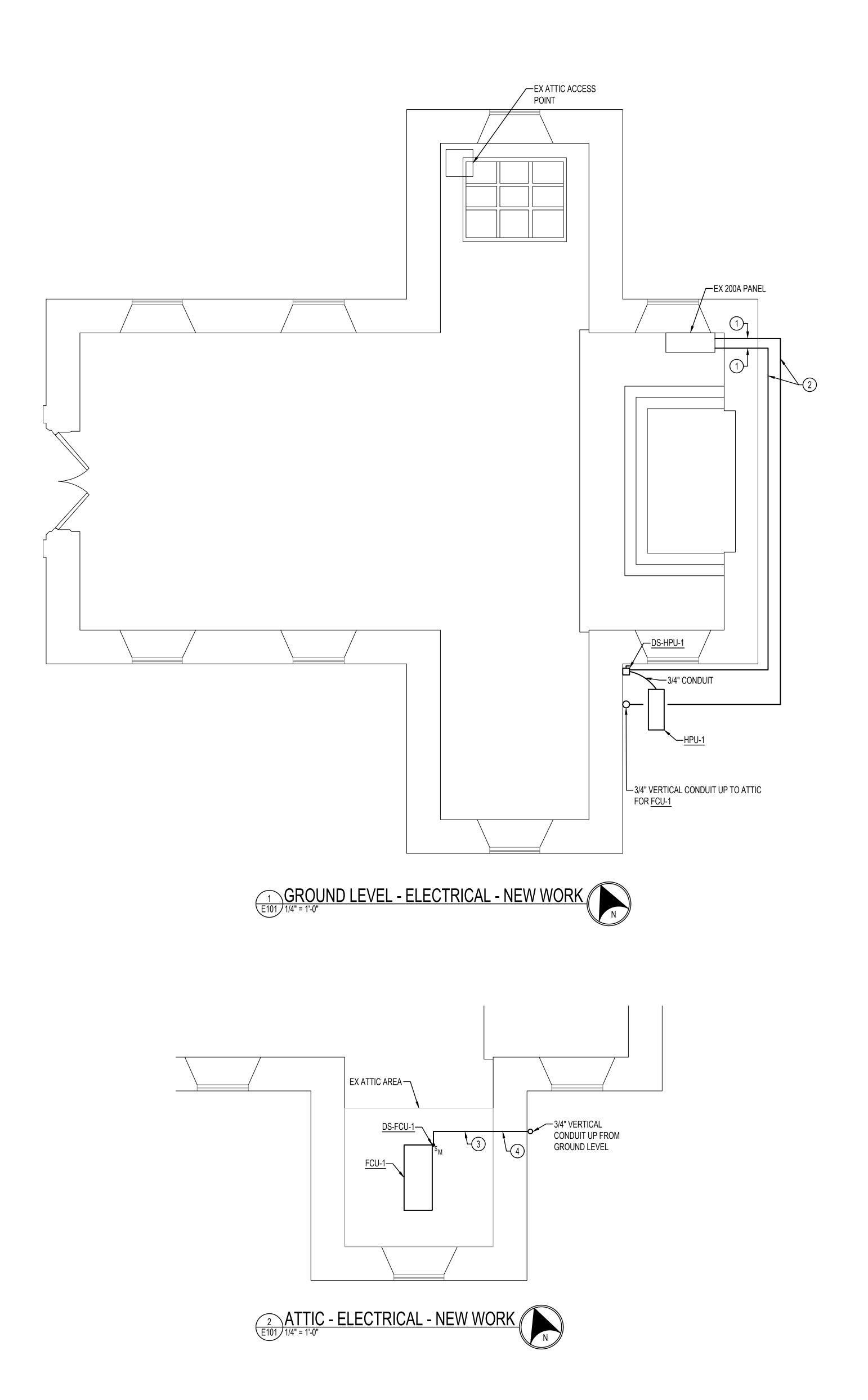
DATE: 03/15/2024

PROJECT No.: SM-023-230-002

ELECTRICAL COVER SHEET

E001

SHEET 14 OF 17



DRAWING NOTES: (APPLICABLE TO THIS SHEET ONLY)

- 1. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (——) INDICATE NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (——) INDICATE EXISTING ITEMS TO REMAIN.
- 2. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT WRITTEN DIRECTION BEFORE PROCEEDING WITH THE WORK.

SPECIAL NOTES: (APPLICABLE TO THIS SHEET ONLY)

- CORE DRILL THROUGH BRICK WALL AND ROUTE CONDUIT TO OUTDOORS. ROUTE BELOW FINISHED GRADE IF APPLICABLE, OR PROVIDE TYPE LB CONDUIT FITTING TO TRANSITION CONDUITS BELOW GRADE AT BUILDING EXTERIOR.
- 2 ROUTE 3/4" CONDUIT UNDERGROUND VIA UTILITY TRENCH. CONDUITS MUST BE MINIMUM 24" BELOW FINISHED GRADE. TRENCH MUST BE WITHIN 10 FEET OF THE FOUNDATION.
- (3) 3/4" HORIZONTAL CONDUIT, SURFACE MOUNT TO WOOD BEAMS.
- (4) CORE DRILL THROUGH BRICK WALL AND ROUTE CONDUIT TO ATTIC SPACE.

ARCHITECTURAL / STRUCTURAL / CIVIL CONSULTANTS:

WHITNEY, BAILEY, COX, MAGNANI,LLC/WBCM, LLC.

300 EAST JOPPA ROAD, SUITE 200 BALTIMORE, MARYLAND 21286 PHONE: (410) 512-4500 FAX: (410) 324-4100

HENRY ADAMS

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PROJECT NO: SM-023-230-002

USING AGENCY APPROVAL

ame Date

Title

DGS APPROVAL

Project Manager

Chief of PM&D

Date

03/15/24 ISSUED FOR BID

DESCRIPTION

CAD DWG FILE: -

MARK DATE

DRAWN BY: ZAJ

CHK'D BY: JLW

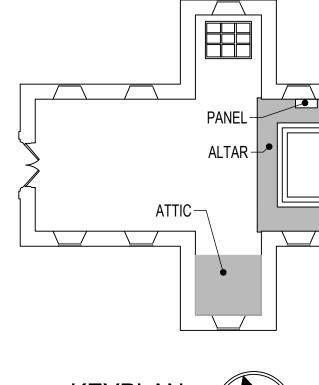
PROJECT No.: SM-023-230-002

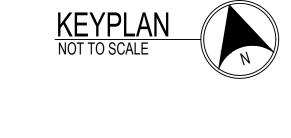
DATE: 03/15/2024

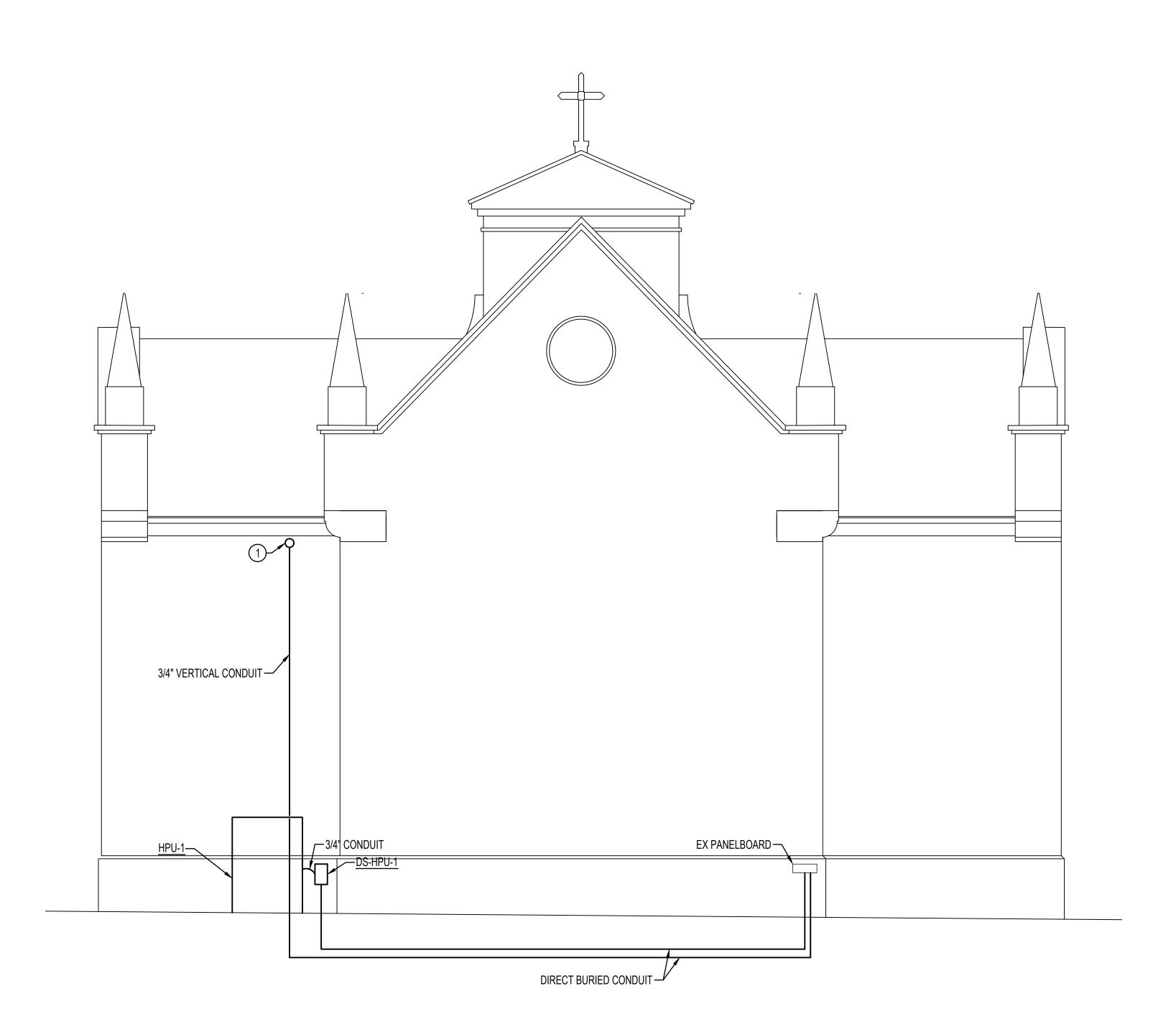
FLOOR PLANS - POWER -NEW WORK

E101

SHEET 15 OF 17







EAST ELEVATION - ELECTRICAL - NEW WORK

DRAWING NOTES: (APPLICABLE TO THIS SHEET ONLY)

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HENRY ADAMS

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Mechanical Electrical & Plumbing Engineers



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DATE: 03/15/2024

ELEVATIONS - POWER - NEW WORK

E102

SHEET 16 OF 17

0 2 4 8 12 FT 1/4" = 1' - 0"

ЕΧ	LOAD CENTER (DEMOLITIO	N)				AMPACITY: 200A TYPE: 200A MCB					TING: F SURE:	LUSH NEMA 1		
	UFACTURER: CUTLER-HAMMER E: LOAD CENTER	,				/ICE: 120/240 VOLTS, 1 F RATING OF MCB: 10K AI	PHASE, 3 WIRE C RMS SYMMETRICAL A	AMPS	LC	CAT	'ion: Al	TAR FLOOR		
CKT	LOAD DESCRIPTION	NOTE		CKT BRE		WIRE AND CONDUIT	WRE AND CONDUIT		BREAKER		NOTE	LOAD DESCRIPTION		Ţ
1	EX NORTH TRANCEPT EAST WALL LIGHTS	-	P 1	TA 20	AUX -	EXISTING	EXISTING	AUX -	TA 20	P 1	-	EX NORTH TRANCEPT WEST WALL TV	+	-
3	EX COFFIN PIT	-	1	20	-	EXISTING	EXISTING	-	20	1	-	EX NORTH WALL PULPIT		T
5	EX NORTH WALL 220V	-	2	30	-	EXISTING	EXISTING	-	20	1	-	EX SOUTH WALL WEST CORNER		
7	-	-	-	-	-		EXISTING	-	30	2	-	EX SOUTH WALL 220V		
	EV NODTH WALL MEST CODNED		4	20	_	EXISTING		_	_		_	_		
9	EX NORTH WALL WEST CORNER	-		20	_	LABTING				-	- 1			

