

FIRE STOPPING:
FIRE STOPPING MUST BE PERFORMED BY A PERSON TRAINED BY A PRODUCT MANUFACTURER REPRESENTATIVE FOR THE PRODUCT TO BE USED.

FIRE STOPPING MUST BE SPECIFIC TO THE PRODUCT BEING USED AND THE TYPE OF PENETRATION AND IN ACCORDANCE WITH THE MANUFACTURER LISTED ASSEMBLY CRITERIA.

FIRE RATED WALLS ARE TO BE STENCILED ABOVE CEILINGS IN ACCORDANCE WITH IBC 703.7. WHERE ACCESS IT NOT PROVIDED ABOVE CEILINGS, LABEL ON UTILITY CHASE SIDE.

LEGEND:

- — — — — MINIMUM SMOKE RESISTIVE / SMOKE PARTITION FOR INCIDENTAL USE WHEN SPRINKLERED. SELF-CLOSING DOORS. NO RATING REQUIRED.
- — — — — MINIMUM 30-MINUTE FIRE RATING BETWEEN RESIDENTIAL SLEEPING ROOMS
- — — — — MINIMUM 1-HOUR FIRE RESISTIVE WITH 45-MINUTE DOORS AND HARDWARE FOR LAUNDRY ROOMS. SEE LSC 8.3.3.2.2.
- — — — — TRAVEL PATH / DISTANCE INDICATED

NOTE: FIRE RESISTANCE RATINGS SHOWN ARE MINIMUM. DUE TO SOUND REQUIREMENTS AND CONSTRUCTION CRITERIA, THE ARCHITECTURAL DRAWINGS MAY SHOW A HIGHER RATING.

FE-C+ FIRE EXTINGUISHER IN CABINET PER DISCUSSION WITH FIRE DEPARTMENT ON FEDERAL MANDATE. SEE LS.02 FOR CRITERIA.

EXIT LED ILLUMINATED EXIT SIGN WITH BATTERY BACKUP

LIFE SAFETY CODE SUMMARY:
CODES: 2018 IBC; 2021 LSC; UFC 3-600-01 CHANGE 6 MAY, 2021;

OCCUPANCY: RESIDENTIAL DORMITORY LSC CH. 28; IBC R2
CONSTRUCTION TYPE: ORIGINAL TYPE V, DUE TO COMBUSTIBLE MATERIALS IN OLD ROOFING. WITH NEW ROOFING, COMBUSTIBLE WOOD TRUSSES ARE TO BE REMOVED TO AVOID ATTIC SPRINKLERS.
ACTUAL AREA PER FLOOR: ~12,500 FT²
ALLOWABLE AREAS PER FLOOR: 21,000 FT²
NUMBER OF STORIES PROVIDED: 3
NUMBER OF STORIES ALLOWED: 3
SPRINKLERS: YES, NFPA 13 2022 EDITION. NO ATTIC SPRINKLERS
FIRE ALARM & MNS: YES, NFPA 72 2022 AND ECB 2018-17
TRAVEL (LSC CH. 28, & CH. 7)
COMMON PATH OF TRAVEL: 50' (DOES NOT INCLUDE TRAVEL WITHIN GUEST ROOM)
DEAD END: 50'
GUEST ROOMS > 2,000 FT² SHALL HAVE 2 EXITS (NOT APPLICABLE)
TRAVEL WITHIN GUEST ROOM TO CORRIDOR: 125'
TRAVEL FROM GUEST ROOM DOOR TO EXTERIOR EXIT WAY: 200'
SEPARATION AND PROTECTION OF OUTSIDE STAIRWAYS PER LSC 7.2.2.6.3 (1); RATING NOT REQUIRED WHEN TWO REMOTE OUTSIDE STAIRWAYS ARE PROVIDED.
MINIMUM STAIR WIDTH (BELOW HANDRAIL): 36" ALLOWING EACH STAIR TO SERVE 50 OCCUPANTS. TWO STAIRS @ 50 OCCUPANTS EACH ALLOW FOR 100 ACCUMULATIVE PER LSC 7.2.2.2.1.2(A) AND A.7.2.2.2.1.2(B).

FIRE EXTINGUISHERS ARE NOT REQUIRED PER LSC FOR THE OCCUPANCY AND UFC 3-600-01. PER REQUEST OF FIRE DEPARTMENT ONE CABINET AND ABC EXTINGUISHER WILL BE PROVIDED IN KITCHEN SPACE DUE TO RECENTLY ISSUED FEDERAL MANDATE AND SCOPE LIMITATIONS.

SUBDIVISION OF SPACES TO COMPLY WITH LSC 28.3.7. GUEST ROOMS MUST BE SEPARATED FROM OTHER GUEST ROOMS AND OTHER AREAS BY MINIMUM 30 MINUTES WITH 20 MINUTE DOORS.

EXTERIOR EXIT BALCONIES ARE IN ACCORDANCE WITH LSC 7.5.3. BALCONY OPENING PROTECTION IS NOT REQUIRED PER 7.5.3.3 DUE TO LOOPED TRAVEL / EXIT PATHS AROUND BUILDING.

FIRE BARRIERS AND SMOKE PARTITIONS TO BE PERMANENTLY IDENTIFIED WITHIN 15 FEET OF THE END OF EACH WALL AND AT 30 FOOT INTERVALS. LETTERS TO BE MINIMUM 3 INCHES IN HEIGHT WITH MINIMUM 3/8 INCH STROKE IN CONTRASTING COLOR. SEE NFPA 101, 8.2.2.5.

SEE E2.01 & E2.02 FOR INTERIOR AND EXTERIOR EMERGENCY LIGHTING.

SEISMIC CRITERIA: (VERIFY WITH STRUCTURAL SHEETS FOR POTENTIAL CHANGES)
SITE CLASS: C
RISK CATEGORY: II

SITE CONDITIONS:
FIRE HYDRANTS ARE EXISTING TO REMAIN WITH NO CHANGES IN SCOPE.

FIRE DEPARTMENT VEHICLE ACCESS IS EXISTING TO REMAIN WITH NO CHANGES IN SCOPE. SIDEWALKS AND EXTERIOR STAIRS WILL BE REPLACED AND IMPROVE ACCESS.

UNDERGROUND SPRINKLER STUB-IN IS EXISTING TO REMAIN WITH NO CHANGES IN SCOPE. ALL ABOVE-GROUND PIPE WITHIN BUILDING FROM FLOOR FLANGE UP WILL BE REPLACED.

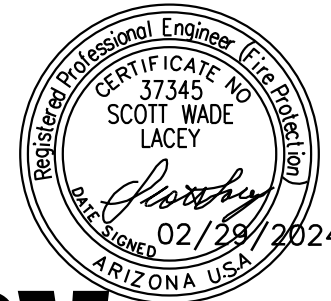
EXISTING FIRE DEPARTMENT CONNECTION LOCATION TO REMAIN ON BACK OF BUILDING.



LITTLE ROCK A.F.B.
ARKANSAS



CLEMENTS & ASSOCIATES
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-375-3380
WWW.CLEMENTSARCHITECTS.COM



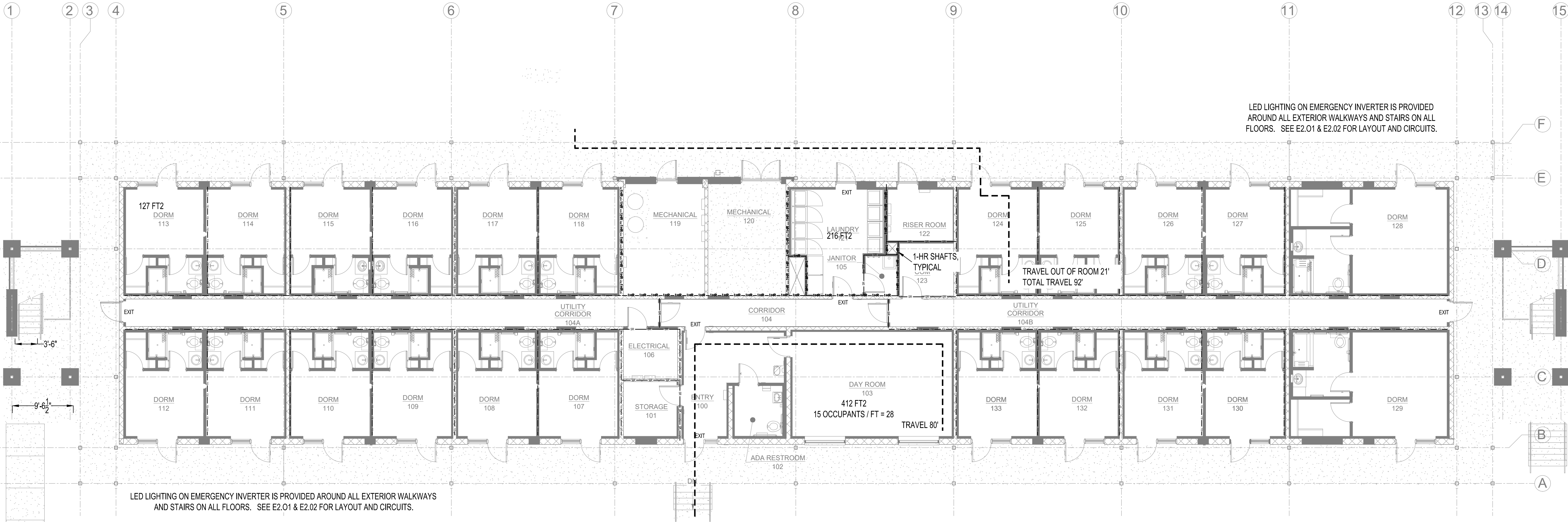
Lacey
Fire Protection
Engineering
WWW.LACEYFPE.COM

100 REVISED SUBMITAL	04/26/2024	BY	Date	Revision/Issue	No.
1					

PROJECT TITLE
REPAIR (SUS) AIRMEN
DORMITORY BLDG 854

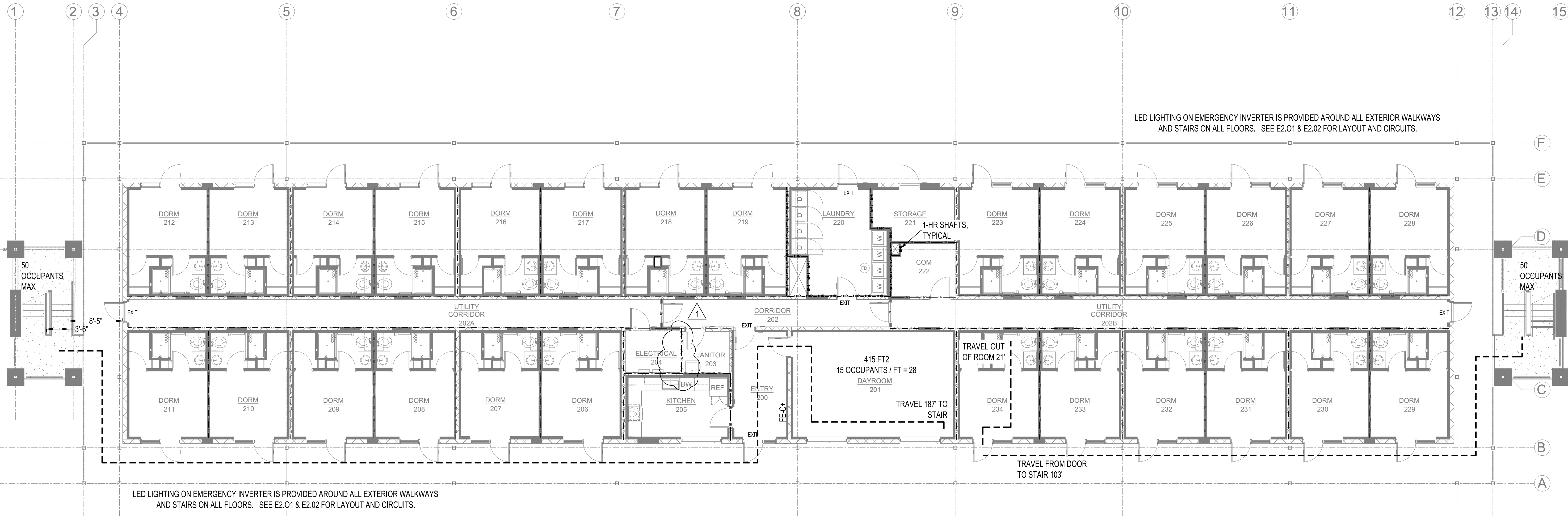
SHEET TITLE
LIFE SAFETY -
FIRST FLOOR PLAN

DRAWN BY SL	LEAD DESIGNER SL
TECH REVIEWER SL	PROJECT NUMBER NKAK 21-1034
DESIGNED BY SL	SHEET
DATE 29 FEB. 2024	LS1.01
SCALE AS NOTED	02 OF 100



1 LIFE SAFETY - FIRST FLOOR
1/8" = 1'





OCCUPANTS THIS FLOOR:
26 - QUEST ROOMS
28 - DAY ROOM
2 - LAUNDRY
2 - KITCHEN
58 CALCULATED AREA WITH DAY ROOM, LAUNDRY,
KITCHEN SERVICING THE SAME GUEST ROOM
OCCUPANTS. AS SUCH, FLOOR OCCUPANT LOAD NOT
ANTICIPATED TO EXCEED 50.

FIRE EXTINGUISHER AND CABINET:
PROVIDE MINIMUM 2A: 20B: C RECHARGEABLE FIRE EXTINGUISHER IN
ACCORDANCE WITH NFPA 10 FOR ORDINARY HAZARD. EXTINGUISHER
TO BE PROVIDED WITH PRESSURE GAUGE INDICATING CHARGE.

PROVIDE A WHITE, STEEL, POWDER-COATED / POLYESTER-COATED
FIRE EXTINGUISHER CABINET WHERE INDICATED.

CABINET TO HAVE A CLEAR WINDOW TO VISUALLY VERIFY
EXTINGUISHER IS PRESENT.

CABINET TO BE SEMI-RECESSED AT WALL FUR-OUT IF DEPTH WILL
ACCOMMODATE. OTHERWISE SURFACE MOUNTED.

TOP OF CABINET TO BE MOUNTED TO ENSURE THAT NEITHER THE
HANDLE TO OPEN OR THE TOP OF THE EXTINGUISHER WILL BE
HIGHER THAN 48" ABOVE FINISHED FLOOR.

PROVIDE NECESSARY FRAMING/BLOCKING TO SECURE CABINET AT
INDICATED LOCATION. COORDINATE WITH ARCHITECTURAL
DRAWINGS AND FIRE ALARM LOCAL OPERATOR CONTROL PANEL TO
BE MOUNTED IN SAME VICINITY.

PROVIDE ACROSS FROM 2ND FLOOR KITCHEN.



LITTLE ROCK A.F.B.
ARKANSAS



CLEMENTS & ASSOCIATES
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-375-3380
WWW.CLEMENTSARCHITECTS.COM



Lacey
Fire Protection
Engineering
WWW.LACEYFPE.COM

No.	Revision/Issue	Date	BY	APP'D
1	100 REVISED SUBMITAL	04/26/2024		

PROJECT TITLE
REPAIR (SUS) AIRMEN
DORMITORY BLDG 854

SHEET TITLE
LIFE SAFETY -
SECOND FLOOR PLAN

DRAWN BY SL	LEAD DESIGNER SL
TECH REVIEWER SL	PROJECT NUMBER NKAK 21-1034
DESIGNED BY SL	SHEET
DATE 29 FEB. 2024	LS1.02
SCALE AS NOTED	03 OF 100



LITTLE ROCK A.F.B.
ARKANSAS



**CLEMENTS
& ASSOCIATES**
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-373-3380
WWW.CLEMENTSARCHITECTS.COM



Lacey
Fire Protection
Engineering
WWW.LACEYFPE.COM

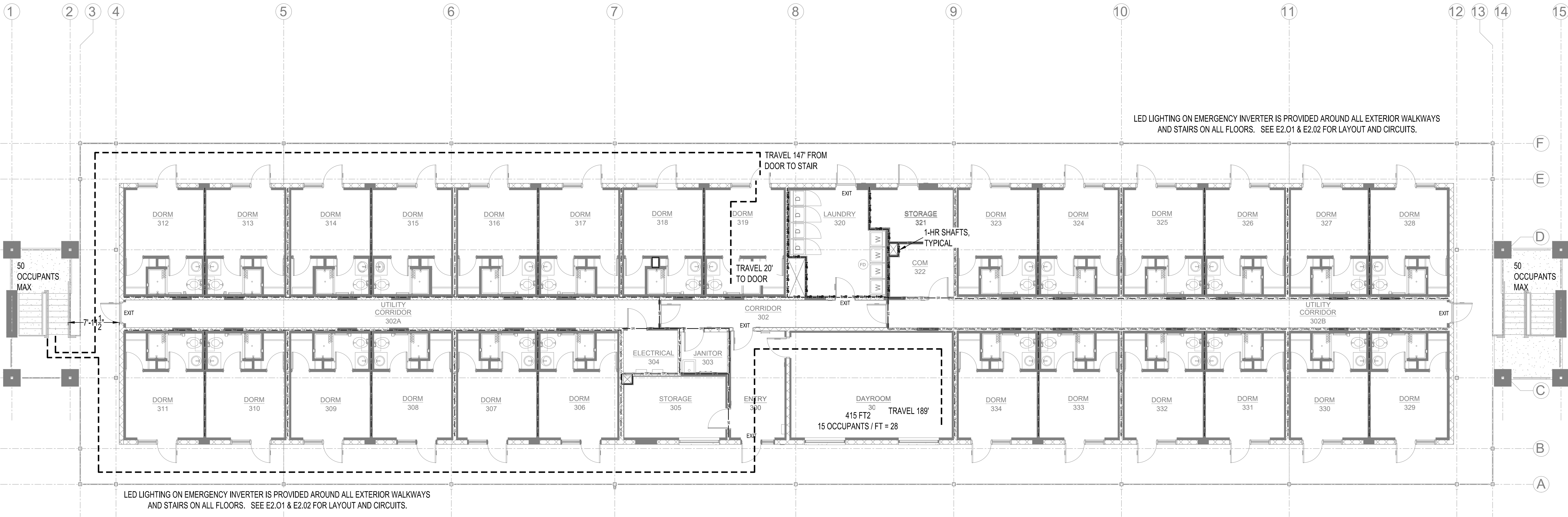
No.	Revision/Issue	Date	BY	APP'D
1	100 REVISED SUBMITAL	04/26/2024		

PROJECT TITLE
REPAIR (SUS) AIRMEN
DORMITORY BLDG 854

SHEET TITLE
LIFE SAFETY -
THIRD FLOOR PLAN

DRAWN BY SL	LEAD DESIGNER SL
TECH REVIEWER SL	PROJECT NUMBER NKAK 21-1034
DESIGNED BY SL	SHEET LS1.03
DATE 29 FEB. 2024	
SCALE AS NOTED	04 OF 100

OCCUPANTS THIS FLOOR:
26 - QUEST ROOMS
28 - DAY ROOM
2 - LAUNDRY
2 - KITCHEN
58 CALCULATED AREA WITH DAY ROOM, LAUNDRY,
KITCHEN SERVICING THE SAME GUEST ROOM
OCCUPANTS. AS SUCH, FLOOR OCCUPANT LOAD NOT
ANTICIPATED TO EXCEED 50.



1 LIFE SAFETY - THIRD FLOOR
1/8" = 1'

GENERAL CONSTRUCTION NOTES

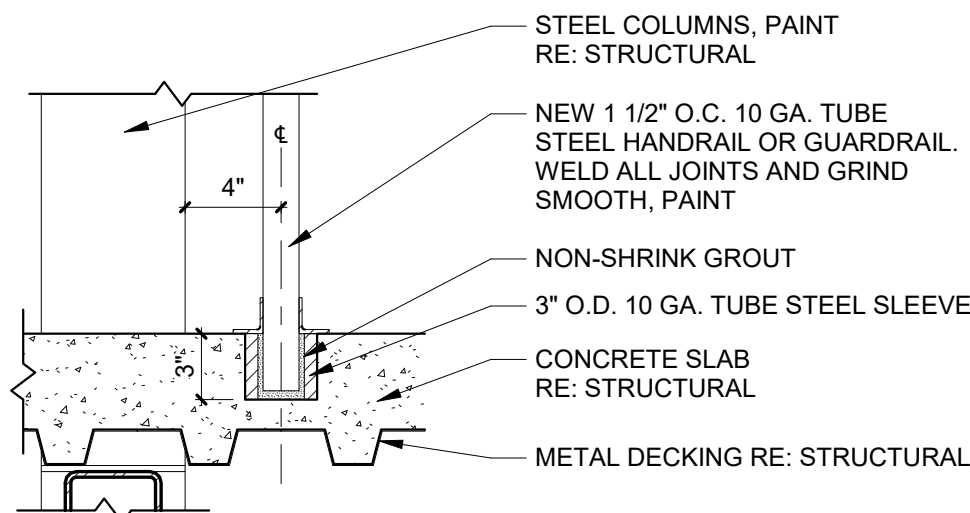
1. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR SITE SAFETY OF THE EMPLOYEES INVOLVED WITH THE DEMOLITION, CONSTRUCTION, AND TO THE GENERAL PUBLIC THAT MAY VENTURE ONTO THE SITE. THE CONTRACTOR SHALL CONFORM TO THE APPLICABLE OSHA REQUIREMENTS FOR WORKER PROTECTION.
2. BUILDING 854 CONTAINS HAZARDOUS MATERIALS. ALL ABATEMENT MUST BE COMPLETED PRIOR TO THE DEMOLITION OF THE STRUCTURE. REFER TO LRAFB PROVIDED ASBESTOS/LEAD PAINT INSPECTION REPORT FOR INFORMATION REGARDING CONTAMINATED ITEM.
3. THE CONTRACTOR SHALL COORDINATE WITH THE LRAFB RECYCLE CENTER AND RECYCLE ALL RECYCLABLE MATERIALS AND MATERIALS OF VALUE INCLUDING COPPER, WIRE, & METAL. RECYCLING CENTER WILL PROVIDE CONTAINERS AND REQUIRE A 48 HOUR NOTICE PRIOR TO DELIVERY. (501)-987-6611
4. CEILING TILES, CARPET, VINYL WALL COVERING, VINYL CORNER GUARDS, AND OTHER INTERIOR ITEMS TYPICALLY RECYCLABLE BY LRAFB ARE CONSIDERED CONTAMINATED WITH ASBESTOS AND MAY NOT BE RECYCLED.
5. THE CONTRACTOR SHALL RECORD ANY SITE ITEMS THAT ARE DAMAGED PRIOR TO COMMENCING CONSTRUCTION. DAMAGE SHALL ALSO BE VERIFIED BY THE GOVERNMENT PRIOR TO COMMENCEMENT. ANY ITEMS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH ITEMS OF A EQUAL OR GREATER VALUE AT NO COST TO THE GOVERNMENT.
6. ALL DISTURBED SITE CONDITIONS SHALL BE REPAIRED TO AN AS FOUND OR BETTER CONDITION AT NO COST TO THE GOVERNMENT.
7. REFER TO CIVIL, STRUCTURAL, FIRE PROTECTION, MECHANICAL, PLUMBING, AND ELECTRICAL FOR ADDITIONAL DEMOLITION AND CONSTRUCTION REQUIREMENTS.

SITE SYMBOLS LEGEND

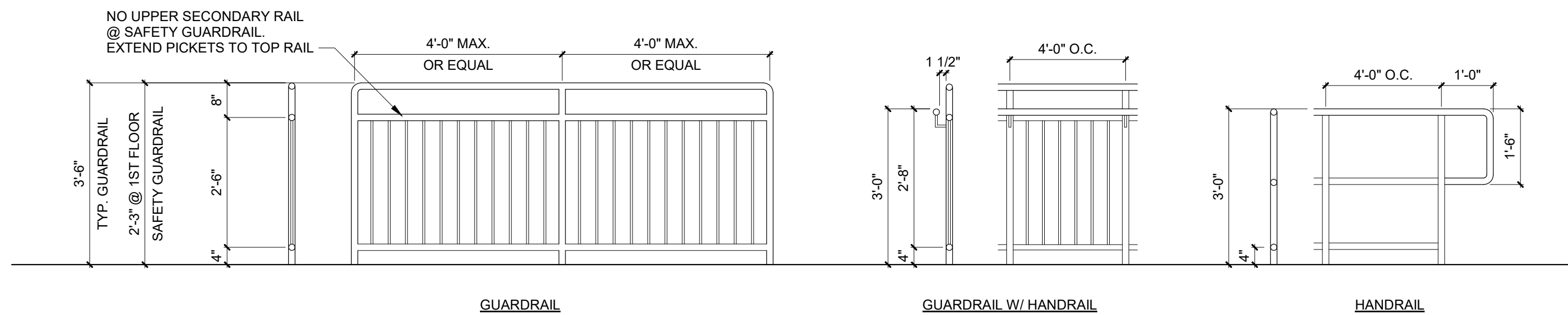
	EXISTING BUILDING
	CONCRETE WALK RE: CIVIL
	WATER
	ELECTRICAL UNDERGROUND
	FIBER OPTICS
	GAS
	STORM DRAINAGE
	MANHOLE
	VALVE
	JUNCTION BOX
	FIRE HYDRANT

3 GUARDRAIL/HANDRAIL POST DETAIL

1 1/2" = 1'-0"



TYPICAL CONSTRUCTION



CONSTRUCTION NOTES:

HANDRAIL CONSTRUCTION: 1 1/2" Ø GALVANIZED STEEL WITH 1 1/2" Ø VERTICAL SUPPORTS AT 4'-0" O.C. UNLESS OTHERWISE INDICATED IN THE DRAWINGS. PAINT

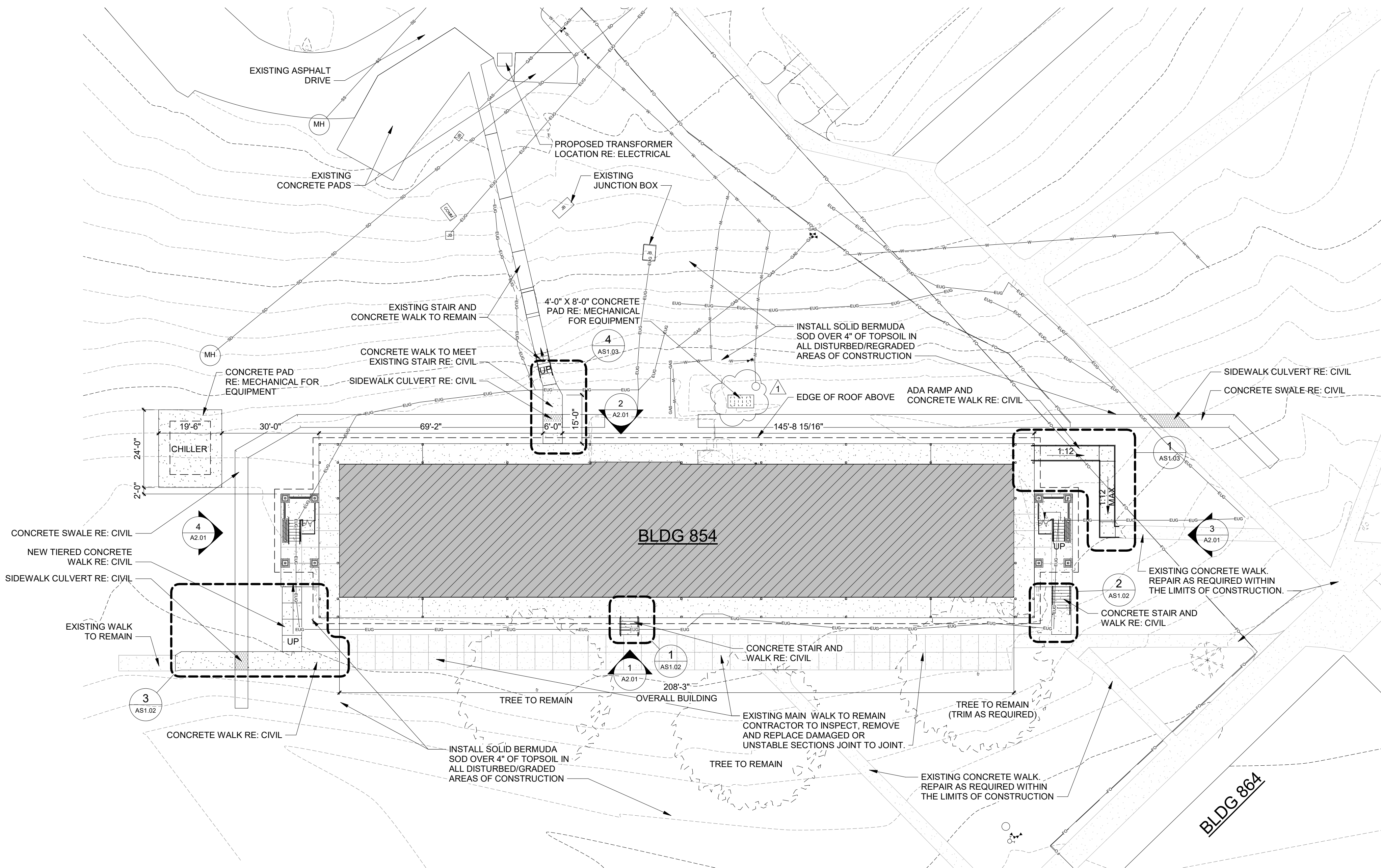
GUARDRAIL CONSTRUCTION: 1 1/2" Ø GALVANIZED STEEL WITH 1 1/2" Ø VERTICAL SUPPORTS AT 4'-0" O.C. UNLESS OTHERWISE INDICATED IN THE DRAWINGS. PICKET INFILLS ARE 1/2" Ø GALVANIZED STEEL AT 4" O.C. MAX., PAINT

GUARDRAIL W/ HANDRAIL: PROVIDE ADA COMPLIANT GALVANIZED STEEL HANDRAIL BRACKETS AND 1 1/2" Ø GALVANIZED STEEL HANDRAIL, PAINT

ALL RAILINGS TO BE WELDED, GROUND SMOOTH, AND PAINTED.

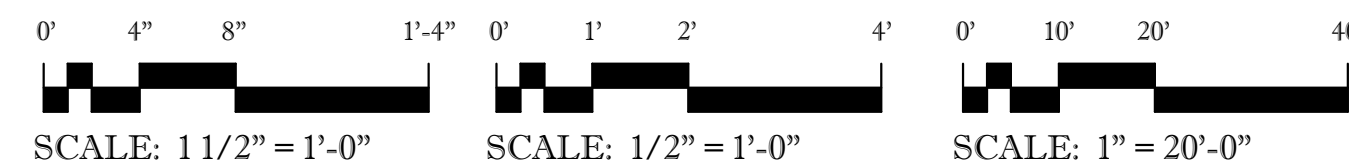
2 RAILING DETAILS

1/2" = 1'-0"



1 ARCHITECTURAL SITE PLAN

1" = 20'-0"



LITTLE ROCK A.F.B.
ARKANSAS

HGL
Construction

CLEMENTS & ASSOCIATES
ARCHITECTURE, INC.

507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-375-3380
WWW.CLEMENTSARCHITECTS.COM



No.	Revision/Issue	Date	BY	APPD
1	100 REVISED SUBMITTAL	4/26/24		

PROJECT TITLE
**REPAIR (SUS) AIRMEN
DORMITORY BLDG 854**

DRAWN BY
HRS, BD, DR

DATE
29 FEB. 2024

SCALE
AS NOTED

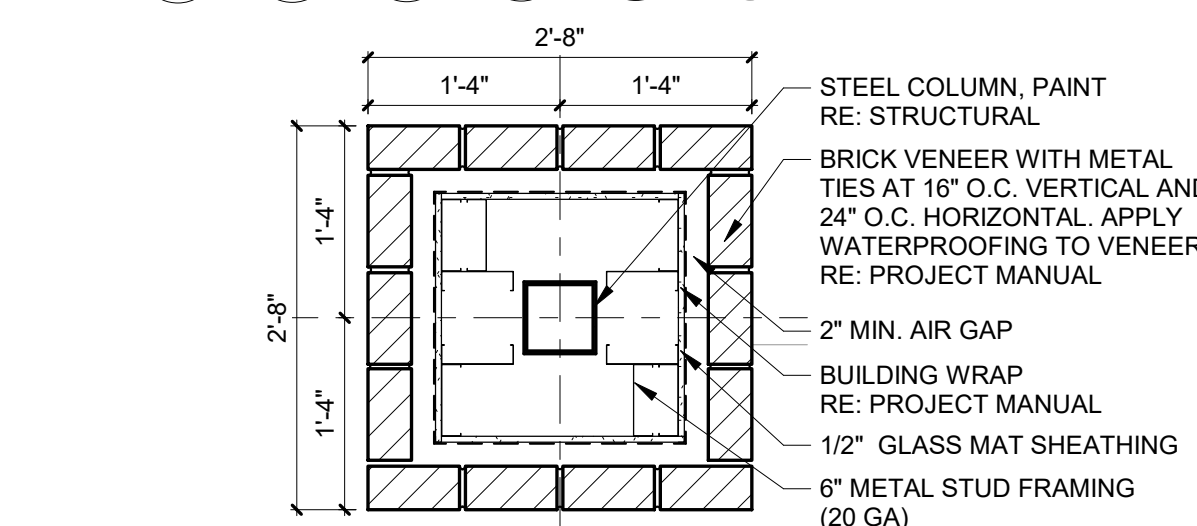
SHEET TITLE
**ARCHITECTURAL SITE PLAN,
NOTES, DETAILS AND
SYMBOLS LEGEND**

LEAD DESIGNER
C&A

PROJECT NUMBER
NKAK 21-1034

SHEET
AS1.01

27 of 100



1'-8"

7'-4"

PRECAST CONCRETE BAND (ABOVE)

BRICK VENEER WITH METAL TIES AT 16" O.C. VERTICAL AND 24" O.C. HORIZONTAL. APPLY WATERPROOFING TO VENEER RE: PROJECT MANUAL

BUILDING WRAP RE: PROJECT MANUAL

2" MIN. AIR GAP

1/2" GLASS MAT SHEATHING

6" METAL STUDS (20 GA @ 16" O.C. WITH CONTINUOUS TOP AND BOTTOM TRACK)

3
A3.02

Architectural floor plan of the first floor of the existing building. The plan shows a central stairwell and surrounding rooms. Key features include:

- Stairwell:** Located in the center, featuring a concrete tread finish, metal pan stairs, and a safety guardrail at the first floor edge. The stairwell is labeled "UP" and "DOWN".
- Concrete Walkway:** A concrete walkway is shown on the right side of the stairwell, labeled "CONCRETE WALKWAY RE: STRUCTURAL".
- Guardrails:** Guardrails are shown at the first floor edge, labeled "GUARDRAIL WITH HANDRAIL AT STAIRS (TYP ALL STAIRS) RE: 2/AS1.01".
- Rooms and Dimensions:**
 - Room 1 (A1.01) is located at the top left, with dimensions 2'-8" and 6'-5".
 - Room 2 (A2.02) is located at the top right, with dimensions 2'-8" and 6'-5".
 - Room 3 (A1.01) is located at the bottom left, with dimensions 2'-8" and 6'-5".
 - Room 4 (A1.01) is located at the bottom right, with dimensions 2'-8" and 6'-5".
 - Room 5 (A1.01) is located at the top left, with dimensions 2'-8" and 6'-5".
 - Room 6 (A1.02) is located at the bottom left, with dimensions 2'-8" and 6'-5".
- Other Features:**
 - A "SLOPE TO DRAIN" is indicated in the top left corner.
 - A "TIERED CONCRETE WALK RE: 3/AS1.02" is shown at the bottom right.
 - A "STEEL COLUMNS, PA RE: STRUCTURAL" is shown at the bottom right.
 - A "SAFETY GUARDRAIL STAIR AT FIRST FLOOR RE: 2/AS1.01" is shown at the bottom right.
 - A "CONCRETE WALKWAY RE: STRUCTURAL" is shown at the bottom right.
 - A "GUARDRAIL" is shown at the bottom right.
 - A "SLOPE TO DRAIN" is indicated in the bottom left corner.
 - A "SIM" (Symbolic) is indicated in the bottom left corner.
 - A "NORTH" arrow is located in the bottom right corner.

