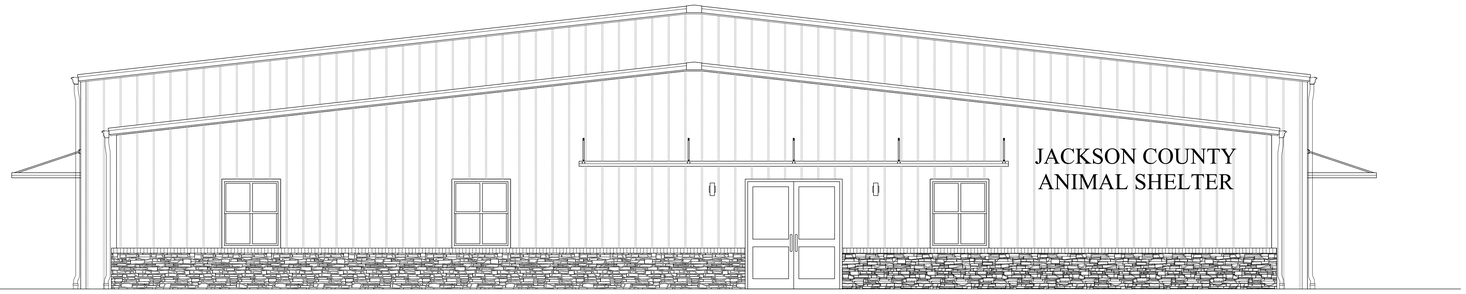
JACKSON COUNTY ANIMAL SHELTER

JEFFERSON, GEORGIA

PHASE 1 - BID SET AUGUST 17, 2021

JACKSON COUNTY ANIMAL SHELTER
29 GALILEE CHURCH ROAD.
JEFFERSON, GA 30549



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PROJECT NOTES:

1. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH AFFECTED WORK.
2. COORDINATE ALL WORK WITH ARCHITECTURAL AND MECHANICAL, ELECTRICAL, PLUMBING, STRUCTURAL, CIVIL, AND ALL DISCIPLINES.
3. STAGING AREA AND CONSTRUCTION ENTRANCE TO BE APPROVED BY OWNER PRIOR TO BEGINNING WORK.
4. ALL WORK TO CONFORM TO ALL LOCAL CODES AND ORDINANCES AS WELL AS SBCCI AND LIFE SAFETY CODE.
5. CONTRACTOR TO PROVIDE ALL UTILITY LINES TO STREET AND ALL UTILITY CONNECTIONS AS REQUIRED FOR COMPLETE OPERATION.
6. CONTRACTOR TO PROVIDE ALL SOIL AND EROSION CONTROL DURING CONSTRUCTION WORK. SOIL AND EROSION CONTROL TO BE IN ACCORDANCE WITH THE GEORGIA MANUAL FOR EROSION AND SEDIMENT CONTROL.
7. CONTRACTOR TO PROVIDE SOIL POISONING PRIOR TO PLACEMENT OF ANY CONCRETE.
8. SEE PROJECT MANUAL AND SPECIFICATIONS FOR ALL PRODUCT INFORMATION.
9. ALL REQUIRED TESTING TO BE BY THE GENERAL CONTRACTOR INCLUDING STRUCTURAL, SOIL COMPACTION, ETC.
10. ALL CORRESPONDENCE DURING BIDDING AND CONSTRUCTION TO BE IN WRITING - DIRECT ALL QUESTIONS TO ARCHITECT'S OFFICE.
11. ALL POURED CONCRETE FOUNDATIONS SHALL HAVE 4" G.A.B.C. AND 6MM POLYETHYLENE VAPOR BARRIER.

PROJECT NOTES:

ABBREVIATIONS

A.C.T.	ACOUSTICAL CEILING TILE	FIN.	FINISH	PT.	PAINTED
A.F.F.	ABOVE FINISH FLOOR	FTG.	CONCRETE FOOTING	RAD.	RADIUS
ALUM.	ALUMINUM	FRP	FIBERGLASS REINFORCED PANEL	REC.	RECESSED
BD.	BOARD	GALV.	GALVANIZED	SCHED.	SCHEDULE
C.J.	CONTROL JOINT	GYP.	GYPSUM	SPEC., SPECS.	SPECIFICATIONS MANUAL
C.L.	CENTER LINE	H.C.	HANDICAP	ST.	STEEL
CMU	CONCRETE MASONRY UNIT	H.M.	HOLLOW METAL	TYP.	TYPICAL CONDITION
COL.	COLUMN	HORIZ.	HORIZONTAL	VERT.	VERTICAL
CONC.	CONCRETE	HT.	HEIGHT	W/	WITH
CONT.	CONTINUOUS	INSUL.	INSULATION		
CORR.	CORRIDOR	JAN.	JANITOR		
D.F.	DRINKING FOUNTAIN	JT., JTS.	JOINT, JOINTS		
DIA., DIAM.	DIAMETER	LAM.	LAMINATE		
D.S.	DOWNSPOUT	LB.	POUND		
E.J.	EXPANSION JOINT	MAX.	MAXIMUM		
ELEC.	ELECTRICAL	MECH.	MECHANICAL		
EQUIP.	EQUIPMENT	MTL.	METAL		
E.W.	EACH WAY	O.C.	ON CENTER		
F.D.	FLOOR DRAIN	O.H.	OVERHEAD		
F.E.	FIRE EXTINGUISHER & CABINET	PR.	PAIR		

PRINTED DATE: 07/12/21

JACKSON CO. ANIMAL SHELTER

JUl 12 2021 | T:\SHARED CAD\Projects 2019\Jackson County Animal Shelter\Sheets\T-100 COVER SHEET.dwg

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

CONSULTANTS

CARTER WATKINS ASSOCIATES ARCHITECTS, INC.
POST OFFICE BOX 1004
137 EAST WASHINGTON STREET
MONROE, GEORGIA 30655
Fax: 770/267-1064
email@carterwatkins.com www.carterwatkins.com

SEAL

STATE OF GEORGIA
BENJAMIN MERCER HARPER
REGISTERED ARCHITECT

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: COVER SHEET

PRINTED:

NUMBER: **T-100**

BUILDING CODE REVIEW – Jackson County Animal Shelter - Jefferson, Georgia

Building Information – Existing single-story, Type VB, unprotected, un-sprinklered (wood) construction with new front and rear additions.

ANIMAL SHELTER

Physical Aspects – Existing: 11,200 square feet, front addition: 1,824 square feet, rear addition: 4,640 square feet. **TOTAL SQUARE FOOTAGE: 17,664 S.F.**

1,824 s.f. BUSINESS

15,840 S.F. STORAGE (kennels).

Current Mandatory Codes as Adopted by DCA:

- International Building Code, 2018 Edition, with Georgia Amendments (2020)
- International Residential Code, 2018 Edition, with Georgia Amendments (2020)
- International Fire Code, 2018 Edition (Contact State Fire Marshal Below)
- International Plumbing Code, 2018 Edition, with Georgia Amendments (2020)
- International Mechanical Code, 2018 Edition, with Georgia Amendments (2020)
- International Fuel Gas Code, 2018 Edition, with Georgia Amendments (2020)
- National Electrical Code, 2017 Edition (No Georgia Amendments)
- International Energy Conservation Code, 2015 Edition, with Georgia Supplements and Amendments (2020)
- 2018 Life Safety Code. For information and questions regarding the Life Safety Code (NFPA 101), IFC Georgia Amendments or the Georgia Accessibility Code please contact the State Fire Marshal's Office.
- **Life Safety Code (NFPA 101) 2018 Edition per the Georgia State Fire Marshal's Office**
- **Jackson County Codes & Ordinances**

INTERNATIONAL BUILDING CODE REVIEW – CONSTRUCTION TYPES

Facility is One-story, slab-on-grade with pre-engineered metal structure, metal paneling exterior walls, wood stud interior walls and metal roof.

Building is considered BUSINESS occupancy per Section 304.1

T504.3 Allowable Heights– Type VB – 40 footy height limitation

T504.4 Stories Above Grade Plan - 2 Stories

T506.2 Allowable Area Factor – 9,000 s.f.

506.3.3 Allowable Area Amount of Increase calculation - [608 linear feet/608 linear feet – 0.25] 30/30 = 1 - 0.25/1 = .75 or an allowable increase of 75% due to frontage. Therefore, the allowance total area is 9,000 x 1.75 = 15,750 s.f.

****** planned square footage exceeds allowable and but the rear addition is separated by a 2-hour fire wall which allows it to be treated as a separate structure and the 2-hour wall provides a Horizontal Exit.******

LIFE SAFETY CODE REVIEW – NFPA 101 2018 EDITION

BUSINESS OCCUPANCY ANALYSIS NFPA CHAPTER 38 -

Occupant Load T7.3.1.2 – 17,664 s.f.

1,824 s.f. Business = 19 Occupants at 100 s.f. per person

15,840 s.f. Storage = 53 Occupants at 300 s.f. per person

TOTAL OCCUPANT LOAD: 72 OCCUPANTS

Means of Egress –

Egress Width Capacity Requirements – T12.2.3.2 –72 Occupants x .22 = 15.84" clear required. 102" clear provided in all areas of building. Two exits provided with maximum separation.

Provide illumination complying with 38.2.8.

Provide Emergency Lighting and Exit Lights per 38.2.9/10 and 7.10.

Protection –

38.3.2 Laundry area shall be separated by 1-hour rated walls and opening protectives

Interior Finishes to be Class A or Class B.

Detection, Alarm, and Communication System –

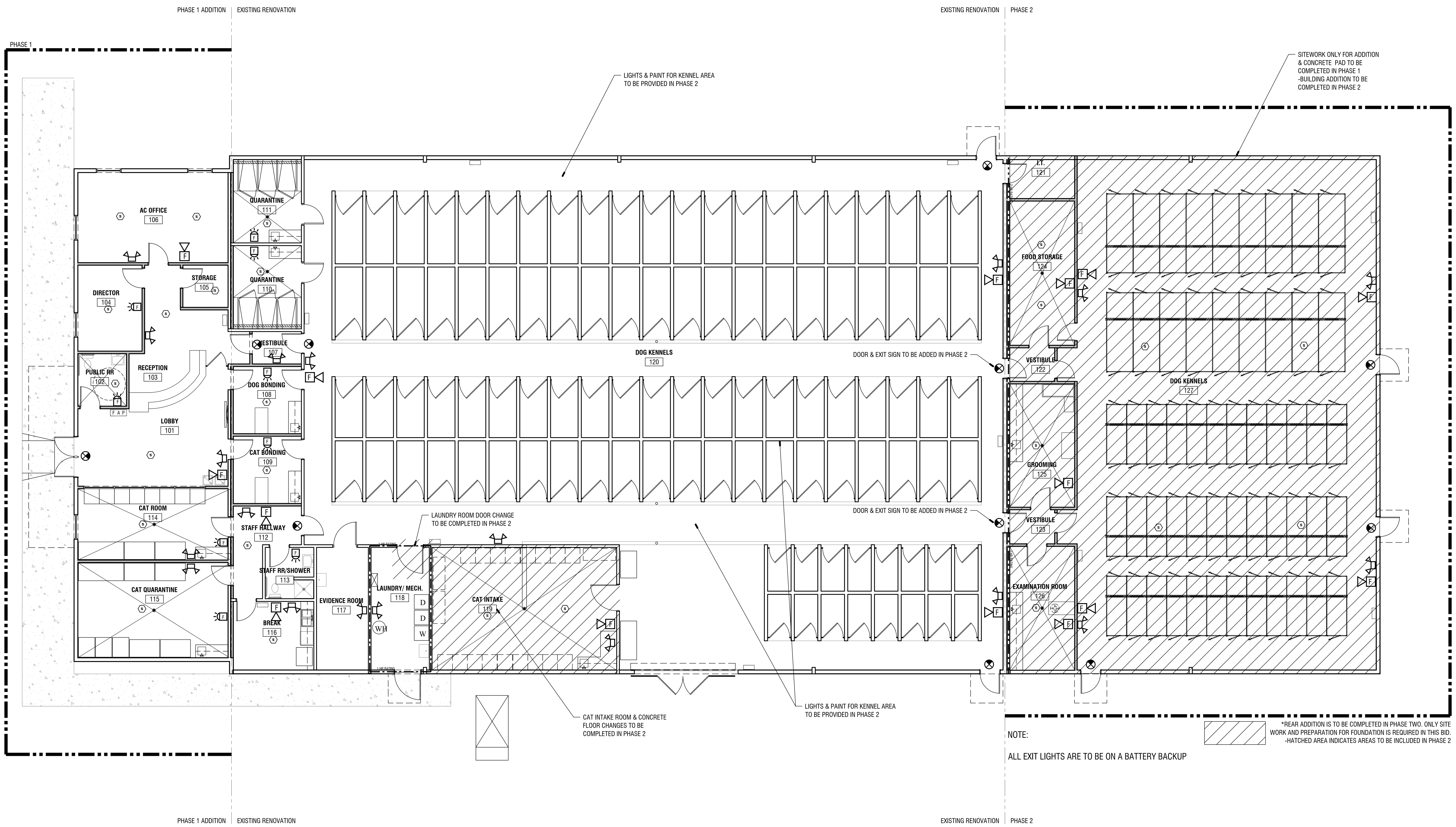
No systems required per 38.3.4.1 (1), (2), and (3). Complete fire alarm system to be provided – Conform with NFPA 72.

Extinguishment Requirements – 38.3.5

Portable Fire Extinguishers are required complying with 9.7.4.1

Corridors – 38.3.6

Corridor protection is not required in Single Tenant Buildings – 38.3.6.1 (2).



NOTE:

ALL EXIT LIGHTS ARE TO BE ON A BATTERY BACKUP

1 LIFE AND SAFETY PLAN

1/8" = 1'-0"

LEGEND

- SMOKE DETECTOR
- COMBINATION ALARM HORN/STROBE, 6'-8" AFF
- STROBE, 6'-8" AFF
- FIREMAN'S TELEPHONE
- FIRE ALARM PANEL
- FIRE EXTINGUISHER AND CABINET
- SINGLE FACE EXIT LIGHT (CEILING OR PENDANT MOUNTED)
- BATTERY OPERATED EMERGENCY LIGHT W/TWO HEADS
- CARBON MONOXIDE SENSOR 12" A.F.F.
- PULL STATION

1 HOUR FIRE RATING

2 HOUR FIRE RATING

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

CONSULTANTS

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email@carterwatkins.com www.carterwatkins.com

SEAL

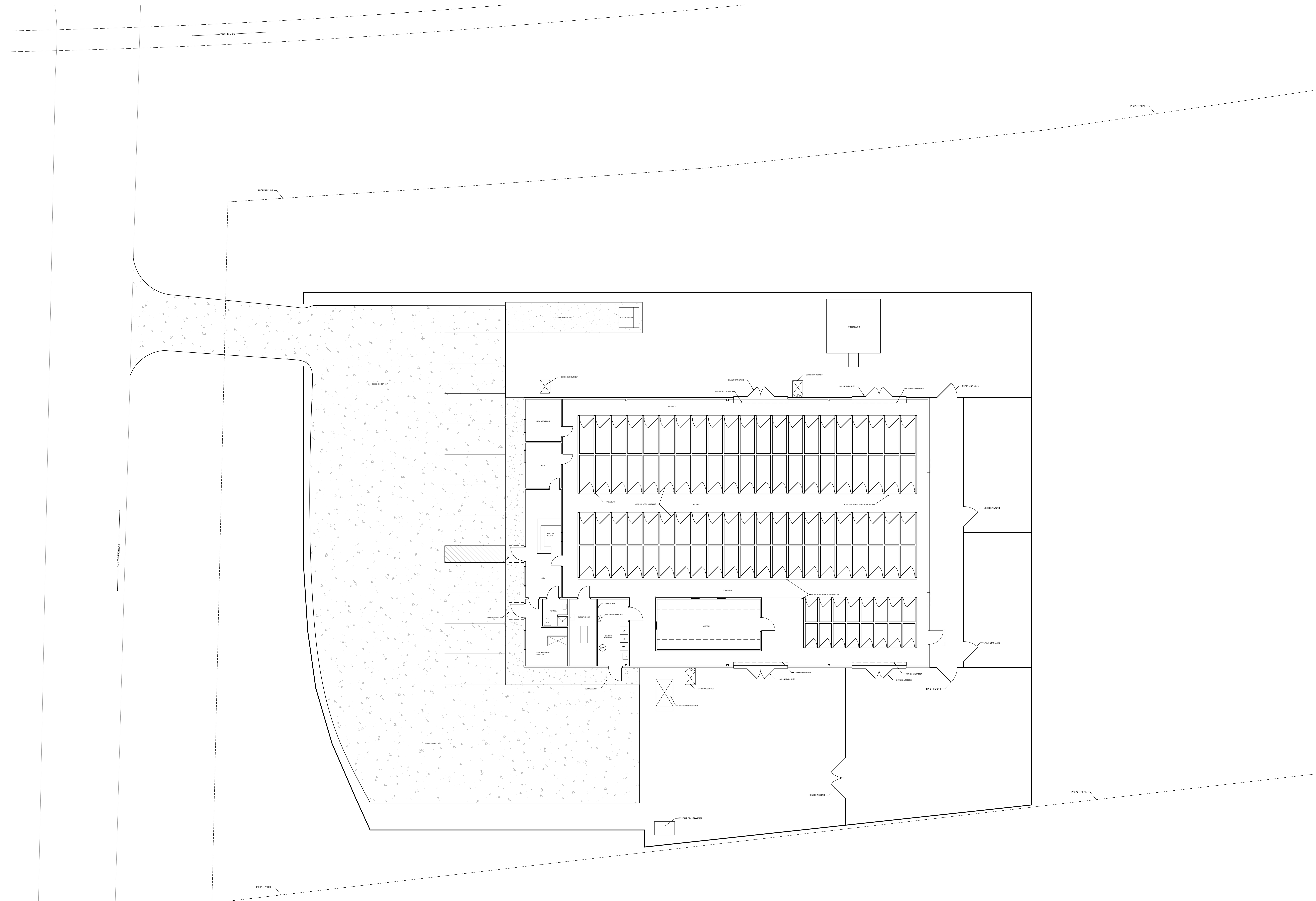
JACKSON COUNTY ANIMAL SHELTER

JEFFERSON, GEORGIA

SHEET TITLE: LIFE SAFETY PLAN

PRINTED:

NUMBER: **LS-101**



1 EXISTING SITE PLAN

3/32" = 1'-0"