EXISTING



AUXILIARIES	
a AFCIBREAKER	e HANDLE PADLOCH

13 EX SOUTH TRANCEPT WEST WALL

15 EX RECEPTACLE

19 EX RECEPTACLE

23 RX SPACE

25 RX SPACE

27 EX SPACE

29 EX SPACE

31 EX SPACE

33 EX SPACE

35 EX SPACE

37 EX SPACE

39 EX SPACE

41 EX SPACE

d SHUNT TRIP BREAKER

b GFCI BREAKER (5mA) f HANDLE CLAMP c GFEP BREAKER (30mA) g RED CB HANDLE

X GROUND BUS SERVICE ENTRANCE LABEL INTEGRAL SPD/TVSS 200% NEUTRAL BUS & LUGS ISOLATED GROUND BUS

EXISTING

SPLIT BUS FEED THRU LUGS SUB FEED LUGS OFFSET INTERIOR / RISER PANEL

EX OUTSIDE RECEPTACLE

EX OUTSIDE RECEPTACLE

RX SPACE

RX SPACE

EX SPACE

	MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE											
EQUIPMENT DESIGNATION	KW	НР	MCA	МОСР	FLA	VOLTAGE	PHASE	LOAD (kVA)	WIRING & CONDUIT	DISCONNECTING MEANS	CONTROL MEANS	NOTES
									See schedule for Ex Load Center			
HPU-1	-	-	29.1	35	23.2	240	1	5.57	(New Work), Circuit 23, 25	DS-HPU-1	BY MECHANICAL	1,2
									See schedule for Ex Load Center			
FCU-1	-	-	8.6	15	6.88	240	1	1.65	(New Work), Circuit 18	DS-FCU-1	BY MECHANICAL	1,2

NOTES: (APPLICABLE TO MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE ONLY)

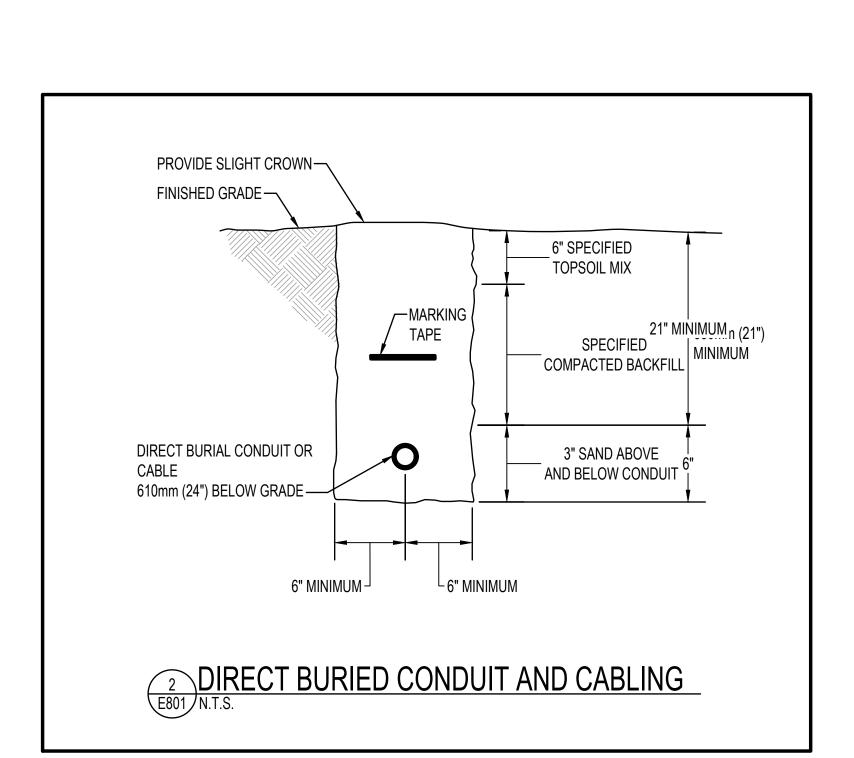
1. REVIEW EQUIPMENT SUBMITTALS FROM OTHER TRADES PRIOR TO ORDERING OR INSTALLING ASSOCIATED ELECTRICAL WORK. ELECTRICAL CONTRACTOR SHALL MODIFY COMPONENTS OF THE ELECTRICAL CONNECTIONS AS NECESSARY TO MATCH NAMEPLATE DATA OF APPROVED EQUIPMENT AND PROVIDE A CODE COMPLIANT INSTALLATION, INCLUDING BUT NOT LIMITED TO CIRCUIT BREAKERS, WIRE, CONDUITS, CONNECTION TYPES, SWITCHES, AND FUSES. CHANGE ORDERS AND EXTRAS WILL NOT BE AWARDED FOR FAILURE TO COORDINATE WITH OTHER TRADES' EQUIPMENT SUBMITTALS.

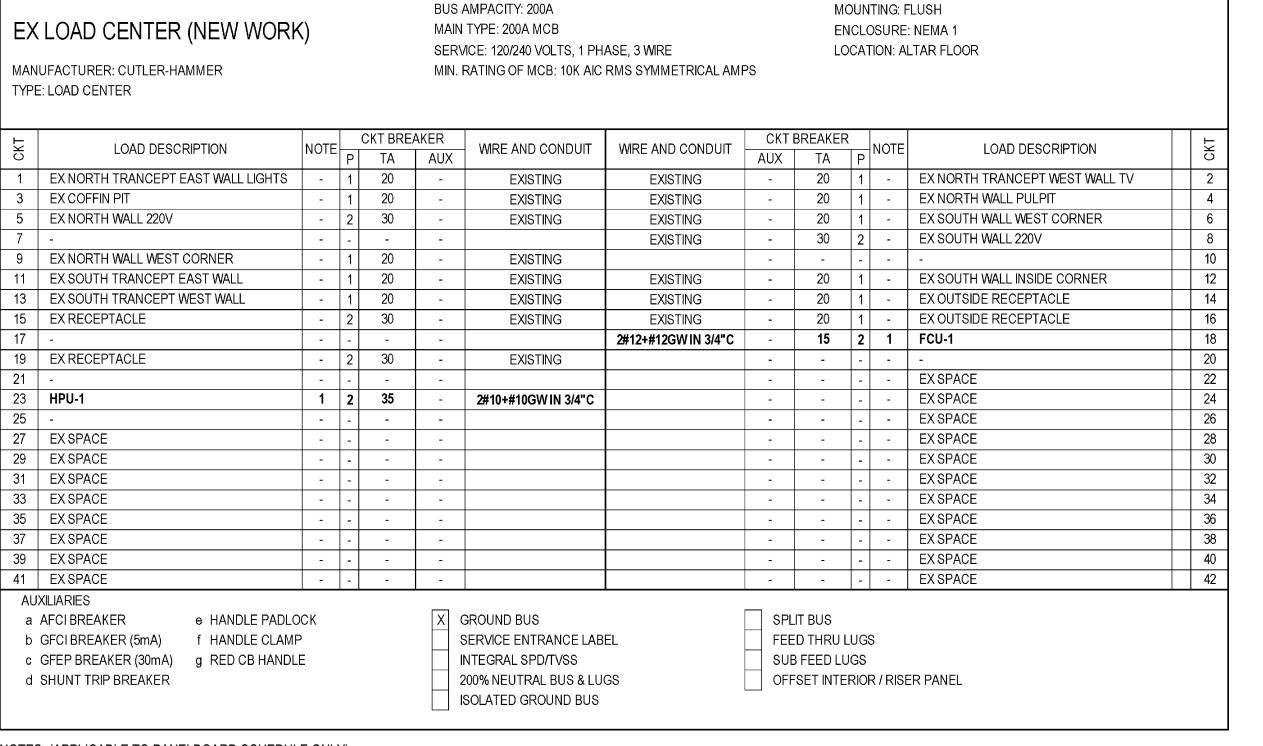
2. PROVIDE NECESSARY SUPPORTING STRUT CHANNEL AND ALL MISCELLANEOUS HARDWARE FOR MOUNTING ELECTRICAL EQUIPMENT. MAINTAIN NEC WORKING CLEARANCES. FIELD COORDINATE EXACT LOCATIONS. DO NOT MOUNT ON EQUIPMENT ACCESS PANELS OR IN EQUIPMENT MANUFACTURERS' RECOMMENDED MAINTENANCE CLEARANCES. COORDINATE EXACT LOCATION OF SAFETY SWITCHES WITH MECHANICAL EQUIPMENT/CONTRACTOR.

DISCONNECT SWITCH SCHEDULE									
DESIGNATION	AMP RATING	POLES	VOLT RATING	FUSE AMPS	FUSE CLASS	NEMA ENCLOSURE	NOTES		
DS-HPU-1	60	2	240	35	RK5	4X	2,4		
DS-FCU-1	20	2	240	-	-	TOGGLE SWITCH	-		

NOTES: (APPLICABLE TO DISCONNECT SWITCH SCHEDULE ONLY)

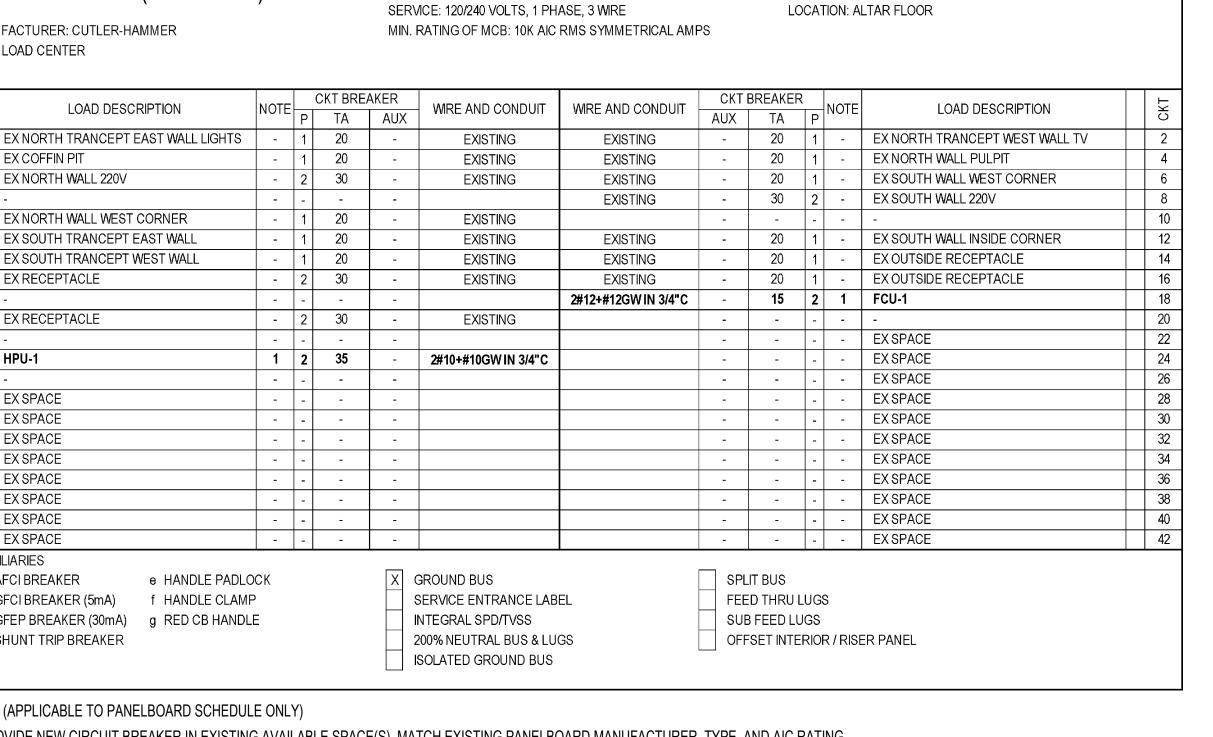
- 1. PROVIDE FUSE AND COORDINATE EXACT EQUIPMENT FUSE SIZE WITH MOTOR OR EQUIPMENT NAMEPLATE DATA DURING
- CONSTRUCTION.
- 2. ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE WITH GROUND LUG.
- 3. PROVIDE ALL FUSIBLE DISCONNECT SWITCHES WITH CLASS R FUSE KIT.
- 4. LABEL DISCONNECT SWITCHES WITH THE DESIGNATION IDENTIFIED IN THIS SCHEDULE AND THE CIRCUIT NUMBER AND PANELBOARD FROM WHICH IT IS FED, INCLUDING VOLTAGE AND PHASE.

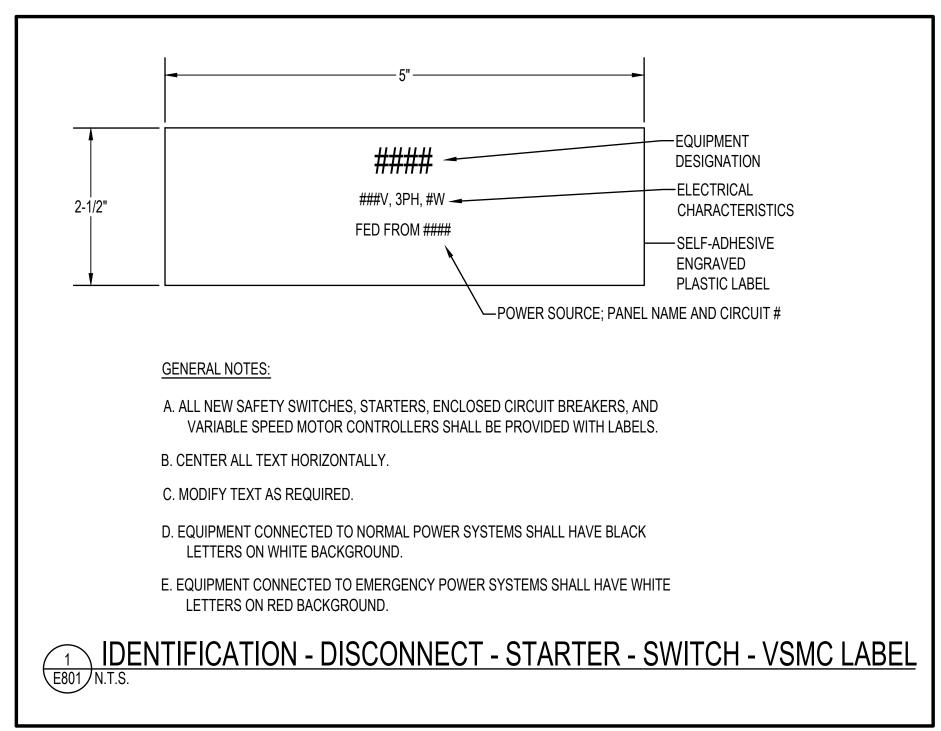




NOTES: (APPLICABLE TO PANELBOARD SCHEDULE ONLY)

1. PROVIDE NEW CIRCUIT BREAKER IN EXISTING AVAILABLE SPACE(S). MATCH EXISTING PANELBOARD MANUFACTURER, TYPE, AND AIC RATING.