Architectural floor plan of a building's second floor, showing a central staircase and surrounding rooms. The plan includes dimensions, room numbers (12, 13, 14, 15, 4, 2, 5), and various annotations for materials and construction details. Key features include guardrails, handrails, stairs, and a concrete walkway. The plan is oriented with North at the top.

Room Numbers and Dimensions:

- Room 12: 11'-9" x 5'-0"
- Room 13: 2'-8" x 2'-8"
- Room 14: 6'-5" x 2'-8"
- Room 15: 2'-8" x 2'-8"
- Room 4: 7'-4" x 22'-9"
- Room 2: 5'-0" x 6'-0"
- Room 5: 3'-6" x 1'-8"

Annotations and Details:

- GUARDRAILS** RE: 2/AS1.01
- GUARDRAIL WITH HANDRAIL AT STAIRS (TYP ALL STAIRS)** RE: 2/AS1.01
- SAFETY GUARDRAIL BELOW STAIR** RE: 2/AS1.01
- METAL PAN STAIRS WITH CONCRETE TREADS, LIGHT BROOM FINISH, AND NON-SLIP NOSING.** RE: STRUCTURAL
- CONTROL JOINT (CJ)**
- STEEL COLUMNS, PAINT** RE: STRUCTURAL
- EDGE OF LANDING ABOVE**
- CONCRETE WALKWAY** RE: STRUCTURAL
- SLOPE TO DRAIN**
- UP** (Stair direction)
- DN** (Stair direction)
- EXISTING BLOC 854**
- GUARDRAIL**

Room Details:

- Room 12: GUARDRAILS RE: 2/AS1.01
- Room 13: GUARDRAIL WITH HANDRAIL AT STAIRS (TYP ALL STAIRS) RE: 2/AS1.01
- Room 14: SAFETY GUARDRAIL BELOW STAIR RE: 2/AS1.01
- Room 15: METAL PAN STAIRS WITH CONCRETE TREADS, LIGHT BROOM FINISH, AND NON-SLIP NOSING. RE: STRUCTURAL
- Room 4: GUARDRAILS RE: 2/AS1.01
- Room 2: GUARDRAIL WITH HANDRAIL AT STAIRS (TYP ALL STAIRS) RE: 2/AS1.01
- Room 5: SAFETY GUARDRAIL BELOW STAIR RE: 2/AS1.01

Dimensions:

- Room 12: 11'-9" x 5'-0"
- Room 13: 2'-8" x 2'-8"
- Room 14: 6'-5" x 2'-8"
- Room 15: 2'-8" x 2'-8"
- Room 4: 7'-4" x 22'-9"
- Room 2: 5'-0" x 6'-0"
- Room 5: 3'-6" x 1'-8"

Other Details:

- GUARDRAILS RE: 2/AS1.01
- GUARDRAIL WITH HANDRAIL AT STAIRS (TYP ALL STAIRS) RE: 2/AS1.01
- SAFETY GUARDRAIL BELOW STAIR RE: 2/AS1.01
- METAL PAN STAIRS WITH CONCRETE TREADS, LIGHT BROOM FINISH, AND NON-SLIP NOSING. RE: STRUCTURAL
- CONTROL JOINT (CJ)
- STEEL COLUMNS, PAINT RE: STRUCTURAL
- EDGE OF LANDING ABOVE
- CONCRETE WALKWAY RE: STRUCTURAL
- SLOPE TO DRAIN
- UP
- DN
- EXISTING BLOC 854
- GUARDRAIL

[illegible]

0' 8" 16" 32" SCALE: 3/4" = 1'-0"



PROJECT TITLE	SHEET TITLE
REPAIR (SUS) ARMEN DORMITORY BLDG 854	FIRST FLOOR RENOVATION PLAN, ENLARGED STAIR PLANS, AND SYMBOLS LEGEND

DRAWN BY HRS, BD, DR	LEAD DESIGNER C&A
TECH REVIEWER HRS	PROJECT NUMBER NKAK 21-1034
DESIGNED BY C&A	SHEET A1.01
DATE 29 FEB. 2024	
SCALE AS NOTED	33 OF 100

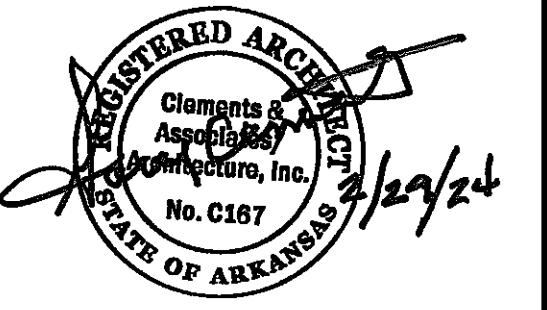


LITTLE ROCK A.F.B.
ARKANSAS

HGL
Construction

CLEMENTS & ASSOCIATES
ARCHITECTURE, INC.

507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-375-3380
WWW.CLEMENTSARCHITECTS.COM



No.	Revision/Issue	Date	BY	APPD
1	100 REVISED SUBMITTAL	4/26/24		

PROJECT TITLE
**REPAIR (SUS) ARMEN
DORMITORY BLDG 854**

SHEET TITLE
**SECOND FLOOR RENOVATION
PLAN AND ENLARGED STAIR
PLANS**

DRAWN BY
HRS, BD, DR

LEAD DESIGNER
C&A

TECH REVIEWER
HRS

PROJECT NUMBER
NKAK 21-1034

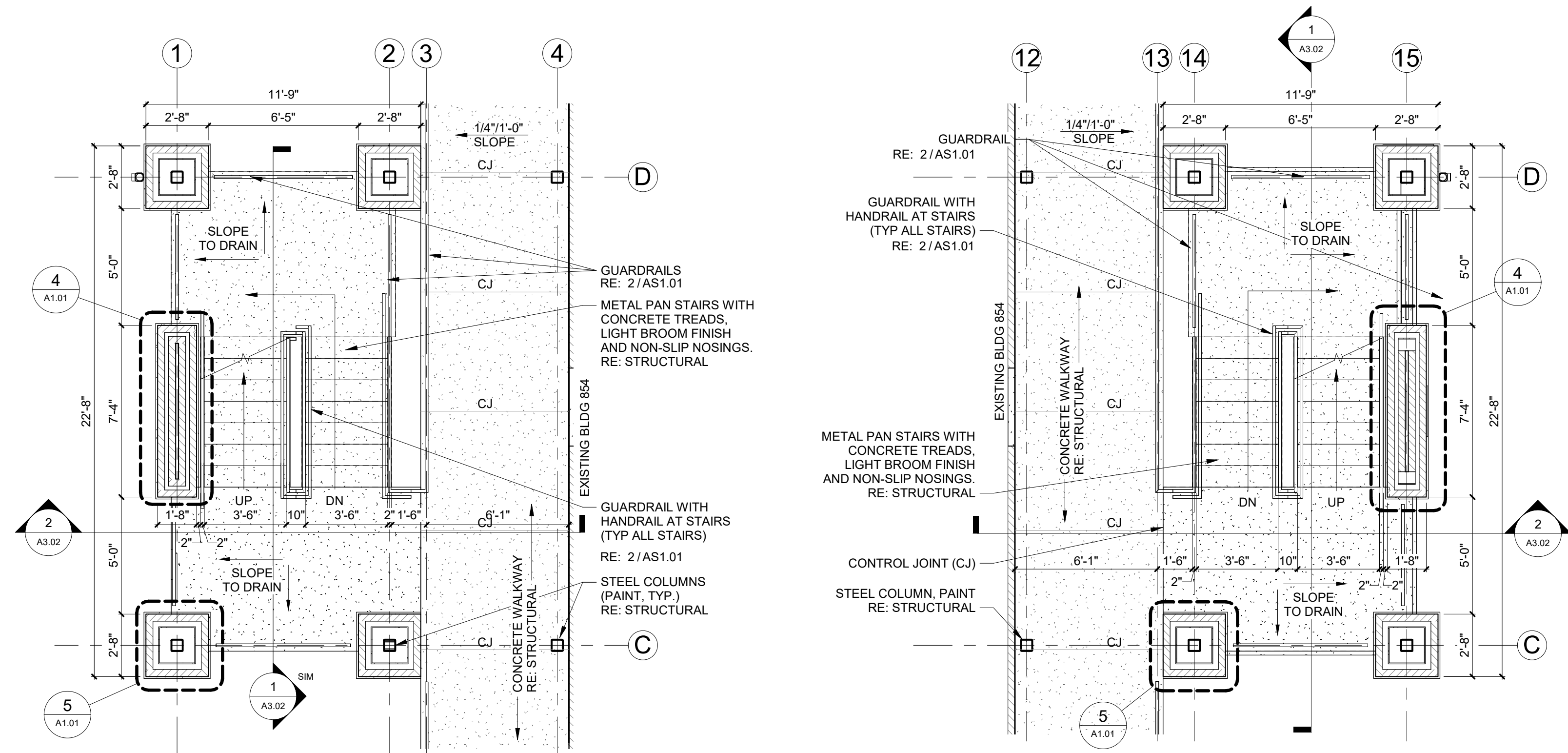
DESIGNED BY
C&A

DATE
29 FEB. 2024

SCALE
AS NOTED

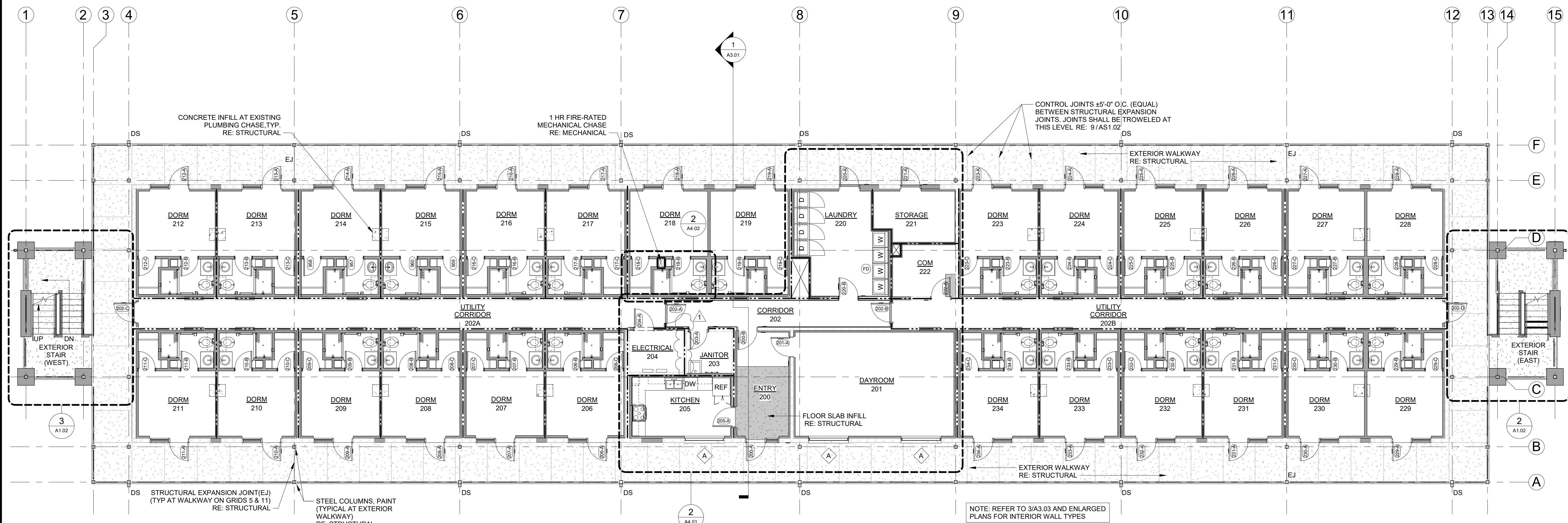
SHEET
A1.02

34 OF 100

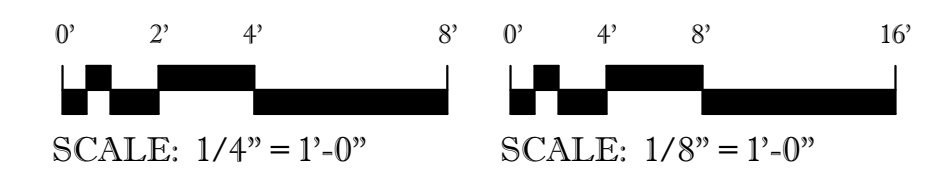


3 ENLARGED EXTERIOR STAIR - WEST
1/4" = 1'-0"

2 ENLARGED EXTERIOR STAIR - EAST
1/4" = 1'-0"



1 SECOND FLOOR - RENOVATION PLAN
1/8" = 1'-0"

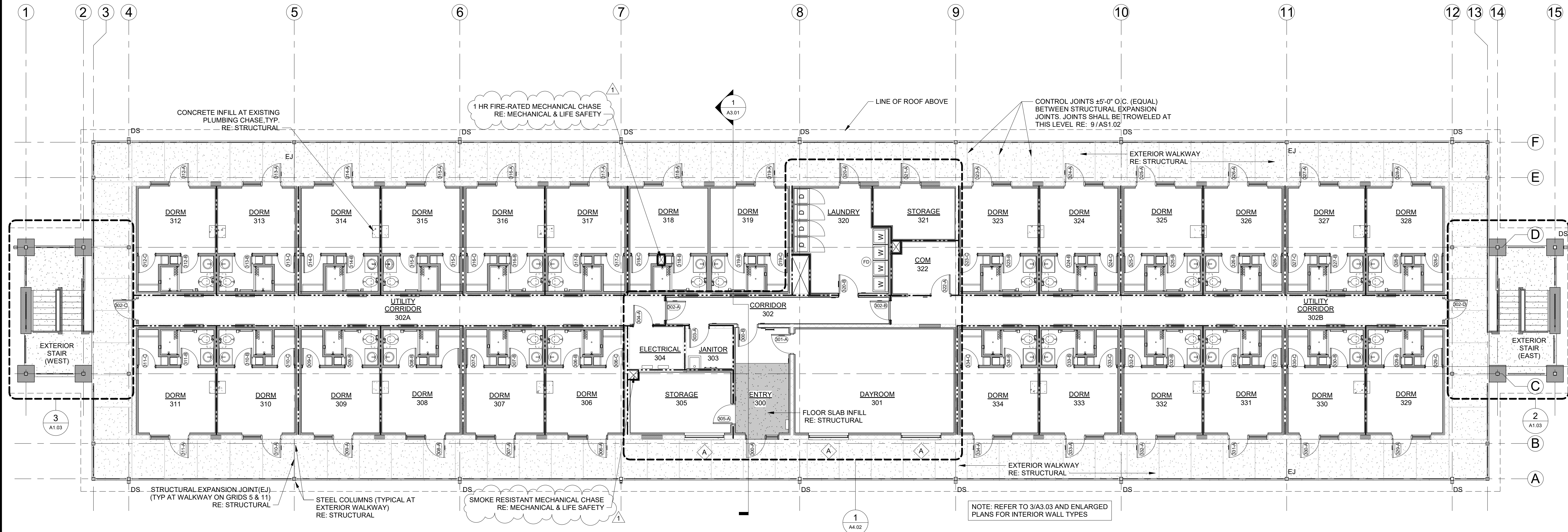
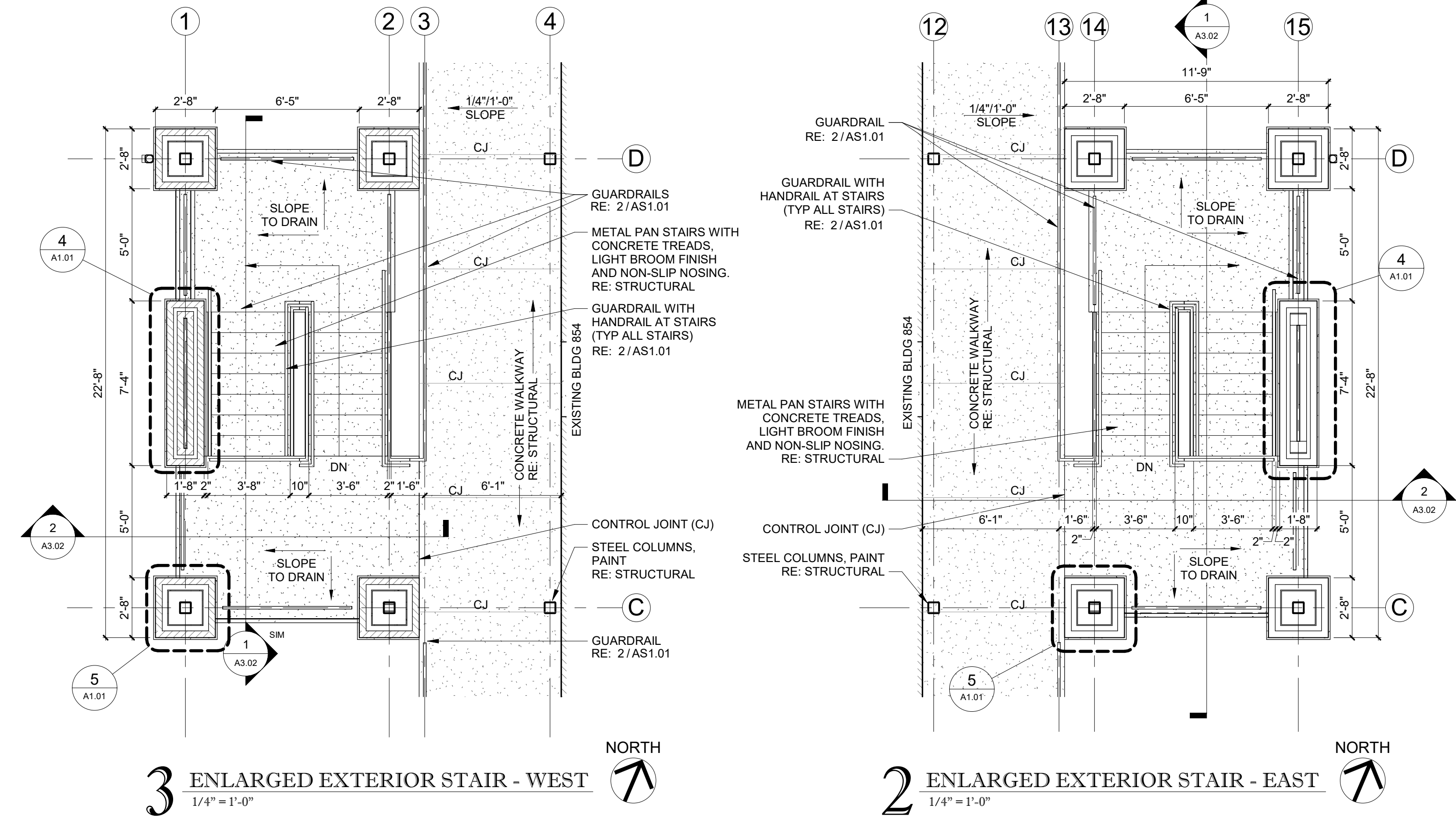
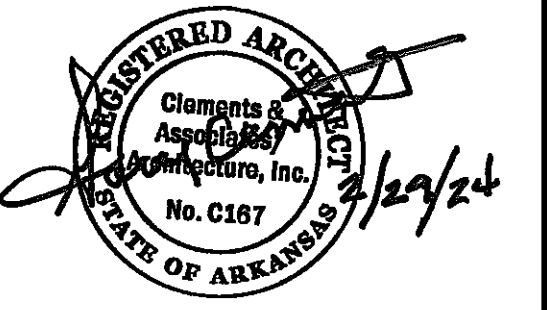




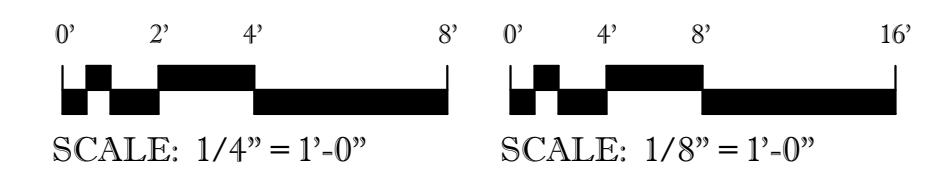
LITTLE ROCK A.F.B.
ARKANSAS

HGL
Construction

CLEMENTS & ASSOCIATES
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-375-3380
WWW.CLEMENTSARCHITECTS.COM



1 THIRD FLOOR - RENOVATION PLAN
1/8" = 1'-0"



No.	Revision/Issue	Date	BY	APPD
1	100 REVISED SUBMITTAL	4/26/24		

REPAIR (SUS) ARMEN DORMITORY BLDG 854

THIRD FLOOR RENOVATION PLANS AND ENLARGED STAIR PLANS

PROJECT TITLE	LEAD DESIGNER
DRAWN BY	C&A
TECH REVIEWER	PROJECT NUMBER
HRS	NKAK 21-1034
DESIGNED BY	SHEET
C&A	
DATE	
29 FEB. 2024	
SCALE	
AS NOTED	

A1.03

35 OF 100



LITTLE ROCK A.F.B.
ARKANSAS

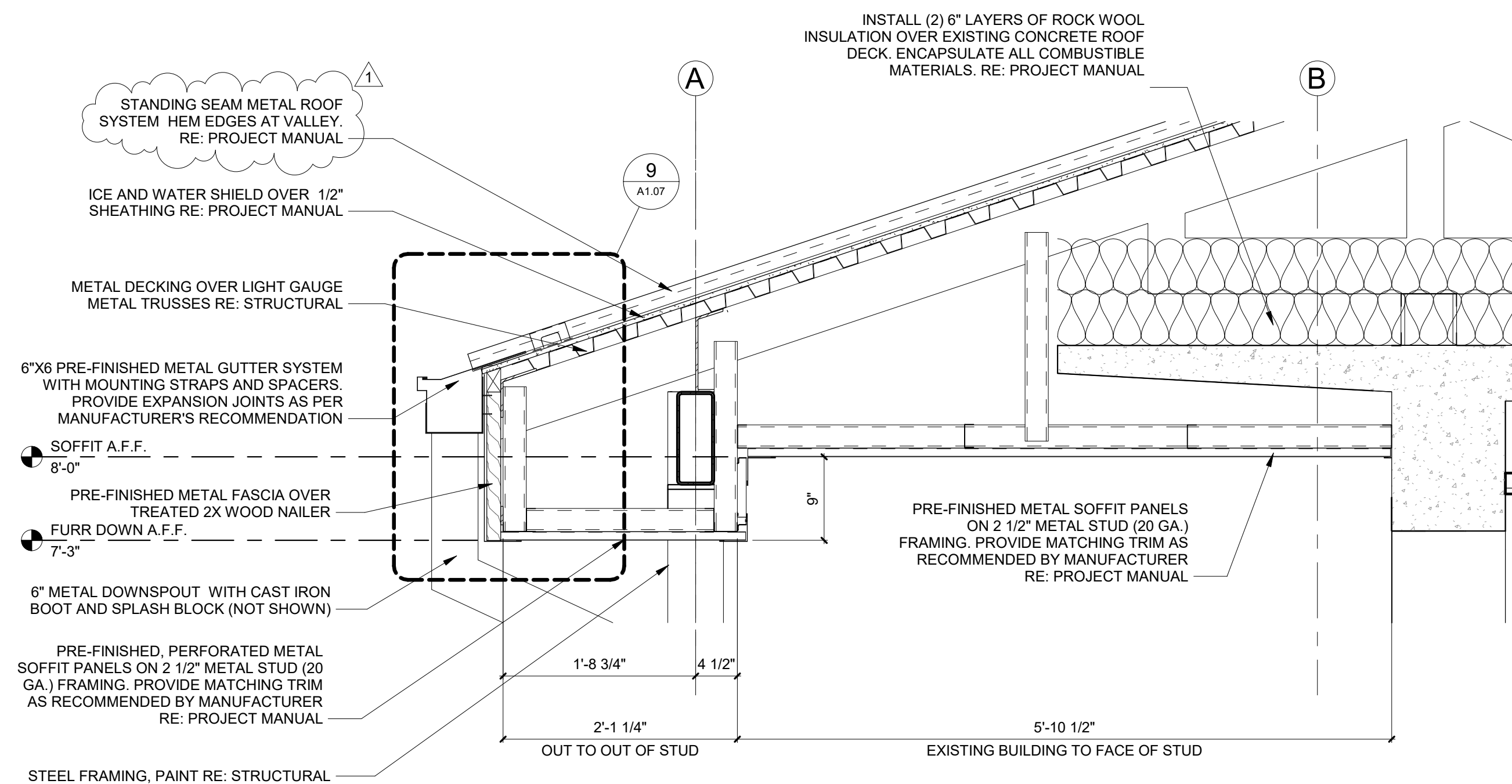
HGL
Construction

CLEMENTS & ASSOCIATES
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-375-3380
WWW.CLEMENTSARCHITECTS.COM

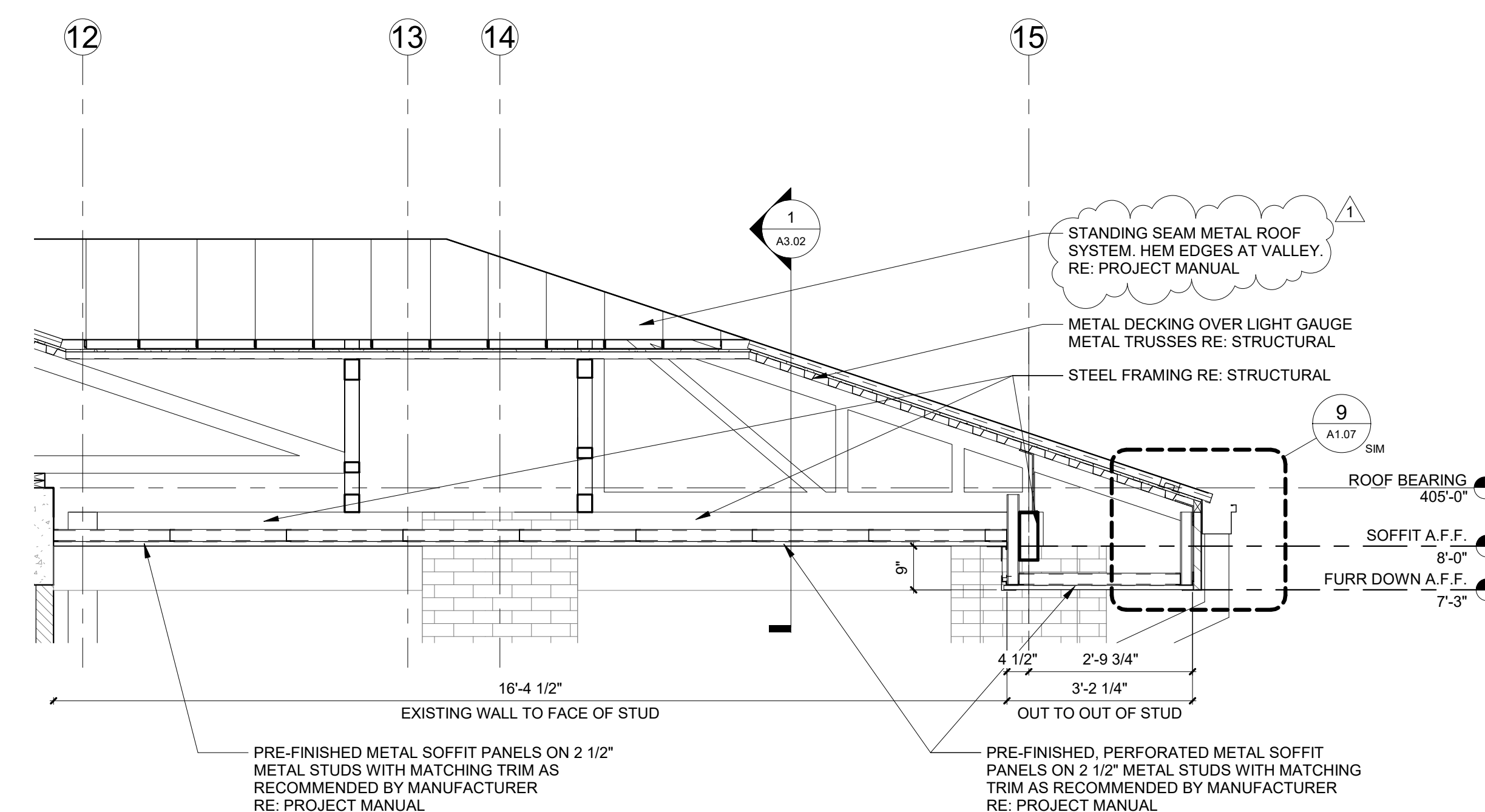


No.	Revision/Issue	Date	BY	APPD
1	100 REVISED SUBMITTAL	4/26/24		

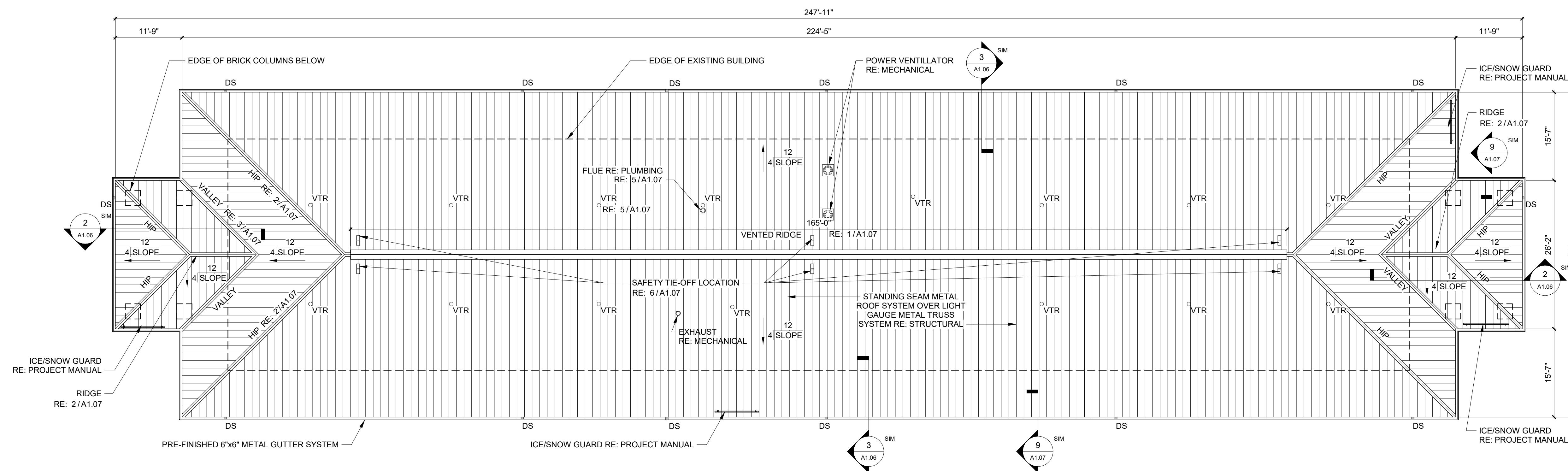
PROJECT TITLE REPAIR (SUS) AIRMEN DORMITORY BLDG 854	SHEET TITLE ROOF PLAN AND DETAILS
DRAWN BY HRS, BD, DR	LEAD DESIGNER C&A
TECH REVIEWER HRS	PROJECT NUMBER NKAK 21-1034
DESIGNED BY C&A	SHEET A1.06
DATE 29 FEB. 2024	SCALE AS NOTED
	38 OF 100



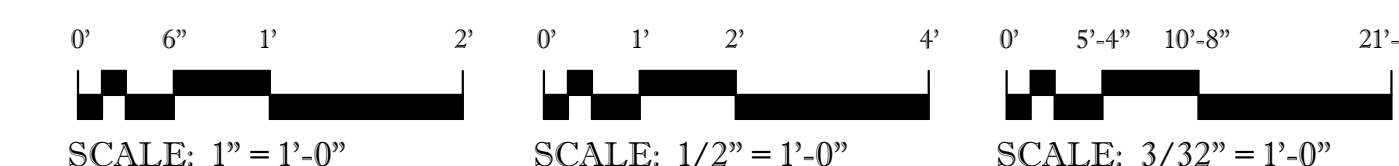
3 EAVE DETAIL AT BALCONY
1" = 1'-0"

