JEFFERSON BARRACKS - BLDG 99 REPAIR

RELEASE DATE
07/11/24

ISSUED FOR
B-2 DELIVERABLES

PROJECT NUMBER
23065

FINKLE + WILLIAMS
ARCHITECTURE

PROJECT ADDRESS
99 Kearney Street
St. Louis, MO 63125

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E-501 ELECTRICAL DETAILS
ED101 ELECTRICAL DEMOLITION PLANS

PROJECT TEAM

ARCHITECT
FINKLE + WILLIAMS ARCHITECTURE
8787 Renner Blvd., Suite 100
Lenexa, Kansas 66219
PH. 913.498.1550

STRUCTURAL
PMA
6717 Shawnee Mission Parkway
Overland Park, KS 66202
PH. 913.831.1262 F. 913.831.0148

ELECTRICAL
FARRIS ENGINEERING
6004 Central St.
Kansas City, MO
PH. 573.202.9766

FIRE PROTECTION
FARRIS ENGINEERING
6004 Central St.
Kansas City, MO
PH. 573.202.9766

DRAWING SYMBOLS LEGEND

EXISTING CONSTRUCTION TO REMAIN

EXISTING CONSTRUCTION TO BE DEMOLISHED

NEW CONSTRUCTION

XX — WALL TYPE DESIGNATION -
REFERENCE FLOOR PLAN(S) FOR LOCATIONS.
REFERENCE DRAWING *A0.01* FOR CONSTRUCTION REQUIREMENTS.

X / X — ROOM NAME AND NUMBER -
REFERENCE FLOOR PLAN(S) FOR LOCATIONS.
REFERENCE FINISH SCHEDULE FOR FINISHES.

XX — DOOR AND FRAME DESIGNATION -
REFERENCE FLOOR PLAN(S) FOR LOCATIONS.
REFERENCE DOOR AND FRAME SCHEDULE FOR REQUIREMENTS.

ELEVATION SYMBOL

X / X — REFERENCE ELEVATION / REFERENCE SHEET

SECTION SYMBOL

X / X — REFERENCE SECTION / REFERENCE SHEET

ENLARGED DETAIL / ENLARGED PLAN SYMBOL

X / X — REFERENCE DETAIL / REFERENCE SHEET

INTERIOR ELEVATION SYMBOL

REFERENCE ELEVATION

X/XX — REFERENCE SHEET

FINISH DESIGNATION SYMBOL

XX-1 — WALL FINISH DESIGNATION
XX-1 — BASE FINISH DESIGNATION
LIMITS OF WALL AND BASE FINISHES

REFERENCE FLOOR PLAN(S) FOR LOCATIONS.
REFERENCE FINISH SCHEDULE FOR DESCRIPTIONS.

XX-# — FLOOR FINISH DESIGNATION -
REFERENCE FLOOR PLAN(S) FOR LOCATIONS.
REFERENCE FINISH SCHEDULE FOR DESCRIPTIONS.

X — REVISION NOTE

XX — CONSTRUCTION NOTE

— DEMOLITION NOTE

CJ — GYPSUM BOARD CONTROL JOINT -
REFERENCE FLOOR PLAN(S) FOR LOCATIONS.
REFERENCE DETAIL 1/A0.01 FOR CONSTRUCTION REQUIREMENTS

FE — WALL MOUNTED FIRE EXTINGUISHER - MULTI-PURPOSE ABC 10 LB DRY CHEMICAL FIRE EXTINGUISHER, W/ APPROPRIATE WALL MOUNTING BRACKET, REFERENCE FLOOR PLAN(S) FOR LOCATIONS. MOUNT SO CENTERLINE OF EXTINGUISHER IS 46" A.F.F.

FEC — SEMI-RECESSED FIRE EXTINGUISHER - MULTI-PURPOSE ABC 10 LB DRY CHEMICAL FIRE EXTINGUISHER. SEMI-RECESSED CABINET TO BE ALUMINUM DOOR & FRAME, 24" H X 9.5" W X 6" DEEP INTERNAL SIZE, 2 ½" PROTRUSION FROM WALL WITH ROLLED EDGES. SOLID DOOR WITH RECESSED HANDLE, ENGRAVED RED VERTICAL LETTERS WITH NO BACKFILL "FIRE EXTINGUISHER" ON DOOR. MOUNT SO CENTERLINE OF CABINET HANDLE IS 46" A.F.F.

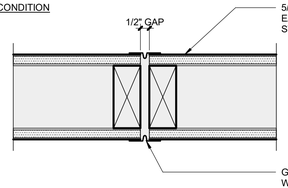
B

GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE MINIMUM STANDARDS OF THE APPLICABLE CODE INDICATED IN THE BUILDING SUMMARY COLUMN AND ALL LOCAL CODES PRESENTLY IN EFFECT UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED.
2. ALL NEW CONSTRUCTION SHALL COMPLY W/THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) AND CHAPTER 11 OF THE INTERNATIONAL BUILDING CODE (INCLUDES ICC A117.1 PER IBC)
3. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES, AND ALL UTILITY CHARGES, AND ARRANGE FOR ALL REQUIRED INSPECTIONS.
4. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING BUILDING & SITE UTILITIES BETWEEN CIVIL & MEP DRAWINGS. THE CONTRACTOR SHALL ALSO CONTACT ALL APPLICABLE UTILITY COMPANIES & PROVIDE CONDUIT & OTHER FACILITIES AS REQUIRED.
5. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY ALL DIMENSIONS & CONDITIONS ON THE JOB SITE PRIOR TO THE BIDDING OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.

   IN CASES OF DISCREPANCY CONCERNING DIMENSIONS, QUANTITIES AND LOCATION, THE CONTRACTOR SHALL, IN WRITING, CALL TO THE ATTENTION OF THE ARCHITECT ANY DISCREPANCIES BETWEEN SPECIFICATIONS, PLANS, DETAILS OR SCHEDULES. THE ARCHITECT WILL THEN INFORM THE CONTRACTOR, IN WRITING, WHICH DOCUMENT TAKES PRECEDENCE. THERE SHALL BE NO ADJUSTMENT TO THE COST OR TIME OF THE WORK RESULTING FROM CLARIFICATION OF SUCH DISCREPANCIES.
6. DIMENSIONS ON DRAWINGS ARE SHOWN TO FINISHED FACE OF WALLS AND PARTITIONS OF EXISTING OR NEW CONSTRUCTION UNLESS OTHERWISE NOTED. CEILING HEIGHT DIMENSIONS AND ALL OTHER VERTICAL DIMENSIONS ARE TO THE FINISHED FLOOR SURFACE UNLESS OTHERWISE NOTED.
7. CONTRACTOR TO FOLLOW ALL PRODUCT MANUFACTURER INSTALLATION REQUIREMENTS FOR ALL BUILDING PRODUCTS. IN THE EVENT OF A CONFLICT BETWEEN INFORMATION SHOWN ON THE CONTRACT DOCUMENTS AND PRODUCT MANUFACTURER INSTALLATION REQUIREMENTS, PRODUCT MANUFACTURER INSTALLATION REQUIREMENTS SHALL GOVERN. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY CONFLICTS BETWEEN PRODUCT MANUFACTURER INSTALLATION REQUIREMENTS AND THE CONTRACT DOCUMENTS PRIOR TO INSTALLATION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES FOR CASEWORK, FINISHES, DOORS, FRAMES, HARDWARE, MECHANICAL, ELECTRICAL, AND PLUMBING FIXTURES, AND OTHER ITEMS REQUIRING ARCHITECT'S REVIEW FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS, AND FOR ALL ITEMS WHICH ALLOWED CONTRACTOR OPTIONS. PRIOR TO FORWARDING TO THE ARCHITECT FOR REVIEW. THESE SUBMITTALS MUST BE REVIEWED BY THE CONTRACTOR FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATIONS OF CONSTRUCTION AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO, ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL AFFIX A STAMP TO SUBMITTAL INDICATING HIS REVIEW. SUBMITTALS FORWARDED WITHOUT A STAMP WILL BE RETURNED. ALL SUBMITTALS MUST BE REVIEWED BY THE ARCHITECT PRIOR TO CONSTRUCTION.
9. CONTRACTOR SHALL GUARANTEE ALL WORK AGAINST FAULT OF ANY MATERIAL OR WORKMANSHIP FOR A PERIOD OF NOT LESS THAN ONE YEAR AFTER COMPLETION OR ACCEPTANCE. FAULTY WORK SHALL BE REPLACED OR REPAIRED AS REQUIRED AT NO COST TO THE OWNER.
10. CONTRACTOR SHALL COORDINATE WITH OWNER ALL ITEMS TO BE SALVAGED PRIOR TO SUBMISSION OF BIDS AND START OF CONSTRUCTION. OWNER SHALL HAVE SALVAGE RIGHTS TO RETAIN ALL REMOVED ITEMS.
11. ALL CHANGES PROPOSED DURING CONSTRUCTION WHICH RESULT IN A CHANGE TO THE CONTRACT TIME AND/OR SUM SHALL BE SUBMITTED TO THE ARCHITECT IN WRITING AND APPROVED BY THE ARCHITECT AND OWNER BEFORE SUCH WORK SHALL COMMENCE.
12. CONTRACTOR SHALL COORDINATE CLEAR OPENINGS FOR ALL APPLIANCES PRIOR TO CONSTRUCTION OF CASEWORK.
13. CONTRACTOR SHALL FURNISH AND INSTALL CONCEALED FIRE-RETARDANT TREATED WOOD BLOCKING BEHIND ALL CABINETS, TOILET ACCESSORIES, PLUMBING FIXTURES, AND OTHER WALL MOUNTED ITEMS AS REQUIRED FOR ADEQUATE SUPPORT.
14. CONTRACTOR SHALL COORDINATE ALL LOCK AND LATCH SETS AND FINAL KEYING WITH OWNER. DOUBLE KEYED LOCKS ARE NOT PERMITTED ON ANY REQUIRED OR MARKED EXIT. MATCH EXISTING KEYING SYSTEM IF ONE IS EXISTING.
15. ALL DOOR HARDWARE ON EXIT DOORS SHALL BE READILY OPERABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE, OR EFFORT.
16. CONTRACTOR SHALL PREPARE ALL NEW AND EXISTING SURFACES SCHEDULED TO RECEIVE NEW FINISHES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR THE SUBSTRATE & FINISH BEING APPLIED.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING CONSTRUCTION INDICATED TO REMAIN AND SHALL REPAIR AND/OR REPLACE ALL AREAS AND/OR MATERIALS DAMAGED DURING CONSTRUCTION AT A MINIMUM TO THE CONDITION WHICH EXISTED PRIOR TO CONSTRUCTION.
18. CONTRACTOR SHALL COORDINATE FINAL QUANTITY AND LOCATIONS OF FIRE EXTINGUISHERS WITH THE FIRE DEPARTMENT AND/OR BUILDING DEPARTMENT. SEE SYMBOLS LEGEND FOR TYPE OF EXTINGUISHER.
19. ALL CONSTRUCTION MATERIALS EXPOSED WITHIN PLENUMS SHALL BE NON-COMBUSTIBLE OR SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND MAXIMUM SMOKE DEVELOPED RATING OF 50.
20. ALL PIPING, LOW VOLTAGE WIRE AND CABLE, OPTICAL FIBER, PNEUMATIC TUBING, AND ALL DUCT AND DUCT COVERINGS, LININGS AND CONNECTORS INSTALLED WITHIN PLENUMS MUST BE RATED FOR PLENUM USE.
21. TENANT SHALL BE RESPONSIBLE FOR COORDINATION AND INSTALLATION OF VOICE AND DATA CABLING AND EQUIPMENT.
22. NOT USED. A
23. ALL NEW GLASS AND GLAZING LOCATED IN HAZARDOUS LOCATIONS AS DEFINED IN IBC SECTION 2406.3 SHALL MEET THE REQUIREMENTS FOR SAFETY GLAZING AS DEFINED IN IBC SECTION 2406.
24. IF THE CONTRACTOR FAILS TO SUBMIT A MATERIAL FOR APPROVAL, THE MATERIAL MAY BE REQUIRED TO BE REMOVED BY THE CONTRACTOR EITHER BY DIRECTION OF THE OWNER OR ARCHITECT.
25. ALL HIGH-PILED STORAGE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE APPLICABLE EDITION OF THE INTERNATIONAL FIRE CODE.
26. THE CONTRACTOR IS TO PROVIDE AS BUILT DRAWINGS IN HARD COPY & AN ELECTRONIC AUTOCAD FILE TO THE OWNER AT THE CONCLUSION OF THE PROJECT.
27. INSTALL ELASTOMERIC JOINT SEALER AROUND ALL PIPES, DUCTWORK, & STRUCTURE PASSING THRU INTERIOR NON-RATED CONCRETE AND MASONRY WALLS, GYPSUM BOARD PARTITIONS, AND CONCRETE FLOOR/ROOF SLABS. FOR FIRE RATED INTERIOR CONCRETE AND MASONRY WALLS, GYPSUM BOARD PARTITIONS, AND CONCRETE FLOOR/ROOF SLABS SEAL ALL PIPES, DUCTWORK, AND STRUCTURE. INSTALL FIRESTOP MATERIALS IN ALL GAPS PRIOR TO SEALANT APPLICATION. INSTALL SEALER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING CONSTRUCTION INDICATED TO REMAIN AND SHALL REPAIR AND/OR REPLACE ALL AREAS AND /OR MATERIAL DAMAGED DURING CONSTRUCTION AT A MINIMUM TO THE CONDITION WHICH EXISTED PRIOR TO CONSTRUCTION.
29. CONTRACTOR SHALL BE RESPONSIBLE FOR PRICING RADIO COVERAGE AMPLIFIER FOR EMERGENCY RESPONDERS AS AN ALTERNATE. PRIOR TO CONSTRUCTION COMPLETION, AMPLIFIER SHALL BE PROVIDED ONLY IF REQUIRED BY AHJ .

NON-RATED CONDITION



GENERAL NOTE:
CONTROL JOINTS TO BE LOCATED AT 30'-0" MAXIMUM GYP. BD. DISTANCE, OR AS INDICATED ON PLANS (MATCH CMU CONTROL JOINT LOCATIONS WHERE APPLICABLE)

1 CONTROL JOINT
A0.01 SCALE : 3" = 1'-0"

BUILDING SUMMARY

GENERAL BUILDING INFORMATION

PROJECT NAME: JEFFERSON BARRACKS - BLDG 99 REPAIR
ADDRESS: 99 Kearney Street
St. Louis, MO 63125
PROPOSED USE: MAINTENANCE GARAGE

PROFESSIONAL SERVICES DISCLAIMER

THIS DISCLAMER SERVES NOTICE OF ACCEPTANCE OF RESPONSIBILITY AND DISCLAIMER OF RESPONSIBILITY AS TO THE CONTRACT DOCUMENTS PREPARED FOR PROJECT NUMBER:

23065, JEFFERSON BARRACKS - BLDG 99 REPAIR BY FINKLE + WILLIAMS, INC.

THE UNDERSIGNED ARCHITECT, AND FINKLE + WILLIAMS, INC., ARE RESPONSIBLE FOR PREPARATION OF ONLY THE NOTED CONSTRUCTION DRAWINGS BELOW:

NO.	TITLE	DATE
A0.00	COVER SHEET	07.11.24
A0.01	LEGENDS & GEN. NOTES	07.11.24
AD4.01	EXTERIOR DEMO ELEVATIONS	07.11.24
A1.01	FLOOR PLANS	07.11.24
A3.01	ROOF PLAN	07.11.24
A4.01	EXTERIOR ELEVATIONS	07.11.24
A5.01	WALL SECTIONS	07.11.24
A7.01	DETAILS	07.11.24
A8.01	DOOR SCHEDULE	07.11.24
A11.10	PROJECT SPECIFICATIONS	07.11.24
A11.11	PROJECT SPECIFICATIONS	07.11.24

THE UNDERSIGNED ARCHITECT AND FINKLE + WILLIAMS DISCLAIM RESPONSIBILITY FOR ALL OTHER CONSTRUCTION DOCUMENTS, AND ANY OTHER SPECIFICATIONS, REPORTS, ESTIMATES, SHOP DRAWINGS, ETC. RELATING TO OR INTENDED TO BE USED FOR ANY PART OF THE ARCHITECTURAL OR ENGINEERING PROJECT, INCLUDING ANY GEOTECHNICAL ENGINEERING SERVICES, OR ENVIRONMENTAL REPORTS.

THIS NOTICE IS EXECUTED BY THE UNDERSIGNED AND AUTHENTICATED BY THE ARCHITECTURAL SEAL OF THE PERSON PREPARING THS NOTICE.

STATE OF MISSOURI * DAVID ALAN WILLIAMS NUMBER A-5540 REGISTERED ARCHITECT

ARCHITECT: DAVID A. WILLIAMS

7-11-24

STATE OF MISSOURI * DAVID ALAN WILLIAMS NUMBER A-5540 REGISTERED ARCHITECT

MARK	DESCRIPTION	DATE
B	REMOVED REF TO FIRE EXT MANUFR	19MAY26
A	REMOVED REF TO AUTO SPRINKLER SYSTEM	19MAY26

ISSUE DATE: 07/11/2024
SOLICITATION NO.: +W50SBK-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

FINKLE + WILLIAMS ARCHITECTURE
8787 RENNER BLVD, SUITE 100
LENEXA, KS 66219
913-498-1550

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

Project No.: 23065
Date: 07/11/24
Issued For: B-2 DELIVERABLES

SHEET ID
LEGENDS & GEN. NOTES
A0.01

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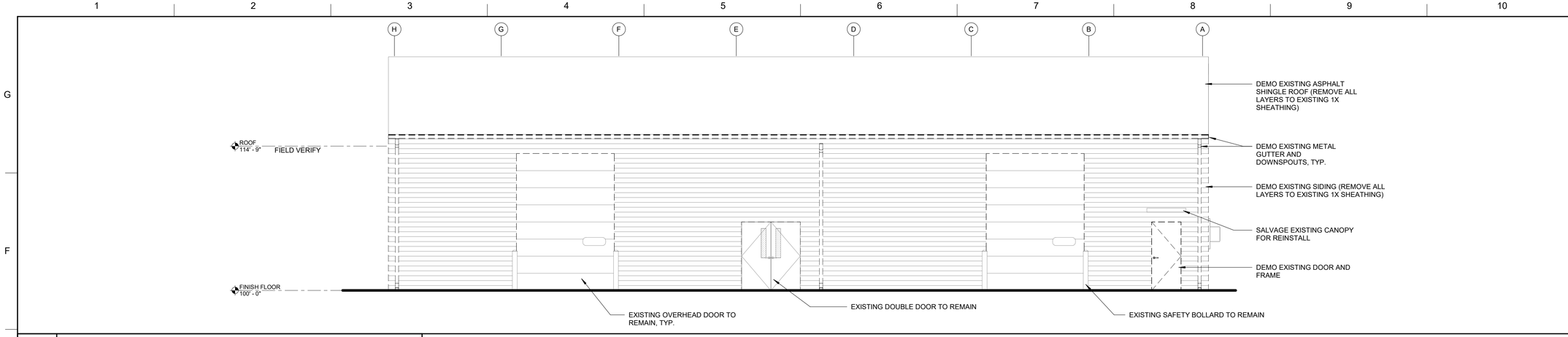
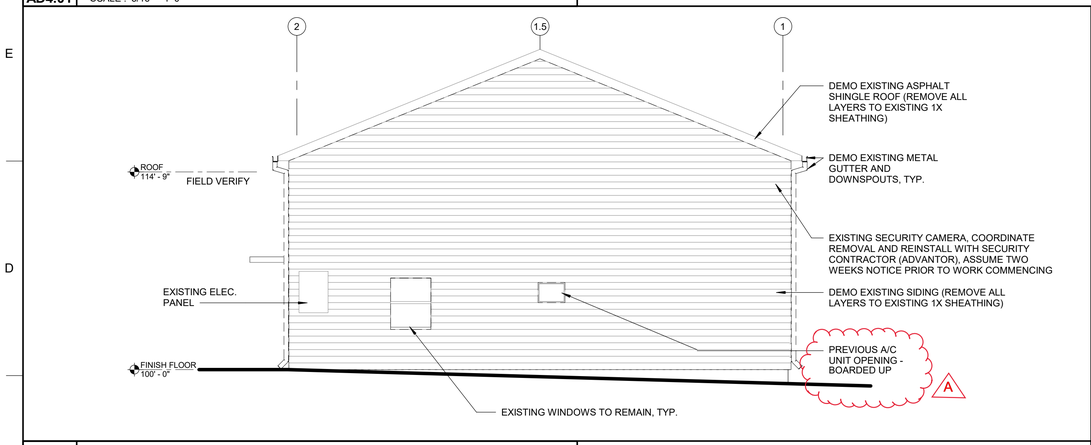


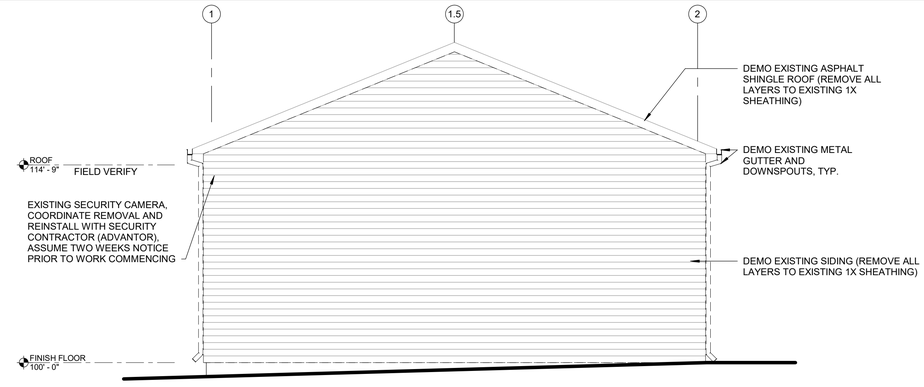
4 WEST ELEVATION - DEMO

AD4.01 SCALE : 3/16" = 1'-0"



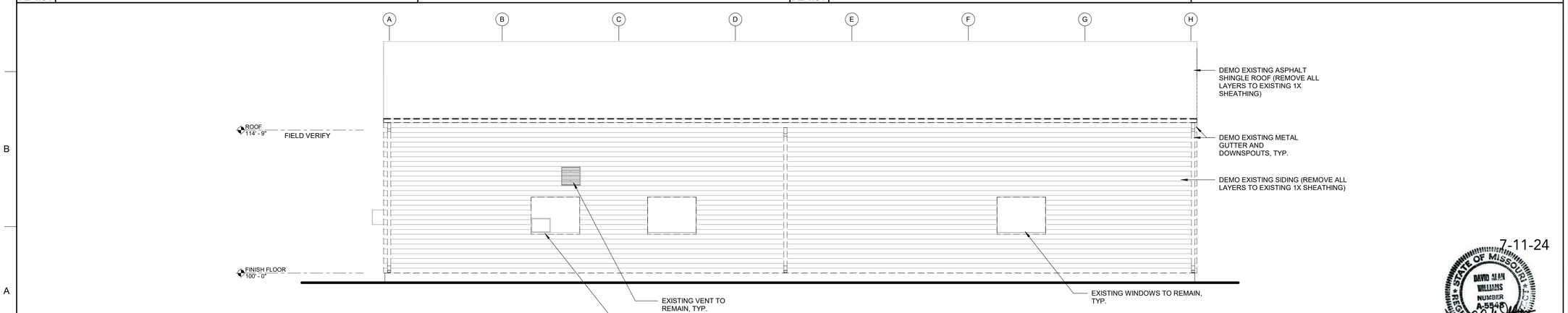
3 SOUTH ELEVATION - DEMO

AD4.01 SCALE : 3/16" = 1'-0"



2 NORTH ELEVATION - DEMO

AD4.01 SCALE : 3/16" = 1'-0"



1 EAST ELEVATION - DEMO

AD4.01 SCALE : 3/16" = 1'-0"

7-11-24

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5548
REGISTERED ARCHITECT

MARK	DESCRIPTION	DATE
A	CHANGED TO BOARD UP OPENING	19MAY26

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

ISSUE DATE: 2023SEP29
SOLICITATION NO.: +W50S8K-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

FINKLE + WILLIAMS ARCHITECTURE
8787 RENNER BLVD, SUITE 100
LENEXA, KS 66219
913-498-1550

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

Project No.: 23065
Date: 07/11/24
Issued For: B-2 DELIVERABLES

SHEET ID
EXTERIOR DEMO ELEVATIONS
AD4.01

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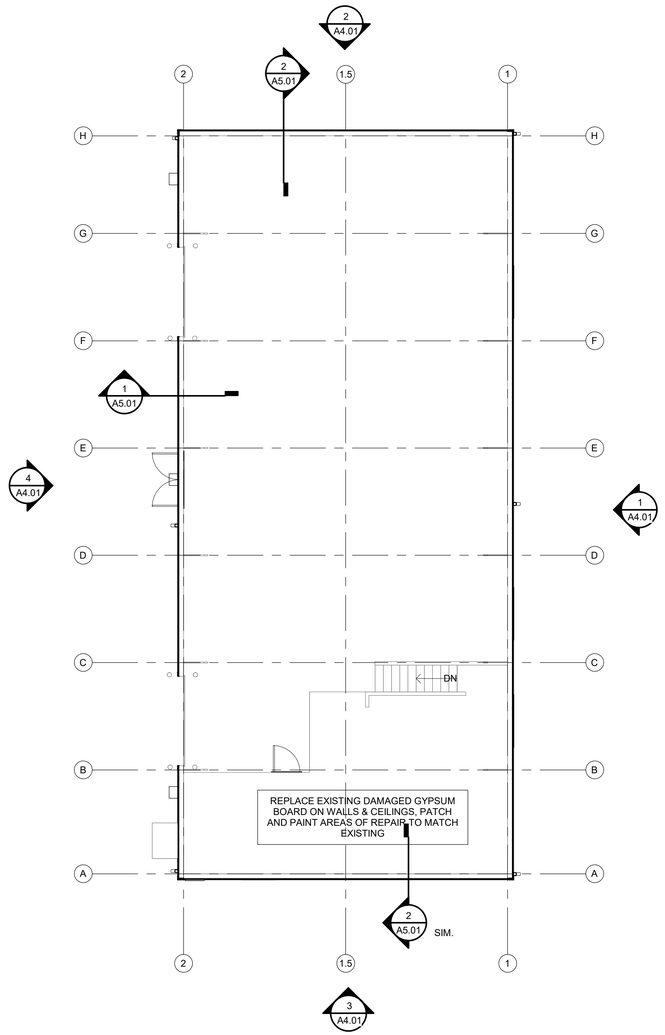
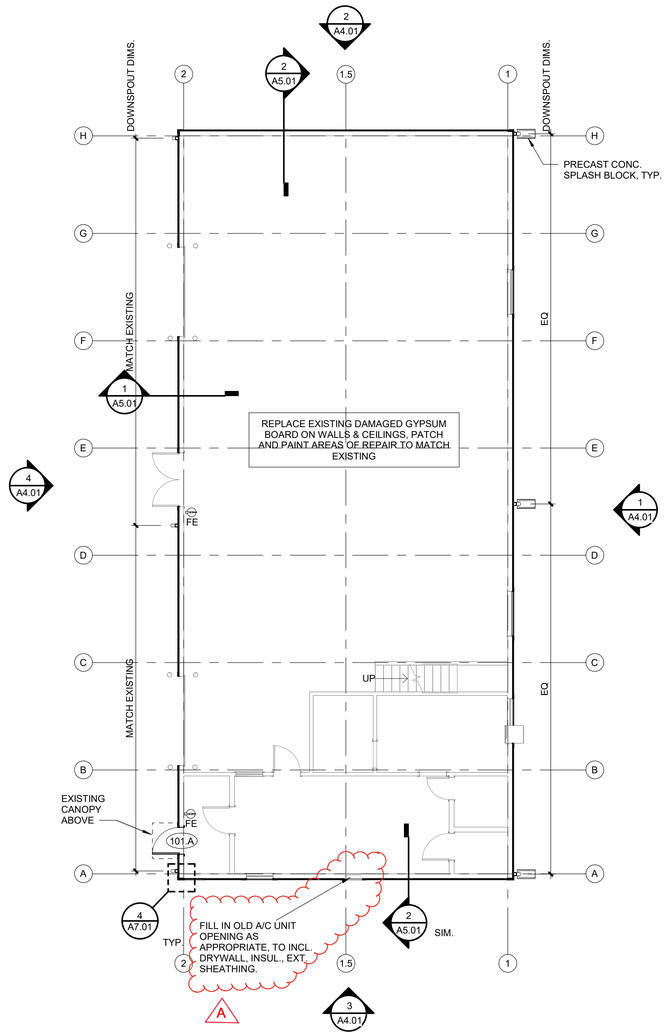