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Date

DGS APPROVAL

Project Manager Date Chief of PM&D Date

	03/15/24	ISSUED FOR BID
MARK	DATE	DESCRIPTION

CAD DWG FILE: -

DRAWN BY: ZAJ

CHK'D BY: JLW

PROJECT No.: SM-023-230-002

DATE: 03/15/2024

ELECTRICAL SCHEDULES AND DETAILS

E801

SHEET 17 OF 17

ST. MARY'S CHAPEL HISTORIC ST. MARY'S CITY COMMISSION DESIGN AND INSTALL INTERPRETIVE ELEMENTS OF CHAPEL EXHIBIT AND ADD A/C PROJECT NO: SM-023-230-002

ARCHITECTURAL CONSULTANT

WHITNEY, BAILEY, COX, MAGNANI, LLC.

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MECHANICAL FLECTRICAL PLUMBING ENGINEERING CONSULTAN

HENRY ADAMS

SOUBAL TRANSPERAVENILE TOWSON, MARYLAND 21204 PHONE: (410) 296-6500







LOCATION MAP 16721 POINT LOOKOUT RD. ST, MARYS CITY, MD 20686 ST. MARYS COUNTY, MARYLAND

DEPARTMENT OF GENERAL SERVICES

ATIF CHAUDHRY, SECRETARY **ROOM 1405** 301 WEST PRESTON STREET BALTIMORE, MARYLAND 21201

		DRAWING SHELT WIDEX
DWG NO.	SHEET NO	SHEET TITLE
GENERAL		
Ctat	1	COVERSHEET
ANCHILCT	IRAL	
AI01	- 2	DVERALE FLOOR PLAN
A301	3	stetions
A302	- 4	SECTIONS AND DETAILS
A501	- 5	ALTAR DETAILS
A502	- 6	BENCH DETAILS
A503	7	RAIUNG DETAILS
MI CHANCA	4 .	
MODS	- 8	MECHANICA, COVER SHEET
M101	0	FLOOR PLAN - DUCTWORK
M201	10	FLOOR PLAN - MECHANICAL PIPEIG
M401	11	MECHANICA, SECTIONS
M501	1.2	MECHANICA, DETAILS
M801	13	MECHANICAL SCHEDULES AND CONTROLS
ELECTRICAL		
£001	14	ELECTRICAL CUIVER SHEET
£101	15	FLOOR PLANS - POWER - NEW WORK
F103	16	ELEVATIONS - POWER - NEW WORK
E801	1.7	ELECTRICAL SCHEDULES AND DETAILS

218 INTERNATIONAL BUILDING CODE (IBC 2018 NATIONAL FIRE PROTECTION ASSOCIATION (MFPA) MEPA 1 (FIRE CODE) & NFPA 101 (LIFE SAFETY CODE) 2018 NATIONAL FIRE PROTECTION ASSOCIATION (NEPA), 54 FUEL GAS CODE 2211 SEDMENT CONTROL ORDINANCE 2015 NATIONAL STANDARD PLUMBING CODE (NSPC) CODE EVALUATION BASED OF 2016 INTERNATIONAL PLUMBING CODE (IPC) 2011 NATIONAL ELECTRICAL CODE INECL MARYLAND ACCESSIBILITY CODE: NAC 2312 COMAR 05.02.02

BOARD OF PUBLIC WORKS

WES MOORE, GOVERNOR BROOKE LIERMAN, COMPTROLLER DERECK DAVIS TREASURER

USING AGENCY

PROJECT MANAGER

CHIEF OF PM&D

USING AÆENCY APPROVAL

DGS APPROVAL

harles Davidson 3/18/24

DATE

-PROJECT SITE

Historic St. Mary's City Commission 18751 Hogaboom Lane St Marys City, MD 20686

ARCHITECTURAL / STRUCTURAL / CIVIL CONSULTANTS:

WHITNEY, BAILEY, COX, MAGNANI, LLC/ WBCM, LLC.

300 EAST JOPPA ROAD, SUITE 200 BALTIMORE, MARYLAND 21286 PIRINE: (410) 512-4500 FAX: (410) 324-4100

HENRY ADAMS

MICHIGANI PARTIE A PARAGRA (SERVICE)



LICENSE#, 15613 EXPIRATION, 11/26/20

ST. MARY'S CHAPEL
DESIGN AND INSTALL INTERPRETIVE LEMENTS OF CHAPEL EXHIBIT AND ADD A PROJECT NO: SM-023-230-002 16721 POINT LOOKOUT RD.,

ST. MARYS CITY, MD 20686 ST. MARYS COUNTY, MARYLAND USING AGENCY APPROVAL

DGS APPROVAL

	03/15/24	ISSUED FOR BID
MARK	DATE	DESCRIPTION

CAD DWG FILE: -

DRAWN BY: DAKOTA ASH

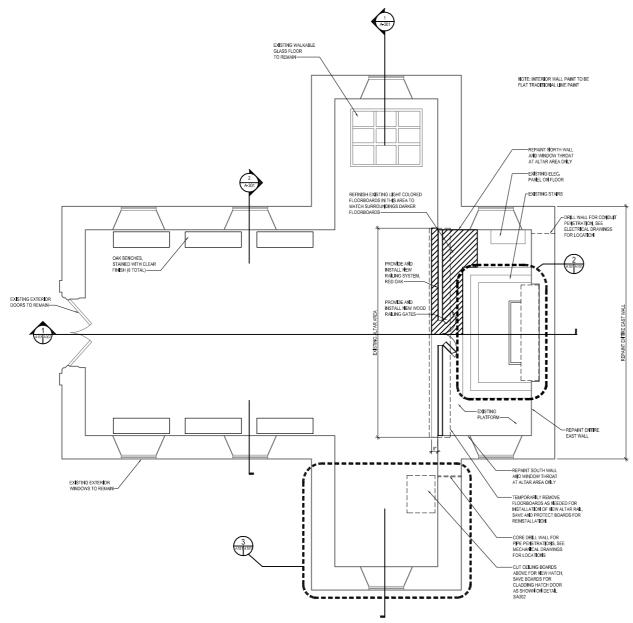
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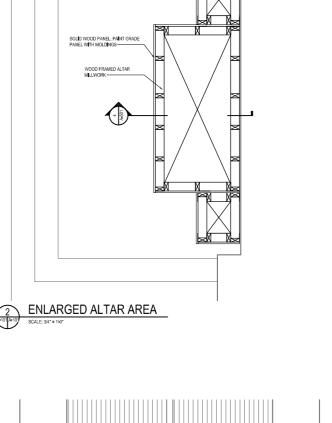
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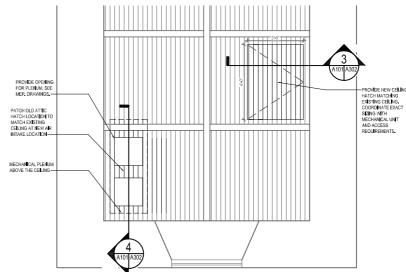
COVER SHEET

G101

SHEET 01 OF 17







3 REFLECTED CEILING PLAN DETAIL

SOALE: 102' = 1-07'

ARCHITECTURAL/STRUCTURAL/CIVIL CONSULTANTS:
WHITNEY, BAILEY,

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EXPIRATION: 11/26/2024

STRAND NICETALL INTERD

DESIGN AND INSTALL INTERPRETIVE
ELEMENTS OF CHAPEL EXHIBIT AND ADD A/C
PROJECT NO: SM-023-230-002
16721 POINT LOOKOUT RD.,
ST. MARYS CITY, MD 20686
ST. MARYS COUNTY, MARYLAND

USING AGENCY APPROVAL

Name

DGS APPROVAL

OAD DWOTTEE.

DRAWN BY: DAKOTA ASH

CHK'D BY:

PROJECT No.: SM-023-230-002

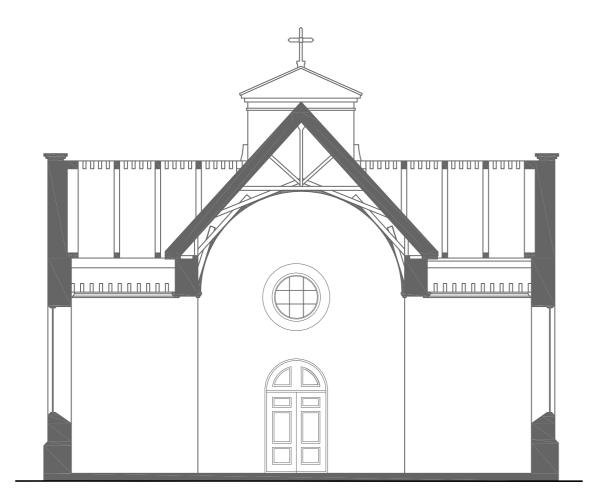
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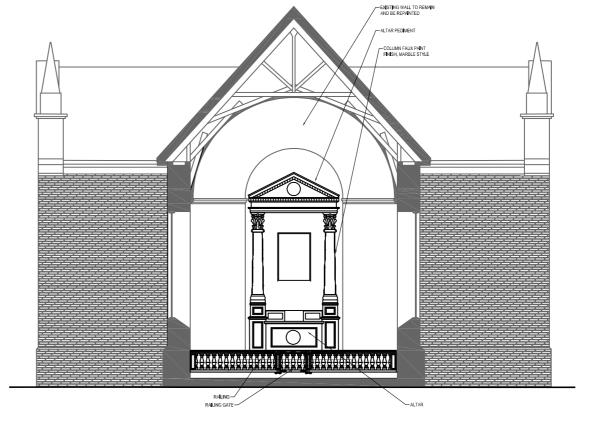
FLOOR PLANS

A101

SHEET 02 OF 17







EXISTING BUILDING SECTION

SCALE: 14/*=140'



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16721 POINT LOOKOUT RD.,
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ST. MARYS COLINTY MAPYLAND ST. MARYS COUNTY, MARYLAND

USING AGENCY APPROVAL

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Chief of	PM&D	Date
	03/15/24	ISSUED FOR BID
MARK	DATE	DESCRIPTION
CAD DW	G FILE: -	

DRAWN BY: DAKOTA ASH

CHK'D BY:

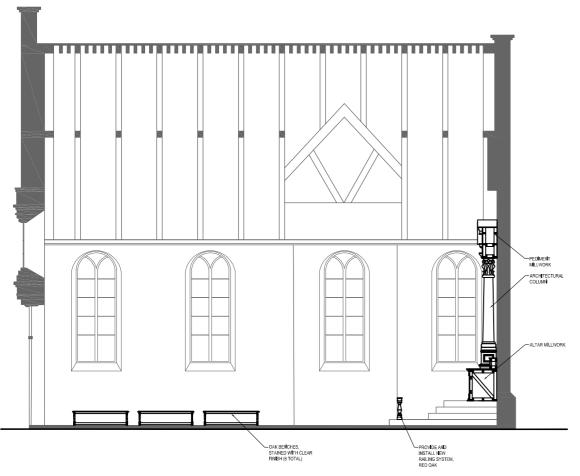
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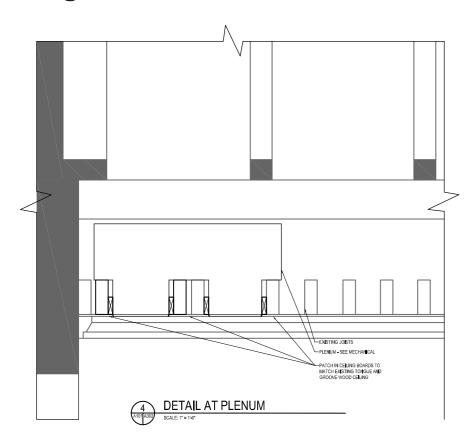
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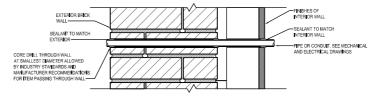
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SHEET 03 OF 17