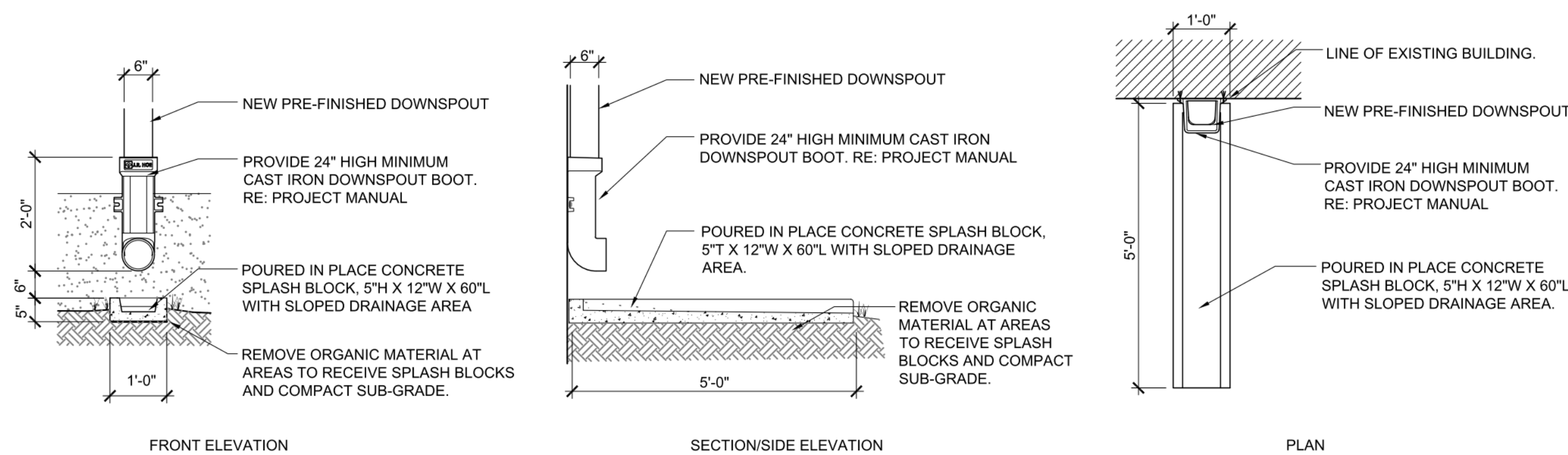


2 SECTION @ EXTERIOR STAIR TOWER ROOF
1/2" = 1'-0"

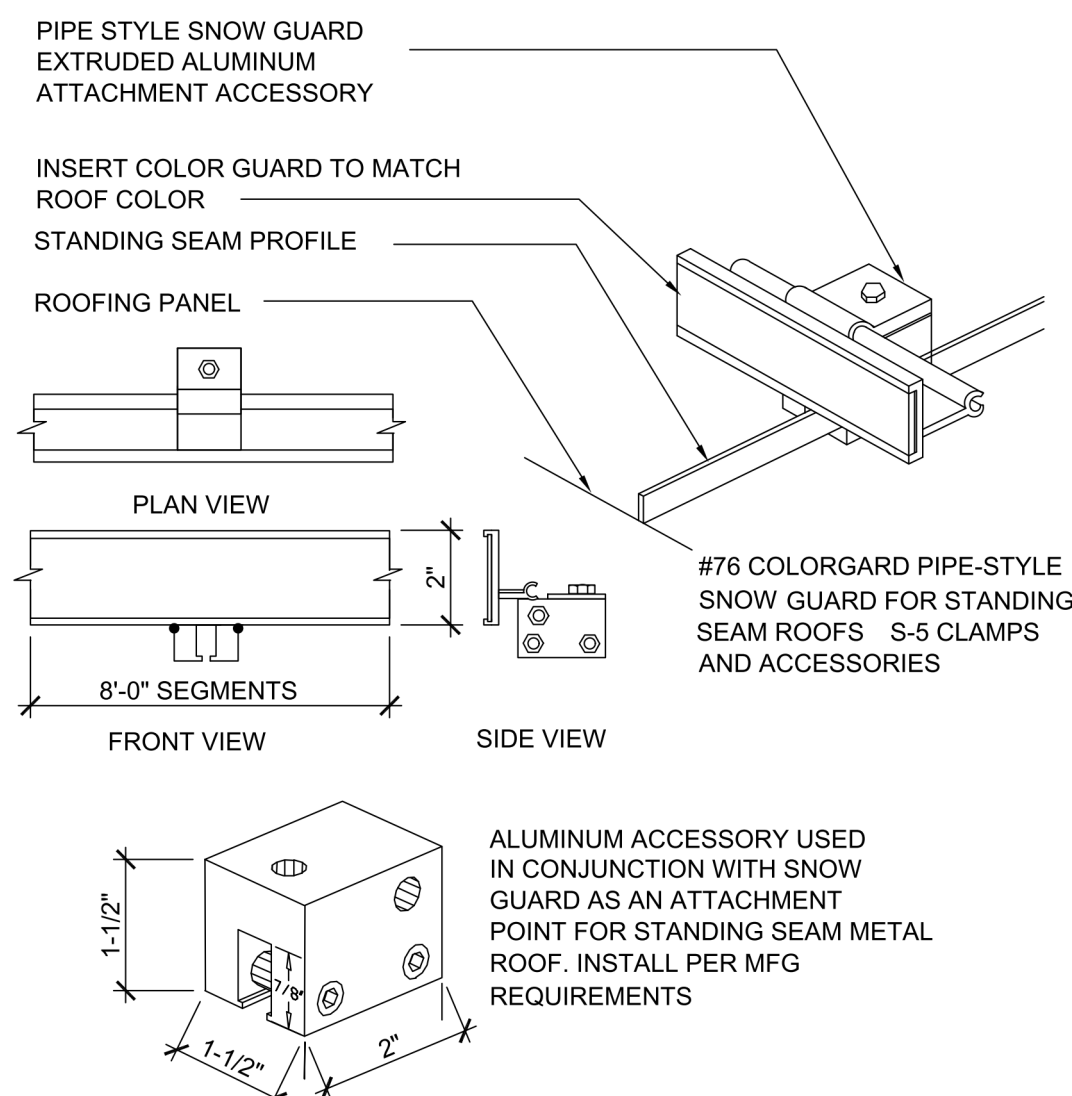


1 ROOF PLAN
3/32" = 1'-0"

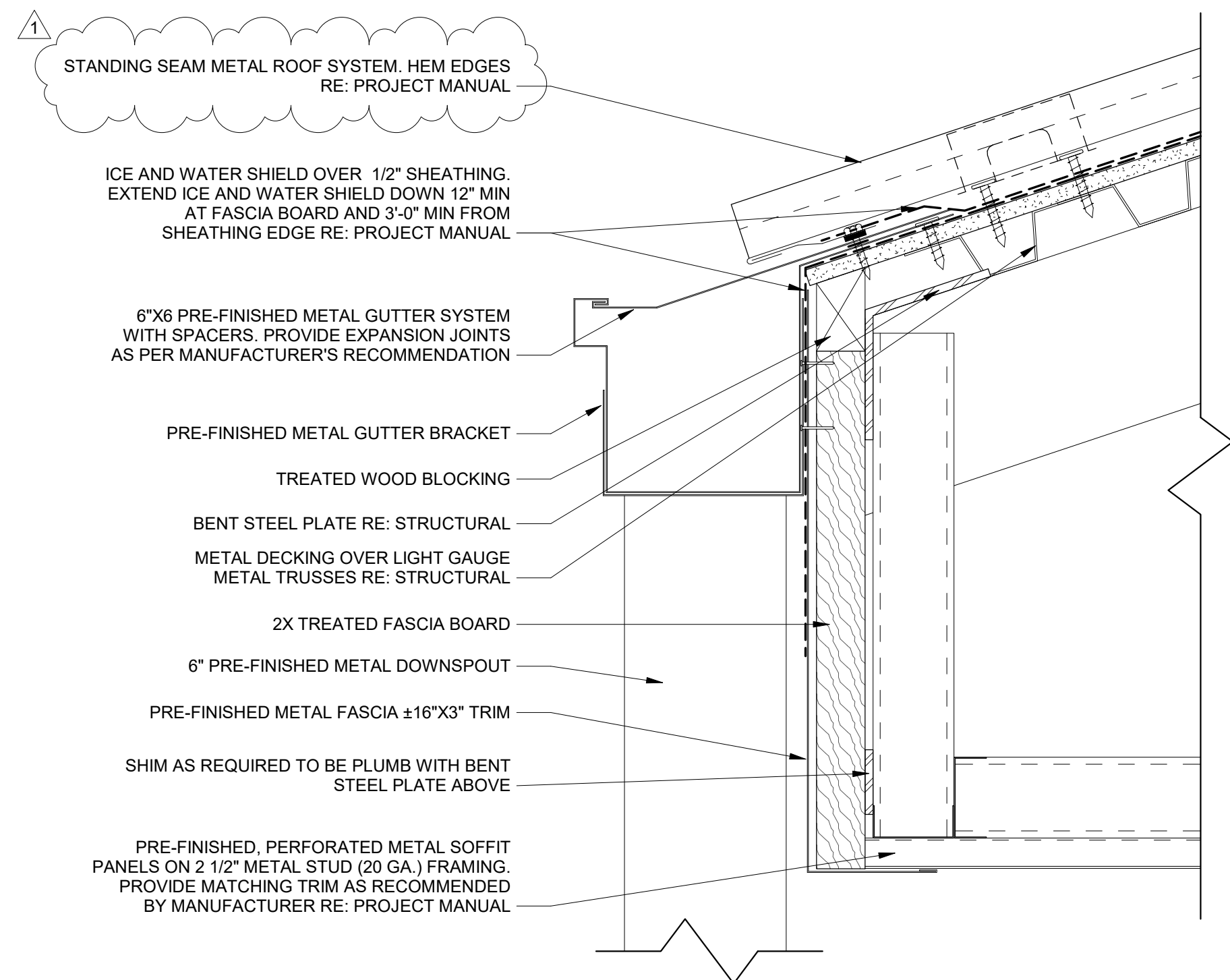




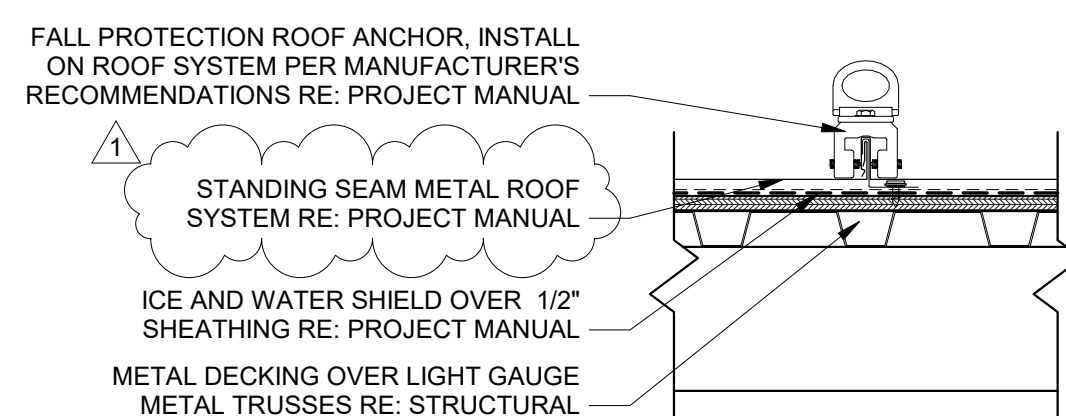
8 DOWNSPOUT BOOT DETAILS
1 1/2" = 1'-0"



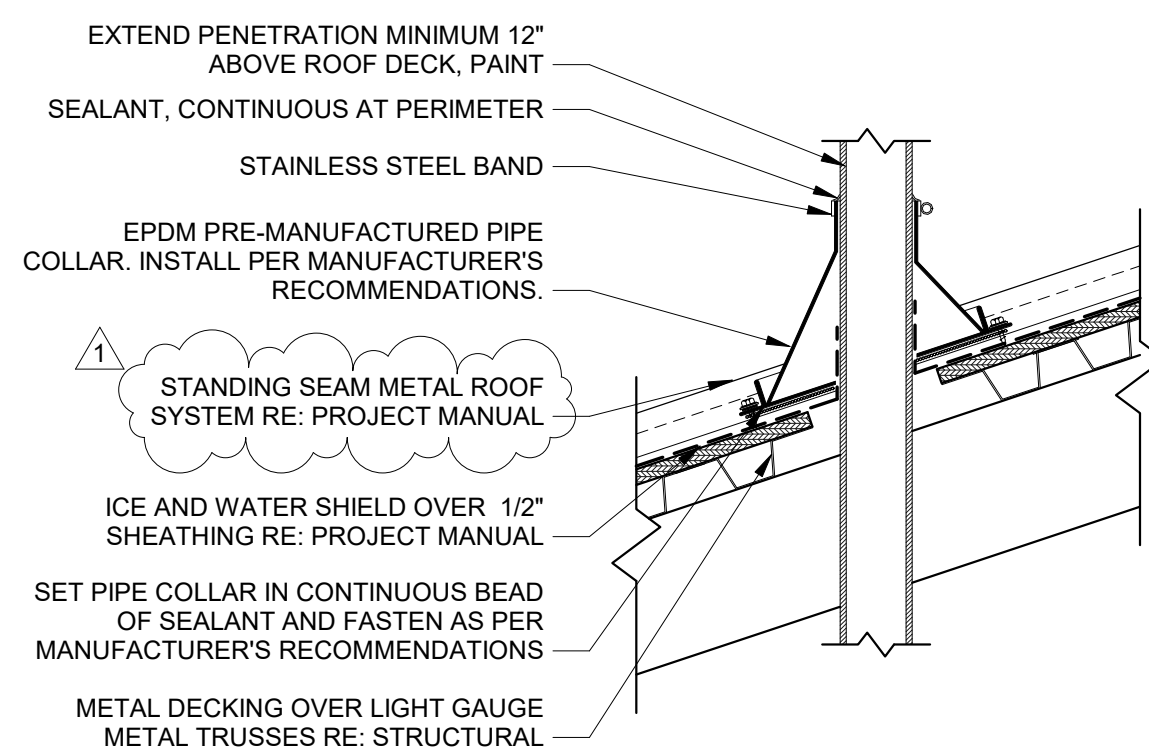
7 SNOW GUARD DETAIL
1 1/2" = 1'-0"



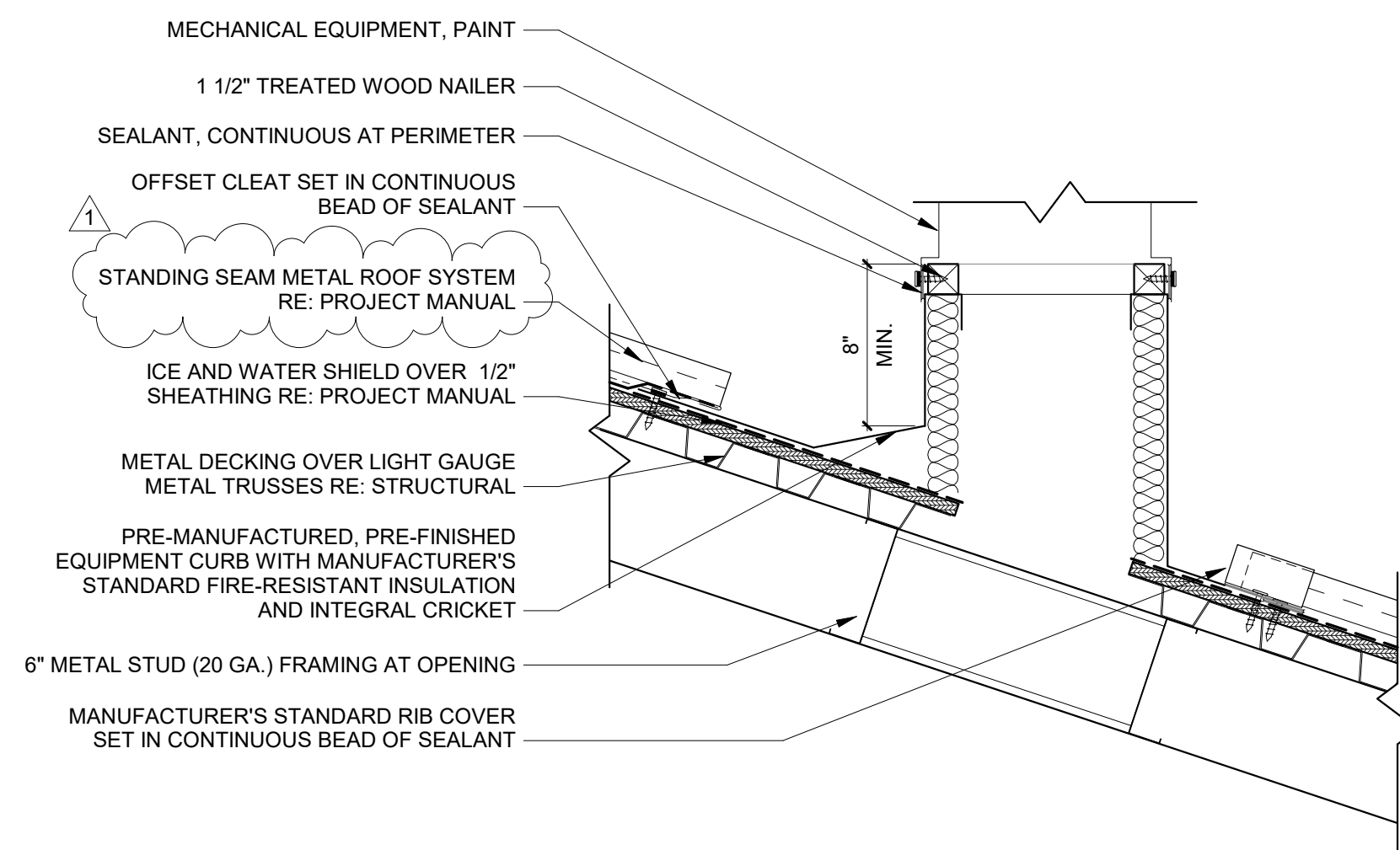
9 GUTTER DETAIL
3" = 1'-0"



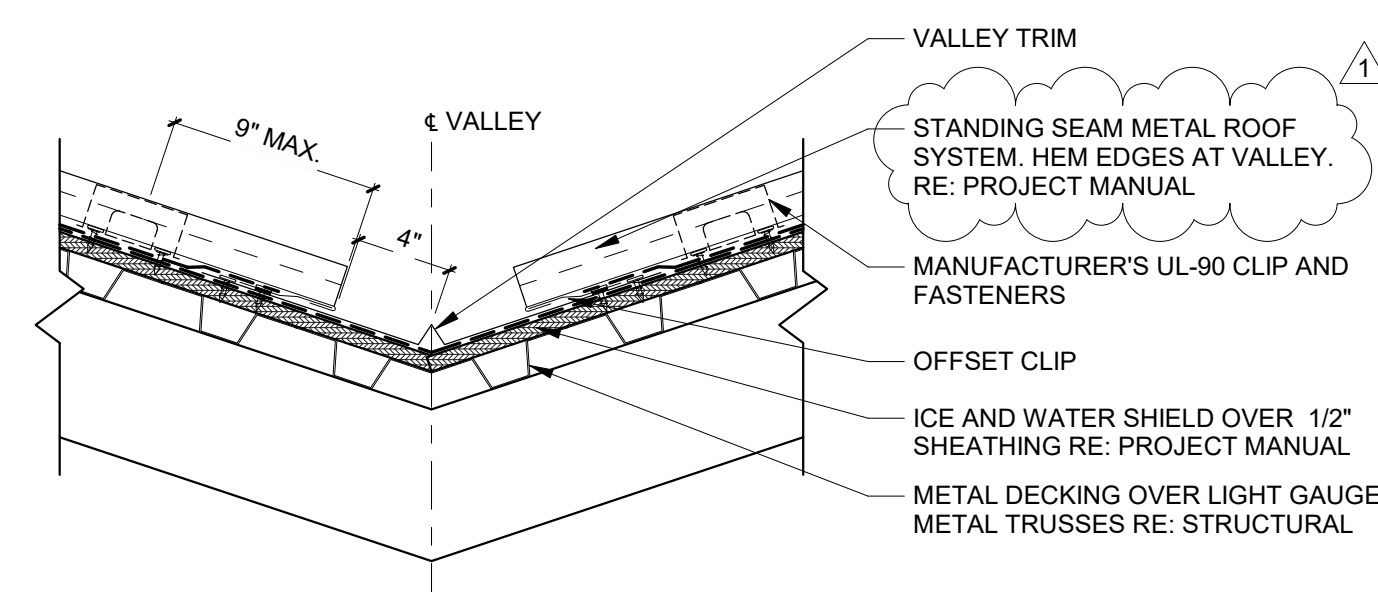
6 SAFETY TIE-OFF DETAIL
1 1/2" = 1'-0"



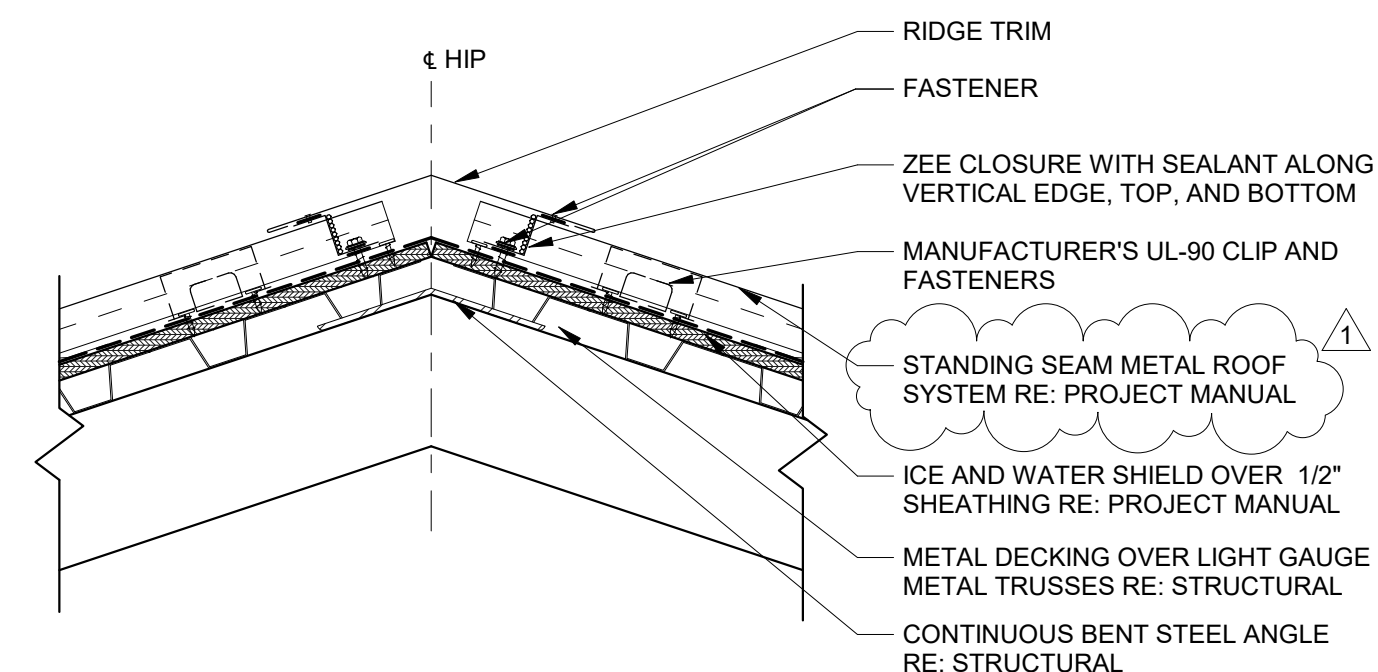
5 ROOF PENETRATION DETAIL
1 1/2" = 1'-0"



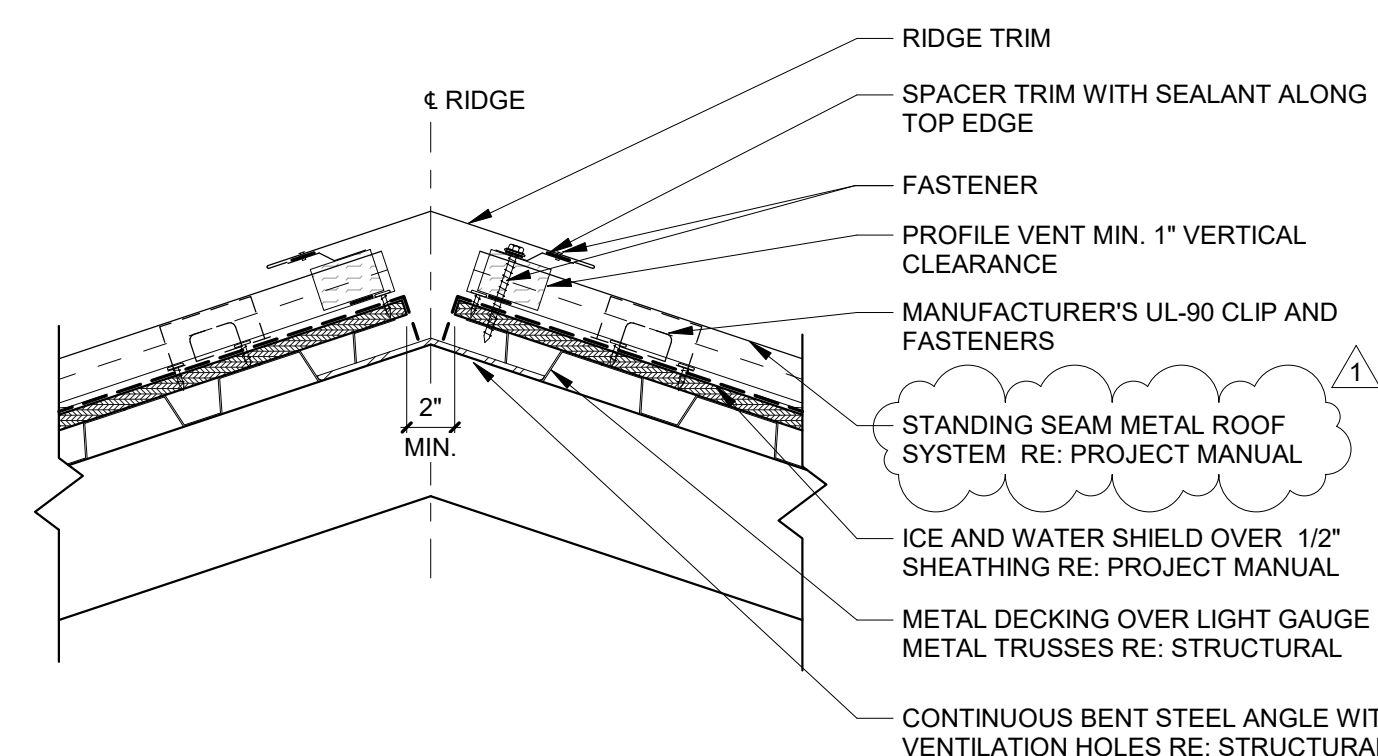
4 MECHANICAL CURB DETAIL
1 1/2" = 1'-0"



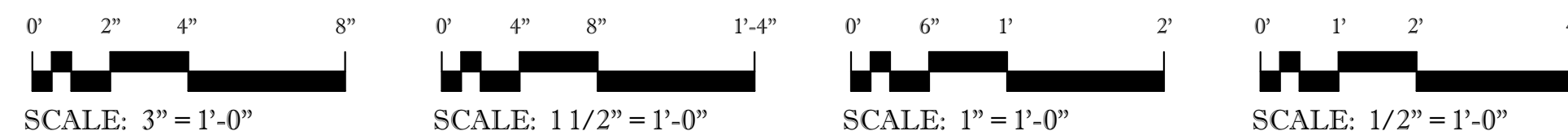
3 ROOF VALLEY DETAIL
1 1/2" = 1'-0"



2 ROOF HIP DETAIL
1 1/2" = 1'-0"



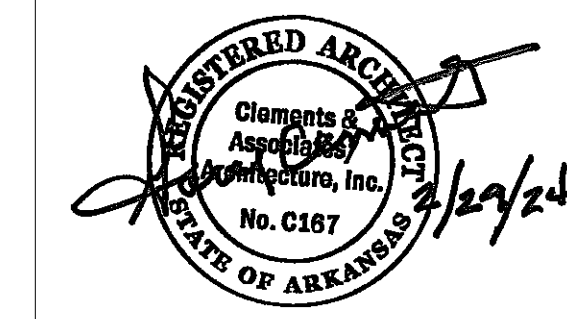
1 VENTED RIDGE DETAIL
1 1/2" = 1'-0"



LITTLE ROCK A.F.B.
ARKANSAS

HGL
Construction

CLEMENTS
& ASSOCIATES
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-375-3380
WWW.CLEMENTSARCHITECTS.COM



PROJECT TITLE	DATE	BY	APPD
REPAIR (SUS) ARMEN DORMITORY BLDG 854	4/26/24		
100 REVISED SUBMITTAL	REVISION/ISSUE	DATE	BY
1			

PROJECT TITLE	SHEET TITLE
REPAIR (SUS) ARMEN DORMITORY BLDG 854	ROOF DETAILS
DRAWN BY	LEAD DESIGNER
HRS, BD, DR	C&A
TECH REVIEWER	PROJECT NUMBER
HRS	NKAK 21-1034
DESIGNED BY	SHEET
C&A	
DATE	
29 FEB. 2024	
SCALE	
AS NOTED	

A1.07
39 OF 100



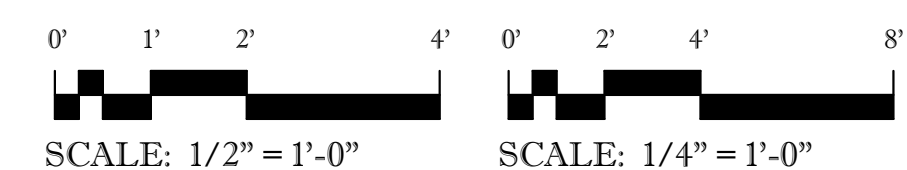
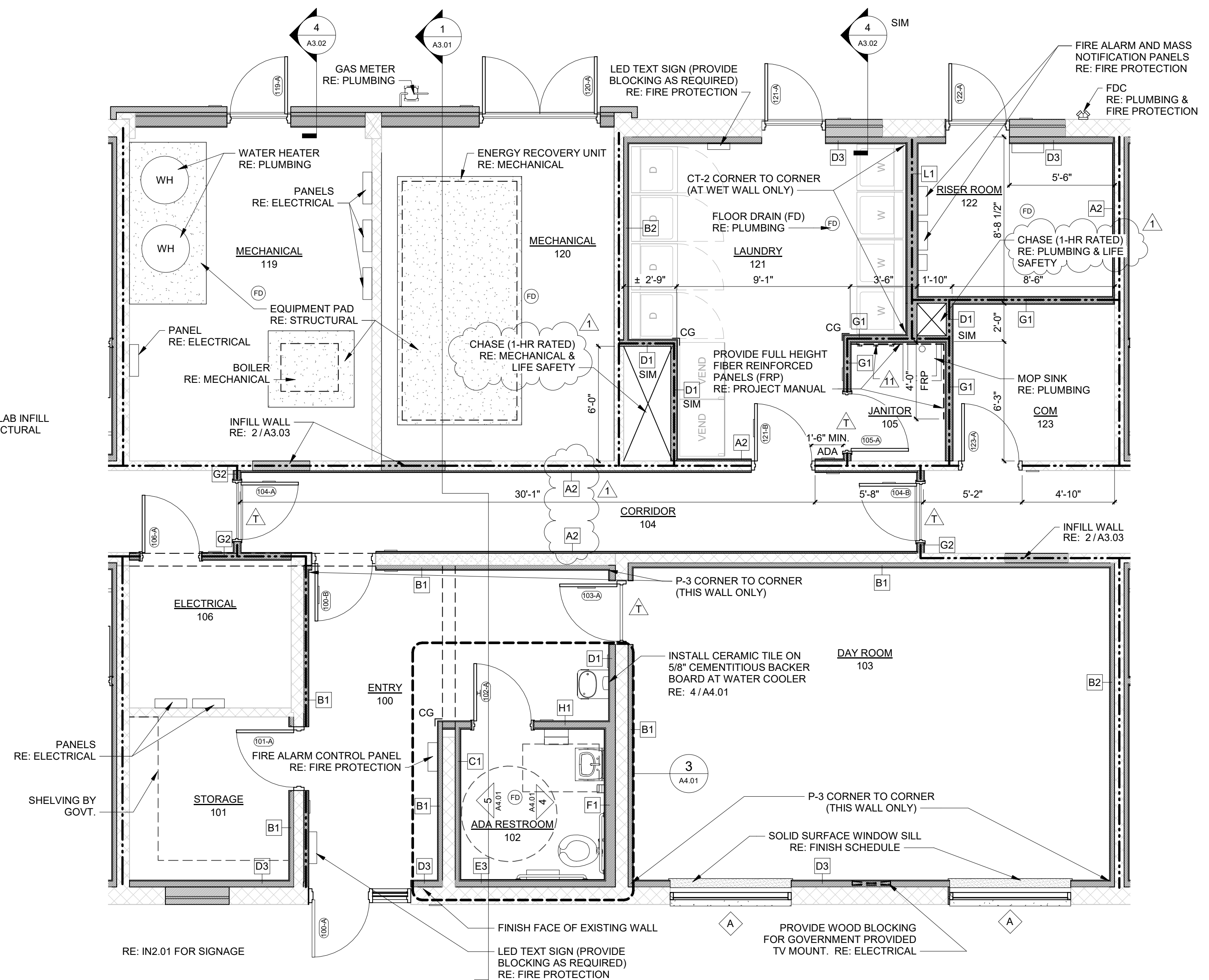
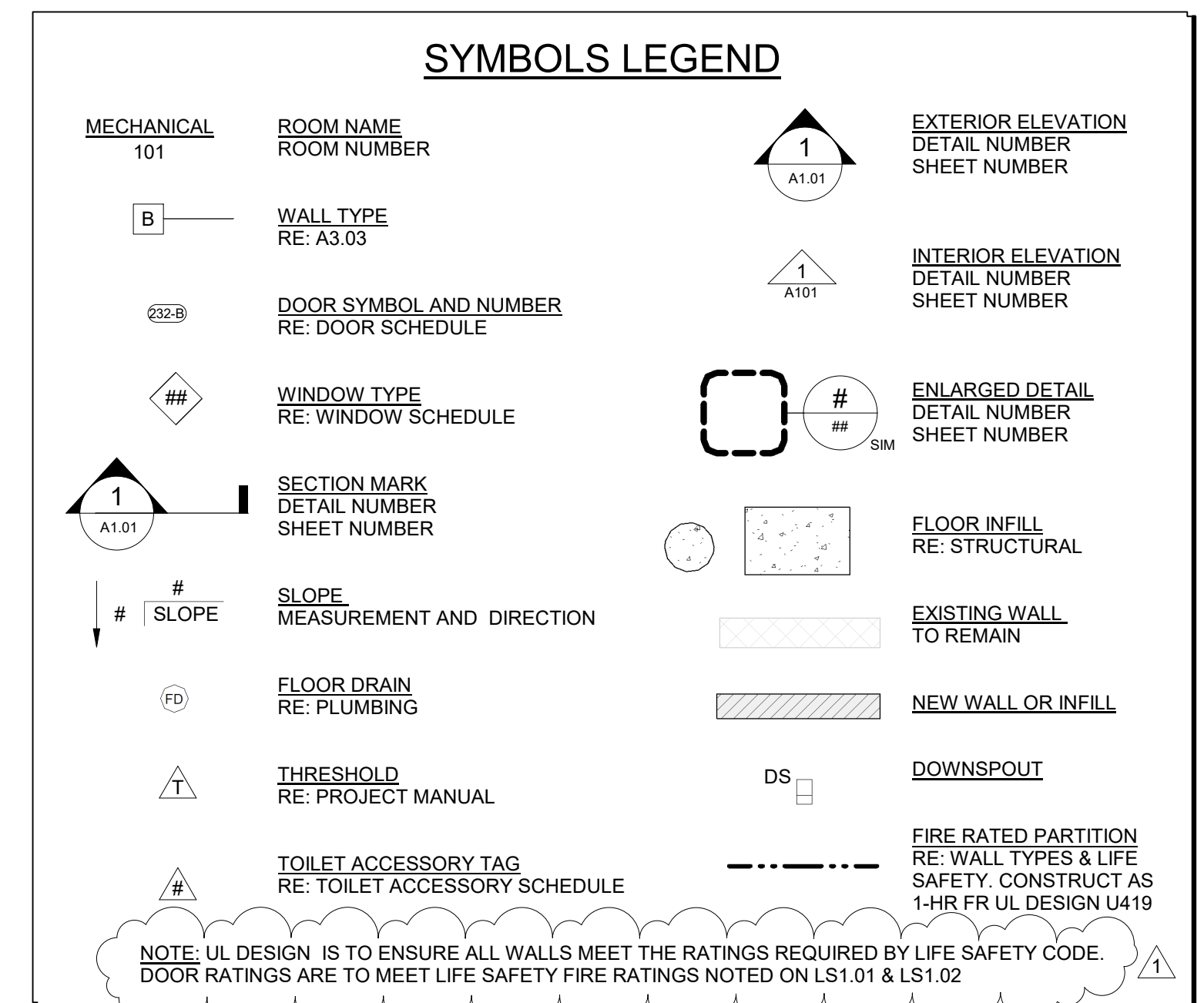
REGISTERED ARCHITECT
Clements & Associates, Inc.
No. C167
STATE OF ARKANSAS
3/29/24