2 SECOND FLOOR PLAN

A1.01 SCALE : 1/8" = 1'-0"



1 1ST FLOOR PLAN

A1.01 SCALE : 1/8" = 1'-0"

7-11-24

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5540
REGISTERED ARCHITECT

MARK	DESCRIPTION	DATE
A	CHANGED TO BOARD UP OPENING	19MAY26

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

ISSUE DATE: 20DEC2023
SOLICITATION NO.: +W50S8K-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

FINKLE + WILLIAMS ARCHITECTURE
8787 RENNER BLVD, SUITE 100
LENEXA, KS 66219
913-498-1550

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

Project No.: 23065
Date: 07/11/24
Issued For: B-2 DELIVERABLES

SHEET ID
FLOOR PLANS
A1.01

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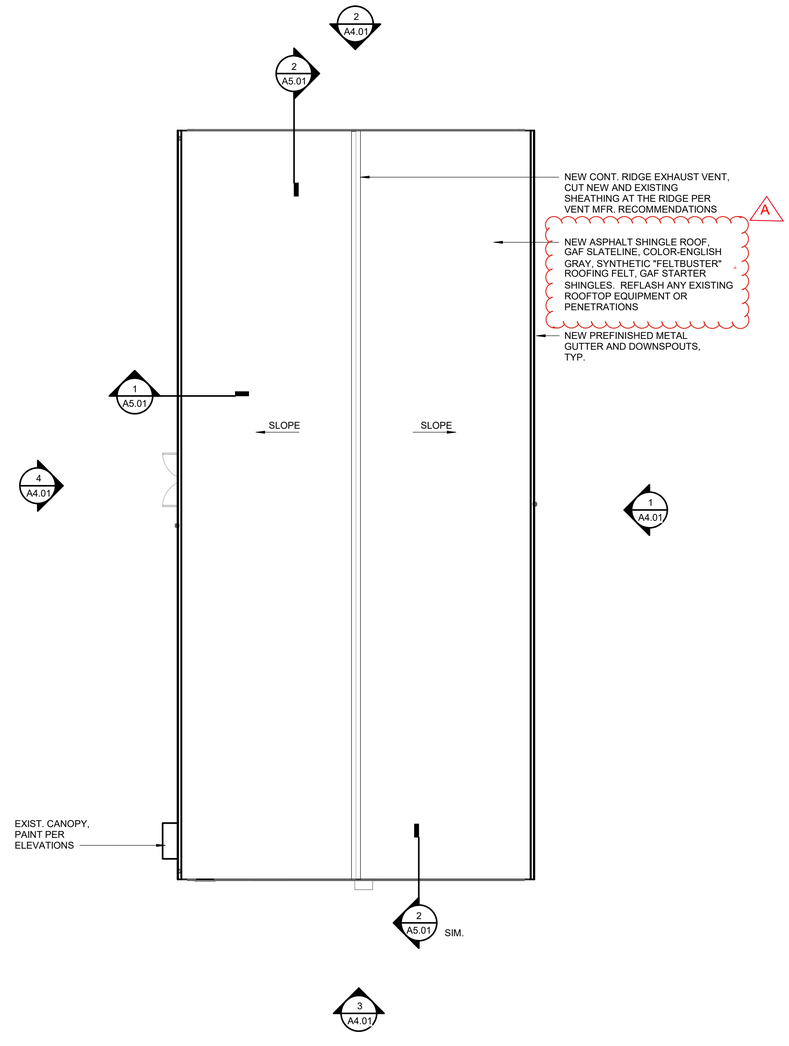

7-11-24

DAVID ALAN WILLIAMS NUMBER A-5548 REGISTERED ARCHITECT STATE OF MISSOURI

1 ROOF PLAN

A3.01 SCALE : 1/8" = 1'-0"

MARK	DESCRIPTION	DATE
A	CORRECTED ROOF DESCRIPTION	3 JUN 26

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:
ISSUE DATE: 2025 SEPTEMBER
SOLICITATION NO.: +W50SBK-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

FINKLE + WILLIAMS ARCHITECTURE
8787 RENNER BLVD, SUITE 100
LENEXA, KS 66219
913-498-1550

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

Project No.: 23065
Date: 07/11/24
Issued For: B-2 DELIVERABLES

SHEET ID
ROOF PLAN
A3.01

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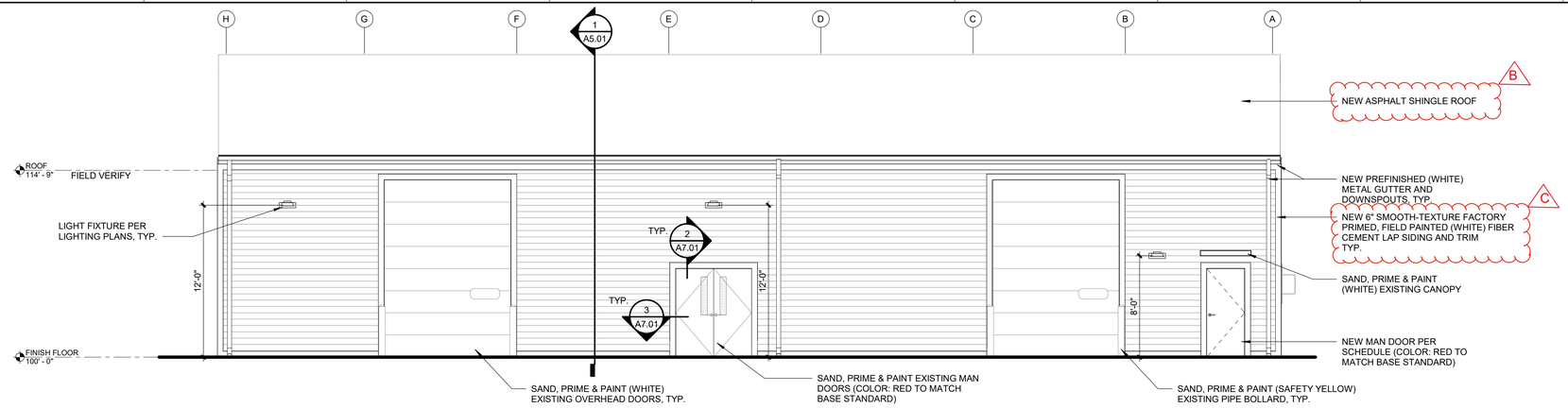
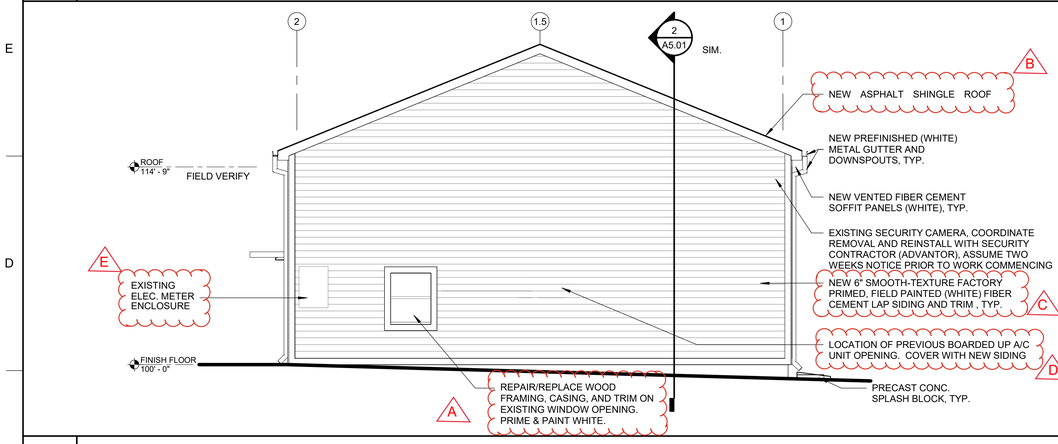


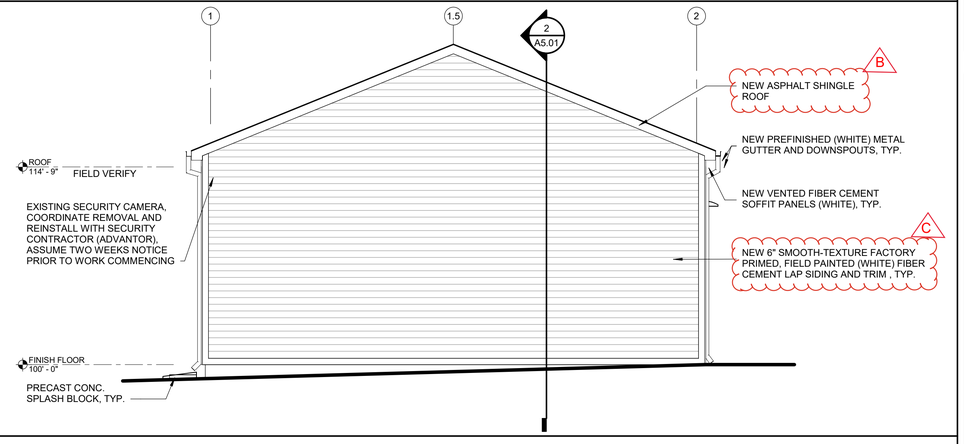
4 WEST ELEVATION

A4.01 SCALE : 3/16" = 1'-0"



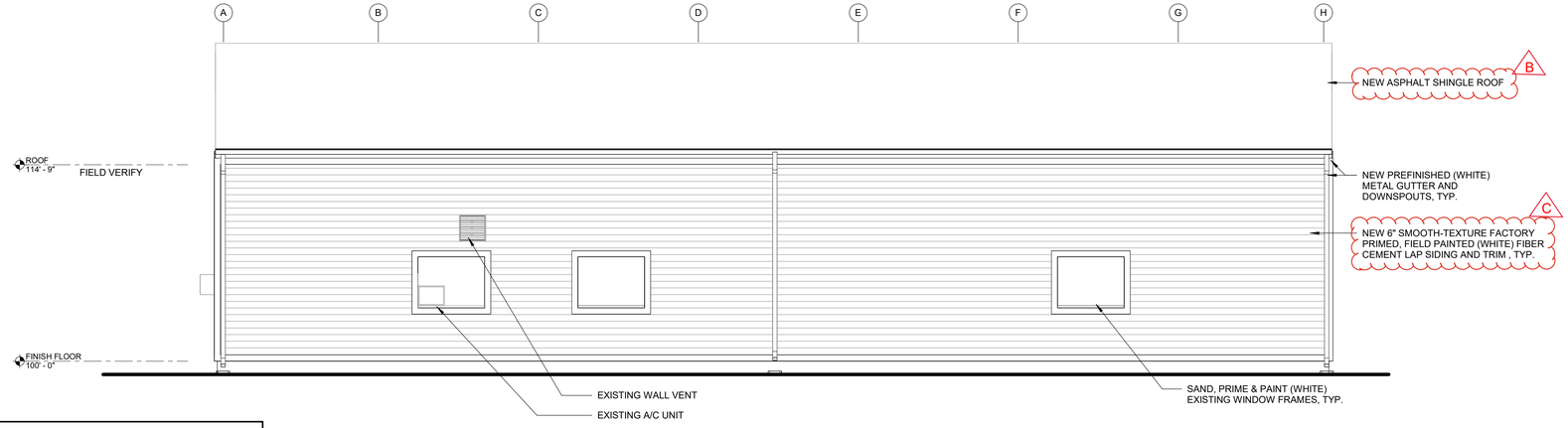
3 SOUTH ELEVATION

A4.01 SCALE : 3/16" = 1'-0"



2 NORTH ELEVATION

A4.01 SCALE : 3/16" = 1'-0"



1 EAST ELEVATION

A4.01 SCALE : 3/16" = 1'-0"

7-11-24

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5540
REGISTERED ARCHITECT

MARK	DESCRIPTION	DATE
E	CHANGED ELECTRIC PANEL TO METER	3 JUN 26
D	CHANGED WINDOW A/C OPENING TO BOARDED UP	3 JUN 26
C	REMOVED REF. TO BRAND NAME	3 JUN 26
B	REMOVED MATCH ADJACENT BUILDINGS PHRASE	3 JUN 26
A	REVISED CALLOUT TO REPAIR WINDOW	3 JUN 26

ISSUE DATE: 20250520
SOLICITATION NO.: +W50S8K-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

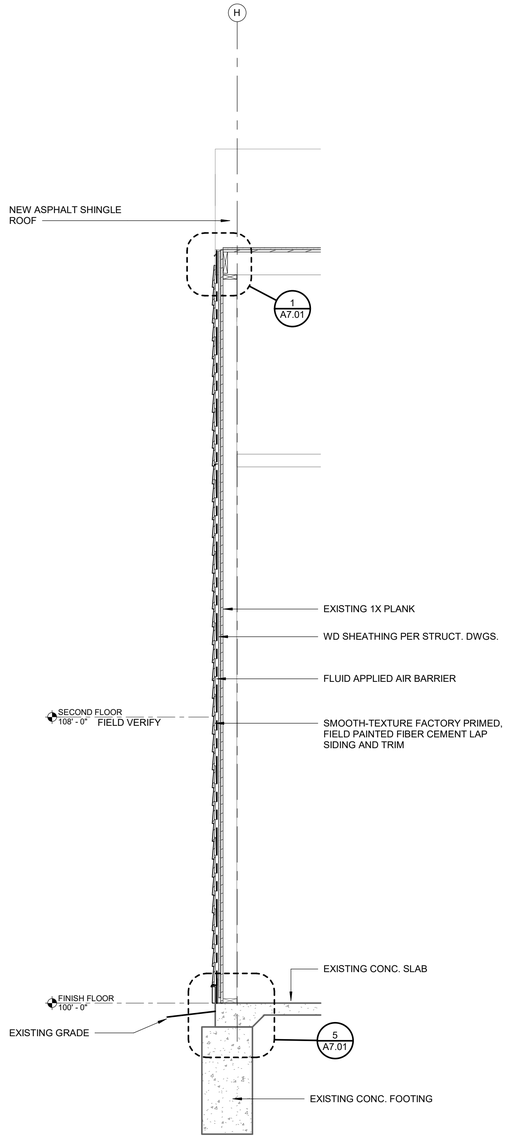
U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

FINKLE + WILLIAMS ARCHITECTURE
8787 RENNER BLVD, SUITE 100
LENEXA, KS 66219
913-498-1550

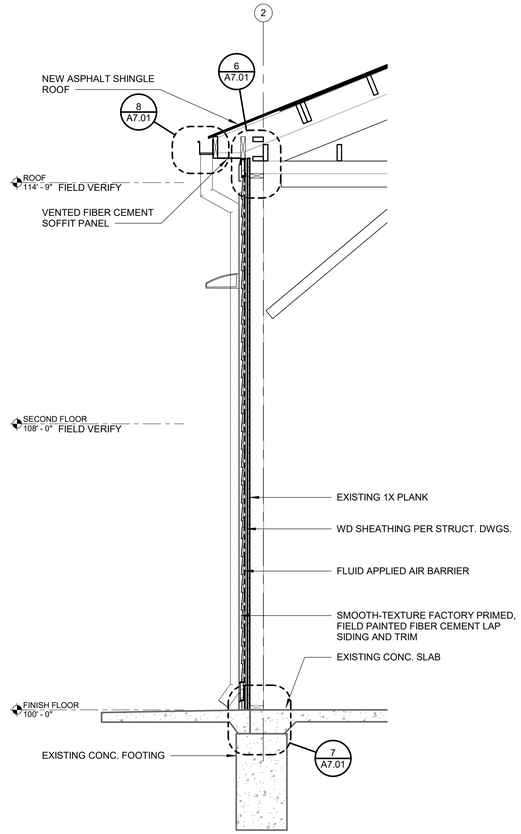
JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

Project No.: 23065
Date: 07/11/24
Issued For: B-2 DELIVERABLES

SHEET ID
EXTERIOR ELEVATIONS
A4.01



2	WALL SECTION 2
A5.01	SCALE : 1/2" = 1'-0"



1	WALL SECTION
A5.01	SCALE : 1/2" = 1'-0"

7-11-24

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5548
REGISTERED ARCHITECT

MARK	DESCRIPTION	DATE

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:
ISSUE DATE: 2023SEP29
SOLICITATION NO.: +W50S8K-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

FINKLE + WILLIAMS ARCHITECTURE
8787 RENNER BLVD, SUITE 100
LENEXA, KS 66219
913-498-1550

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

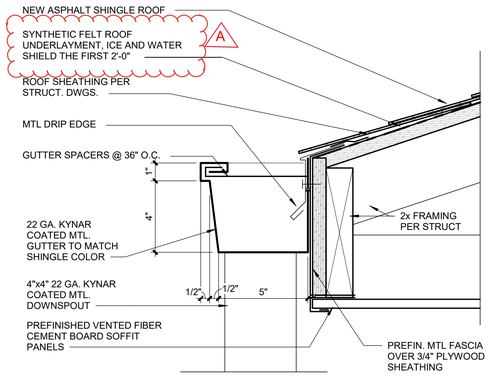
Project No.: 23065
Date: 07/11/24
Issued For: B-2 DELIVERABLES

SHEET ID
WALL SECTIONS
A5.01

7/11/2024 1:08:09 PM JEFFERSON BARRACKS - BLDG 99 REPAIR

8 GUTTER DETAIL

A7.01 SCALE : 3" = 1'-0"



6 SOFFIT DETAIL

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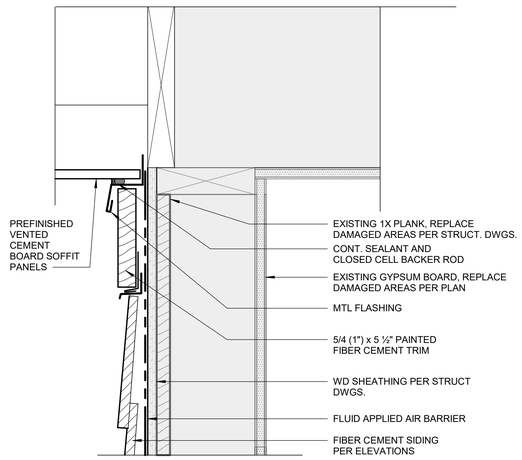
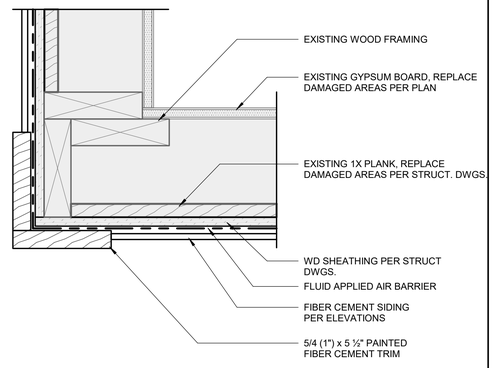


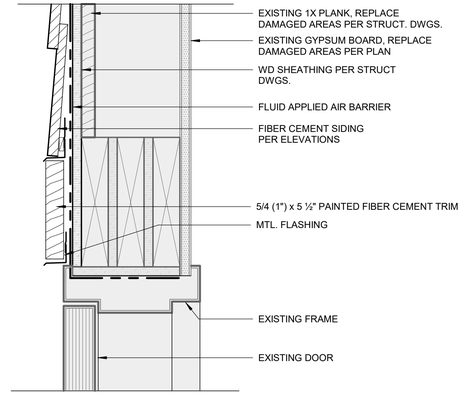
4 PLAN DETAIL

A7.01 SCALE : 3" = 1'-0"



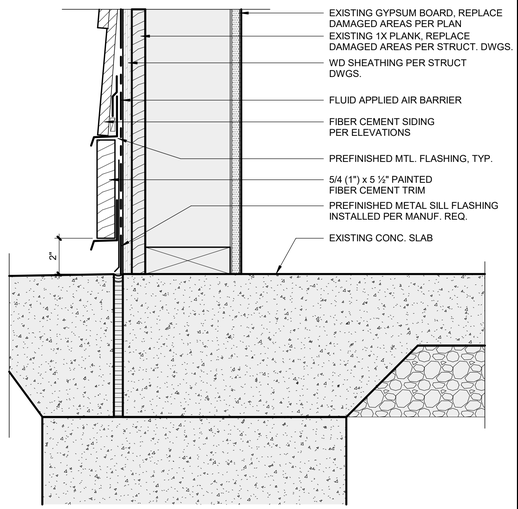
2 DOOR HEAD DETAIL

A7.01 SCALE : 3" = 1'-0"



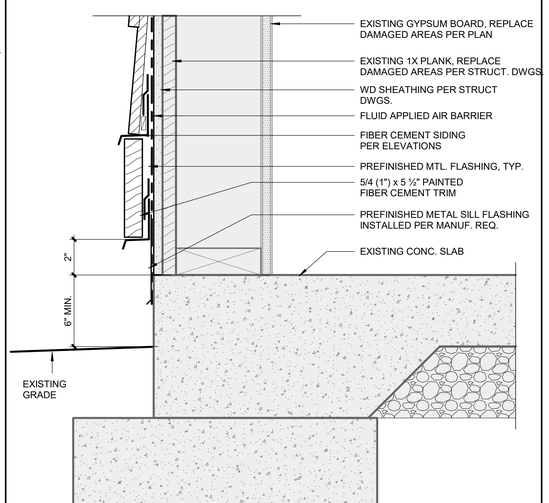
7 SILL DETAIL 2

A7.01 SCALE : 3" = 1'-0"



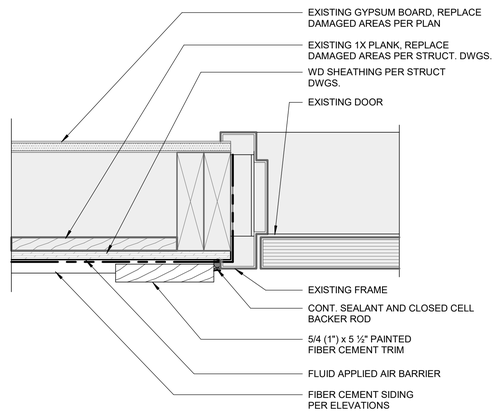
5 SILL DETAIL

A7.01 SCALE : 3" = 1'-0"



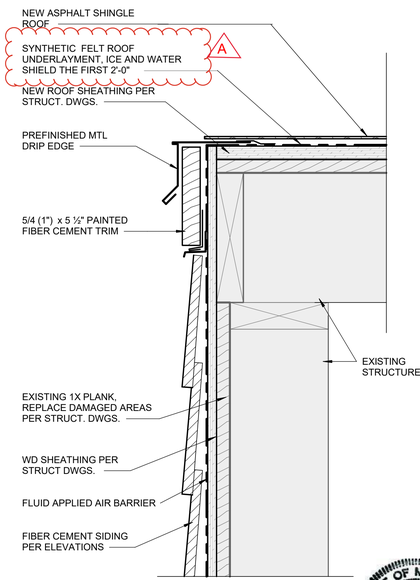
3 DOOR JAMB DETAIL

A7.01 SCALE : 3" = 1'-0"



1 GABLE DETAIL

A7.01 SCALE : 3" = 1'-0"



7-11-24

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5548
REGISTERED ARCHITECT

MARK	DESCRIPTION	DATE
A	CHANGED 30# FELT TO SYNTHETIC UNDERLAYMENT	3 JUN 26

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

ISSUE DATE: 20240709
SOLICITATION NO.: +W50SBK-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

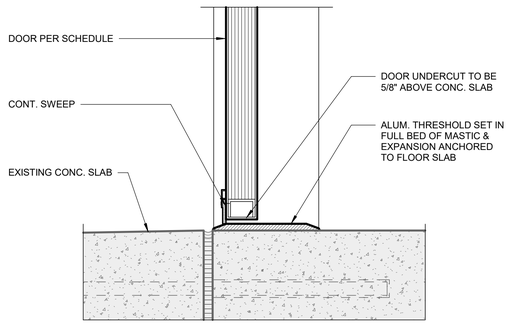
FINKLE + WILLIAMS ARCHITECTURE
8787 RENNER BLVD, SUITE 100
LENEXA, KS 66219
913-498-1550

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

Project No.: 23065
Date: 07/11/24
Issued For: B-2 DELIVERABLES

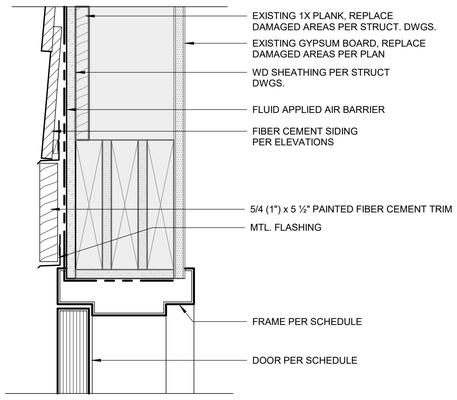
SHEET ID
DETAILS
A7.01

7/11/2024 1:08:09 PM JEFFERSON BARRACKS - BLDG 99 REPAIR



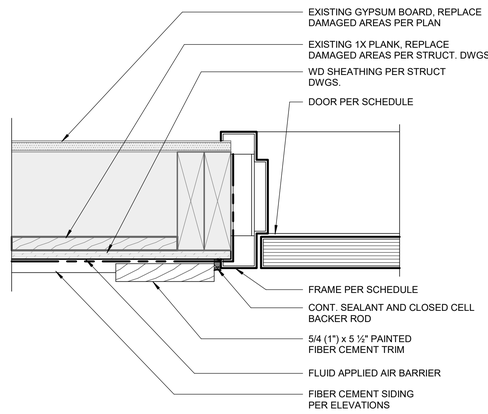
3 SILL DETAIL

A8.01 SCALE : 3" = 1'-0"



2 DOOR HEAD DETAIL - NEW

A8.01 SCALE : 3" = 1'-0"



1 DOOR JAMB DETAIL - NEW

A8.01 SCALE : 3" = 1'-0"

DOOR TYPES

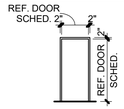
ALL HOLLOW METAL DOORS TO BE FACTORY PRIMED. PAINT TO BE SPRAYED

EXT. DOOR TO BE GRADE III EXTRA HEAVY DUTY, MODEL 4 INSUL., MIN. 16 GA. GALV. STL. (FINISH W/ 2 COATS SEMI-GLOSS ACRYLIC LATEX PAINT)

H1

FRAME TYPES

ALL HOLLOW METAL FRAMES TO BE FACTORY PRIMED. PAINT TO BE SPRAYED



14 GA. GALV. WELDED HOLLOW METAL FRAMES, FINISH TO BE SPRAYED W/ 2 COATS SEMI-GLOSS ACRYLIC LATEX PAINT

1

HARDWARE SETS

GENERAL NOTES:

1. ALL HARDWARE SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
2. ALL DOOR HARDWARE SHALL BE FINISH US26D OR EQUIVALENT, UNLESS NOTED OTHERWISE.
3. ALL LATCHSETS AND LOCKSETS SHALL BE EQUIPPED WITH LEVER TYPE OPERATING TRIM W/ THE "CLUTCH" FEATURE.
4. ALL CLOSERS SHALL BE LOCATED ON ROOMS SIDES OF DOORS.
5. CONTRACTOR'S HARDWARE CONSULTANT SHALL BE RESPONSIBLE FOR DETERMINING APPROPRIATE HARDWARE FUNCTION AND OPTIONS.
6. CONTRACTOR SHALL COORDINATE FINAL KEYING WITH OWNER.