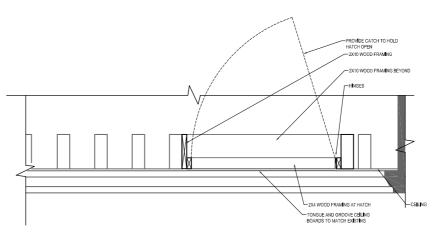














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DGS APPROVAL

Chief of PM&D 03/15/24 ISSUED FOR BID MARK DATE DESCRIPTION CAD DWG FILE: -

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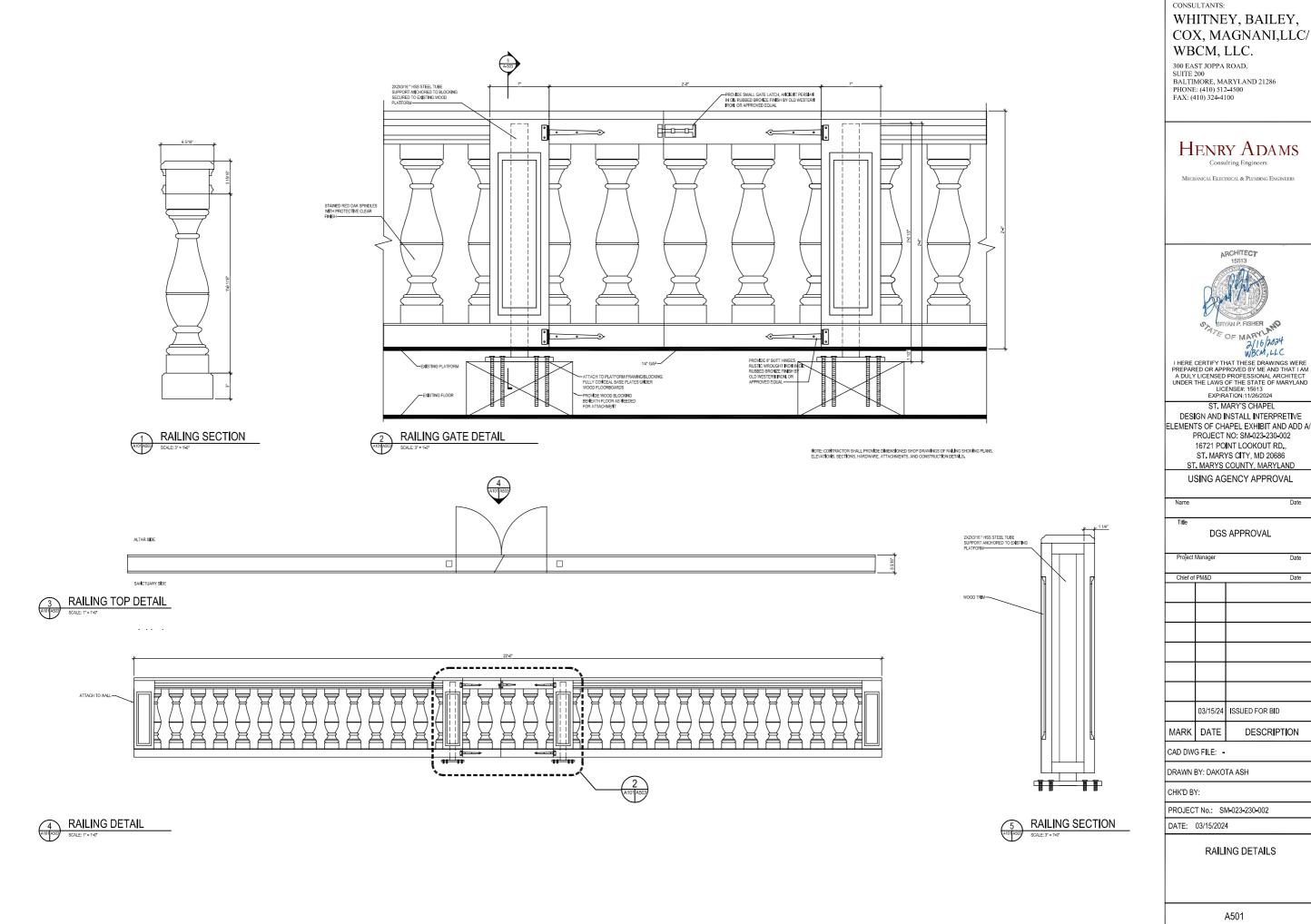
PROJECT No.: SM-023-230-002

DATE: 03/15/2024

SECTION AND DETAILS

A302

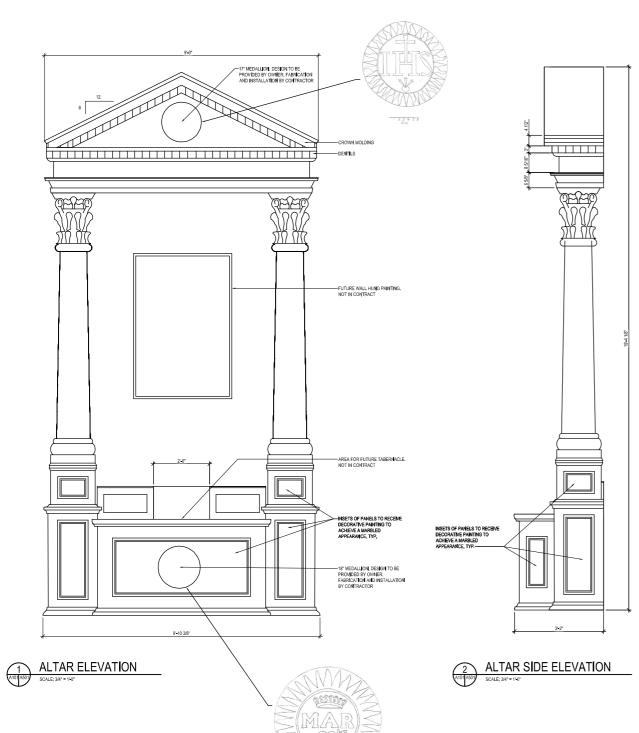
SHEET 04 OF 17

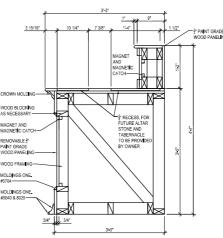


COX, MAGNANI,LLC/

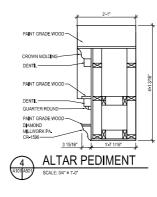
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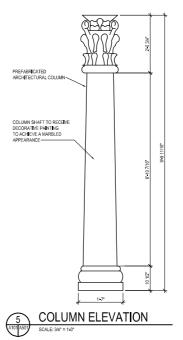
SHEET 05 OF 18

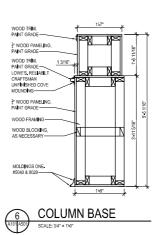














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EXPIRATION: 1/26/2/24

ST. MARY'S CHAPEL DESIGN AND INSTALL INTERPRETIVE ELEMENTS OF CHAPEL EXHIBIT AND ADD A/C PROJECT NO: SM-023-230-002 16721 POINT LOOKOUT RD., ST. MARYS CITY, MD 20686 ST. MARYS COUNTY, MARYLAND

USING AGENCY APPROVAL

DGS APPROVAL

Chief of PM&D

03/15/24 ISSUED FOR BID MARK DATE DESCRIPTION

CAD DWG FILE: -

DRAWN BY: DAKOTA ASH

CHK'D BY:

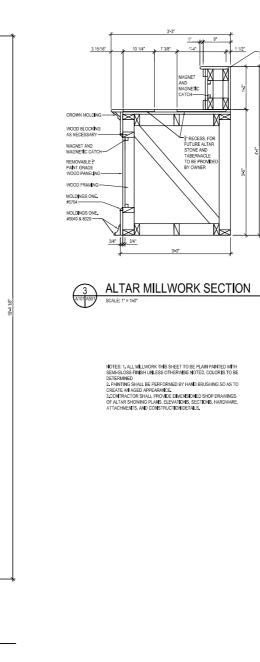
PROJECT No.: SM-023-230-002

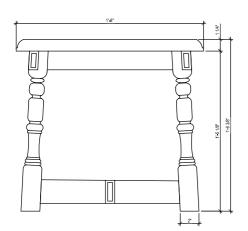
DATE: 03/15/2024

DETA**I**LS

A502

SHEET 06 OF 17



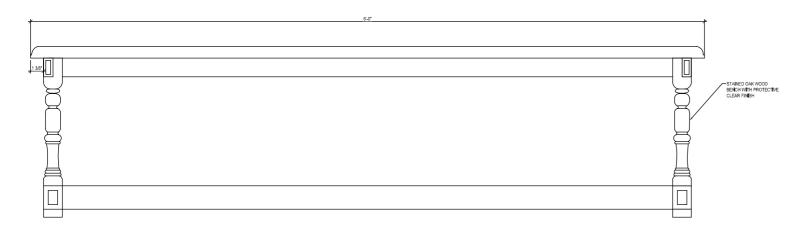


NOTES: 1, WOOD BENCH ASSEMBLY TO HAVE NO VISIBLE FASTENERS, ASSEMBLY TO UTILIZED WOOD JONEWRY TO THE GREATEST EXTENT.

2, CONTRACTOR SHALL FROMDE DIMENSIONED SHOP PROVINGES OF TYPICAL BETHER SHOWING PLANS. ELECATIONS, SECTIONS, HAVDWARE, ATTACHMENTS, AND CONSTRUCTION DETAILS.

BENCH SIDE ELEVATION

AND ASSESS SCALE: 3" = 1"-2"



BENCH ELEVATION

SCALE: 3' = 1'-4"

ARCHITECTURAL / STRUCTURAL / CIVIL CONSULTANTS:

WHITNEY, BAILEY, COX, MAGNANI,LLC/ WBCM, LLC.

300 EAST JOPPA ROAD, SUITE 200 BALTIMORE, MARYLAND 21286 PHONE: (410) 512–4500 FAX: (410) 324–4100



Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS



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ST. MARY'S CHAPEL

DESIGN AND INSTALL INTERPRETIVE

ELEMENTS OF CHAPEL EXHIBIT AND ADD A/C PROJECT NO: SM-023-230-002 16721 POINT LOOKOUT RD., ST. MARYS CITY, MD 20686 ST. MARYS COUNTY, MARYLAND

USING AGENCY APPROVAL

DGS APPROVAL

'	Ü	
Chief of	PM&D	Date
	03/15/24	ISSUED FOR BID
MARK	DATE	DESCRIPTION
CAD DW	G FILE: -	

DRAWN BY: DAKOTA ASH

CHK'D BY:

PROJECT No.: SM-023-230-002

DATE: 03/15/2024

BENCH DETAILS

A503

SHEET 07 OF 17

MECHANICAL LEGEND							
SYMBOL	DESCRIPTION						
D	CONDENSATE DRAIN						
	VOLUME DAMPER						
XXXXX	FLEXIBLE CONNECTION						
T	THERMOSTAT						
\boxtimes	OUTDOOR AIR OR SUPPLY AIR DUCT						
	RETURN AIR DUCT						
1 M101	CALLOUT DESIGNATION TOP - VIEW REFERENCE BOTTOM - REFERENCED DRAWING						
—	REFRIGERANT LIQUID						
—RS	REFRIGERANT SUCTION						

	MECHANICAL A		
AFF	ABOVE FINISHED FLOOR	L	LENGTH
APD	AIR PRESSURE DROP	LAT	LEAVING AIR TEMPERATURE
APPROX	APPROXIMATELY	LFT	LEAVING FLUID TEMPERATURE
ATC	AUTOMATIC TEMPERATURE CONTROLS	LLS	LIQUID LEVEL SENSOR
		LWT	LEAVING WATER TEMPERATURE
BAS	BUILDING AUTOMATION SYSTEM	l	
BDD	BAROMETRIC BACKDRAFT DAMPER	M	MECHANICAL
BHP	BRAKE HORSEPOWER	MAX	MUMIXAM
BTU	BRITISH THERMAL UNITS	MBH	THOUSAND BRITISH THERMAL UNITS PER HOUF
		MD	MECHANICAL DEMOLITION
CC	COOLING COIL	MIN	MINIMUM
CFM	CUBIC FEET PER MINUTE	MOD	MOTOR OPERATED DAMPER
CLG	COOLING	ı	
CS	CURRENT SENSOR	N	NORTH
X	CONNECT TO EXISTING	NC	NORMALLY CLOSED
		NO	NUMBER
)	DAMPER / DEEP / DEPTH / DIAMETER / DIFFUSER /	NOM	NOMINAL
	DRAÍN	NTS	NOT TO SCALE
)B	DRY BULB		
DIA	DIAMETER	OA	OUTDOOR AIR
ON.	DOWN	oc or	ON CENTER
PS .	DIFFERENTIAL PRESSURE SWITCH	1 ~~	ONOLNIEN
// J	DITTERENTIAL PRESCORE SWITCH	P	PRESSURE
AT	ENTERING AIR TEMPERATURE	PD	PRESSURE SWITCH
FT	ENTERING AIR TEMPERATURE	PH	PHASE
TFC		PH	PHASE
	ELECTRICAL	I .	DADRIG
SP	EXTERNAL STATIC PRESSURE	R	RADIUS
WT	ENTERING WATER TEMPERATURE	RA	RETURN AIR
X	EXISTING	RHC	REHEAT COIL
		RL	REFRIGERANT LIQUID
	FAHRENHEIT	RPM	ROTATIONS PER MINUTE
C	FLEX CONNECTION	RS	REFRIGERANT SUCTION
CU	FAN COIL UNIT	RX	REMOVE EXISTING
PD	FLUID PRESSURE DROP	1	
T	FEET / FOOT	SA	SUPPLY AIR
v	FACE VELOCITY	SENS	SENSIBLE
		SEER	SEASONAL ENERGY EFFICIENCY RATIO
3	GRILLE	SP	STATIC PRESSURE
SPM	GALLONS PER MINUTE	"	
	O'LLONG I LIVING IL	l T	THERMOSTAT / TEMPERATURE SENSOR
Н	HEIGHT / HIGH / HUMIDISTAT / HUMIDITY SENSOR	TSP	TOTAL STATIC PRESSURE
HC	HEATING COIL	TYP	TYPICAL
HC HP	HORSEPOWER	1117	TITIONE
		LIME	LINEVEDOTTY OF MADVI AND
HPU	HEAT PUMP UNIT	UMD	UNIVERSITY OF MARYLAND
HR	HEATING WATER RETURN	l v	MALUE MIGHTO
dS.	HEATING WATER SUPPLY		VALVE / VOLTS
IVAC	HEATING, VENTILATION, AND AIR CONDITIONING	VD	VOLUME DAMPER
łZ	HERTZ	VIF	VERIFY IN FIELD
N	INCH	l w	WIDE / WIDTH
•	INOH	WB WB	WET BUILB
			112.5025
		WG	WATER GAGE
		WPD	WATER PRESSURE DROP
		1	
		I	