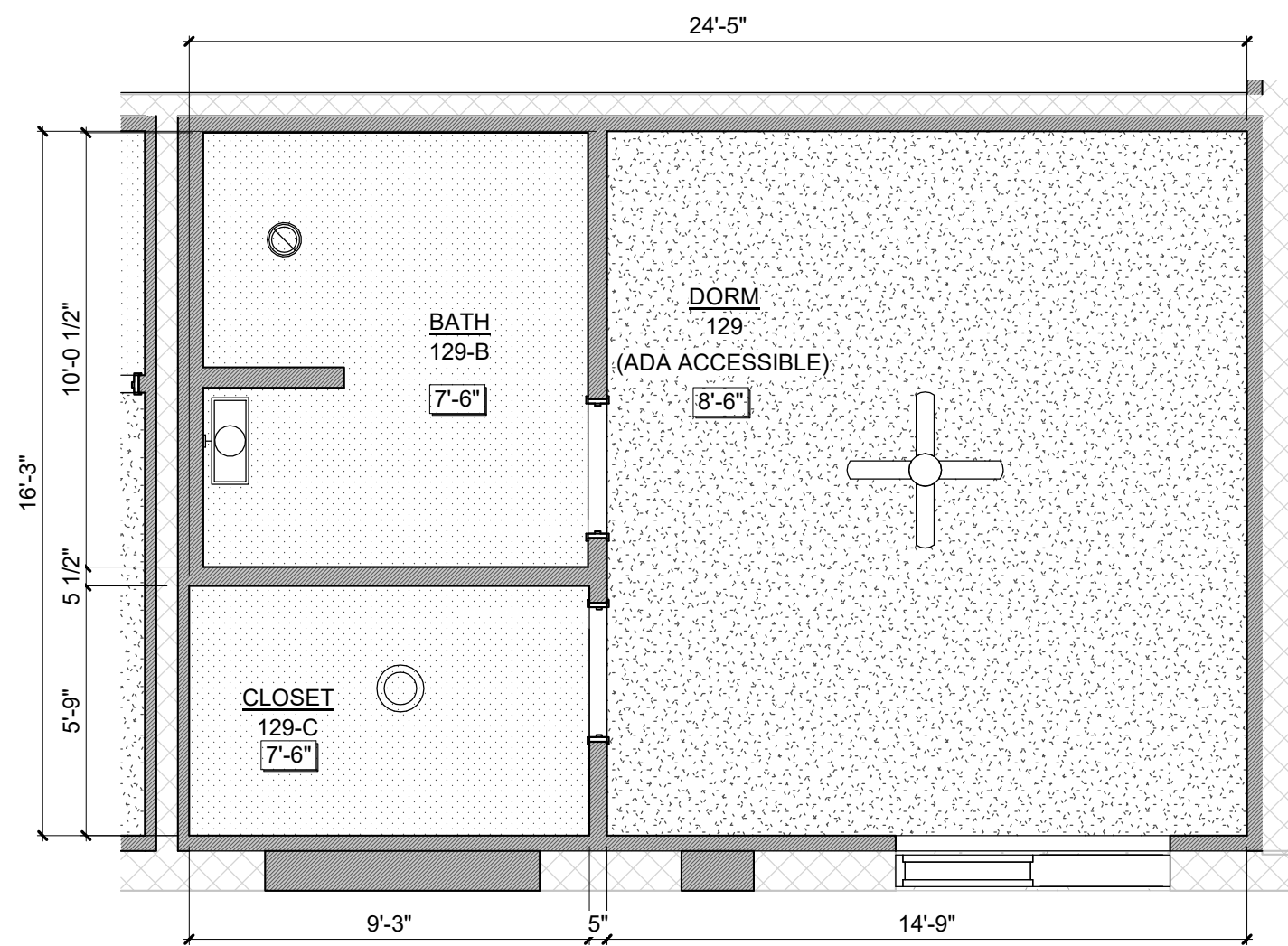
No.	Revision/Issue	Date	BY	APPD
1	100 REV/ISED SUBMITTAL	4/26/24		

PROJECT TITLE
REPAIR (SUS) ARMEN
DORMITORY BLDG 854

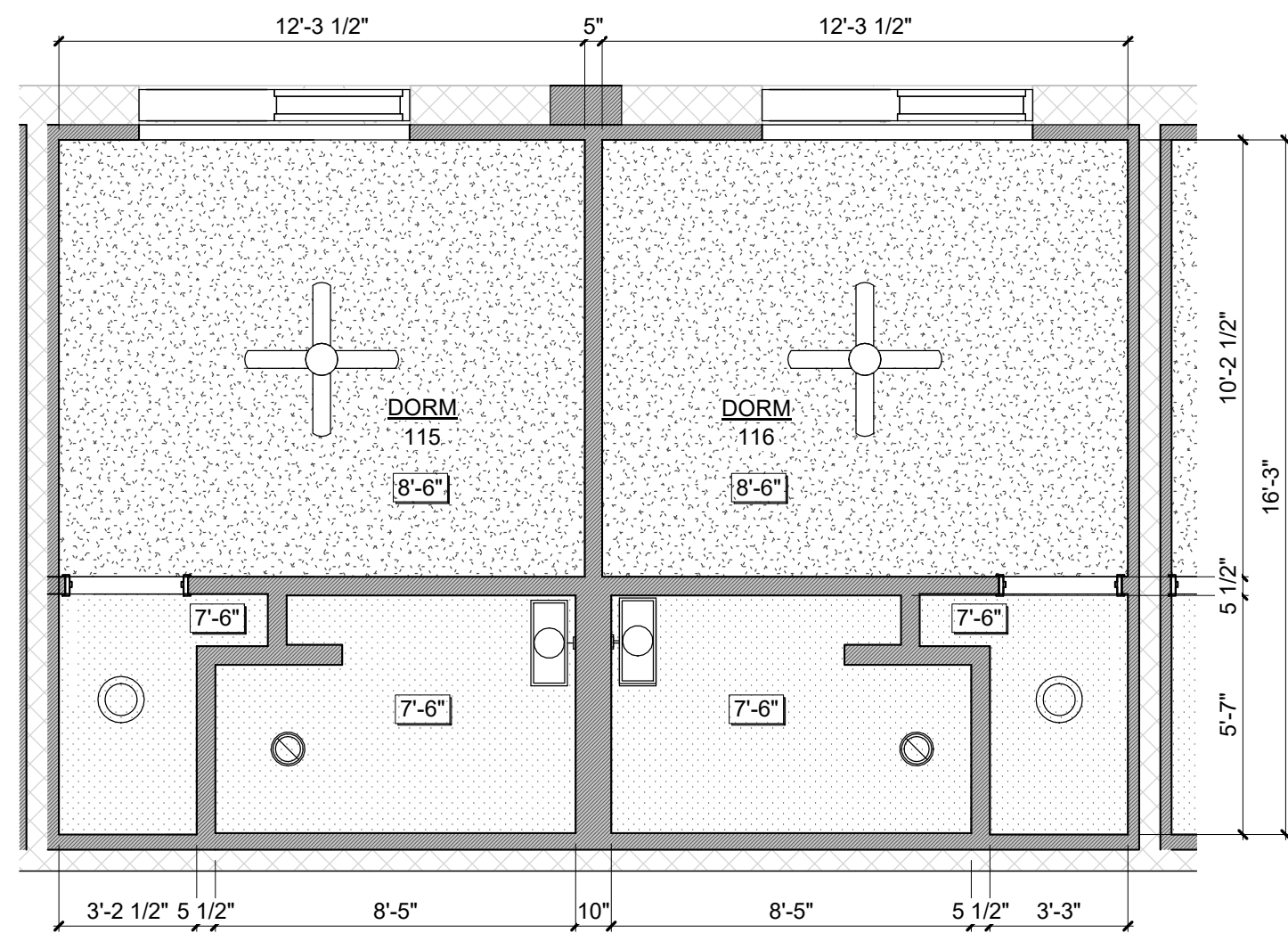
ENLARGED PLANS

DRAWN BY HRS, BD, DR	LEAD DESIGNER C&A
TECH REVIEWER HRS	PROJECT NUMBER NKAK 21-1034
DESIGNED BY C&A	SHEET A4.01
DATE 29 FEB. 2024	
SCALE AS NOTED	45 OF 100

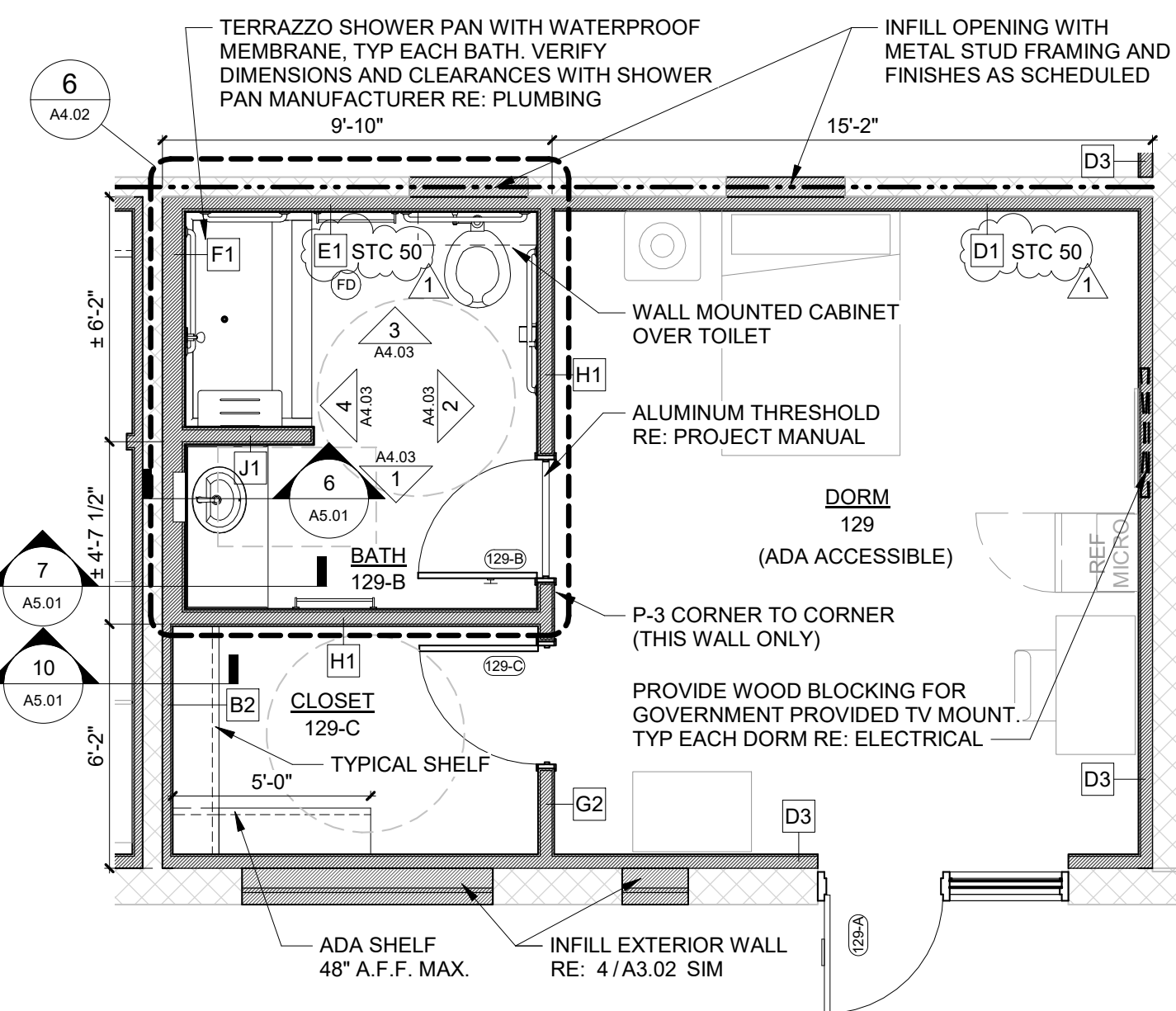




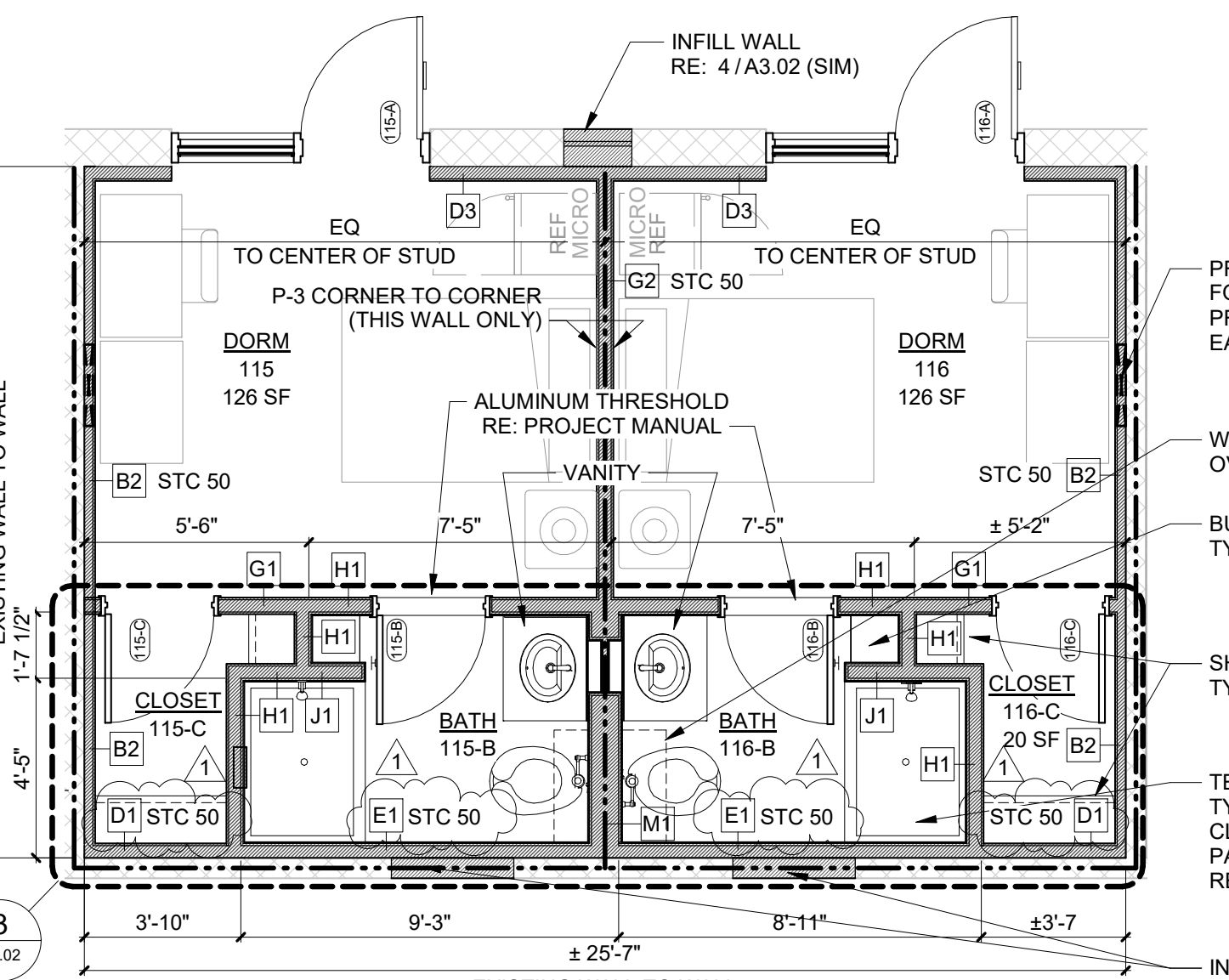
8 TYPICAL ADA DORM REFLECTED CEILING PLAN
1/4" = 1'-0"



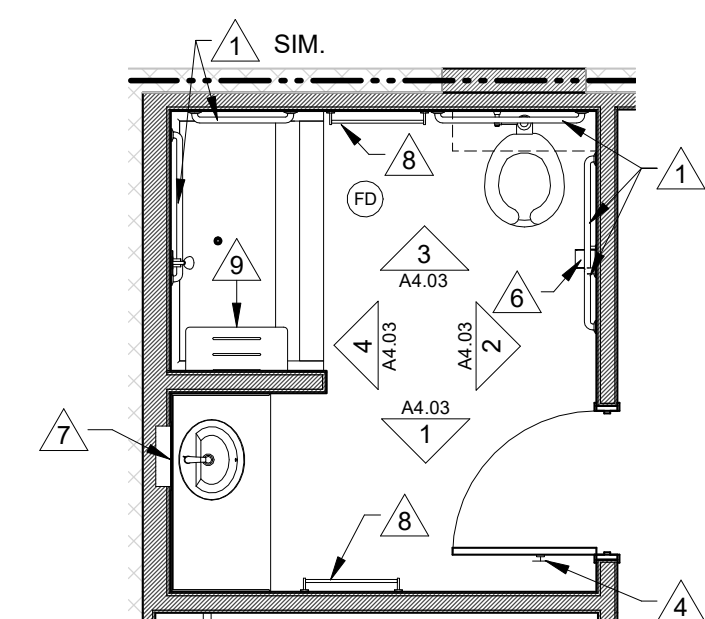
5 TYPICAL DORM REFLECTED CEILING PLAN
1/4" = 1'-0"



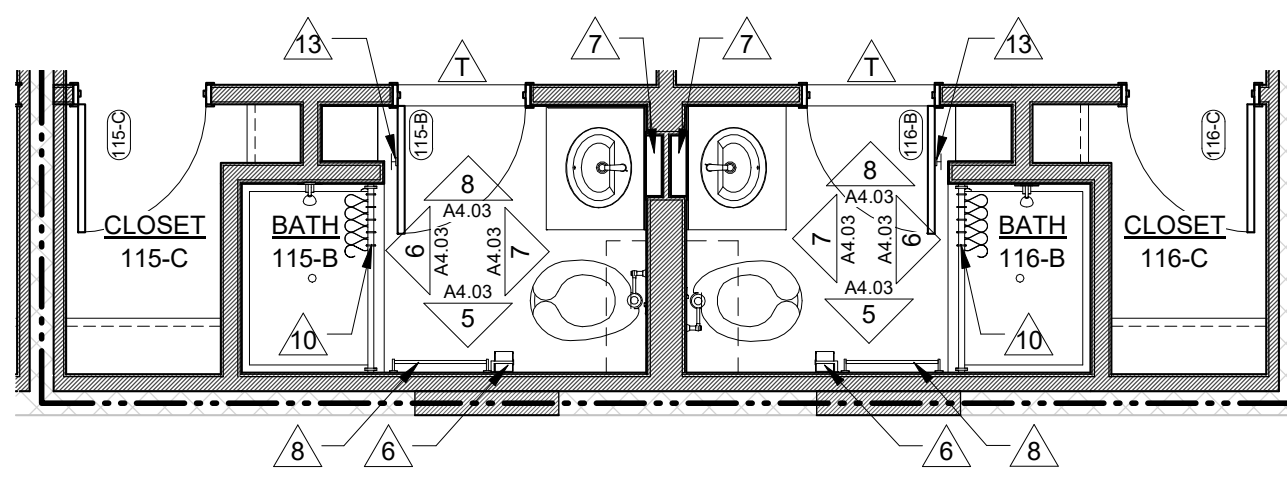
7 TYPICAL ADA DORM DIMENSION PLAN
1/4" = 1'-0"



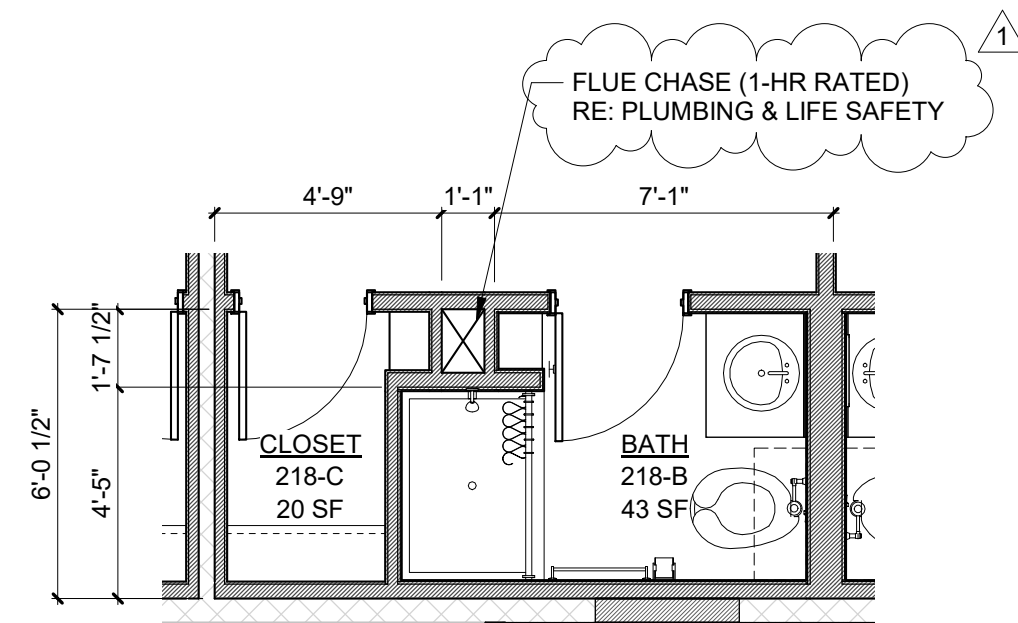
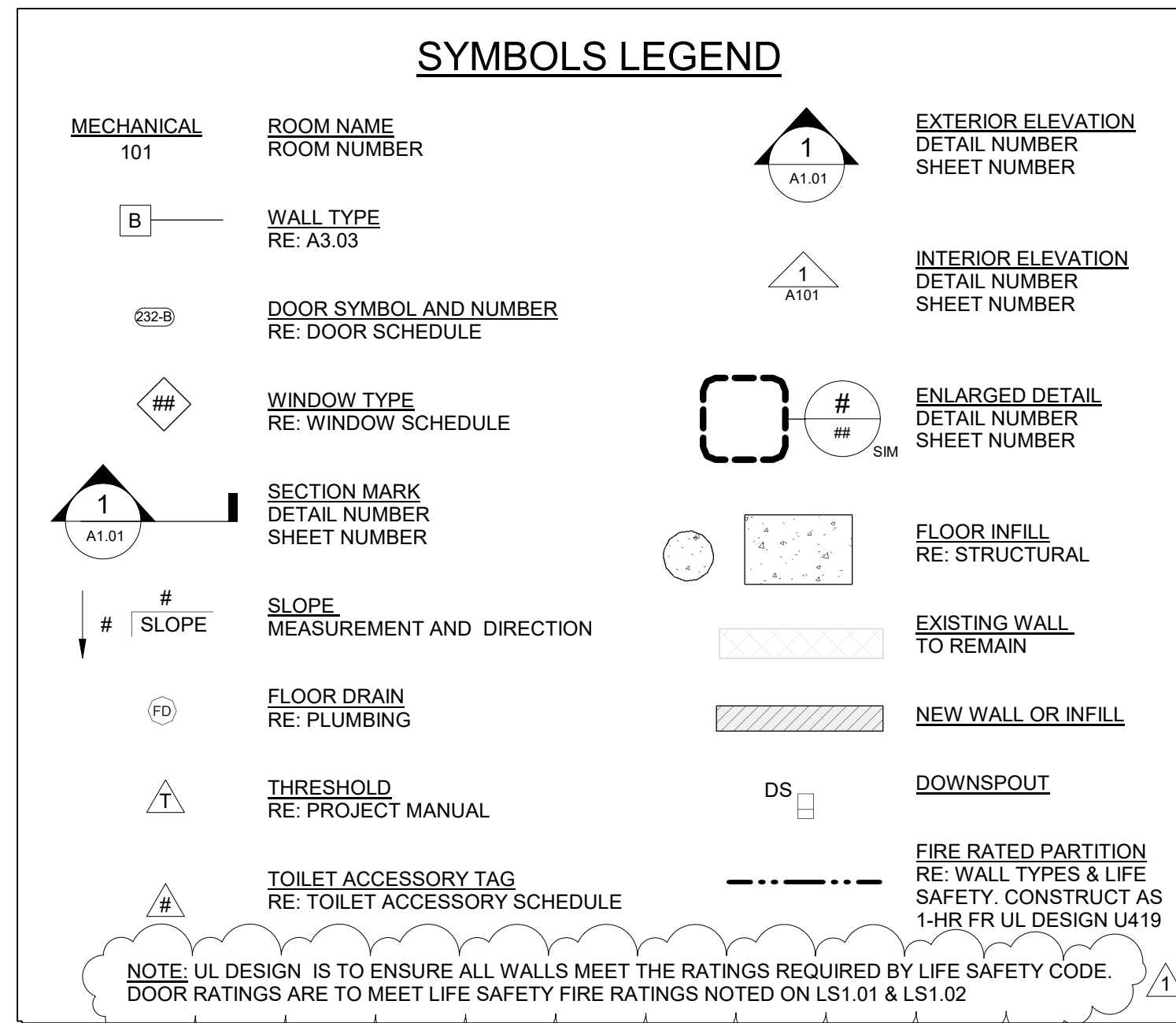
4 TYPICAL DORM DIMENSION PLAN
1/4" = 1'-0"



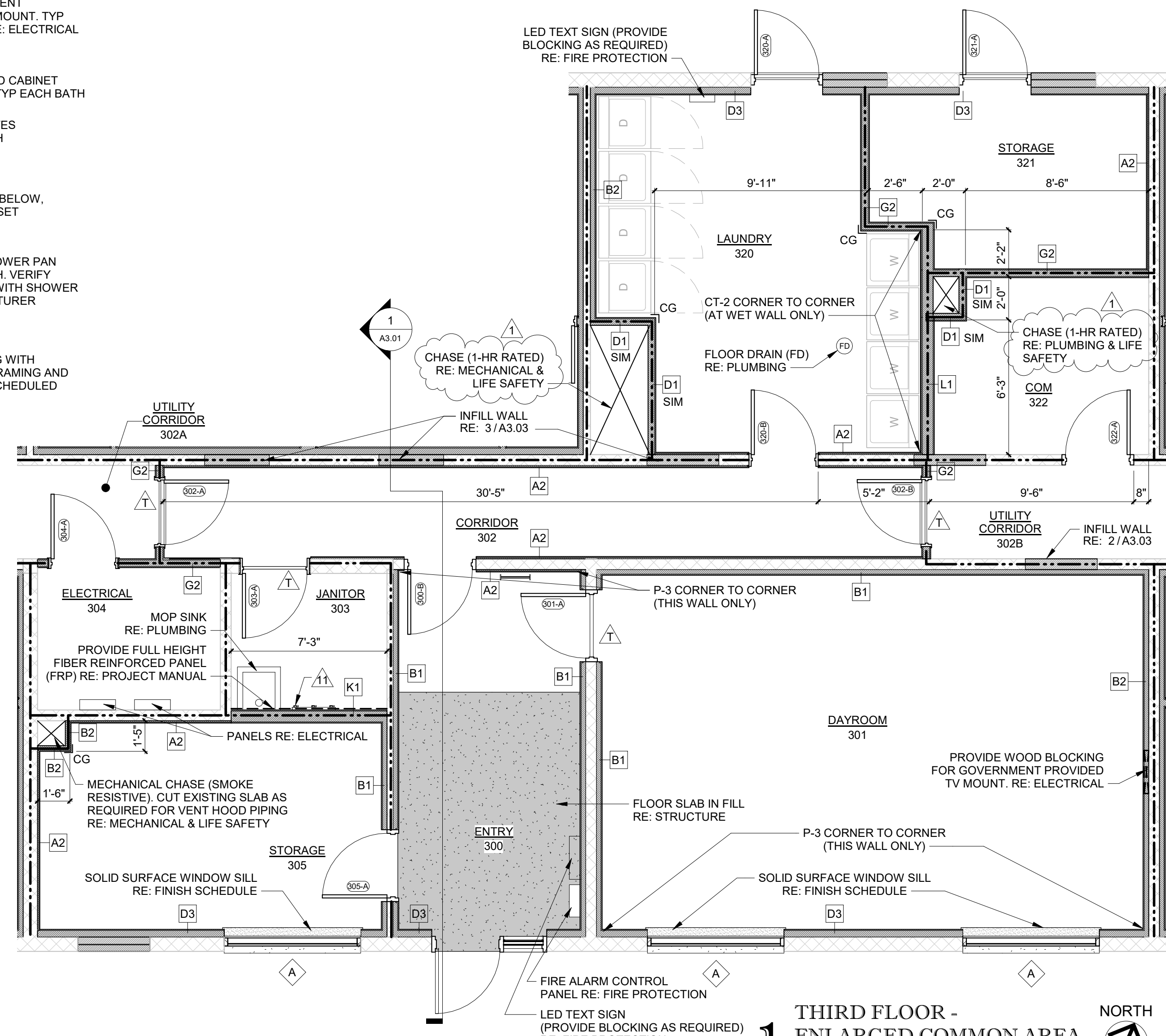
6 TYPICAL ADA DORM TOILET ACCESSORY PLAN
1/4" = 1'-0"



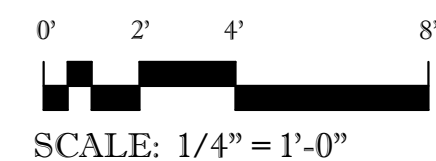
3 TYPICAL DORM TOILET ACCESSORY PLAN
1/4" = 1'-0"



2 SECOND & THIRD DIMENSION FLOOR PLAN AT FLUE CHASE
1/4" = 1'-0"



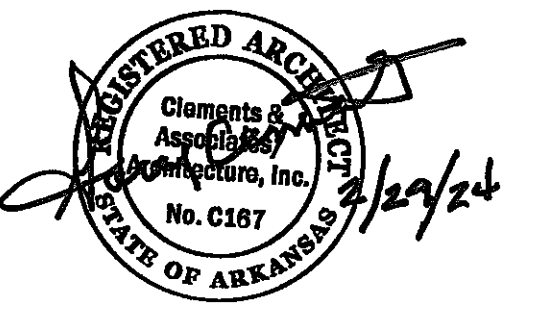
1 THIRD FLOOR - ENLARGED COMMON AREA
1/4" = 1'-0"



LITTLE ROCK A.F.B.
ARKANSAS

HGL
Construction

CLEMENTS
& ASSOCIATES
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-375-3380
WWW.CLEMENTSARCHITECTS.COM



PROJECT TITLE	REPAIR (SUS) AIRMEN DORMITORY BLDG 854
SHEET TITLE	ENLARGED PLANS
DRAWN BY	HRS, BD, DR
TECH REVIEWER	HRS
DESIGNED BY	C&A
DATE	29 FEB. 2024
SCALE	AS NOTED
BY	APPD
Date	4/26/24
Revision/Issue	100 REVISED SUBMITTAL
No.	1

REPAIR (SUS) AIRMEN
DORMITORY BLDG 854

ENLARGED PLANS

LEAD DESIGNER
C&A
PROJECT NUMBER
NKA 21-1034
SHEET
A4.02
46 OF 100



REGISTERED ARCHITECT
Clements & Associates
Architecture, Inc.
No. C167
STATE OF ARKANSAS
2/29/24