SET # EL.1:

-HINGES	Ball Bearing, 4 1/2"x 4 1/2, Std Weight, Stnls Stl w/Stnls Stl pin, Non Removable Pin
-LOCKSET	Push Bar Rim Exit Device, Grade 1
	Exterior Lever - Contour Angle Return, Key Locks and Unlocks
	Rim Cylinder for use with BEST Interchangeable core
	Match general operation and appearance of hardware on double doors
	BEST Interchangeable core, 7 pin, B1 keyway
- KEYING	Two BEST key blanks and pins for BEST cylinder
-CLOSER	Heavy Duty, Grade 1, Cast Aluminum, Parallel arm mounting, standard plastic cover, Adjustable Spring size 1-6
-STOPS	Use Appropriate clearance/support blade stop for closer manufacturer
-THRESHOLD	Commercial flat aluminum alloy saddle, 5" width x ½" high x .1310" minimal nominal thickness, mill finish
-WEATHERSTRIP	Standard Perimeter Gasketing - ¼" Wide x 1-1/8" high, Vinyl Insert, Mill Aluminum
-BOTTOM SWEEP	Black Neoprene insert in Clear Anodized Aluminum, ¼" wide x 1-11/16" total high
-KICK PLATE	12" X 34" X .125" Aluminum Diamond Plate Kick Plate,

A

DOOR AND FRAME SCHEDULE

NO.	DOOR SIZE W.	H.	Th.	TYPE	MAT.	FRAME TYPE	FRAME MAT.	RATING	DETAILS JAMB	HEAD	SILL	HARDWARE	REMARKS
101.A	3' - 0"	7' - 0"	1 3/4"	H1	HM	1	HM	-	1/A8.01	2/A8.01	3/A8.01	EL.1	

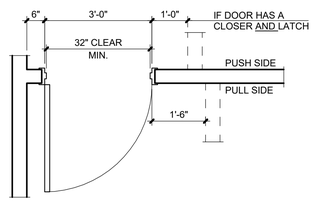
REMARKS

MATERIAL LEGEND

GL	-	GLASS
HM	-	HOLLOW METAL
WD	-	WOOD
STL	-	STEEL
AL	-	ALUMINUM
MFR	-	PER MANUFACTURER
POLY	-	POLYETHYLENE
P	-	POLYCARBONATE

DOOR LOCATION PLAN

FOR ALL DOORS NOT LOCATED ON PLAN



7-11-24

MARK	DESCRIPTION	DATE
A	REVISED DOOR HARDWARE. REMOVED BRAND NAMES.	3/12/26

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

ISSUE DATE: 2023 EDITION
SOLICITATION NO.: +W50SBK-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

FINKLE + WILLIAMS ARCHITECTURE
8787 RENNER BLVD, SUITE 100
LENEXA, KS 66219
913-498-1550

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY2020S7

Project No.: 23065
Date: 07/11/24
Issued For: B-2 DELIVERABLES

SHEET ID
DOOR SCHEDULE
A8.01

JEFFERSON BARRACKS - BLDG 99 REPAIR

7/11/2024 1:08:09 PM

DIVISION 1 - GENERAL REQUIREMENTS

1.1 ALLOWANCES
- A. IF ANY PORTIONS OF THE PROJECT ARE INDICATED TO BE BID BY A COST PER UNIT ALLOWANCE, THE ALLOWANCE STATED IN THE DOCUMENTS IS THE COST TO THE CONTRACTOR OF THE PRODUCTS OR MATERIALS ONLY. ANY TAXES, FREIGHT, MARKUP, DELIVERY, AND LABOR SHALL BE IN ADDITION TO THE MATERIAL ALLOWANCE.

1.2 ALTERNATES
- A. IF ANY ALTERNATES ARE INDICATED IN THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL FURNISH A SEPARATE PRICE FOR ALL MATERIAL, TAXES, FREIGHT, MARKUP, DELIVERY, LABOR, OVERHEAD AND PROFIT FOR THAT PORTION OF THE WORK. THE PROPOSED ALTERNATE MAY THEN BE ADDED OR DEDUCTED FROM THE CONTRACT SUM IF THE OWNER ACCEPTS THE ALTERNATE.
- B. PROVIDE PHYSICAL SAMPLES OF ALL PROPOSED ALTERNATES FOR ARCHITECT'S APPROVAL.

1.3 UNIT PRICES
- A. IF ANY UNIT PRICES ARE REQUESTED IN THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL FURNISH A PRICE INCLUDING ALL NECESSARY MATERIAL, TAXES, FREIGHT, MARKUP, DELIVERY, LABOR, OVERHEAD, AND PROFIT PER UNIT OF MEASUREMENT FOR WORK THAT MAY BE ADDED OR DEDUCTED FROM THE CONTRACT SUM IF ESTIMATED QUANTITIES OF WORK REQUIRED BY THE CONSTRUCTION DOCUMENTS ARE INCREASED OR DECREASED.

1.4 CHANGE ORDERS
- A. WHEN CHANGES TO THE CONTRACT SUM OR SCHEDULE ARE NECESSARY, CONTRACTOR SHALL SUBMIT A PDF COPY TO ARCHITECT FOR REVIEW IN A FORMAT AGREED UPON BETWEEN THE OWNER, ARCHITECT, AND CONTRACTOR. BEFORE PROCEEDING WITH WORK RELATED TO CHANGE ORDERS, CONTRACTOR SHALL OBTAIN OWNER'S WRITTEN APPROVAL.

1.5 PAYMENT APPLICATIONS
- A. PRIOR TO SUBMITTAL OF EACH FORMAL MONTHLY PAYMENT APPLICATION, THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT A DRAFT COPY OF THE PROPOSED PAYMENT APPLICATION WITH A SCHEDULE OF VALUES INDICATING THE ESTIMATED PERCENT COMPLETE IN EACH CATEGORY.
- B. FOLLOWING REVIEW AND ADJUSTMENT (IF ANY) OF THE DRAFT, CONTRACTOR SHALL SUBMIT A PDF COPY OF THE PROPERLY EXECUTED PAYMENT APPLICATION, SCHEDULE OF VALUES, AND LIEN WAIVERS FOR ARCHITECT'S REVIEW AND FORWARDING TO OWNER FOR PAYMENT.

1.6 SUBMITTALS
- A. CONTRACTOR SHALL PREPARE AND SUBMIT SUBMITTALS REQUIRED BY INDIVIDUAL SPEC SECTIONS AS A PDF ~~UPLOADED TO ON-LINE PROJECT SOFTWARE WEBSITE OR A PDF~~ SENT VIA EMAIL FOR ARCHITECT'S REVIEW.
- B. PROCESSING TIME:
  1. INITIAL REVIEW: MIN. TEN (10) BUSINESS DAYS
  2. RESUBMITTAL REVIEW (AS REQUIRED): MIN. FIVE (5) BUSINESS DAYS
- C. CERTIFICATES AND CERTIFICATIONS SUBMITTALS: INCLUDES SIGNATURE OF ENTITY RESPONSIBLE FOR PREPARING CERTIFICATION. PROVIDE DIGITAL SIGNATURE ON ELECTRONICALLY SUBMITTED CERTIFICATES AND CERTIFICATIONS WHERE INDICATED.
- D. DELEGATED-DESIGN SERVICES CERTIFICATION: IN ADDITION TO OTHER REQUIRED SUBMITTALS, SUBMIT DIGITALLY SIGNED PDF ELECTRONIC FILE, SIGNED AND SEALED BY THE RESPONSIBLE DESIGN PROFESSIONAL
- E. BIM INCORPORATION BY CONTRACTOR IF REQUIRED BY OWNER.
- F. CONTRACTOR'S SUBMITTAL REVIEW: CONTRACTOR SHALL REVIEW EACH SUBMITTAL AND CHECK FOR COORDINATION WITH OTHER WORK OF THE CONTRACT AND FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. MARK WITH APPROVAL STAMP BEFORE SUBMITTING TO ARCHITECT.
  1. ARCHITECT WILL NOT REVIEW SUBMITTALS THAT DO NOT HAVE CONTRACTOR'S REVIEW AND APPROVAL.
- G. MOCK-UPS
  1. CONTRACTOR SHALL PROVIDE MOCK-UPS AS INDICATED IN THE DRAWINGS.

1.7 CONSTRUCTION PERIOD TESTING
- A. THE OWNER SHALL ENGAGE AN INDEPENDENT TESTING AGENCY TO PERFORM CODE-REQUIRED "SPECIAL INSPECTIONS" AND QUALITY CONTROL TESTING. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING TIMES FOR TESTS, INSPECTIONS, AND OBTAINING SAMPLES AND NOTIFYING TESTING AGENCY.

1.8 REFERENCE STANDARDS
- A. CONSTRUCTION AND MATERIALS SHALL COMPLY WITH THE MOST RECENT STANDARDS IN EFFECT AS OF THE DATE OF THE CONSTRUCTION DOCUMENTS, UNLESS INDICATED OTHERWISE.

1.9 CLOSEOUT PROCEDURES
- A. PUNCHLIST - PRIOR TO SCHEDULING A SUBSTANTIAL COMPLETION WALK-THROUGH TO DEVELOP A PUNCHLIST OF ITEMS REQUIRING COMPLETION, PROJECT SHALL BE FINAL CLEANED, TOUCH-UP PAINTED, AND DAMAGED CEILING TILE REPLACED. UPON ARRIVAL, IF THE ARCHITECT DETERMINES THE PROJECT IS NOT READY FOR WALK-THROUGH, THE PUNCHLIST SHALL BE RESCHEDULED.
  1. WHEN THE CONTRACTOR CONSIDERS THE PUNCHLIST ITEMS FULLY COMPLETED, A FINAL WALK-THROUGH SHALL BE SCHEDULED TO REVIEW THE COMPLETED CONSTRUCTION.
- B. PRIOR TO PROJECT COMPLETION, CONTRACTOR SHALL SUBMIT/COMPLETE THE FOLLOWING:
  1. ELECTRONIC (PDF) SET OF CONSTRUCTION DRAWINGS NEATLY MARKED UP TO SHOW ACTUAL INSTALLATION WHERE INSTALLATION VARIES FROM THAT SHOWN ON ORIGINALLY ON THE CONSTRUCTION DOCUMENTS.
  2. ELECTRONIC COPY (PDF) OF OPERATION AND MAINTENANCE MANUALS INCLUDING SUBCONTRACTOR AND SUPPLIER CONTACT INFORMATION, MAINTENANCE AND SERVICE INSTRUCTIONS. SCHEDULES, EMERGENCY INSTRUCTIONS, SPARE PARTS LISTS, WIRING DIAGRAMS, AND WARRANTY INFORMATION.
  3. TRAINING OF OWNER PERSONNEL ON USE AND MAINTENANCE OF MECHANICAL, ELECTRICAL, PLUMBING, FIRE SPRINKLER, ALARM, SECURITY, IRRIGATION, AND OTHER BUILDING SYSTEMS.

DIVISION 6 - WOOD AND PLASTICS

061000 ROUGH CARPENTRY

SEE STRUCTURAL CONSTRUCTION DOCUMENTS FOR SPECIFICATIONS RELATED TO STRUCTURAL LUMBER, ENGINEERED WOOD PRODUCTS, PANEL PRODUCTS, FASTENERS, AND ACCESSORIES

A. SUBMITTALS:
1. PRODUCT DATA FOR TREATED WOOD, ENGINEERED WOOD PRODUCTS, FOAM PLASTIC SHEATHING, AND WATER / AIR BARRIER PRODUCTS.

B. LUMBER: PROVIDE S4S, 19 PERCENT MAXIMUM MOISTURE CONTENT FOR 2-INCH NOMINAL THICKNESS OR LESS, MARKED WITH GRADE STAMP OF INSPECTION AGENCY OF THE FOLLOWING GRADE:
1. INTERIOR PARTITION FRAMING: STANDARD, STUD, OR NO. 3 GRADE
2. EXPOSED FRAMING: NO. 1 OR NO. 2.
3. MISCELLANEOUS LUMBER FOR NAILERS, BLOCKING, AND SIMILAR CONSTRUCTION: STUD, OR NO. 3 GRADE

C. PANEL PRODUCTS: DOC PS 2. PROVIDE PLYWOOD COMPLYING WITH DOC PS 1 WHERE PLYWOOD IS INDICATED AND AS FOLLOWS:
1. WALL SHEATHING:
   a. PLYWOOD: EXTERIOR OR EXPOSURE 1, STRUCTURAL I, FIRE RETARDANT-TREATED (WHERE SPECIFIED).
   b. ORIENTED STRAND BOARD: EXPOSURE 1, STRUCTURAL I
   c. GLASS-MAT GYPSUM: ASTM C 1177/C 1177M
   d. EXTRUDED POLYSTYRENE FOAM: ASTM C 578, TYPE IV WITH T&G OR SHIPLAP LONG EDGES
   e. POLYISOCYANURATE FOAM: ASTM C 1289, TYPE I, CLASS 2, WITH ALUMINUM FOIL FACINGS. FOAM PLASTIC CORE AND FACINGS SHALL HAVE A FLAME SPREAD OF 25 OR LESS WHEN TESTED INDIVIDUALLY.
2. ROOF SHEATHING, WHERE INDICATED ON DRAWINGS:
   a. PLYWOOD: EXTERIOR OR EXPOSURE 1, STRUCTURAL I
   b. ORIENTED STRAND BOARD: EXPOSURE 1, STRUCTURAL I
3. PLYWOOD SUBFLOORING: EXTERIOR OR EXPOSURE 1, STRUCTURAL I
4. TELEPHONE AND ELECTRICAL EQUIPMENT BACKING BOARDS: PLYWOOD, EXPOSURE 1, C-D PLUGGED, FIRE RETARDANT TREATED, 1/2" THICK.

D. PRESERVATIVE-TREATED MATERIALS: APWA C2 LUMBER AND APWA C9 PLYWOOD, LABELED BY AN INSPECTION AGENCY APPROVED BY ALSC'S BOARD OF REVIEW. AFTER TREATMENT, KILN-DRY LUMBER TO 19 PERCENT MOISTURE CONTENT AND PLYWOOD TO 15 PERCENT. TREAT INDICATED ITEMS AND THE FOLLOWING:
1. WOOD MEMBERS IN CONNECTION WITH ROOFING, FLASHING, VAPOR BARRIERS, AND WATERPROOFING
2. CONCEALED MEMBERS IN CONTACT WITH MASONRY OR CONCRETE
3. WOOD FRAMING LESS THAN 18" ABOVE GRADE
4. WOOD FLOOR PLATES INSTALLED OVER CONCRETE SLABS DIRECTLY IN CONTACT WITH EARTH.

E. FIRE-RETARDANT TREATED MATERIALS: COMPLY WITH PERFORMANCE REQUIREMENTS IN AWPA C20 FOR LUMBER AND AWPA C27 FOR PLYWOOD LABELED BY TESTING AND INSPECTING AGENCY. USE INTERIOR TYPE A HIGH TEMPERATURE (HT). TREAT INDICATED ITEMS AND THE FOLLOWING:
1. INTERIOR RATED: TELEPHONE AND ELECTRICAL EQUIPMENT BACKING BOARDS
2. EXTERIOR RATED: PLYWOOD SHEATHING AS DETAILED AT ROOF SOFFIT.

F. MISCELLANEOUS PRODUCTS:
1. FASTENERS: SIZE AND TYPE INDICATED. GALVANIZED WHEN EXPOSED TO WEATHER, GROUND CONTACT, OR AREAS OF HIGH HUMIDITY, STAINLESS STEEL WHEN FASTENING PRESERVATIVE-TREATED MATERIALS (CONTRACTOR SHALL CONFIRM COMPATIBILITY OF FASTENER MATERIAL WITH PRESERVATIVE).
2. METAL FRAMING ANCHORS: HOT-DIP GALVANIZED STEEL OF STRUCTURAL CAPACITY, TYPE, AND SIZE INDICATED.
3. BUILDING PAPER: ASPHALT SATURATED ORGANIC FELT COMPLYING WITH ASTM D 226, TYPE 1 (NO. 15 ASPHALT FELT), UNPERFORATED.
4. AIR BARRIERS: AIR-RETARDER SHEETING OR FLUID APPLIED COATING DESIGNED TO PREVENT WATER INSTRUSION FROM EXTERIOR TO INTERIOR BUT TO ALLOW WATER VAPOR TO PASS FROM INTERIOR TO EXTERIOR. AN AIR BARRIER MUST HAVE AIR PERMEANCE THAT IS NOT GREATER THAN 0.02 L/(S·M²) AT A PRESSURE DIFFERENCE OF 75 PA (0.004 CFM/FT2 AT A PRESSURE DIFFERENCE OF 1.56 LB/FT2) WHEN TESTED IN ACCORDANCE WITH ASTM E 2178.
5. SILL-SEALER: GLASS-FIBER INSULATION, 1" THICK, COMPRESSIBLE TO 1/32".
6. ADHESIVE FOR FIELD GLUING PANELS TO FRAMING: APA AFG-01.

G. INSTALLATION:
1. SET ROUGH CARPENTRY TO REQUIRED LEVELS AND LINES WITH MEMBERS PLUMB, TRUE TO LINE, CUT AND FITTED. DISCARD PIECES WITH DEFECTS THAT WOULD LOWER STRENGTH OR RESULT IN UNACCEPTABLE APPEARANCE OF EXPOSED MEMBERS.
2. INSTALL STRUCTURAL MEMBER FULL LENGTH WITHOUT SPLICES UNLESS OTHERWISE SPECIFICALLY DETAILED.
3. COMPLY WITH MEMBER SIZES, SPACING, CONFIGURATION, AND FASTENER SIZE AND SPACING AS INDICATED ON THE STRUCTURAL DRAWINGS, BUT NOT LESS THAN REQUIRED BY APPLICABLE CODES AND AFPA WCD 1 T11.
4. CONSTRUCT DOUBLE JOIST HEADERS AT FLOOR AND CEILING OPENINGS AND UNDER WALL STUD PARTITIONS THAT ARE PARALLEL TO FLOOR JOISTS.
5. FRAME OPENINGS WITH TWO OR MORE STUDS AT EACH JAMB AND SUPPORT HEADERS ON CRIPPLE STUDS.
6. PROVIDE DOUBLE 2x10 HEADERS WITH 1/2" PLYWOOD BETWEEN AND 2x4 BOTTOM PLATE AT ALL DOOR AND WINDOW OPENINGS UNLESS NOTED OTHERWISE.
7. FURNISH CONCEALED BLOCKING AND NAILERS WHERE INDICATED AND AT ALL LOCATIONS WHERE WALL HUNG ITEMS WILL REQUIRE A SUBSTRATE FOR FASTENING OR SUPPORT.
8. INSTALL ROOF SHEATHING PERPENDICULAR TO FRAMING MEMBERS WITH ENDS STAGGERED AND SHEET ENDS OVER FIRM BEARING. PROVIDE PANELS CLIPS BETWEEN ROOF FRAMING MEMBERS AND SOLID EDGE BLOCKING BETWEEN SHEETS.
9. INSTALL WALL SHEATHING PERPENDICULAR TO TO WALL STUDS WITH ENDS OVER FIRM BEARING AND STAGGERED.
10. INSTALL FLOOR SHEATHING PERPENDICULAR TO FLOOR JOISTS WITH ENDS OVER FIRM BEARING. GLUE AND NAIL SHEATHING TO EACH JOIST.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

BUILDING ENVELOPE MEETING WITH ALL DIVISION 7 SUBCONTRACTORS, THE ARCHITECT, AND OWNER SHALL TAKE PLACE ONCE ALL SUBCONTRACTORS HAVE BEEN SELECTED TO ENSURE ALL PRODUCTS ARE COMPATIBLE AND TO ELIMINATE ANY GAP IN SCOPE.

071326 SELF-ADHERING SHEET WATERPROOFING

A. SUBMITTALS: PRODUCT DATA AND PRODUCT TEST REPORTS

B. QUALITY ASSURANCE: MANUFACTURER QUALIFICATIONS: AUTHORIZED, APPROVED, OR LICENSED WATERPROOFING MANUFACTURER.

C. WATERPROOFING MATERIALS: *BASIS OF DESIGN - CCW MIRADRI 860/861 AS MANUFACTURED BY CARLISLE COATINGS & WATERPROOFING OR APPROVED EQUAL. TO BE USED WITH MIRADRAIN DRAINAGE SYSTEM AS DETAILED BY CARLISLE DETAIL 860-2D. THIS SYSTEM SHALL BE USED ALONG THE PLAN NORTH ELEVATION WHERE FINISH GRADE IS ABOVE FINISH FLOOR, SEE CONSTRUCTION DOCUMENTS FOR MORE DETAIL.*
1. RUBBERIZED ASPHALT SHEET: 60-mil (1.5 mm) THICK. SELF-ADHERING SHEET CONSISTING OF 56 mils (1.4 mm) OF RUBBERIZED ASPHALT LAMINATED TO A 4-mil (0.10 mm) THICK POLYETHYLENE FILM WITH RELEASE LINER ON ADHESIVE SIDE.
2. ACCESSORY PRODUCTS: *BASIS OF DESIGN: CCW PRODUCT LINE TO INCLUDE*: SURFACE PRIMER, MASTIC AND SEALANTS, SHEET FLASHING, LIQUID MEMBRANE, SUBSTRATE PATCHING MEMBRANE, ADHESIVES, TAPE, AND METAL TERMINATION BARS RECOMMENDED BY WATERPROOFING MANUFACTURER.
3. PROTECTION COURSE: *BASIS OF DESIGN CCW-PROTECTION BOARD*
4. PERIMETER DRAINAGE SYSTEM: *BASIS OF DESIGN - CCW MIRADRAIN HC.*

D. INSTALLATION:
1. PROVIDE CLEAN, DUST-FREE, AND DRY SUBSTRATES FOR WATERPROOFING APPLICATION.
2. REMOVE FINS, RIDGES, MORTAR, AND OTHER PROJECTIONS AND FILL HONEYCOMB, AGGREGATE POCKETS, HOLES, AND VOIDS.
3. PREPARE, FILL, PRIME, AND TREAT JOINTS AND CRACKS IN SUBSTRATES
4. BRIDGE AND COVER ISOLATION AND EXPANSION JOINTS WITH OVERLAPPING SHEET STRAPS. INVERT AND LOOSELY LAY FIRST SHEET STRIP OVER CENTER OF JOINT. FIRMLY ADHERE SECOND STRIP TO FIRST AND OVERLAP TO SUBSTRATE.
5. PREPARE, PRIME, AND TREAT INSIDE AND OUTSIDE CORNERS, TERMINATION, PROTRUSIONS, AND PENETRATIONS THROUGH WATERPROOFING ACCORDING TO ASTM D 6135.
6. APPLY PRIMER TO SUBSTRATES AT REQUIRED RATE. ALLOW TO DRY, AND INSTALL SELF-ADHERING SHEETS PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND ASTM D 6135 MAINTAINING UNIFORM MINIMUM 21/2" LAP WIDTHS AND END LAPS. OVERLAP AND SEAL SEAMS AND STAGGER END LAPS.
7. REPAIR ANY TEARS AND VOIDS AND SLIT AND FLATTEN FISHMOUTHS AND BLISTERS. PATCH WITH SHEETS EXTENDING 6" BEYOND REPAIRED AREAS IN ALL DIRECTIONS.
8. INSTALL PROTECTION COURSE OVER WATERPROOFING AND SECURE DRAINAGE PANELS OVER PROTECTION COURSE WITHOUT PENETRATING WATERPROOFING. LAP EDGES AND ENDS OF GEOTEXTILE.
9. PROTECT WATERPROOFING SYSTEM FROM DAMAGE DURING CONSTRUCTION.

072726 FLUID-APPLIED MEMBRANE AIR BARRIERS

A. SUBMITTALS:
1. PRODUCT DATA AND PRODUCT TEST REPORTS
2. SHOP DRAWINGS, INCLUDING DETAILS FOR SUBSTRATE JOINTS AND CRACKS, COUNTERFLASHING STRIPS, PENETRATIONS, INSIDE/OUTSIDE CORNERS, TERMINATIONS AND TIE-INS WITH ADJOINING CONTRUCTION.

B. QUALITY ASSURANCE: INSTALLER QUALIFICATIONS: AUTHORIZED, APPROVED, OR LICENSED BY MANUFACTURER.

C. PRODUCTS:
1. HIGH-BUILD, VAPOR PERMEABLE AIR BARRIER: SYNTHETIC POLYMER MEMBRANE WITH AN INSTALLED DRY FILM THICKNESS, ACCORDING TO MFR'S WRITTEN INSTRUCTIONS, OF 35 MILS OR THICKER OVER SMOOTH, VOID-FREE SUBSTRATE.
2. PERFORMANCE CRITERIA:
   a. FLAME SPREAD: <25, ASTM E 84
   b. VAPOR PERMEANCE: NOT LESS THAN 10 PERMS, ASTM E-96, METHOD B
   c. AIR PERMEANCE: <0.02 l/S*M*M AT 75 Pa
   d. FASTENER SEALABILITY: NO WATER LEAKING THROUGH NAIL PENETRATIONS AFTER 24 HOURS, ASTM D 1970
   e. WATER RESISTANCE: 55 cm COL. OF WATER FOR 5 HOURS, NO LEAKING OR WET THROUGH
   f. FIRE PROPAGATION: MEETS REQUIREMENTS OF NFPA 285 IN APPROVED TESTED WALL ASSEMBLIES.

D. ACCESSORIES: PROVIDE THE FOLLOWING PRODUCT ACCESSORIES OR APPROVED EQUALS FROM SAME MANUFACTURER AS AIR-BARRIER MEMBRANE.
1. PRIMERS, TRANSITION STRIPS, TERMINATION STRIPS, JOINT REINFORCING FABRIC AND STRIPS, JOINT SEALANTS, COUNTERFLASHING STRIPS, FLASHING SHEETS AND METAL TERMINATION BARS, TERMINATION MASTIC, SUBSTRATE PATCHING MATERIALS, ADHESIVES, TAPES, FOAM SEALANTS, LAP SEALANTS, AND OTHER ACCESSORY MATERIALS THAT ARE RECOMMENDED IN WRITING BY AIR-BARRIER MFR TO PRODUCE A COMPLETE AIR-BARRIER ASSEMBLY AND THAT ARE COMPATIBLE WITH PRIMARY AIR-BARRIER MATERIAL AND ADJACENT CONSTRUCTION TO WHICH THEY MAY SEAL.

E. INSTALLATION: AIR BARRIERS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS, THE APPLICABLE ICC-ES EVALUATION REPORT AND THE APPLICABLE CODE.
1. INSTALL TRANSITION STRIPS AT WALL OPENINGS, ROOF TRANSITIONS, BASE FLASHING SO THAT A MIN. OF 3" OF COVERAGE IS ACHIEVED OVER SUBSTRATE.
2. BRIDGE ISOLATION JOINTS, EXPANSION JOINTS, AND DISCONTINUOUS WALL-TO-WALL, DECK-TO-WALL, AND DECK-TO-DECK JOINTS WITH AIR-BARRIER ACCESSORY MATERIAL THAT ACCOMODATES JOINT MOVEMENT ACCORDING TO MFR'S WRITTEN INSTRUCTIONS AND DETAILS.
3. TESTING AND INSPECTION: BY OWNER-ENGAGED AGENCY.

074646 FIBER-CEMENT SIDING

A. SUBMITTALS:
1. PRODUCT DATA, INSTALLATION INSTRUCTIONS, TEST DATA, SAMPLE WARRANTY
2. COLOR AND FINISH SAMPLES
3. SAMPLE WARRANTY, INCLUDING SPECIAL WARRANTY, MFR AGREES TO REPAIR OR REPLACE PRODUCTS THAT FAIL IN MATERIAL OR WORKMANSHIP WITHIN PERIOD OF 30 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

B. QUALITY ASSURANCE: BUILD MOCKUP OF TYPICAL WALL AREA AS SHOWN ON DRAWINGS

C. PRODUCTS: SEE EXTERIOR MATERIAL LEGEND
1. FIBER CEMENT SIDING:
   a. GENERAL: ASTM C1186, TYPE A, GRADE II, FIBER-CEMENT BOARD, NONCOMBUSTIBLE WHEN TESTED PER ASTM E136; WITH FLAME-SPREAD INDEX OF 25 OR LESS PER ASTM E84
   b. LABELING: ACCORDING TO ASTM C1186 BY QUALIFIED TESTING AGENCY.
   c. NOMINAL THICKNESS: NOT LESS THAN 5/16"
   d. HORIZONTAL PLANK SIDING: BOARDS PLAIN EDGE STYLE PER EXTERIOR MATERIAL LEGEND
      - TEXTURE: PER EXTERIOR MATERIAL LEGEND
   e. PANELS: 48" WIDE SHEETS
   f. FACTORY PRIMING: MFR'S STANDARD ACRYLIC PRIMER
2. FIBER-CEMENT SOFFIT
   a. GENERAL: ASTM C1186, TYPE A, GRADE II, FIBER-CEMENT BOARD, NONCOMBUSTIBLE WHEN TESTED PER ASTM E136; WITH FLAME-SPREAD INDEX OF 25 OR LESS PER ASTM E84
   b. NOMINAL THICKNESS: NOT LESS THAN 5/16"
   c. PATTERN: PER EXTERIOR MATERIAL LEGEND
      - TEXTURE: PER EXTERIOR MATERIAL LEGEND
   d. FACTORY PRIMING: MFR'S STANDARD ACRYLIC PRIMER

D. ACCESSORIES:
1. SIDING ACCESSORIES, GENERAL: PROVIDE STARTER STRIPS, EDGE TRIM, OUTSIDE AND INSIDE CORNER CAPS, AND OTHER ITEMS AS RECOMMENDED BY SIDING MANUFACTURER FOR BUILDING CONFIGURATION.
2. FLASHING: PROVIDE STAINLESS STEEL FLASHING COMPLYING WITH DIV 7.
   a. FINISH FOR ALUMINUM FLASHING: FACTORY-PRIME COATING
3. FASTENERS:
   a. FOR FASTENING TO WOOD, USE SIDING NAILS OF SUFFICIENT LENGTH TO PENETRATE MIN. 1" INTO FRAMING.
   b. FOR FASTENING TO METAL, USE RIBBED BUGLE-HEAD SCREWS OF SUFFICIENT LENGTH TO PENETRATE MIN. 1/4" OR THREE SCREW-THREADS INTO SUBSTRATE.
   c. FOR FASTENING FIBER CEMENT, USE HOT-DIP GALVANIZED FASTENERS.
4. INSECT SCREEN FOR SOFFIT VENTS: ALUMINUM 18X16 MESH.
5. CONT. SOFFIT VENTS: ALUM. HAT CHANNEL SHAPE
   a. NET-FREE AREA: 8 SQ.IN./LF
   b. FINISH: MATCH ADJACENT CONSTRUCTION

E. INSTALLATION:
1. GENERAL: COMPLY WITH MFR'S WRITTEN INSTALLATION INSTRUCTIONS APPLICABLE TO PRODUCTS AND APPLICATIONS INDICATED UNLESS MORE STRINGENT REQUIREMENTS APPLY.
   a. INSTALL FASTENERS NO MORE THAN 24"
   b. INSTALL JOINT SEALANTS AS SPECIFIED IN DIVISION 7.