MECHANICAL ADDDEVIATIONS

MECHANICAL GENERAL NOTES (APPLICABLE TO ALL MECHANICAL DRAWINGS

- COORDINATE ALL MECHANICAL WORK WITH ELECTRICAL WORK, AND WORK OF OTHER TRADES SHOWN ON OTHER DRAWINGS.
- RUN ALL DRAIN PIPING WITH 2 PERCENT MINIMUM GRADE UNLESS OTHERWISE NOTED.
- INSTALL PIPING AND DUCTWORK SO THAT ALL VALVES AND DAMPERS ARE ACCESSIBLE PER INTERNATIONAL MECHANICAL CODE SECTION 306.
- 4. CERTAINTEMS SUCH AS ACCESS DOORS, CLEANOUTS, RISE AND DROPS IN DUCTWORK AND PHING, ETC., ARE INDICATED ON THE DRAWINGS FOR CLARITY OR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE ITEMS AS REQUIRED ELSEWHERE IN THE CONTRACT DOCUMENTS.
- THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS.
- PROVIDE FLEXIBLE CONNECTIONS AT ALL DUCTWORK SYSTEMS (SUPPLY AND RETURN) CONNECTED TO FAN COIL UNITS WHICH REQUIRE VIBRATION ISOLATION, FLEXIBLE
 CONNECTORS SHALL BE PROVIDED AT THE POINT OF CONNECTION TO THE EQUIPMENT.
- 9. EXCEPT AS OTHERWISE NOTED, LOCATE ALL ROOM THERMOSTATS ABOVE FINISHED FLOOR ON SAME HORIZONTAL CENTERLINE AS LIGHT SWITCH, WHERE LIGHT SWITCH AND TEMPERATURE SENSOR ARE NEXT TO EACH OTHER, LIGHT SMITCH SMITCH SHALL BE CLOSEST TO THE DOOR, COORDINATE WITH ELECTRICAL CONTRACTOR, NOTIFY THE ENGINEER OF ANY ROOMS WHERE THE ABOVE LOCATION CANNOT BE MAINTAINED OR WHERE THERE IS A QUESTION ON LOCATION.

APPLICABLE CODES, STANDARDS, AND REGULATIONS

- 2021 INTERNATIONAL MECHANICAL CODE
- 2. 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 4. 2021 INTERNATIONAL EXISTING BUILDING CODE
- 5. 2021 INTERNATIONAL GREEN CONSTRUCTION CODE

- 5. WHERE THE INSTALLATION OF NEW SERVICES OR THE EXTENSION OF EXISTING SERVICES REQUIRES CUTTING OF EXISTING FLOORS, WALLS, PARTITIONS, ETC., CHECK FOR THE PRESENCE OF EXISTING MECHANICAL PLUMBING AND ELECTRICAL SERVICES WITHIN OR IMMEDIATELY BENEATH CONSTRUCTION, EXERCISE NECESSARY PRECAUTIONS TO PREVENT DIAMAGE TO THE SERVICES OF MULRIFY TO PERSONNEL DUE TO CONTACT WITH SAME, TEMPORARILY DISCONNECT SERVICES DURING THE CUTTING OPERATION, SCHEDULE SERVICE OUTLAGES IN ADVANCE WITH THE OWNER.
- CONCRETE HOUSEKEEPING PADS TO SUIT MECHANICAL EQUIPMENT SHALL BE SIZED AND LOCATED BY THE MECHANICAL CONTRACTOR. MINIMUM CONCRETE PAD
 THICKNESS SHALL BE 4" OR AS INDICATED OTHERWISE ON DRAWINGS, PAD SHALL EXTEND BEYOND THE EQUIPMENT A MINIMUM OF 6" ON EACH SIDE.

- 3. 2021 INTERNATIONAL BUILDING CODE
- MARYLAND BUILDING REHABLITATION CODE REGULATIONS
- DGS PROCEDURE MANUAL FOR PROFESSIONAL SERVICES, REV 2019

ARCHITECTURAL / STRUCTURAL / CIVIL

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MECHANICAL ELECTRICAL & PLUMBING ENGINEERS



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USING AGENCY APPROVA

DGS APPROVAL

Project Manager Date

03/15/24 ISSUED FOR BID

MARK DATE DESCRIPTION CAD DWG FILE: -

DRAWN BY: MAV

CHK'D BY: CEL

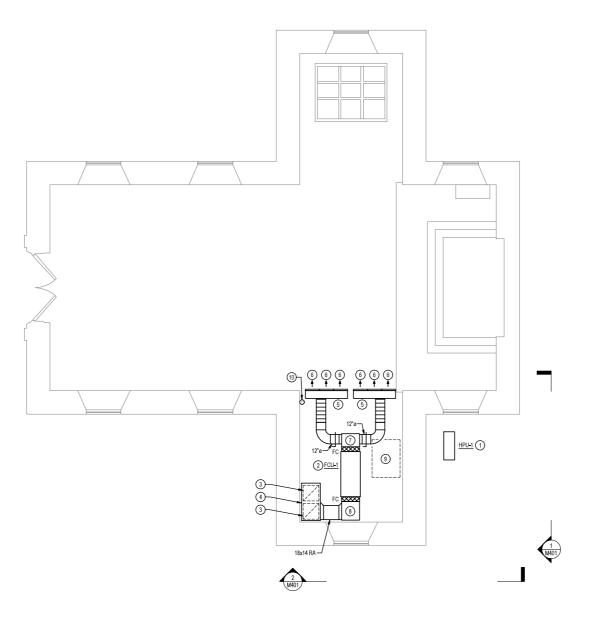
PROJECT No.: SM-023-230-002

DATE: 03/15/2024

MECHANICAL COVER SHEET

M001

SHEET 8 OF 17



FIRST FLOOR - DUCTWORK - NEW WORK PLAN

DRAWING NOTES: (APPLICABLE TO THIS DRAWING ONLY)

1. EXISTING SHOWN WITH LIGHT WEIGHT LINE,

NEW WORK SHOWN WITH HEAVY WEIGHT LINE,

3. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. EXISTING CONDITIONS ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE USCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, OR THERE IS, A QUESTION REGARDING SCOPE OF WORK OR LIMITS OF DISTURBANCE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT WRITTEN DIRECTION BEFORE PROCEEDING WITH THE WORK.

4. UNLESS OTHERWISE NOTED, RUNOUTS TO DIFFUSERS SHALL BE SAME SIZE AS DIFFUSER NECK SIZE.

HENRY ADAMS

ARCHITECTURAL / STRUCTURAL / CIVIL

WHITNEY, BAILEY,

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COX, MAGNANI,LLC/

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

SPECIAL NOTES: (APPLICABLE TO THIS DRAWING ONLY)

MOUNT ON 4" HOUSEKEEPING PAD

FCU-1 AND ASSOCIATED DUCTWORK LOCATED WITHIN ATTIC SPACE. MOUNT FROM ABOVE. PROVIDE SECONDARY DRAIN PAN BENEATH FCU.

3) 20x20 R-1. 900 CFM.

48" L x 24" W x 18" H INSULATED PLENUM.

5 54" L x 10" W x12" H INSULATED PLENUM. 900 CFM

APPROX 18" LONG D-1 (THE DIFFUSER SHALL FIT BETWEEN THE EXISTING STUDS, VERIFY EXACT DIMENSION IN FIELD) WITH (6) 1" SLOTS, CONTRACTOR SHALL VERIFY IN FIELD IF EXISTING STUDS ARE LOAD BEARING, IF THEY ARE NOT LOAD BEARING MODIFY FRAMING AND USE A SINGLE 9 FT LONG D-1 IN LIEU OF THE MULTIPLE 18" LONG DIFFUSERS, LOCATE DIFFUSER IN BARREL VAULT CEILING AND MATCH STAINED WOOD.

7 14" LONG INSULATED PLENUM, PLENUM SHALL BE 16" DEEP AND WIDTH SHALL MATCH WIDTH OF FCU CONNECTION.

8) 24" LONG INSULATED PLENUM, PLENUM SHALL BE 16" DEEP AND WIDTH SHALL MATCH WIDTH OF FCU CONNECTION.

9 36" x 48" ATTIC HATCH

10 LOCATE THERMOSTAT AT THE SAME ELEVATION AS LIGHT SWITCHES

OF MAD OF MAD OF MAD OF MAD 2/13/2024

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PROJECT NO: SM-023-230-002

USING AGENCY APPROVAL

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DGS APPROVAL

Project Manager Date

Chief of PM&D Date

03/15/24 ISSUED FOR BID

MARK DATE DESCRIPTION

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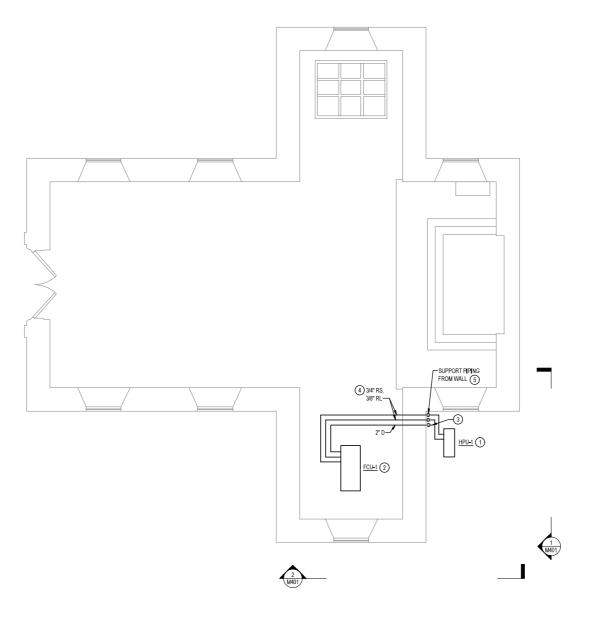
PROJECT No.: SM-023-230-002

DATE: 03/15/2024

FIRST FLOOR - DUCTWORK -NEW WORK PLAN

M101

SHEET 9 OF 17



DRAWING NOTES: (APPLICABLE TO THIS DRAWING ONLY)

EXISTING SHOWN WITH LIGHT WEIGHT LINE,

NEW WORK SHOWN WITH HEAVY WEIGHT LINE, -

NEW WORK SHOWN WITH HEAVY WEIGHT LINE.

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PATCH, FINISH, AND PAINT ANY WALLS FROM CORNER TO CORNER THAT ARE OPENED UP FOR INSTALLATION OF NEW WIRING, DUCTWORK, PIPING, ETC, MATCH EXISTING FINISH.

SPECIAL NOTES: (APPLICABLE TO THIS DRAWING ONLY)

- (1) MOUNT ON 4" HOUSEKEEPING PAD
- 2 FCU-1 AND ASSOCIATED PIPING LOCATED WITHIN ATTIC SPACE. MOUNT FROM
- 3 TERMINATE 2" D 6" ABOVE FINISHED GRADE WITH ELBOW DN
- 4 ASSOCIATED EQUIPMENT MANUFACTURER SHALL CONFIRM FINAL PIPE SIZES
- PROVIDE PENETRATION OUTLET EQUAL TO AIREX PROSYSTEM KIT MODEL TGS AT PIPE PENETRATIONS THROUGH WALL.