REVISIONS					
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SEAL

STATE OF GEORGIA
BENJAMIN MERCER CARTER
REGISTERED ARCHITECT

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

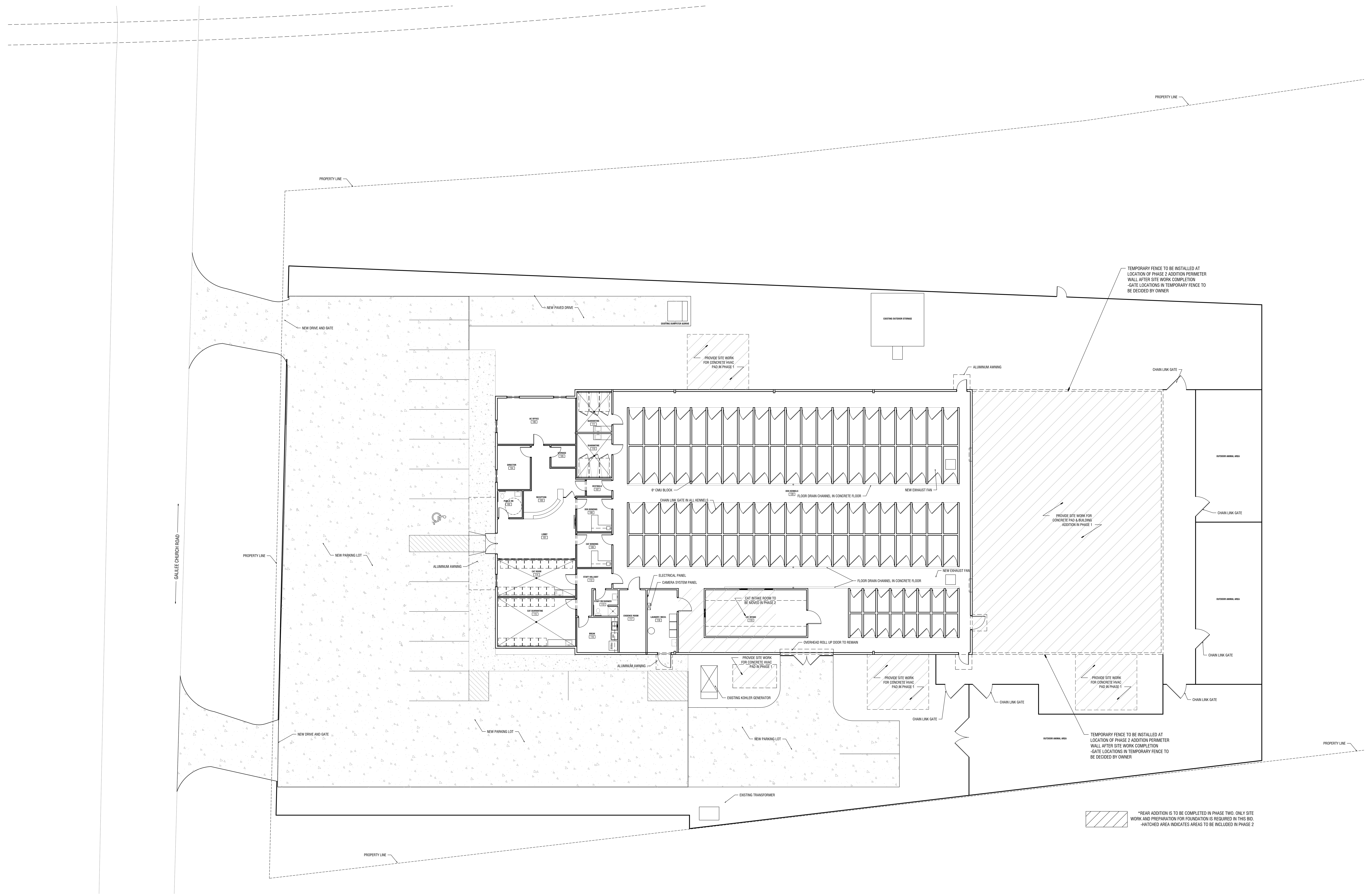
SHEET TITLE:
EXISTING SITE PLAN

PRINTED:

NUMBER:
C-101

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

Jul 12 2021 | T:\SHARED CAD\Projects 2019\Jackson County Animal Shelter\Sheets\C-101 EXISTING SITE PLAN.dwg



1 PROPOSED SITE PLAN PHASE 1

3/32" = 1'-0"

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REVISIONS

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SEAL

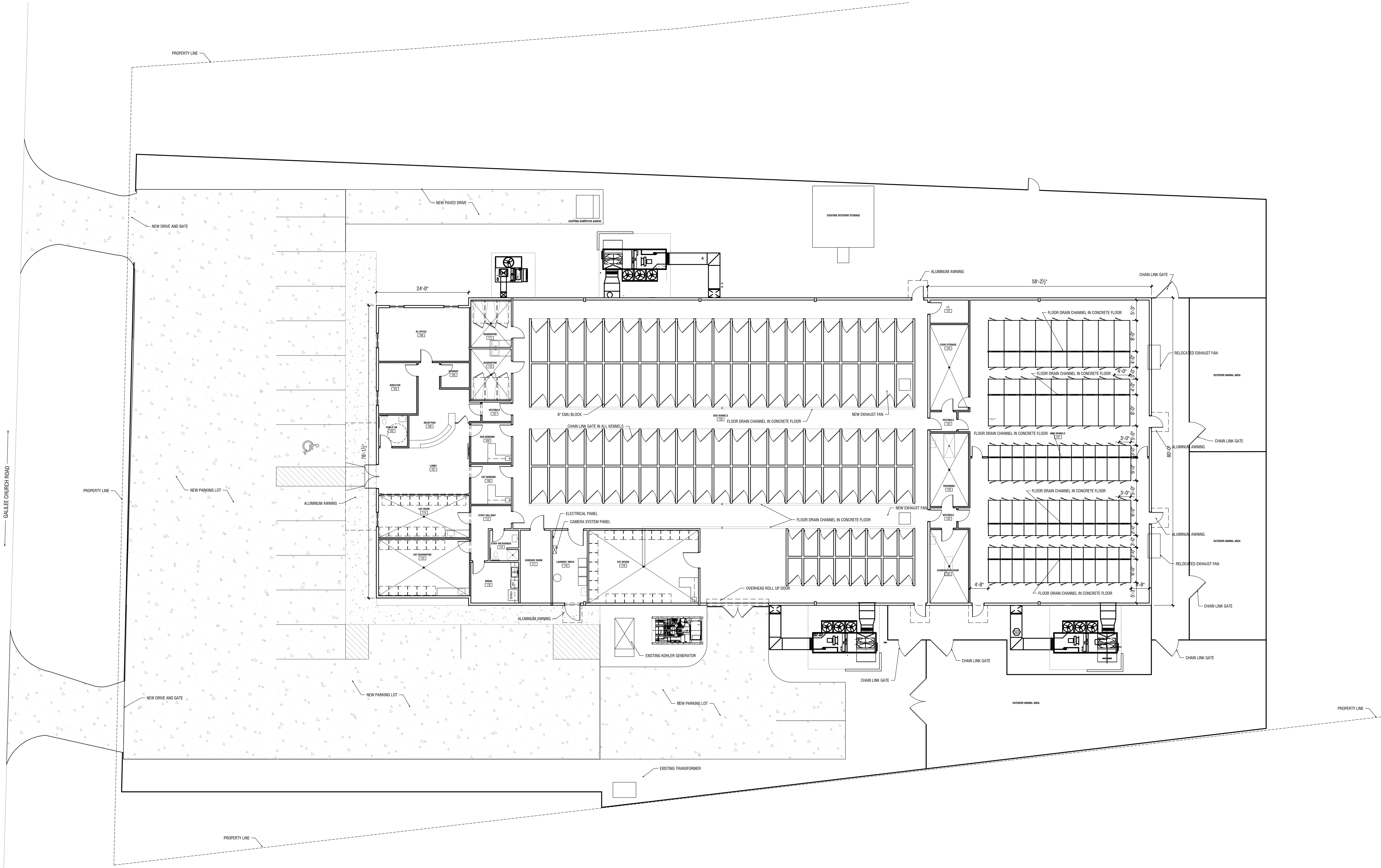
JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: PROPOSED SITE PLAN PHASE 1

PRINTED:

NUMBER: **C-102**

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21



1 PROPOSED SITE PLAN PHASE 2

3/32" = 1'-0"

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REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
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SEAL

STATE OF GEORGIA — BENJAMIN MERCER CARTER — REGISTERED ARCHITECT

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: PROPOSED SITE PLAN PHASE 2

PRINTED:

NUMBER: **C-103**

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

SITE DEVELOPMENT PLANS
FOR
JACKSON COUNTY ANIMAL CONTROL SHELTER

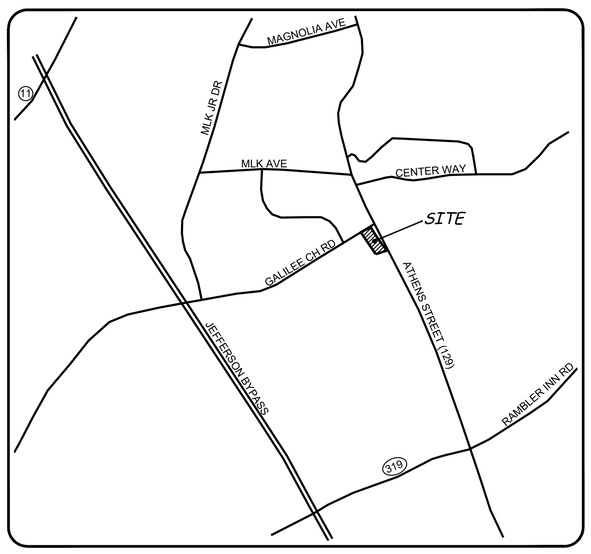
29 GALILEE CHURCH ROAD
JEFFERSON, GEORGIA 30549

DESIGNED BY:
CIVIL SOLUTIONS, INC.
ENGINEERING ~ PLANNING
750 BELMONT ROAD
ATHENS, GA 30605
PHONE: 706-255-2443

TOPOGRAPHIC INFORMATION BY:
WOOD BROTHERS LAND SURVEYORS, INC.
P.O. BOX 477
JEFFERSON, GA 30549
PHONE: 706-387-0075

GPS LOCATION OF THE SITE:
34.09576°N
83.57230°W

DISTURBED ACREAGE = 0.96 ACRES



LOCATION MAP
N.T.S.

SHEET INDEX

C1.	COVER SHEET
C2.	EXISTING CONDITIONS & DEMOLITION PLAN
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C8.	CONSTRUCTION DETAILS

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800-282-7411

GEORGIA REGISTERED No. 30872 PROFESSIONAL ENGINEER NATHAN C. WOOD
LEVEL II CERTIFICATION #13718

REVISIONS	DATE

CIVIL SOLUTIONS, INC.
ENGINEERS ~ PLANNERS
750 BELMONT ROAD
ATHENS, GA 30605
OFFICE 706-255-2443

OWNER & DEVELOPER
JACKSON COUNTY GEORGA
67 ATHENS STREET
JEFFERSON, GA 30549
(706)367-6312

SITE DEVELOPMENT PLANS FOR:
JACKSON COUNTY ANIMAL CONTROL SHELTER
JEFFERSON, GEORGIA

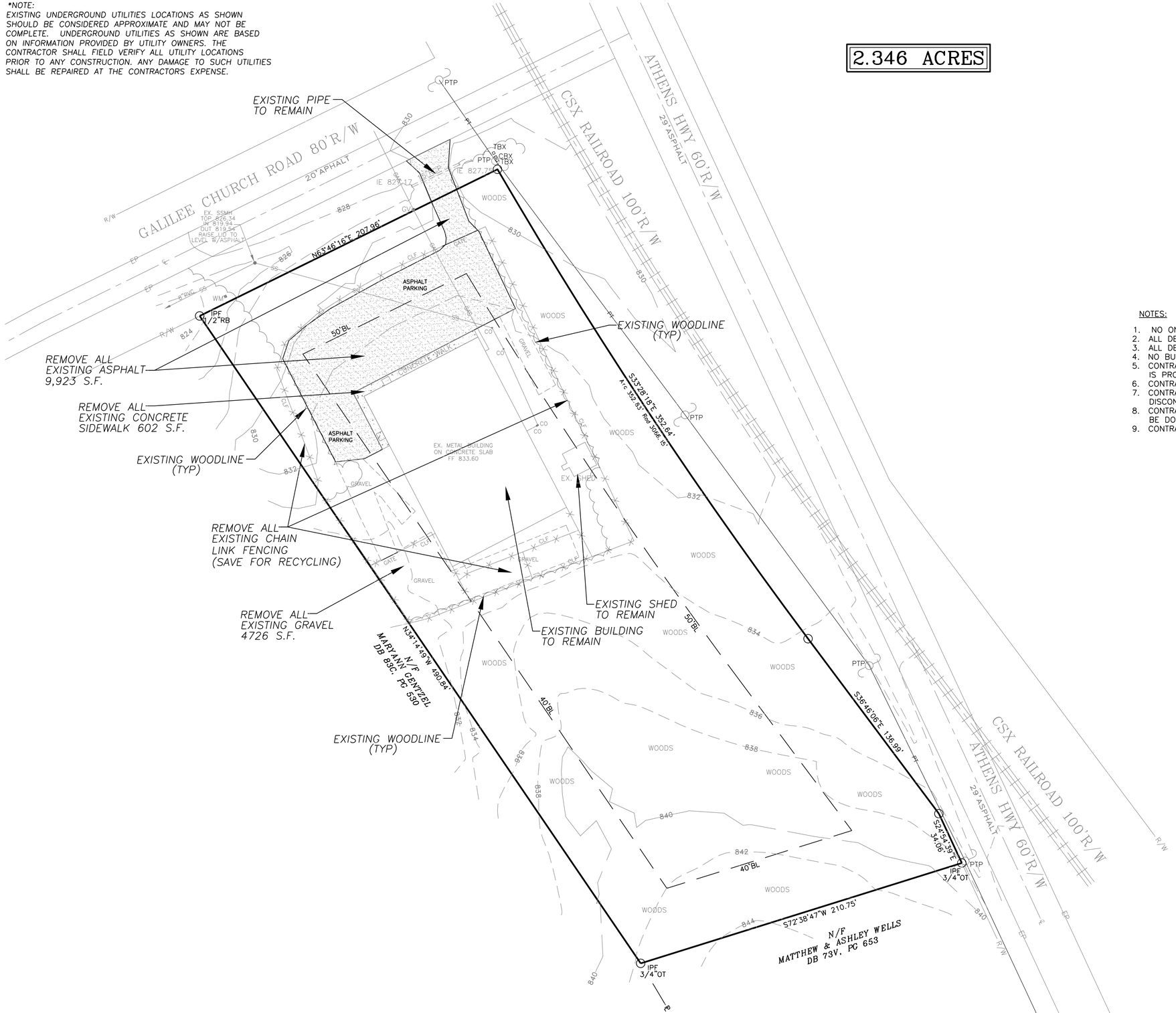
GMD	COUNTY	CITY
245	JACKSON	JEFFERSON

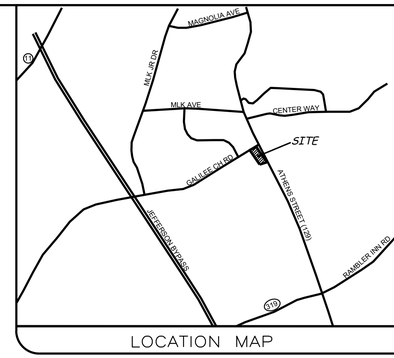
DATE
03/18/21

SHEET
C1

*NOTE:
EXISTING UNDERGROUND UTILITIES LOCATIONS AS SHOWN SHOULD BE CONSIDERED APPROXIMATE AND MAY NOT BE COMPLETE. UNDERGROUND UTILITIES AS SHOWN ARE BASED ON INFORMATION PROVIDED BY UTILITY OWNERS. THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY DAMAGE TO SUCH UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

2.346 ACRES





NOTES:

1. NO ONSITE DISPOSAL AND NO MATERIAL TO BE BURIED ONSITE.
2. ALL DEMO MATERIAL TO BE HAULED OFF.
3. ALL DEMO MATERIAL TO BE DISPOSED IN A CERTIFIED LANDFILL.
4. NO BURNING ONSITE WITHOUT A PERMIT.
5. CONTRACTOR RESPONSIBLE FOR MAKING SURE ALL DEMO MATERIAL IS PROPERLY DISPOSED OF.
6. CONTRACTOR RESPONSIBLE FOR ANY REQUIRED PERMITS.
7. CONTRACTOR RESPONSIBLE FOR CONTACTING ALL UTILITIES FOR DISCONNECT.
8. CONTRACTOR TO NOTIFY LOCAL Ga DOT WHEN ANY WORK IS TO BE DONE WITHIN THE DOT RIGHT-OF-WAY.
9. CONTRACTOR RESPONSIBLE FOR ALL TRAFFIC CONTROL.

GEORGIA811 Utilities Protection Center, Inc.
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30 0 30 60 90
Scale 1" = 30'

GEORGIA REGISTERED No. 30825 PROFESSIONAL ENGINEER JASON C. WOOD
LEVEL II CERTIFICATION #13718

REVISIONS	DATE

CIVIL SOLUTIONS, INC.
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ATHENS, GA 30605
OFFICE 706-255-2443

OWNER & DEVELOPER
JACKSON COUNTY GEORGA
67 ATHENS STREET
JEFFERSON, GA 30549
(706)367-6312

EXISTING CONDITIONS & DEMOLITION PLAN FOR:
JACKSON COUNTY ANIMAL CONTROL SHELTER
JEFFERSON, GEORGIA

GMD	COUNTY	CITY
245	JACKSON	JEFFERSON

DATE 03/18/21

SHEET C2

*NOTE:
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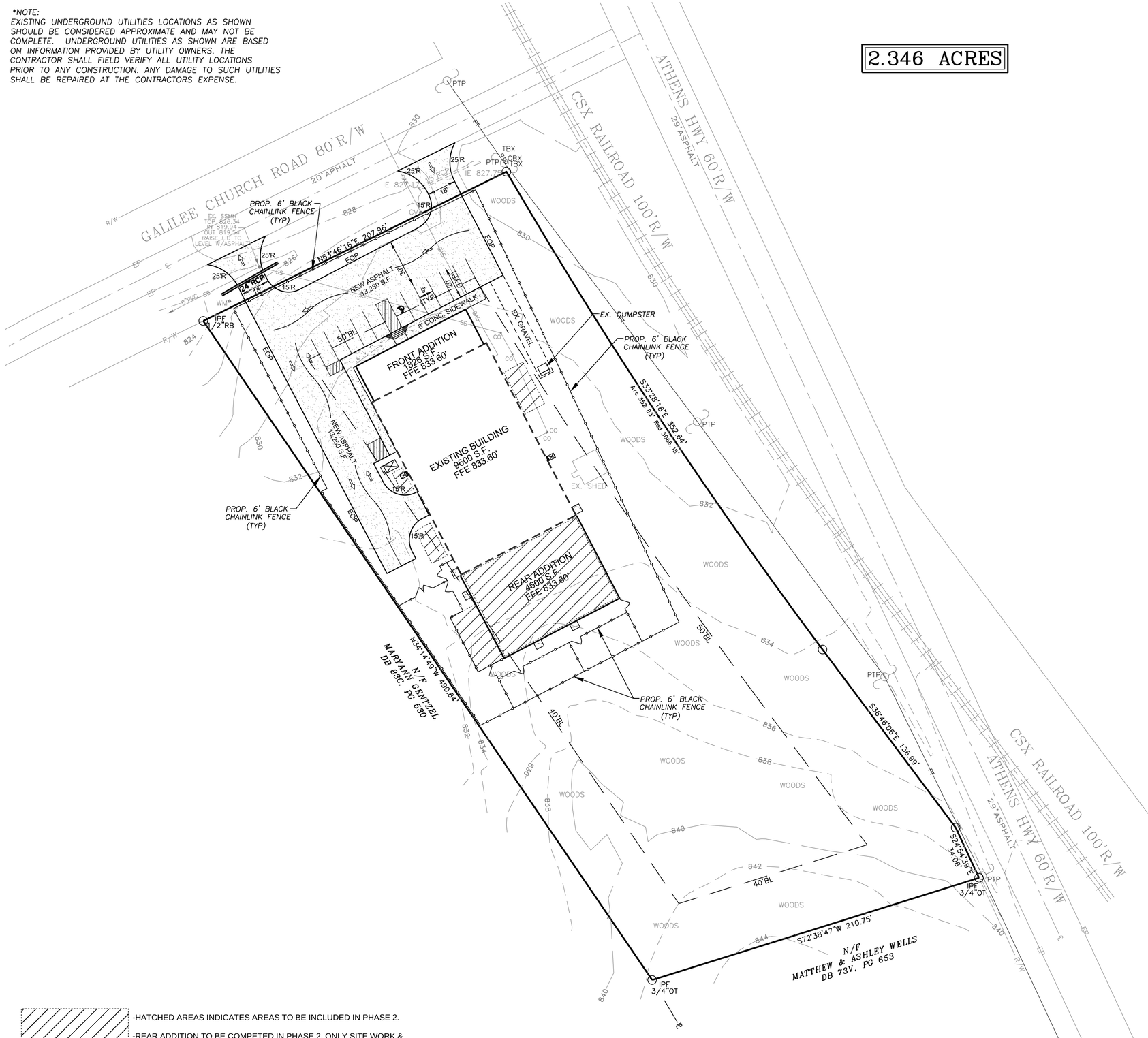
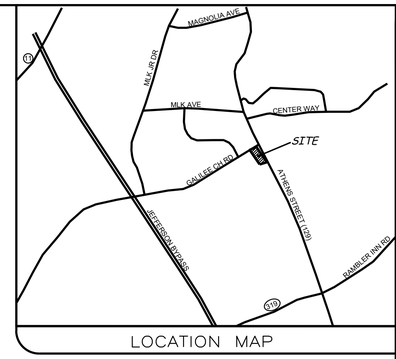
2.346 ACRES