073113 ASPHALT SHINGLES

A. SUBMITTALS: PRODUCT DATA AND SAMPLES FOR ALL MATERIALS

B. WARRANTY
1. MATERIAL WARRANTY PERIOD: 30 YEARS.
2. WIND-SPEED WARRANTY PERIOD: 15 YEARS.
   a. MAXIMUM WIND SPEED: 110 MPH (49 M/S)
3. ALGAE-RESISTANCE WARRANTY PERIOD: 15 YEARS.
4. WORKMANSHIP WARRANTY PERIOD: 25 YEARS.
5. ROOFING INSTALLER'S WARRANTY PERIOD: FIVE YEARS.

C. PERFORMANCE REQUIREMENTS
1. EXTERIOR FIRE-TEST EXPOSURE: CLASS A.
2. WIND RESISTANCE: ASTM D3161/D3161M, CLASS F, AND WITH ASTM D7158/D7158M, CLASS H.
3. ENERGY PERFORMANCE: ENERGY STAR.

D. PRODUCTS
1. COMPLY WITH BASE ROOFING STANDARD FOR ASPHALT SHINGLES, GAF SLATELINE "ENGLISH GRAY", AS APPROVED BY STATE HISTORIC PRESERVATION OFFICE. UTILIZE RELATED PRODUCTS DESIGNED TO WORK WITH GAF SLATELINE SHINLES THAT WILL PROVIDE THE BEST WARRANTY COVERAGE PER MANUFACTURER.
2. GLASS-FIBER-REINFORCED ASPHALT SHINGLES: GAF SLATELINE, COLOR: ENGLISH GRAY, BASE STANDARD: **[IMPACT-RESISTANT, LAMINATED]**-STRIP TYPE.
   a. HIP AND RIDGE SHINGLES: GAF TIMBERTEX UNITS.
   b. STARTER STRIP SHINGLES: GAF PRO-START
3. RIDGE VENTS: GAF COBRA RIGID VENT 3
4. METAL FLASHING AND TRIM: **[ALUMINUM]**.
5. UNDERLAYMENT: GAF FELTBUSTER SYNTHETIC ROOFING FELT.
6. WATER AND ICE-DAM MEMBRANE: GAF WEATHERWATCH MINERAL SURFACED LEAK BARRIER

E. INSTALLATION
1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

A

7-11-24

STATE OF MISSOURI — DAVID ALAN WILLIAMS — NUMBER A-5548 — REGISTERED ARCHITECT

MARK	DESCRIPTION	DATE
B	REMOVED BRAND NAMES IN 074646 C.1.& C.2	3 JUN 26
A	REVISED ROOFING TO GAF TO MATCH BASE STANDARD	3 JUN 26

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

ISSUE DATE: 07/11/2024
SOLICITATION NO.: +W50SBK-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

U.S. AIR FORCE
+1315T CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

FINKLE + WILLIAMS ARCHITECTURE
8787 RENNER BLVD, SUITE 100
LENEXA, KS 66219
913-498-1550

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

Project No.: 23065
Date: 07/11/24
Issued For: B-2 DELIVERABLES

SHEET ID
PROJECT SPECIFICATIONS
A11.10

076200 SHEET METAL FLASHING AND TRIM

A. SUBMITTALS: PRODUCT DATA, COLOR SAMPLES, AND SHOP DRAWINGS INDICATING MATERIAL, DIMENSIONS, JOINT LOCATIONS, EDGE CONDITIONS, AND METHODS OF ANCHORAGE.

B. FABRICATION STANDARD: COMPLY WITH SMACNA'S "ARCHITECTURAL SHEET METAL MANUAL". CONFORM TO DIMENSIONS AND PROFILES SHOWN UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED.

C. COORDINATION: COORDINATE INSTALLATION OF SHEET METAL FLASHING AND TRIM WITH INTERFACING AND ADJOINING CONSTRUCTION TO PROVIDE A LEAKPROOF, SECURE, AND NONCORROSIVE INSTALLATION.

D. SHEET METAL:
1. COPPER: ASTM B 370, TEMPER H00 OR H01, COLD ROLLED, NOT LESS THAN 16 OZ/S.F. (0.55 mm THICK).
2. ALUMINUM SHEET: ASTM B 209 (ASTM B 209 M) ALLOY 3003, 3004, 3105, OR 5005, TEMPER SUITABLE FOR FORMING AND STRUCTURAL PERFORMANCE REQUIRED, BUT NOT LESS THAN H14; NOT LESS THAN 0.032 INCH (O.8 mm) THICK, FINISHED WITH MANUFACTURER'S FLUOROPOLYMER 2-COAT SYSTEM WITH TOPCOAT CONTAINING NOT LESS THAN 70% POLYVINYLIDENE FLUORIDE RESIN BY WEIGHT; COMPLYING WITH AAMA 2604.
3. STAINLESS STEEL SHEET: ASTM A 240/A 240M, TYPE 304, WITH NO. 2D FINISH; NOT LESS THAN 0.0156 INCH (0.4 mm) THICK.

E. FLASHING AND TRIM: FABRICATE FLASHING AND TRIM TO COMPLY WITH RECOMMENDATIONS OF SMACNA'S "ARCHITECTURAL SHEET METAL MANUAL" THAT APPLY TO THE DESIGN, DIMENSIONS, METAL, AND OTHER CHARACTERISTICS OF THE ITEM INDICATED OR DETAILED ON THE CONSTRUCTION DRAWINGS. FABRICATE WITH CONCEALED FASTENERS EXCEPT WHERE EXPOSED FASTENERS ARE PERMITTED.

F. ACCESSORIES:
1. SOLDER FOR COPPER: ASTM B 32, GRADE Sn50
2. SOLDER FOR STAINLESS STEEL: ASTM B 32, GRADE Sn60, WITH ACID FLUX OF TYPE RECOMMENDED BY STAINLESS STEEL MFR.
3. BUTYL SEALANT: ASTM C 1311, SOLVENT-RELEASE TYPE, FOR EXPANSION JOINTS WITH LIMITED MOVEMENT.
4. ASPHALT MASTIC: SSPC-PAINT 12, ASBESTOS FREE, SOLVENT TYPE.
5. ROOFING CEMENT: ASTM D 4586, TYPE I, ASBESTOS FREE, ASPHALT BASED
6. SLIP SHEET: RESIN-SIZED PAPER, MINIMUM 3 LB/100 S.F. (0.16 kg/sq. m)

G. INSTALLATION:
1. COMPLY WITH SMACNA'S "ARCHITECTURAL SHEET METAL MANUAL." ALLOW FOR THERMAL EXPANSION; SET TRUE TO LINE AND LEVEL. INSTALL WORK WITH LAPS, JOINTS, AND SEAMS PERMANENTLY WATERTIGHT AND WEATHERPROOF; CONCEAL FASTENERS WHERE POSSIBLE.
2. SECURE FLASHINGS AT ROOF EDGES ACCORDING TO FMG LOSS PREVENTION DATA SHEET 1-49 FOR SPECIFIED WIND ZONE.
3. SEALED JOINTS: FORM NON-EXPANSION, BUT MOVABLE, JOINTS IN METAL TO ACCOMMODATE ELASTOMERIC SEALANT TO COMPLY WITY SMACNA STANDARDS USING BAYONET TYPE OR INTERLOCKING HOOKED SEAMS.
4. FABRICATE NONMOVING SEAMS IN SHEET METAL WITH FLAT-LOCK SEAMS. FOR METAL OTHER THAN ALUMINUM, TIN EDGES TO BE SEAMED, FORM SEAMS AND SOLDER. FOR ALUMINUM, FORM SEAMS AND SEAL WITH EPOXY SEAM SEALER. RIVET JOINTS FOR ADDITIONAL STRENGTH.
5. SEPARATION: SEPARATE NON-COMPATIBLE METALS OR CORROSIVE SUBSTRATES WITH A COATING OF ASPHALT MASTIC OR OTHER PERMANENT SEPARATION

077200 ROOF ACCESSORIES

A. SUBMITTALS: PRODUCT DATA, INSTALLATION DETAILS, WARRANTIES

B. ROOF ACCESSORIES:
1. ROOF CURBS AND EQUIPMENT SUPPORTS: SEE MECHANICAL SPECIFICATIONS FOR MORE INFORMATION, INCLUDE MANUFACTURER'S STANDARD RIGID OR SEMIRIGID INSULATION AND PRESERVATIVE-TREATED WOOD NAILERS AT TOPS. PROVIDE UNITS WITH CANT STRIPS AND BASE PROFILE COORDINATED WITH ROOF INSULATION THICKNESS AND ROOF DECK SLOPE.
2. ROOF HATCHES: INSULATED SINGLE-LEAF, 36" W X 60" D OPENING. FABRICATE FROM METALLIC-COATED STEEL WITH INTEGRAL CURB OF HEIGHT NECESSARY TO EXTEND 8" MIN. ABOVE ROOF SURFACE, DOUBLE WALL CONSTRUCTION WITH 11/2" INSULATION, FORMED CANTS AND CAP FLASHING, WITH WELDED MECHANICAL CORNER JOINTS. PROVIDE DOUBLE-WALL COVER (LID) CONSTRUCTION WITH 1" INSULATION CORE. PROVIDE GASKETING AND CORROSION RESISTANT HARDWARE INCLUDING PINTLE HINGES, HOLD-OPEN DEVICES, INTERIOR PADLOCK HASPS, AND BOTH INTERIOR AND EXTERIOR LATCH HANDLES.

C. INSTALLATION: INSTALL ROOF ACCESSORY ITEMS ACCORDING TO CONSTRUCTION DETAILS OF NRCA'S "ROOFING AND WATERPROOFING MANUAL". COORDINATE WITH INSTALLATION OF ROOF DECK, VAPOR BARRIERS, ROOF INSULATION, ROOFING, AND FLASHING TO ENSURE COMBINED ELEMENTS ARE SECURE, WATERPROOF, AND WEATHERTIGHT.

078413 PENETRATION FIRESTOPPING

A. SUBMITTALS: PRODUCT DATA AND PRODUCT CERTIFICATES SIGNED BY MFR. CERTIFYING THAT PRODUCTS COMPLY WITH REQUIREMENTS.

B. RATINGS: PROVIDE FIRESTOPPING SYSTEM WITH FIRE RESISTANCE RATINGS INDICATED BY REFERENCE TO UL DESIGNATIONS AS LISTED IN ITS "FIRE RESISTANCE DIRECTORY", OR TO DESIGNATION OF ANOTHER TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

C. FLAME SPREAD/SMOKE DEVELOPED RATINGS: FOR EXPOSED FIRESTOPPING, PROVIDE PRODUCTS WITH FLAME SPREAD INDEXES OF LESS THAN 25 AND SMOKE-DEVELOPED INDEXES OF LESS THAN 450, AS DETERMINED ACCORDING TO ASTM E 84.

D. FIRESTOP SYSTEMS: USE SYSTEMS AS DESIGNATED ON THE CONSTRUCTION DRAWINGS, OR IF NOT DESIGNATED, ANY SYSTEM THAT IS CLASSIFIED BY UL AND ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION FOR THE APPLICATION MAY BE USED.

E. INSTALLATION: INSTALL FIRESTOPPING SYSTEMS TO COMPLY WITH REQUIREMENTS LISTED IN TESTING AGENCY'S DIRECTORY FOR INDICATED FIRE-RESISTANCE RATING.

F. IDENTIFICATION: IDENTIFY THROUGH-PENETRATION FIRESTOP SYSTEMS WITH PERMANENT LABELS ATTACHED TO SURFACES ADJACENT TO FIRESTOP SYSTEMS SO THAT LABELS WILL BE VISIBLE TO ANYONE SEEKING TO REMOVE PENETRATING ITEMS OR FIRESTOP SYSTEMS. LABELS SHALL INCLUDE THE FOLLOWING:
1. THE WORDS "WARNING - THROUGH PENETRATION FIRESTOP SYSTEM - DO NOT DISTURB"
2. CLASSIFICATION/LISTING DESIGNATION OF APPLICABLE TESTING AND INSPECTING AGENCY.
3. THROUGH-PENETRATION FIRESTOP SYSTEM MANUFACTURER'S NAME AND PRODUCT NAME.

079200 JOINT SEALANTS

A. SUBMITTALS: PRODUCT DATA, COLOR SAMPLES, AND SCHEDULE OF LOCATIONS FOR EACH TYPE OF SEALANT SUBMITTED.

B. SEALANT COLORS/MOCKUP: MULTIPLE SEALANT COLORS WILL BE REQUIRED TO COORDINATE WITH COLORS OF MATERIALS BEING SEALED, SHALL BE SELECTED FROM MANUFACTURER'S FULL RANGE OF AVAILABLE COLORS, INCLUDING PREMIUM COLORS, AND SHALL BE VERIFIED FROM A 12" LONG FIELD APPLIED SAMPLE OF EACH COLOR PRIOR TO COMPLETE INSTALLATION.

C. ENVIRONMENTAL LIMITATIONS: DO NOT PROCEED WITH INSTALLATION OF JOINT SEALANTS WHEN AMBIENT AND SUBSTRATE TEMPERATURE CONDITIONS ARE OUTSIDE LIMITS PERMITTED BY JOINT SEALANT MANUFACTURER OR ARE BELOW 40 deg F (4.4 deg C).

D. COMPATIBILITY: PROVIDE JOINT SEALANTS, JOINT FILLERS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER SERVICE AND APPLICATION CONDITIONS.

E. JOINT SEALANTS:
1. BUILDING EXPANSION JOINTS: SINGLE COMPONENT, NEUTRAL-CURING SILICONE SEALANT, ASTM C 920, TYPE S; GRADE NS; CLASS 25; USES T, M, AND O, WITH THE ADDITIONAL CAPABILITY TO WITHSTAND 50% MOVEMENT IN BOTH EXTENSION AND COMPRESSION FOR A TOTAL OF 100% MOVEMENT.
2. EXTERIOR TRAFFIC BEARING JOINTS WHERE SLOPE PRECLUDES POURABLE SEALANT: SINGLE COMPONENT, NONSAG URETHANE SEALANT, ASTM C920, TYPE S; GRADE NS; CLASS 25; USES T, NT, M, G, A, AND O.
3. EXTERIOR TRAFFIC BEARING JOINTS WHERE SLOPE PERMITS USE OF POURABLE SEALANT: SINGLE COMPONENT, POURABLE URETHANE SEALANT, ASTM C 920, TYPE S; GRADE P; CLASS 25; USES T, M, G, A, AND O.
4. INTERIOR JOINTS IN CERAMIC TILE AND OTHER HARD SURFACES IN KITCHENS, TOILET ROOMS, AND AROUND PLUMBING FIXTURES: SINGLE COMPONENT, MILDEW-RESISTANT SILICONE SEALANT, ASTM C 920, TYPE S; GRADE NS, CLASS 25; USES NT, G, A, AND O; FORMULATED WITH FUNGICIDE.
5. INTERIOR JOINTS AROUND PERIMETERS OF DOORS AND FRAMES: LATEX SEALANT, SINGLE COMPONENT, NONSAG, MILDEW-RESISTANT, PAINTABLE, ACRYLIC EMULSION SEALANT COMPLYING WITH ASTM C 834.
6. ACOUSTICAL SEALANT FOR EXPOSED INTERIOR JOINTS: NONSAG, PAINTABLE, NONSTAINING, LATEX SEALANT COMPLYING WITH ASTM C 834.
7. ACOUSTICAL SEALANT FOR CONCEALED JOINTS: NONDRYING, NONHARDENING, NONSKINNING, NONSTAINING, GUNNABLE, SYNTHETIC-RUBBER SELANT RECOMMENDED FOR SEALING INTERIOR CONCEALED JOINTS TO REDUCE TRANSMISSION OF AIRBORNE SOUND.

F. JOINT SEALANT BACKING: CYLINDRICAL CLOSED CELL PVC ROD COMPLYING WITH ASTM C330; SIZE 30% TO 50% LARGER THAN JOINT WIDTH. ALL OPEN CELL BACKINGS SUCH AS "DENVER FOAM" ARE PROHIBITED.

G. BOND-BREAKER TAPE: POLYETHYLENE TAPE OR OTHER PLASTIC TAPE RECOMMENDED BY SEALANT MFR. FOR PREVENTING SEALANT FROM ADHERING TO RIGID, INFLEXIBLE JOINT-FILLER MATERIALS OR JOINT SURFACES AT BACK OF JOINT.

H. INSTALLATION: COMPLY WITH ASTM C 1193; ASTM C 919 FOR ACOUSTICAL JOINTS; AND AS FOLLOWS:
1. REMOVE ALL LOOSE MATERIAL, CLEAN AND PRIME JOINTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, AND PROTECT ADJACENT SURFACES.
2. INSTALL BOND-BREAKER TAPE WHERE JOINT BACKINGS ARE NOT USED.
3. INSTALL SEALANT TOOLED CONCAVE, FREE OF AIR POCKETS, FOREIGN EMBEDDED MATTER, RIDGES, AND SAGS, AND PROTECT UNTIL FULLY CURED. SEALANT WITH DUST AND DEBRIS EMBEDDED IN SURFACE SHALL BE CAUSE FOR REJECTION.

- END DIVISION 7 -

DIVISION 8 - DOOR AND WINDOWS

081113 HOLLOW METAL DOORS AND FRAMES

A. SUBMITTALS:
1. PRODUCT DATA
2. SHOP DRAWINGS INCLUDING ELEVATIONS OF EACH DOOR AND FRAME TYPE, DOOR AND FRAME DETAILS FOR EACH TYPE.
3. PRODUCT SCHEDULE INDICATING OPENING AND FRAME SIZES CORRESPONDING TO THOSE USED IN CONSTRUCTION DOCUMENTS.

B. STEEL DOORS:
1. INTERIOR DOORS (STANDARD-DUTY): WHERE INDICATED ON SCHEDULE
   a. COMPLY WITH SDI A250.8, LEVEL 1; SDI A250.4, LEVEL C
   b. TYPE: AS INDICATED IN DOOR AND FRAME SCHEDULE
   c. THICKNESS: 1 3/4"
   d. FACE: UNCOATED STEEL SHEET, MIN. 0.032" THICK
   e. EDGE CONSTRUCTION: MODEL 1, FULL FLUSH
2. INTERIOR DOORS (HEAVY-DUTY): WHERE INDICATED ON SCHEDULE
   a. COMPLY WITH SDI A250.8, LEVEL 2; SDI A250.4, LEVEL B
   b. TYPE: AS INDICATED IN DOOR AND FRAME SCHEDULE
   c. THICKNESS: 1 3/4"
   d. FACE: UNCOATED STEEL SHEET, MIN. 0.042" THICK
   e. EDGE CONSTRUCTION: MODEL 1, FULL FLUSH
3. EXTERIOR DOORS (EXTRA-HEAVY-DUTY): WHERE INDICATED ON SCHEDULE
   a. COMPLY WITH SDI A250.8, LEVEL 3; SDI A250.4, LEVEL A
   b. TYPE: AS INDICATED IN DOOR AND FRAME SCHEDULE
   c. THICKNESS: 1 3/4"
   d. FACE: GALVANIZED STEEL SHEET, MIN. 0.053" THICK, W/ MIN. A60 COATING
   e. EDGE CONSTRUCTION: MODEL 1, FULL FLUSH
   f. TOP EDGE CLOSURE: CLOSE TOP EDGES OF DOORS WITH SAME MATERIAL, SEAL JOINTS AGAINST WATER PENETRATION
   g. BOTTOM EDGES: END CLOSURES OR CHANNELS OF SAME MATERIAL, PROVIDE WEEP-HOLE OPENINGS IN BOTTOM OF EXT. DOORS.
   h. CORE: POLYISOCYANURATE
   i. FIRE RATED CORE: MFR'S STANDARD VERTICAL STEEL STIFFENER W/ INSULATION CORE FOR FIRE-RATED DOORS

C. STEEL FRAMES:
1. INTERIOR FRAMES:
   a. FULLY WELDED, COMPLY WITH SDI A250.8, LEVEL 2; SDI A250.4, LEVEL B
   b. UNCOATED STEEL SHEET, THICKNESS PER DOOR SCHEDULE
2. EXTERIOR FRAMES:
   a. FULLY WELDED, COMPLY WITH SDI A250.8, LEVEL 3, SDI A250.4, LEVEL A
   b. GALVANIZED STEEL SHEET, W/ MIN. A60 COATING; THICKNESS PER DOOR SCHEDULE

D. MATERIALS:
1. COLD-ROLLED STEEL SHEETS: ASTM A 1008/A 1008M, COMMERCIAL STEEL (CS), TYPE B; SUITABLE FOR EXPOSED APPLICATIONS.
2. HOT-ROLLED STEEL SHEETS: ASTM A1011/A 1011M, COMMERCIAL STEEL (CS), TYPE B; FREE OF SCALE, PITTING, OR SURFACE DEFECTS; PICKLED AND OILED.
3. GALVANIZED STEEL SHEETS: ASTM A 653/A 653M, COMMERCIAL STEEL (CS), TYPE B
4. INSERTS, BOLTS, & FASTENERS: HOT-DIP GALVANIZED ACCORDING TO ASTM A 153/A 153M
5. POWER-ACTUATED FASTENERS IN CONCRETE: FASTENER SYSTEM OF TYPE SUITABLE FOR APPLICATION INDICATED, FABRICATED FROM CORROSION-RESISTANT MATERIALS, WITH CLIPS OR OTHER ACCESSORY FOR ATTACHING HOLLOW-METAL FRAMES.
6. MINERAL FIBER INSULATION: ASTM C 665, TYPE I; CONSISTING OF FIBERS MANUFACTURED FROM SLAG OR ROCK WOOL; WITH MAX. FLAME-SPREAD OF 25 AND SMOKE-DEV. INDEX OF 50; PASSING ASTM E 136 FOR COMBUSTION CHARACTERISTICS.

E. ACCESSORIES:
1. GLAZING STOPS: NONREMOVABLE ON OUTSIDE OF EXTERIOR DOORS AND/OR SECURE SIDE OF INTERIOR DOORS; SCREW-APPLIED, REMOVABLE GLAZING STOPS ON INSIDE.
2. DOOR SILENCERS: GRAY RUBBER PUSH-IN TYPE; THREE ON STRIKE JAMB OF SINGLE DOORS; TWO ON HEAD OF OF DOUBLE DOORS.
3. PLASTER GUARDS: PROVIDE AT MASONRY INSTALLATIONS.
4. SUPPORTS AND ANCHORS: MIN. .042" THICK GALVANIZED STEEL SHEET
5. PRIMER: MANUFACTURER'S STANDARD FACTORY APPLIED COAT OF RUST-INHIBITIVE PRIMER COMPLYING WITH ANSI A250.10.

F. INSTALLATION:
1. FRAMES: COMPLY WITH SDI A250.11 AND INSTALL FIRE-RATED FRAMES PER NFPA 80.
2. DOORS: FIT AND ADJUST HOLLOW-METAL DOORS TO COMPLY WITH THE FOLLOWING:
   a. NON-FIRE RATED STEEL DOORS: COMPLY WITH SDI A250.8.
   b. FIRE-RATED DOORS: INSTALL WITH CLEARANCES ACCORDING TO NFPA 80.
   c. SMOKE CONTROL DOORS: INSTALL ACCORDING TO NFPA 105

087100 DOOR HARDWARE

A. SUBMITTALS: PRODUCT DATA AND HARDWARE SCHEDULE INDICATING HARDWARE ITEM, FINISH, AND QUANTITY LOCATED ON EACH DOOR WITH DOOR AND HARDWARE SET NUMBERING CORRESPONDING TO THOSE USED IN CONSTRUCTION DOCUMENTS.

B. HARDWARE: FURNISH PRODUCTS AS SPECIFIED IN THE HARDWARE SETS CONTAINED IN THE CONSTRUCTION DOCUMENTS AND AS FOLLOWS:
1. HINGES:
   a. QUANTITY: 3 HINGES FOR DOORS 90" OR LESS IN HEIGHT; 4 HINGES FOR DOORS MORE THAN 90" IN HEIGHT.
   b. BEARING: BALL BEARING HINGES AT ALL LOCATIONS.
   c. MATERIAL: STAINLESS STEEL OR BRASS/BRONZE HINGES WITH STAINLESS STEEL PINS FOR EXTERIOR.
   d. PINS: NONREMOVABLE PINS FOR EXTERIOR AND PUBLIC INTERIOR EXPOSURE; NON-RISING ELSEWHERE.
2. LOCKSETS AND LATCHSETS:
   a. BORED LOCKS AND LATCHES: BHMA A156.2, SERIES 4000, GRADE 1
   b. EXIT DEVICES: BHMA A156.3, GRADE 1
   c. AUXILIARY LOCKS: BHMA A156.5, GRADE 1
   d. INTERCONNECTED LOCKS AND LATCHES: BHMA A156.12, SERIES 5000, GRADE 1
   e. MORTISE LOCKS AND LATCHES: BHMA A156.13, SERIES 1000, GRADE 1
   f. TRIM: LEVER HANDLE STYLE PER CONSTRUCTION DOCUMENTS OR IF NOT SPECIFIED, MATCH BUILDING STANDARD.
   g. KEYING: PROVIDE CONSTRUCTION KEYING AND COORDINATE FINAL KEYING WITH OWNER'S MASTER-KEY SYSTEM*: REFER TO HARDWARE SETS, SHT A8.01* A
3. CLOSERS:
   a. LOCATION: MOUNT CLOSERS ON INTERIOR (ROOM SIDE) OF DOOR OPENING. PROVIDE REGULAR-ARM, PARALLEL-ARM, OR TOP-JAMB-MOUNTED CLOSERS AS NECESSARY.
   b. OPTIONS: FURNISH ADJUSTABLE DELAYED OPENING (ADA ACCESSIBLE) FEATURE ON ALL CLOSERS.
4. STOPS: FURNISH AND INSTALL WALL OR FLOOR STOPS AS APPROPRIATE FOR ALL DOORS WHETHER INDICATED OR NOT.
5. WEATHERSTRIPPING: AT ALL EXTERIOR DOORS AND AS SCHEDULED, PROVIDE WEATHERSTRIPPING ON HEAD AND JAMBS AND DRIP-SWEEP AT SILL.
6. SMOKE GASKETING: PROVIDE SMOKE GASKETING AT ALL FIRE-RATED DOORS.
7. THRESHOLDS: PROVIDE THRESHOLDS AT ALL EXTERIOR DOORS AND AS SCHEDULED.