ARCHITECTURAL / STRUCTURAL / CIVIL CONSULTANTS:

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Mechanical Electrical & Plumbing Engineers



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DGS APPROVAL

Project Manager Date

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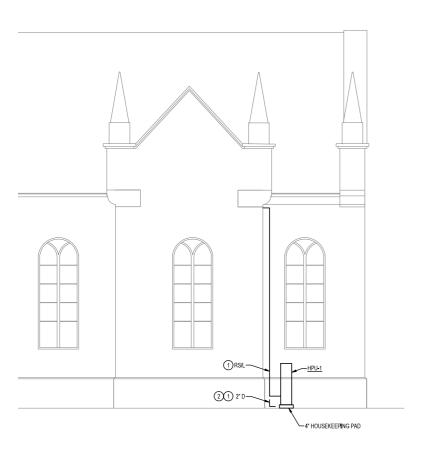
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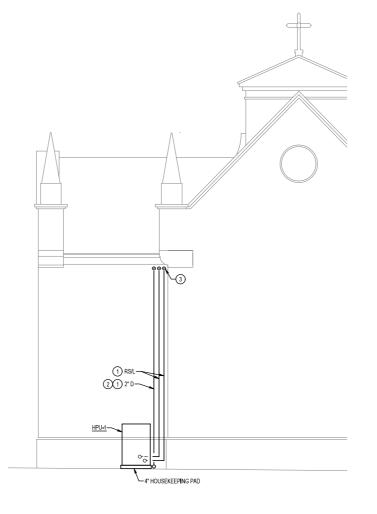
FIRST FLOOR - MECHANICAL PIPING - NEW WORK PLAN

M201

SHEET 10 OF 17

FIRST FLOOR - MECHANICAL PIPING - NEW WORK PLAN





MECHANICAL - SECTION 2



DRAWING NOTES: (APPLICABLE TO THIS DRAWING ONLY)

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 NEW WORK SHOWN WITH HEAVY WEIGHT LINE,
- NEW WORK SHOWN WITH HEAVY WEIGHT LINE.

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SPECIAL NOTES: (APPLICABLE TO THIS DRAWING ONLY)

- SUPPORT PIPES FROM WALL
- (2) TERMINATE 2" D 6" ABOVE FINISHED GRADE WITH ELBOW DN
- PROVIDE PENETRATION OUTLET EQUAL TO AIREX PROSYSTEM KIT MODEL TGS AT PIPE PENETRATIONS THROUGH WALL.





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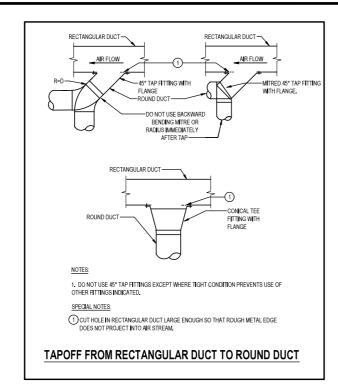
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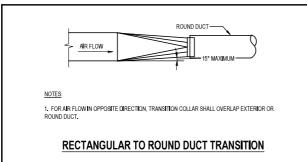
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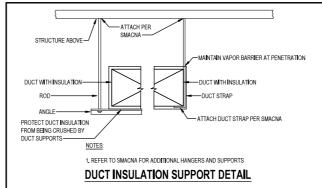
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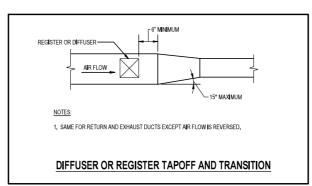
M401

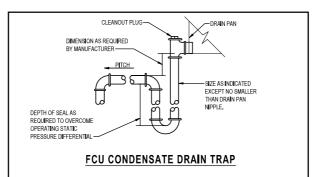
SHEET 11 OF 17

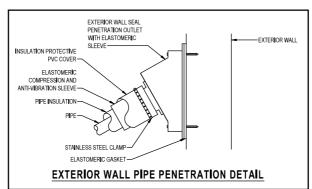


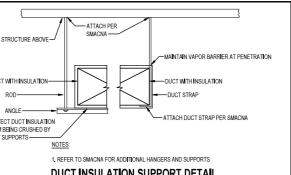


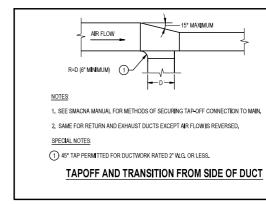


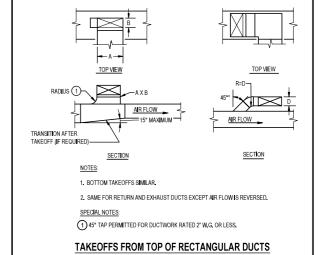


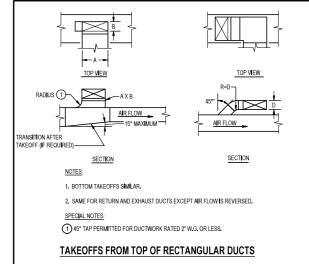












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MECHANICAL ELECTRICAL & PLUMBING ENGINEERS



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DGS APPROVAL

Date

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DRAWN BY: MAV

CHK'D BY: CEL

PROJECT No.: SM-023-230-002

DATE: 03/15/2024

MECHANICAL DETAILS

M501

SHEET 12 OF 17

GENERAL NOTES: (APPLICABLE TO ALL MECHANICAL SCHEDULES)

- UNIT NUMBERS ARE INDICATED WHERE ALL UNITS ARE LISTED AND NUMBERED INDIMIDUALLY.
- UNIT TYPES ARE DESCRIBED IN THE SPECIFICATIONS.
- TEMPERATURE VALUES ARE LISTED IN DEGREES FAHRENHEIT.
- AIR PRESSURE VALUES ARE LISTED IN INCHES OF WATER COLUMN.
- AIR VELOCITY VALUES ARE LISTED IN FEET PER MINUTE.
- DUCT AND PIPE SIZES ARE LISTED IN SINGLE-NUMBER INCHES OF NOMINAL DIAMETER OR MULTIPLE NUMBER INCHES OF INDICATED PARAMETER CONNECTION SIZES ARE BRANCH SIZES FROM MAINS TO UNIT INLETS. SINGLE PIPE SIZE IS TYPICAL FOR SUPPLY AND RETURN.

HENRY ADAMS

300 EAST JOPPA ROAD, SUITE 200 BALTIMORE, MARYLAND 21286 PHONE: (410) 512-4500 FAX: (410) 324-4100

WBCM, LLC.

300 EAST JOPPA ROAD,

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

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MECHANICAL SCHEDULES AND CONTROLS

M801

SHEET 13 OF 19

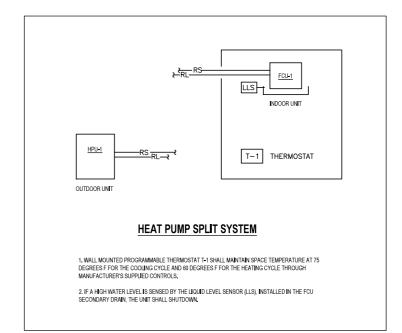
	VARIABLE REFRIGERANT FAN COIL UNITS										
					COOLING				HEATING		
II NO	LOCATION	LOCATION ASSOCIATED HEAT PUMP SAIC	SA CFM	ESP (IN WC)	TOTAL MBH	SENS MBH	EAT DB	EAT WB	TOTAL MBH	EAT DB	NOTES
CU-1	ATTIC	HPU-1	1,800	0.5	48.5	36.0	75	63	41.3	70	

NOTES FOR VARIABLE REFRIGERANT FAN COIL UNITS: 1. R-410A REFRIGERANT

VARIABLE REFRIGERANT HEAT PUMP UNITS									
			CAPACITY (NOTE 3)				ELECTRICAL		
NO.	LOCATION	SERVICE	TOTAL COOLING (MBH)	EAT	TOTAL HEATING (MBH)	EAT	VOLTAGE/PHASE	NOTES	
HPI I.1	OUTDOODS	CHADEL	48.5	06	41.3	n	208/1		

NOTES FOR VARIABLE REFRIGERANT AIR-COOLED CONDENSING UNITS:

- R. 410A REFRIGERANT
 RETRIGERANT PIPE SIZES AND ROUTING, REFRIGERANT CHARGE, ETC., SHALL DE PROVIDED DY THE MANUFACTURER.
 RETRIGERANT PIPE SIZES AND ROUTING, REFRIGERANT CHARGE, ETC., SHALL DE PROVIDED DY THE MANUFACTURER.
 R. CAPACITY DINICIATED IS MINIMUM REQUIRED CAPACITY AFTER CORRECTIONS FOR DESIGN CONDITIONS, REFRIGERANT PIPE S
 AND LENGTHS, AND CORRECTIONS HAVE BEEN TAKEN INTO ACCOUNT.



GENERAL ELECTRICAL DEMOLITION/RENOVATION NOTES

- 1. THE FACILITY WILL REMAIN OCCUPIED DURING RENOVATIONS.
- 2. MINIMIZE OUTAGES, COORDINATE OUTAGES WITH OWNER, PERFORM WORK REQUIRING SUSTAINED EQUIPMENT OUTAGE CONTINUOUSLY AROUND THE CLOCK UNTIL. WORK IS COMPLETE. UNLESS NOTED OTHERWISE.
- 3. PRIOR TO DEMOLITION, HELD VERIFY CONDUITS, CONDUCTORS, AND CABLES THAT PASS THROUGH AND SERVE AREAS OUTSIDE THE SCOPE OF WORK, MAINTAIN CONTINUITY OF SYSTEMS, PROTECT OR RELOCATE SYSTEMS TO PREVENT DAMAGE, RESTORE SYSTEMS TO NORMAL OPERATION, COORDINATE SYSTEM OUTAGES WITH
- 4. IDENTIFY NONFUNCTIONING EQUIPMENT AND DEVICES TO REMAIN AFTER DEMOLITION, NOTIFY OWNER IN WRITING PRIOR TO DEMOLITION, UPON COMPLETION OF WORK, ENSURE THAT EXISTING EQUIPMENT AND DEVICES OPERATE PROPERLY.
- IN AREAS REQUIRING THE PERFORMANCE OF WORK OF OTHER TRADES, CAREFULLY DISCONNECT, MAKE SAFE, REMOVE AND STORE ELECTRICAL ITEMS IN PATH OF WORK, REINSTALL AND RECONNECT SAME AFTER COMPLETION OF OTHER TRADES WORK, COORDINATE REMOVAL OF EQUIPMENT WITH OTHER TRADES PRIOR TO DEMOLITION.
- 6. AFTER DEMOLITION VERIFY AND SUPPORT REMAINING CABLES, WIRES, AND CONDUIT IN ACCORDANCE WITH THE APPLICABLE VERSION OF THE NEC. DISCONNECT, MAKE SAFE AND REMOVE ABANDONED AND TEMPORARY WIRE WITHIN SPACE.
- EXISTING CONDITIONS REFLECT GENERAL OBSERVATIONS AND ARE NOT INTENDED TO INDICATE DETAILS OR DIMENSIONS, NO ATTEMPT HAS BEEN MADE TO SHOW ALL
 ELECTRICAL EQUIPMENT. VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING WORK, NOTIFY OWNER IN WRITING IF CONDITIONS ARE DISCOVERED THAT PREVENT
 EXECUTION OF WORK.
- 8. PROTECT REMAINING FLECTRICAL SYSTEMS AND COMPONENTS FROM DAMAGE, REMOVE PROTECTIVE MATERIALS UPON COMPLETION OF WORK.
- 9. IN AREAS NOTED TO REMOVE ELECTRICAL WORK, REMOVE CONDUITS AND ASSOCIATED SUPPORTS BACK TO POINT OF CONCEALMENT AND REMOVE WIRING BACK TO REMAINING ACTIVE DEVICES OR SOLIRCE
- 10. PROVIDE OWNER WITH INVENTORY OF MAJOR ELECTRICAL ITEMS TO BE REMOVED. OWNER WILL SELECT ITEMS TO BE SALVAGED. TURN SALVAGED ITEMS OVER TO OWNER. ITEMS REJECTED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR, REMOVE DEMOUSHED ITEMS FROM SITE.
- 11. UPDATE PANELBOARD DIRECTORIES TO INCLUDE MODIFICATIONS BY THIS PROJECT. TRACE CIRCUITS TO IDENTIFY UNLABELED LOADS.
- 12. REPAIR DISTURBED AREAS TO MATCH EXISTING CONDITIONS.
- 13. PROVIDE BLANK COVER PLATES FOR DEVICES REMOVED WHEN A REPLACEMENT DEVICE IS NOT INDICATED.
- 14, MAINTAIN CONTINUITY OF CIRCUITS AND FEEDERS REMAINING AFTER DEMOLITION IN PANELS INDICATED TO BE DEMOUSHED OR REPLACED, EXTEND EXISTING CIRCUITS AND FEEDERS REMAINING AFTER DEMOLITION TO NEW PANELS, CIRCUIT BREAKER, CONDUIT, AND WIRE SHALL MATCH EXISTING TYPES AND SIZES.