LOCATION MAP

GENERAL NOTES:

1. THIS TRACT CONTAINS 2.346 ACRES
   TAX PARCEL #069 037P
2. BOUNDARY BY WOOD BROTHERS LAND SURVEYORS, INC. DATED 2/22/2021.
3. TOPO WAS FIELD RUN BY WOOD BROTHERS LAND SURVEYORS, INC. DATED 2/22/2021.
4. MINIMUM BUILDING LINES: 40' FRONT, 40' SIDE AND 40' REAR.
5. WATER AND SANITARY SEWER SERVICE TO BE PROVIDED BY CITY OF JEFFERSON..
6. THERE ARE EXISTING STRUCTURES ON SITE.
7. INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER, AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, HIS EMPLOYEES, HIS CONSULTANTS, HIS CONTRACTORS, AND/OR HIS AGENTS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION SHOWN HEREON AS TO SUCH UNDERGROUND INFORMATION.
8. PROPOSED USE: 16,000 SF GOVERNMENT BUILDING:
9. THERE WILL BE NO DRIVE-THRU WINDOWS.
10. MAXIMUM CUT OR FILL SLOPES IS 3H:1V.
11. THE DEVELOPER AND CONTRACTOR ARE RESPONSIBLE FOR OBTAINING ALL DEVELOPMENT PERMITS PRIOR TO CONSTRUCTION.
12. ALL EROSION CONTROL DEVICES MUST BE IN PLACE PRIOR TO ANY GRADING.
13. NOTIFY INSPECTOR 24 HOURS PRIOR TO CONSTRUCTION.
14. ALL CONSTRUCTION TO CONFORM TO JACKSON COUNTY STANDARDS AND SPECIFICATIONS.
15. ALL PROPOSED CONTOURS ARE FINISHED GRADE.
16. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER STEPS ARE NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING FACILITIES ON THESE PLANS. HOWEVER, THIS INFORMATION IS SHOWN FOR THE CONTRACTOR TO CONTACT THE UTILITY PRIOR TO STARTING CONSTRUCTION.
17. THE CONTRACTOR SHALL STOCKPILE ALL TOPSOIL ON PROPERTY WHERE OWNER DIRECTS, UNTIL READY FOR REDISTRIBUTION.
18. ANY EXCESS EARTH CUT MATERIALS, IF ANY, SHALL BE PLACED AT A LOCATION ON OR NEAR THE SITE AS DESIGNATED BY THE OWNER.
19. PROVIDE & MAINTAIN OFF-STREET PARKING ON THE SUBJECT PROPERTY DURING THE ENTIRE CONSTRUCTION PERIOD.
20. NO WASTE MATERIAL IS TO BE BURIED ON SITE.
21. THE OWNER IS RESPONSIBLE FOR MAINTENANCE OF THE STORM DRAIN SYSTEM AND DETENTION FACILITY OUTSIDE OF THE RIGHT-OF-WAY.
22. THERE ARE NO KNOWN EXISTING OR PREVIOUSLY EXISTING LANDFILLS OR PROPOSED ONSITE BURIAL PITS ON SITE.
23. THERE ARE NO CEMETERIES OR OTHER SIGNIFICANT OR HISTORICAL AREAS ON THE SITE.
24. THERE ARE NO WETLANDS ON SITE PER THE NATIONAL WETLANDS INVENTORY MAPPER.
25. THERE ARE NO STATE WATERS ON SITE.
26. NO PORTION OF THE PROPERTY LIES WITHIN A FLOOD ZONE ACCORDING TO FIRM COMMUNITY PANEL NUMBER 13157C0255C, DATED DECEMBER 17, 2010.
27. THE NUMBER OF PROPOSED PARKING SPACES WAS DETERMINED BY OWNER TO BE 13 TOTAL SPACES.

-HATCHED AREAS INDICATES AREAS TO BE INCLUDED IN PHASE 2.

-REAR ADDITION TO BE COMPETED IN PHASE 2. ONLY SITE WORK & PREPARATION FOR FOUNDATION IS REQUIRED IN THIS BID. SITE WORK FOR HVAC UNIT CONCRETE SLABS ALSO TO BE INCLUDED.

GEORGIA811 Utilities Protection Center, Inc.
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30 0 30 60 90
Scale 1" = 30'

GEORGIA REGISTERED No. 10870 PROFESSIONAL ENGINEER KEVIN C. WOOD
LEVEL II CERTIFICATION #13718

REVISIONS	DATE

DATE 03/18/21

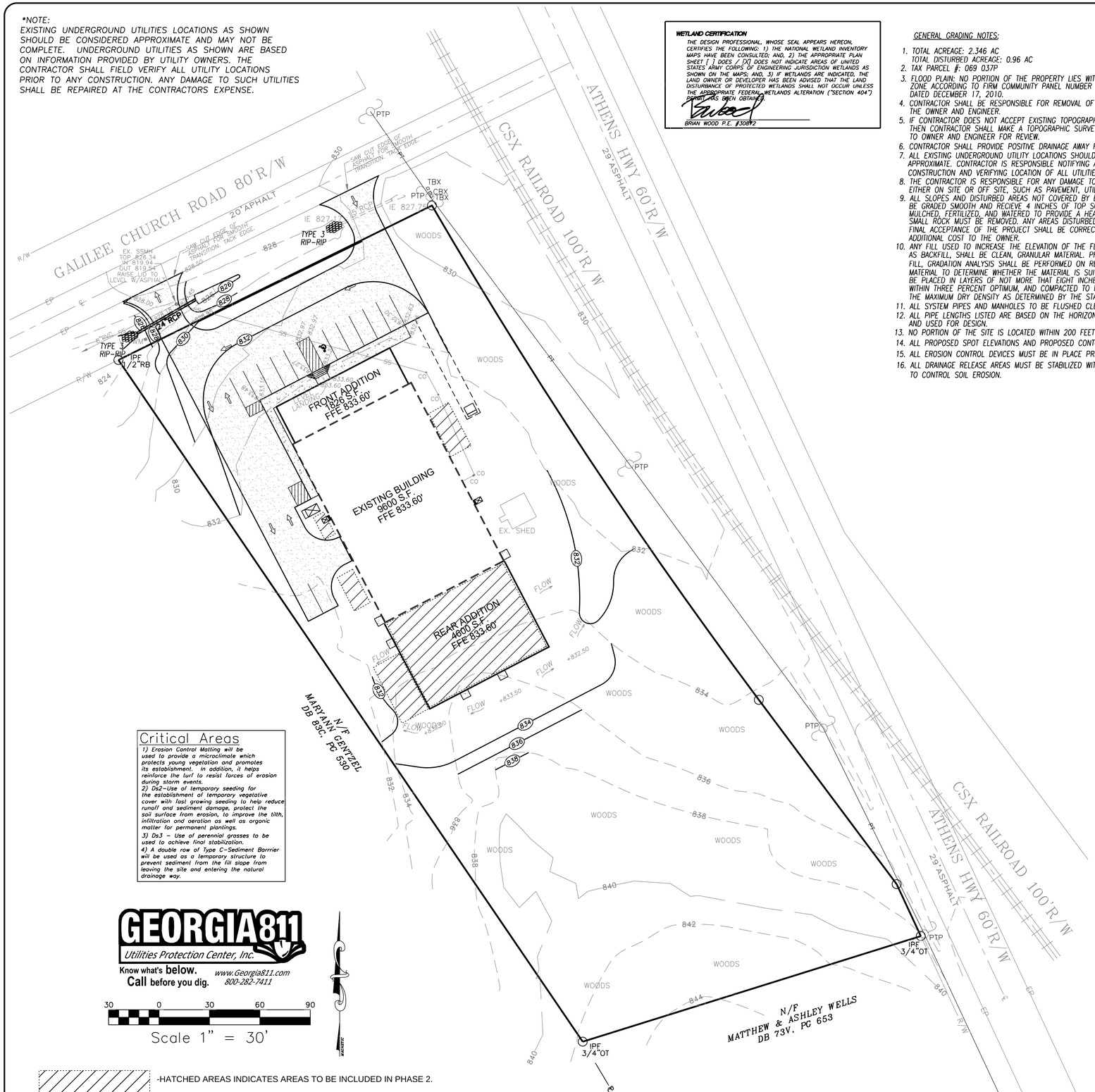
SHEET C3

CIVIL SOLUTIONS, INC.
ENGINEERS ~ PLANNERS
750 BELMONT ROAD
JEFFERSON, GA 30549
OFFICE 706-250-2443

OWNER & DEVELOPER
JACKSON COUNTY GEORGA
67 ATHENS STREET
JEFFERSON, GA 30549
(706)367-6312

SITE PLAN FOR:
JACKSON COUNTY
ANIMAL CONTROL SHELTER
JEFFERSON, GEORGIA

GMD	COUNTY	CITY
245	JACKSON	JEFFERSON



*NOTE:
EXISTING UNDERGROUND UTILITIES LOCATIONS AS SHOWN SHOULD BE CONSIDERED APPROXIMATE AND MAY NOT BE COMPLETE. UNDERGROUND UTILITIES AS SHOWN ARE BASED ON INFORMATION PROVIDED BY UTILITY OWNERS. THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY DAMAGE TO SUCH UTILITIES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

WETLAND CERTIFICATION

THE DESIGN PROFESSIONAL, WHOSE SEAL APPEARS HEREON, CERTIFIES THE FOLLOWING: 1) THE NATIONAL WETLAND INVENTORY MAPS HAVE BEEN CONSULTED; AND, 2) THE APPROPRIATE PLAN SHEET [ ] DOES / [X] DOES NOT INDICATE AREAS OF UNITED STATES ARMY CORPS OF ENGINEERING JURISDICTION WETLANDS AS SHOWN ON THE MAPS; AND, 3) IF WETLANDS ARE INDICATED, THE LAND OWNER OR DEVELOPER HAS BEEN ADVISED THAT THE LAND DISTURBANCE OF PROTECTED WETLANDS SHALL NOT OCCUR UNLESS THE APPROPRIATE FEDERAL WETLANDS ALTERATION ("SECTION 404") PERMIT HAS BEEN OBTAINED.

BRIAN WOOD P.E. #30872

GENERAL GRADING NOTES:

1. TOTAL ACREAGE: 2.346 AC
   TOTAL DISTURBED ACREAGE: 0.96 AC
2. TAX PARCEL #: 069 037P
3. FLOOD PLAIN: NO PORTION OF THE PROPERTY LIES WITHIN A FLOOD ZONE ACCORDING TO FIRM COMMUNITY PANEL NUMBER 13157C0255C, DATED DECEMBER 17, 2010.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL DEBRIS NOT ACCEPTIBLE TO THE OWNER AND ENGINEER.
5. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN, WITHOUT EXCEPTION, THEN CONTRACTOR SHALL MAKE A TOPOGRAPHIC SURVEY AT THEIR EXPENSE AND SUBMIT IT TO OWNER AND ENGINEER FOR REVIEW.
6. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS.
7. ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. CONTRACTOR IS RESPONSIBLE NOTIFYING ALL UTILITIES BEFORE CONSTRUCTION AND VERIFYING LOCATION OF ALL UTILITIES SHOWN OR NOT SHOWN.
8. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ANY EXISTING IMPROVEMENTS, EITHER ON SITE OR OFF SITE, SUCH AS PAVEMENT, UTILITIES, STORM DRAINAGE, ETC.
9. ALL SLOPES AND DISTURBED AREAS NOT COVERED BY BUILDING OR PAVEMENT ARE TO BE GRADED SMOOTH AND RECIEVE 4 INCHES OF TOP SOIL. THE AREAS SHALL BE SEEDED, MULCHED, FERTILIZED, AND WATERED TO PROVIDE A HEARTY MOWABLE STAND OF GRASS. SMALL ROCK MUST BE REMOVED. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
10. ANY FILL USED TO INCREASE THE ELEVATION OF THE FLOOR SLAB OR ANY FILL TO BE USED AS BACKFILL, SHALL BE CLEAN, GRANULAR MATERIAL. PRIOR TO THE USE OF ANY GRANULAR FILL, GRADATION ANALYSIS SHALL BE PERFORMED ON REPRESENTATIVE SAMPLES OF THE FILL MATERIAL TO DETERMINE WHETHER THE MATERIAL IS SUITABLE AS FILL. COMPACTED FILL SHALL BE PLACED IN LAYERS OF NOT MORE THAT EIGHT INCHES IN THICKNESS, AT MOISTURE CONTENTS WITHIN THREE PERCENT OPTIMUM, AND COMPACTED TO MINIMUM DENSITY OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR METHOD, ASTM D-698.
11. ALL SYSTEM PIPES AND MANHOLES TO BE FLUSHED CLEAN PRIOR TO TURNING OVER TO OWNER.
12. ALL PIPE LENGTHS LISTED ARE BASED ON THE HORIZONTAL DISTANCE FROM CENTER OF STRUCTURE AND USED FOR DESIGN.
13. NO PORTION OF THE SITE IS LOCATED WITHIN 200 FEET OF A STATE WATERS.
14. ALL PROPOSED SPOT ELEVATIONS AND PROPOSED CONTOURS ARE SHOWN TO FINISHED GRADE.
15. ALL EROSION CONTROL DEVICES MUST BE IN PLACE PRIOR TO ANY GRADING.
16. ALL DRAINAGE RELEASE AREAS MUST BE STABILIZED WITH GRASSING, AND OR RIP-RAP, AS NECESSARY TO CONTROL SOIL EROSION.

LOCATION MAP

NOTE: LIMITS OF DISTURBANCE = 0.96 AC

NOTE: GRADING SHALL BE DONE IN ACCORDANCE WITH THE LINES AND GRADES DRAWN ON THE APPROVED GRADING PLAN.

NOTE: REQUIRED EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AS DEVELOPMENT PROGRESSES.

NOTE: THERE IS NO FEMA FLOOD PER FEMA FIRM PANEL NUMBER 13157C0255C, DATED DECEMBER 17, 2010.

Critical Areas

1) Erosion Control Matting will be used to provide a microclimate which protects young vegetation and promotes its establishment. In addition, it helps reinforce the turf to resist forces of erosion during storm events.

2) Ds2-Use of temporary seeding for the establishment of temporary vegetative cover with fast growing seeding to help reduce runoff and sediment damage, protect the soil surface from erosion, to improve the tilth, infiltration and aeration as well as organic matter for permanent plantings.

3) Ds3 - Use of perennial grasses to be used to achieve final stabilization.

4) A double row of Type C-Sediment Barrrier will be used as a temporary structure to prevent sediment from the fill slope from leaving the site and entering the natural drainage way.

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▨ -HATCHED AREAS INDICATES AREAS TO BE INCLUDED IN PHASE 2.

-REAR ADDITION TO BE COMPETED IN PHASE 2. ONLY SITE WORK & PREPARATION FOR FOUNDATION IS REQUIRED IN THIS BID. SITE WORK FOR HVAC UNIT CONCRETE SLABS ALSO TO BE INCLUDED.

DRIVEWAY CULVERT PROFILE

SCALES:
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

STORM SEWER CUSTOM REPORT

Line Desc	PIPE #	Inc A ac	Total Area ac	Runoff C	Rainfall I	Time C min	Inc Q cfs	Total Q cfs	Pipe Length ft	Pipe Dia in	Type	Mann "n"	Vel ft/s	Slp %
OPEN END	1	2.66	2.66	0.65	6.60	15	11.41	11.41	40.00	24	RCP	0.013	3.63	2.50

No. 30872
BRIAN C. WOOD

LEVEL II CERTIFICATION #13718

REVISIONS	DATE

CIVIL SOLUTIONS, INC.
ENGINEERS ~ PLANNERS
750 BELMONT ROAD
ATHENS, GA 30605
OFFICE 706-255-2443

OWNER & DEVELOPER
JACKSON COUNTY GEORGA
67 ATHENS STREET
JEFFERSON, GA 30549
(706)367-6312

GRADING AND DRAINAGE PLAN FOR:
JACKSON COUNTY
ANIMAL CONTROL SHELTER
JEFFERSON, GEORGIA

GMD	COUNTY	CITY
245	JACKSON	JEFFERSON

DATE
03/18/21

SHEET
C4

TENTATIVE CONSTRUCTION SCHEDULE

PHASE 1 INFRASTRUCTURE — 2021

	MAY	JUN	JUL	AUG	SEP
INSTALLATION OF CONSTRUCTION EXIT AND PERIMETER SILT FENCE					
CLEARING & GRUBBING					
INSTALL GRADING PHASE EROSION MEASURES					
PRELIMINARY GRADING					
BUILDING CONSTRUCTION					
INSTALLATION OF UTILITY LINES (WATER)					
PAVING					
INSTALL FINAL PHASE EROSION MEASURES					
FINAL GRADING					
REMOVE TEMPORARY EROSION MEASURES					
MAINTENANCE OF BMP'S					
TEMPORARY STABILIZATION					

SOILS:
CeB – Cecil sandy loam, 2 to 6 percent slopes

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

THERE ARE NO WETLANDS OR STATE WATERS ON OR WITHIN 200 FEET OF THE SITE. THERE ARE NO STATE BUFFERS REQUIRED FOR THIS SITE.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.

CONTRACTOR TO CONDUCT SOIL TESTS TO IDENTIFY AND TO IMPLEMENT SITE-SPECIFIC FERTILIZER NEEDS.