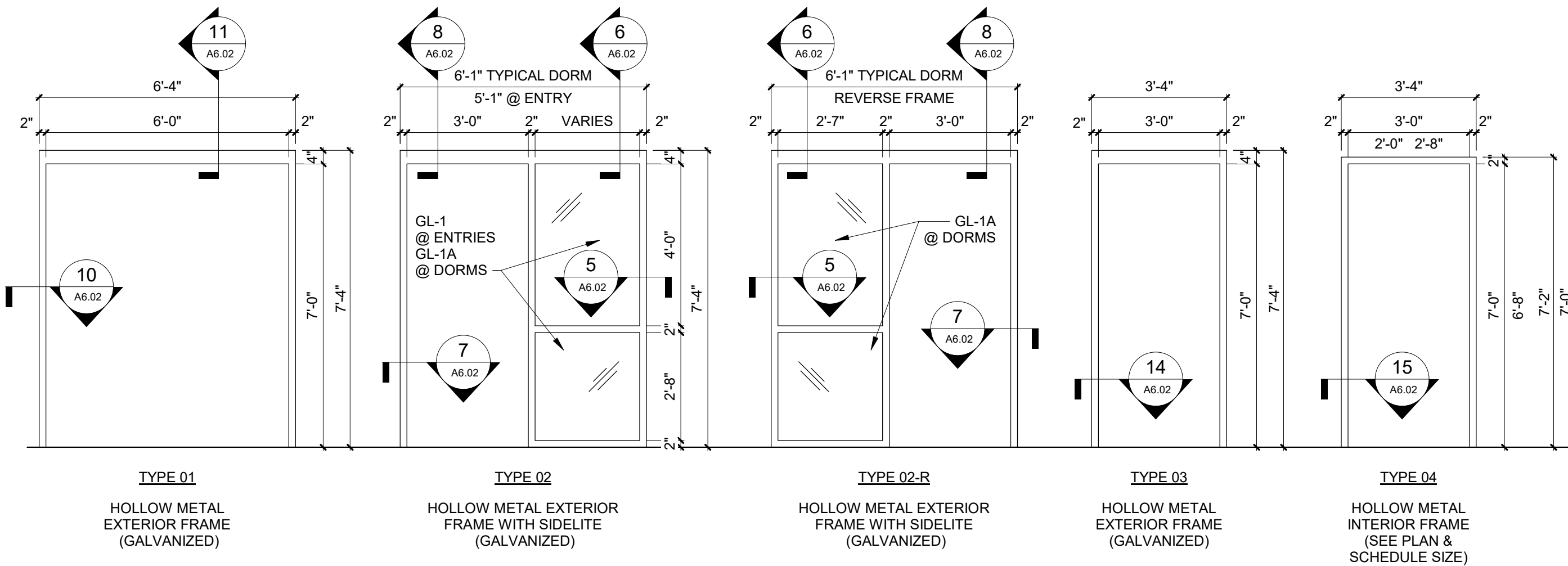
No.	Revision/Issue	Date	BY	APP'D
1	100 REVISED SUBMITTAL	4/26/24		

REPAIR (SUS) ARMEN
DORMITORY BLDG 854

DOOR, FRAME, & WINDOW
ELEVATIONS, AND SCHEDULES

DRAWN BY HRS, BD, DR	LEAD DESIGNER C&A
TECH REVIEWER HRS	PROJECT NUMBER NKAK 21-1034
DESIGNED BY C&A	SHEET A6.01
DATE 29 FEB. 2024	
SCALE	49 OF 100
AS NOTED	

DOOR SCHEDULE - SECOND FLOOR															
		OPENING SIZE		DOOR		FRAME		DETAILS				FIRE RATING	HARDWARE SET	NOTES	
MARK	WIDTH	HEIGHT	TYPE	MATERIAL	FINISH	GLAZING	TYPE	MATERIAL	FINISH	GLAZING	HEAD				JAMB
200-A	3'-0"	7'-0"	D	HM	P-4	GL-1	02	HM	P-4	GL-1	8/A6.02 6/A6.02	7/A6.02 5/A6.02	9/A6.02 4/A6.02		HW-05
200-B	3'-0"	6'-8"	E	SCW	WD-1	----	ETR	HM	P-4	----	22/A6.02	22/A6.02	----		HW-06
201-A	3'-0"	6'-8"	F	SCW	WD-1	GL-3	ETR	HM	P-4	GL-3	22/A6.02	22/A6.02	12/A6.02		HW-09
202-A	3'-0"	7'-0"	E	SCW	WD-1	----	04	HM	P-4	----	16/A6.02	15/A6.02	17/A6.02		HW-10
202-B	3'-0"	7'-0"	E	SCW	WD-1	----	04	HM	P-4	----	16/A6.02	15/A6.02	17/A6.02		HW-10
202-C	3'-0"	7'-0"	B	HM	P-4	----	ETR	HM	P-4	----	8/A6.02	7/A6.02	9/A6.02		HW-11
202-D	3'-0"	7'-0"	B	HM	P-4	----	ETR	HM	P-4	----	8/A6.02	7/A6.02	9/A6.02		HW-11
203-A	2'-8"	6'-8"	E	SCW	WD-1	----	ETR	HM	P-4	----	19/A6.02 SIM	18/A6.02 SIM	17/A6.02		HW-12
204-A	3'-0"	6'-8"	G	HM	P-4	----	04	HM	P-4	----	16/A6.02	15/A6.02	----		HW-12
205-A	3'-0"	7'-0"	F	SCW	WD-1	----	04	HM	P-4	----	19/A6.02	18/A6.02	----		HW-10
206-A, B, C - 219-A, B, C **REFER TO DOOR SCHEDULE - TYPICAL DORMITORY SUITE															
220-A	3'-0"	7'-0"	C	HM	P-4	GL-1	03	HM	P-4	----	11/A6.02	10/A6.02	9/A6.02		HW-15
220-B	3'-0"	7'-0"	E	SCW	P-4	----	04	HM	P-4	----	19/A6.02	18/A6.02	----	60 MIN.	HW-16
221-A	3'-0"	7'-0"	B	HM	P-4	----	03	HM	P-4	----	11/A6.02	10/A6.02	9/A6.02 SIM		HW-11
222-A	3'-0"	7'-0"	G	HM	P-4	----	04	HM	P-4	----	21/A6.02	20/A6.02	----		HW-12
223-A, B, C - 234-A, B, C **REFER TO DOOR SCHEDULE - TYPICAL DORMITORY SUITE															

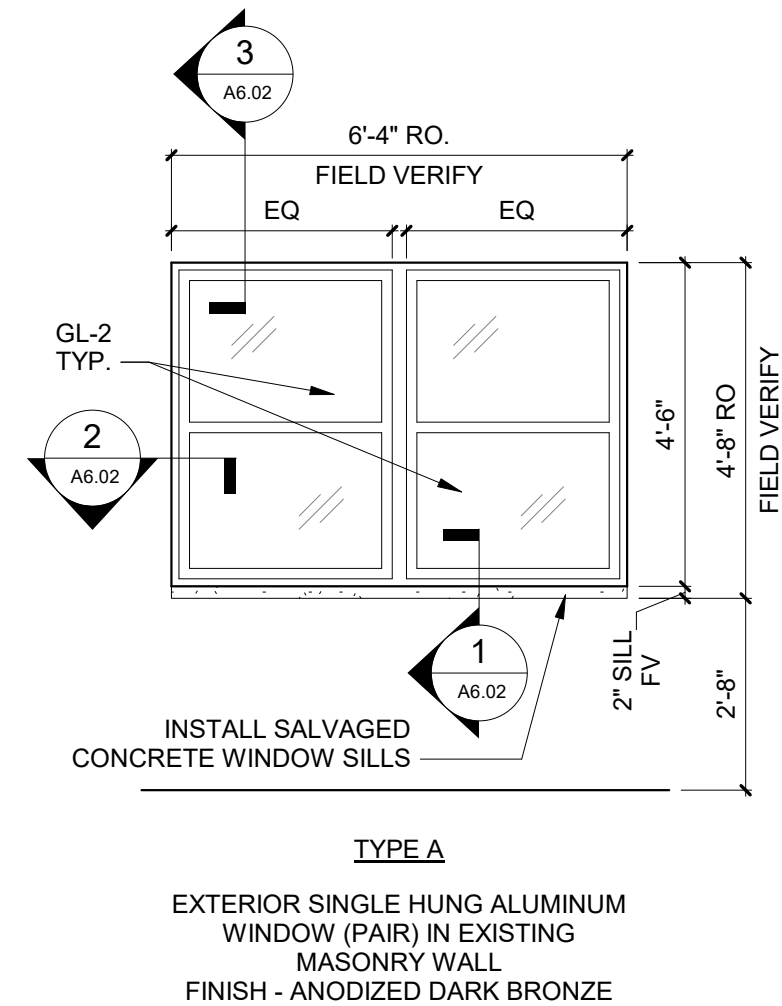


2

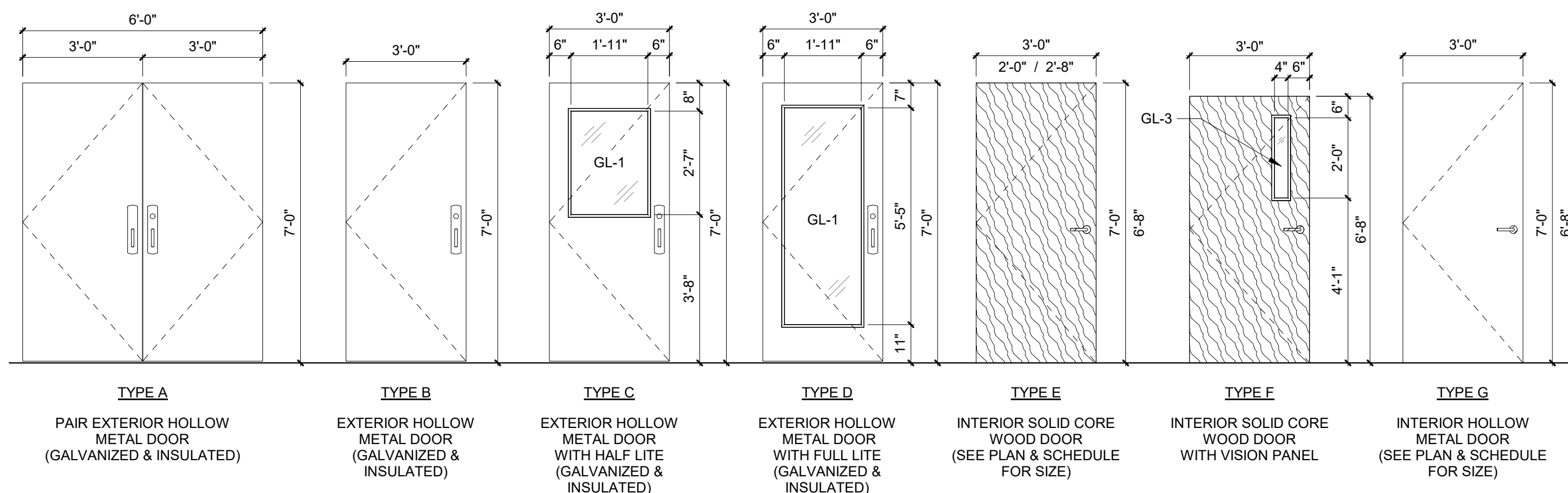
DOOR SCHEDULE - TYPICAL DORMITORY SUITE																
MARK	OPENING SIZE		DOOR				FRAME				DETAILS			FIRE RATING	HARDWARE SET	NOTES
	WIDTH	HEIGHT	TYPE	MATERIAL	FINISH	GLAZING	TYPE	MATERIAL	FINISH	GLAZING	HEAD	JAMB	SILL			
000-A	3'-0"	7'-0"	B	HM	P-4	----	02	HM	P-4	GL-1A	8/A6.02 6/A6.02	7/A6.02 5/A6.02	8/A6.02 4/A6.02	----	HW-01	DOOR STC = 48
000-B	2'-8"	7'-0"	E	SCW	WD-1	----	04	HM	P-4	----	14/A6.02	13/A6.02	12/A6.02	----	HW-02	
000-C	2'-8"	7'-0"	E	SCW	WD-1	----	04	HM	P-4	----	16/A6.02	15/A6.02	----	----	HW-03	

GLAZING LEGEND	
GL-1	1" LAMINATED & TEMPERED INSULATED GLAZING.
GL-1A	2 1/2" LAMINATED & TEMPERED INSULATED GLAZING. STC = 45
GL-2	1" LAMINATED & INSULATED GLAZING.
GL-3	1/4" TEMPERED GLAZING

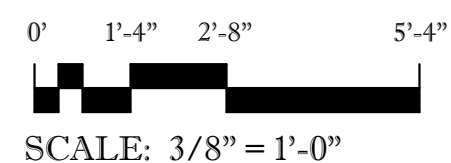
SMOKE RESISTIVE PARTITIONS	
SR	DOORS IN SMOKE RESISTIVE PARTITIONS REQUIRE CLOSERS RE: LIFE SAFETY



3 WINDOW ELEVATIONS



1 DOOR ELEVATIONS



FIRE ALARM & MASS NOTIFICATION LEGEND

DEVICE INFORMATION

The diagram shows a rectangular label with the following components and callouts:

- STROBE-CANDELA**: Points to the top-left corner of the label.
- DEVICE NUMBER FOR RESPECTIVE CIRCUIT**: Points to the top-right corner of the label.
- P-C-D**: Points to the top-left corner of the label.
- CD**: Points to the top-left corner of the label.
- W**: Points to the top-right corner of the label.
- INDICATES PANEL AND CIRCUIT INFORMATION**: Points to the center of the label, which contains a square icon with a cross inside.
- INITIAL SPEAKER-WATTAGE**: Points to the bottom-right corner of the label.
- SIGNALING LINE CIRCUIT #**: Points to the bottom-left corner of the label, which contains a circle with the number 5 inside.
- SLC**: Points to the bottom-left corner of the label.

Diagram illustrating the P-C-D (Panel-Circuit-Device) symbol components:

- STROBE-CANDELA**: Points to the top of the square symbol.
- DEVICE NUMBER FOR RESPECTIVE CIRCUIT**: Points to the 'W' (Wattage) label.
- INDICATES PANEL AND CIRCUIT INFORMATION**: Points to the 'C' (Circuit) label.
- INITIAL SPEAKER-WATTAGE**: Points to the 'S' (Speaker) label.
- SIGNALING LINE CIRCUIT #**: Points to the 'SLC' (Signaling Line Circuit) label.

1. PROVIDE NEW ADDRESSABLE VOICE FIRE ALARM AND MASS NOTIFICATION SYSTEM AS OUTLINED.

1. SYSTEM SHALL COMPLY WITH THE FOLLOWING AT MINIMUM

- INTELLIGIBILITY CONSIDERATIONS:**

- AC POWER FOR FIRE ALARM / MNS EQUIPMENT:**

1. WHERE MORE THAN ONE AC CIRCUIT IS REQUIRED, PROVIDE A DEDICATED AC SUB-PANEL IN ACCORDANCE WITH UFC 3-520-01, 3-2.7.
2. SUB-PANEL SHALL SIZED FOR MINIMUM OF SIX 20A CIRCUITS DEDICATED TO FIRE PROTECTION AND LIFE SAFETY SYSTEMS.
3. SUB-PANEL SHALL BE SERVED BY LOCK-ON BREAKER IN UPSTREAM DISTRIBUTION EQUIPMENT.
4. NO MORE THAN 3 FA/MNS PANELS ON ONE 20A CIRCUIT.

1. FIRE ALARM AND MNS NAC/SLC CIRCUITS MUST BE CLASS "A" WITH NO "T" TAPS ALLOWED.
2. PATHWAY SURVIVABILITY MUST BE LEVEL 1.
3. FIRE ALARM AND MNS CIRCUITS TO BE SOLID COPPER FPL/FPLR/FPLP, OR TFFN/THHN UNLESS OTHERWISE RECOMMENDED BY THE MFG. UNDERGROUND (SUCH AS TO PIV) MUST BE LISTED FOR WET LOCATION SUCH AS THWN.
4. ALL FIELD-WIRING COLORS MUST BE THE SAME THROUGHOUT THE CIRCUIT TO WHICH IT IS CONNECTED. DEVELOP A COLOR SCHEME AND SHOW ON SHOP DRAWINGS, SUCH AS DIFFERENT COLORS FOR EACH CIRCUIT.
5. ALL WIRING MUST EITHER TERMINATE AT THE FIRE ALARM CONTROL PANEL, REMOTE POWER SUPPLY, OTHER CABINETS OR DEVICE.
 - 5.1. ALL DEVICES MUST UTILIZE SCREW TERMINALS.
 - 5.2. PULL ALL CONDUCTORS SPLICE FREE.
 - 5.3. THE USE OF WIRE NUTS, CRIMPED CONNECTORS, OR TWISTING OF CONDUCTORS IS PROHIBITED.
 - 5.4. DO NOT USE TERMINAL STRIPS IN THE FIELD WIRING, SUCH AS IN-BETWEEN DEVICES.
 - 5.5. TERMINATION AT A DEVICE MUST BE A COMPLETE BREAK IN THE WIRE, DO NOT LOOP THE WIRE AROUND THE SCREW.
6. UNLESS INDICATED OTHERWISE, THE FOLLOWING WIRE SIZE MUST BE USED:
 - 6.1. SLC AND IDC: MINIMUM 18 AWG
 - 6.2. NAC STROBE AND TEXT SIGNS: MINIMUM 14 AWG.
 - 6.3. SPEAKER: MINIMUM 16 AWG
 - 6.4. REMOTE ANNUNCIATOR, LOC DATA, TEXT SIGN CONTROL (RS485) PER MFG RECOMMENDATIONS FOR DISTANCES OF PROJECT.
7. STROBE CIRCUITS AND SPEAKER CIRCUITS TO BE CALCULATED AS SHOWN. AN ADDITIONAL 15+ TO BE ADDED TO EACH DEVICE DISTANCE TO ACCOUNT FOR ANTICIPATED DROPS AND LOOPS IN JUNCTION BOXES (DOWN/BACK). IN ADDITION, VOLTAGE CALCS TO PROVIDE A SAFETY FACTOR OF AT LEAST 1 VOLT USING POINT-TO-POINT.
 - 7.1. CONTRACTOR MUST PROVIDE VOLTAGE DROP CALCS FOR THEIR PARTICULAR PRODUCTS. THIS MUST INCLUDE SPEAKER AND STROBE CALCULATIONS.
 - 7.2. VOLTAGE FOR STROBES MUST START AT 20.4 VOLTS AND MUST NOT DROP BELOW 17 VOLTS ACCOUNTING FOR TOTAL CIRCUIT PATH (OUT / BACK, AND DROPS / ELEVATION CHANGES).
 - 7.3. EACH 6 FOOT FLEX ADDS 28' PER DROP (DOWN & BACK WITH LOOPS).
8. 70 VOLT SPEAKER CIRCUITS MUST BE USED DUE TO CIRCUIT LENGTHS.
 - 8.1. SPEAKER dB CALCULATIONS TO BE PERFORMED ACCOUNTING FOR DOUBLE THE WATTAGE INDICATED ON FLOOR PLAN. THIS IS TO ACCOUNT FOR FIELD ADJUSTMENTS AND SPARE CAPACITY.
 - 8.2. IN NO CASE ARE SPEAKER CIRCUITS TO BE LOADED TO EXCEED A 5% DROP IN VOLTAGE PER CALCULATIONS WITH DOUBLE ANTICIPATED WATTAGE USED IN CALCS.
9. SIGNALING LINE CIRCUITS MAY BE RUN WITH OTHER FIRE ALARM AND MNS CIRCUITS AS LONG AS THERE IS NO HUM OR OTHER INTERFERING NOISE OVER THE SPEAKERS IMPACTING SLEEPING RESIDENTS.
10. LOC CIRCUITS AND/OR CIRCUITS BETWEEN CONTROL PANELS (SUCH AS RS485, VOICE, ETC.) MUST BE IN RACEWAYS SEPARATE FROM SLC AND NAC.
11. MINIMUM 3/4" EMT RED CONDUIT IS REQUIRED FOR ALL CIRCUITS, UNLESS INDICATED ON DRAWINGS TO HAVE MINIMUM 1".
12. FLEXIBLE METALLIC CONDUIT (FMC) MAY BE USED FOR DROPS TO DEVICES (SUCH AS IN CEILINGS) TO A MAXIMUM OF 6' EACH.
 - 12.1. A SINGLE DROP MUST BE PROVIDED DOWN/BACK TO DEVICE. DO NOT LOOP DROPS TO DEVICES.
13. LIQUID TIGHT FLEXIBLE METALLIC CONDUIT (LTMC) AND FITTINGS MUST BE USED ON THE EXTERIOR OR WET LOCATIONS (SUCH AS FOR SPEAKERS).
13. FLEXIBLE DROPS ARE NOT REQUIRED TO BE RED.
14. UNLESS INDICATED, FIRE ALARM AND MNS CONDUITS AND BACK BOXES MUST BE RED DIPPED / PAINTED BY MFG.
 - 14.1. WIRE TROUGHS AND LARGER JUNCTION BOXES MAY BE FIELD PAINTED RED.
 - 14.2. COVERS MAY BE FIELD PAINTED RED.
- 16.3. EXPOSED CONDUITS MUST BE PAINTED TO MATCH WALL / CEILING FINISH AND LABELED WITH A RED 3/4" BAND ON EACH SIDE OF A WALL AND EVERY 20". THE INSIDE COVER OF PULL BOXES MUST BE LABELED AS "FIRE ALARM" WITH THE INTERIOR OF THE BOX PAINTED RED.
17. WIRE TROUGHS (GUTTERS) MUST BE PROVIDED ABOVE PANELS WHEN THERE ARE MORE THAN ONE PANEL AT A LOCATION.
 - 17.1. TROUGHS SHOULD BE ABOVE CEILINGS IN FINISHED AREAS WITH MINIMUM CONDUITS BETWEEN PANELS AND TROUGHS.
 - 17.2. 120VAC CIRCUITS MUST NOT SHARE CONDUITS OR BE RUN IN THE SAME WIRE TROUGH AS LOW VOLTAGE CIRCUITS (<71 VOLTS).
18. ALL CONDUIT MUST BE CONCEALED, UNLESS REQUIRED TO BE RUN IN OPEN EXPOSED AREAS.
19. MINIMUM 25 PERCENT SPARE AMPERAGE MUST BE PROVIDED ON EACH CIRCUIT OF POWER SUPPLIES.
20. MINIMUM 50% SPARE CAPACITY MUST BE PROVIDED ON AMPLIFIER PANELS AND CIRCUITS.
21. RACEWAY FILL MUST BE IN ACCORDANCE WITH NFPA 70. FORTY (40) PERCENT FILL MUST NOT BE EXCEEDED.
22. PROVIDE SPARE CIRCUITS AS INDICATED.

1. EVERY CABINET THAT HAS BACKUP BATTERIES MUST HAVE A LABEL THAT IS PROMINENTLY DISPLAYED JUST ABOVE BATTERIES INDICATING THE VOLTAGE AND AMP-HOUR OF BATTERIES REQUIRED IN THAT CABINET BASED ON CALCULATIONS.
2. EXAMPLE: "TWO-12-VOLT 7-AMP HOUR BATTERIES".
3. BATTERIES MUST HAVE MFG DATE PER NFPA 72, NOT DATE OF INSTALLATION.
4. NEW BATTERIES MUST HAVE BEEN MANUFACTURED WITHIN 6 MONTHS OF OCCUPANCY.

1. COORDINATE BETWEEN TRADES TO PROVIDE SIGNAGE ON RISER ROOM DOOR THAT STATES "FIRE ALARM AND SPRINKLER RISER".
2. LETTERING OF SIGN TO BE MINIMUM 2" HIGH.
3. SIGN TO BE DOT GRADE ALUMINUM / STENCILING TO PREVENT FADING.
4. PROVIDE WHITE LETTERING ON RED BACKGROUND.

LITTLE ROCK A.F.B.
ARKANSAS



Registered Professional Engineer (Fire Protection)
 CERTIFICATE NO. 37345
 SCOTT WADE LACEY
 DATE SIGNED 02/29/2022
 ARIZONA USA



REPAIR (SUS) ARMEN DORMITORY BLDG 854	SHEET TITLE	FIRE ALARM & MNS NOTES
	DRAWN BY	LEAD DESIGNER
	SL	SL
	CHK REVIEWER	PROJECT NUMBER
	SL	NKAK 21-1034
SIGNED BY	SHEET	
SL		
DATE		
9 FEB. 2024		FA1.00
SCALE		
IS NOTED		58 OF 100

REPAIR (SUS) ARMEN
DORMITORY BLDG 854

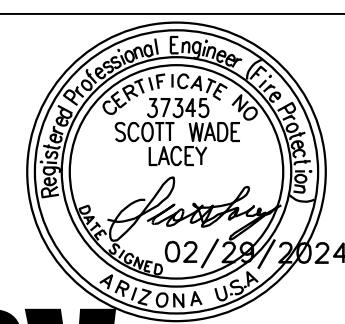
SHEET TITLE
FIRE ALARM & MNS NOTES



LITTLE ROCK A.F.B.
ARKANSAS



CLEMENTS & ASSOCIATES
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-373-3380
WWW.CLEMENTSARCHITECTS.COM



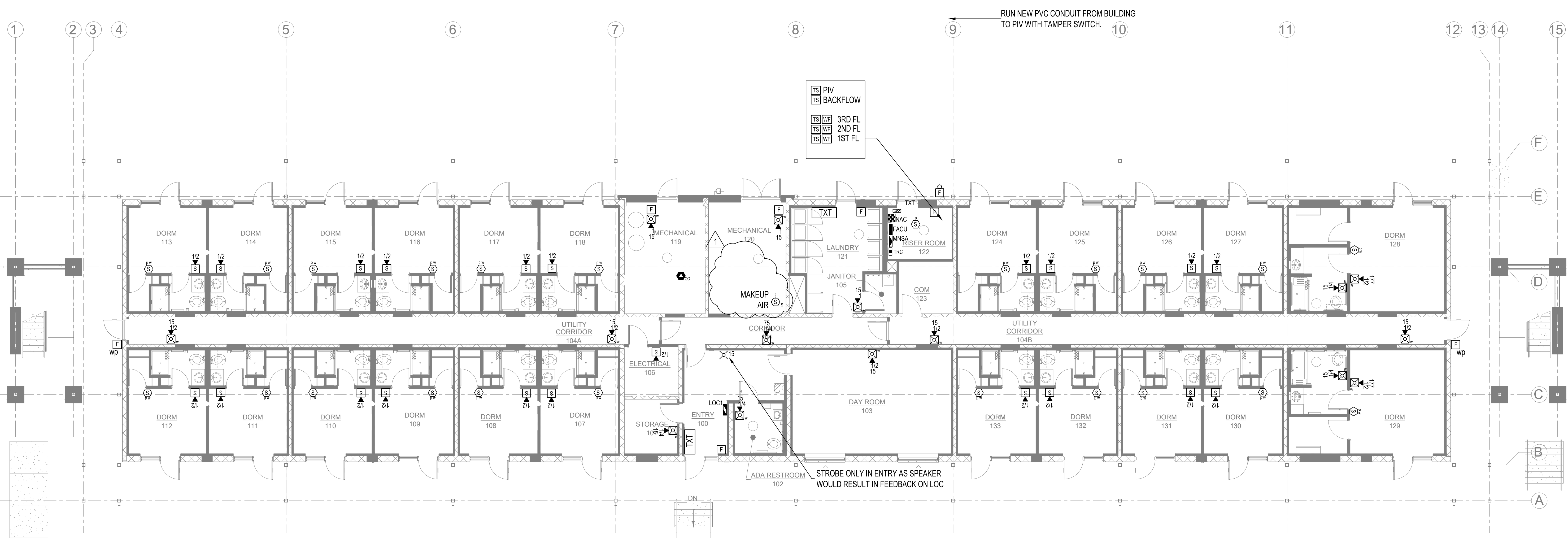
Lacey
Fire Protection
Engineering
WWW.LACEYFPE.COM

No.	Revision/Issue	Date	BY	APP'D
1	100 REVISED SUBMITAL	04/26/2024		

PROJECT TITLE
REPAIR (SUS) AIRMEN
DORMITORY BLDG 854

SHEET TITLE
FIRE ALARM & MNS -
FIRST FLOOR PLAN

DRAWN BY SL	LEAD DESIGNER SL
TECH REVIEWER SL	PROJECT NUMBER NKAK 21-1034
DESIGNED BY SL	SHEET FA1.01
DATE 29 FEB. 2024	
SCALE AS NOTED	59 OF 100



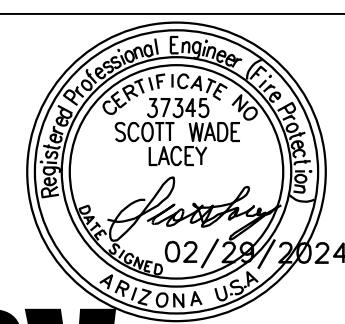
1 FIRE ALARM AND MASS NOTIFICATION - FIRST FLOOR
1/8" = 1'
NORTH



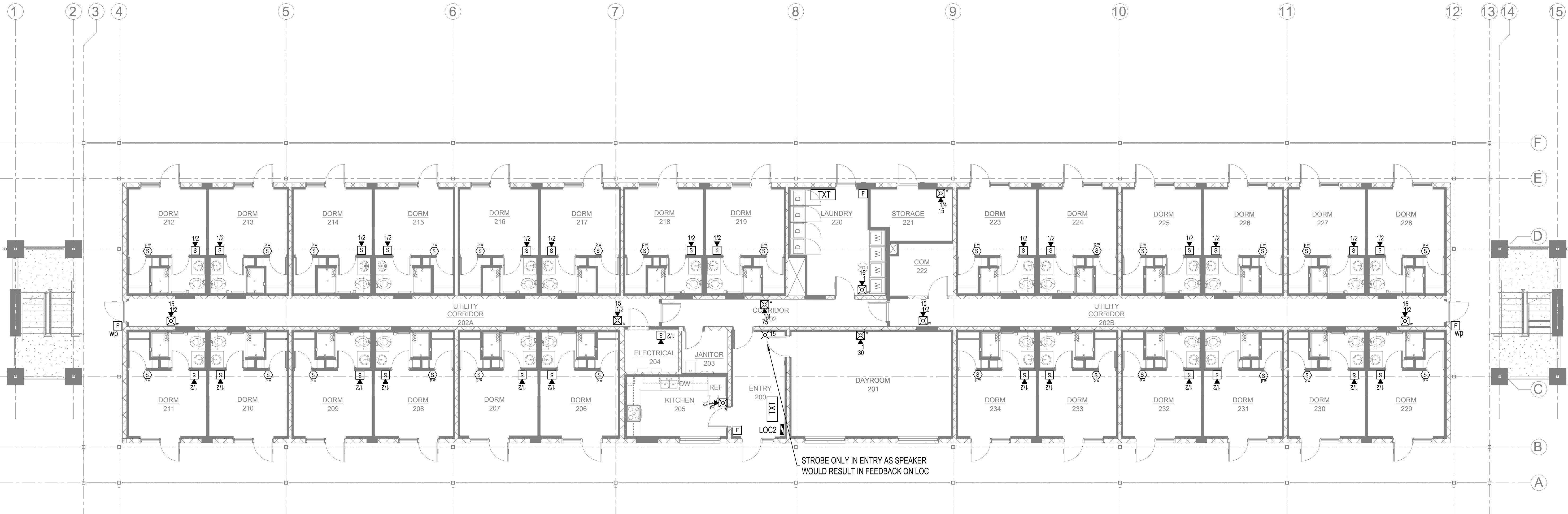
LITTLE ROCK A.F.B.
ARKANSAS



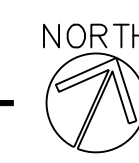
CLEMENTS & ASSOCIATES
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-375-3380
WWW.CLEMENTSARCHITECTS.COM



Lacey
Fire Protection
Engineering
WWW.LACEYFPE.COM



1 FIRE ALARM AND MASS NOTIFICATION - SECOND FLOOR
1/8" = 1'



No.	Revision/Issue	Date	BY	APP'D
1	100 REVISED SUBMITAL	04/26/2024		

PROJECT TITLE REPAIR (SUS) AIRMEN DORMITORY BLDG 854		SHEET TITLE FIRE ALARM & MNS - SECOND FLOOR PLAN	
DRAWN BY SL	LEAD DESIGNER SL	PROJECT NUMBER NKAK 21-1034	
TECH REVIEWER SL	DESIGNED BY SL	SHEET FA1.02	
DATE 29 FEB. 2024	SCALE AS NOTED		60 OF 100

STROBE ONLY IN ENTRY AS SPEAKER
WOULD RESULT IN FEEDBACK ON LOC

SPEAKER TO BE IN SOFFIT (PREFERRED)
OR ON WALL DIRECTED DOWNWARD AT
GROUND IN FRONT OF BUILDING AND AT
LOWEST WATTAGE.

1. THIS IS A DESIGN-BUILD PROJECT.
2. REPLACE ENTIRE SPRINKLER SYSTEM FROM FLOOR FLANGE UP.
3. SPRINKLERS IN ACCORDANCE WITH NFPA 13.
4. RESIDENTIAL AREAS PROTECTED PER NFPA 13 4-HEAD. OTHER AREAS AS INDICATED.
5. ROOF FRAMING IS BEING REPLACED WITH NON-COMBUSTIBLE TRUSS SYSTEM. AS SUCH, ATTIC SPRINKLERS WILL NOT BE PROVIDED.
6. IF THERE IS ANY REMAINING ASPHALT / TAR FROM OLD ROOFING THAT CANNOT BE REMOVED, IT WILL BE COVERED WITH MINERAL WOOL BATT INSULATION TO PROVIDE ENCASEMENT.

1. IN ACCORDANCE WITH UFC 3-600-01, 4-15.2.2, A RANGE HOOD SUPPRESSION SYSTEM IS NOT BEING PROVIDED AS FACILITY IS SPRINKLERED.