GENERAL ELECTRICAL NOTES

- PROVIDE LABOR, MATERIALS, TOOLS, EQUIPMENT, COORDINATION, DELEGATED DESIGN AND INCIDENTALS NECESSARY TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.
 PERFORM WORK AS REQUIRED BY APPLICABLE CODES, REGULATIONS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENTS AND OTHER AUTHORITIES WITH LAWFUL
- 3. MATERIAL AND EQUIPMENT SHALL BE LISTED AND LABELED BY NATIONALLY RECOGNIZED TESTING LABORATORIES FOR INTENDED SERVICE.
- 4. GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES AND BACK CHARGES, AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES THAT HAVE
- 5. MAINTAIN RECORD DRAWINGS ON SITE. RECORD SET SHALL BE COMPLETE, CURRENT, AND AVAILABLE UPON REQUEST.
- 6. SUBMIT FOR APPROVAL, SHOP DRAWINGS FOR EQUIPMENT AND MATERIALS USED ON PROJECT, OBTAIN APPROVAL BY ENGINEER PRIOR TO PURCHASE OF EQUIPMENT AND MATERIALS.
- 7. REPAIR OR REPLACE DAMAGE TO FACILITIES AND EQUIPMENT AT NO ADDITIONAL EXPENSE TO OWNER,
- 8. PATCH AND REPAIR DISTURBED AREAS TO MATCH ADJACENT SURFACES AND FINISHES.
- PROVIDE TEMPORARY POWER AND LIGHTING FOR OTHER TRADES AS REQUIRED TO COMPLETE PROJECT IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.
 DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS, PROVIDE COMPONENTS INDICATED ON RISER DIAGRAMS WHETHER OR NOT INDICATED ON PLANS, AND VICE VERSA.
- 11. LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND REQUIRE COORDINATION WITH OTHER TRADES, ROUTING OF CONDUIT IS DIAGRAMMATIC IN NATURE AND NOT INTENDED TO SHOW REQUIRED OFFSETS AND DETAILS, OBTAIN DRAWINGS AND SPECIFICATIONS FROM OTHER TRADES AND COORDINATE WITH OTHER TRADES.
- 12. COORDINATE ELECTRICAL INSTALLATION WITH FIELD CONDITIONS, LOCATIONS SHOWN ARE DIAGRAMMATIC AND MAY REQUIRE ADJUSTMENT IN FIELD.
- 13. PERMANENTLY LABEL NEW ELECTRICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, DEVICE DESIGNATION AND SUPPLY CIRCUIT DESIGNATION.
- 14. CORE DRILL CONCRETE WALLS AND FLOORS TO PROVIDE OPENINGS FOR CONDUIT INSTALLATION. MAXIMUM CORE DRILL SIZE SHALL BE SHOCH DIAMETER, SPACE CORE DRILL LOCATIONS A MIMIMUM OF 6" FROM EACH OTHER, MEASURED FROM CORE DRILL OPENINGS, PROPERLY SEAL OPENINGS ACCORDING TO LOCATION AND APPLICATION. USE GROUND PENETRATING RADAR OR OTHER MEANS TO VERIFY THAT NO UTILITIES OR STRUCTURAL MEMBERS WILL BE DAMAGED FROM THE DRILLING, OFFSET CONDUIT ROUTE A REQUIRED TO COORDINATE WITH OSSTRUCTION AND WITH NO ADDITIONAL COST TO THE PROJECT.
- 15. PROVIDE EACH CIRCUIT WITH A DEDICATED NEUTRAL UNLESS NOTED OTHERWISE.
- 16. CONDUIT HOMERUNS SHOWN ON DRAWINGS WITH MORE THAN 3 CURRENT CARRYING CONDUCTORS ARE SHOWN DIAGRAMMATICALLY, DO NOT INSTALL MORE THAN 3 CURRENT CARRYING CONDUCTORS IN A SINGLE RACEWAY UNLESS INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
- 17. PROVIDE FIRESTOPPING FOR ELECTRICAL PENETRATIONS IN FIRE RATED ASSEMBLIES.
- 18. INSTALL ELECTRICAL WORK IN A NEAT AND WORKMANLIKE MANNER, RECTILINEAR TO BUILDING STRUCTURE. INSTALL RACEWAYS TIGHT TO STRUCTURAL CEILING AND AS HIGH AS POSSIBLE WITHIN CEILING SPACES TO MAINTAIN MAXIMUM AMOUNT OF CLEAR SPACE BELOW RACEWAY.
- 19. INSTALL RACEWAYS CONCEALED IN BUILDING FINISHES FOR ALL EXTERIOR MOUNTED DEVICES. DO NOT ROUTE EXPOSED ON BUILDING EXTERIOR.
- 20. INSTALL RACEWAYS CONCEALED IN WALLS, UNDER FLOORS, ABOVE CEILINGS, ETC., EXCEPT AS FOLLOWS:
- A. WHERE SUSPENDED CEILINGS ARE NOT PROVIDED.
- B. IN VERTICAL SHAFTS, ELECTRICAL CLOSETS, ETC., MECHANICAL AND ELECTRICAL EQUIPMENT SPACES WHERE CONCEALMENT IS NOT PRACTICAL.
- C. AT SURFACE-MOUNT PANELBOARDS IN OTHERWISE FINISHED SPACES LIMITED TO VERTICAL RUNS ABOVE AND BELOW PANEL.
- D. WHERE REQUIRED FOR EQUIPMENT CONNECTIONS.

 E. WHERE SPECIFICALLY INDICATED ON DRAWINGS.
- 24. OWNER-PUNNSHED EQUIPMENT: VERIFY AND COORDINATE ELECTRICAL ROUGH IN REQUIREMENTS FOR OWNER-FURNISHED EQUIPMENT WITH OWNER PRIOR TO PULLING CONDUCTORS AND MAKING FINAL CONNECTIONS, LACK OF COORDINATION SHALL NOT JUSTIFY CHANGE ORDERS.
- 25. WHERE SUBMITTED EQUIPMENT REQUIRES REVISION TO OVERCURRENT PROTECTION, CONDUIT, AND WIRING, COORDINATE AND MAKE CHANGE TO PROVIDE A COMPLETE INSTALLATION IN ACCORDANCE WITH APPLICABLE CODES.
- 26. PROVIDE NECESSARY SUPPORTING STRUT CHANNEL AND ALL MISCELLANEOUS HARDWARE FOR MOUNTING ELECTRICAL EQUIPMENT. MAINTAIN NEC WORKING CLEARANCES, COORDINATE EXACT LOCATION IN FIELD, DO NOT MOUNT ON EQUIPMENT ACCESS PANELS OR IN EQUIPMENT MANUFACTURER'S RECOMMENDED MAINTENANCE (LEARANCES).

	ELECTR I CAL A	BBI	REV I A	TIONS
A AIC ASHRAE AWG BOD C C CB CKT DS DWG EX	AMPERE AMPERE INTERRUPTING CAPACITY AMERICAN SOCIETY OF HEATING, REFRISERATING, AND ARCONDITIONING ENGINEERS AMERICAN WIRE GAUGE BASIS OF DESIGN CONDUIT CIRCUIT BREAKER CIRCUIT BREAKER CIRCUIT DISCONNECT SWITCH DRAWING EXISTING GROUND		MCB MLO MOCP NEC NEMA NTS RX SS SW T	MAIN CIRCUIT BREAKER MAIN LIGS ONLY MAXIMUM OVERCURRENT PROTECTION NATIONAL ELECTRICAL CODE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION NOT TO SCALE REMOVE EXISTING SAFETY SMITCH SMITCH TRANSFORMER TYPICAL VOITS
GW HP HPU JB K KAIC KCMIL KW	GROUND WIRE HORSEPOWER HEAT PUMP UNIT JUNCTION BOX ONE THOUSAND THOUSAND AMPERE INTERRUPTING CAPACITY THOUSAND GRICULAR MILS KILOWATTS LOAD CENTER		VA W XFMR	VOLTAMPERES WIRE TRANSFORMER

_										
١	ELECTRICAL LEGEND									
1	SYMBOL	DESCRIPTION	MOUNTING HEIGHT							
	□, 0	EQUIPMENT, AS NOTED								
	ים	SAFETY SWITCH	60" TO TOP							
	NOTES: (APPLICAB	AND SHALL BE								

- THE MOUNTING HIGHTS GIVEN ON THIS SHEET IN THE ELECTRICAL LEGEND ARE GENERAL AND SHALL BE USED ONLY WHEN MOUNTING HIGHTS CAND BE ESTABLISHED BY REFERENCE TO DETAILS, ELEVATIONS, AND NOTES ON THE DRAWINGS.
- ALL MOUNTING HEIGHTS, UNLESS OTHERWISE NOTED, SHALL BE MEASURED FROM THE FINISHED FLOOR
 TO THE CENTERLINE OF THE OUTLET OR DEVICE.
- 3. HEIGHTS OF ALL ITEMS NOT COVERED BY THE ELECTRICAL LEGEND AND NOT SHOWN ON THE DRAWINGS SHALL BE AS DIRECTED BY THE ARCHITECT OR ENGINEER.
- WHERE PLACING ANY ITEM AT THE HEIGHTS LISTED OR NOTED WILL CAUSE INTERFERENCE WITH THE WORK OF OTHER TRADES, OR IS NOT PHYSICALLY POSSIBLE OR DESIRABLE FOR ONE REASON OR ANOTHER, THE ITEM SHALL BE INSTALLED AT A LOCATION APPROVED BY THE ARCHITECT OR REMINEER.

WIRING	
	CONCEALED CONDUITIN CEILING OR WALLS
	CONDUIT IN OR UNDER FLOOR
 0	CONDUIT TURNING UP
	GENERAL NOTE: WHERE WIRE SIZE IS INDICATED AT THE HOMERUN OR ON THE SCHEDULE TO BE LARGER THAN THE SPECIFIED MINMUM PROVIDE THE INDICATED WIRE SIZE THROUGHOUT THE ENTIRE BRANCH CIRCUIT.
PRESENTATION	<u> </u>
☐ ¥ ₽₩	ELECTRICAL EQUIPMENT DESIGNATED BY SOLID HEAVY UNEWEIGHT INDICATES NEW WORK TO BE PROVIDED.
O	ELECTRICAL EQUIPMENT DESIGNATED BY SOLID LIGHT LINEWEIGHT INDICATES EXISTING EQUIPMENT TO REMAIN, UNLESS OTHERWISE INDICATED.
[<u>]</u> 5 4 4	ELECTRICAL EQUIPMENT DESIGNATED BY DASHED HEAVY UNEWEIGHT REPRESENTS EXISTING EQUIPMENT TO BE REMOVED AND DISPOSED, UNLESS INDICATED TO BE REMOUNTED, RELOCATED, OR TURNED OVER TO OWNER.
REFERENCE	
	— SECTION DESIGNATION
E50 <u>1</u>	NUMBER DENOTES SECTION IDENTIFICATION
<u> </u>	
	—DETAIL DESIGNATION
E501)	NUMBER DENOTES SECTION IDENTIFICATION
① -	
(§1) -	

ARCHITECTURAL/STRUCTURAL/CIVIL CONSULTANTS:
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Mechanical Electrical & Plumbing Engineers



PROFESSIONAL CERTIFICATION. I HERE BY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 51082 EXPIRATION DATE: 06/07/2025

ST. MARY'S CHAPEL
DESIGN AND INSTALL
INTERPRETIVE ELEMENTS OF
CHAPEL EXHIBIT AND ADD A/C
PROJECT NO: SM-023-230-002

USING AGENO	CY APPROVAL

Name Date

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DGS APPROVAL

PROJECT No.: SM-023-230-002

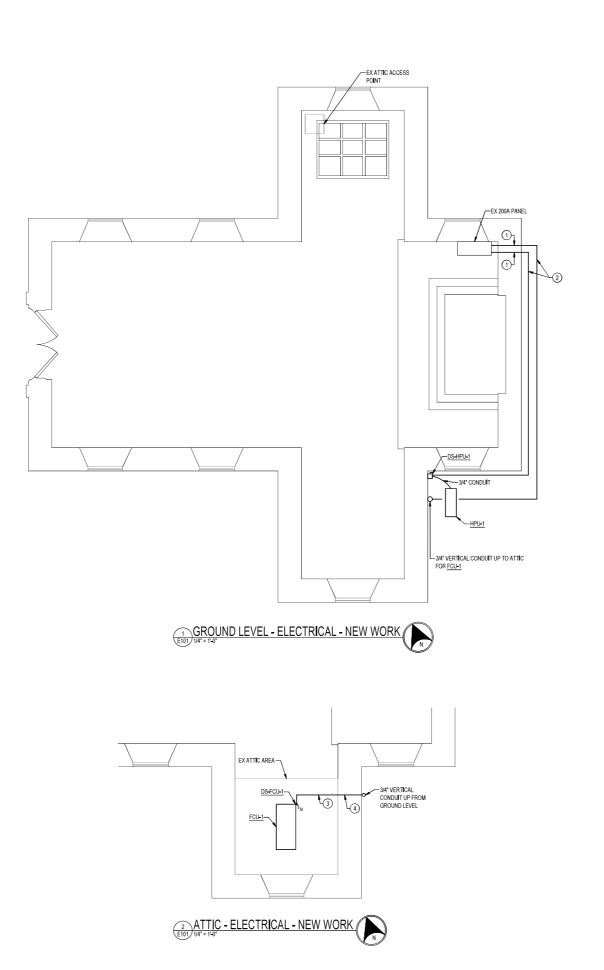
DATE: 03/15/2024

ELECTRICAL COVER SHEET

E001

CHK'D BY: JI W

SHEET 14 OF 17



DRAWING NOTES: (APPLICABLE TO THIS SHEET ONLY)

- UNILESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOULD HEAVY LINEWEIGHT () INDICATE
 NEW WORK TO BE PROVIDED, ELECTRICAL ITEMS SHOWN BY SOULD LIGHT LINEWEIGHT () INDICATE
 EXISTING ITEMS TO REMAIN.
- EXISTING I LIMIS TO REMAIN.