SILT CONTROL CALCULATIONS

Disturbed Area (acre)	Required Vol. of Silt Control. (cubic yard)	BMP's Utilized	Actual Vol. of Silt Control per BMP (cubic yard)	Total Actual Vol. of Silt Control. (cubic yard)
0.96	64	748 ft. Sd1	127	127

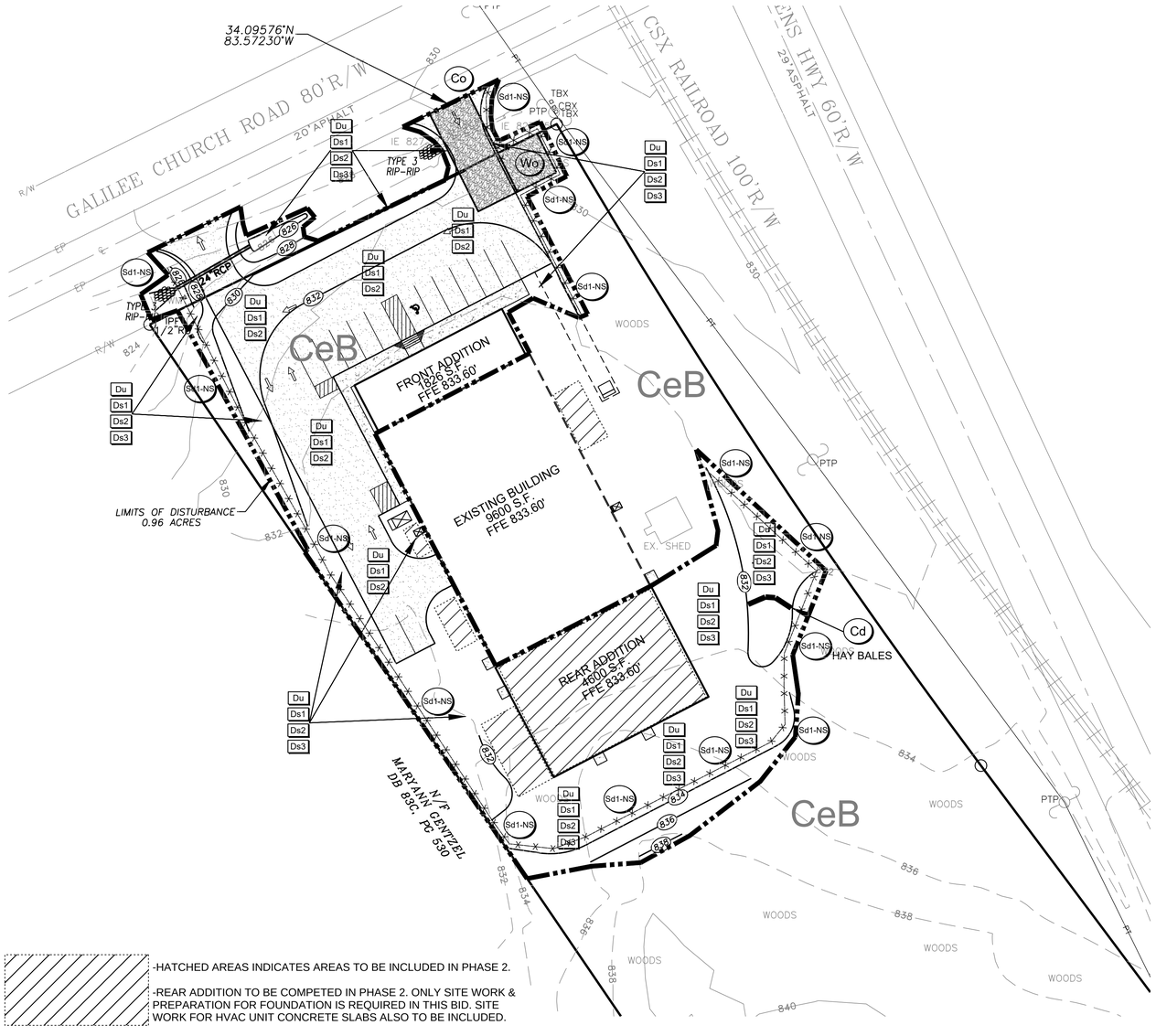
Volume calculations based upon the following:
— Sd1 assumes a silt fence placed on a 2:1 slope and allowed to fill 0.30 feet, i.e., Volume = 0.17 cu. yd./ft.

I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION.

BRIAN WOOD, P.E. #30872

... GENERAL EROSION CONTROL NOTES ...

1. A PERMANENT GROUND COVER WILL BE ESTABLISHED IN ACCORDANCE TO THE VEGETATIVE PLAN SHOWN ON THE BMP DETAIL SHEET.
2. ALL EROSION CONTROL MEASURES MUST BE CHECKED DAILY AND MAINTAINED AS NECESSARY TO PREVENT EROSION.
3. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS.
4. THE INSTALLATION OF EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES SHALL OCCUR PRIOR TO LAND-DISTURBING ACTIVITIES.
5. MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE SITE CONTRACTOR.
6. "THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES."
7. "EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE. PRACTICES WILL BE CHECKED DAILY."
8. Ds1–Ds2–Ds3–Su–SS ON ALL SLOPES AND TYPE "S" Sd1 IN ALL CRITICAL AREAS; NO CRITICAL AREAS ARE ANTICIPATED TO OCCUR ON SITE.
9. STANDARDS AND SPECIFICATIONS: ALL DESIGNS WILL CONFORM TO AND ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE PUBLICATION ENTITLED "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA."
10. ADDITIONAL MEASURES WILL BE ADDED IF DETERMINED TO BE NEEDED BY ON-SITE INSPECTIONS.
11. NO PORTION OF THE PROPERTY SHOWN HEREON IS IN A DESIGNATED FLOOD HAZARD AREA ACCORDING TO THE COMMUNITY NO. #13157C0255C, DATED DECEMBER 17, 2010.
12. THERE ARE NO WETLANDS SHOWN ON SITE PER THE NATIONAL WETLANDS INVENTORY MAPS.
13. NO DISPOSAL ON SITE; ALL CONSTRUCTION DEBRIS WILL BE DISPOSED IN A JACKSON COUNTY/STATE APPROVED LANDFILL.
14. NO STAGING AREAS ON SITE FOR PETROLEUM PRODUCTS, CONSTRUCTION PRODUCTS SUCH AS PAINTS AND STAINS, OR CHEMICAL PRODUCTS SUCH AS PESTICIDES, HERBICIDES, OR FERTILIZERS.
15. A 25 FOOT UNDISTURBED BUFFER ADJACENT TO ALL STREAMS, CREEKS, LAKES, PONDS, ETC. IS REQUIRED TO BE MAINTAINED BY THE SOIL EROSION AND SEDIMENT CONTROL ORDINANCE (ARTICLE 4 SECTION 4.3 PARAGRAPH 15). A DOUBLE ROW OF TYPE "S" SILT FENCE IS REQUIRED ALONG ALL 25' UNDISTURBED BUFFERS.
16. SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE 1/3 FULL VOLUME.
17. THE SD2-F AND SD2-P IS NOT TO BE USED CONCURRENTLY IN THE AREA OF APPLICATION. SD2-P IS TO BE USED AFTER THE INSTALLATION OF PAVEMENT. IN ADDITION, EXCAVATED INLET TRAPS MAY BE USED. THE ADDITIONAL STORAGE PROVIDED BY THE USE OF SD2-F (SEE DETAIL) HAS NOT BEEN INCORPORATED INTO THE SILT CALCULATIONS. THIS ADDITIONAL STORAGE IS ABOVE AND BEYOND THE 67 CY/AC REQUIRED FOR EACH BASIN.
18. MATTING OR BLANKETS (SLOPE STABILIZATION) WILL BE USED IN ACCORDANCE WITH PAGE 6-69 OF THE 2016 EDITION MANUAL FOR EROSION AND SEDIMENTATION CONTROL IN GEORGIA.
19. NO SLOPES TO EXCEED 3 TO 1. CRITICAL AREAS ARE AT ALL DETENTION PONDS, ALL SLOPES GREATER THAN 2:5 TO 1, AND ALL SLOPES GREATER THAN 10 FEET IN HEIGHT.
20. WASTE DISPOSAL. SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
21. THE SOIL EROSION AND SEDIMENT CONTROL PLAN IS IN COMPLIANCE WITH WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC TANK REGULATIONS.
22. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50 FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25 FT OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
23. AMENDMENTS TO THE PLAN THAT HAVE A SIGNIFICANT EFFECT ON BMP's WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
24. PRE-DEVELOPED CN=66 POST-DEVELOPED CN=69
25. WATERPROOF TARPS WEIGHTED DOWN ON THE EDGES TO BE USED TO PROTECT BUILDING MATERIALS DURING INCLEMENT WEATHER.
26. THERE ARE NO EXISTING OR PROPOSED INERT WASTE BURY PITS ON SITE.
27. ALL STREAM BUFFERS MUST BE FLAGGED PRIOR TO LAND DISTURBING ACTIVITIES.
28. STORM WATER MANAGEMENT FACILITIES AND ES&PC MEASURES ARE TO BE ACCOMPLISHED PRIOR TO ANY OTHER CONSTRUCTION ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
29. ALL DISTURBED AREAS TO BE GRASSED AS SOON AS CONSTUCTION PHASES PERMIT.
30. CUT AND FILL SLOPES SHALL NOT EXCEED 3H:1V ON RESIDENTIAL PROJECTS AND LOTS, AND SHALL NOT EXCEED 2H:1V ON ALL OTHER PROJECTS.
31. EROSION, SEDIMENT AND POLLUTION CONTROL MEASURES AND PRACTICES ARE TO BE CHECKED DAILY.
32. TEMPORARY ES&PC BMP's WILL BE REMOVED WHEN SITE IS 85% STABILIZED WITH PERMANENT VEGETATION.



Critical Areas

1) Erosion Control Matting will be used to provide a microclimate which protects young vegetation and promotes its establishment. In addition, it helps reinforce the turf to resist forces of erosion during storm events.
2) Ds2–Use of temporary seeding for the establishment of temporary vegetative cover with fast growing seeding to help reduce runoff and sediment damage, protect the soil surface from erosion, to improve the tilth, infiltration and aeration as well as organic matter for permanent plantings.
3) Ds3 – Use of perennial grasses to be used to achieve final stabilization.
4) A double row of Type C–Sediment Barrier will be used as a temporary structure to prevent sediment from the fill slope from leaving the site and entering the natural drainage way.

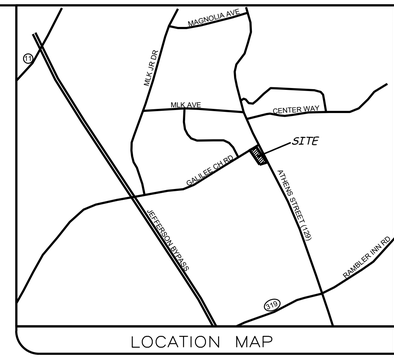
-HATCHED AREAS INDICATES AREAS TO BE INCLUDED IN PHASE 2.

-REAR ADDITION TO BE COMPETED IN PHASE 2. ONLY SITE WORK & PREPARATION FOR FOUNDATION IS REQUIRED IN THIS BID. SITE WORK FOR HVAC UNIT CONCRETE SLABS ALSO TO BE INCLUDED.

DESCRIPTION OF ACTIVITIES
CLEARING WILL BE KEPT TO A MINIMUM. VEGETATION AND MULCH WILL BE APPLIED TO APPLICABLE AREAS IMMEDIATELY AFTER GRADING IS COMPLETED. SEEDING, MULCHING AND FERTILIZING REQ. ARE SHOWN ON THE ES&PC PLAN AND CONSTRUCTION DETAILS.
ALL CRITICAL AREAS AND CUT AND FILL SLOPES EXCEEDING 2.5(H)/1(V) WILL BE TREATED WITH Su/SS/Ds3 OR Su/Ds4 IMMEDIATELY UPON COMPLETION. Mb SHOULD BE INSTALLED IN ACCORDANCE TO MANUFACTURER'S DIRECTIONS. GRAVEL WILL BE APPLIED TO PARKING LOT AS SOON AS GRADING IS COMPLETED. LAND DISTURBANCE SHOULD BE SCHEDULED TO LIMIT EXPOSURE OF BARE SOILS TO EROSIVE ELEMENTS. BEST MANAGEMENT PRACTICES WILL BE EMPLOYED TO PREVENT EROSION IN AREAS OF CONCENTRATED WATER FLOWS. EROSION IN GRASS CHANNELS SHALL BE PREVENTED BY THE INSTALLATION OF HAYBALE AND STONE CHECK DAMS.

EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO CONSTRUCTION AND SHALL BE CHECKED AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. SEDIMENTS WILL BE MAINLY BE CONTROLLED BY SILT FENCE. A TEMPORARY CONSTRUCTION ENTRANCE WILL BE EMPLOYED AT THE ENTRANCE TO PREVENT THE TRANSPORT OF SEDIMENT FROM THE SITE BY VEHICULAR TRAFFIC. ANY MUD OR SEDIMENT THAT GETS INTO THE ROADWAY SHALL BE IMMEDIATELY CLEANED OFF THE ROAD.

NO SIGNIFICANT FLOODING OR CHANNEL DEGRADATION IS ANTICIPATED DOWNSTREAM OF THE DEVELOPMENT.



GEORGIA
UNIFORM CODING SYSTEM
FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES
GEORGIA SOIL AND WATER CONSERVATION COMMISSION

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Co	CONSTRUCTION EXIT			A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Cr	CONSTRUCTION ROAD STABILIZATION			A travelway constructed as part of a construction plan including access roads, subdivision roads, parking areas and other on-site vehicle transportation routes.
Dc	STREAM DIVERSION CHANNEL			A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Dl	DIVERSION			An earth channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE			A flexible conduit of heavy-duty fabric or other material designed to safely conduct surface runoff down a slope. This is temporary.
Dn2	PERMANENT DOWNDRAIN STRUCTURE			A paved chute, pipe, sectional conduit or similar material designed to safely conduct surface runoff down a slope.
Fr	FILTER RING			A temporary stone barrier constructed at storm drain inlets and pond outlets.
Ga	GABION			Rock filter baskets which are hand-placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE			Permanent structures installed to protect channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER			A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM			A permanent or temporary stone filter dam installed across small streams or drainageways.
Re	RETAINING WALL			A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not attainable. Each situation will require special design.
Rt	RETRO FITTING			A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter.
Sd1	SEDIMENT BARRIER			A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence.
Sd2	INLET SEDIMENT TRAP			An impounding area created by excavating around a storm drain drop inlet. The excavated area will be filled and stabilized on completion of construction activities.
Sd3	TEMPORARY SEDIMENT BASIN			A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out.
Sd4	TEMPORARY SEDIMENT TRAP			A small temporary pond that drains a disturbed area so that sediment can settle out. The principle feature distinguishing a temporary sediment trap from a temporary sediment basin is the lack of a pipe or riser.
Sk	FLOATING SURFACE SKIMMER			A buoyant device that releases/drains water from the surface of sediment ponds, traps, or basins at a controlled rate of flow.
Spb	SEEP BERM			Linear control device constructed as a diversion perpendicular to the direction of runoff to enhance dissipation and infiltration, while creating multiple sedimentation chambers with the employment of intermediate dikes.

STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Sr	TEMPORARY STREAM CROSSING			A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment.
St	STORMDRAIN OUTLET PROTECTION			A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.
Su	SURFACE ROUGHENING			A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading.
Tc	TURBIDITY CURTAIN			A floating or staked barrier installed within the water (it may also be referred to as a floating boom, silt barrier, or silt curtain).
Tp	TOPSOILING			The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of construction activities.
Tr	TREE PROTECTION			To protect desirable trees from injury during construction activity.
Wt	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL			Paved or vegetative water outlets for diversions, terraces, berms, dikes or similar structures.

VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE		Bf	Strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surrounding an area of disturbance or bordering streams.
Cs	COASTAL DUNE STABILIZATION (WITH VEGETATION)		Cs	Planting vegetation on dunes that are denuded artificially constructed, or re-nourished.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP. SEEDING)		Ds2	Establishing a temporary vegetative cover with fast growing seedlings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)		Ds3	Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (SODDING)		Ds4	A permanent vegetative cover using sods on highly erodable or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.
Fl-Co	FLOCCULANTS AND COAGULANTS		Fl-Co	Substance formulated to assist in the solids/liquid separation of suspended particles in solution.
Sb	STREAMBANK STABILIZATION (USING FROM VEGETATION)		Sb	The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion problems.
Ss	SLOPE STABILIZATION		Ss	A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.
Tac	TACKIFIERS AND BINDERS		Tac	Substance used to anchor straw or hay mulch by causing the organic material to bind together.

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30 0 30 60 90
Scale 1" = 30'

GMD	COUNTY	CITY
245	JACKSON	JEFFERSON

GEORGIA REGISTERED No. 30872 PROFESSIONAL ENGINEER BRIAN C. WOOD
LEVEL II CERTIFICATION #13718

REVISIONS	DATE

DATE 03/18/21

SHEET C5

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750 BELMONT ROAD
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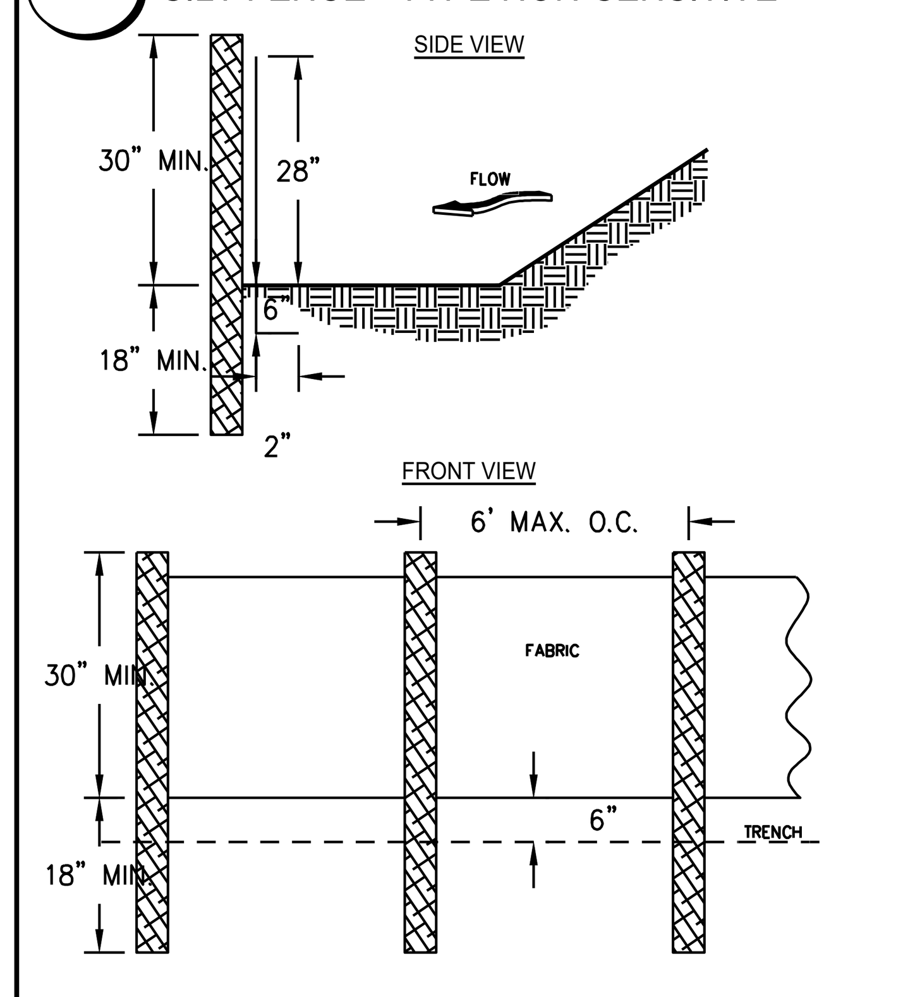
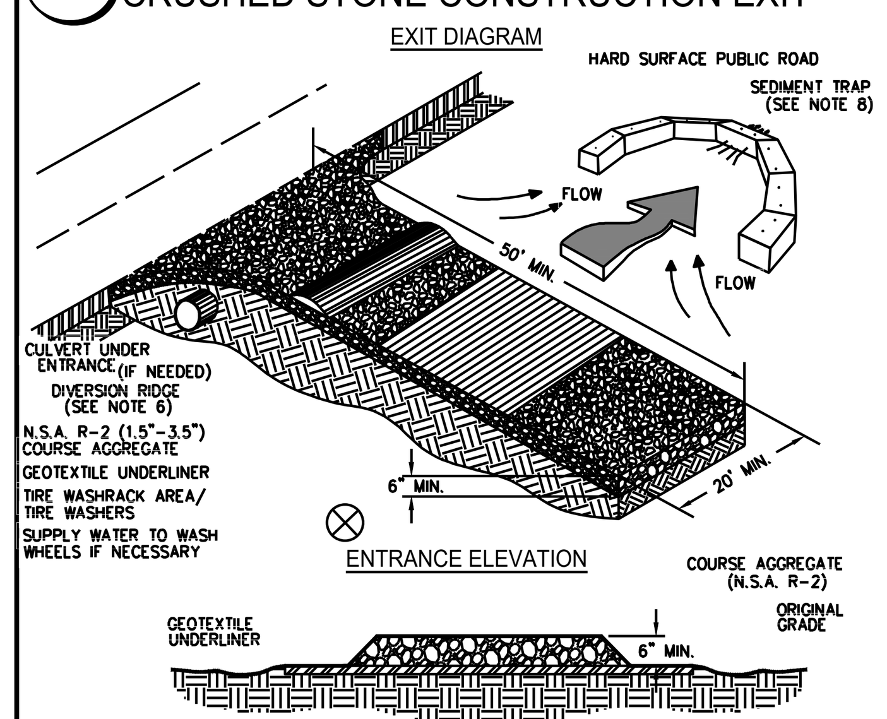
ES&PC PLAN FOR:
JACKSON COUNTY
ANIMAL CONTROL SHELTER
JEFFERSON, GEORGIA