C. INSTALLATION: MOUNT HARDWARE IN LOCATIONS RECOMMENDED BY THE DOOR AND HARDWARE INSTITUTE, UNLESS OTHERWISE INDICATED.

- END DIVISION 8 -

092900 GYPSUM BOARD

A. SUBMITTALS: PRODUCT DATA FOR EACH TYPE

B. INTERIOR GYPSUM BOARD: PROVIDE IN THICKNESS AND TYPE INDICATED IN THE CONSTRUCTION DRAWINGS IN MAXIMUM LENGTHS AVAILABLE TO MINIMIZE END-TO-END BUTT JOINTS AND AS FOLLOWS:
1. GYPSUM WALLBOARD: TYPE 'X', ASTM C 1396/C 1396M
   a. THICKNESS: 5/8" U.N.O. IN DRAWINGS
   b. LONG EDGES: TAPERED AND FEATURED (ROUNDED OR BEVELED) FOR PREFILLING
   c. SAG-RESISTANT TYPE FOR CEILING SURFACES.
2. MOLD-RESISTANT GYPSUM BOARD: TYPE 'X', ASTM C 1396/C 1396M. WITH MOISTURE AND MOLD-RESISTANT CORE AND PAPER SURFACES
   a. WHERE: ON ALL TOILET ROOM AND SHOWER ROOM WALLS, BEHIND ALL PLUMBING FIXTURES, AND AS INDICATED
   b. THICKNESS: 5/8" U.N.O. IN DRAWINGS
   c. LONG EDGES: TAPERED.
   d. MOLD RESISTANCE: ASTM D3273, SCORE OF 10.
3. IMPACT-RESISTANT GYPSUM BOARD: ASTM C1396/C1396M, TESTED ACCORDING TO ASTM C1629/C1629M
   a. CORE: 5/8", TYPE 'X'
   b. SURFACE ABRASION, INDENTATION, SOFT-BODY, AND HARD-BODY IMPACT: ASTM C1629/C1629M, MEETS OR EXCEEDS *[LEVEL 1], [LEVEL 2], [LEVEL 3]*
   c. LONG EDGES: TAPERED
   d. MOLD RESISTANCE: ASTM D3273, SCORE OF 10.

C. SPECIALTY GYPSUM BOARD:
1. GYPSUM BOARD, TYPE 'C': ASTM C1396/C1396M. MANUFACTURED TO HAVE INCREASED FIRE-RESISTIVE CAPABILITY
   a. THICKNESS: AS INIDCATED ON DRAWINGS
   b. LONG EDGES: TAPERED

D. TILE BACKING PANELS:
1. GLASS-MAT, WATER RESISTANT BACKING BOARD: ASTM C 1178/C1178M,
   a. LOCATIONS: AT TILED, 'WET' WALLS
   b. CORE: 5/8", TYPE 'X'
   c. MOLD RESISTANCE: ASTM D3273, SCORE OF 10
2. CEMENTITIOUS BACKER UNITS: ANSI A118.9 AND ASTM C1288 OR ASTM C1325, WITH MANUFACTURER'S STANDARD EDGES.
   a. THICKNESS: AS INDICATED
   b. MOLD RESISTANCE: ASTM D3273, SCORE OF 10

E. EXTERIOR GYPSUM BOARD FOR CEILINGS AND SOFFITS:
1. EXTERIOR GYPSUM SOFFIT BOARD: ASTM C1396/C1396M, W/ MANUFACTURER'S STANDARD EDGES
   a. ~~BASIS OF DESIGN: GEORGIA PACIFIC "DENS-GLAS GOLD", OR APPROVED EQUAL~~
   b. CORE: AS INDICATED
2. GLASS-MAT GYPSUM SHEATHING BOARD: ASTM C 1177.C1177M WITH FIBERGLASS MAT LAMINATED TO BOTH SIDES AND WITH MANUFACTURER'S STANDARD EDGES
   a. ~~BASIS OF DESIGN: GEORGIA PACIFIC "DENSGLASS GOLD SHEATHING"~~
   b. CORE: AS INDICATED

F. ACCESSORIES:
1. TRIM: ASTM C1047, FORMED FROM GALVANIZED OR ALUMINUM COATED STEEL SHEET, ROLLED ZINC, OR PLASTIC
   a. OUTSIDE CORNERS: PROVIDE CORNER BEAD UNLESS NOTED OTHERWISE
   b. EXPOSED PANEL EDGES: PROVIDE LC-BEAD (J-BEAD) UNLESS NOTED OTHERWISE; USE TEAR-AWAY BEAD WHERE GYP. BD. MEETS WINDOW FRAMES OR CEILING GRID.
   c. CONTROL JOINTS: PROVIDE WHERE INDICATED OR APPROXIMATELY 30'-0" MAX. CONTACT ARCHITECT FOR LOCATIONS IF NOT INDICATED.
   d. REVEALS AND MOLDINGS: EXTRUDED ALUMINUM WITH CLASS II CLEAR ANODIZED FINISH.
2. JOINT TREATMENT MATERIALS: ASTM C475/C475M
3. SOUND-ATTENUATION BLANKETS: ASTM C 665, TYPE I (UNFACED)
4. ACOUSTICAL SEALANT: COMPLY WITH ASTM C 834, NONSAG, PAINTABLE, NONSTAINING LATEX.

G. FIRE-RESISTANCE-RATED ASSEMBLIES: PROVIDE MATERIALS AND CONSTRUCTION IDENTICAL TO THOSE TESTED IN ASSEMBLIES AS INDICATED BY AND INDEPENDENT TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. WHERE DECORATIVE REVEALS ARE INDICATED IN A RATED ASSEMBLY, PROVIDE ADDITIONAL LAYERS OF GYPSUM BOARD AS NECESSARY TO MAINTAIN THE FIRE RATED ASSEMBLY BEHIND THE LAYER CONTAINING THE REVEALS.

H. STC-RATED ASSEMBLIES: PROVIDE MATERIALS AND CONSTRUCTION IDENTICAL TO THOSE TESTED IN ASSEMBLIES PER ASTM E 90 AND CLASSIFIED PER ASTM E 413 BY A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY.

I. INSTALLATION:
1. FRAMING: COMPLY WITH ASTM C 754 AND ASTM C 840 AND WITH U.S. GYPSUM'S "GYPSUM CONSTRUCTION HANDBOOK" ISOLATE FRAMING FROM BUILDING STRUCTURE TO PREVENT TRANSFER OF LOADING IMPOSED BY STRUCTURAL MOVEMENT AND PROVIDE BRACING AS NECESSARY FOR PROPER SUPPORT WHETHER INDICATED OR NOT.
2. GYPSUM PANELS AND FINISH: COMPLY WITH ASTM C 840 AND GA-216. ISOLATE GYPSUM BOARD ASSEMBLIES FROM ABUTTING STRUCTURAL AND MASONRY WORK AND FINISH AS FOLLOWS:
   a. LEVEL 1 (EMBED TAPE AT JOINTS)
      • LOCATIONS: AT CONCEALED AREAS UNLESS A HIGHER LEVEL IS INDICATED OR REQUIRED FOR FIRE-RESISTANCE-RATED ASSEMBLY.
   b. LEVEL 2 (EMBED TAPE AND APPLY SEPARATE FIRST COAT OF JOINT COMPOUND TO TAPE. FASTENERS, AND TRIM FLANGES AND SAND SMOOTH AFTER EACH COAT)
      • LOCATIONS: AT SUBSTRATES BEHIND TILE.
   c. LEVEL 4 (EMBED TAPE AND APPLY SEPARATE FIRST, FILL, AND FINISH COATS OF JOINT COMPOUND TO TAPE, FASTENERS, AND TRIM FLANGES AND SAND SMOOTH AFTER EACH COAT)
      • LOCATIONS: ALL SURFACES IN FINISHED SPACES TO BE LEVEL 4 FINISH MINIMUM UNLESS NOTED OTHERWISE.
   d. LEVEL 5 (EMBED TAPE, APPLY SEPARATE FIRST, FILL, AND FINISH COATS OF JOINT COMPOUND TO TAPE, FASTENERS, AND TRIM FLANGES, AND APPLY THIN SKIM COAT OF JOINT COMPOUND OVER ENTIRE SURFACE AND SAND SMOOTH AFTER EACH COAT)
      • LOCATIONS: AT ALL WALLS RECEIVING SEMI-GLOSS OR GLOSS SHEEN PAINT, LONG HALLWAYS, CRITICAL LIGHTING AREAS ABUTTING WINDOWS OR AREAS FLOODED WITH NATURAL OR ARTIFICIAL LIGHT, ALL WALLS ADJACENT TO AND PERPINDICULAR TO EXTERIOR GLASS, AND ALL GYPSUM BOARD CEILINGS
3. TERMINATIONS AT WINDOW MULLIONS: WHEN GYPSUM BOARD PARTITIONS TERMINATE INTO WINDOW MULLIONS, THE TERMINATIONS SHALL BE INSTALLED AS DETAILED ON THE CONSTRUCTION DOCUMENTS. IF NOT DETAILED, THE TERMINATIONS SHALL BE INSTALLED TO ALLOW PERIMETER WINDOW BLINDS TO EXTEND FULLY TO THE WINDOW MULLION, NOT CUT SHORT DUE TO THE WIDTH OF THE PARTITION.

099123 PAINTING

A. SUBMITTALS:
1. PRODUCT DATA
2. ONE (1) DRAW-DOWN SAMPLE OF EACH COLOR AND SHEEN SPECIFIED.

B. PRODUCTS: PROVIDE MANUFACTURER'S BEST QUALITY PAINTS OF COLOR AND SHEEN AS INDICATED IN THE CONSTRUCTION DOCUMENTS THAT ARE FORMULATED AND RECOMMENDED BY MANUFACTURER FOR APPLICATION INDICATED. PROVIDE MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH SUBSTRATES.

C. APPLICATION:
1. EQUIPMENT: APPLY COATINGS BY BRUSH, ROLLER, SPRAY, OR OTHER APPLICATORS ACCORDING TO COATING MANUFACTURER'S WRITTEN INSTRUCTIONS. WHEN SPRAYED, EXTERIOR COATINGS SHALL BE BACK-ROLLED FOLLOWING SPRAY APPLICATION. USE ROLLERS FOR FINISH COAT ON INTERIOR WALLS AND CEILINGS.
2. PIGMENTED (OPAQUE) FINISHES: COMPLETELY COVER SURFACES TO PROVIDE A SMOOTH, OPAQUE SURFACE OF UNIFORM APPEARANCE. PROVIDE A FINISH FREE OF CLOUDINESS, SPOTTING, HOLIDAYS, LAPS, BRUSH MARKS, RUNS, SAGS, ROPINESS, OR OTHER SURFACE IMPERFECTIONS.
3. TRANSPARENT (CLEAR) FINISHES: USE MULTIPLE COATS TO PRODUCE A GLASS-SMOOTH SURFACE FILM OF EVEN LUSTER. PROVIDE A FINISH FREE OF LAPS, RUNS, CLOUDINESS, COLOR IRREGULARITY, BRUSH MARKS, ORANGE PEEL, NAIL HOLES OR OTHER SURFACE IMPERFECTIONS.

D. PAINT SYSTEMS - EXTERIOR: PROVIDE THE FOLLOWING PAINT SYSTEMS FOR THE EXTERIOR SUBSTRATE INDICATED:
1. TILT-UP CONCRETE WALL PANELS: TEXTURED CEMENT-BASED ACRYLIC COATING (~~SHERWIN WILLIAMS ULTRACRETE, OR EQUAL~~); TWO COATS OVER PRIMER. PAINTING OVER SEALANT JOINTS IS PROHIBITED.
2. CONCRETE, STUCCO, OR MASONRY: SEMIGLOSS ACRYLIC ENAMEL: TWO COATS OVER PRIMER
3. CONCRETE MASONRY UNITS: SEMIGLOSS ACRYLIC ENAMEL: TWO COATS OVER BLOCK FILLER
4. EXTERIOR GYSPUM SOFFIT BOARD: HIGH PERFORMANCE LOW-GLOSS EGG SHELL ENAMEL: TWO COATS OVER PRIMER
5. SMOOTH WOOD AND WOOD TRIM: SEMIGLOSS ALKYD ENAMEL: TWO COATS OVER PRIMER
6. FERROUS METAL: SEMIGLOSS ALKYD ENAMEL: TWO COATS OVER RUST-INHIBITIVE PRIMER
7. ZINC-COATED METAL: SEMIGLOSS ALKYD ENAMEL: TWO COATS OVER GALVANIZED METAL PRIMER.
8. ALUMINUM: SEMIGLOSS ALKYD ENAMEL: TWO COATS OVER PRIMER

A. PAINT SYSTEMS - INTERIOR: PROVIDE THE FOLLOWING PAINT SYSTEMS FOR THE INTERIOR SUBSTRATE INDICATED
1. CONCRETE AND MASONRY: ACRYLIC ENAMEL; SHEEN AS INDICATED: TWO COATS OVER PRIMER
2. CONCRETE MASONRY UNITS: ACRYLIC ENAMEL; SHEEN AS INDICATED: TWO COATS OVER BLOCK FILLER
3. GYPSUM BOARD: ACRYLIC ENAMEL; SHEEN AS INDICATED: TWO COATS OVER PRIMER
4. WOODWORK: SEMI-GLOSS ALKYD ENAMEL: TWO COATS OVER PRIMER
5. STAINED WOODWORK: ALKYD-BASED, SATIN VARNISH: TWO COATS OVER SEALER AND WOOD STAIN
6. NATURAL FINISH WOODWORK: ALKYD-BASED, SATIN VARNISH: TWO COATS OVER SEALER
7. FERROUS METAL: SEMIGLOSS ACRYLIC ENAMEL: TWO COATS OVER FERROUS METAL PRIMER
8. ZINC COATED METAL: ACRYLIC ENAMEL; SHEEN AS INDICATED: TWO COATS OVER GALVANIZED METAL PRIMER

- END DIVISION 9 -

DIVISION 16 - ELECTRICAL

SEE ELECTRICAL PLANS AND SPECIFICATIONS

DIVISION 21 - FIRE SUPPRESSION

283100 FIRE ALARM B

A. NO WORK IS PLANNED TO REPLACE OR MODIFY THE EXISTING SIMPLEX FIRE ALARM SYSTEM.
B. DISRUPTIONS TO FIRE ALARM SYSTEM IN ORDER TO EFFECT WORK UNDER THIS CONTRACT SHALL BE COORDINATED WITH THE BASE CIVIL ENGINEERING OFFICE WELL AHEAD OF TIME. THE CENTRAL MONITORING DISPATCH CENTER SHALL BE NOTIFIED PRIOR TO DISABLING ANY SYSTEM.
C. CONTRACTOR SHALL UTILIZE JOHNSON CONTROLS TO PROVIDE LABOR OR TECHNICAL ASSISTANCE BEYOND THE CAPABILITIES OF THE ELECTRICAL CONTRACTOR.
D. JOHNSON CONTROLS IS THE RECOGNIZED VENDOR FOR THE BASE FIRE ALARM SYSTEM. SIMPLEX IS THE MANUFACTURER FOR THE BASE STANDARD FIRE ALARM SYSTEMS.

7-11-24

STATE OF MISSOURI
DAVID ALAN WILLIAMS
NUMBER A-5548
REGISTERED ARCHITECT

AIR NATIONAL GUARD · CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
B	REVISED 283100 TO ADDRESS FALM SYSTEM IN BLDG 99	3 JUN 26
A	REVISED 087100 TO AGREE W/HDWE SET ON SHT A8.01	3 JUN 26

ISSUE DATE: 2023SEP29
SOLICITATION NO.: +W50S8K-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002
DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

FINKLE + WILLIAMS ARCHITECTURE
8787 RENNER BLVD, SUITE 100
LENEXA, KS 66219
913-498-1550

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

Project No.: 23065
Date: 07/11/24
Issued For: B-2 DELIVERABLES

SHEET ID
PROJECT SPECIFICATIONS
A11.11

7/11/2024 1:08:10 PM JEFFERSON BARRACKS - BLDG 99 REPAIR

1. BUILDING CODE(S): 2018 INTERNATIONAL EXISTING BUILDING CODE: ALTERATION LEVEL 1

2. DESIGN LOADS:

A. ROOF LIVE LOAD — 20 PSF

B. ROOF SNOW LOAD

a.	GROUND SNOW LOAD, P_g	20 PSF
b.	FLAT ROOF SNOW LOAD, P_f	20 PSF
1.	SLOPED ROOF, P_s	15.1 PSF
c.	SNOW EXPOSURE FACTOR, C_e	0.9
d.	RISK CATEGORY	II
e.	SNOW LOAD IMPORTANCE FACTOR, I	1.0
f.	THERMAL FACTOR, C_t	
1.	UNHEATED STRUCTURE	1.2
g.	DRIFTING	PER CODE

C. WIND LOADS

a.	BASIC WIND SPEED (3 SECOND GUST)	
1.	V(ULTIMATE)	108 MPH
2.	V(SERVICE)	83.7 MPH
b.	RISK CATEGORY	II
c.	WIND EXPOSURE	C
d.	INTERNAL PRESSURE COEFFICIENT	+/- 0.18
e.	COMPONENT AND CLADDING PRESSURE	SEE TABLE 1/S0.02
f.	BASIC WIND-FORCE-RESISTING SYSTEM	LIGHT FRAME WOOD WALLS WITH STRUCTURAL WOOD SHEAR PANELS

D. SEISMIC LOADS

a.	RISK CATEGORY	II
b.	SPECTRAL ACCELERATION	Ss = 0.120g, S1 = 0.061g
c.	SEISMIC IMPORTANCE FACTOR, I	1.0
d.	SPECTRAL RESPONSE COEFFICIENTS	
1.	SDS	0.528
2.	SD1	0.160
e.	SITE CLASS	D – DEFAULT
f.	SEISMIC DESIGN CATEGORY	D
g.	BASIC SEISMIC-FORCE-RESISTING SYSTEM	LIGHT FRAME WOOD WALLS WITH STRUCTURAL WOOD SHEAR WALLS
h.	RESPONSE MODIFICATION FACTOR, R	6.5
i.	SEISMIC RESPONSE COEFFICIENT, Cs	0.081
j.	DESIGN BASE SHEAR	0.081W
k.	SEISMIC BASE SHEAR	NOT APPLICABLE*
*	RENOVATION DOES NOT IMPACT FORCES IN EXISTING LATERAL FORCE RESISTING ELEMENTS BY MORE THAN CODE ALLOWABLE 10%, SEE EXEMPTION 806.3 OF THE 2018 INTERNATIONAL EXISTING BUILDING CODE.	
l.	ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE

E. DEAD LOADS

a.	STRUCTURE	ACTUAL WEIGHT
b.	ROOF STRUCTURE (INCLUDING UNDERHUNG)	20 PSF

F. THE STRUCTURAL SYSTEMS SHOWN ON THESE DOCUMENTS HAVE BEEN DESIGNED FOR THE FINAL, IN PLACE USAGE OF THE STRUCTURE BASED ON THE INTENDED OCCUPANCY AND CODE REQUIREMENTS. WHILE GENERAL CONSTRUCTABILITY HAS BEEN CONSIDERED, THE STRUCTURAL SYSTEMS HAVE NOT BEEN DESIGNED TO ACCOMMODATE SPECIFIC CONSTRUCTION MEANS AND METHODS THAT MIGHT BE UTILIZED BY THE CONTRACTOR. THIS PROJECT HAS NOT BEEN DESIGNED FOR FUTURE EXPANSION.

3. STATEMENT OF SPECIAL INSPECTIONS

A. THIS STATEMENT OF SPECIAL INSPECTIONS IS IN ACCORDANCE WITH 1704.3 OF THE 2018 INTERNATIONAL BUILDING CODE (2018 IBC). THE INTENT OF THIS SECTION IS THAT ALL SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 17 OF THE 2018 IBC UNLESS SPECIFICALLY NOTED OTHERWISE. ADDITIONAL SPECIAL INSPECTIONS MAY BE REQUIRED BY LOCAL CODE OR BUILDING OFFICIAL, AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ANY ADDITIONAL REQUIREMENTS ABOVE AND BEYOND THE CODE REQUIRED SPECIAL INSPECTION INDICATED BELOW.

B. THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH THE BUILDING CODE.

a. INSPECTION OF ROOF AND WALL SHEATHING ATTACHMENT

C. THE OWNER IS RESPONSIBLE FOR EMPLOYING ONE OR MORE SPECIAL INSPECTORS TO PERFORM INSPECTIONS DURING CONSTRUCTION, BASED ON REQUIREMENTS OF ONE OR MORE DESIGN PROFESSIONALS.

D. THE CONTRACTOR SHALL REQUEST SPECIAL INSPECTION OF THE ITEMS LISTED ABOVE PRIOR TO THOSE ITEMS BECOMING INACCESSIBLE AND UNOBSERVABLE DUE TO PROGRESSION OF THE WORK. THE CONTRACTOR SHALL PROVIDE SAFE ACCESS TO THE JOB SITE AND ITEMS TO BE INSPECTED. SAFE ACCESS INCLUDES BUT IS NOT LIMITED TO LADDERS, SCAFFOLDING AND/OR CONTRACTOR OPERATED LIFTS AS REQUIRED FOR SITE OBSERVATION.

E. SPECIAL INSPECTOR SHALL PROVIDE BI-WEEKLY SPECIAL INSPECTION REPORTS AND SHALL DISTRIBUTE THESE REPORTS TO THE BUILDING OFFICIAL, OWNER, CONTRACTOR, ARCHITECT, STRUCTURAL ENGINEER OF RECORD, AND MECHANICAL/ELECTRICAL/PLUMBING ENGINEER OF RECORD. SPECIAL INSPECTION REPORTING SHALL BE IN ACCORDANCE WITH SECTION 1704.2.4 OF THE 2018 IBC.

F. ALL DISCREPANCIES NOTED DURING INSPECTIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR. IF LEFT UNCORRECTED, THESE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE APPROPRIATE DESIGN PROFESSIONALS AND/OR BUILDING OFFICIAL. THE INSPECTOR IS NOT AUTHORIZED TO APPROVE DEVIATIONS FROM THE CONTRACT DRAWINGS.

4. STRUCTURAL ENGINEER SITE OBSERVATIONS:

A. THE CONTRACT STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE, AND, EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCES.

B. THE ENGINEER SHALL NOT HAVE CONTROL NOR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSION OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

C. PERIODIC SITE OBSERVATION BY FIELD REPRESENTATIVES OF PMA ENGINEERING IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN GENERAL ACCORDANCE WITH THE STRUCTURAL CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OR QUANTITY OF THE WORK, BUT RATHER PERIODIC IN AN EFFORT TO GUARD THE OWNER AGAINST DEFECTS OR DEFICIENCIES IN THE WORK OF THE CONTRACTOR.

5. CONDITIONS AND DIMENSIONS SHOWN HAVE BEEN TAKEN FROM EXISTING DRAWINGS, FIELD MEASUREMENTS, AND FIELD OBSERVATIONS. DETAILS HAVE BEEN DEVELOPED BASED ON THE AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AND DIMENSIONS SHOWN PRIOR TO FABRICATION AND, IF THE AS-BUILT CONDITION IS DIFFERENT THAN REPRESENTED IN THESE DOCUMENTS, SHALL NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.

6. SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND CIVIL DRAWINGS FOR OTHER PERTINENT INFORMATION RELATED TO THE STRUCTURAL WORK AND COORDINATE AS REQUIRED. THESE STRUCTURAL DRAWINGS ARE INTENDED TO BE UTILIZED AS A COMPLETE SET OF DOCUMENTS THAT REPRESENT THE BUILDING'S STRUCTURAL SYSTEMS. NO SINGLE SHEET OR SERIES OF SHEETS IS INTENDED TO "STAND ALONE." THESE STRUCTURAL DRAWINGS ARE INTENDED TO BE INCLUDED IN A COMPLETE SET OF CONSTRUCTION DOCUMENTS, INCLUDING, BUT NOT LIMITED TO: ARCHITECTURAL DRAWINGS, CIVIL DRAWINGS, MECHANICAL/ELECTRICAL/PLUMBING DRAWINGS, AND DEFERRED DESIGN DRAWINGS. CONTRACTOR SHALL VERIFY COORDINATION OF THESE DRAWINGS WITH CONTENTS OF ABOVE DRAWING SETS SPECIFIED AND ONLY PROCEED WITH BIDDING AND CONSTRUCTION AFTER SUCH HAS TAKEN PLACE.

7. DETAILS LABELED "TYP" OR "TYPICAL" ARE TO BE APPLIED AT LOCATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY INDICATED. WHERE A DETAIL IS NOT INDICATED, THE DETAIL SHALL BE THE SAME AS FOR SIMILAR CONDITIONS OR AS SHOWN IN THE "TYPICAL DETAILS."

8. THE BUILDING IS NOT STRUCTURALLY STABLE UNTIL ALL CONNECTIONS, GRAVITY AND LATERAL FRAMING, SHEAR WALLS, DIAPHRAGMS, PERMANENT BRACING, AND EXTERIOR LOAD BEARING WALLS ARE COMPLETE AND HAVE ACHIEVED THEIR DESIGN STRENGTH. CONTRACTOR IS SOLELY RESPONSIBLE FOR MAINTAINING STRUCTURAL STABILITY DURING ERECTION AND CONSTRUCTION. TEMPORARY BRACING SYSTEMS ARE NOT TO BE REMOVED UNTIL STRUCTURAL WORK IS COMPLETE.

9. DO NOT STACK CONSTRUCTION MATERIALS ON THE STRUCTURE OR OVERLOAD ANY PART OF THE STRUCTURE.

10. STRUCTURAL STEEL:

A. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN, LATEST EDITION, AND AISC "CODE OF STANDARD PRACTICE."

B. ALL STRUCTURAL STEEL FOR WIDE FLANGE AND WT SHAPES SHALL BE ASTM A992, GRADE 50, UNLESS NOTED OTHERWISE ON THE PLANS. ALL ANGLES, PLATES, AND CHANNELS SHALL BE ASTM A36 UNLESS NOTED OTHERWISE. ALL RECTANGULAR AND ROUND HSS SHAPES SHALL BE ASTM A500, GRADE C.

C. ALL STEEL LOCATED WITHIN UNCONDITIONED SPACES SUBJECT TO VARIATION IN BOTH TEMPERATURE AND MOISTURE SHALL BE SHOP PRIMED AND PAINTED TO RESIST RUSTING.

11. WOOD:

A. ALL DESIGN AND CONSTRUCTION SHALL CONFORM TO THE APPLICABLE BUILDING CODE AND THE CURRENT EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION."

B. ALL STUDS AND PLATES SHALL BE SOUTHERN PINE OR DOUGLAS FIR LARCH NO. 2 (SPRUCE PINE FIR NO.2) (19% MAXIMUM MOISTURE CONTENT OR BETTER.)

C. ROOF SHEATHING SHALL BE OSB OR PLYWOOD PANELS 7/16" MINIMUM NOMINAL THICKNESS, EXTERIOR RATED SHEATHING, EXPOSURE 1. RUN PANELS PERPENDICULAR TO THE SUPPORTS, STAGGER PANEL ENDS 1/2 PANEL LENGTH. ATTACH WITH 10D COMMON OR DEFORMED SHANK NAILS (1-1/2" MINIMUM PENETRATION) 6" ON CENTER AT PANEL EDGES AND 12" ON CENTER AT INTERMEDIATE SUPPORTS. SPACE NAILS AT 6" O.C. WITHIN 8'-0" OF BUILDING CORNERS AND EDGES.

D. WOOD PLATES, SILLS, AND SLEEPER STUDS WHICH REST ON CONCRETE SLABS, ON CONCRETE OR MASONRY FOUNDATIONS OR ARE IN DIRECT CONTACT WITH THE EARTH, SHALL BE PRESSURE TREATED AND SHALL BE ATTACHED UTILIZING FASTENERS WITH ADEQUATE CORROSION RESISTANCE (HOT-DIPPED GALVANIZED OR STAINLESS STEEL, UNLESS NOTED OTHERWISE).

E. ALL SPECIFIED FASTENERS SHOWN IN THESE DOCUMENTS MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. ALL FASTENERS IN A CONNECTION MUST BE USED AND SHALL BE INSTALLED PRIOR TO LOADING THE CONNECTION.

F. FASTENERS USED WITH PRESSURE AND FIRE-RETARDANT TREATED WOOD SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS AND HAVE AN ADEQUATE CORROSION RESISTANT COATING, HOT-DIPPED GALVANIZED OR STAINLESS STEEL. IN THE ABSENCE OF MANUFACTURER RECOMMENDATIONS, FASTENER COATING SHALL BE IN ACCORDANCE WITH ASTM B695, CLASS 55 MINIMUM.

G. STAMPED STEEL WOOD CONNECTION PRODUCTS MUST BE APPROVED IN WRITING BY THE ENGINEER-OF-RECORD PRIOR TO INSTALLATION. APPROVAL AND SUBSTITUTION REQUESTS MUST BE ACCOMPANIED BY EVALUATION REPORTS FROM THE INTERNATIONAL CODE COUNCIL.

H. STAMPED STEEL CONNECTORS SPECIFIED FOR USE IN EXTERIOR OR WET APPLICATIONS, OR THAT ARE IN DIRECT CONTACT WITH TREATED WOOD, SHALL HAVE A ZINC OR HOT-DIPPED GALVANIZED COATING.

I. CUT ALL JOISTS TO THE CORRECT LENGTH, DO NOT "SHORT-CUT". THE GAP BETWEEN THE END OF THE JOIST AND THE HEADER MATERIAL SHOULD BE NO GREATER THAN 1/8" UNLESS OTHERWISE NOTED. GAPS GREATER THAN 1/8" WILL ACHIEVE A REDUCED CAPACITY AND SHOULD BE EVALUATED BY THE ENGINEER-OF-RECORD FOR ADEQUACY.