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SPECIAL NOTES: (APPLICABLE TO THIS SHEET ONLY)

- CORE DRILL THROUGH BRICK WALL AND ROUTE CONDUIT TO OUTDOORS, ROUTE BELOW RINISHED GRADE
 IF APPLICABLE, OR PROVIDE TYPE LB CONDUIT FITTING TO TRANSITION CONDUITS BELOW GRADE AT
 BUILDING EXTERIOR.
- (2) ROUTE 3/4" CONDUIT UNDERGROUND VIA UTILITY TRENCH, CONDUITS MUST BE MINIMUM 24" BELOW FINISHED GRADE. TRENCH MUST BE WITHIN 10 FEET OF THE FOUNDATION.

ATTIC-

- 3) 3/4" HORIZONTAL CONDUIT, SURFACE MOUNT TO WOOD BEAMS.
- (4) CORE DRILL THROUGH BRICK WALL AND ROUTE CONDUIT TO ATTIC SPACE.

 $\frac{\mathsf{ARCHITECTURAL}/\mathsf{STRUCTURAL}/\mathsf{CIVIL}}{\mathsf{CONSULTANTS}}:$

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HENRY ADAMS

Consulting Engineer

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS



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USING AGENCY APPROVAL

me

it**l**e

DGS APPROVAL

Project Manager Date

Chief of PM&D Date

03/15/24 ISSUED FOR BID

MARK DATE DESCRIPTION

CAD DWG FILE: -

DRAWN BY: ZAJ

CHK'D BY: JLW

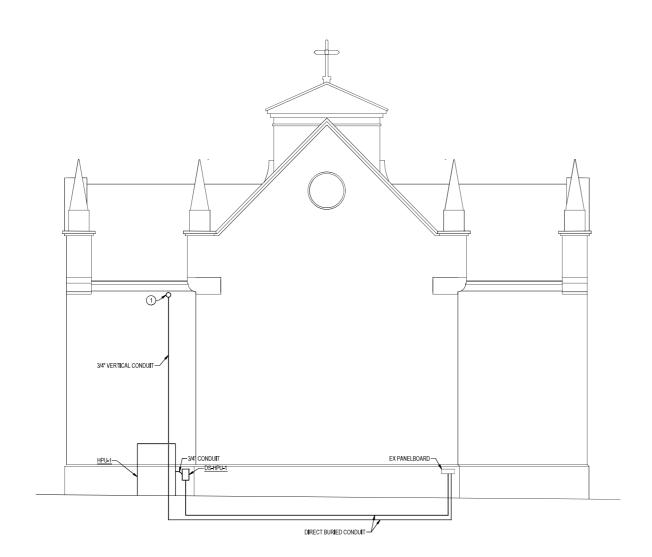
PROJECT No.: SM-023-230-002

DATE: 03/15/2024

FLOOR PLANS - POWER -NEW WORK

E101

SHEET 15 OF 17



EAST ELEVATION - ELECTRICAL - NEW WORK

DRAWING NOTES: (APPLICABLE TO THIS SHEET ONLY)

- UNILESS OTHERWISE NOTED, ELECTRICAL TIEMS SHOWN BY SOULD HEAVY LINEWEIGHT () INDICATE
 NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOULD LIGHT LINEWEIGHT () INDICATE
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SPECIAL NOTES: (APPLICABLE TO THIS SHEET ONLY)

1 CORE DRILL THROUGH BRICK WALL AND ROUTE CONDUIT TO ATTIC SPACE.

ARCHITECTURAL / STRUCTURAL / CIVIL CONSULTANTS:

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Title

DGS APPROVAL

Project Manager Date

Chief of PM&D Date

03/15/24 ISSUED FOR BID

DESCRIPTION

CAD DWG FILE: -

DRAWN BY: ZAJ

MARK DATE

CHK'D BY: JLW

PROJECT No.: SM-023-230-002

DATE: 03/15/2024

ELEVATIONS - POWER - NEW WORK

E102

SHEET 16 OF 17

	LOAD CENTER (DEMOLITIO	BUS AMPACITY. 200A MAIN TYPE: 200A MCB SERVICE: 120/240 VOLTS, 1 PHASE, 3 WIRE				MOUNTING: FLUSH ENGLOSURE: NEMA 1 LOCATION: ALTAR FLOOR							
	UFACTURER: CUTLER-HAMMER E: LOAD CENTER				MIN.	RATING OF MCB: 10K AI	C RMS SYMMETRICAL	AMPS					
CKT	LOAD DESCRIPTION	NOTE	TE CKI BREAKER		AKER	WIRE AND CONDUIT	WIRE AND CONDUIT	CKT	BREAKE!	₹ P	NOTE	LOAD DESCRIPTION	170
1	EX NORTH TRANCEPT EAST WALL LICHTS		1	20		EXIGTING	EXICTING		20	1		EX NORTH TRANCEPT WEST WALL TV	
3	EX COFFIN PIT	-	1	20	-	EXISTING	EXISTING	-	20	1	-	FX NORTH WALL PLILPIT	11.
5	EX NORTH WALL 220V	-	2	30	-	EXISTING	EXISTING	-	20	1	-	EX SOUTH WALL WEST CORNER	
7		-	-	-	-		EXISTING	-	30	2	-	EX 30UTH WALL 220V	
9	EX NORTH WALL WEST CORNER		1	20	-	EXISTING		-	-	-	-		111
11	EX SOUTH TRANCEPT FAST WALL	-	1	20	-	FXISTING	FXISTING	-	20	1	-	EX SOUTH WALL INSIDE CORNER	111
13	EX SOUTH TRANCEPT WEST WALL	-	1	20	-	EXISTING	EXISTING	-	20	1	-	EX OUTSIDE RECEPTACLE	1 1
15	EXRECEPTACLE	-	2	30	-	EXISTING	EXISTING	-	20	1	-	EX OUTSIDE RECEPTACLE	111
17		-	-		-			-	-	-	-	RX SPACE	1 1
19	EXRECEPTACLE	-	2	30	-	FXISTING		-	-	-	-	RX SPACE	1 2
21		-	-	-	-			-	-	-	-	EX SPACE	1 2
23	RX SPACE	-	-		-			-	-	-	-	EXSPACE	1 2
25	RX SPACE	-	-		-			-	-	-	-	EXSPACE	1 2
27	EXISPACE	-	-	-	-			-	-	-	-	EXSPACE	1 2
29	EX SPACE	-	-					-	- 8	-	-	EX SPACE	1 3
31	EXIGRACE	-	-	-	-			-	-	-	-	EXSPACE	1 3
33	EX SPACE	-	-	-	-			-	-	-	-	EX SPACE	1
35	EX SPACE	-	-	-	-			-	-	-	-	EX SPACE	1 3
37	EXISPACE	-	-	-	-			-		-	-	EX SPACE	1 3
30	EXIGPAGE	-	-	-	-			-	-	-	-	EXGPAGE	1 2
41	EX SPACE	-	-	-	-			-	-	-	-	EX SPACE	1
AUXUARES a AFG BREAKER b GFC BREAKER (SmA) f HANDLE CLAMF c GFEP BREAKER (S0mA) g RED CB HANDLE d SHUNT TRIP BREAKER						X GROUND BUS SERVICE ENTRANCE LABEL INTEGRAL SPOTIVES 200% NEUTRAL BUS & LUGS ISOLATED GROUND BUS			SPLIT BUS FEED THRULUGS SUB FEED LUGS OFFSET INTERIOR / RISER PANEL				

MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE												
EQUIPMENT DESIGNATION	KW	HP	MCA	МОСР	FLA	VOLTAGE	PHASE	LOAD (kVA)	WIRING & CONDUIT	DISCONNECTING MEANS	CONTROL MEANS	NOTES

(New Work), Circuit 23, 25 See schedule for Ex Load Center

BY MECHANICAL

DS-HPU-1

5.57

NOTES: (APPLICABLE TO MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE ONLY)

- 1. REVIEW EQUIPMENT SUBMITTALS FROM OTHER TRADES PRIOR TO ORDERING OR INSTALLING ASSOCIATED ELECTRICAL WORK. ELECTRICAL CONTRACTOR SHALL MODIFY COMPONENTS OF THE ELECTRICAL CONNECTIONS AS NECESSARY TO MATCH NAMEPLATE DATA OF APPROVED EQUIPMENT AND PROVIDE A CODE COMPLIANT INSTALLATION, INCLUDING BUT NOT ILLUTION TO TRACTOR TO THE AWARDED FOR FAILURE TO COORDINATE WITH OTHER TRADES EQUIPMENT SUBMITTALS.
- 2. PROVIDE NECESSARY SUPPORTING STRUT CHANNEL AND ALL MISCELLANEOUS HARDWARE FOR MOUNTING ELECTRICAL EQUIPMENT, MAINTAIN NEC WORKING CLEARANCES, FIELD COORDINATE EXACT LOCATIONS, DO NOT MOUNT ON EQUIPMENT ACCESS PANELS OR IN EQUIPMENT MANUFACTURERS' RECOMMENDED MAINTENANCE CLEARANCES, COORDINATE EXACT LOCATION OF SAFETY SWITCHES WITH MECHANICAL EQUIPMENT/CONTRACTOR.

DISCONNECT SWITCH SCHEDULE							
DESIGNATION	AMP RATING	POLES	VOLT RATING	FUSE AMPS	FUSE CLASS	NEMA ENCLOSURE	NOTES
DS-HPU-1	60	2	240	35	RK5	4X	2,4
DS-FCU-1	20	2	240		_	TOGGLE	_

NOTES: (APPLICABLE TO DISCONNECT SWITCH SCHEDULE ONLY)

HPU-1

1. PROVIDE FUSE AND COORDINATE EXACT EQUIPMENT FUSE SIZE WITH MOTOR OR EQUIPMENT NAMEPLATE DATA DURING

35 23.2 240

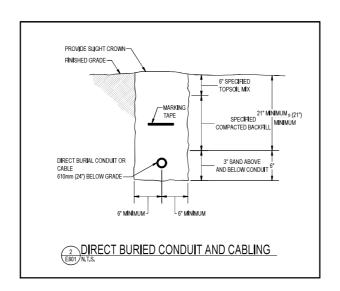
15 6.88 240

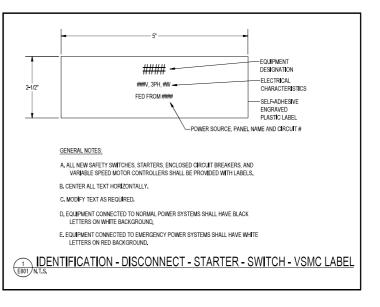
- 2. ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE WITH GROUND LUG.
- 3. PROVIDE ALL FUSIBLE DISCONNECT SWITCHES WITH CLASS R FUSE KIT.
- Label disconnect symmetric with the designation designation between the circuit number and panel board from which it is fed, including voltage and phase.



NOTES: (APPLICABLE TO PANELBOARD SCHEDULE ONLY)

1. PROVIDE NEW CIRCUIT BREAKER IN EXISTING AVAILABLE SPACE(S), MATCH EXISTING PANELBOARD MANUFACTURER, TYPE, AND AIC RATING.





ARCHITECTURAL / STRUCTURAL / CIVIL

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HENRY ADAMS

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS



PROFESSIONAL CERTIFICATION, I HERE BY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO.: 51082 EXPIRATION DATE: 06/07/2025

ST. MARY'S CHAPEL DESIGN AND INSTALL INTERPRETIVE ELEMENTS OF CHAPEL EXHIBIT AND ADD A/C PROJECT NO: SM-023-230-002

JS I NG AGENCY APPROVAL	
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DOC ADDDOMAL

	DGS	APPROVAL						
Project	Manager	Date						
Chief of	PM&D	Date						
	03/15/24	ISSUED FOR BID						
MARK	DATE	DESCRIPTION						
CAD DW	CAD DWG FILE: - DRAWN BY: ZAJ							
DRAWN								
CHKID B	CHKID BA: II M							

ELECTRICAL SCHEDULES AND DETAILS

PROJECT No.: SM-023-230-002

DATE: 03/15/2024

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SHEET 17 OF 17