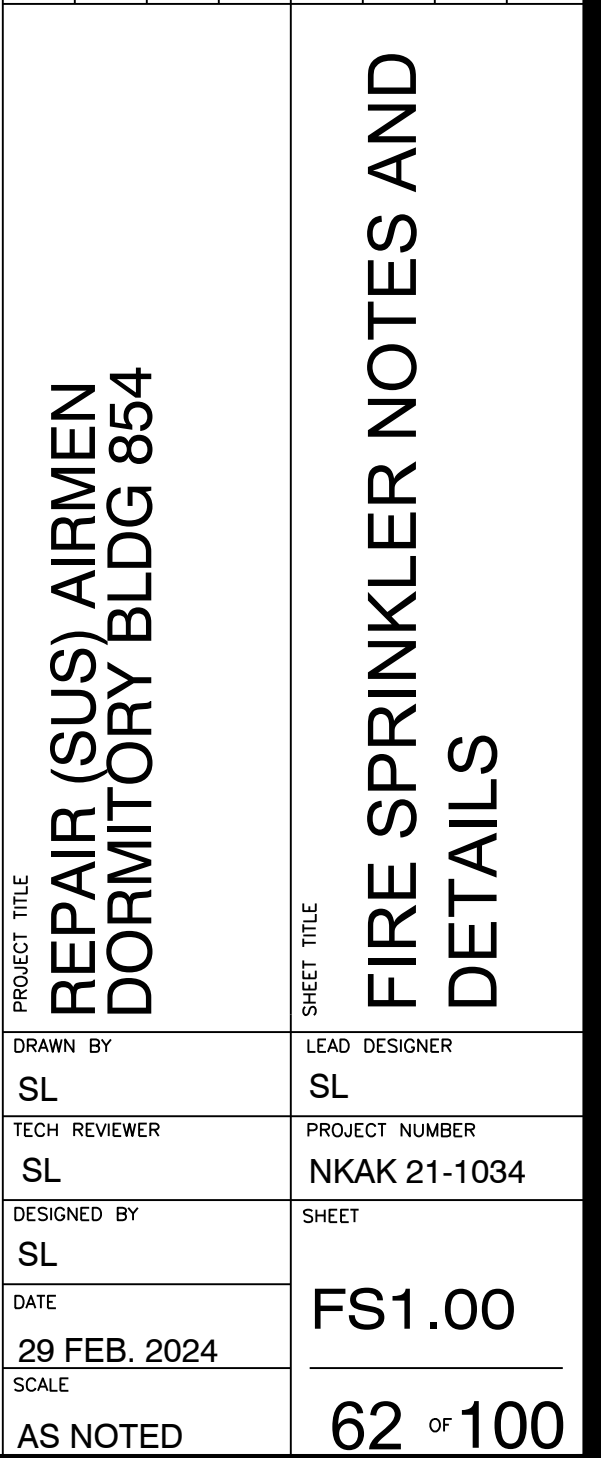
DATE: 1/18/2023
By: SCOTT LACEY, FPE
LOCATION: MAIN BEHIND BUILDING
STATIC: 69 PSI
RESIDUAL: 60 PSI FLOWING 1,186 GPM

1. RESIDENTIAL SLEEPING ROOMS SHALL BE PROTECTED WITH A MAX 4-HEAD DESIGN PER NFPA 13 FOR RESIDENTIAL AREAS.
2. BATHROOMS < 55 FT2 WILL NOT BE SPRINKLERED.
3. ALL HEADS SHALL BE CENTER OF TILE IN SUSPENDED TILE SYSTEMS.
4. CALCULATIONS SHALL INCLUDE 8 PSI FOR BACKFLOW PREVENTION ASSEMBLY.
5. VELOCITIES SHALL NOT EXCEED LIMITS OF UFC 3-600-01.
6. PROVIDE AUXILIARY DRAINS FOR TRAPPED SECTIONS OF PIPE. SHALL DISCHARGE WITH FITTINGS IN ACCORDANCE WITH NFPA 13.
7. FLEXIBLE SPRINKLER DROPS ARE ALLOWED WHEN FRICTION LOSS OF EACH DROP IS INCLUDED.

PROVIDE DOT GRADE METAL SIGN WITH
WHITE LETTERING ON RED
BACKGROUND WITH MINIMUM 4" HIGH
LETTERS FOR "FDC" AND LOCATE ABOVE
FDC.

1. SYSTEM TO COMPLY WITH NFPA 13, 2022; UFC 3-600-01 CH6 MAY 2021.
2. AN NFPA 13 4-HEAD DESIGN WILL BE UTILIZED IN SLEEPING AREAS.
3. COMMON AREAS TO BE PROTECTED PER HC1 LIGHT HAZARD.
4. MECHANICAL, STORAGE, AND LAUNDRY SPACES TO BE PER HC2 ORDINARY HAZARD.
5. CPVC PIPE WILL BE USED IN ACCORDANCE WITH STRICT LIMITATIONS FOR BEING EXPOSED IN MECHANICAL AND UTILITY CHASE SPACES. THIS INCLUDES PIPE BEING RUN TIGHT TO CEILING SURFACE AND NOT SUSPENDED.
6. OPEN, NON-CONDITIONED, NON-COMBUSTIBLE STAIRS AND BREEZEWAYS WILL NOT BE SPRINKLERED DUE TO FREEZE POTENTIAL, CHALLENGES WITH REPLACING DRY-BARREL HEADS EVERY 10 YEARS, AND THE LACK OF FUEL SOURCE IN THE STAIRS.
7. BUILDING WILL BE SERVED BY ONE WET-PIPE RISER WITH FLOOR ZONE VALVES AND WATER FLOW SWITCHES FOR EACH FLOOR.
8. SPRINKLER PIPE IN EXPOSED AREAS MUST BE PAINTED / LABELED IN ACCORDANCE WITH UFC 3-600-01, 9-6.8.2 WITH 3" STENCILS.
9. POST INDICATOR VALVE IS EXISTING TO REMAIN.
10. PROVIDE NEW TAMPER SWITCH AND CONDUIT / MONITORING.
11. 175 PSI PRESSURE RELIEF SHALL BE PROVIDED ON EACH SPRINKLER RISER AND DOWNSTREAM OF ANY CHECK VALVES.
12. AIR RELEASE VENTS SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13.
13. MINIMUM OF 3' CLEARANCE SHALL BE PROVIDED IN FRONT OF EACH ISOLATION VALVE.
14. ALL AUXILIARY DRAINS SHALL BE READILY ACCESSIBLE AND DRAIN TO AN APPROVED LOCATION. DRAINS SHALL BE IDENTIFIED ON DRAWINGS.
15. SPRINKLER PIPING, FITTINGS, AND SPRINKLERS SHALL NOT BE LOCATED ABOVE NON-MOVABLE ELECTRONIC EQUIPMENT / RACKS. COORDINATE WITH ELECTRICAL SHEETS FOR ANTICIPATED LOCATIONS.
8. RUN NEW MINIMUM 3/4" PVC CONDUIT FROM BUILDING TO PIV WITH NEW TAMPER SWITCH ON PIV. CONDUIT MAY COME UP OUTSIDE BUILDING UNDER SIDEWALK AND TURN INTO BUILDING WITH "LB" FITTING. ENSURE CABLE IS LISTED FOR WET LOCATION.

1. COORDINATE BETWEEN TRADES TO PROVIDE SIGNAGE ON RISER ROOM DOOR THAT STATES "FIRE ALARM AND SPRINKLER RISER".
2. LETTERING OF SIGN TO BE MINIMUM 2" HIGH.
3. SIGN TO BE DOT GRADE ALUMINUM / STENCILING TO PREVENT FADING.
4. PROVIDE WHITE LETTERING ON RED BACKGROUND.





LITTLE ROCK A.F.B.
ARKANSAS



**CLEMENTS
& ASSOCIATES**
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-373-3380
WWW.CLEMENTSARCHITECTS.COM



Lacey
Fire Protection
Engineering
WWW.LACEYFPE.COM

No.	Revision/Issue	Date	BY	APP'D
1	100 REVISED SUBMITAL	04/26/2024		

PROJECT TITLE
REPAIR (SUS) AIRMEN
DORMITORY BLDG 854

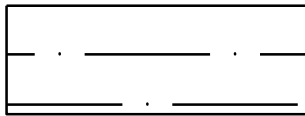
SHEET TITLE
FIRE SPRINKLER -
FIRST FLOOR PLAN

DRAWN BY SL	LEAD DESIGNER SL
TECH REVIEWER SL	PROJECT NUMBER NKAK 21-1034
DESIGNED BY SL	SHEET FS1.01
DATE 29 FEB. 2024	
SCALE AS NOTED	63 OF 100

SPRINKLER DENSITY:



LIGHT HAZARD - 1.0 / 1,500 FT2 WITH 250 GPM HOSE.
QUICK RESPONSE HEADS.

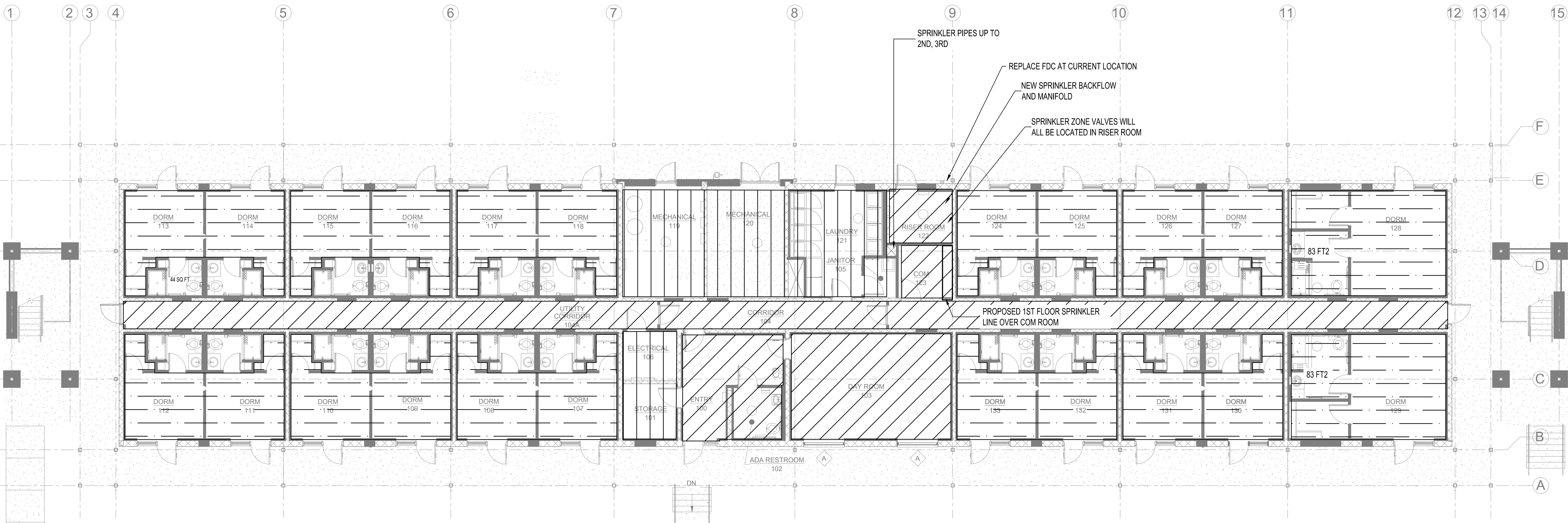


RESIDENTIAL NFPA 13, 4-HEAD, BATHROOMS <55 FT2
NOT SPRINKLERED. RESIDENTIAL HEADS, SIDEWALL
AND PENDANT.



ORDINARY HAZARD - 2.0 / 2,500 OR ROOM / AREA
RATED MINIMUM 1-HR. QUICK RESPONSE.

COMBUSTIBLE MATERIALS / CONSTRUCTION ARE TO
BE REMOVED FROM ATTIC SO THAT NO ATTIC
SPRINKLERS ARE BEING PROVIDED.



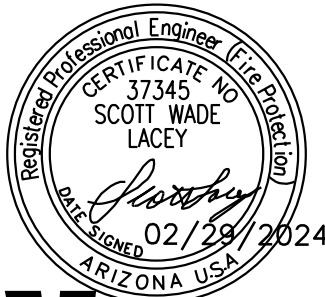
1 FIRE SPRINKLER - FIRST FLOOR
1/8" = 1'



LITTLE ROCK A.F.B.
ARKANSAS



**CLEMENTS
& ASSOCIATES**
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-373-3380
WWW.CLEMENTSARCHITECTS.COM



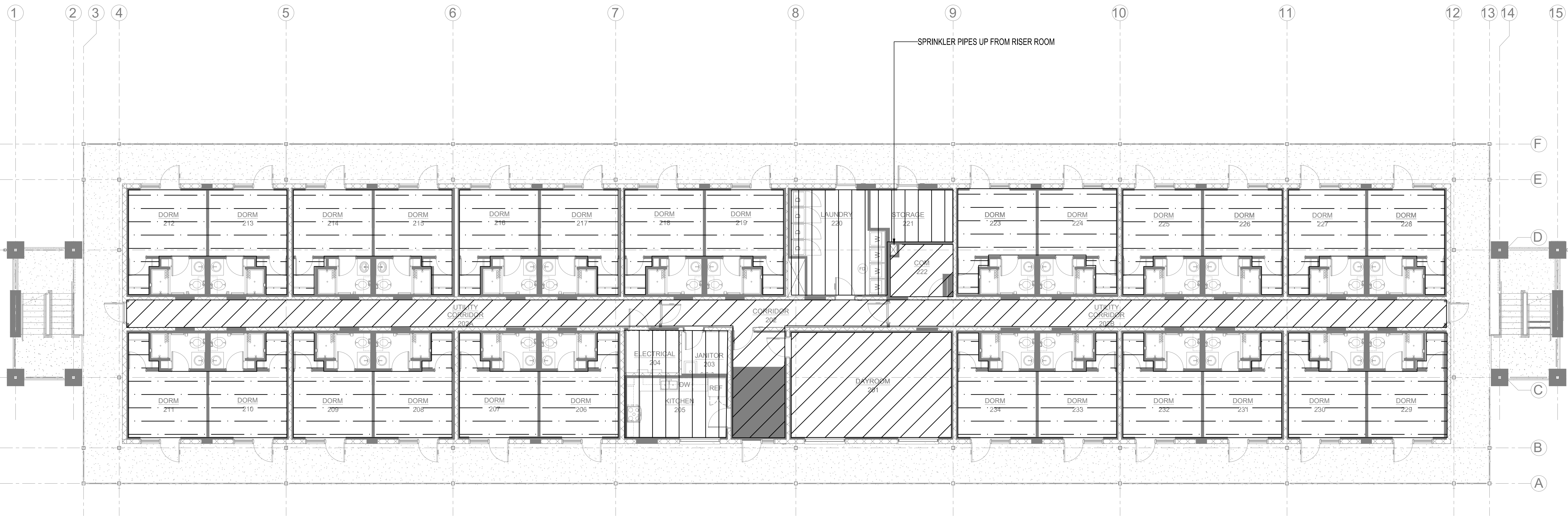
Lacey
Fire Protection
Engineering
WWW.LACEYFPE.COM

No.	Revision/Issue	Date	BY	APP'D
1	100 REVISED SUBMITAL	04/26/2024		

PROJECT TITLE
REPAIR (SUS) AIRMEN
DORMITORY BLDG 854

SHEET TITLE
FIRE SPRINKLER -
SECOND FLOOR PLAN

DRAWN BY SL	LEAD DESIGNER SL
TECH REVIEWER SL	PROJECT NUMBER NKAK 21-1034
DESIGNED BY SL	SHEET FS1.02
DATE 29 FEB. 2024	
SCALE AS NOTED	64 OF 100



1 FIRE SPRINKLER - SECOND FLOOR
1/8" = 1'





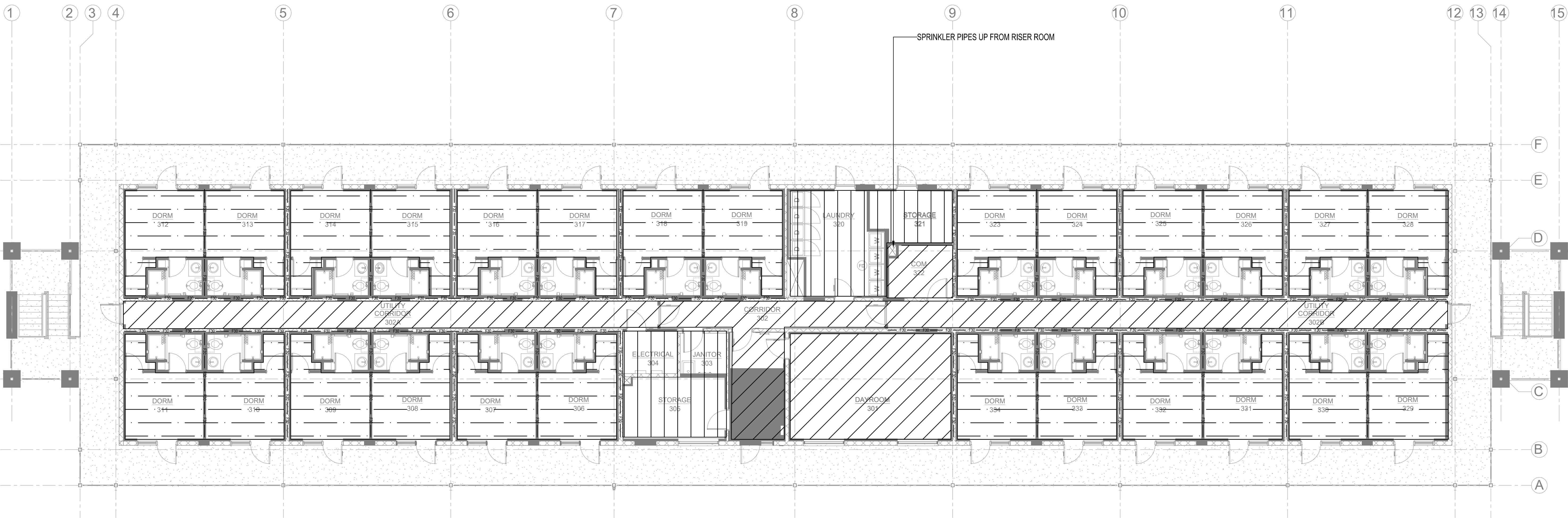
LITTLE ROCK A.F.B.
ARKANSAS



**CLEMENTS
& ASSOCIATES**
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-373-3380
WWW.CLEMENTSARCHITECTS.COM



Lacey
Fire Protection
Engineering
WWW.LACEYFPE.COM



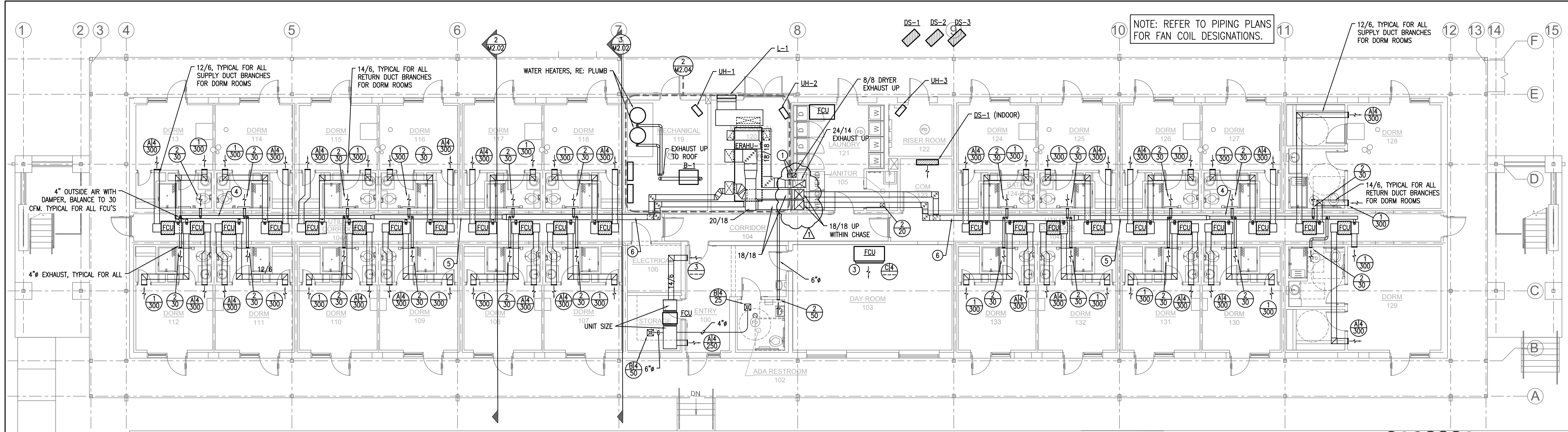
1 FIRE SPRINKLER - THIRD FLOOR
1/8" = 1'



PROJECT TITLE
REPAIR (SUS) AIRMEN
DORMITORY BLDG 854

SHEET TITLE
FIRE SPRINKLER -
THIRD FLOOR PLAN

DRAWN BY SL	LEAD DESIGNER SL
TECH REVIEWER SL	PROJECT NUMBER NKAK 21-1034
DESIGNED BY SL	SHEET FS1.03
DATE 29 FEB. 2024	
SCALE AS NOTED	65 OF 100

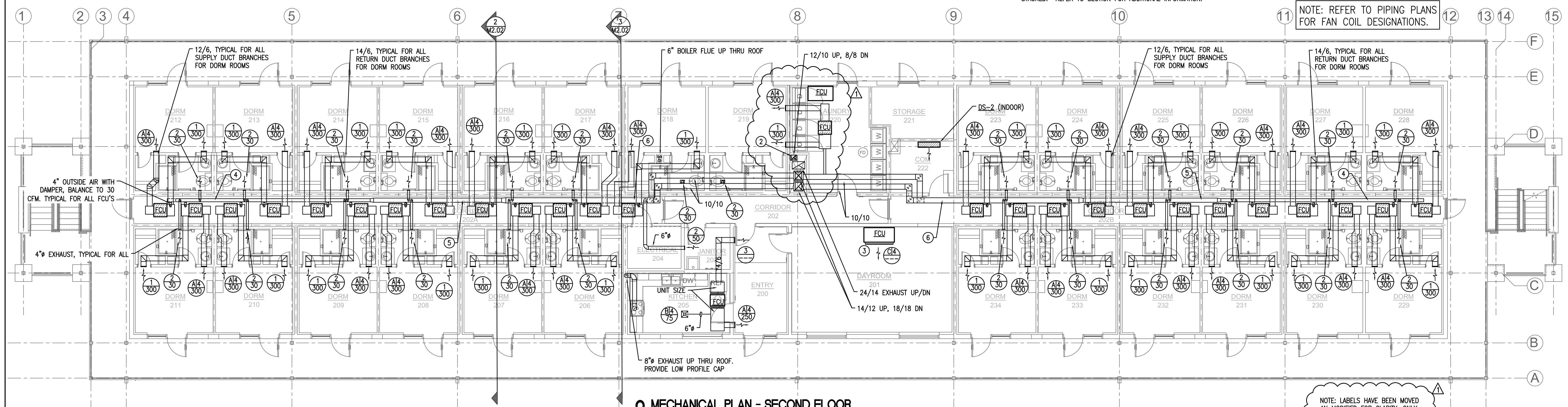


1 MECHANICAL PLAN - FIRST FLOOR
SCALE: 1/8" = 1'-0"

KEYED NOTES:

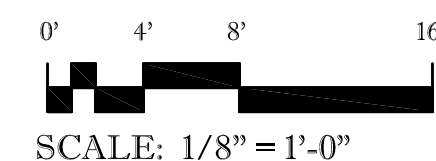
- 1 EXHAUST DUCT TO EXTEND TO 12" AFF. ROUTE FOUR 4" EXHAUST DUCTS TO DRYERS WITH LOWEST CONNECTION OF 24". PROVIDE 8/8 TO MECHANICAL ROOM WITH ACCESS DOOR FOR LINT REMOVAL.
- 2 ROUTE FOUR 4" EXHAUST DUCTS TO DRYERS.
- 3 EXTEND DISCHARGE DUCT TO NEW GRILLE, SIZE TO EQUAL DIMENSIONS OF FAN COIL UNIT.
- 4 6/6 OUTSIDE AIR DUCT (BOTTOM) AND EXHAUST DUCT (TOP) STACKED. REFER TO SECTION FOR ADDITIONAL INFORMATION.
- 5 8/8 OUTSIDE AIR DUCT (BOTTOM) AND EXHAUST DUCT (TOP) STACKED. REFER TO SECTION FOR ADDITIONAL INFORMATION.
- 6 10/10 OUTSIDE AIR DUCT (BOTTOM) AND EXHAUST DUCT (TOP) STACKED. REFER TO SECTION FOR ADDITIONAL INFORMATION.

NOTE: LABELS HAVE BEEN MOVED
AN MODIFIED FOR CLARITY. ONLY
CLOUDED AREAS HAVE CHANGED.

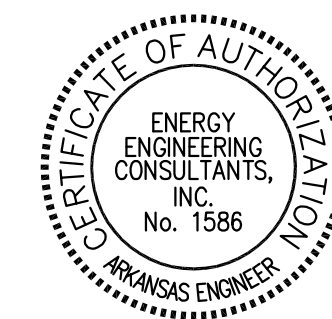


2 MECHANICAL PLAN - SECOND FLOOR
SCALE: 1/8" = 1'-0"

NOTE: LABELS HAVE BEEN MOVED
AN MODIFIED FOR CLARITY. ONLY
CLOUDED AREAS HAVE CHANGED.



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



EECI
ENERGY ENGINEERING
CONSULTANTS, INC.

10 CORPORATE HILL DR., STE. 100 PH: (501) 244-0511
LITTLE ROCK, AR 72205 FX: (501) 244-0241



LITTLE ROCK A.F.B.
ARKANSAS

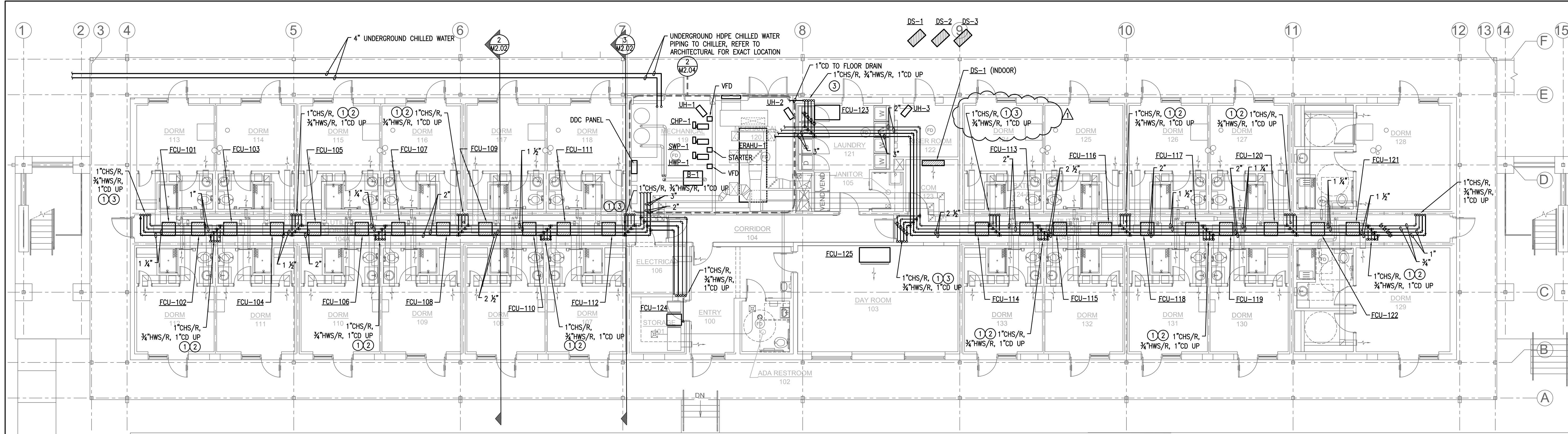
HGL
Construction

CLEMENTS & ASSOCIATES
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-975-3380
WWW.CLEMENTSARCHITECTS.COM



DATE	BY	APP'D
4/26/24		
100 REVISED SUBMITTAL		

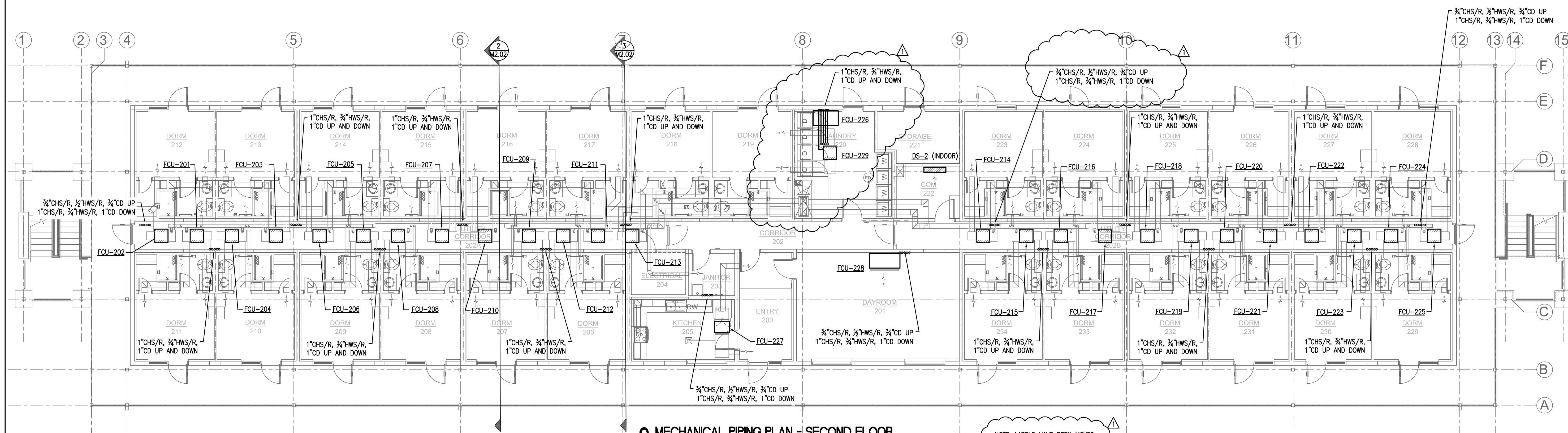
PROJECT TITLE	REPAIR (SUS) ARMEN DORMITORY BLDG 854
DESIGNED BY	HS, BD
CHECKED BY	GC
DATE	29 FEB. 2024
PROJECT NO.	NKAK 21-1034
SHEET	M2.01
OF	76 OF 100
AS NOTED	



1 MECHANICAL PIPING PLAN - FIRST FLOOR
SCALE: 1/8" = 1'-0"

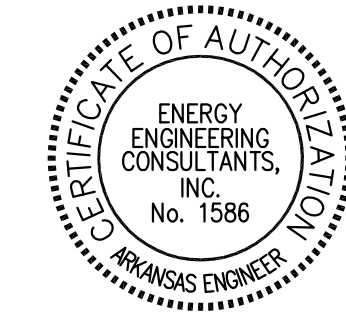
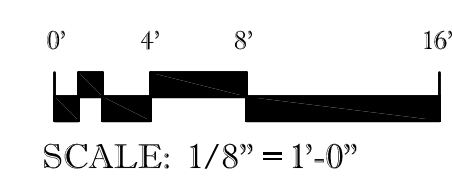
KEYED NOTES:

- HUB DRAIN, RE: PLUMBING. COMBINE ALL CONDENSATE FROM FLOORS ABOVE AND DISCHARGE TO HUB DRAIN.
- 1 1/2"CHS/R BRANCH WITH BALL VALVES, 1" HWS/R BRANCH WITH BALL VALVES. CONNECT 1ST FLOOR FAN COIL UNITS AND ROUTE PIPING TO UPPER FLOORS.
- 1"CHS/R BRANCH WITH BALL VALVES, 3/4"CHS/R BRANCH WITH BALL VALVES. CONNECT 1ST FLOOR FAN COIL UNITS AND ROUTE PIPING TO UPPER FLOORS.



2 MECHANICAL PIPING PLAN - SECOND FLOOR
SCALE: 1/8" = 1'-0"

NOTE: LABELS HAVE BEEN MOVED AN MODIFIED FOR CLARITY. ONLY CLOUDED AREAS HAVE CHANGED.