Sd1-NS SILT FENCE - TYPE NON-SENSITIVE



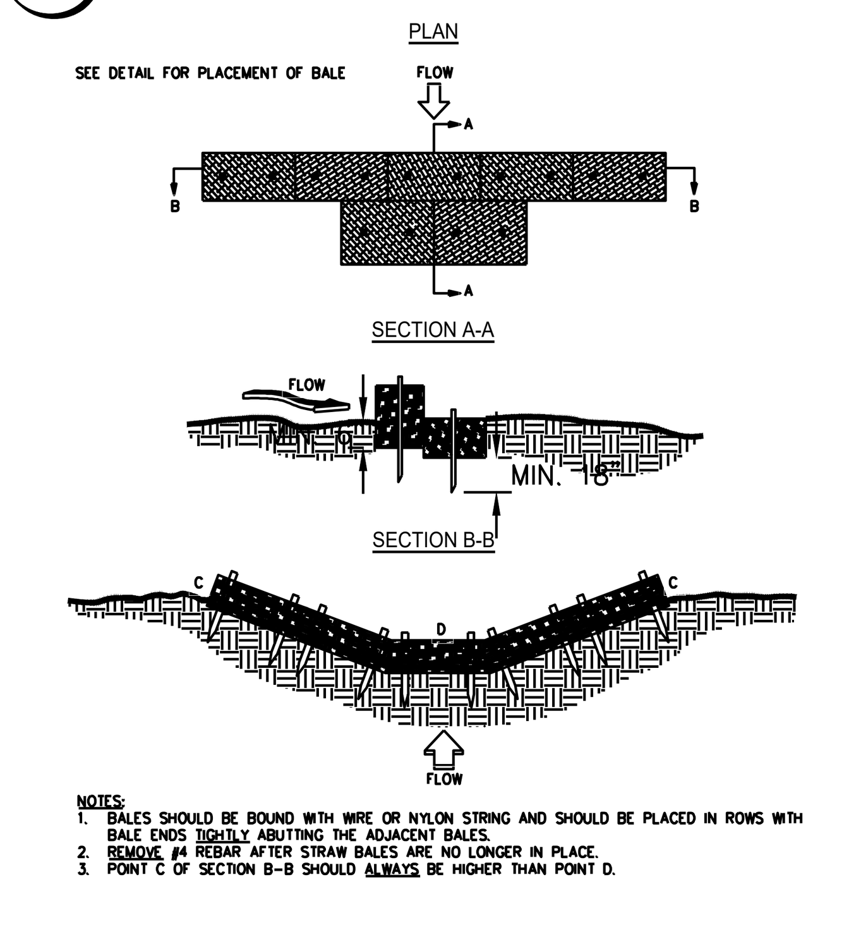
NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

Co CRUSHED STONE CONSTRUCTION EXIT



NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

Cd TYPICAL STRAW BALE CHECK DAM



NOTES:
1. BALES SHOULD BE BOUND WITH WIRE OR NYLON STRING AND SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. REMOVE #4 REBAR AFTER STRAW BALES ARE NO LONGER IN PLACE.
3. POINT C OF SECTION B-B SHOULD ALWAYS BE HIGHER THAN POINT D.

SWALE 1: 26.80 CFS > 2.0 CFS, WILL USE SLOPE STABILIZATION ALONG WITH CHECK DAMS
SWALE 2: 49.76 CFS > 2.0 CFS, WILL USE SLOPE STABILIZATION ALONG WITH CHECK DAMS

STORMWATER POLLUTION PREVENTION POST-CONSTRUCTION:

During construction the existing extended detention ponds will have the following maintenance

1. Remove excessive vegetation, including trees, from pond and/or dam.
2. Remove accumulated sediment, if any, in pond.
3. Permanently stabilize all disturbed areas.
4. Repair/replace all stormwater outlets (St).
5. Ponds must be restored to meet or exceed the original design criteria.

items performed:

Maintenance and reconstruction of the existing extended detention ponds will reduce pollutant loading leaving the site once construction is complete through gravitational settling and biological uptake. The forebays will function to filter pollutants out of the stormwater runoff before it reaches the ponds.

NON-STORM WATER DISCHARGES:

All non-storm water discharges will be routed through on site BMPs and the storm water management system where possible. These discharges include flushing of water and fire lines, irrigation water, ground water, dewatering of pits or depressions within the construction site and rinse off water of non-toxic materials.

NO WASTE WILL BE DISPOSED OF INTO STORM WATER INLETS OR WATERS OF THE STATE

CONSTRUCTION, HAZARDOUS, AND SANITARY WASTE:

Locate waste collection areas away from streets, gutters, watercourses and storm drains. Waste collection areas, such as dumpsters, are often best located near construction site entrances to minimize traffic on disturbed soils. The Plan should include secondary containment around liquid waste collection areas to further minimize the likelihood of contaminated discharges.
Materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit.

WASTE
All waste materials will be collected and stored in a securely lidded metal dumpster. The dumpster will meet all solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied a minimum of once per week or more often if necessary and trash will be hauled as required by local regulations. No construction waste will be buried onsite.

All personnel will be instructed on proper procedures for waste disposal. A notice stating these practices will be pasted at the jobsite and the Contractor will be responsible for seeing that these procedures are followed.

HAZARDOUS
All hazardous waste materials will be disposed of in the manner specified by local, state, and/or federal regulations and by the manufacturer of such products. The job site superintendent, who will also be responsible for seeing that these practices are followed, will instruct site personnel in these practices. Material Safety Data Sheets (MSDS's) for each substance with hazardous properties that is used on the job site will be obtained and used for the proper management of potential wastes that may result from these products. An MSDS will be posted in the immediate area where such product is stored and/or used and another copy of each MSDS will be maintained in the ESPCP file at the job site construction trailer office. Each employee who must handle a substance with hazardous properties will be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using particularly regarding spill control techniques.

The contractor will implement the Spill Prevention Control and Countermeasures (SPCC) Plan found within this ESPCP and will train all personnel in the proper cleanup and handling of spilled materials. No spilled hazardous materials or hazardous wastes will be allowed to come in contact with storm water discharges. If such contact occurs, the storm water discharge will be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated storm water. It shall be the responsibility of the job site superintendent to properly train all personnel in the use of the SPCC plan.

SANITARY
A minimum of one portable sanitary unit will be provided for every ten (10) workers on the site. All sanitary waste will be collected from the portable units a minimum of one time per week by a licensed portable facility provider in complete compliance with local and state regulations.

All sanitary waste units will be located in an area where the likelihood of the unit contributing to storm water discharge is negligible. Additional containment BMP's must be implemented such as gravel bags or specially designed plastic skid containers around the base to prevent wastes from contributing to storm water discharges. The contractor must identify the location of sanitary waste units on the Intermediate Erosion Control Plan Grading Phase once the locations have been determined.

Sanitary sewer waste water treatment will be provided by Municipal Authority/Septic System at the completion of this Project.

OFFSITE VEHICLE TRACKING
A stabilized construction exit has been provided to help reduce vehicle tracking of sediment. The paved street adjacent to the site exit will be inspected daily for tracking of mud, dirt or rock. Dump trucks hauling material from the construction site will be covered.

Dust Control on Disturbed Areas (Du)

DEFINITION
Controlling surface and air movement of dust on construction sites, roads, and demolition sites.

PURPOSE
- To prevent surface and air movement of dust from exposed soil surfaces.
- To reduce the presence of airborne substances that may be harmful or injurious to human health, welfare, or safety, or to animals or plant life.

CONDITIONS
This practice is applicable to areas subject to surface and air movement of dust where on and off-site damage may occur without treatment.

METHOD AND MATERIALS

A. Temporary Methods

Mulches. See standard **Ds1 - Disturbed Area Stabilization (With Mulching Only)**. Synthetic resins may be used instead of asphalt to bind mulch material. Refer to specification **Tac - Tackifiers**. Resins should be used according to manufacturer's recommendations.

Vegetative Cover. See specification **Ds2 - Disturbed Area Stabilization (With Temporary Seeding)**.

Spray-on Adhesives. These are used on mineral soils (not effective on muck soils). Keep traffic off these areas. Refer to specification **Tac - Tackifiers**.

Tillage. This practice is designed to roughen and bring clods to the surface. It is an emergency measure that should be used before wind erosion starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment that may produce the desired effect.

Irrigation. This is generally done as an emergency treatment. Site is sprinkled with water until the surface is wet. Repeat as needed.

Barriers. Solid board fences, snowfences, burlap fences, crate walls, bales of hay and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 15 times their height are effective in controlling wind erosion.

Calcium Chloride. Apply at rate that will keep surface moist. May need retreatment.

B. Permanent Methods

Permanent Vegetation. See specification **Ds3 -Disturbed Area Stabilization (With Permanent Vegetation)**. Existing trees and large shrubs may afford valuable protection if left in place.

Topsoiling. This entails covering the surface with less erosive soil material. See specification **Tp - Topsoiling**.

Stone. Cover surface with crushed stone or coarse gravel. See specification **Cr-Construction Road Stabilization**.

Disturbed Area Stabilization (With Mulching Only) (Ds1)

DEFINITION
Applying plant residues or other suitable materials, produced on the site if possible, to the soil surface.

PURPOSE
- To reduce runoff and erosion
- To conserve moisture
- To prevent surface compaction or crusting
- To control undesirable vegetation
- To modify soil temperature
- To increase biological activity in the soil

REQUIREMENT FOR REGULATORY COMPLIANCE
Mulch or temporary grassing shall be applied to all exposed areas within 14 days of disturbance. Mulch can be used as a singular erosion control device for up to six months, but it shall be applied at the appropriate depth, depending on the material used, anchored and have a continuous 90% cover or greater of the soil surface.

Maintenance shall be required to maintain appropriate depth and 90% cover. Temporary vegetation may be employed instead of mulch if the area will remain undisturbed for less than six months.

If any area will remain undisturbed for greater than six months, permanent vegetative techniques shall be employed. Refer to **Ds2 -Disturbed Area Stabilization (With Temporary Seeding), Ds3 - Disturbed Area Stabilization (With Permanent Seeding), and Ds4 - Disturbed Area Stabilization (With Sodding)**.

SPECIFICATIONS
Mulching Without Seeding
This standard applies to graded or cleared areas where seedings may not have a suitable growing season to produce an erosion retardant cover, but can be stabilized with a mulch cover.

Site Preparation
1. Grade to permit the use of equipment for applying and anchoring mulch.
2. Install needed erosion control measures as required such as dikes, diversions, berms, terraces and sediment barriers.
3. Loosen compact soil to a minimum depth of 3 inches.

Mulching Materials
Select one of the following materials and apply at the depth indicated:
1. Dry straw or hay shall be applied at a depth of 2 to 4 inches providing complete soil coverage. One advantage of this material is easy application.
2. Wood waste (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain on site, be chipped, and applied as mulch. This method of mulching can greatly reduce erosion control costs.
3. Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and re-used.

Applying Mulch
When mulch is used without seeding, mulch shall be applied to provide full coverage of the exposed area.
1. Dry straw or hay mulch and wood chips shall be applied uniformly by hand or by mechanical equipment.

2. If the area will eventually be covered with perennial vegetation, 20-30 pounds of nitrogen per acre in addition to the normal amount shall be applied to offset the uptake of nitrogen caused by the decomposition of the organic mulches.
3. Apply polyethylene film on exposed areas.

Anchoring Mulch
1. Straw or hay mulch can be pressed into the soil with a disk harrow with the disk set straight or with a special "packer disk." Disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but to press it into the soil leaving much of it in an erect position. Straw or hay mulch shall be anchored immediately after application.

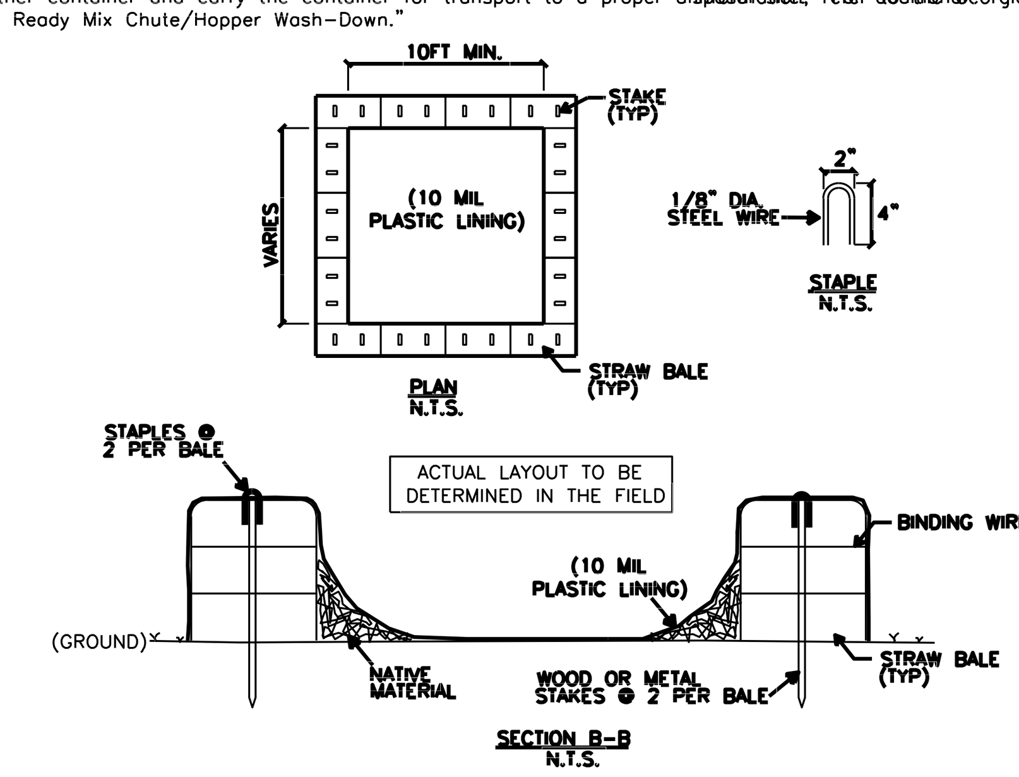
   Straw or hay mulch spread with special blower-type equipment may be anchored. Tackifers, binders and hydraulic mulch with tackifier specifically desgined for tacking straw can be substituted for emulsified asphalt. Please refer to specification **Tac-Tackifers**. Plastic mesh or netting with mesh no larger than one inch by one inch shall be installed according to manufacturer's specifications.
2. Netting of the appropriate size shall be used to anchor wood waste. Openings of the netting shall not be larger than the average size of the wood waste chips.
3. Polyethylene film shall be anchor trenched at the top as well as incrementally as necessary.

Wo Concrete Truck Washout:

NO concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water onsite.

The washing of ready-mix concrete drums & dump truck bodies used in the delivery of portland cement conc. is prohibited on this site. In accordance with Std Specs. 107-Legal Regulations & Responsibility to the Public, only the discharge chute utilized in conc. delivery may be rinsed free of fresh conc. remains. The contractor shall excavate a pit outside of State water buffers, at least 25 feet from any storm drain & outside of the travel way, including shoulders, for a wash/pit area. The pit shall be large enough to store all wash-down water without overtopping the pit. Immediately after the concrete completed and after the wash-down water has soaked into the ground, the pit shall be filled in, and ground above shall be graded to match the elevation of the surrounding area as directed by the Alternative wash-down plans must be approved by the Project Engineer.

Never dispose of wash-down water down a storm drain. Wash-down water pit location may be relocated as long as the following apply:
(1) the pit is located away from a storm drain, stream or river,
(2) the pit it accessible to the vehicle being used for wash-down,
(3) the pit has enough volume for wash-down water, and
(4) make sure you have permission to use the area for wash-down.
On some sites, you may not have permission or access to a location which allows for wash-down. In those cases, the Contractor may have to wash-down into a wheel barrow or other container and carry the container for transport to a proper disposal site. For additional information, refer to the Georgia Environmental Assistance Program's "A Guide for Ready Mix Chute/Hopper Wash-Down."



SPILL PREVENTION PLAN:

The following materials are expected onsite during construction: Concrete products, asphalt, petroleum based fuels and lubricants for equipment, tar, metal building materials, lumber, sheet rock, floor coverings, electrical wire and fixtures, paints/stains/finishing treatments, paints, paint solvents, additives for soil stabilization, cleaning solvents, pesticides, fertilizers, herbicides, crushed stone, plastic and metal pipes.

Practices such as good housekeeping, proper handling of hazardous products and proper spill control practices will be followed to reduce the risk of spills and spills from discharging into storm water runoff.

GOOD HOUSEKEEPING
1. Quantities of products stored onsite will be limited to the amount needed for the job.
2. Products and materials will be stored in a neat, orderly manner in appropriate containers protected from rainfall, where possible.
3. Products will be kept in their original containers with manufacturer labels legible and visible.
4. Product mixing, disposal and disposal of product containers will be according to the manufacturer's recommendations.
5. The Contractor will inspect such materials to ensure proper use, storage and disposal.

PETROLEUM BASED PRODUCTS
Containers for products such as fuels, lubricants and tars will be inspected daily for leaks and spills. This includes on-site vehicle and machinery daily inspections and regular preventative maintenance of such equipment. Equipment maintenance areas will be located away from state water, natural drains and storm water drainage inlets. In addition, temporary fueling tanks shall have a secondary containment liner to prevent/minimize site contamination. Discharge of oils, fuels and lubricants is prohibited. Proper disposal methods will include collection in a suitable container and disposal as required by local and State regulations.

Disturbed Area Stabilization (With Temporary Seeding) (Ds2)

DEFINITION
The establishment of temporary vegetative cover with fast growing seedings for seasonal protection on disturbed or denuded areas.

PURPOSE
- To reduce runoff and sediment damage of down stream resources
- To protect the soil surface from erosion
- To improve wildlife habitat
- To improve aesthetics
- To improve tilth, infiltration and aeration as well as organic matter for permanent plantings

REQUIREMENT FOR REGULATORY COMPLIANCE
Mulch or temporary grassing shall be applied to all exposed areas within 14 days of disturbance. Temporary grassing, instead of mulch, can be applied to rough graded areas that will be exposed for less than six months. If an area is expected to be undisturbed for longer than six months, permanent perennial vegetation shall be used. If optimum planting conditions for temporary grassing is lacking, mulch can be used as a singular erosion control device for up to six months but it shall be applied at the appropriate depth, anchored, and have a continuous 90% cover or greater of the soil surface. Refer to specification **Ds1-Disturbed Area Stabilization (With Temporary Seeding).**

CONDITIONS
Temporary vegetative measures should be coordinated with permanent measures to assure economical and effective stabilization. Most types of temporary vegetation are ideal to use as companion crops until the permanent vegetation is established. Note: Some species of temporary vegetation are not appropriate for companion crop plantings because of their potential to out-compete the desired species (e.g. annual ryegrass). Contact NRCS or the local SWCD for more information.

SPECIFICATIONS
Grading and Shaping
Excessive water run-off shall be reduced by properly designed and installed erosion control practices such as closed drains, ditches, dikes, diversions, sediment barriers and others.

No shaping or grading is required if slopes can be stabilized by hand-seeded vegetation or if hydraulic seeding equipment is to be used.

Seedbed Preparation
When a hydraulic seeder is used, seedbed preparation is not required. When using conventional or hand-seeding, seedbed preparation is not required if the soil material is loose and not sealed by rainfall.

When soil has been sealed by rainfall or consists of smooth cut slopes, the soil shall be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate.

Lime and Fertilizer
Agricultural lime is required unless soil tests indicate otherwise. Apply agricultural lime at a rate determined by soil test for pH. Quick acting lime should be incorporated to modify pH during the germination period. Bio stimulants should also be considered when there is less than 3% organic matter in the soil. Graded areas require lime application. Soils must be tested to determine required amounts of fertilizer and amendments. Fertilizer should be applied before land preparation and incorporated with a disk, ripper, or chisel. On slopes too steep for, or inaccessible to equipment, fertilizer shall be hydraulically applied, preferably in the first pass with seed and some hydraulic mulch, then topped with the remaining required application rate.