12. SUBMITTALS:

A. CODE COMPLIANT STRUCTURAL DESIGN OF THE FOLLOWING ITEMS IS DEFERRED TO THE GENERAL CONTRACTOR.

a. TEMPORARY BRACING AND SHORING

B. DEFERRED SUBMITTALS SHALL INCLUDE SUBSTANTIATING STRUCTURAL CALCULATIONS AND SHALL BEAR THE SIGNED WET OR CERTIFIED ELECTRONIC STAMP OF A REGISTERED PROFESSIONAL ENGINEER WHO IS LEGALLY AUTHORIZED TO PRACTICE IN THE JURISDICTION WHERE PROJECT IS LOCATED AND WHO IS EXPERIENCED IN PROVIDING ENGINEERING SERVICES OF THE KIND INDICATED. DEFERRED SUBMITTALS SHALL BEAR THE APPROVAL STAMP OF THE PROJECT ENGINEER OF RECORD.

C. ALL SHOP DRAWINGS AND SUBMITTALS MUST BE REVIEWED AND APPROVED BY THE CONTRACTOR PRIOR TO SUBMITTAL. ENGINEER'S REVIEW OF SHOP DRAWINGS IS LIMITED TO CHECKING FOR GENERAL CONFORMANCE WITH DESIGN DRAWINGS AND STRENGTH OF COMPONENTS AND MATERIALS. CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES FROM THE DESIGN DRAWINGS, QUANTITIES, DIMENSIONAL ERRORS, OR OMISSIONS IN THE SHOP DRAWINGS.

D. ALL SHOP DRAWINGS MUST BE ORIGINAL DOCUMENTS AND SHALL NOT BE REPRODUCTIONS OF THESE CONTRACT DOCUMENTS.

E. SUBMIT SHOP DRAWINGS DETAILING FABRICATION OF EACH MEMBER AND ITS CONNECTIONS. CONNECTION DRAWINGS ARE TO BE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER.

1 S0.01 STRUCTURAL GENERAL NOTES

2 S0.01 NOT USED

3 S0.01 STRUCTURAL SHEET INDEX

S0.01 GENERAL NOTES
S0.02 TABLES
S2.01 ROOF FRAMING PLAN
S3.01 EXTERIOR ELEVATIONS
S4.01 SECTIONS
S4.02 SECTIONS
S4.03 SECTIONS

4 S0.01 NOT USED

5 S0.01 STRUCTURAL ABBREVIATIONS

A.F.F.	ABOVE FINISH FLOOR	INT	INTERIOR
ALT	ALTERNATE	JST	JOIST
A.B.	ANCHOR BOLT	JT	JOINT
ARCH	ARCHITECTURAL PLANS	K	KIP (1000 LBS)
&	AND	LBS	POUNDS
@	AT	LLG	LONG LEG HORIZONTAL
BAL	BALANCE	LLV	LONG LEG VERTICAL
BLDG	BUILDING	MANUF	MANUFACTURER
BM	BEAM	MAS	MASONRY
B.O.	BOTTOM OF... (ADD ITEM)	MAX	MAXIMUM
BRG	BEARING	MIN	MINIMUM
BTWN	BETWEEN	MISC	MISCELLANEOUS
CL	CENTER LINE	MK	MARK
C.G.S.	CENTER OF GRAVITY OF STRANDS	N.S.	NEAR SIDE
CIP	CAST-IN-PLACE CONCRETE	N.T.S.	NOT TO SCALE
CLR	CLEAR	O.C.	ON CENTER
C.J.	CONTROL JOINT	O.F.	OUTSIDE FACE
COL	COLUMN	OPNG	OPENING
CMU	CONCRETE MASONRY UNIT	OPP	OPPOSITE
CONC	CONCRETE	PC	PRECAST
CONT	CONTINUOUS	PSF	POUNDS PER SQUARE FOOT
CTR	CENTER	PSI	POUNDS PER SQUARE INCH
DIA	DIAMETER	PT	POST TENSION
DEG	DEGREE	RAD	RADIUS
DIM	DIMENSION	REINF	REINFORCEMENT
DTL	DETAIL	REF	REFERENCE
DWG	DRAWING	RE:	REFERENCE
E.F.	EACH FACE	SCHED	SCHEDULE
ELEV	ELEVATION	SECT	SECTION
EQ	EQUAL	SHT	SHEET
E.W.	EACH WAY	SIM	SIMILAR
EXIST	EXISTING	SPA	SPACING
EXP	EXPANSION	SPECS	SPECIFICATION
EXT	EXTERIOR	SQ	SQUARE
FND	FOUNDATION	STD	STANDARD
FIN	FINISHED	STL	STEEL
FLR	FLOOR	SW	SHEAR WALL
F.S.	FAR SIDE	T&B	TOP & BOTTOM
FTG	FOOTING	T.O.	TOP OF... (ADD ITEM)
F.V.	FIELD VERIFY	TYP	TYPICAL
GA	GAUGE	U.N.O.	UNLESS NOTED OTHERWISE
G.B.	GRADE BEAM	VAR	VARIES
GALV	GALVANIZED	VERT	VERTICAL
HORIZ	HORIZONTAL	w/	WITH
I.F.	INSIDE FACE	W.W.F.	WELDED WIRE FABRIC

6 S0.01 NOT USED

7 S0.01 NOT USED

STATE OF MISSOURI
JEFFREY D. PATTERSON
NUMBER PE-2000173305
PROFESSIONAL ENGINEER
7/11/2024

Page McNaghten Associates, Inc.
d/b/a PMA Engineering
Professional Engineering Corp.
MO Cert. of Authority #001400

MARK	DESCRIPTION	DATE

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

ISSUE DATE: 7/11/2024
SOLICITATION NO.: +W5DSKK-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

PMA ENGINEERING
6717 SHAWNEE MISSION PKWY SUITE 100
OVERLAND PARK, KS 66202
(913) 831-0148

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

Project No.: 23065
Date: 7/11/2024
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GENERAL NOTES

S0.01

7/11/2024 10:59:55 AM JEFFERSON BARRACKS - BLDG 99 REPAIR

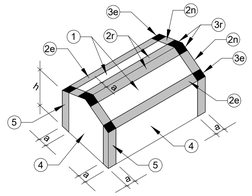
COMPONENTS & CLADDING WIND PRESSURES (PSF)
GABLE ROOF, 20° < θ ≤ 27°, 110 MPH (3 SEC GUST), EXPOSURE C, LRFD

ZONE	HEIGHT																			
	0-15'		15-20'		20-25'		25-30'		30-35'		35-40'		40-45'		45-50'		50-55'		55-60'	
1	+16.0	-37.5	+17.0	-40.0	+17.8	-41.7	+18.5	-43.4	+19.1	-45.0	+19.7	-46.2	+20.2	-47.4	+20.6	-48.4	+21.0	-49.3	+21.4	-50.2
2e	+16.0	-37.5	+17.0	-40.0	+17.8	-41.7	+18.5	-43.4	+19.1	-45.0	+19.7	-46.2	+20.2	-47.4	+20.6	-48.4	+21.0	-49.3	+21.4	-50.2
2n	+16.0	-59.8	+17.0	-63.7	+17.8	-66.4	+18.5	-69.2	+19.1	-71.6	+19.7	-73.6	+20.2	-75.6	+20.6	-77.1	+21.0	-78.5	+21.4	-80.0
2r	+16.0	-59.8	+17.0	-63.7	+17.8	-66.4	+18.5	-69.2	+19.1	-71.6	+19.7	-73.6	+20.2	-75.6	+20.6	-77.1	+21.0	-78.5	+21.4	-80.0
3e	+16.0	-59.8	+17.0	-63.7	+17.8	-66.4	+18.5	-69.2	+19.1	-71.6	+19.7	-73.6	+20.2	-75.6	+20.6	-77.1	+21.0	-78.5	+21.4	-80.0
3r	+16.0	-77.1	+17.0	-82.2	+17.8	-85.7	+18.5	-89.2	+19.1	-92.4	+19.7	-94.9	+20.2	-97.5	+20.6	-99.4	+21.0	-101.3	+21.4	-103.2
4	+26.4	-28.6	+28.1	-30.4	+29.3	-31.7	+30.5	-33.0	+31.6	-34.2	+32.5	-35.2	+33.4	-36.1	+34.0	-36.8	+34.7	-37.5	+35.3	-38.2
5	+26.4	-35.2	+28.1	-37.5	+29.3	-39.1	+30.5	-40.7	+31.6	-42.2	+32.5	-43.4	+33.4	-44.5	+34.0	-45.4	+34.7	-46.3	+35.3	-47.1

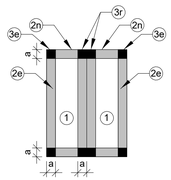
NOTES:

1. WIND ZONES ARE IN ACCORDANCE WITH ASCE 7-10, FIGURE 30.4-1 WITH A ROOF ANGLE 20° - 27° (GABLE ROOF).
2. PRESSURES ARE BASED ON AN EFFECTIVE WIND AREA OF 10 SQUARE FEET.
3. PRESSURES SHOWN ARE NOMINAL WIND PRESSURES AT ULTIMATE LOAD LEVEL (LRFD) AND SHALL BE USED IN ACCORDANCE WITH THE LOAD COMBINATIONS SPECIFIED IN ASCE 7-16, CHAPTER 2.
4. DESIGNER MAY USE THE APPROPRIATE ADJUSTMENT FACTORS OR METHODS OF ASCE 7-16 TO COMPUTE COMPONENT & CLADDING PRESSURES FOR SPECIFIC COMPONENTS OF THIS STRUCTURE.
5. PRESSURES SHOWN ARE APPLIED NORMAL TO THE SURFACE, FOR EXPOSURE & HEIGHT INDICATED ON THE TABLE. ADJUST TO OTHER CONDITIONS USING EQUATION 30.4-1.
6. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACES, RESPECTIVELY.
7. PARAPET WIND PRESSURES HAVE NOT BEEN PROVIDED AND SHALL BE CALCULATED USING SECTION 30.8 OF ASCE 7-16.
8. NOTATION:

   a: 10 PERCENT OF LEAST HORIZONTAL DIMENSION OR 0.4h, WHICHEVER IS SMALLER, BUT NOT LESS THAN 4% OF LEAST HORIZONTAL DIMENSION OR 3 FT.
   h: MEAN ROOF HEIGHT, IN FEET (METERS), EXCEPT THAT EAVE HEIGHT SHALL BE USED FOR ROOF ANGLES <10°.
   0: ANGLE OF PLANE OF ROOF FROM HORIZONTAL, IN DEGREES.



GABLE ROOF (20° < θ ≤ 27°)



GABLE ROOF PLAN

INTERIOR ZONES | EDGE ZONES | CORNER ZONES

1 S0.02 C&C WIND PRESSURES TABLE

2 S0.02 NOT USED

3 S0.02 NOT USED

4 S0.02 NOT USED

5 S0.02 NOT USED

6 S0.02 NOT USED

7 S0.02 NOT USED

8 S0.02 NOT USED

9 S0.02 NOT USED

JEFFREY D. PATTERSON
NUMBER PE-2000173305
STATE OF MISSOURI
PROFESSIONAL ENGINEER
7/11/2024

Page McNaghten Associates, Inc.
d/b/a PMA Engineering
Professional Engineering Corp.
MO Certified of Authority #001400

MARK	DESCRIPTION	DATE

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

ISSUE DATE: 7/11/2024
SOLICITATION NO.: +W5DSK-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

PMA ENGINEERING
6717 SHAWNEE MISSION PKWY SUITE 100
OVERLAND PARK, KS 66202
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JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

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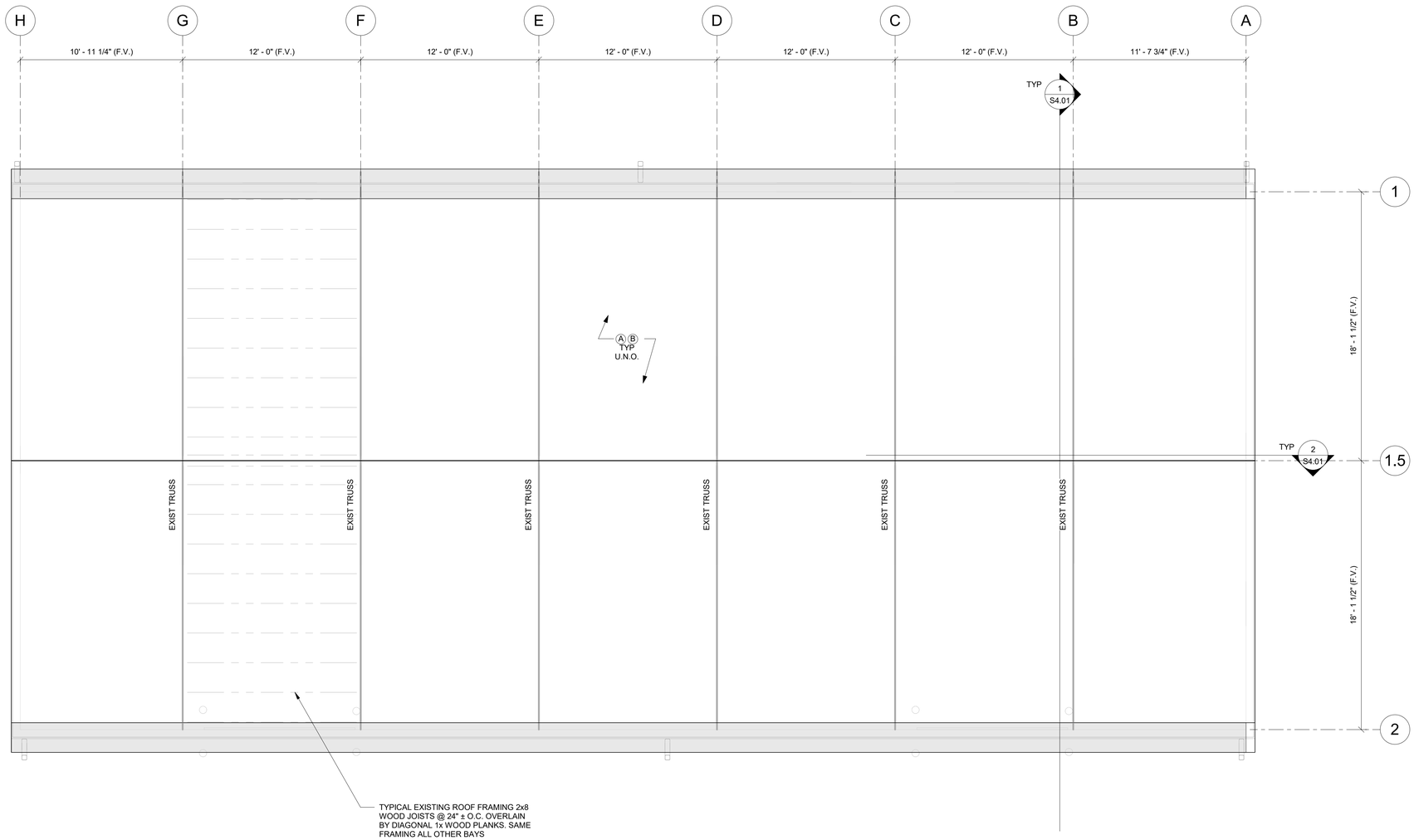
TABLES

S0.02

7/11/2024 10:59:56 AM JEFFERSON BARRACKS - BLDG 99 REPAIR



PLAN REFERENCE NOTES:

Ⓐ PARTIALLY DEMOLISH EXISTING SHINGLES AND ANY ADDITONAL ROOF MEMBRANES ONLY AS DESCRIBED PER ARCH. INSPECT AND REPAIR OR REPLACE ANY DAMAGED AREAS OF THE EXPOSED DIAGONAL 1x WOOD ROOF PLANKS WITH NEW MATERIAL OF LIKE KIND. NEW MATERIAL SHALL BE SUPPORTED IN A BEARING CONDITION OVER AT LEAST TWO EXISTING ROOF FRAMING ELEMENTS FROM BELOW. INSPECT EXISTING FASTENER SPACING, AND WHERE REQUIRED, PROVIDE ADDITIONAL NO. 10 RING SHANK NAILS AS NEEDED TO ACHIEVE FASTENERS AT 6" O.C. MAX OVER THE ROOF PURLINS. DRIVE FLUSH OR REMOVE AND REPLACE ANY PROTRUDING FASTENERS FROM THE EXISTING 1x ROOF PLANKS TO PREPARE FOR THE ADDITION OF NEW SHEATHING.

Ⓑ WITH THE 1x PLANKS PREPARED PER OTHER NOTES IN THIS DETAIL, PROVIDE 7/16" MIN 24/16 MIN SPAN RATED STRUCTURAL 1 OSB OR PLYWOOD ROOF SHEATHING OVER BARE 1x PLANKS. ORIENTATE STRONG DIRECTION OF SHEATHING PERPENDICULAR TO THE LONG SIDE OF THE BUILDING. FASTEN WITH NO. 10 RING SHANK NAILS IN A 6/12 PATTERN (6" O.C. MAX ALONG EDGES, 12" O.C. MAX WITHIN THE FIELD OF THE PANEL). ALIGN PANEL SEAM LOCATIONS WITH ROOF PURLINS BELOW.

PLAN LEGEND:

EXTENT OF PARTIAL ROOF SHEATHING DEMOLITION (F.V.) REF 1/S4.02 & 2/S4.02.

STATE OF MISSOURI
JEFFREY D. PATTERSON
NUMBER PE-2000173305
PROFESSIONAL ENGINEER
7/11/2024

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d/b/a PMA Engineering
Professional Engineering Corp.
MO Cert. of Authority #001400

1 S2.01 ROOF FRAMING PLAN
1/4" = 1'-0"

NORTH

7/11/2024 10:59:56 AM JEFFERSON BARRACKS - BLDG 99 REPAIR

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CHECKED BY:
SUBMITTED BY:
ISSUE DATE: 2023SEP20
SOLICITATION NO.: +W50SBK-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

PMA ENGINEERING
6717 SHAWNEE MISSION PKWY SUITE 100
OVERLAND PARK, KS 66202
(913) 831-0148

MARK	DESCRIPTION	DATE

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

Project No.: 23065
Date: 7/11/2024
Issued For: B-2 DELIVERABLES

SHEET ID
ROOF FRAMING PLAN

S2.01

1 S3.01 WEST ELEVATION
3/16" = 1'-0"

SHEET REFERENCE NOTES:

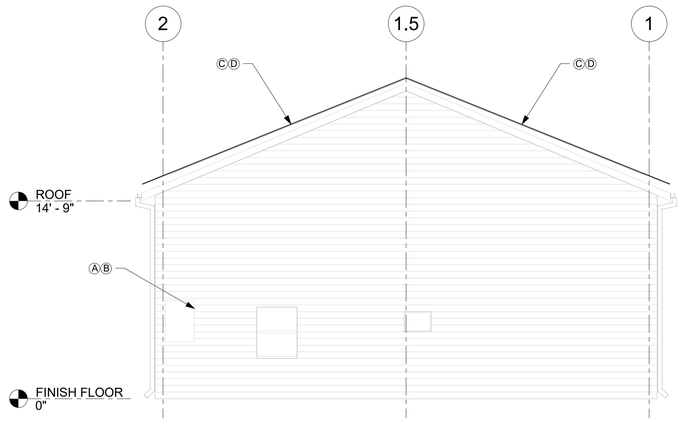
(A) PARTIALLY DEMOLISH EXISTING METAL SIDING AND ANY ADDITIONAL FLASHINGS AND FASCIA ONLY AS DESCRIBED PER ARCH. INSPECT AND REPAIR OR REPLACE ANY DAMAGED AREAS OF THE EXPOSED DIAGONAL 1x WOOD WALL SHEATHING PLANKS WITH NEW MATERIAL OF LIKE KIND. NEW MATERIAL SHALL BE ATTACHED OVER AT LEAST TWO EXISTING 2x6 WALL OR TRUSS COLUMN FRAMING ELEMENTS. INSPECT EXISTING FASTENER SPACING, AND WHERE REQUIRED, PROVIDE ADDITIONAL NO. 10 RING SHANK NAILS AS NEEDED TO ACHIEVE FASTENERS AT 6" O.C. MAX OVER THE 2x6 WALL STUDS AND TRUSS COLUMNS. DRIVE FLUSH OR REMOVE AND REPLACE ANY PROTRUDING FASTENERS FROM THE EXISTING 1x WALL PLANKS TO PREPARE FOR THE ADDITION OF NEW SHEATHING.

(B) WITH THE 1x PLANKS PREPARED PER OTHER NOTES IN THIS DETAIL, PROVIDE 7/16" MIN 24/16 MIN SPAN RATED STRUCTURAL 1 OSB OR PLYWOOD WALL SHEATHING OVER BARE 1x PLANKS. ORIENTATE STRONG DIRECTION OF SHEATHING PERPENDICULAR TO THE WALL STUDS. FASTEN WITH NO. 10 RING SHANK NAILS IN A 6/12 PATTERN (6" O.C. MAX ALONG EDGES, 12" O.C. MAX WITHIN THE FIELD OF THE PANEL). ALIGN PANEL SEAM LOCATIONS WITH WALL STUDS.

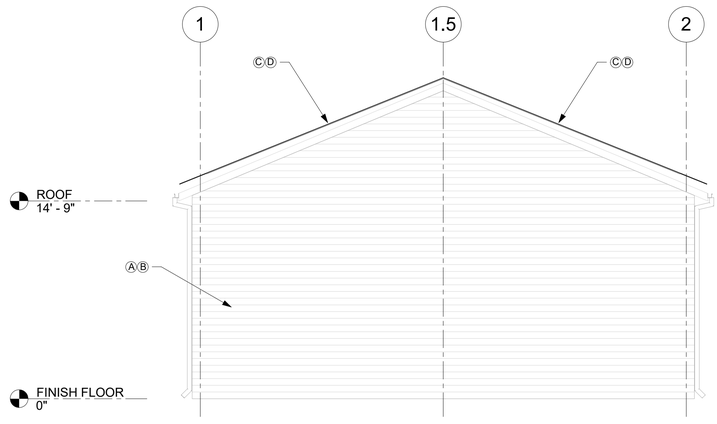
(C) PARTIALLY DEMOLISH EXISTING SHINGLES AND ANY ADDITONAL ROOF MEMBRANES PER ARCH. FIELD VERIFY AND MEASURE THE EXTENTS OF PARTIAL DEMOLITION TO THE EXISTING 1x ROOF PLANKS NECESSARY TO EXPOSE THE ATTIC SPACE AS SHOWN IN THE DETAIL PRIOR TO CUTTING. PARTIALLY DEMOLISH PLANKS AS DESCRIBED IN THIS NOTE. ONCE WORK HAS PROGRESSED AND EAVE ACCESS FROM ABOVE IS NO LONGER REQUIRED, PROVIDE NEW 1x WOOD PLANKS SPANNING BETWEEN AT LEAST TWO ROOF FRAMING MEMBERS IN A BEARING CONDITON. FASTEN PLANKS TO SUPPORTING FRAMING WITH NO. 10 RING SHANK NAILS 6" O.C. MAX, MINUMUM (2) PER END.

(D) WITH THE 1x PLANKS PREPARED PER OTHER NOTES IN THIS DETAIL, PROVIDE 7/16" MIN 24/16 MIN SPAN RATED STRUCTURAL 1 OSB OR PLYWOOD ROOF SHEATHING OVER BARE 1x PLANKS. ORIENTATE STRONG DIRECTION OF SHEATHING PERPENDICULAR TO THE LONG SIDE OF THE BUILDING. FASTEN WITH NO. 10 RING SHANK NAILS IN A 6/12 PATTERN (6" O.C. MAX ALONG EDGES, 12" O.C. MAX WITHIN THE FIELD OF THE PANEL). ALIGN PANEL SEAM LOCATIONS WITH ROOF PURLINS BELOW.

2 S3.01 SHEET S3.01 REFERENCE NOTES



3 S3.01 SOUTH ELEVATION
3/16" = 1'-0"



4 S3.01 NORTH ELEVATION
3/16" = 1'-0"

5 S3.01 EAST ELEVATION
3/16" = 1'-0"

6 S3.01 NOT USED

STATE OF MISSOURI
JEFFREY D. PATTERSON
NUMBER PE-2000173305
PROFESSIONAL ENGINEER
7/11/2024

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Professional Engineering Corp.
MO Cert. of Authority #001400

MARK	DESCRIPTION	DATE

ISSUE DATE: 2023SEP28
SOLICITATION NO.: +W5DSK-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

PMA ENGINEERING
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JEFFERSON BARRACKS ANGS
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SHEET ID
EXTERIOR ELEVATIONS

S3.01

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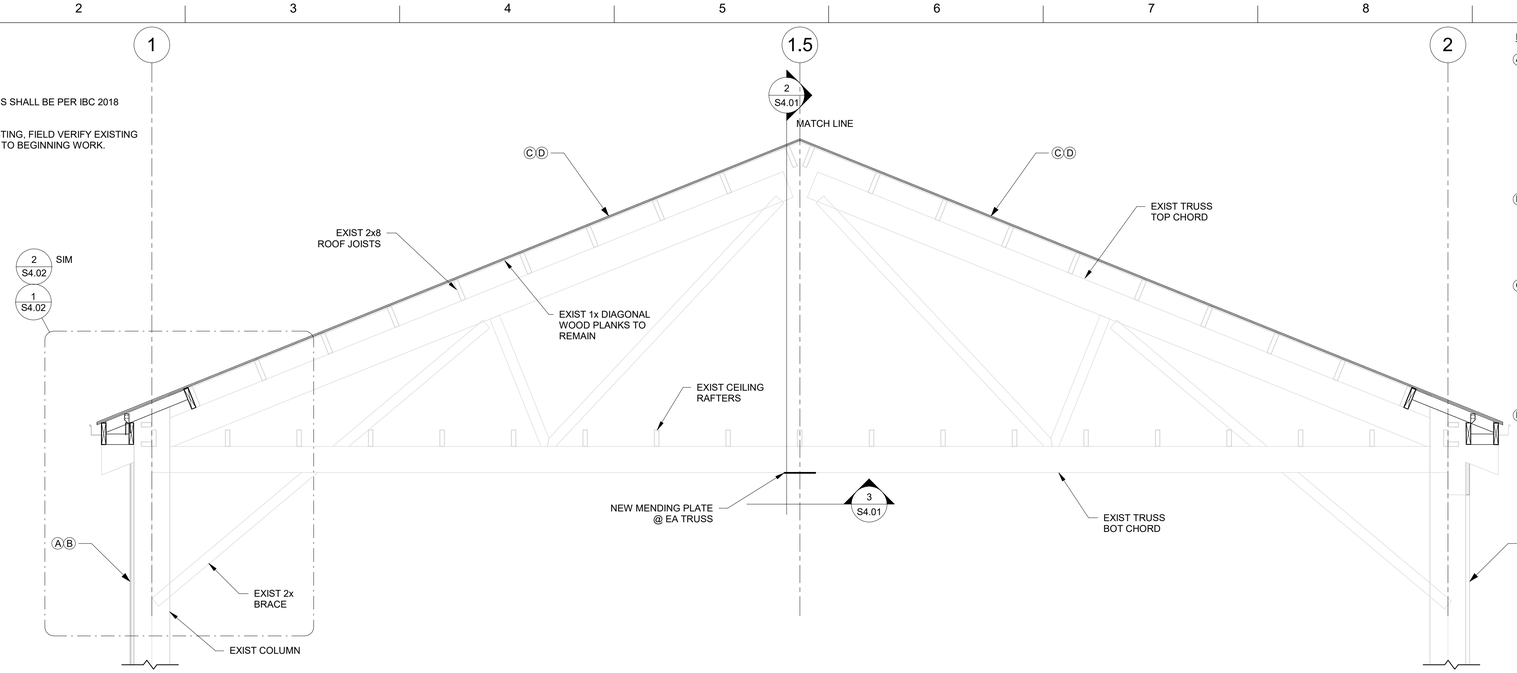
NOTES:

1. FASTENERS FOR WOOD CONNECTIONS SHALL BE PER IBC 2018 MINIMUMS. U.N.O.
2. MEMBER SIZES NOT SHOWN ARE EXISTING. FIELD VERIFY EXISTING MEMBERS SIZE AND LOCATION PRIOR TO BEGINNING WORK.