EECI
ENERGY ENGINEERING
CONSULTANTS, INC.
10 CORPORATE HILL DR., STE. 100 PH: (501) 244-0511
LITTLE ROCK, AR 72205 FX: (501) 244-0241



LITTLE ROCK A.F.B.
ARKANSAS

HGL
Construction

CLEMENTS & ASSOCIATES
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-975-3380
WWW.CLEMENTSARCHITECTS.COM

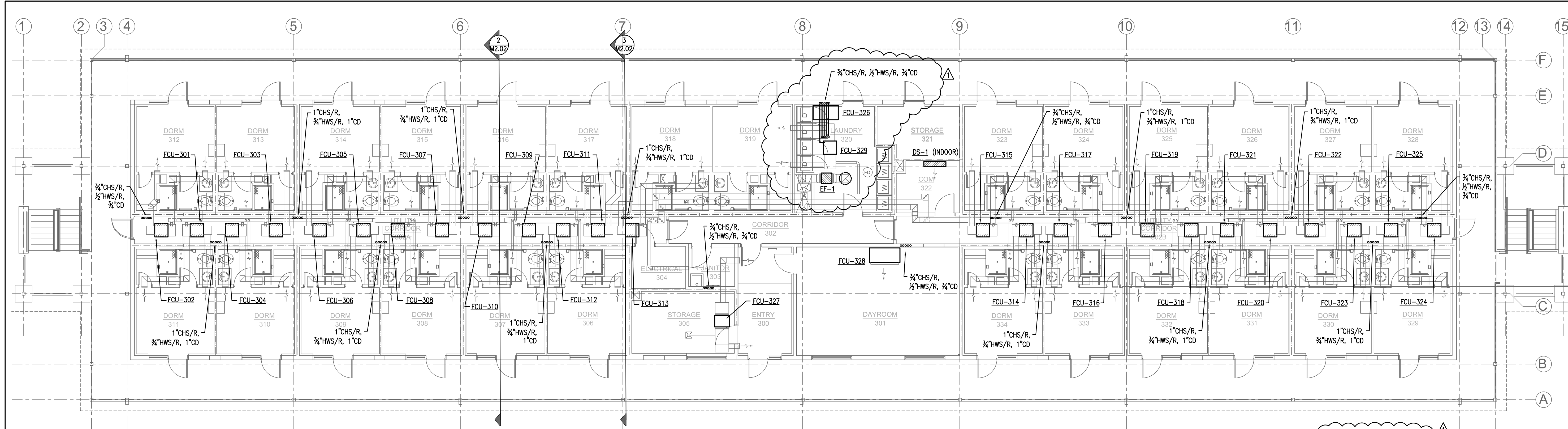


NO.	REVISION/ISSUE	DATE	BY	APP'D
100	REVISED SUBMITTAL	4/26/24		

REPAIR (SUS) AIRMEN
DORMITORY BLDG 854

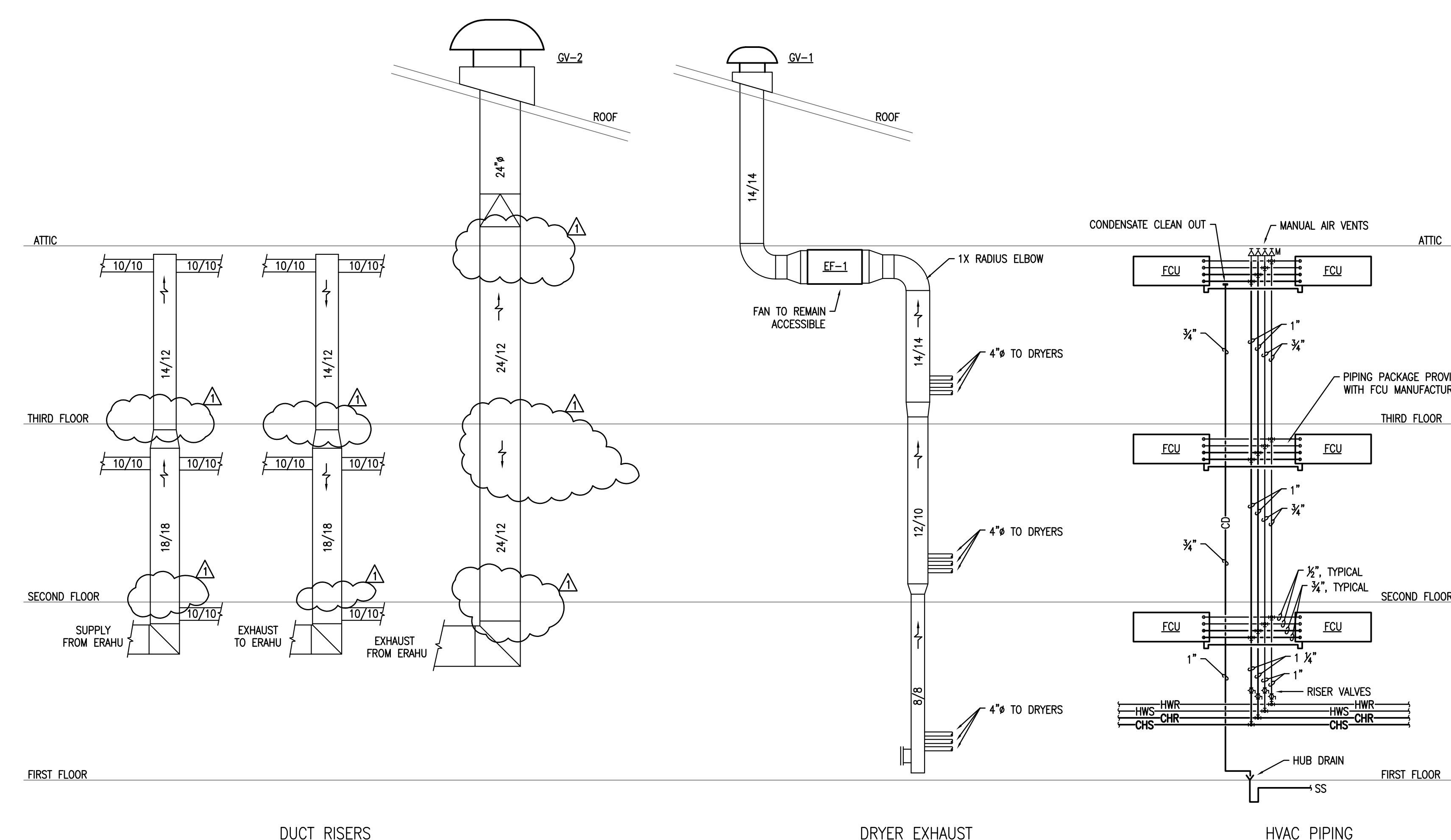
MECHANICAL
PIPING PLAN

HS, BD	GC
HS	NKAK 21-1034
GC	
DATE	29 FEB. 2024
SCALE	AS NOTED
SHEET	M2.03
	78 OF 100

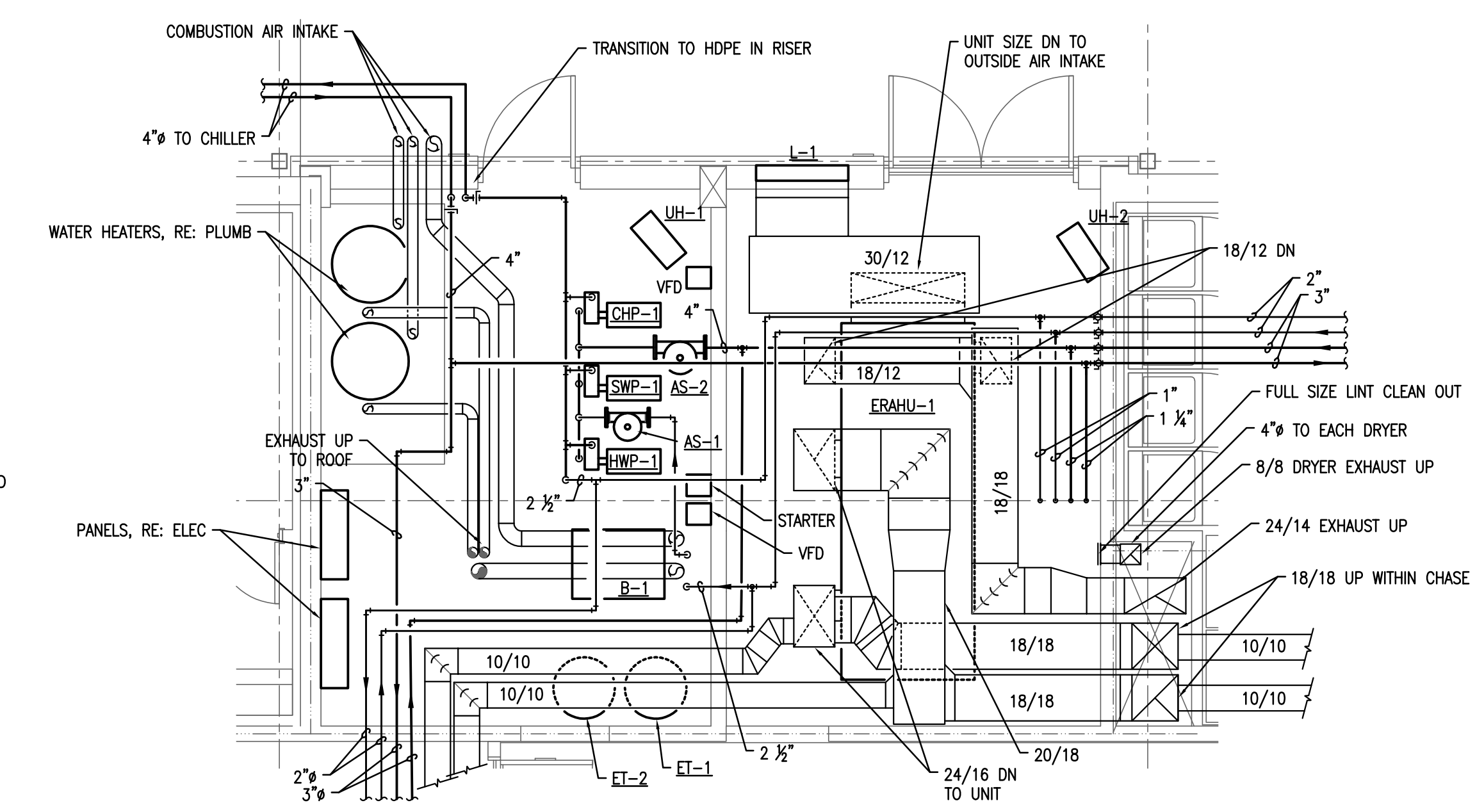


1 MECHANICAL PIPING PLAN - THIRD FLOOR
SCALE: 1/8" = 1'-0"

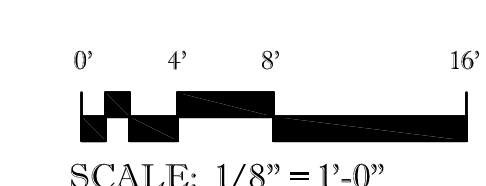
NOTE: LABELS HAVE BEEN MOVED
AN MODIFIED FOR CLARITY. ONLY
CLOUDED AREAS HAVE CHANGED.



3 TYPICAL HVAC RISERS
SCALE: NONE



2 MECHANICAL ROOM ENLARGED PLAN
SCALE: 1/4" = 1'-0"



LITTLE ROCK A.F.B.
ARKANSAS



CLEMENTS & ASSOCIATES
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-375-3380
WWW.CLEMENTSARCHITECTS.COM

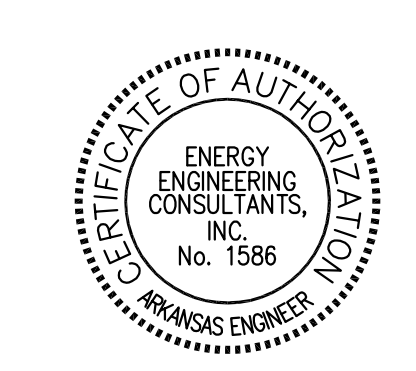


NO.	REVISION/ISSUE	DATE	BY	APP'D
100	REVISED SUBMITTAL	4/26/24		

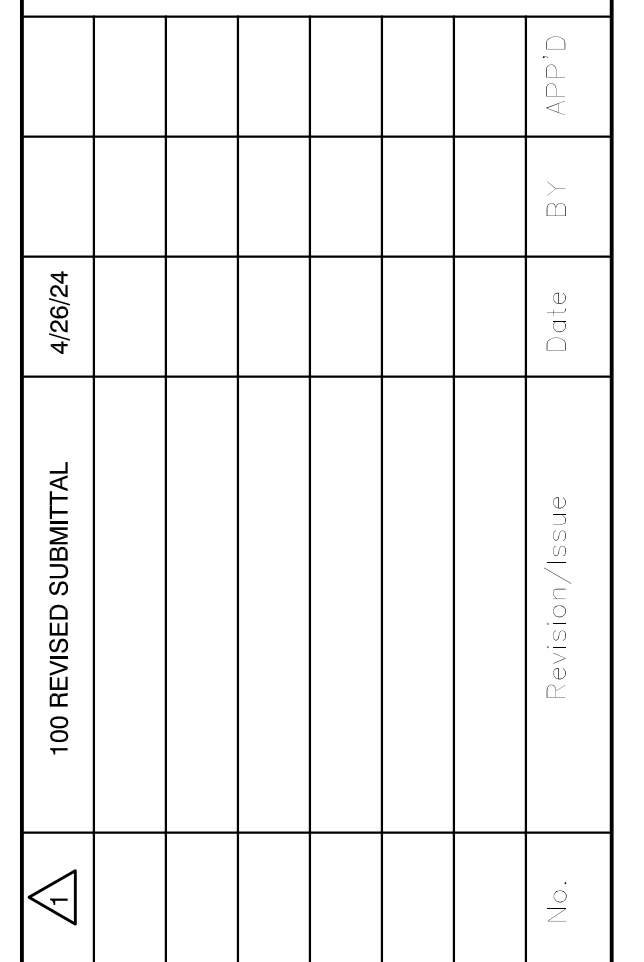
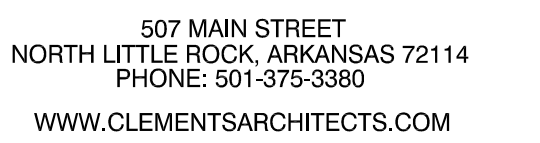
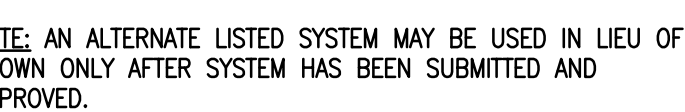
REPAIR (SUS) ARMEN
DORMITORY BLDG 854

MECHANICAL
PIPING PLAN

DESIGNED BY	HS, BD	CHECKED BY	GC
DATE	29 FEB. 2024	PROJECT NUMBER	NKAK 21-1034
SCALE	AS NOTED	SHEET	M2.04
			79 OF 100



EECI
ENERGY ENGINEERING
CONSULTANTS, INC.
10 CORPORATE HILL DR., STE. 100 PH: (501) 244-0511
LITTLE ROCK, AR 72205 FX: (501) 244-0241



MECHANICAL DETAILS

DESIGNED BY	LEAD DESIGNER
HS, BD	GC
TECH. SCALE	PROJECT NUMBER
HS	NKAK 21-1034
DESIGNED BY	SHEET
GC	M3.01
DATE	
29 FEB. 2024	
SCALE	80 OF 100
AS NOTED	



1. ALL WORK MUST COMPLY WITH THE REQUIREMENTS OF LOCAL CODES AND ORDINANCES. WHERE INSPECTIONS ARE REQUIRED BY AUTHORITIES HAVING JURISDICTION, WORK MUST NOT BE CONCEALED UNTIL INSPECTIONS AND TESTING ARE COMPLETED AND ACCEPTED.
2. PRIOR TO BID, CONTRACTOR MUST BECOME THOROUGHLY FAMILIAR WITH THE REQUIREMENTS OF THE GENERAL NOTES AS WELL AS ALL OTHER NOTES SHOWN ON THE CONTRACT DOCUMENTS. VISIT THE SITE TO ESTABLISH THE EXISTING CONDITIONS PRIOR TO BID AND PRIOR TO ANY DUCT, PIPE OR EQUIP. FABRICATION. SYSTEMS MUST BE ERECTED USING CONTRACTOR'S FIELD MEASUREMENTS FOR COORDINATION WITH EQUIPMENT, STRUCTURE, FIRE PROTECTION & ELEC. CONDITIONS IN THE SPACE.
3. ALL CONTRACT DOCUMENTS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRICAL RELATIONSHIPS OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, SEQUENCE, DEVICE, POSITION, FITTING, OR COMPONENT. DO NOT SCALE DRAWINGS.
4. INFORMATION AND COMPONENTS SHOWN ON DIAGRAMS OR DETAILS, BUT NOT SHOWN ON PLANS, AND VICE VERSA, MUST BE PROVIDED AS IF EXPRESSLY REQUIRED BY BOTH.
5. EXCEPT WHERE INDICATED OTHERWISE, THE NOTATION OR DESCRIPTION OF ANY ITEM IN THE CONTRACT DOCUMENTS CARRIES WITH IT THE INSTRUCTION TO FURNISH AND INSTALL THE ITEM, WHETHER OR NOT THIS INSTRUCTION IS EXPLICITLY STATED.
6. MECHANICAL INSTALLATION MUST MAINTAIN INTEGRITY OF WALLS, PARTITIONS AND FLOORS DESIGNATED AS EITHER FIRE RATED OR "SMOKE TIGHT". SEAL AROUND ALL PENETRATIONS THROUGH RATED OR SMOKE TIGHT ASSEMBLIES. COORDINATE WITH ARCHITECTURAL PLANS AND GENERAL CONTRACTOR.
7. COORDINATE PLACEMENT OF ALL MECHANICAL RELATED EQUIPMENT AND DEVICES WITH OTHER TRADES. DO NOT POSITION OR INSTALL ANY MECHANICAL EQUIP. OR DEVICES IN ANY SYSTEM IN SUCH A WAY THAT IT WILL BE INACCESSIBLE OR UNMAINTAINABLE AFTER CONSTRUCTION IS COMPLETED. PROVIDE DUCT ACCESS DOORS AT FIRE DAMPERS, ETC.
8. NO OTHER TRADES ARE ALLOWED TO BE SUPPORTED FROM MATERIALS, EQUIPMENT OR DEVICES INSTALLED BY THE MECHANICAL TRADES. LIKEWISE, ALL WORK INSTALLED BY THE MECHANICAL TRADES MUST BE SUPPORTED FROM THE STRUCTURE ABOVE, FROM WALLS, OR FROM THE FLOOR UNLESS OTHERWISE INDICATED.
9. REPLACE OR REPAIR ALL ARCHITECTURAL FEATURES REMOVED OR DAMAGED DURING THE COURSE OF THE WORK. REPAIR OR REPLACEMENT MUST, AS A MINIMUM, EQUAL ORIGINAL CONDITION. SPECIAL CARE MUST BE TAKEN ON THE ROOFS TO PREVENT DAMAGE. ANY DAMAGE MUST BE PROMPTLY REPAIRED AT NO EXPENSE TO THE OWNER. COMPLY WITH BONDING REQUIREMENTS OF THE ROOFING MANUFACTURER.
10. ALL WIRING INSTALLED FOR CONTROLS, POWER, INTERLOCKS, ETC. WHICH ARE TO BE INSTALLED IN RETURN AIR PLENUMS MUST BE PENULN RATED OR INSTALLED IN CONDUIT UNLESS OTHERWISE INDICATED. ALL WIRING INSTALLED IN OCCUPIED SPACES SHALL BE IN CONDUIT. AS SUCH INSTALLATIONS MUST MEET NFPA AND NEC REQUIREMENTS, AND LOCAL CODES.
11. ALL MECHANICAL WORK MUST BE INSTALLED HIGH AS POSSIBLE SO AS TO MAINTAIN THE MAXIMUM POSSIBLE CLEARANCE ABOVE FINISHED FLOOR FOR TENANT FINISH-OUT.
12. CEILING MOUNTED LIGHTING AND ELECTRICAL REQUIREMENTS TAKE PRECEDENCE OVER CEILING MOUNTED MECHANICAL REQUIREMENTS. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING GRID AND LIGHTING LAYOUT FOR COORDINATION OF FINAL AIR DEVICE LOCATIONS.
13. FABRICATION AND INSTALLATION OF HVAC WORK IS TO COMPLY WITH SMACNA AND ALL APPLICABLE CODES.
14. DUCT SIZES SHOWN ON PLANS INDICATE MINIMUM REQUIRED CLEAR INSIDE DIMENSIONS. ADJUST DUCT SIZES FOR LINDER THICKNESS WHERE APPLICABLE OR WHERE SHOWN. SEE NOTES AND/OR SPECIFICATIONS FOR INSULATION TYPE AND STANDARDS.
15. PROVIDE DUCT TRANSITIONS AS REQUIRED AT EQUIPMENT AND DEVICE CONNECTIONS WHERE DUCT SIZES INDICATED DIFFER FROM THE DUCT CONNECTION SIZE OR DUCT COLLAR.
16. ALL DUCTS MUST BE MOUNTED HIGH AS POSSIBLE EXCEPT AS REQUIRED TO AVOID CONFLICTS WITH INTERSECTING DUCTS. DIAGONALLY OFFSET ALL DUCTS IMMEDIATELY BEFORE AND AFTER PASSING UNDER INTERSECTING DUCTS OR LARGE STRUCTURAL MEMBERS TO MAINTAIN MAXIMUM HEIGHT ABOVE FINISHED FLOOR (AFF).
17. COORDINATE FINAL PLACEMENT OF ALL THERMOSTATS WITH WALL MOUNTED DEVICES AND OWNER'S REPRESENTATIVE. MOUNT THERMOSTATS AT 48" AFF. ANY THERMOSTAT THAT IS REQUIRED TO BE MOUNTED ON AN EXTERIOR WALL MUST BE MOUNTED ON AN INSULATED PAD.
18. BALANCE MECHANICAL SYSTEMS TO PROVIDE INDICATED FLOWS. SEE SPECIFICATIONS FOR OTHER TEST AND BALANCE REQUIREMENTS. SUBMIT FINAL BALANCE REPORT OF MECHANICAL SYSTEMS (FLOW AND TEMPERATURE) FOR REVIEW.



REPAIR (SUS) ARMEN DORMITORY BLDG 854	MECHANICAL DETAILS
--	-----------------------

DRAWN BY HS, BD	LEAD DESIGNER GC
TECH. REVIEWER HS	PROJECT NUMBER NKAK 21-1034
DESIGNED BY GC	SHEET M3.02
DATE 29 FEB. 2024	81 OF 100
SCALE AS NOTED	

GENERAL:

CHILLED WATER PUMP:

THE CHILLED WATER PUMP'S SPEED SHALL BE MODULATED TO MAINTAIN THE DIFFERENTIAL PRESSURE (ADJUSTABLE) REQUIRED FOR ADEQUATE FLOW DETERMINED BY THE TAB CONTRACTOR.

CHILLED WATER BYPASS:

NO CHILLED WATER BYPASS. MINIMUM CHILLER FLOW MAINTAINED VIA 3-WAY VALVES.

CHILLER:

THE CHILLER SHALL BE EQUIPPED WITH EQUIPMENT CONTROL SUPPLIED BY THE MANUFACTURE TO SEQUENCE THE COMPRESSORS BASED ON THE ACTUAL LOAD. ONCE FLOW VERIFICATION IS ACHIEVED, THE STAND-A-LONE CONTROL SHALL SEQUENCE COMPRESSORS AND FANS TO MAINTAIN A SUPPLY TEMPERATURE OF 44 DEGREES (ADJUSTABLE). THE EMS SHALL INTERLOCK WITH CHILLER CONTROLS FOR START/STOP AND ALARM MONITORING.

HEATING WATER PUMP:

THE HEATING WATER PUMP'S SPEED SHALL BE MODULATED TO MAINTAIN THE DIFFERENTIAL PRESSURE (ADJUSTABLE) REQUIRED FOR ADEQUATE FLOW DETERMINED BY THE TAB CONTRACTOR.

SWING PUMP:

SWING PUMP IS TO ONLY BE UTILIZED DURING SERVICING OF EITHER CHILLED OR HEATING WATER PUMP. THE PUMP IS TO BE MANUALLY STARTED AFTER ASSOCIATED VALVES ARE OPENED (EITHER CHILLED OR HEATING WATER SYSTEM).

BOILER:

THE BOILER SYSTEM SHALL START AND STOP UPON EMS COMMAND. THE BOILER CONTROLLER SHALL STAGE THE BOILER'S RATE OF FIRE AS NEEDED TO MEET THE FACILITY'S LOAD. THE FLOW VERIFICATION SHALL BE SATISFIED PRIOR TO BOILER OPERATION. THE SYSTEM'S FIRE RATE (% FIRE) SHALL BE MODULATED TO MAINTAIN THE LEAVING WATER TEMPERATURE AT SETPOINT. THE LEAVING WATER TEMPERATURE SHALL BE DETERMINED BY THE EMS THROUGH THE GLOBAL TEMPERATURE SENSOR AND SHALL SEND THE SETPOINT TO THE BOILER CONTROL SYSTEM (4m and 20ma). THE HEATING WATER SUPPLY TEMPERATURE SHALL BE 140 DEG. F (ADJUSTABLE) WHEN THE OUTSIDE AIR TEMPERATURE IS AT OR BELOW 50 DEG. F (ADJUSTABLE). WHEN THE OUTSIDE AIR TEMPERATURE RISES ABOVE 50 DEG. F (ADJUSTABLE), THE SUPPLY TEMPERATURE SHALL BE RESET DOWN LINEARLY 5 DEG. F (ADJUSTABLE) SUPPLY TEMPERATURE FOR EVERY 1 DEG. F (ADJUSTABLE) CHANGE IN OUTSIDE AIR TEMPERATURE TO 110 DEG. F (ADJUSTABLE) AT 60 DEG. F (ADJUSTABLE). WHEN THE OUTSIDE AIR TEMPERATURE FALLS BELOW 60 DEG. F (ADJUSTABLE), THE SUPPLY TEMPERATURE SHALL RESET UP LINEARLY AT THE SAME RATE AS IT RESETS DOWN UNTIL IT REACHES 140 DEG. F (ADJUSTABLE) AT AN OUTSIDE AIR TEMPERATURE OF 50 DEG. F (ADJUSTABLE).



ENERGY RECOVERY AIR HANDLING UNITS (ERAHU-#) SEQUENCE OF OPERATION:

UNITS SHALL BE CONTROLLED VIA FACTORY MOUNTED MICROPROCESSOR CONTROLLER. UNIT SHALL BE CAPABLE OF STAND-A-LONE OPERATION WITH NETWORK COMPATIBILITY SPECIFIED BY CONTROLS CONTRACTOR (TRANE BACNET). UNIT SHALL BE STARTED AND STOPPED UPON SIGNAL OF THE EMS (TYPICALLY TO OPERATE 24/7). WHEN UNIT IS NOT IN OPERATION THE ISOLATION DAMPERS ARE TO BE CLOSED.

WHEN THE OUTDOOR AIR TEMPERATURE IS ABOVE 80 DEGREES F (ADJUSTABLE) THE CONTROLLER SHALL MODULATE THE CHILLED WATER VALVE TO MAINTAIN THE SUPPLY AIR TEMPERATURE AT 55 DEGREES F (ADJUSTABLE). THE REHEAT VALVE SHALL BE LOCKED OUT AND THE ENTHALPY WHEEL SHALL BE IN OPERATION.

WHEN THE OUTSIDE AIR TEMPERATURE FALLS BELOW 55 DEGREES F THE CHILLED WATER VALVE SHALL BE CLOSED AND THE HEATING CONTROL VALVE MODULATED TO MAINTAIN A SUPPLY AIR TEMPERATURE OF 70 DEGREES F (ADJUSTABLE).

WHEN THE OUTSIDE AIR TEMPERATURE FALLS BETWEEN 55 AND 80 DEGREES F THE CHILLED WATER VALVE IS TO BE MODULATED TO MAINTAIN A COIL LEAVING TEMPERATURE OF 55 DEGREES AND THE HEATING WATER VALVE IS TO BE MODULATED TO MAINTAIN A UNIT DISCHARGE TEMPERATURE OF 70 DEGREES F.

FREEZE CONTROL: IF THE ENTERING COIL TEMPERATURE FALLS BELOW 38 DEGREES F. THE SUPPLY FAN IS TO STOP AND ISOLATION DAMPER TO CLOSE (EXHAUST FAN TO REMAIN OPERATIONAL). THE UNIT MUST BE MANUALLY RESET AS CONDITION INDICATES ENTHALPY WHEEL FAILURE.



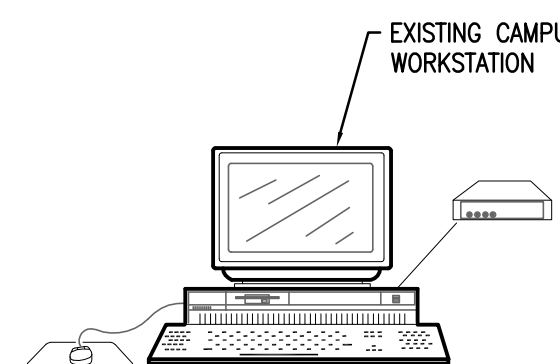
VARIABLE FREQUENCY DRIVES

NOTES:

1. VARIABLE FREQUENCY DRIVES SHALL BE PROVIDED BY THE CONTROLS CONTRACTOR.

2. ALL VARIABLE FREQUENCY DRIVES WITHIN THIS PROJECT SHALL BE OF THE SAME SERIES, PROVIDE 2-YEAR PARTS WARRANTY

	ANALOG INPUT		TERMINAL EQUIPMENT CONTROLLER
	ANALOG OUTPUT		TEMPERATURE SENSOR
	DIGITAL INPUT		FLOW SWITCH
	DIGITAL OUTPUT		2-WAY CONTROL VALVE
	THERMOSTAT		3-WAY CONTROL VALVE
	TEMPERATURE SENSOR		DAMPER ACTUATOR
	TEMPERATURE SENSOR		SMOKE DETECTOR
	AVERAGING TEMPERATURE SENSOR		DIFFERENTIAL PRESSURE TRANSMITTER
	HUMIDITY SENSOR		PRESSURE SWITCH / SENSOR



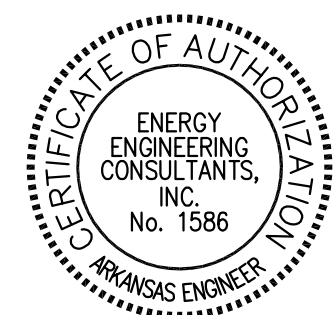
1 SCALE: NONE

FAN COIL UNIT SEQUENCE OF OPERATION:

THE TERMINAL UNIT CONTROLLER SHALL SEQUENCE THE FAN SPEED (OFF, LOW, MEDIUM, AND HIGH) AND MODULATE THE CHILLED WATER AND HEATING WATER VALVES TO MAINTAIN THE SPACE TEMPERATURE. INTERLOCK MOISTURE SENSOR TO SHUT DOWN UNIT AND ALARM UPON WATER DETECTION IN DRAIN PAN



SCALE: NONE



10 CORPORATE HILL DR., STE. 100 PH: (501) 244-0511
LITTLE ROCK, AR 72205 FX: (501) 244-0241



LITTLE ROCK A.F.B.
ARKANSAS



**CLEMENTS
& ASSOCIATES**
ARCHITECTURE, INC.

507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-375-3380
WWW.CLEMENTSARCHITECTS.COM



1	100 REVISED SUBMITTAL	4/26/24		
No.	Revision/Issue	Date	B	APP'D

PROJECT TITLE
REPAIR (SUS) ARMEN
DORMITORY BLDG 854

MECHANICAL CONTROLS

HS, BD	GC
TECH. FOLDER	PROJECT FOLDER
HS	NKAK 21-1034
DESCRIPTION BY	SHEET
GC	M3.03
DATE	
29 FEB. 2024	
SCALE	
AS NOTED	82 OF 100

	POINT OF CONNECTION - NEW TO EXISTING		SECTION / ELEVATION REFERENCE INDICATES DIRECTION OF SECTION SECTION DETAIL NUMBER REFERRED SHEET NUMBER
A/D	ACCESS DOOR		
	THERMOSTAT		
	HUMIDISTAT		
	CARBON DIOXIDE SENSOR		
-----	EXISTING TO REMAIN		SUPPLY DIFFUSER/GRILLE LABEL:
	EXISTING TO BE REMOVED		
— CHS —	CHILLED WATER SUPPLY		MARK THROW PATTERN AIRFLOW (CFM)
— CHR —	CHILLED WATER RETURN		RETURN DIFFUSER/GRILLE LABEL:
— HWS —	HEATING HOT WATER SUPPLY		MARK AIRFLOW (CFM)
— HWR —	HEATING HOT WATER RETURN		SUPPLY AIR DIFFUSER
— CD —	CONDENSATE DRAIN (COLD)		RETURN AIR GRILLE
	PIPE UP		EXHAUST GRILLE
	PIPE DOWN		
	CONCENTRIC REDUCER		ROUND DUCTWORK. DIAMETER IN INCHES.
	ECCENTRIC REDUCER		RECTANGULAR DUCTWORK. SIZE IN INCHES, FIRST NUMBER IS SIDE SHOWN.
	STRAINER WITH BLOWDOWN VALVE		FLAT OVAL DUCTWORK. SIZE IN INCHES, FIRST NUMBER IS MAJOR AXIS (SIDE SHOWN).
	GATE VALVE		MITERED ELBOW WITH TURNING VANES.
	GLOBE VALVE		1.5X RADIUS DUCTWORK ELBOW — ROUND OR RECTANGULAR.
	BALL VALVE		
	OS&Y VALVE		RECTANGULAR DUCTWORK BRANCH TAKE-OFF WITH 45 DEGREE BRANCH INLET.
	CHECK VALVE		HIGH EFFICIENCY TAP WITH DAMPER.
	LEVER OPERATED BUTTERFLY VALVE		
	GEAR OPERATED BUTTERFLY VALVE		FIRE DAMPER / ACCESS DOOR (A/D)
	3-WAY ELECTRIC CONTROL VALVE		VOLUME DAMPERS
	2-WAY ELECTRIC CONTROL VALVE		MOTORIZED DAMPER
	VALVE IN RISER (BALL, BUTTERFLY)		
	PIPE GUIDE		
	CAP ON END LINE		
	MANUAL AIR VENT		
	AUTOMATIC AIR VENT		
	PRESSURE GAUGE WITH GAUGE COCK		
	THERMOMETER		
	FLEXIBLE CONNECTION		

DESIGNATION	REFERENCE PRODUCT	TYPE	SERVES	COOLING				ELECTRICAL DATA						REMARKS
				AIR FLOW RATE (CFM)	NOMINAL CAPACITY (TONS)	SENSIBLE/TOTAL (MBH)	AIR EDB/ENB (DEG. F)	MINIMUM SEER	INDOOR UNIT		OUTDOOR UNIT			
									VOLTS / PHASE	MCA	VOLTS / PHASE	MCA	MCOP	
DS-1, DS-2, DS-3	TRANS PKA/PUY-A18	WALL MOUNTED	COMM	425	1.5	18.2 / 11.4	80 / 67	18.5	208 / 1	<3	208 / 1	11.4	15	
NOTES: 1. FIELD ROUTE REFRIGERANT LINE SET BETWEEN INDOOR / OUTDOOR UNITS (SIZED PER MANUFACTURER RECOMMENDATION). 2. PROVIDE WALL MOUNT T'STAT, COMPRESSOR SHORT CYCLE PROTECTOR, HIGH AND LOW PRESSURE PROTECTIONS, AND 1-YEAR WARRANTY FOR REFRIGERATION SYSTEM. 3. ELECTRICAL DISCONNECT BY ELECTRICAL CONTRACTOR.														

DESIGNATION	REFERENCE PRODUCT	TYPE	REFRIGERANT	WEIGHT (LBS)	COOLING DATA					EVAPORATOR FLOW DATA				ELECTRICAL DATA				REMARKS
					NOMINAL TONS	FULL LOAD CAPACITY (TONS)	AMBIENT AIR TEMPERATURE (DEG. F)	FULL LOAD EER	IPLV / NPLV	DESIGN FLOW RATE (GPM)	PRESSURE DROP (FEET)	MINIMUM FLOW RATE (GPM)	EVAPORATOR EWT/LWT (DEG. F)	VOLTS / PHASE	MCA	MOCP	STARTER TYPE	
CH-1	TRANE CGAM	SCROLL	HFC-410A	5,692	80	67.6	95		15.4 / 14.1	200	12.1	64.2	54 / 42	208 / 3	354	400	ACROSS THE LINE	SELECTED WITH 30% PROPYLENE GLYCOL
NOTES: 1. PROVIDE EACH UNIT WITH SINGLE POINT POWER CONNECTION WITH BREAKER DISCONNECT. 2. PROVIDE EACH UNIT WITH COMPRESSOR SHORT CYCLE PROTECTION, LOW PRESSURE CUT OFF SWITCH AND FLOW VERIFICATION. 3. PROVIDE 5 YEAR EXTENDED PARTS WARRANTIES ON ALL REFRIGERANT COMPRESSORS. 4. PROVIDE 110V HEAT TRACE FOR FREEZE PROTECTION. 5. PROVIDE FACTORY REFRIGERANT TERMINATION, SYSTEM CHARGE, AND STARTUP.																		