Seeding
Select a grass or grass-legume mixture suitable to the area and season of the year. Seed shall be applied uniformly by hand, cyclone seeder, drill, culti-packer-seeder, or hydraulic seeder (slurry including seed and fertilizer). Drill or cultipacker seeders should normally place seed one-quarter to one-half inch deep. Appropriate depth of planting is ten times the seed diameter. Soil should be "raked" lightly to cover seed with soil if seeded by hand. See Table 6-4.1

Mulching
Temporary vegetation can, in most cases, be established without the use of mulch, provided there is little to no erosion potential. However, the use of mulch can often accelerate and enhance germination and vegetation establishment. Mulch without seeding should be considered for short term protection. Refer to **Ds1 - Disturbed Area Stabilization (With Mulching Only)**.

Irrigation
During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to a depth that will insure germination of the seed. Subsequent applications should be made when needed.

Table 6-4.1 - Temporary Cover or Companion Cover Crops
PLANT, PLANTING RATE, AND PLANTING DATE FOR TEMPORARY COVER OR COMPANION CROPS [1]

Species	Broadcast Rates: Rate Per Acre[2]	Broadcast Rates: Pure Live Seed (PLS) Per 1000 sqft	Resource Area[3]	Planting Dates by Resource Area (J F M A M J J A S O N D) — Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.	Remarks
BARLEY *Hordeum vulagre*					
alone	3 bu. (144 lbs)	3.3 lbs	M-L		14,000 seed per pound. Winter hardy. Use on productive soils.
in mixture	1/2 bu. (24lbs)	0.6 lb	P		
			C		
LESPEDEZA, ANNUAL *Lespedeza striata*					
alone	40 lbs	0.9 lb	M-L		200,000 seed per pound. May volunteer for several years. Use inoculant EL.
in mixture	10 lbs	0.2 lb	P		
			C		
LOVEGRASS, WEEPING *Eragrostis curvula*					
alone	4 lbs	0.1 lb	M-L		1,500,000 seed per pound. May last for several years. Mix with *Sericea lespedeza*.
in mixture	2 lbs	0.05 lb	P		
			C		
MILLET, BROWNTOP *Panicum fasciculatum*					
alone	40 lbs	0.9 lb	M-L		137,000 seed per pound. Quick dense cover. Will provide excessive competion in mixtures if seeded at high rate.
in mixture	10 lbs	0.2 lb	P		
			C		
MILLET, PEARL *Pennesetum glaucum*					
alone	50 lbs	1.1 lbs	M-L		88,000 seed per pound. Quick dense cover. May reach 5 feet in height. Not recommended for mixtures.
			P		
			C		
OATS *Avena sativa*					
alone	4 bu. (128 lbs)	2.9 lbs	M-L		13,000 seed per pound. Use on productive soils. Not as a winter hardy as rye or barley.
in mixture	1 bu. (32 lbs)	0.7 lb	P		
			C		
RYE *Secale cereale*					
alone	3 bu. (168 lbs)	3.9 lbs	M-L		18,000 seed per pound. Quick cover. Drought tolerant and winter hardy.
in mixture	1/2 bu. (28 lbs)	0.6 lb	P		
			C		
RYEGRASS, ANNUAL *Lolium temulentum*					
alone	40 lbs	0.9 lb	M-L		227,000 seed per pound. Dense cover. Very competitive and is not to be used in mixtures.
			P		
			C		
SUDANGRASS *Sorghum sudanese*					
alone	60 lbs	1.4 lbs	M-L		55,000 seed per pound. Good on droughty sites. Not recommended for mixtures.
			P		
			C		
TRITICALE *X-Triticosecale*					
alone	3 bu. (144 lbs)	3.3 lbs	C		Use on lower part of Southern Coastal Plain and in Atlantic Coastal Flatwoods only.
in mixture	1/2 bu. (24 lbs)	0.6 lb			
WHEAT *Triticum aestivum*					
alone	3 bu. (180 lbs)	4.1 lbs	M-L		15,000 seed per pound. Winter hardy.
in mixture	1/2 bu. (30 lbs)	0.7 lb	P		
			C		

[1]Temporary cover crops are very competitive and will crowd out perennials if seeded too heavily
[2]Reduce seeding rates by 50% when drilled.
[3]M-L represents the Mountain; Blue Ridge; and Ridges and Valleys MLRAs
P represents the Southern Piedmont MLRA
C represents Southern Coastal Plan; Sand Hills; Black Lands; and Atlantic Coast Flatwoods MLRAs
(see Figure 6-4.1, p. 6-40)

LEVEL II CERTIFICATION #13718

REVISIONS	DATE

CIVIL SOLUTIONS, INC.
ENGINEERS ~ PLANNERS
750 BELMONT ROAD
ATHENS, GA 30605
OFFICE 706-255-2443

OWNER & DEVELOPER
JACKSON COUNTY GEORGA
67 ATHENS STREET
JEFFERSON, GA 30549
(706)367-6312

EROSION CONTROL DETAILS & NOTES FOR:
JACKSON COUNTY
ANIMAL CONTROL SHELTER
JEFFERSON, GEORGIA

GMD	COUNTY	CITY
245	JACKSON	JEFFERSON

DATE 03/18/21

SHEET C6

Disturbed Area Stabilization (With Permanent Vegetation) Ds3

DEFINITION
The planting of perennial vegetation such as trees, shrubs, vines, grasses, or legumes on exposed areas for final permanent stabilization. Permanent perennial vegetation shall be used to achieve final stabilization.

PURPOSE
- To protect the soil surface from erosion
- To reduce damage from sediment and runoff to down-stream areas
- To improve wildlife habitat and visual resources
- To improve aesthetics

REQUIREMENT FOR REGULATORY COMPLIANCE
This practice shall be applied immediately to rough graded areas that will be undisturbed for longer than six months. This practice or sodding shall be applied immediately to all areas at final grade. **Final Stabilization** means that all soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell that has been certified by the GA EPD for waste disposal, 100% of the soil surface is uniformlycovered in permanent vegetation with a density of 70% or greater, or landscaped according to the Plan (uniformly covered with landscaping materials in planned landscaped areas), or equivalent permanent stabilization measures.

Permanent vegetation shall consist of, planted trees, shrubs, perennial vines; or a crop of perennial vegetation appropriate for the region, such that within the growing season a 70% coverage by perennial vegetation shall be achieved. Final stabilization applies to each phase of construction. For linear construction projects on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by stabilizing the disturbed land for its agricultural or silvicultural use. Until this standard is satisfied and permanent control measures and facilities are operational, interim stabilization measures and temporary erosion and sedimentation control measures shall not be removed.

CONDITIONS
Permanent perennial vegetation is used to provide a protective cover for exposed areas including cuts, fills, dams, and other denuded areas.

PLANNING CONSIDERATIONS

1. Use conventional planting methods where possible.
2. When mixed plantings are done during marginal planting periods, companion crops shall be used.
3. No-till planting is effective when planting is done following a summer or winter annual cover crop. Sericea lespedeza planted no-till into stands of rye is an excellent procedure.
4. Block sod provides immediate cover. It is especially effective in controlling erosion adjacent to concrete flumes and other structures. Refer to Specification **Ds4-Disturbed Area Stabilization (With Sodding)**.
5. Irrigation should be used when the soil is dry or when summer plantings are done.
6. Low maintenance plants, as well as natives, should be used to ensure long-lasting erosion control.
7. Mowing should not be performed during the quail nesting season (May to September).
8. Wildlife plantings should be included in critical area plantings.

Wildlife Plantings
Commercially available plants beneficial to wildlife species include the following:

Mast Bearing Trees

Beech, Black Cherry, Blackgum, Chestnut, Chinkapin, Hackberry, Hickory, Honey Locust, Native Oak, Persimmon, Sawtooth Oak and Sweetgum.

All trees that produce nuts or fruits are favored by many game species. Hickory provides nuts used mainly by squirrels and bear.

Shrubs and Small Trees

Bayberry, Bicolor Lespedeza, Crabapple, Dogwood, Huckleberry or Native Blueberry, Mountain Laurel, Native Holly, Red Cedar, Red Mulberry, Sumac, Wax Myrtle, Wild Plum and Blackberry.

Plant in patches without tall trees to develop stable shrub communities. All produce fruits used by many kinds of wildlife, except for lespedeza that produces seeds used by quail and songbirds.

Grasses, Legumes, Vines and Temporary Cover

Bahiagrass, Bermudagrass, Grass-Legume mixtures, Partridge Pea, Annual Lespedeza, Orchardgrass (for mountains), Browntop Millet (for temporary cover), and Native grapes.

Provides herbaceous cover in clearings for a game bird brood-rearing habitat. Appropriate legumes such as vetches, clovers, and lespedezas may be mixed with grass, but they may die out after a few years.

CONSTRUCTION SPECIFICATIONS
Grading and Shaping
Grading and shaping may not be required where hydraulic seeding and fertilizing equipment is to be used. Vertical banks shall be sloped to enable plant establishment.

When conventional seeding and fertilizing are to be done, grade and shape where feasible and practical, so that equipment can be used safely and efficiently during seedbed preparation, seeding, mulching and maintenance of the vegetation.

Concentrations of water that will cause excessive soil erosion shall be diverted to a safe outlet. Diversions and other treatment practices shall conform with the appropriate standards and specifications.

Lime and Fertilizer Rates and Analysis
Agricultural lime is required at the rate of one to two tons per acre unless soil tests indicate otherwise. Graded areas require lime application. If lime is applied within six months of planting permanent perennial vegetation, additional lime is not required. Agricultural lime shall be within the specifications of the Georgia Department of Agriculture.

Lime spread by conventional equipment shall be "ground limestone." Ground limestone is calcitic or dolomitic limestone ground so that 90 percent of the material will pass through a 10-mesh sieve, not less than 50 percent will pass through a 50-mesh sieve and not less than 25 percent will pass through a 100-mesh sieve.

Fast-acting lime spread by hydraulic seeding equipment should be "finely ground limestone" spanning from the 180 micron size to the 5 micron size. Finely ground limestone is calcitic or dolomitic limestone ground so that 95 percent of the material will pass through a 100-mesh sieve.

It is desirable to use dolomitic limestone in the Sand Hills, Southern Coastal Plain and Atlantic Coast Flatwoods MLRAs. (See Figure 6-4.1)

Agricultural lime is generally not required where only trees are planted.

Initial fertilization, nitrogen, topdressing, and maintenance fertilizer requirements for each species or combination of species are listed in Table 6-5.1.

Lime and Fertilizer Application
When *hydraulic seeding* equipment is used, the initial fertilizer shall be mixed with seed, innoculant (if needed), and wood cellulose or wood pulp fiber mulch and applied in a slurry. The innoculant, if needed, shall be mixed with the seed prior to being placed into the hydraulic seeder. The slurry mixture will be agitated during application to keep the ingredients thoroughly mixed. The mixture will be spread uniformly over the area within one hour after being placed in the

hydroseeder.

Finely ground limestone can be applied in the mulch slurry or in combination with the top dressing.

When *conventional planting* is to be done, lime and fertilizer shall be applied uniformly in one of the following ways:

1. Apply before land preparation so that it will be mixed with the soil during seedbed preparation.
2. Mix with the soil used to fill the holes, distribute in furrows.
3. Broadcast after steep surfaces are scarified, pitted or trenched.
4. A fertilizer pellet shall be placed at root depth in the closing hole beside each pine tree seedling.

Plant Selection
Refer to Tables 6-4.1, 6-5.2, 6-5.3 and 6-5.4 for approved species. Species not listed shall be approved by the State Resource Conservationist of the Natural Resources Conservation Service before they are used.

Plants shall be selected on the basis of species characteristics, site and soil conditions, planned use and maintenance of the area; time of year of planting, method of planting; and the needs and desires of the land user.

Some perennial species are easily established and can be planted alone. Examples of these are Common Bermuda, Tall Fescue, and Weeping Lovegrass.

Other perennials, such as Bahia Grass and Sericea Lespedeza, are slow to become established and should be planted with another perennial species. The additional species will provide quick cover and ample soil protection until the target perennial species become established. For example, Common seeding combinations are 1) Weeping Lovegrass with Sericea Lespedeza (scarified) and 2) Tall Fescue with Sericea Lespedeza (unscarified).

Plant selection may also include annual companion crops. Annual companion crops should be used only when the perennial species are not planted during their optimum planting period. A common mixture is Brown Top Millet with Common Bermuda in mid-summer. Care should be taken in selecting companion crop species and seeding rates because annual crops will compete with perennial species for water, nutrients, and growing space. A high seeding rate of the companion crop may prevent the establishment of perennial species.

Ryegrass shall not be used in any seeding mixtures containing perennial species due to its ability to out-compete desired species chosen for permanent perennial cover.

Seed Quality
The term "pure live seed" is used to express the quality of seed and is not shown on the label. Pure live seed, PLS, is expressed as a percentage of the seeds that are pure and will germinate. Information on percent germination and purity can be found on seed tags. PLS is determined by multiplying the percent of pure seed with the percent of germination; i.e.,

(PLS = % germination x % purity)

EXAMPLE:

Common Bermuda seed
70% germination, 80% purity

PLS = 70% germination x 80% purity

PLS = 56%

The percent of PLS helps you determine the amount of seed you need. If the seeding rate is 10 pounds PLS and the bulk seed is 56 % PLS, the bulk seeding rate is:

$$\frac{10 \text{ lbs. PLS/acre}}{56\% \text{ PLS}} = 17.9 \text{ lbs/acre}$$

You would need to plant 17.9 lbs/acre to provide 10 lbs/acre of pure live seed.

Seedbed Preparation
Seedbed preparation may not be required where hydraulic seeding and fertilizing equipment is to be used (but is strongly recommended for any seeding process, when possible). When conventional seeding is to be used, seedbed preparation will be done as follows:

Broadcast plantings

1. Tillage, at a minimum, shall adequately loosen the soil to a depth of 4 to 6 inches; alleviate compaction; incorporate lime and fertilizer; smooth and firm the soil; allow for the proper placement of seed, sprigs, or plants; and allow for the anchoring of straw or hay mulch if a disk is to be used.

2. Tillage may be done with any suitable equipment.
3. Tillage should be done on the contour where feasible.
4. On slopes too steep for the safe operation of tillage equipment, the soil surface shall be pitted or trenched across the slope with appropriate hand tools to provide two places 6 to 8 inches apart in which seed may lodge and germinate. Hydraulic seeding may also be used.

Individual Plants

1. Where individual plants are to be set, the soil shall be prepared by excavating holes, opening furrows, or dibble planting.
2. For nursery stock plants, holes shall be large enough to accommodate roots without crowding.
3. Where pine seedlings are to be planted, subsoil under the row 36 inches deep on the contour four to six months prior to planting. Subsoiling should be done when the soil is dry, preferably in August or September.

Inoculants
All legume seed shall be inoculated with appropriate nitrogen-fixing bacteria. The inoculant shall be a pure culture prepared specifically for the seed species and used within the dates on the container.

A mixing medium recommended by the manufacturer shall be used to bond the inoculant to the seed. For conventional seeding, use twice the amount of inoculant recommended by the manufacturer. For hydraulic seeding, four times the amount of inoculant recommended by the manufacturer shall be used.

All inoculated seed shall be protected from the sun and high temperatures and shall be planted the same day inoculated. No inoculated seed shall remain in the hydroseeder longer than one hour.

Planting
Hydraulic Seeding
Mix the seed (inoculated if needed), fertilizer, and wood cellulose or wood pulp fiber mulch with water and apply in a slurry uniformly over the area to be treated. Apply within one hour after the mixture is made.

Conventional Seeding
Seeding will be done on a freshly prepared and firmed seedbed. For broadcast planting, use a culti-packer-seeder, drill, rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a cultipacker or other suitable equipment.

No-Till Seeding
No-till seeding is permissible into annual cover crops when planting is done following maturity of the cover crop or if the temporary cover stand is sparse enough to allow adequate growth of the permanent (perennial) species. No-till seeding shall be done with appropriate no-till seeding equipment. The seed must be uniformly distributed and planted at the proper depth.

Individual Plants
Shrubs, vines and sprigs may be planted with appropriate planters or hand tools. Pine trees shall be planted manually in the subsoil furrow. Each plant shall be set in a manner that will avoid crowding the roots.

Nursery stock plants shall be planted at the same depth or slightly deeper than they grew at the nursery. The tips of vines and sprigs must be at or slightly above the ground surface.

Where individual holes are dug, fertilizer shall be placed in the bottom of the hole, two inches of soil shall be added and the plant shall be set in the hole.

Mulching
Mulch is required for all permanent vegetation applications. Mulch applied to seeded areas shall achieve 75% to 100% soil cover. When selecting a mulch, design professionals should consider the mulch's functional longevity, vegetation establishment enhancement, and erosion control effectiveness. Select the mulching material from the following and apply as indicated:

1. *Dry straw* or *dry hay* of good quality and free of weed seeds can be used. Dry straw shall be applied at the rate of 2 tons per acre. Dry hay shall be applied at a rate of 2 1/2 tons per acre.
2. *Wood cellulose mulch* or *wood pulp fiber* shall be used with hydraulic seeding. It shall be applied at the rate of 500 pounds per acre. Dry straw or dry hay shall be applied (at the rate indicated above) after hydraulic seeding.
3. One thousand pounds of *wood cellulose* or *wood pulp fiber*, which includes a tackifier, shall be used with hydraulic seeding on slopes 3/4:1 or steeper.
4. *Sericea Lespedeza* hay containing mature seed shall be applied at a rate of three tons per acre.
5. *Pine straw* or *pine bark* shall be applied at a thickness of 3 inches for bedding purposes. Other suitable materials in sufficient quantity may be used where ornamentals or other ground covers are planted. This is not appropriate for seeded areas.
6. When using temporary erosion control blankets or block sod, mulch is not required.
7. *Bituminous treated roving* may be applied on planted areas, slopes, in ditches or dry waterways to prevent erosion. Bituminous treated roving shall be applied within 24 hours after an area has been planted. Application rates and materials must meet Georgia Department of Transportation specifications.

Wood cellulose and wood pulp fibers shall not contain germination or growth inhibiting factors. They shall be evenly dispersed when agitated in water. The fibers shall contain a dye to allow visual metering and aid in uniform application during seeding.

Applying Mulch
Straw or hay mulch will be spread uniformly within 24 hours after seeding and/or planting. The mulch may be spread by blower-type spreading equipment, other spreading equipment or by hand. Mulch shall be applied to cover 75% of the soil surface.

Wood cellulose or wood fiber mulch shall be applied uniformly with hydraulic seeding equipment.

Anchoring Mulch
Anchor straw or hay mulch immediately after application by one of the following methods:

1. *Hay and straw* mulch shall be pressed into the soil immediately after the mulch is spread. A special "packer disk"' or disk harrow with the disks set straight may be used. The disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disks shall be dull enough to press the mulch into the ground without cutting it, leaving much of it in an erect position. Mulch shall not be plowed into the soil.
2. *Synthetic tackifiers, binders or hydraulic mulch specifically designed to tack straw,* shall be applied in conjunction with or immediately after the mulch is spread. Synthetic tackifiers shall be mixed and applied according to manufacturer's specifications. All tackifiers, binders or hydraulic mulch specifically designed to tack straw should be verified nontoxic through EPA 2021.0 testing. Refer to **Tackifiers-Tac**
3. *Rye or wheat* can be included with Fall and Winter plantings to stabilize the mulch. They shall be applied at a rate of one-quarter to one-half bushel per acre.
4. *Plastic mesh or netting* with mesh no larger than one inch by one inch may be needed to anchor straw or hay mulch on unstable soils and concentrated flow areas. These materials shall be installed and anchored according to manufacturer's specifications.

Bedding Material
Mulch is used as a bedding material to conserve moisture and control weeds in nurseries, ornamental beds, around shrubs, and on bare areas on lawns.