1 S4.01 TRUSS ELEVATION SECTION
1/2" = 1'-0"

DETAIL REFERENCE NOTES:

(A) PARTIALLY DEMOLISH EXISTING METAL SIDING AND ANY ADDITIONAL FLASHINGS AND FASCIA ONLY AS DESCRIBED PER ARCH. INSPECT AND REPAIR OR REPLACE ANY DAMAGED AREAS OF THE EXPOSED DIAGONAL 1x WOOD WALL SHEATHING PLANKS WITH NEW MATERIAL OF LIKE KIND. NEW MATERIAL SHALL BE ATTACHED OVER AT LEAST TWO EXISTING 2x6 WALL OR TRUSS COLUMN FRAMING ELEMENTS. INSPECT EXISTING FASTENER SPACING, AND WHERE REQUIRED, PROVIDE ADDITIONAL NO. 10 RING SHANK NAILS AS NEEDED TO ACHIEVE FASTENERS AT 6" O.C. MAX OVER THE 2x6 WALL STUDS AND TRUSS COLUMNS. DRIVE FLUSH OR REMOVE AND REPLACE ANY PROTRUDING FASTENERS FROM THE EXISTING 1x WALL PLANKS TO PREPARE FOR THE ADDITION OF NEW SHEATHING.

(B) WITH THE 1x PLANKS PREPARED PER OTHER NOTES IN THIS DETAIL, PROVIDE 7/16" MIN 24/16 MIN SPAN RATED STRUCTURAL 1 OSB OR PLYWOOD WALL SHEATHING OVER BARE 1x PLANKS. ORIENTATE STRONG DIRECTION OF SHEATHING PERPENDICULAR TO THE WALL STUDS. FASTEN WITH NO. 10 RING SHANK NAILS IN A 6/12 PATTERN (6" O.C. MAX ALONG EDGES, 12" O.C. MAX WITHIN THE FIELD OF THE PANEL). ALIGN PANEL SEAM LOCATIONS WITH WALL STUDS.

(C) PARTIALLY DEMOLISH EXISTING SHINGLES AND ANY ADDITONAL ROOF MEMBRANES PER ARCH. FIELD VERIFY AND MEASURE THE EXTENTS OF PARTIAL DEMOLITION TO THE EXISTING 1x ROOF PLANKS NECESSARY TO EXPOSE THE ATTIC SPACE AS SHOWN IN THE DETAIL PRIOR TO CUTTING. PARTIALLY DEMOLISH PLANKS AS DESCRIBED IN THIS NOTE. ONCE WORK HAS PROGRESSED AND EAVE ACCESS FROM ABOVE IS NO LONGER REQUIRED, PROVIDE NEW 1x WOOD PLANKS SPANNING BETWEEN AT LEAST TWO ROOF FRAMING MEMBERS IN A BEARING CONDITON. FASTEN PLANKS TO SUPPORTING FRAMING WITH NO. 10 RING SHANK NAILS 6" O.C. MAX, MINUMUM (2) PER END.

(D) WITH THE 1x PLANKS PREPARED PER OTHER NOTES IN THIS DETAIL, PROVIDE 7/16" MIN 24/16 MIN SPAN RATED STRUCTURAL 1 OSB OR PLYWOOD ROOF SHEATHING OVER BARE 1x PLANKS. ORIENTATE STRONG DIRECTION OF SHEATHING PERPENDICULAR TO THE LONG SIDE OF THE BUILDING. FASTEN WITH NO. 10 RING SHANK NAILS IN A 6/12 PATTERN (6" O.C. MAX ALONG EDGES, 12" O.C. MAX WITHIN THE FIELD OF THE PANEL). ALIGN PANEL SEAM LOCATIONS WITH ROOF PURLINS BELOW.

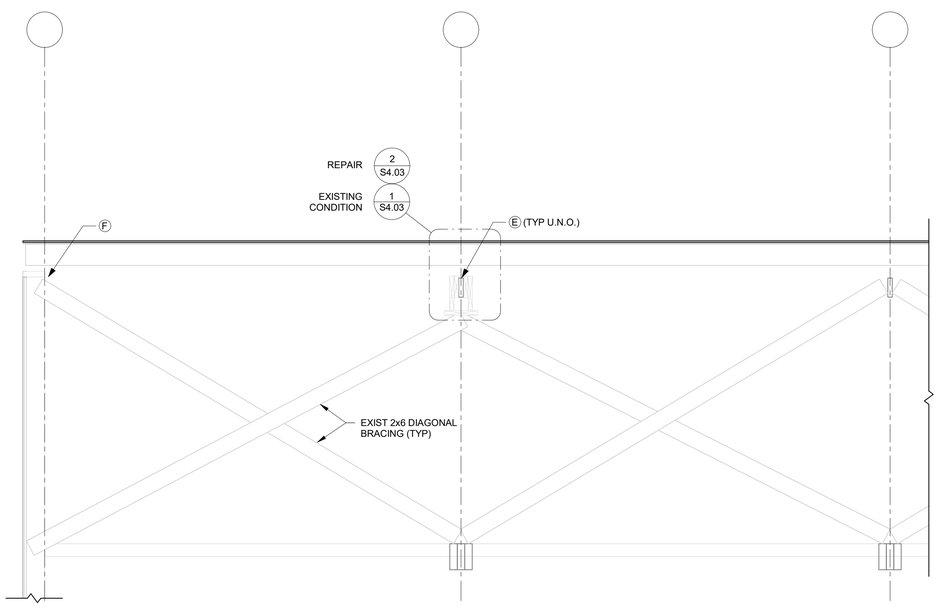
NOTES:

1. REPAIRS DESCRIBED IN THIS DETAIL SHALL BE COMPLETED PRIOR TO ANY DEMOLITION OR PARTIAL DEMOLITION OF STRUCTURAL WOOD MEMBERS, ROOF SHEATHING, OR WALL SHEATHING.
2. REPAIRS DESCRIBED IN THIS DETAIL SHALL BE COMPLETED PRIOR TO THE INSTALLATION OF BOTTOM CHORD MENDING PLATES PER OTHER DETAILS.
3. MEMBER SIZES NOT SHOWN ARE EXISTING, FIELD VERIFY EXISTING MEMBERS SIZE AND LOCATION PRIOR TO BEGINNING WORK.

DETAIL REFERENCE NOTES:

(E) WHERE LATERAL BRACING MEETS AT TOP OF TRUSS NEAR RIDGE, INSTALL (2) 1/4"Øx5" LAG SCREWS, (1) EACH SIDE OF FRAMING, UPWARDS INTO TRUSS SANDWICH PLATE WHERE EXISTING NAILS HAVE WITHDRAWN. WITH SCREW, DRAW 2x FRAMING UPWARDS TO ACHIEVE CONNECTION OF 2x LATERAL FRAMING AND TRUSS SANDWICH PLATES. DRIVE ANY EXISTING WITHDRAWN NAILS BACK IN PLACE. PERFORM THIS REPAIR AT ALL SIMILAR LOCATIONS. RE: DETAILS 1/S4.03 & 2/S4.03

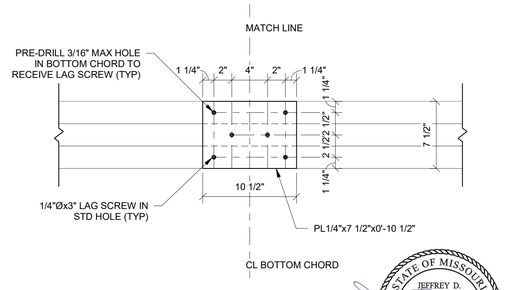
(F) WHERE LATERAL BRACING MEETS AT TOP OF TRUSS AND GABLE END, AT PERIMETER OF BUILDING, INSTALL (2) 1/4"Øx3" LAG SCREWS TO ATTACH EXISTING WITHDRAWN LATERAL BRACE AND VERTICAL WALL FRAMING MEMBER. DRIVE ANY EXISTING WITHDRAWN NAILS BACK IN PLACE. PERFORM THIS REPAIR AT ALL SIMILAR LOCATIONS.



2 S4.01 ROOF LATERAL REPAIR
1/2" = 1'-0"

NOTES:

1. WORK DESCRIBED IN THIS DETAIL SHALL BEGIN ONLY AFTER REPAIRS TO THE ROOF LATERAL SYSTEM PER DETAIL (2/S.4.01) HAVE BEEN COMPLETED.
2. MENDING PLATE DESCRIBED IN THIS DETAIL SHALL BE PROVIDED AT EACH TRUSS BOTTOM CHORD MID-SPAN SPLICE LOCATION.



3 S4.01 BOTTOM CHORD MENDING PLATE
1 1/2" = 1'-0"

STATE OF MISSOURI
JEFFREY D. PATTERSON
NUMBER PE-2000173305
PROFESSIONAL ENGINEER
7/11/2024

Page McNaghten Associates, Inc.
d/b/a PMA Engineering
Professional Engineering Corp.
MO Cert. of Authority #001400

MARK	DESCRIPTION	DATE

ISSUE DATE: 2023SEP28
SOLICITATION NO.: +W5DSK-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

PMA ENGINEERING
6717 SHAWNEE MISSION PKWY SUITE 100
OVERLAND PARK, KS 66202
(913) 831-0148

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

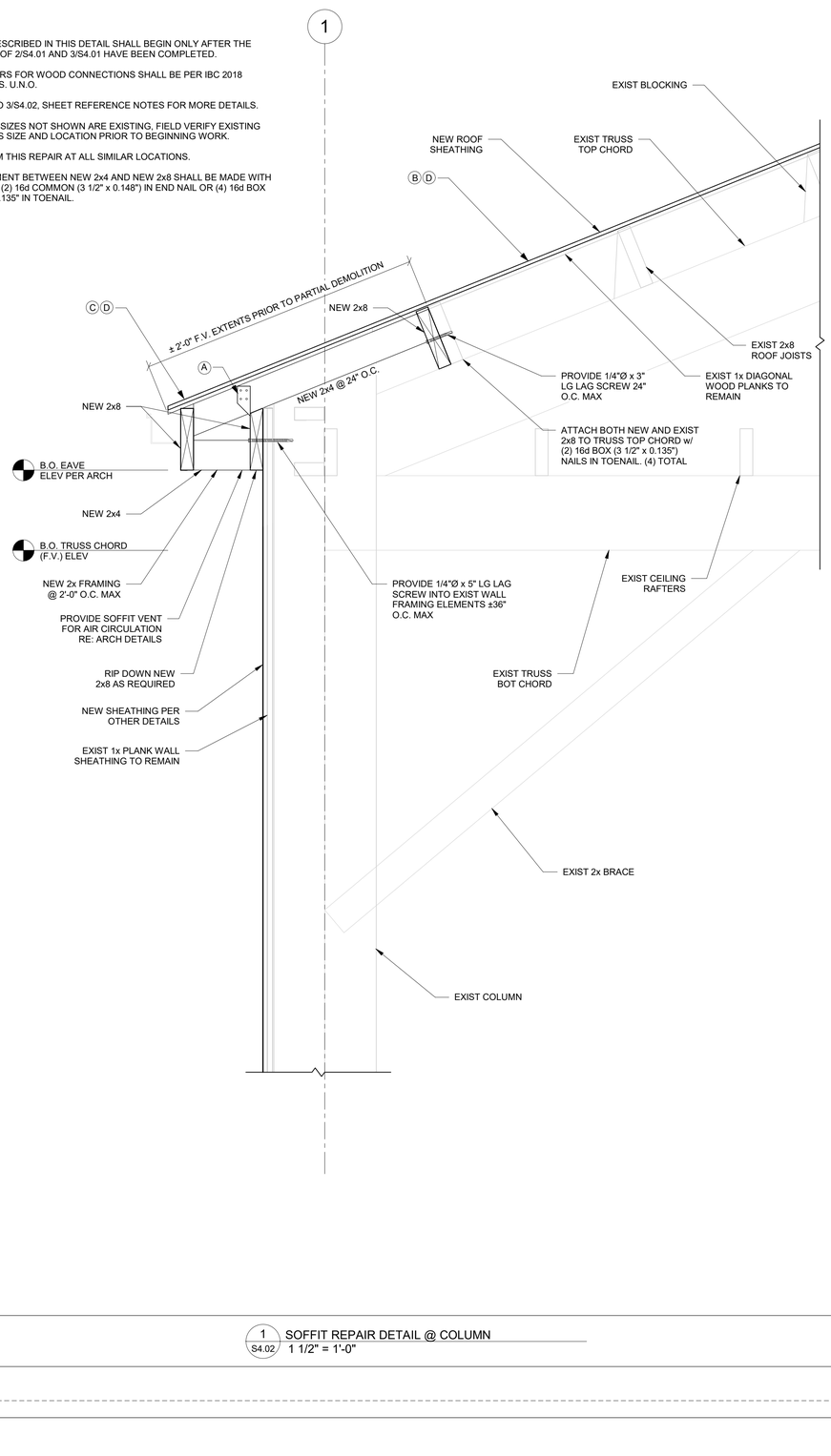
Project No.: 23065
Date: 7/11/2024
Issued For: B-2 DELIVERABLES

SHEET ID
SECTIONS
S4.01

7/11/2024 10:59:57 AM JEFFERSON BARRACKS - BLDG 99 REPAIR

NOTES:

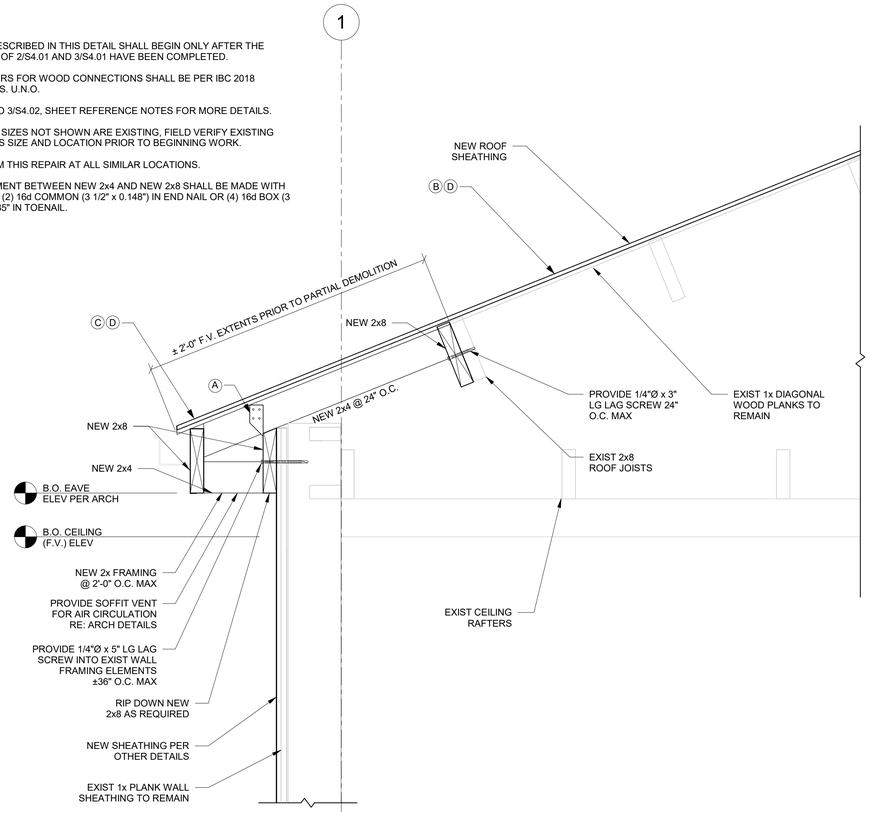
1. WORK DESCRIBED IN THIS DETAIL SHALL BEGIN ONLY AFTER THE REPAIRS OF 2/S4.01 AND 3/S4.01 HAVE BEEN COMPLETED.
2. FASTENERS FOR WOOD CONNECTIONS SHALL BE PER IBC 2018 MINIMUMS. U.N.O.
3. REFER TO 3/S4.02, SHEET REFERENCE NOTES FOR MORE DETAILS.
4. MEMBER SIZES NOT SHOWN ARE EXISTING, FIELD VERIFY EXISTING MEMBERS SIZE AND LOCATION PRIOR TO BEGINNING WORK.
5. PERFORM THIS REPAIR AT ALL SIMILAR LOCATIONS.
6. ATTACHMENT BETWEEN NEW 2x4 AND NEW 2x8 SHALL BE MADE WITH MINIMUM (2) 16d COMMON (3 1/2" x 0.148") IN END NAIL OR (4) 16d BOX (3 1/2" x 0.135" IN TOENAIL.



1 S4.02 SOFFIT REPAIR DETAIL @ COLUMN
1 1/2" = 1'-0"

NOTES:

1. WORK DESCRIBED IN THIS DETAIL SHALL BEGIN ONLY AFTER THE REPAIRS OF 2/S4.01 AND 3/S4.01 HAVE BEEN COMPLETED.
2. FASTENERS FOR WOOD CONNECTIONS SHALL BE PER IBC 2018 MINIMUMS. U.N.O.
3. REFER TO 3/S4.02, SHEET REFERENCE NOTES FOR MORE DETAILS.
4. MEMBER SIZES NOT SHOWN ARE EXISTING, FIELD VERIFY EXISTING MEMBERS SIZE AND LOCATION PRIOR TO BEGINNING WORK.
5. PERFORM THIS REPAIR AT ALL SIMILAR LOCATIONS.
6. ATTACHMENT BETWEEN NEW 2x4 AND NEW 2x8 SHALL BE MADE WITH MINIMUM (2) 16d COMMON (3 1/2" x 0.148") IN END NAIL OR (4) 16d BOX (3 1/2" x 0.135" IN TOENAIL.



2 S4.02 SOFFIT REPAIR DETAIL AWAY FROM COLUMN
1 1/2" = 1'-0"

SHEET REFERENCE NOTES:

(A) PROVIDE STEEL "HURRICANE" HOLDOWN/TIE DEVICE. BASIS FOR DESIGN IS 40 LBS MIN LATERAL AND 160LBS MIN UPLIFT. INSTALL TIE WITH ALL REQUIRED FASTENERS PER TIE MANUFACTURER.

(B) PARTIALLY DEMOLISH EXISTING SHINGLES AND ANY ADDITONAL ROOF MEMBRANES ONLY AS DESCRIBED PER ARCH. INSPECT AND REPAIR OR REPLACE ANY DAMAGED AREAS OF THE EXPOSED DIAGONAL 1x WOOD ROOF PLANKS WITH NEW MATERIAL OF LIKE KIND. NEW MATERIAL SHALL BE SUPPORTED IN A BEARING CONDITION OVER AT LEAST TWO EXISTING ROOF FRAMING ELEMENTS FROM BELOW. INSPECT EXISTING FASTENER SPACING, AND WHERE REQUIRED, PROVIDE ADDITIONAL NO. 10 RING SHANK NAILS AS NEEDED TO ACHIEVE FASTENERS AT 6" O.C. MAX OVER THE ROOF PURLINS. DRIVE FLUSH OR REMOVE AND REPLACE ANY PROTRUDING FASTENERS FROM THE EXISTING 1x ROOF PLANKS TO PREPARE FOR THE ADDITION OF NEW SHEATHING.

(C) PARTIALLY DEMOLISH EXISTING SHINGLES AND ANY ADDITONAL ROOF MEMBRANES PER ARCH. FIELD VERIFY AND MEASURE THE EXTENTS OF PARTIAL DEMOLITION TO THE EXISTING 1x ROOF PLANKS NECESSARY TO EXPOSE THE ATTIC SPACE AS SHOWN IN THE DETAIL PRIOR TO CUTTING. PARTIALLY DEMOLISH PLANKS AS DESCRIBED IN THIS NOTE. ONCE WORK HAS PROGRESSED AND EAVE ACCESS FROM ABOVE IS NO LONGER REQUIRED, PROVIDE NEW 1x WOOD PLANKS SPANNING BETWEEN AT LEAST TWO ROOF FRAMING MEMBERS IN A BEARING CONDITON. FASTEN PLANKS TO SUPPORTING FRAMING WITH NO. 10 RING SHANK NAILS 6" O.C. MAX, MINUMUM (2) PER END.

(D) WITH THE 1x PLANKS PREPARED PER OTHER NOTES IN THIS DETAIL, PROVIDE 7/16" MIN 24/16 MIN SPAN RATED STRUCTURAL 1 OSB OR PLYWOOD ROOF SHEATHING OVER BARE 1x PLANKS. ORIENTATE STRONG DIRECTION OF SHEATHING PERPENDICULAR TO THE LONG SIDE OF THE BUILDING. FASTEN WITH NO. 10 RING SHANK NAILS IN A 6/12 PATTERN (6" O.C. MAX ALONG EDGES, 12" O.C. MAX WITHIN THE FIELD OF THE PANEL). ALIGN PANEL SEAM LOCATIONS WITH ROOF PURLINS BELOW.

3 S4.02 SHEET S4.02 REFERENCE NOTES

4 S4.02 NOT USED

7/11/2024

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d/b/a PMA Engineering
Professional Engineering Corp.
MO Cert. of Authority #001400

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

PMA ENGINEERING
6717 SHAWNEE MISSION PKWY SUITE 100
OVERLAND PARK, KS 66202
(913) 831-0148

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

ISSUE DATE:
SOLICITATION NO.:
+W5DSK-23-R-0005
CONTRACT NO.:
+FA4625-17-D-0002

MARK	DESCRIPTION	DATE

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY2602057

Project No.: 23065
Date: 7/11/2024
Issued For: B-2 DELIVERABLES

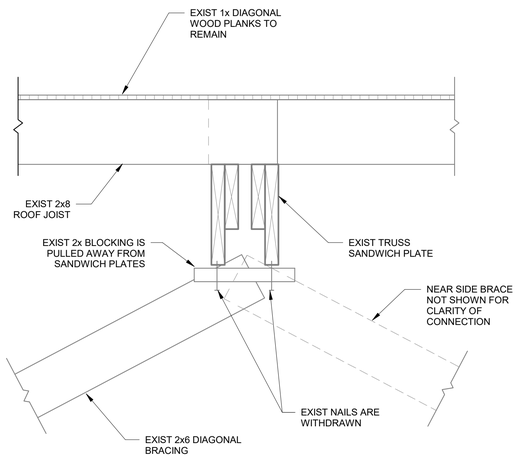
SHEET ID
SECTIONS

S4.02

7/11/2024 10:59:57 AM JEFFERSON BARRACKS - BLDG 99 REPAIR

NOTE:

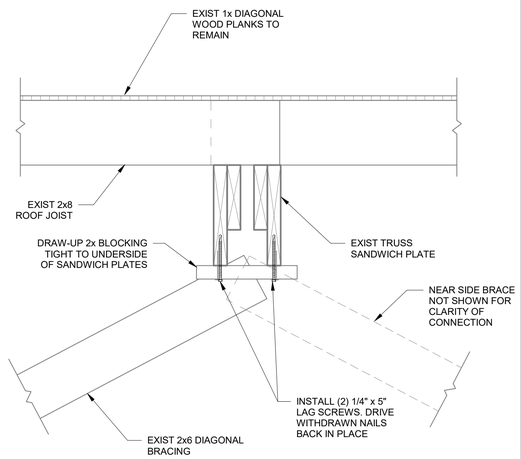
ROOFING MATERIALS NOT SHOWN.



1 S4.03 EXISTING CONDITION
1 1/2" = 1'-0"

NOTE:

ROOFING MATERIALS NOT SHOWN.



2 S4.03 REPAIR DETAIL
1 1/2" = 1'-0"

3 S4.03 NOT USED

4 S4.03 NOT USED

5 S4.03 NOT USED

6 S4.03 NOT USED

7 S4.03 NOT USED

8 S4.03 NOT USED

STATE OF MISSOURI
JEFFREY D. PATTERSON
NUMBER PE-2000173305
PROFESSIONAL ENGINEER
7/11/2024

Page McNaghten Associates, Inc.
d/b/a PMA Engineering
Professional Engineering Corp.
MO Cert. of Authority #001400

MARK	DESCRIPTION	DATE

ISSUE DATE: 7/11/2024
SOLICITATION NO.: +W50SBK-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SUBMITTED BY:

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

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OVERLAND PARK, KS 66202
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JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTUY202057

Project No.: 23065
Date: 7/11/2024
Issued For: B-2 DELIVERABLES

SHEET ID
SECTIONS

S4.03

7/11/2024 10:59:57 AM JEFFERSON BARRACKS - BLDG 99 REPAIR

ELECTRICAL SYMBOLS LEGEND
(AS APPLICABLE)

SWITCHING

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
$a	SINGLE POLE SWITCH - LETTER INDICATES SWITCH LEG	$T	TIMER SWITCH
$2	DOUBLE POLE SWITCH	$S	SENSOR SWITCH - WALL MOUNTED; SEE LIGHTING CONTROL SCHEME NARRATIVE FOR TYPE
$3	THREE-WAY SWITCH	$S,D	DIMMING SENSOR SWITCH - WALL MOUNTED; SEE LIGHTING CONTROL SCHEME NARRATIVE FOR TYPE
$4	FOUR-WAY SWITCH	S,#	SENSOR - CEILING MOUNTED; SEE LIGHTING CONTROL SCHEME NARRATIVE FOR TYPE
$D	DIMMER SWITCH	S,#	SENSOR - WALL MOUNTED; SEE LIGHTING CONTROL SCHEME NARRATIVE FOR TYPE
$H	HORSEPOWER RATED SWITCH	DS,#	DAYLIGHT SENSOR - CEILING MOUNTED
$F	FUSED SWITCH	(B)	LIGHTING CONTROL STATION - LETTER INDICATES TYPE
$TE	THERMAL ELEMENT		
$M	MOMENTARY CONTACT SWITCH		
$K	KEY OPERATED SWITCH		
$P	PILOT LIGHT SWITCH		

NUMBER INDICATES ZONE OF LUMINAIRES TO BE CONTROLLED BY SENSOR(S). NO NUMBER INDICATES ALL ROOM LUMINAIRES TO BE CONTROLLED BY SENSOR(S).

LIGHTING

LABEL INFORMATION A,# — LETTER INDICATES LUMINAIRE MARK, NUMBER INDICATES ZONE IDENTIFIER, NO NUMBER INDICATES SINGLE ZONE

	LUMINAIRE		WALL MOUNTED LUMINAIRE
	LUMINAIRE - EMERGENCY		WALL MOUNTED LUMINAIRE - NIGHT LIGHT
	LUMINAIRE - NIGHT LIGHT		WALL MOUNTED LUMINAIRE - EMERGENCY
	WALL MOUNTED LUMINAIRE		EXIT SIGN - WALL/CEILING MOUNTED (SHADING DENOTES EXIT FACE SIDE)
	WALL MOUNTED LUMINAIRE - EMERGENCY		COMBINATION EXIT SIGN/EMERGENCY LIGHTING UNIT (SHADING DENOTES EXIT FACE SIDE)
	WALL MOUNTED LUMINAIRE - NIGHT LIGHT		PHOTOCELL, DAYLIGHT SENSOR
	STRIP LUMINAIRE		EXTERIOR LUMINAIRE - POLE MOUNTED
	STRIP LUMINAIRE - EMERGENCY		EXTERIOR LUMINAIRE - POLE MOUNTED
	STRIP LUMINAIRE - NIGHT LIGHT		EXTERIOR LUMINAIRE - POLE MOUNTED
	LUMINAIRE		EXTERIOR LUMINAIRE - POLE MOUNTED
	LUMINAIRE - NIGHT LIGHT		FLOOD LIGHT LUMINAIRE
	LUMINAIRE - EMERGENCY		EMERGENCY BATTERY PACK
	TRACK LUMINAIRE		EMERGENCY LUMINAIRE REMOTE HEADS

POWER DEVICES

	SINGLE RECEPTACLE		LIGHTING & APPLIANCE PANELBOARD
	DUPLEX RECEPTACLE		POWER DISTRIBUTION EQUIPMENT
	FOUR-PLEX RECEPTACLE - TWO DUPLEX RECEPTACLES	T	TRANSFORMER
	RANGE RECEPTACLE		ENCLOSED CIRCUIT BREAKER
	SPECIAL RECEPTACLE		CABINET (TYPE INDICATED)
G	DUPLEX RECEPTACLE - GROUND-FAULT CIRCUIT-INTERRUPTER		MOTOR STARTER, LIGHTING CONTACTOR
IG	DUPLEX RECEPTACLE - ISOLATED GROUND		SAFETY SWITCH
WR	DUPLEX RECEPTACLE - WEATHER-RESISTANT GROUND-FAULT CIRCUIT-INTERRUPTER		COMBINATION MOTOR STARTER & SAFETY SWITCH
A	DUPLEX RECEPTACLE - ON APPLIANCE CIRCUIT		MOTOR
T	DUPLEX RECEPTACLE - TAMPER-RESISTANT	J	CORD DROP (J-BOX AT CEILING)
F	DUPLEX RECEPTACLE - ARC-FAULT RATED		CORD DROP (SPECIAL RECEPTACLE AT CEILING)
U	DUPLEX RECEPTACLE - WITH USB PORTS		MULTI-OUTLET ASSEMBLY
	DUPLEX RECEPTACLE - EMERGENCY (RED)		FLUSH FLOOR BOX
	DUPLEX RECEPTACLE - CEILING MOUNTED		FLUSH POKE-THRU
	DUPLEX RECEPTACLE - SPLIT-WIRE/PLUG LOAD CONTROLLED		DAMPER
J	JUNCTION BOX	S	SOLENOID

GENERAL ELECTRICAL DEMOLITION NOTES
APPLY TO ALL ELECTRICAL SHEETS

A. COMPLETELY REMOVE ALL ELECTRICAL WIRING, CONDUIT, SWITCHES, DISCONNECTS, LUMINAIRES, AND ASSOCIATED ANCILLARY EQUIPMENT SHOWN CROSSHATCHED. ITEMS INDICATED FOR REMOVAL ARE ONLY SUGGESTIVE OF THE AMOUNT OF DEMOLITION WORK INVOLVED. PERFORM A SITE INVESTIGATION TO AID IN DETERMINING THE COMPLETE EXTENT OF DEMOLITION WORK.