DESIGNATION	REFERENCE PRODUCT	HEATING SECTION			FAN DATA		ELECTRICAL		OPTIONS			REMARKS
		HEAT INPUT (KW)	HEAT INPUT (BTU/hr)	AIR THROW (FEET)	AIR FLOW (CFM)	STATIC PRESSURE (INCHES W.C.)	VOLTS / PHASE	FLA	THERMOSTAT TYPE	MANUAL FAN SWITCH	DISCONNECT SWITCH	
UH-1, UH-2, UH-3	MARKEL 51 SERIES	3.3	11.2	4	400	---	208 / 1	15.9	WALL	NO	NO	
NOTES: 1. ACCEPTABLE MANUFACTURERS: MARKEL, TRANE, PRE-APPROVED EQUAL. 2. UNIT DISCONNECT PROVIDED BY ELECTRICIAN. 3. PROVIDE UNIT HEATERS WITH HANGING KIT AND WALL MOUNTED THERMOSTAT.												

DESIGNATION	REFERENCE PRODUCT	LOCATION	TYPE	SERVES	WATER FLOW RATE (GPM)	TOTAL HEAD (FT. WATER)	ROTATION (RPM)	EFFICIENCY AT DESIGN (%)	MOTOR SIZE		ELECTRICAL		REMARKS
									BHP	MHP	VOLTS	PHASE	
HWP-1	PACO 159597LC	MECHANICAL	END SUCTION	HEATING WATER	75	80	1800	65.0	2.4	5	208	3	1. ACCEPTABLE MANUFACTURERS: ARMSTRONG, BELL & GOSSETT, PACO, AND TACO. 2. PROVIDE END SUCTION PUMPS WITH SUCTION DIFFUSER.
SWP-1	PACO 25957LC	MECHANICAL	END SUCTION	SWING PUMP	200	75	1800	77.00	4.9	7.5	208	3	
CHP-1	PACO 25957LC	MECHANICAL	END SUCTION	CHILLED WATER	200	75	1800	77.00	4.9	7.5	208	3	

DESIGNATION	REFERENCE PRODUCT	LOCATION	SERVES	TYPE	MINIMUM TEMPERATURE (DEG. F.)	MAXIMUM TEMPERATURE (DEG. F.)	MINIMUM PRESSURE (PSIG)	MAXIMUM PRESSURE (PSIG)	REQUIRED ACCEPTANCE (GAL)	TANK VOLUME (GAL)	TANK DIAMETER (IN.)	TANK HEIGHT (IN.)	REMARKS
ET-1	TACO CA140-125	BASEMENT MECHANICAL	HEATING WATER	DIAPHRAGM	50	180	30	60	15.5	37	16	40	LOCATE ON EQUIPMENT PAD.
ET-2	TACO CA90-125	BASEMENT MECHANICAL	CHILLED WATER	DIAPHRAGM	40	100	30	60	6.5	23	16	29	LOCATE ON EQUIPMENT PAD.

NOTES:
1. ACCEPTABLE MANUFACTURERS: AMTROL, ARMSTRONG, TACO, AND WHEATLEY.
2. COORDINATE EXISTING MAKEUP PRESSURE WITH PRECHARGE OF EXPANSION TANK.

DESIGNATION	REFERENCE PRODUCT	TYPE	MAXIMUM AIRFLOW (CFM)	PRESSURE DROP (IN. WATER)	MINIMUM FREE AREA (SQ. FT.)	SIZE W x H (INCHES)	REMARKS
L-1	RUSKIN L637SD	DRAINABLE BLADE	2,500	0.08	4.5	36 x 36	

NOTES:

1. ACCEPTABLE MANUFACTURERS: AMERICAN WARNING, GREENHECK, AND RUSKIN.
2. ALL MOTORIZED DAMPER ACTUATORS SHALL BE PROVIDED BY THE CONTROLS CONTRACTOR.
3. ALL LOUVERS SHALL BE OF ALUMINUM CONSTRUCTION.
4. PAINT / FINISH TO MATCH BUILDING. COORDINATE WITH ARCHITECT.

DESIGNATION	REFERENCE PRODUCT	LOCATED	FUEL TYPE	HEATING DATA				ELECTRICAL		REMARKS
				NAT. GAS INPUT (MBH)	HEATING OUTPUT (MBH)	EWI / LWT DEG. F.	WATER FLOW (GPM)	VOLTS / PHASE	AMPS	
B-1	RAYPAK XFIRE 800	MECH	NATURAL GAS	800	768	140 / 120	75	115 / 1	13	6" PVC FLUE. PROVIDE WITH 50 GPM PRIMARY PUMP.

NOTES:

- NOTE: HEATING OUTPUT IS MAX AND NOT BASED ON OPERATING CONDITIONS.
- PROVIDE UNITS WITH A MINIMUM OF A 5:1 TURNDOWN, ASME RELIEF, AND DISCONNECT.
- PROVIDE UNITS WITH FM APPROVED GAS TRAIN AND FACTORY STARTUP.
- REFER TO CONTROL DRAWINGS AND SPECIFICATIONS FOR CONTROLS REQUIRED. PROVIDE BACNET INTEGRATION MODULE.

DESIGNATION	REFERENCE PRODUCT	LOCATION	TYPE	SERVES	VOLUME (CFM)	THROAT WIDTH (INCHES)	THROAT LENGTH (INCHES)	THROAT AREA (SQ. FEET)	THROAT VELOCITY (FT / MIN)	REMARKS
GV-1	COOK 20PR	ROOF	EXHAUST	DRYERS	1,200	20"Ø	---	2.2	550.3	
GV-2	COOK 24TR	ROOF	EXHAUST	RELIEF AIR	2,500	24"Ø	---	3.1	796.2	

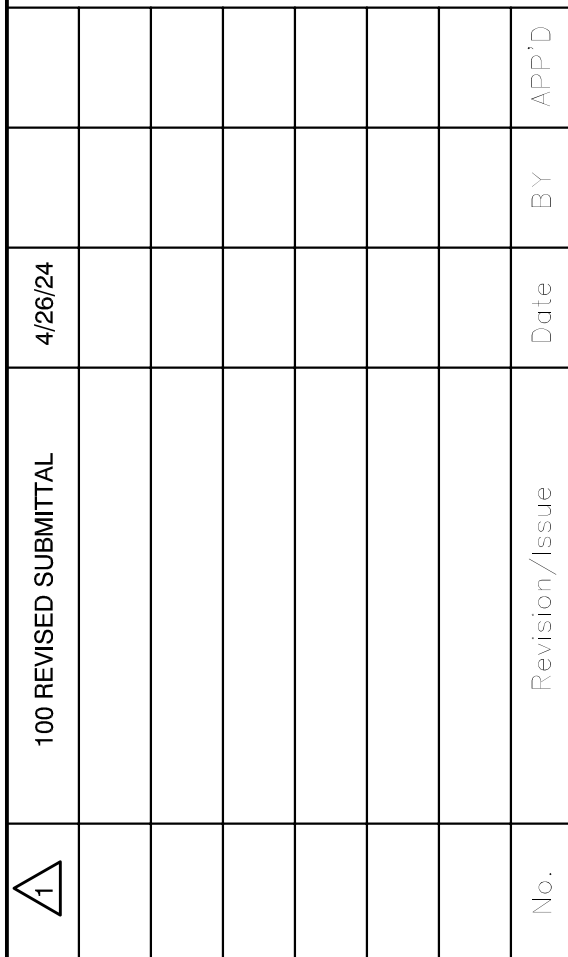
1. ACCEPTABLE MANUFACTURERS: ACME, COOK, AND GREENHECK.
2. PROVIDE UNITS WITH ROOF CURB. COORDINATE WITH ROOF TYPE AND PITCH.

DESIGNATION	REFERENCE PRODUCT	LOCATION	SERVES	TYPE	INLET / OUTLET SIZE (INCHES)	MAXIMUM PRESSURE LOSS (FEET)	REMARKS
AS-1	AMTROL 3-AS	FIRST FLOOR MECHANICAL	HEATING WATER	TANGENTIAL WITH STRAINER	3	5.8	
AS-2	AMTROL 4-AS	FIRST FLOOR MECHANICAL	CHILLED WATER	TANGENTIAL WITH STRAINER	4	4.3	

NOTES:

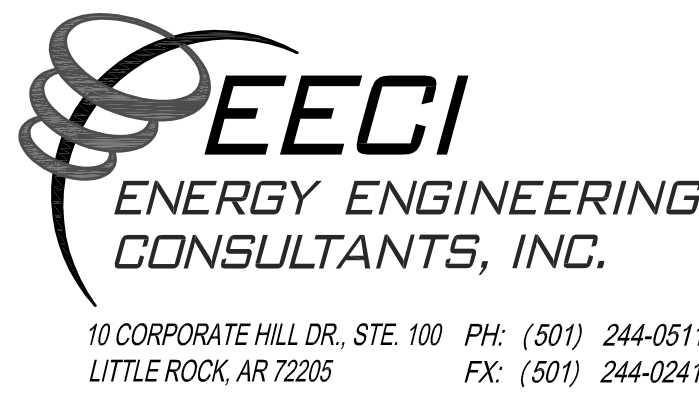
1. ACCEPTABLE MANUFACTURERS: AMTROL, ARMSTRONG, BELL & GOSSETT, TACO, AND WHEATLEY.
2. PROVIDE WITH HIGH CAPACITY AIR VENT AND MANUAL BLOW DOWN VALVE.

MARK	REFERENCE PRODUCT	TYPE	SERVES	FAN DATA				ELECTRICAL			REMARKS
				AIR FLOW (CFM)	TOTAL STATIC PRESSURE (IN. WATER)	DRIVE	ROTATION (RPM)	SONES	VOLTS / PHASE	MOTOR SIZE (MHP)	
EF-1	COOK 135SQN	IN-LINE	DRYERS	1200	1/4	DIRECT	1,102	8.6	115 / 1	1/8	PROVIDE WITH SPEED CONTROLLER. UNIT SHALL TYPICALLY OPERATE 24/7.
NOTES: 1. ACCEPTABLE MANUFACTURERS: ACME, COOK, GREENHECK, AND TWIN CITY. 2. PROVIDE IN-LINE FANS WITH ISOLATION HANGER KITS, DISCONNECTS AND FLEXIBLE CONNECTIONS.											



MECHANICAL
SCHEDULES

HS, BD	GC
TECH. REVIEWER	PROJECT NUMBER
HS	NKAK 21-1034
DESIGNED BY	SHEET
GC	M4.01 83 OF 100
DATE	
29 FEB. 2024	
SCALE	
AS NOTED	



FAN COIL / BLOWER COIL UNITS - FOUR PIPE (1 OF 2)

Designation	Reference Product	Type	Airflow Data			Cooling Data					Heating Data					Electrical Data		Remarks	
			Total Airflow (CFM)	External Pressure (in. Water)	Filter Type	Cooling Tot./Sens (MBH)	Air EDB/EWB (Deg. F)	Water EWT/LWT (Deg. F)	Water Flow Rate (GPM)	Water Pressure Drop (ft. Water)	Total Capacity (MBH)	Heating Coil Rows	Air EDB/LDB (Deg. F)	Water EWT/LWT (Deg. F)	Water Flow Rate (GPM)	Water Pressure Drop (ft. Water)	Volts / Phase		HP
FCU-101	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-102	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-103	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-104	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-105	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-106	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-107	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-108	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-109	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-110	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-111	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-112	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-113	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-114	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-115	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-116	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-117	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-118	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-119	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-120	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-121	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-122	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-123	TRANE FCEB030	HORIZONTAL EXPOSED	275	0	1" THROWAWAY	9.4 / 6.8	80 / 67	42 / 54	1.5	1.6	7.9	1	65 / 91	140 / 120	0.5	1.3	115 / 1	1/8	2-WAY CONTROL VALVES
FCU-124	TRANE FCCB030	HORIZONTAL CONCEALED	275	0	1" THROWAWAY	9.4 / 6.8	80 / 67	42 / 54	1.5	1.6	7.9	1	65 / 91	140 / 120	0.5	1.3	115 / 1	1/8	2-WAY CONTROL VALVES
FCU-125	TRANE FCEB040	HORIZONTAL RECESSED	325	0.1	1" THROWAWAY	11.5 / 8.7	80 / 67	42 / 54	2	5.4	8.2	1	65 / 90	140 / 120	0.5	1.1	115 / 1	1/8	2-WAY CONTROL VALVES
FCU-201	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-202	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-203	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-204	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-205	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-206	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-207	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-208	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-209	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-210	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-211	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-212	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-213	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-214	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-215	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-216	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-217	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-218	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-219	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-220	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-221	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-222	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-223	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-224	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-225	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	2-WAY CONTROL VALVES
FCU-226	TRANE FCEB030	HORIZONTAL EXPOSED	275	0	1" THROWAWAY	9.4 / 6.8	80 / 67	42 / 54	1.5	1.6	7.9	1	65 / 91	140 / 120	0.5	1.3	115 / 1	1/8	2-WAY CONTROL VALVES
FCU-227	TRANE FCCB030	HORIZONTAL CONCEALED	275	0	1" THROWAWAY	9.4 / 6.8	80 / 67	42 / 54	1.5	1.6	7.9	1	65 / 91	140 / 120	0.5	1.3	115 / 1	1/8	2-WAY CONTROL VALVES
FCU-228	TRANE FCEB040	HORIZONTAL RECESSED	400	0.1	1" THROWAWAY	11.5 / 8.7	80 / 67	42 / 54	2	5.4	8.2	1	65 / 90	140 / 120	0.5	1.1	115 / 1	1/8	2-WAY CONTROL VALVES
FCU-229	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67												

- NOTES:
1. ACCEPTABLE MANUFACTURERS: TRANE.
 2. HEATING COIL SHALL BE IN THE REHEAT POSITION.
 3. ALL FAN COIL UNITS SHALL BE SELECTED WITH 30% GYLCOL FOR THE CHILLED WATER SYSTEMS.

ENERGY RECOVERY AIR HANDLING UNITS

DESIGNATION	ERAHU-1
MANUFACTURER / MODEL	TRANE OABD036
MAXIMUM UNIT LENGTH (INCHES)	161
MAXIMUM UNIT WIDTH (INCHES)	52
MAXIMUM UNIT HEIGHT (INCHES)	55
UNIT ARRANGEMENT	END YES SIDES (2) YES NO SIDE SEE DRAWINGS 2" PLEATED 2" PLEATED GALVANIZED STEEL, BAKED ENAMEL 2" FOAM
SUPPLY FAN	SUPPLY AIR FLOW (CFM) 2,500 EXTERNAL STATIC PRESSURE (INCHES W.C.) 0.75 FAN RPM 2,815 FAN BHP 2.1 MOTOR HP 3
EXHAUST FAN	EXHAUST AIR FLOW (CFM) 2,500 EXTERNAL STATIC PRESSURE (INCHES W.C.) 0.75 FAN RPM 2,370 FAN BHP 1.23 MOTOR HP 2
ENTHALPY WHEEL (SUMMER)	OSA EDB / EWB (DEG F.) 98 / 78 VENTILATION AIR LDB / LWB (DEG F.) 83.8 / 74.2 EXHAUST AIR EDB / EWB (DEG.F) 75 / 63 SENSIBLE / LATENT EFFECTIVENESS (%) (1) 61.7 / 25.3
ENTHALPY WHEEL (WINTER)	OSA EDB / EWB (DEG F.) 17 / 15 VENTILATION AIR LDB / LWB (DEG F.) 44.6 / 35.1 EXHAUST AIR EDB / EWB (DEG.F) 70 / 58 SENSIBLE / LATENT EFFECTIVENESS (%) (1) 52.1 / 46.7
CHILLED WATER COIL	AIR FLOW (CFM) 2,500 COIL FACE VELOCITY (FPM) 486 ROWS 6 FIN SPACING (FINS PER FOOT) 12 ENTERING AIR TEMPERATURE (DB/WB DEG.F.) 83.4 / 70.9 LEAVING AIR TEMPERATURE (DB/WB DEG.F.) 56.7 / 56.1 COIL AIR PRESSURE DROP (INCHES W.G.) 0.5 ENTERING WATER TEMPERATURE (DEG.F.) 43 LEAVING WATER TEMPERATURE (DEG.F.) 55 CHILLED WATER FLOW (GPM) 11 COIL WATER PRESSURE DROP (FEET W.G.) 1.8 TOTAL HEAT TRANSFER (MBH) 67.5 SENSIBLE HEAT TRANSFER (MBH) 52.9 ACCESS DOORS SECTION ACCESSORIES S.S. DRAIN PAN
RE-HEAT WATER COIL	AIR FLOW (CFM) 2,500 COIL FACE VELOCITY (FPM) 486 ROWS 2 FIN SPACING (FINS PER FOOT) 8 ENTERING AIR TEMPERATURE (DEG.F.) 49.3 LEAVING AIR TEMPERATURE (DEG.F.) 75.8 COIL AIR PRESSURE DROP (INCHES W.G.) 0.51 ENTERING WATER TEMPERATURE (DEG.F.) 160 LEAVING WATER TEMPERATURE (DEG.F.) 140 HEATING WATER FLOW (GPM) 7.2 COIL WATER PRESSURE DROP (FEET W.G.) 3.2 TOTAL HEAT TRANSFER (MBH) 71.6
ELECTRICAL	VOLTS / PHASE 208 / 3 MINIMUM CIRCU

FAN COIL / BLOWER COIL UNITS - FOUR PIPE (2OF 2)																			
DESIGNATION	REFERENCE PRODUCT	TYPE	AIRFLOW DATA		FILTER TYPE	COOLING DATA					HEATING DATA					ELECTRICAL DATA		REMARKS	
			TOTAL AIRFLOW (CFM)	EXTERNAL PRESSURE (IN. WATER)		COOLING TOT/SENS (MBH)	AIR EDB/EWB (DEG. F)	WATER EWT/LWT (DEG. F)	WATER FLOW RATE (GPM)	WATER PRESSURE DROP (FT. WATER)	TOTAL CAPACITY (MBH)	HEATING COIL ROWS	AIR EDB/LDB (DEG. F)	WATER EWT/LWT (DEG. F)	WATER FLOW RATE (GPM)	WATER PRESSURE DROP (FT. WATER)	VOLTS / PHASE		HP
FCU-301	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-302	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-303	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-304	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-305	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-306	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-307	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-308	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-309	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-310	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-311	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-312	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-313	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-314	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-315	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-316	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-317	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-318	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-319	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-320	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-321	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-322	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-323	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-324	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-325	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
FCU-326	TRANE FCCB030	HORIZONTAL EXPOSED	275	0	1" THROWAWAY	9.4 / 6.8	80 / 67	42 / 54	1.5	1.6	7.9	1	65 / 91	140 / 120	0.5	1.3	115 / 1	1/8	3-WAY CONTROL VALVES
FCU-327	TRANE FCCB030	HORIZONTAL CONCEALED	275	0	1" THROWAWAY	9.4 / 6.8	80 / 67	42 / 54	1.5	1.6	7.9	1	65 / 91	140 / 120	0.5	1.3	115 / 1	1/8	3-WAY CONTROL VALVES
FCU-328	TRANE FCEB040	HORIZONTAL RECESSED	400	0.1	1" THROWAWAY	11.5 / 8.7	80 / 67	42 / 54	2	5.4	8.2	1	65 / 90	140 / 120	0.5	1.1	115 / 1	1/8	3-WAY CONTROL VALVES
FCU-329	TRANE FCCB040	HORIZONTAL CONCEALED	300	0.5	1" THROWAWAY	12.8 / 8.6	80 / 67	42 / 54	2.1	9.1	9.2	1	65 / 92	140 / 120	1	1.2	208 / 1	1/8	3-WAY CONTROL VALVES
NOTES: 1. ACCEPTABLE MANUFACTURERS: TRANE 2. HEATING COIL SHALL BE IN THE REHEAT POSITION. 3. ALL FAN COIL UNITS SHALL BE SELECTED WITH 30% GYLCOOL FOR THE CHILLED WATER SYSTEMS.																			

AIR DEVICES													
MARK	REFERENCE PRODUCT	USE	MAXIMUM AIRFLOW (CFM)	TYPE	STYLE	NECK SIZE (INCHES)	FACE SIZE (INCHES)	MAXIMUM APD (INCHES W.C.)	MAXIMUM N.C. RATING	MATERIAL	FINISH	PROVIDE OBD	REMARKS
A	PRICE 520	SUPPLY	300	SIDEWALL	BLADE	12 / 6	14 x 8	0.13	25	STEEL	WHITE	YES	45° DOUBLE DEFLECTION
B	PRICE SCD	SUPPLY	100	CEILING	LOUVERED	6" Ø	12 x 12	0.03	25	STEEL	WHITE	YES	
C	PRICE 520	SUPPLY	400	SIDEWALL	BLADE	SEE REMARKS	SEE REMARKS	0.10					SIZE OF GRILLE TO EQUAL FAN COIL DUCT SIZE.
1	PRICE 91	RETURN / EXHAUST	300	SIDEWALL	BAR	12 / 6	14 x 8	-0.06	25	STEEL	WHITE	NO	3/8" SPACING WITH 45° DEFLECTION
2	PRICE 80	RETURN / EXHAUST	40	WALL	EGGCRATE	6 x 5	8 x 6	-0.04	20	ALUMINUM	WHITE	NO	
3	PRICE 91	RETURN / EXHAUST	325	SIDEWALL	BAR	16 / 6	18 x 8	-0.06	25	STEEL	WHITE	NO	3/8" SPACING WITH 45° DEFLECTION
NOTES: 1. ACCEPTABLE MANUFACTURERS: KRUEGER, METALAIRE, PRICE, TITUS, AND TUTTLE & BAILEY. 2. ALL CEILING DIFFUSERS SHALL BE 4-WAY THROW UNLESS OTHERWISE INDICATED ON PLANS. 3. COORDINATE WITH ARCHITECTURAL ROOM FINISH SCHEDULES FOR DEVICE FRAMING REQUIREMENTS. 4. PROVIDE OPPOSED BLADE DAMPERS AT ALL BRANCH TAKE-OFFS EVEN IF OBD'S ARE INDICATED FOR AIR DEVICES. 5. PROVIDE SQUARE TO ROUND TRANSITIONS AS REQUIRED FOR CONNECTION TO GRILLES.													



EECI
ENERGY ENGINEERING
CONSULTANTS, INC.

10 CORPORATE HILL DR., STE. 100 PH: (501) 244-0511
LITTLE ROCK, AR 72205 FX: (501) 244-0241



LITTLE ROCK A.F.B.
ARKANSAS



CLEMENTS & ASSOCIATES
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-975-3380
WWW.CLEMENTSARCHITECTS.COM

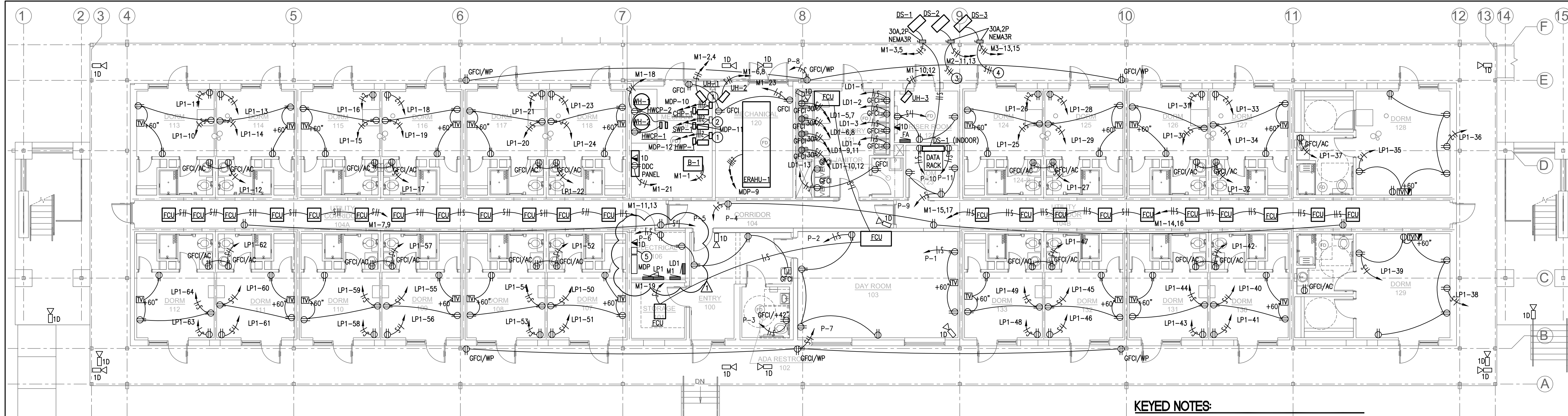


								APPD
								BY
4/26/24								Date
100 REVISED SUBMITTAL								Revision/Issue
A								No.

PROJECT TITLE
**REPAIR (SUS) ARMEN
DORMITORY BLDG 854**

SHEET TITLE
**MECHANICAL
SCHEDULES**

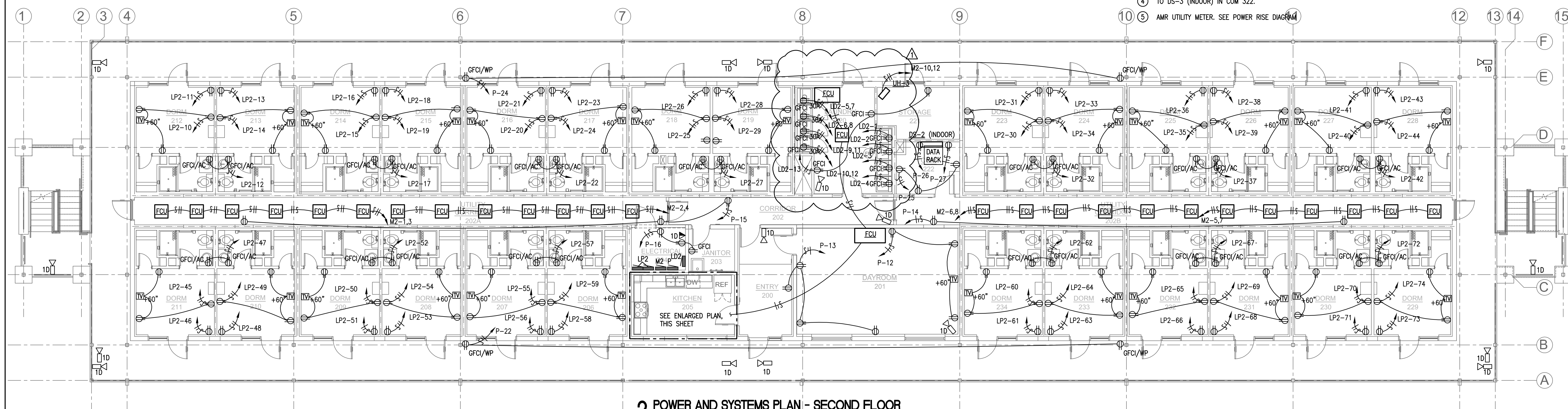
DRAWN BY HS, BD	PLANT DEVELOPER GC
DESIGNED BY HS	REVISIONS NKAK 21-1034
CHECKED BY GC	SHEET M4.03
DATE 29 FEB. 2024	PRICE 85 of 100
AS NOTED	



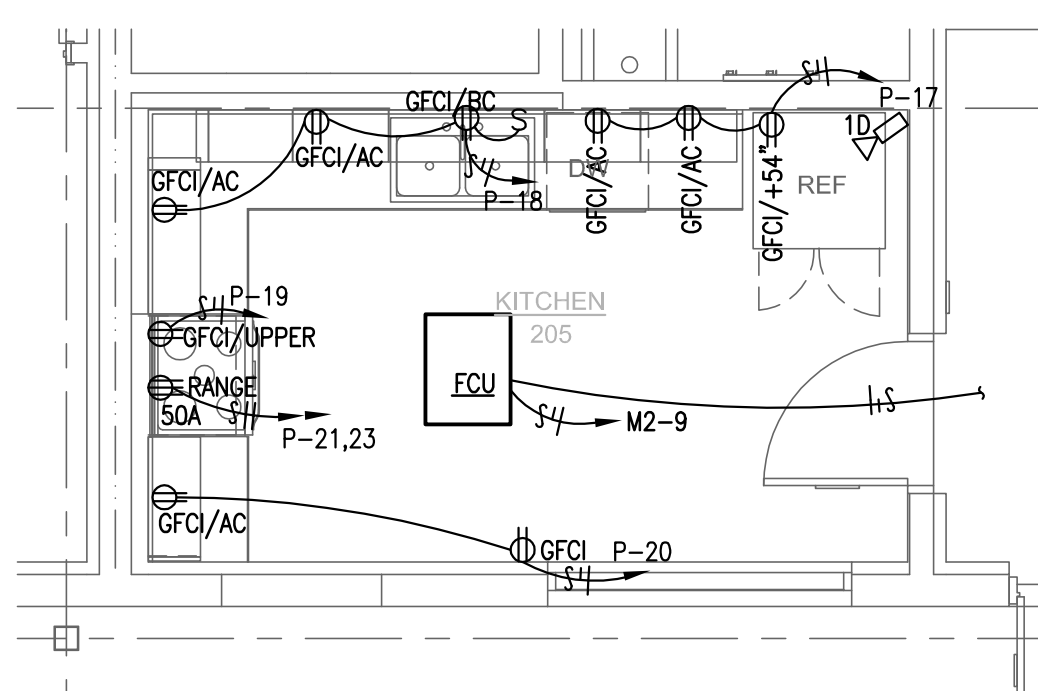
1 POWER AND SYSTEMS PLAN - FIRST FLOOR
SCALE: 1/8" = 1'-0"

ALL CAMERAS LOCATIONS INDICATED ARE ROUGH IN ONLY. CAMERA CABLING AND SYSTEM BY OTHERS.

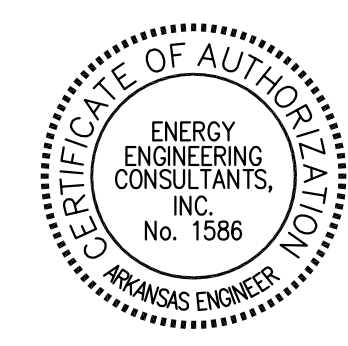
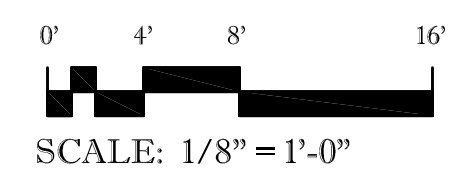
- KEYED NOTES:**
- 1 VFD. SUPPLIED AND INSTALLED BY MECHANICAL CONTRACTOR.
 - 2 LINE STARTER. SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR.
 - 3 TO DS-2 (INDOOR) IN COM 222.
 - 4 TO DS-3 (INDOOR) IN COM 222.
 - 5 AMR UTILITY METER. SEE POWER RISE DIAGRAM.



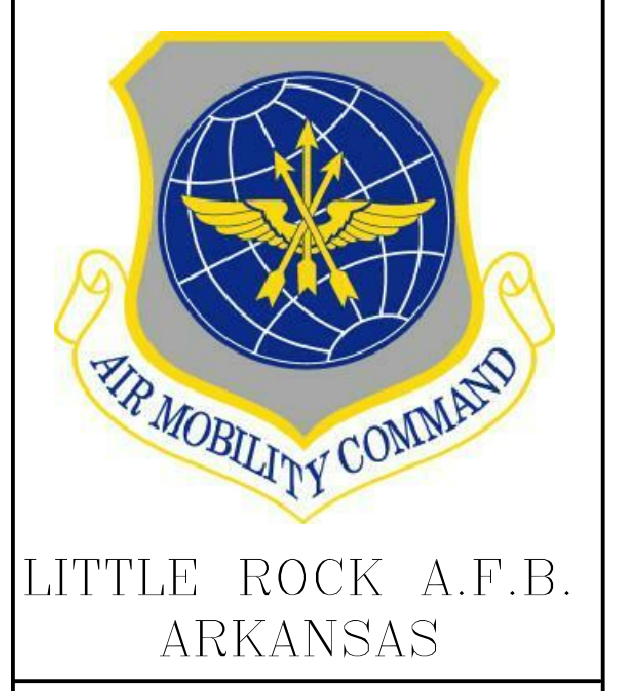
2 POWER AND SYSTEMS PLAN - SECOND FLOOR
SCALE: 1/8" = 1'-0"



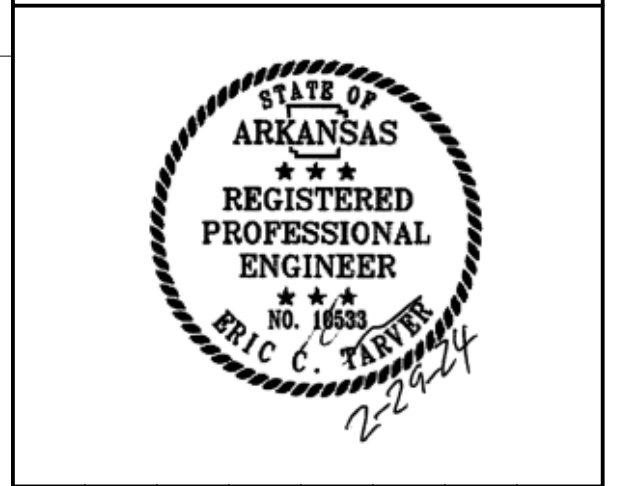
3 POWER AND SYSTEMS PLAN - SECOND FLOOR ENLARGED
SCALE: 1/4" = 1'-0"



EECI
ENERGY ENGINEERING
CONSULTANTS, INC.
10 CORPORATE HILL DR., STE. 100 PH: (501) 244-0511
LITTLE ROCK, AR 72205 FX: (501) 244-0241



CLEMENTS & ASSOCIATES
ARCHITECTURE, INC.
507 MAIN STREET
NORTH LITTLE ROCK, ARKANSAS 72114
PHONE: 501-375-3380
WWW.CLEMENTSARCHITECTS.COM



NO.	REVISION/ISSUE	DATE	BY	APP'D
100	REVISED SUBMITTAL	4/26/24		

REPAIR (SUS) ARMEN
DORMITORY BLDG 854
POWER AND
SYSTEMS PLAN

HS, BD	GC
HS	NKAK 21-1034
GC	
DATE	29 FEB. 2024
SCALE	AS NOTED
SHEET	E4.01
95	100