Material	Depth
Grain straw	4" to 6"
Grass Hay	4" to 6"
Pine needles	3" to 5"
Wood waste	4" to 6"

Irrigation
Irrigation will be applied at a rate that will not cause runoff.

Topdressing
Topdressing will be applied on all temporary and permanent (perennial) species planted alone or in mixtures with other species. Recommended rates of application are listed in Table 6-5.1.

Second Year and Maintenance Fertilization
Second year fertilizer rates and maintenance fertilizer rates are listed in Table 6-5.1.

Lime Maintenance Application
Apply one ton of agricultural lime every 4 to 6 years or as indicated by soil tests. Soil tests can be conducted to determine more accurate requirements, if desired.

Use and Management
Mow Sericea Lespedeza only after frost to ensure that the seeds are mature. Mow between November and March.

Bermudagrass, Bahiagrass and Tall Fescue may be mowed as desired. Maintain at least 6 inches of top growth under any use and management. Moderate use of top growth is beneficial after establishment.

Exclude traffic until the plants are well established. Because of the quail nesting season, mowing should not take place between May and September.

Table 6-5.1. Fertilizer Requirements

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
1. Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 1/2/ — 30
2. Cool season grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	0-50 lbs./ac. 1/ — —
3. Ground covers	First Second Maintenance	10-10-10 10-10-10 10-10-10	1300 lbs./ac. 3/ 1300 lbs./ac. 3/ 1100 lbs./ac.	— — —
4. Pine seedlings	First	20-10-5	one 21-gram pellet per seedling placed in the closing hole	—
5. Shrub Lespedeza	First Maintenance	0-10-10 0-10-10	700 lbs./ac. 700 lbs./ac. 4/	—
6. Temporary cover crops seeded alone	First	10-10-10	500 lbs./ac.	30 lbs./ac. 5/
7. Warm season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 800 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 2/6/ 50-100 lbs./ac. 2/ 30 lbs./ac.
8. Warm season grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50 lbs./ac./6/

1/ Apply in spring following seeding.
2/ Apply in split applications when high rates are used.
3/ Apply in 3 split applications.
4/ Apply when plants are pruned.
5/ Apply to grass species only.
6/ Apply when plants grow to a height of 2 to 4 inches.

Table 6-5.2- Permanent Cover Crops
PLANT, PLANTING RATE, AND PLANTING DATE FOR PERMANENT COVER [1]

Species	Broadcast Rates: Rate Per Acre[2]	Pure Live Seed (PLS) Per 1000 sqft	Resource Area[3]	Planting Dates by Resource Area (J F M A M J J A S O N D; solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.)	Remarks
BAHIA, PENSACOLA *Paspalum notatum*					
alone or with temporary cover	60 lbs	1.4 lbs	P		166,000 seed per pound. Low growing. Sod forming. Slow to establish. Plant with a companion crop. Will spread into bermuda pastures and lawns. Mix with Sericea lespedeza or weeping lovegrass.
with other perennials	30 lbs	0.7 lb	C		
BAHIA, WILMINGTON *Paspalum notatum*					
alone or with temporary cover	60 lbs	1.4 lbs	M-L		Same as above
with other perennials	30 lbs	0.7 lb	P		
BERMUDA, COMMON *Cynodon dactylon*					
Hulled seed alone	10 lbs	0.2 lb	P		1,787,000 seed per pound. Quick cover. Low growing and sod forming. Full sun. Good for athletic fields.
with other perennials	6 lbs	0.1 lb	C		
BERMUDA, COMMON *Cynodon dactylon*					
Unhulled seed with temporary cover	10 lbs	0.2 lb	P		Plant with winter annuals.
with other perennials	6 lbs	0.1 lb	C		Plant with Tall Fescue

Table 6-5.2- Permanent Cover Crops
PLANT, PLANTING RATE, AND PLANTING DATE FOR PERMANENT COVER [1]

Species	Broadcast Rates: Rate Per Acre[2]	Pure Live Seed (PLS) Per 1000 sqft	Resource Area[3]	Planting Dates by Resource Area	Remarks
BERMUDA SPRIGS *Cynodon dactylon*					
Coastal, Common, Midland or Tift 44	40 cu ft or sod plugs 3' x3'	0.9 cu ft	M-L P C		A cubic foot contains approximately 650 sprigs. A bushel contains 1.25 cubic feet or approximately 800 sprigs.
Coastal, Common, or Tift 44					Same as above
Tift 78					Southern Coastal Plain only.
CENTIPEDE *Eremochloa ophiuroides*	Block sod only		P C		Drought tolerant. Full sun or partial shade. Effective adjacent to concrete and in concentrated flow areas. Irrigation is needed until fully established. Do not plant near pastures. Winterhardy as far north as Athens and Atlanta.
CROWNVETCH *Coronilla varia*					
with winter annuals or cool season grasses	15 lbs	0.3 lb	M-L P		100,000 seed per pound. Dense growth. Drought tolerant and fire resistant. Attractive rose, pink and white blossoms spring to late fall. Mix with 30 pounds of Tall fescue or 15 pounds of rye. Inoculate seed with M inoculant. Use from North Atlanta and Northward.

Table 6-5.2- Permanent Cover Crops
PLANT, PLANTING RATE, AND PLANTING DATE FOR PERMANENT COVER [1]

Species	Broadcast Rates: Rate Per Acre[2]	Pure Live Seed (PLS) Per 1000 sqft	Resource Area[3]	Planting Dates by Resource Area	Remarks
FESCUE, TALL *Festuca arundinacea*					
alone	50 lbs	1.1 lb	M-L		227,000 seed per pound. Use alone only on better sites. Mix with perennial lespededza or Crownvetch. Apply topdressing in spring following fall plantings. Not for heavy use areas or athletic fields.
with other perennials	30 lbs	0.7 lb	P		
KUDZU *Pueraria thumbergiana*					
Plants or crowns	3' - 7' apart		ALL		Rapid and vigorous growth. Excellent in gully erosion control. Will climb. Good livestock forage.
LESPEDEZA SERICEA *Lespedeza cuneata*					
scarified	60 lbs	1.4 lb	M-L P C		350,000 seed per pound. Widely adapted. Low maintenace. Mix with Weeping lovegrass, Common bermuda, bahia, or tall fescue. Takes 2 to 3 years to become fully established. Excellent on roadbanks. Inoculate seed with EL inoculant.
unscarified	75 lbs	1.7 lb	M-L P C		Mix with Tall fesue or winter annuals.
seed- bearing hay	3 tons	1338 lbs	M-L P C		Cut when seed mixture is mature, but before, it shatters. Add Tall fescue or winter annuals.

Table 6-5.2- Permanent Cover Crops
PLANT, PLANTING RATE, AND PLANTING DATE FOR PERMANENT COVER [1]

Species	Broadcast Rates: Rate Per Acre[2]	Pure Live Seed (PLS) Per 1000 sqft	Resource Area[3]	Planting Dates by Resource Area	Remarks
LESPEDEZA Ambro virgata *Lespedeza virgata DC* or Appalow *Lespedeza cuneata (Dumont) G. Don)*					
scarified	60 lbs	1.4 lb	M-L P C		300,000 seed per pound. Height of growth is 18 to 24 inches. Advantageous in urban areas. Spreading-type growth. New growth has bronze coloration. Mix with weeping lovegrass, common bermuda, bahia, tall fescue or winter annuals. Do not mix with Sericea lespedeza. Slow to develop solid stands. Inoculate seed with EL inoculant.
unscarified	75 lbs	1.7 lb	M-L P C		
LESPEDEZA, SHRUB *Lespedeza bicolor* *Lespedeza thumbergii*					
plants	3' x3'		M-L P C		Provide wildlife food and cover.
LOVEGRASS, WEEPING *Eragrostis curvula*					
alone	4 lbs	0.1 lb	M-L P		1,500,000 seed per pound. Quick cover. Drought tolerant. Grows well with Sericea lespedeza on roadbanks.
with other perennials	2 lbs	0.05 lb	C		

Table 6-5.2- Permanent Cover Crops
PLANT, PLANTING RATE, AND PLANTING DATE FOR PERMANENT COVER [1]

Species	Broadcast Rates: Rate Per Acre[2]	Pure Live Seed (PLS) Per 1000 sqft	Resource Area[3]	Planting Dates by Resource Area	Remarks
MAIDENCANE *Panicum hemitomon*					
sprigs	2' x 3' spacing	ALL			For very wet sites. May clog channels. Dig sprigs from local sources. Use along river banks and shorelines.
PANICGRASS, ATLANTIC COASTAL *Panicum amarum var amarukum*					
	20 lbs	0.5 lb	P C		Grows well on coastal sand dunes, borrow areas, and gravel pits. Provides winter cover for wildlife. Mix with Sericea lespedeza except on sand dunes.
REED CANARY GRASS *Phalaris arundinacea*					
alone	50 lbs	1.1 lb	M-L		
with other perrenials	30 lbs	0.7 lb	P		Grows similar to Tall fescue
SUNFLOWER, 'AZTEC' MAXIMILLIAN *Helianthus maximiliani*					
	10 lbs	0.2 lb	M-L P C		227,000 seed per pound. Mix with Weeping lovegrass or other low-grwoing grasses or legumes.

1 Reduce seeding rates by 50% when drilled
2 PLS is an abbreviation for Pure Live Seed. Refer to Section V.E. of these specifications.
3 M-L represents to Mountain; Blue Ridge; and Ridges and Valleys MLRAs
P represents the Southern Piedmont MLRA
C represents the Souther Coastal Plain;Sand Hills;Black Lands;and Atlantic Coast Flatwoods MLRAs. See Figure 6-4.1

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JEFFERSON, GA 30549
(706)367-6312

EROSION CONTROL DETAILS FOR:
JACKSON COUNTY
ANIMAL CONTROL SHELTER
JEFFERSON, GEORGIA

GMD	COUNTY	CITY
245	JACKSON	JEFFERSON

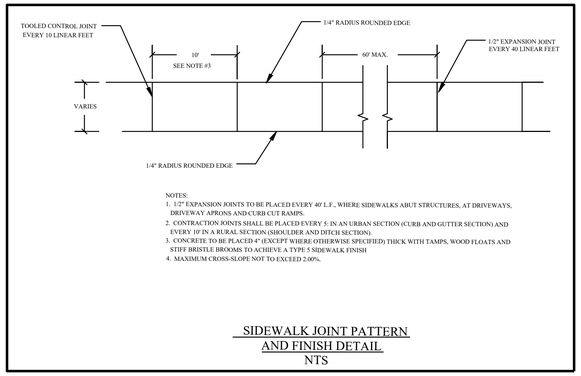
REVISIONS	DATE

GEORGIA REGISTERED No. 30873 PROFESSIONAL ENGINEER JOHN C. WOOD

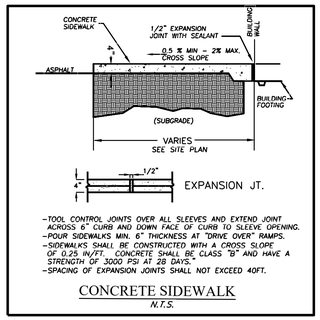
LEVEL II CERTIFICATION #13718

DATE 03/18/21

SHEET C7



SIDEWALK JOINT PATTERN
AND FINISH DETAIL
NTS



CONCRETE SIDEWALK
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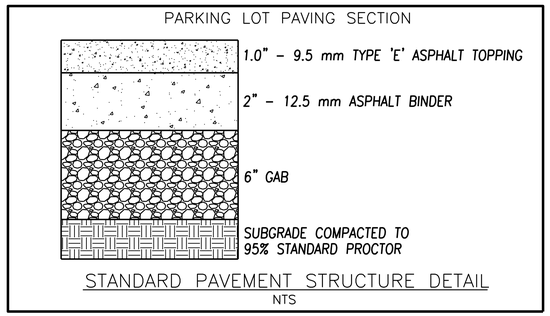

STANDARD PAVEMENT STRUCTURE DETAIL
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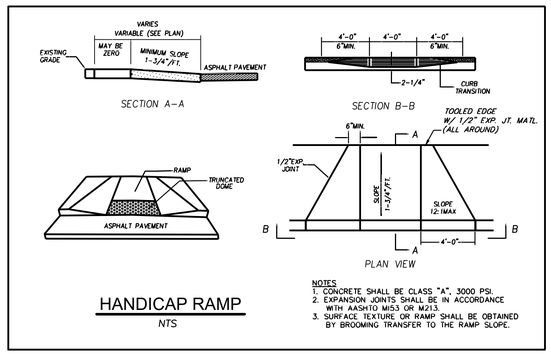

HANDICAP RAMP
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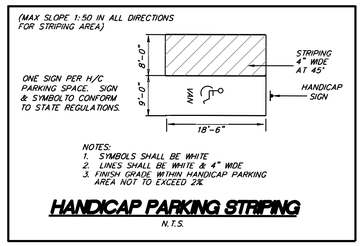
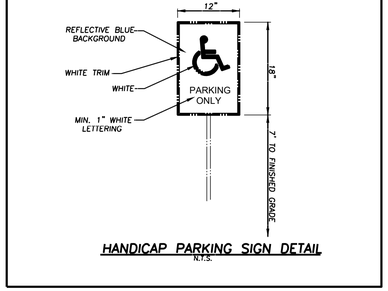


HANDICAP PARKING STRIPING
N.T.S.



HANDICAP PARKING SIGN DETAIL
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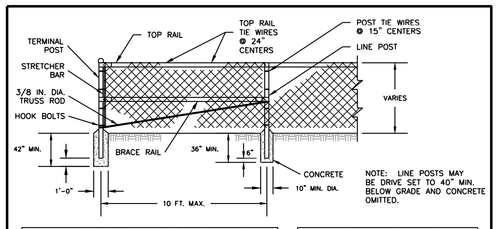

SHAPE, SIZE AND WEIGHT REQUIREMENTS FOR FENCE POSTS AND RAILS

ITEM	SHAPE	OUTSIDE DIMENSIONS INCHES	WEIGHT LBS./LIN. FT.
**			
TERMINAL POSTS	ROUND	2.375	3.65
	*ROUND	2.375	3.12
LINE POSTS	ROUND	1.90	2.72
	*ROUND	1.90	2.28
TOP & BRACE RAILS	ROUND	1.66	2.27
	*ROUND	1.66	1.84

* GRADE B HIGH STRENGTH STEEL
** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

GATE FRAME MEMBERS SIZE AND WEIGHT

GATE FRAME	OUTSIDE DIMENSIONS INCHES	WEIGHT LBS./LIN. FT.
ROUND	1.66	2.27
*ROUND	1.66	1.84

* GRADE B HIGH STRENGTH STEEL

GATE POST SIZE AND WEIGHT

GATE LEAF WIDTH OF 6 FT., OR LESS	OUTSIDE DIMENSIONS INCHES	WEIGHT LBS./LIN. FT.
ROUND	2.875	5.79
*ROUND	2.875	4.64

* GRADE B HIGH STRENGTH STEEL

CONSTRUCTION NOTES
1. MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS.
2. ALL POSTS SHALL BE INSTALLED VERTICALLY. WHERE POSTS ARE INSTALLED ON AN INCLINED SURFACE, THE ANGLE OF THE POST SHALL BE ADJUSTED SO THAT THE POST WILL BE VERTICAL.
3. THE FENCING SHALL BE #9 GAGE FENCE FABRIC, STANDARD BLACK VINYL

FENCE DETAILS

CIVIL SOLUTIONS, INC.
ENGINEERS ~ PLANNERS
750 BELMONT ROAD
ATHENS, GA 30605
OFFICE 706-352-2443

OWNER & DEVELOPER
JACKSON COUNTY GEORGA
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CONSTRUCTION DETAILS FOR:
JACKSON COUNTY
ANIMAL CONTROL SHELTER
JEFFERSON, GEORGIA

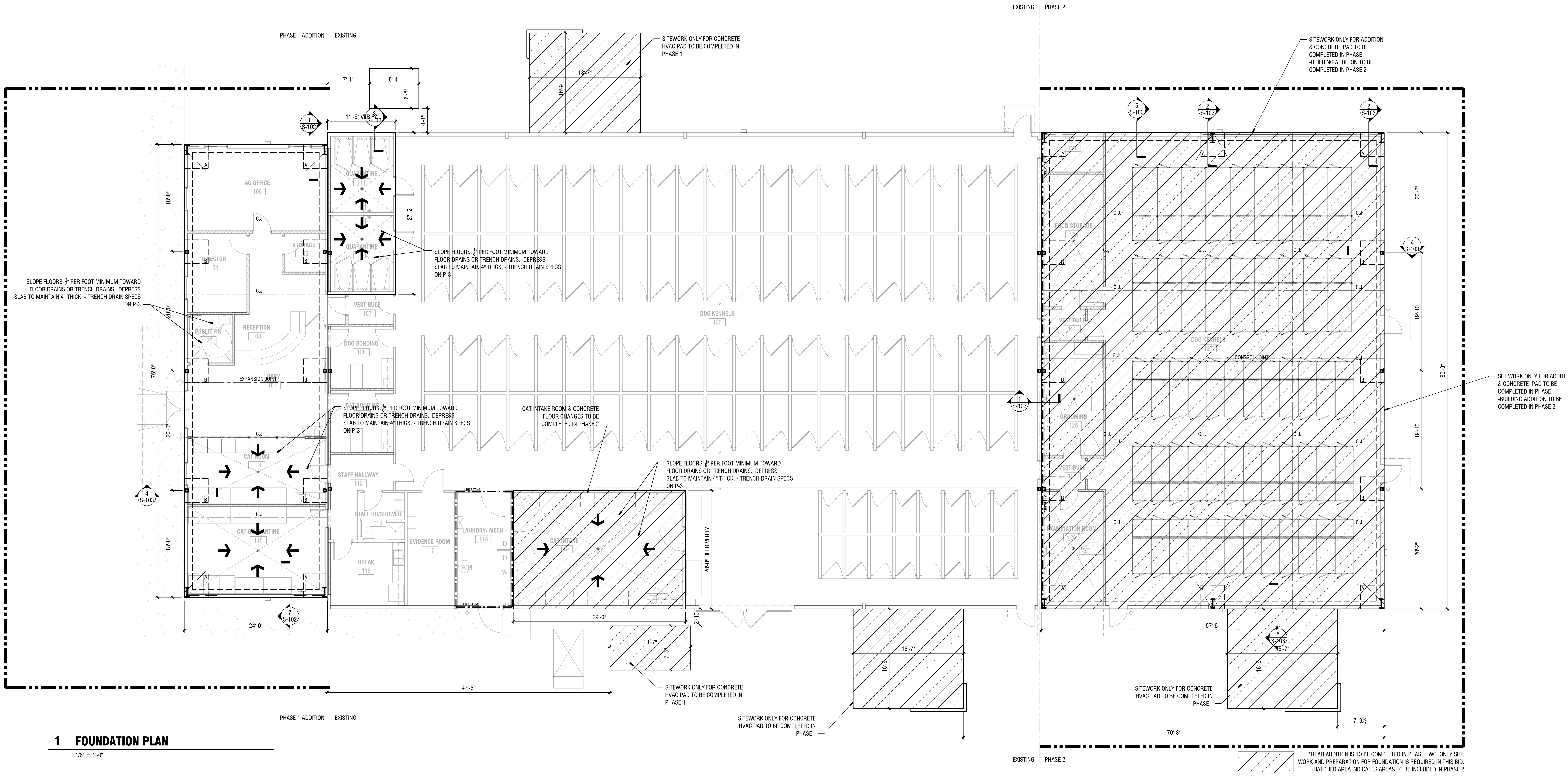
GMD	COUNTY	CITY
245	JACKSON	JEFFERSON

GEORGIA REGISTERED No. 30825 PROFESSIONAL ENGINEER JOHN C. WOOD
LEVEL II CERTIFICATION #13718

REVISIONS	DATE

DATE
03/18/21

SHEET
C8



1 FOUNDATION PLAN

1/8" = 1'-0"

FOOTING SCHEDULE

A	5'-0"x5'-0"x2'-4" W/ 7 #4 BARS @ 8" O.C. & #4 CROSS BARS @ 8" O.C.
B	3'-0"x3'-0"x2'-0" W/ 5 #4 BARS @ 7" O.C. & #4 CROSS BARS @ 7" O.C.