B. COORDINATE AND SCHEDULE ALL NECESSARY POWER OUTAGES WITH THE OWNER'S REPRESENTATIVE PRIOR TO PROCEEDING WITH SUCH WORK SO OPERATIONS IN ADJACENT OCCUPIED PORTIONS OF THE BUILDING ARE NOT INTERRUPTED OR RESTRICTED WITHOUT PRIOR APPROVAL.

C. REMOVE EXISTING LUMINAIRES, LAMPS, BALLASTS, AND RELATED COMPONENTS INDICATED AS COMPLETELY AS POSSIBLE. DELIVER EQUIPMENT CONSIDERED SALVAGEABLE BY THE OWNER'S REPRESENTATIVE AND NOT SHOWN FOR REUSE TO THE OWNER'S STORAGE LOCATION. REMOVE NON-SALVAGEABLE EQUIPMENT FROM THE SITE. PROPERLY DISPOSE OF LAMPS AND BALLASTS CONSIDERED HAZARDOUS WASTE.

D. COORDINATE REUSED EXISTING BOX AND CONDUIT LOCATIONS WITH NEW WORK LOCATIONS.

GENERAL ELECTRICAL NOTES
APPLY TO ALL ELECTRICAL SHEETS

A. MOUNTING HEIGHTS INDICATED ARE TO CENTER OF ROUGH-IN ABOVE FINISHED FLOOR (AFF).

B. INSTALL ALL CONDUCTORS IN CONTINUOUS RACEWAY. PROVIDE INSULATED EQUIPMENT GROUNDING CONDUCTOR.

C. PROVIDE DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT PHASE CONDUCTOR. EXCEPTION: WHERE AN EQUIPMENT MANUFACTURER REQUIRES A MULTIWIRE BRANCH CIRCUIT FOR ONLY ONE UTILIZATION EQUIPMENT AND WHERE ALL UNGROUNDED CONDUCTORS OF THAT CIRCUIT ARE OPENED SIMULTANEOUSLY BY THE BRANCH CIRCUIT OVERCURRENT DEVICE.

D. PATCH, PAINT, REPAIR OR REPLACE ALL WALLS, CEILINGS, OR OTHER BUILDING ELEMENTS DISTURBED DURING INSTALLATION OF ELECTRICAL WORK.

E. USE ROOM NUMBERS ASSIGNED BY OWNER AND NOT ROOM NUMBERS LISTED ON DRAWINGS FOR LABELING OF PANELBOARD DIRECTORIES, FIRE ALARM PANEL PROGRAMMING, ETC. INCLUDE A DESCRIPTION OF LOAD SUCH AS LIGHTS, RECEPTACLES, MECHANICAL UNIT LOCATIONS, ETC. ON TYPED PANELBOARD DIRECTORIES.

F. LOCATIONS AND QUANTITIES OF LIGHTING CONTROL SENSORS ON THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE ONLY THE ROOM/AREA CONTROLLED BY THE SENSORS. PROVIDE ADDITIONAL SENSORS AND RELATED EQUIPMENT FOR COMPLETE COVERAGE AND SWITCHING ARRANGEMENTS INDICATED.

STATE OF MISSOURI
MICHAEL D. WALLACE
NUMBER PE-2020006988
PROFESSIONAL ENGINEER
07/11/2024

MARK	DESCRIPTION	DATE

ISSUE DATE: 2024-JUL11
SOLICITATION NO.: +W9SB9K-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

DESIGNED BY: H. OASSEM
DRAWN BY: H. OASSEM
CHECKED BY: M. WALLACE
SUBMITTED BY:

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

FARRIS ENGINEERING
12700 W DODGE RD
OMAHA, NE 68154
402-330-5900

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTOY202057

GENERAL ELECTRICAL

SHEET ID
FLOOR PLAN

E-001

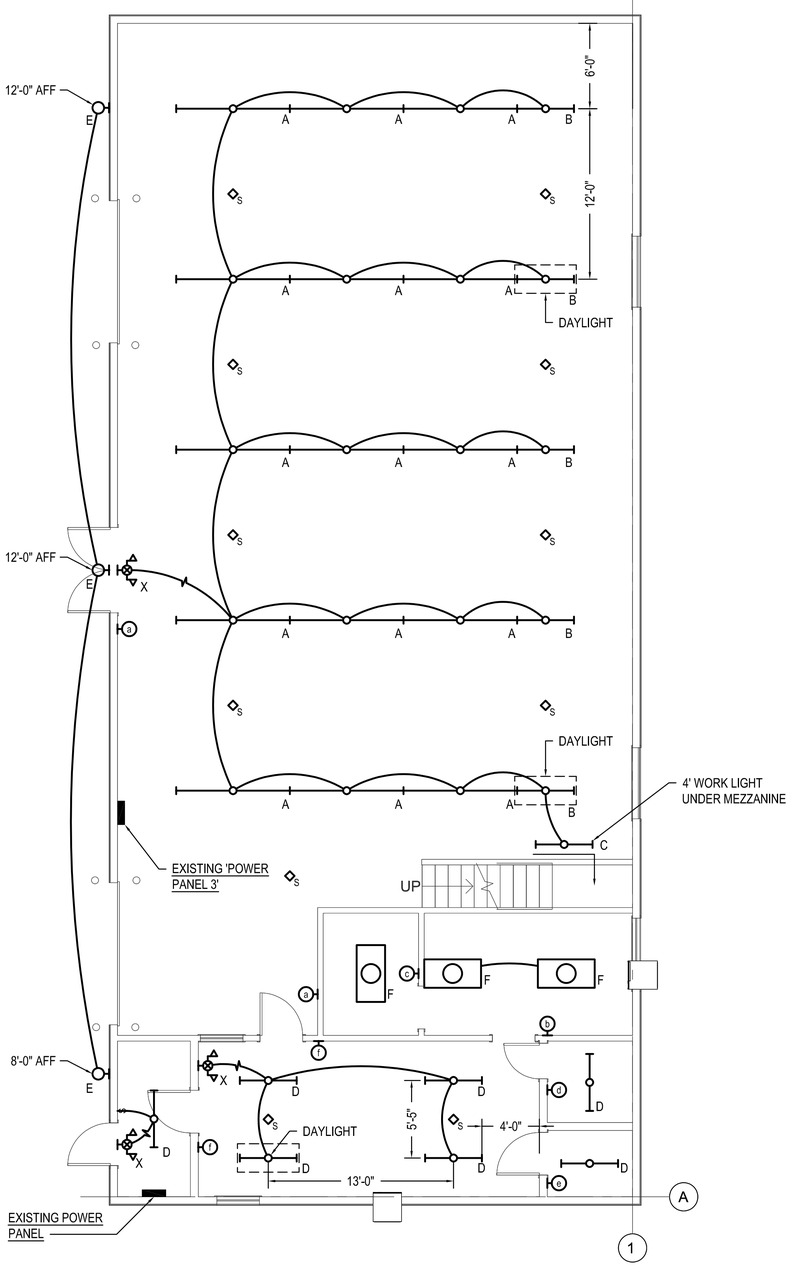
GENERAL ELECTRICAL NOTES:

A. REFER TO THE LUMINAIRE SCHEDULE FOR NEW LIGHTING INFORMATION AND FINISHES.

B. REFER TO CONTROL STATION DIAGRAMS FOR LIGHTING CONTROL INFORMATION. SENSOR LOCATIONS SHOWN ARE DIAGRAMMATIC IN NATURE, VERIFY ALL ACCESSORIES AND CONFIGURATION REQUIREMENTS FOR LIGHTING CONTROL SCHEMES.

C. MOUNT LIGHT FIXTURES AT HEIGHTS SIMILAR TO EXISTING ARRANGEMENT.

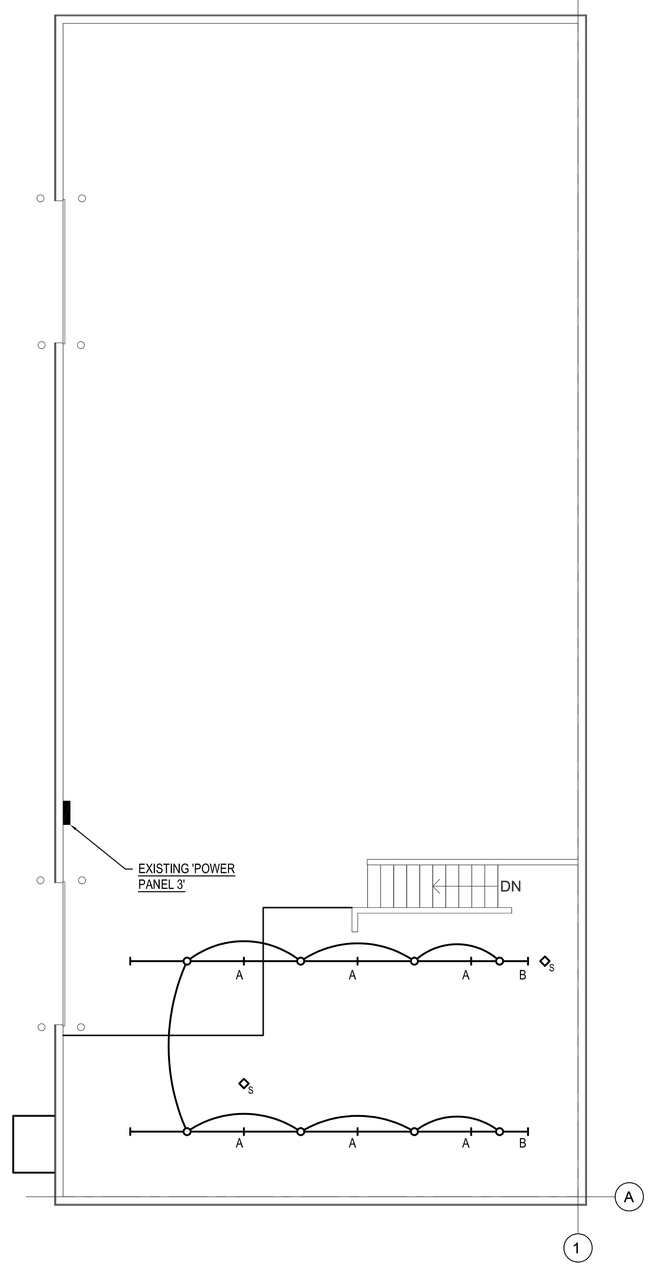
D. REUSE EXISTING LIGHTING BRANCH CIRCUIT FEEDERS AS APPLICABLE.



BUILDING 99 - FIRST FLOOR - ELECTRICAL PLAN

SCALE: 3/16 INCH = 1 FOOT

12" 0 5' 10'



BUILDING 99 - MEZZANINE - ELECTRICAL PLAN

SCALE: 3/16 INCH = 1 FOOT

12" 0 5' 10'

MICHAEL D. WALLACE
STATE OF MISSOURI
NUMBER PE-2020006988
PROFESSIONAL ENGINEER

07/11/2024

MARK	DESCRIPTION	DATE

DESIGNED BY: H. OASSEM
DRAWN BY: H. OASSEM
CHECKED BY: M. WALLACE
SUBMITTED BY:

ISSUE DATE: 2024-JUL11
SOLICITATION NO.: +W9SI8K-23-R-0005
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U.S. AIR FORCE
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JEFFERSON BARRACKS ANGS
ST LOUIS, MO

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12700 W DODGE RD
OMAHA, NE 68154
402-330-5900

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTO1202057

ELECTRICAL PLANS

SHEET ID
FLOOR PLAN

E-102

LUMINAIRE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER/SERIES	CATALOG NO.	LIGHT SOURCE				FINISH	MOUNTING	INPUT WATTS	VOLTS	ACCEPTABLE MANUFACTURERS	REMARKS
				TYPE	DELIVERED LUMEN OUTPUT	CCT	CRI						
A	8' LINEAR STRIP, FLAT DIFFUSE LENS	N/A	N/A	LED	5200 LM	3500	90	WHITE	CHAIN	33	120	N/A	
B	4' LINEAR STRIP, FLAT DIFFUSE LENS	N/A	N/A	LED	2600 LM	3500	90	WHITE	CHAIN	16	120	N/A	
C	4' SOLID FRONT UNDER CABINET LIGHT, ROCKER SWITCH	N/A	N/A	LED	2400 LM	3500	90	BLACK	SURFACE	21	120	N/A	
D	4' LOW PROFILE WRAPAROUND, CURVED, RIBBED LENS	N/A	N/A	LED	4000 LM	3500	90	WHITE	SURFACE	35	120	N/A	
E	EXTERIOR WALL LUMINAIRE	N/A	N/A	LED	1910-8477 LM (ADJUSTABLE)	3000	70	BLACK	SURFACE	78	120	N/A	
F	2'X4' FLAT PANEL, SATIN WHITE DIFFUSER	N/A	N/A	LED	4000 LM	3500	90	WHITE	RECESSED	37	120	N/A	
X	EMERGENCY LIGHT/EXIT COMBINATION, RED LETTERS	N/A	N/A	LED	N/A	N/A	N/A	WHITE	REMARK 1	4	120	N/A	

LUMINAIRE SCHEDULE REQUIREMENTS:

A. SUBMIT SHOP DRAWINGS FOR EACH LUMINAIRE USED ON THE PROJECT.

B. ACCEPTABLE MANUFACTURERS ARE CAPABLE OF PROVIDING EQUIVALENT LUMINAIRES. PRODUCTS MUST BE BAA COMPLIANT, SUBMIT PRODUCT AND ACCESSORIES EQUIVALENT OR SUPERIOR TO THE SPECIFIED LUMINAIRE IN SALIENT QUALITIES, PHOTOMETRIC PERFORMANCE, CONSTRUCTION QUALITY, INCLUDED ACCESSORIES, AND AESTHETICS.

C. ALL LUMINAIRES SHALL HAVE A U.L. LABEL. ALL LUMINAIRES USED IN EXTERIOR APPLICATIONS SHALL HAVE A U.L. WET LABEL.

D. VERIFY MOUNTING COMPATIBILITY OF LUMINAIRES WITH CEILING SYSTEMS/MATERIALS PRIOR TO ORDERING LUMINAIRES. NOTIFY ENGINEER OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.

E. FOR ALL SUSPENDED LUMINAIRES PROVIDE MOUNTING TYPE INDICATED IN LUMINAIRE SCHEDULE. REFER TO PLANS FOR SUSPENSION LENGTH(S) REQUIRED.

F. PROVIDE LED LUMINAIRES WITH MINIMUM 5-YEAR WARRANTY.

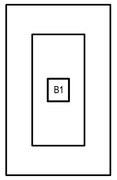
LUMINAIRE SCHEDULE REMARKS:

1. REFER TO DRAWINGS FOR MOUNTING REQUIREMENTS SUCH AS WALL MOUNT, END MOUNT, CEILING MOUNT AND PROVIDE LUMINAIRES ACCORDINGLY. PROVIDE DIRECTIONAL CHEVRON ARROWS AS INDICATED ON PLANS.

GENERAL NOTES:

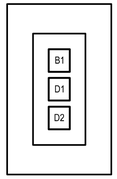
A. LIGHTING CONTROLS ARE BASED ON UFC 3-530-01 GUIDELINES.

B. EXTERIOR FIXTURES SHALL BE CONTROLLED BY FACTORY-PROVIDED PHOTOCELL.



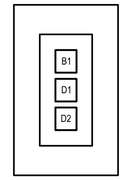
CONTROL ELEMENTS:
- B1: MANUAL ON/OFF ROOM LIGHTING; ON TO 100%, FULL OUTPUT.
- AUTOMATIC OFF AFTER 20 MINUTES OF VACANCY (WALL VACANCY SENSOR).
- FINISH: WHITE
- APPLICATION: STORAGE ROOM

CONTROL STATION 'e' (e)



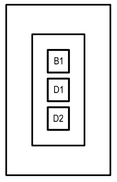
CONTROL ELEMENTS:
- B1: MANUAL ON/OFF ROOM LIGHTING; ON TO 100%, FULL OUTPUT.
- D1: DIMMER TO PROVIDE MANUAL RAISE FOR ROOM LIGHTING.
- D2: DIMMER TO PROVIDE MANUAL LOWER FOR ROOM LIGHTING.
- AUTOMATIC OFF AFTER 20 MINUTES OF VACANCY (WALL VACANCY SENSOR).
- AUTOMATIC OFF WHEN BUILDING IS SCHEDULED TO BE VACANT.
- FINISH: WHITE
- APPLICATION: WORKROOM

CONTROL STATION 'c' (c)



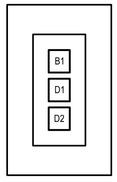
CONTROL ELEMENTS:
- B1: MANUAL ON/OFF ROOM LIGHTING; ON TO 100%, FULL OUTPUT.
- D1: DIMMER TO PROVIDE MANUAL RAISE FOR ROOM LIGHTING.
- D2: DIMMER TO PROVIDE MANUAL LOWER FOR ROOM LIGHTING.
- AUTOMATIC RAMPED DIMMING TO 50% AFTER 20 MINUTES OF VACANCY.
- AUTOMATIC OFF WHEN BUILDING IS SCHEDULED TO BE VACANT.
- INCORPORATE DAYLIGHT SENSOR CONTROLS FOR DAYLIGHT ZONES INDICATED ON PLAN.
- FINISH: WHITE
- APPLICATION: SHOP

CONTROL STATION 'a' (a)



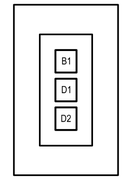
CONTROL ELEMENTS:
- B1: MANUAL OFF ROOM LIGHTING.
- D1: DIMMER TO PROVIDE MANUAL RAISE FOR ROOM LIGHTING.
- D2: DIMMER TO PROVIDE MANUAL LOWER FOR ROOM LIGHTING.
- AUTOMATIC ON TO 50% OUTPUT.
- AUTOMATIC OFF AFTER 20 MINUTES OF VACANCY.
- AUTOMATIC OFF WHEN BUILDING IS SCHEDULED TO BE VACANT.
- INCORPORATE DAYLIGHT SENSOR CONTROLS FOR DAYLIGHT ZONES INDICATED ON PLAN.
- FINISH: WHITE
- APPLICATION: OFFICE ROOM

CONTROL STATION 'f' (f)



CONTROL ELEMENTS:
- B1: MANUAL ON/OFF ROOM LIGHTING; ON TO 100%, FULL OUTPUT.
- D1: DIMMER TO PROVIDE MANUAL RAISE FOR ROOM LIGHTING.
- D2: DIMMER TO PROVIDE MANUAL LOWER FOR ROOM LIGHTING.
- AUTOMATIC OFF AFTER 20 MINUTES OF VACANCY (WALL VACANCY SENSOR).
- FINISH: WHITE
- APPLICATION: BATHROOM

CONTROL STATION 'd' (d)



CONTROL ELEMENTS:
- B1: MANUAL ON/OFF ROOM LIGHTING; ON TO 100%, FULL OUTPUT.
- D1: DIMMER TO PROVIDE MANUAL RAISE FOR ROOM LIGHTING.
- D2: DIMMER TO PROVIDE MANUAL LOWER FOR ROOM LIGHTING.
- FINISH: WHITE
- APPLICATION: KITCHEN

CONTROL STATION 'b' (b)

LIGHTING CONTROL STATIONS

NO SCALE

STATE OF MISSOURI
MICHAEL D. WALLACE
NUMBER PE-2020006988
PROFESSIONAL ENGINEER

07/11/2024

MARK	DESCRIPTION	DATE

DESIGNED BY: H. OASSEM
DRAWN BY: H. OASSEM
CHECKED BY: M. WALLACE
SUBMITTED BY:
ISSUE DATE: 2024JUL11
SOLICITATION NO.: +W90S8K-23-R-0005
CONTRACT NO.: +FA4625-17-D-0002

U.S. AIR FORCE
+131ST CIVIL ENGINEER SQUADRON
JEFFERSON BARRACKS ANGS
ST LOUIS, MO

FARRIS ENGINEERING
12700 W DODGE RD
OMAHA, NE 68154
402-330-5900

JEFFERSON BARRACKS ANGS
REPAIR ROADS AND GROUNDS BUILDING 99
LTOY220057

ELECTRICAL DETAILS,
LUMINAIRE SCHEDULE

SHEET ID
FLOOR PLAN

E-501

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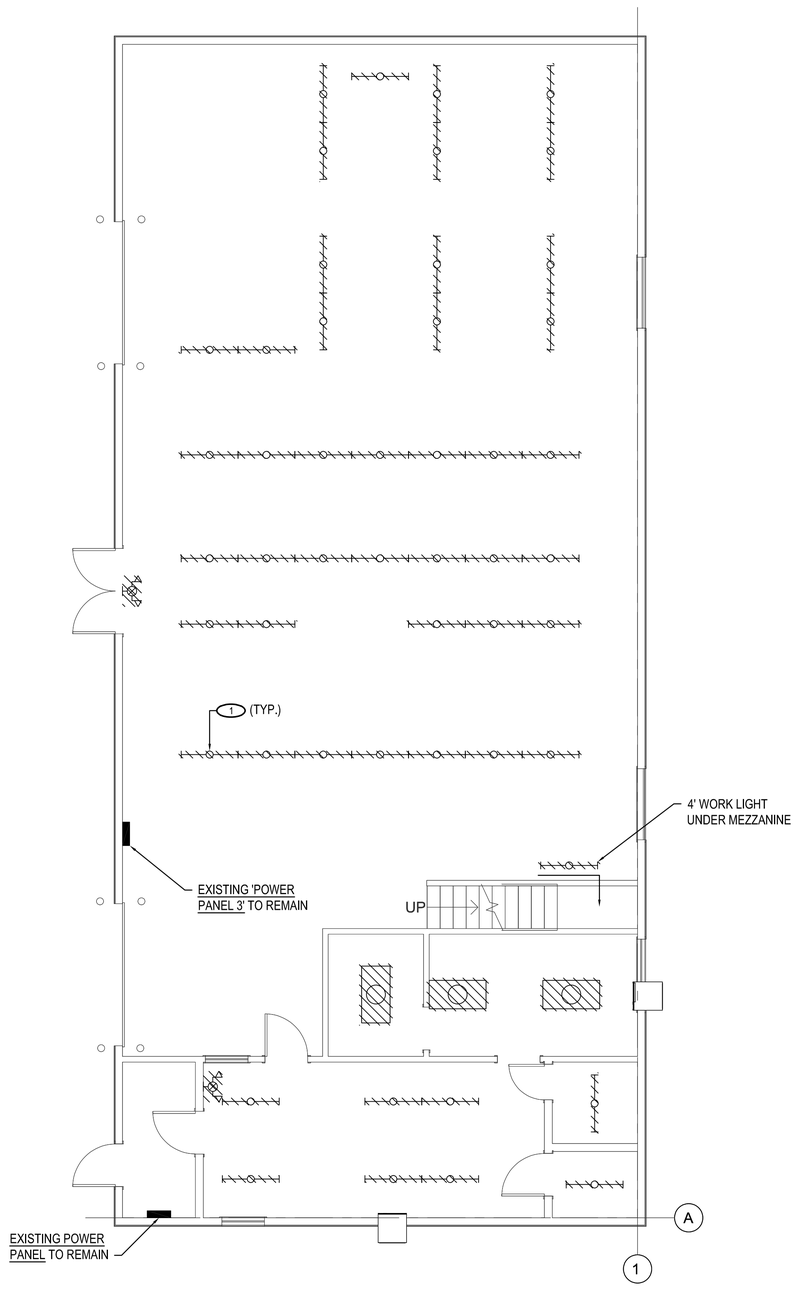
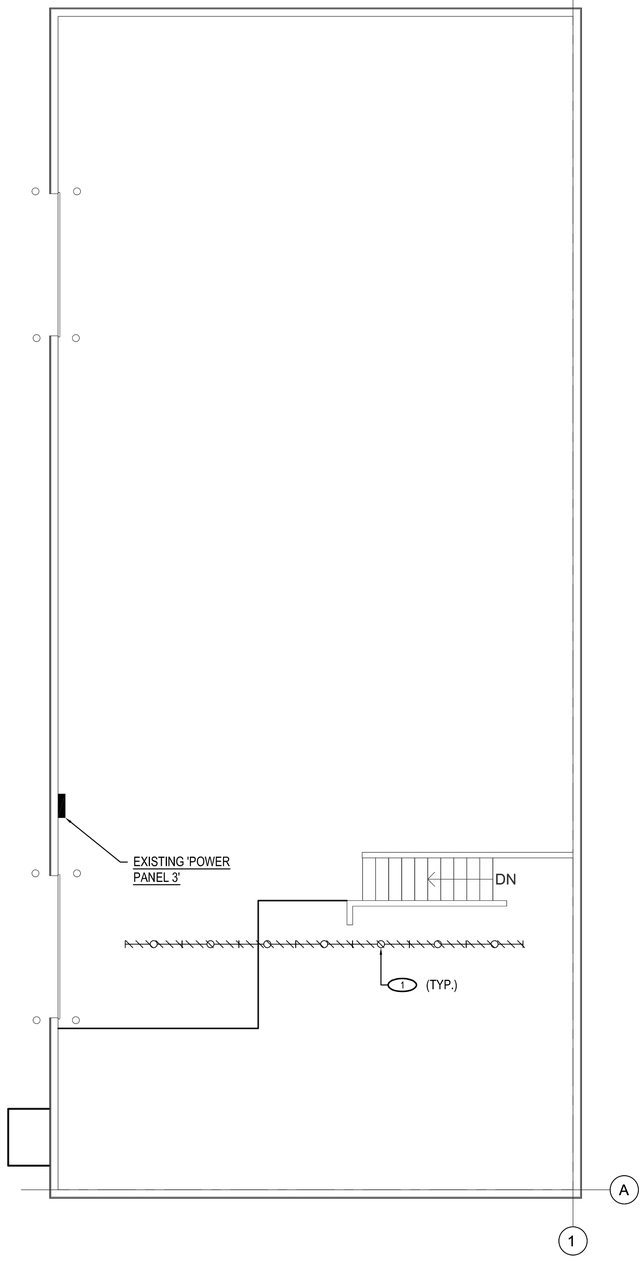


BUILDING 99 - FIRST FLOOR - ELECTRICAL DEMOLITION

SCALE: 3/16 INCH = 1 FOOT

12" 0 5' 10'



BUILDING 99 - MEZZANINE - ELECTRICAL DEMOLITION

SCALE: 3/16 INCH = 1 FOOT

12" 0 5' 10'

GENERAL ELECTRICAL DEMOLITION NOTES:

A. ALL LIGHTING WILL BE UPGRADED. VERIFY EXISTING LIGHTING FIXTURE LOCATIONS FOR DEMOLITION.

B. ANY ELECTRICAL OR FIRE ALARM COMPONENTS THAT NEED TO BE REMOVED FOR THE RENOVATION SHALL BE REUSED AND REINSTALLED. FINISHES OF THE REUSED COMPONENTS SHALL REMAIN UNAFFECTED.

ELECTRICAL DEMOLITION KEYNOTES: (⬭)

(1) DEMOLISH LIGHTING FIXTURES SHOWN CROSSHATCHED. REMOVE OR REUSE WIRING METHODS, BOXES, AND RACEWAY AS APPLICABLE FOR NEW LIGHTING FIXTURE LOCATIONS.

STATE OF MISSOURI
MICHAEL D. WALLACE
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PROFESSIONAL ENGINEER

07/11/2024

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REPAIR ROADS AND GROUNDS BUILDING 99
LTOY202057

ELECTRICAL
DEMOLITION PLANS

SHEET ID
FLOOR PLAN

ED101

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