NOTE: EQUIPMENT FOUNDATIONS

1. CONDENSING UNITS - PROVIDE 3000 PSI CONCRETE SLAB AT 4" THICK WITH 8" X 8" THICKENED EDGES. VERIFY SIZE WITH EQUIPMENT. MAINTAIN 6" CLEAR ON ALL SIDES

GENERAL STRUCTURAL NOTE:

1. STRUCTURAL WORK TO INCLUDE ALL WORK SHOWN ON STRUCTURAL DRAWINGS AND ANY AND ALL STRUCTURAL WORK SHOWN ON ANY OTHER DRAWINGS IN THE SET. BIDS SHALL BE INCLUSIVE OF ALL STRUCTURAL WORK SHOWN ON ALL DRAWINGS AND SHALL INCLUDE ALL ACCESSORIES AND RELATED ITEMS REQUIRED FOR COMPLETE AND OPERABLE SYSTEMS AND ALL WORK AND ITEM AS REQUIRED BY THE LATEST VERSION OF ALL APPLICABLE CODES.

2. STRUCTURAL WORK TO INCLUDE ALL REMOVAL OF EXISTING ITEMS NOT TO BE REUSED.

3. COORDINATE WORK WITH ALL EXISTING CONDITIONS. REPORT ANY DISCREPANCIES OF CONFLICTS TO THE ARCHITECT PRIOR TO PROCEEDING WITH THE AFFECTED PORTIONS OF THE WORK.

1. COORDINATE ALL RELATED WORK WITH FOUNDATION.

2. COORDINATE ALL PLUMBING AND IN-SLAB EQUIPMENT.

3. VERIFY ALL DIMENSIONS AND REPORT AND DISCREPANCIES TO ARCHITECT PRIOR TO PROCEEDING.

4. PROVIDE SLOPED AREAS AT ALL DOORS WHERE SLABS ARE PRESENT AND AS INDICATED.

5. PROVIDE COMPACTION TESTING AND SOIL POISONING PRIOR TO POURING SLAB AND FOOTINGS.

6. SLOPE ALL SLABS TO FLOOR DRAINS AND TRENCH DRAINS AT ¼" PER FOOT.

7. PROVIDE CAST IRON AT ALL SLAB PENETRATIONS FOR SANITARY PLUMBING AND STEEL SLEEVES AT ALL WATER / CONDENSATE LINE / ETC. PLUMBING PENETRATIONS.

CONTINUOUS TRENCH DRAINS

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

CONSULTANTS

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SEAL

STATE OF GEORGIA BENJAMIN MERCER CARTER REGISTERED ARCHITECT

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: FOUNDATION PLAN

PRINTED:

NUMBER: S-101

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

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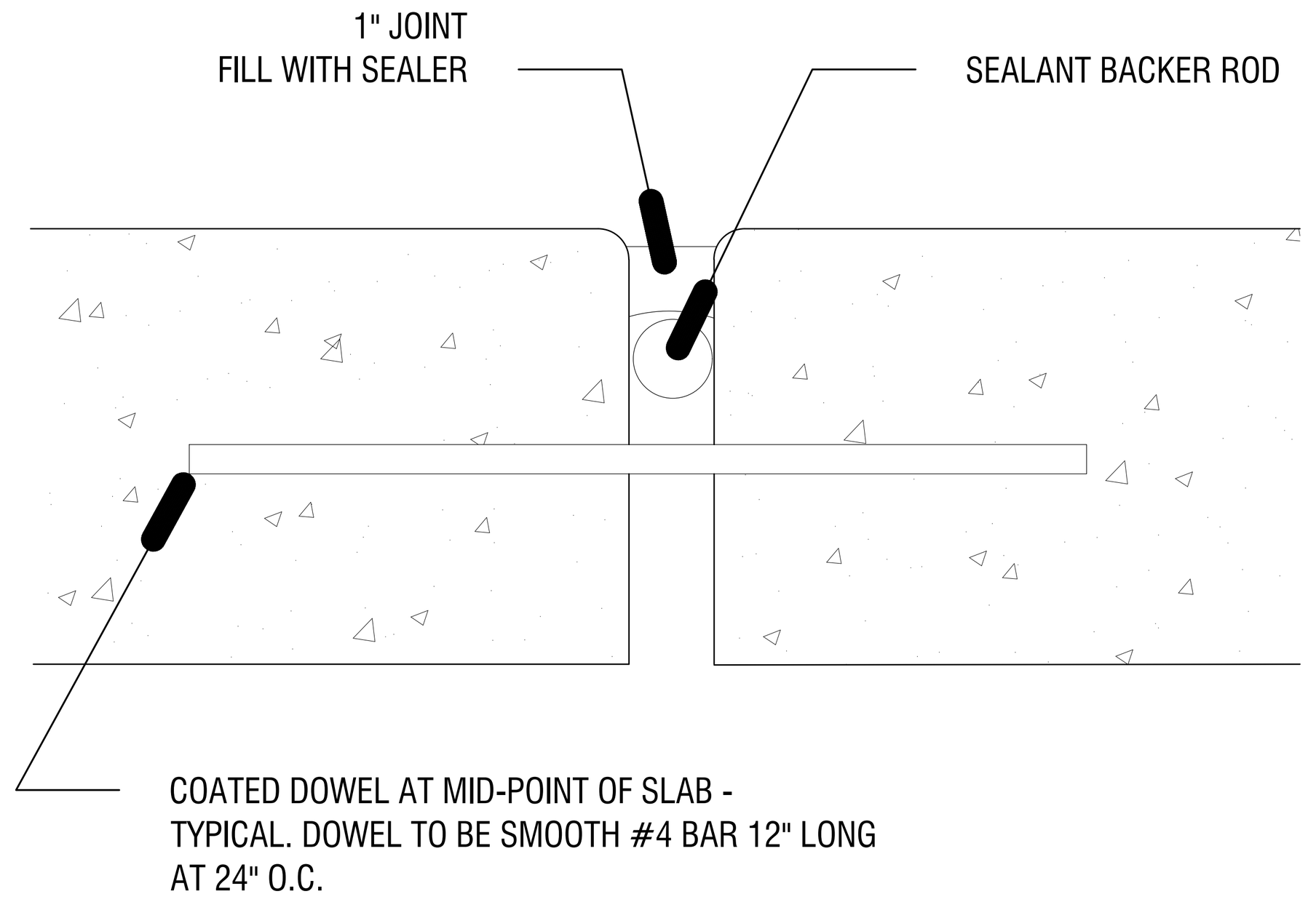
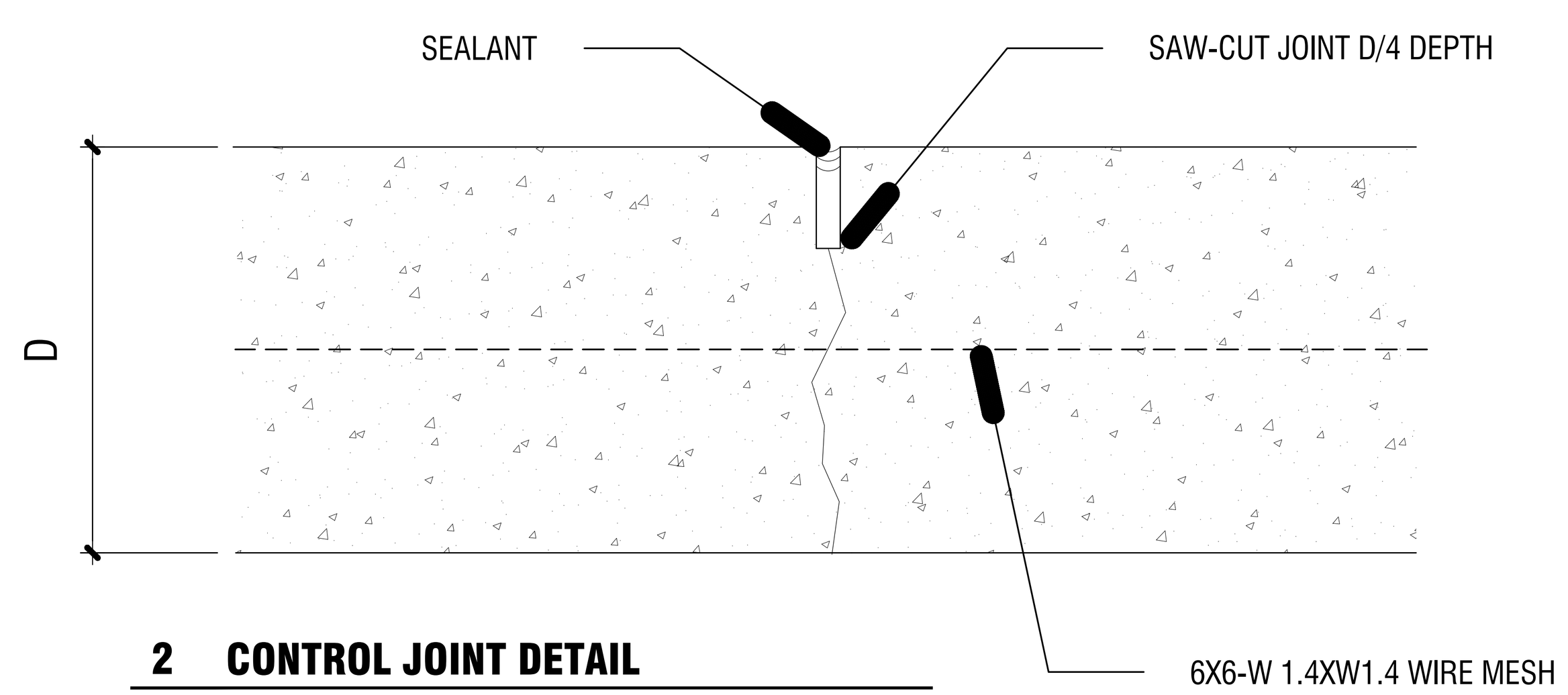


NOTE:
1. EXPANSION JOINT TO BE FORMED FROM THE POURING OF TWO DIFFERENT CONCRETE POURS.
2. APPLY BLOCK FILLER AND PRIME AND PAINT TO ALL INTERIOR CONCRETE BLOCK. COLORS TO BE SELECTED.
3. CONTROL JOINTS ARE TO BE CUT THE FOLLOWING DAY.
4. ALL INTERIOR BLOCK EXPOSED OUTSIDE CORNERS TO BE 1" RADIUS ROUNDED.

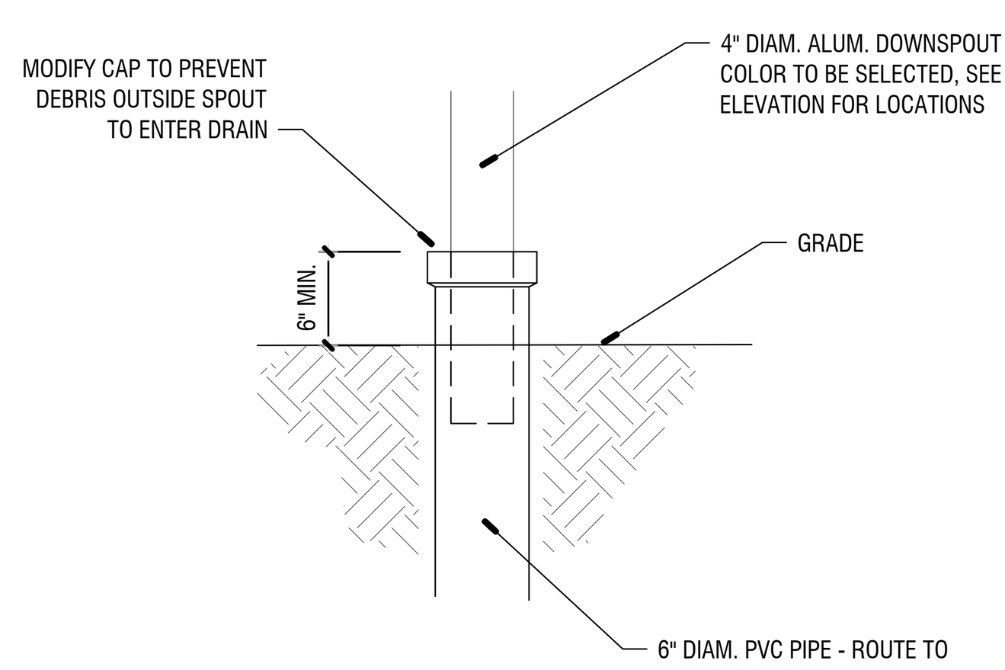
1 EXPANSION JOINT DETAIL

3/4" = 1'-0"



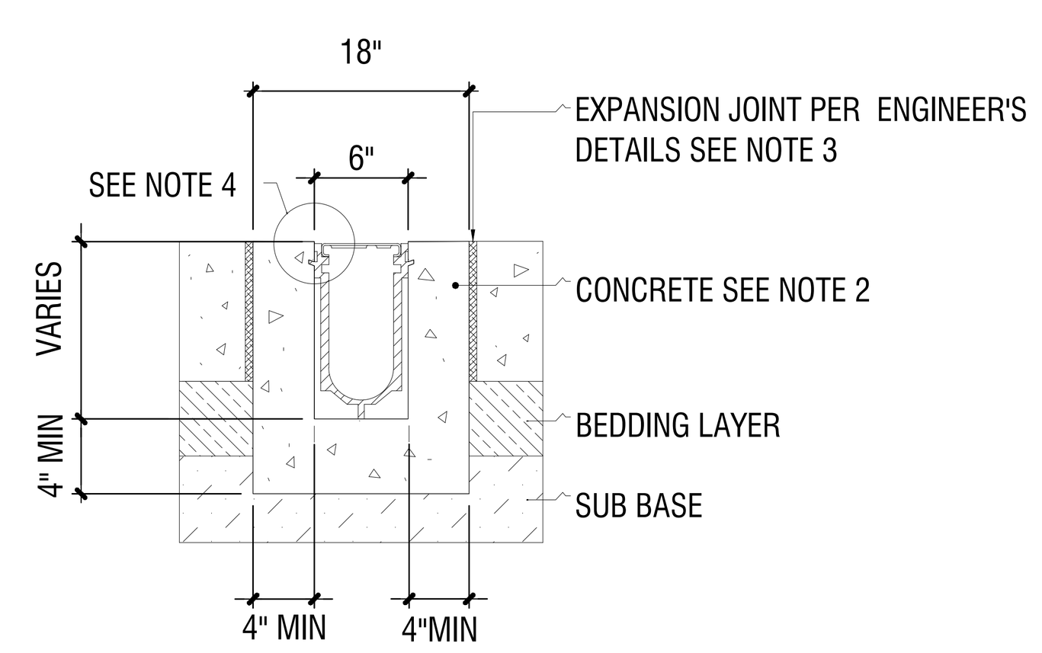
2 CONTROL JOINT DETAIL

3/4" = 1'-0"



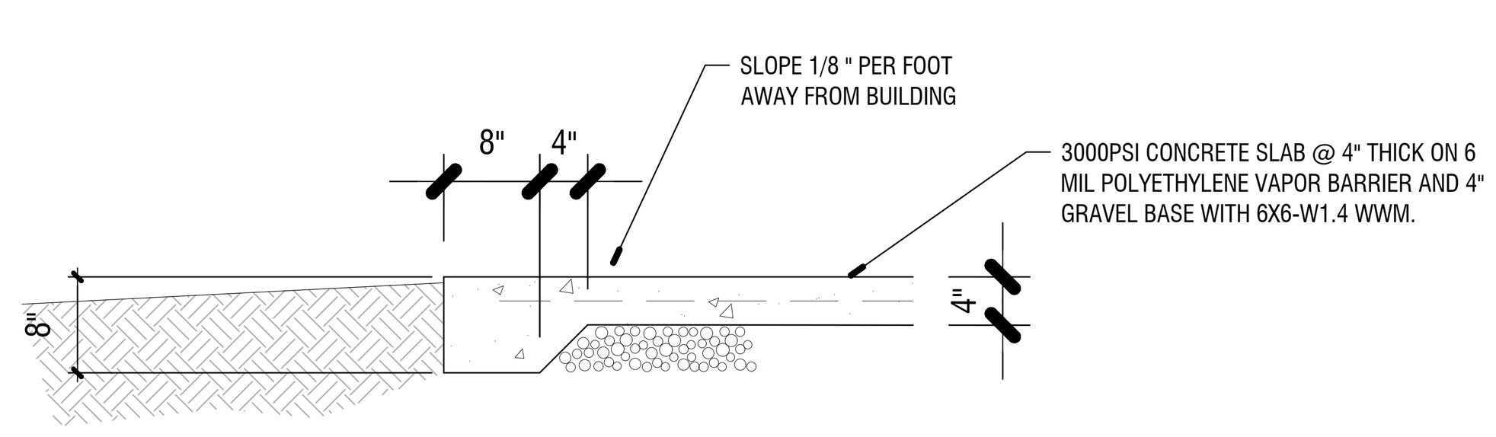
3 DETAIL AT DOWNSPOUT

3/4" = 1'-0"



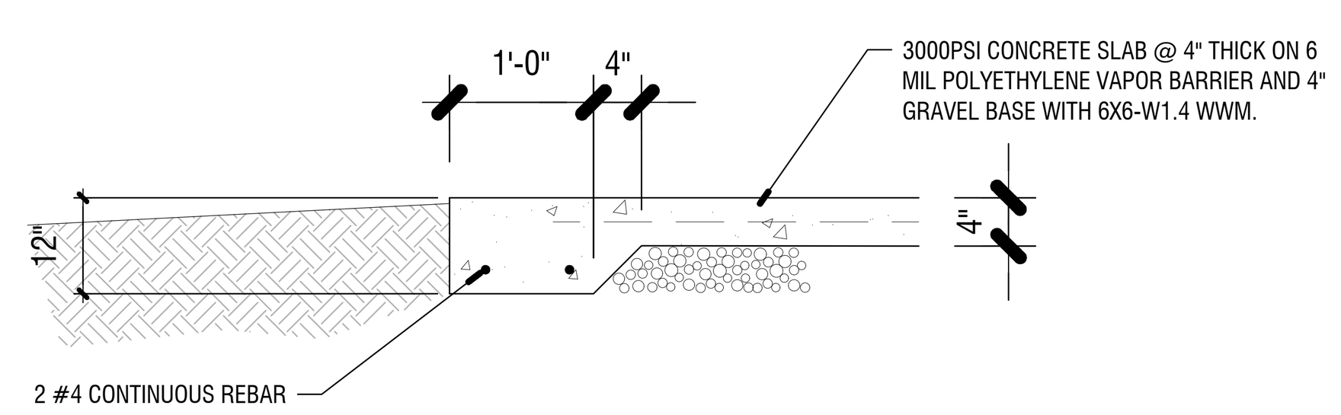
4 TRENCH DRAIN DETAIL

3/4" = 1'-0"



5 EQUIPMENT PAD

3/4" = 1'-0"



6 SLAB AT FRONT PORCH

3/4" = 1'-0"

STRUCTURAL NOTES

GENERAL:

A. THE FOLLOWING NOTES APPLY TO ALL STRUCTURAL DRAWINGS.

B. ALL DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE 2015 EDITION, GEORGIA AMENDMENTS.

C. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH WORK FOR DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS, SEE ARCHITECTURAL DRAWINGS.

D. THE STRUCTURE SHOWN ON THESE DRAWINGS IS SELF-SUPPORTING ONLY IN ITS COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE DESIGN, ADEQUACY, SAFETY, AND STABILITY OF ALL TEMPORARY ERECTION BRACING AND SHORING.

E. THE GENERAL CONTRACTOR SHALL COORDINATE ALL SIZES AND LOCATIONS OF ROOF PENETRATIONS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. ALL PENETRATIONS THROUGH ROOF DECK GREATER THAN 12" SQUARE SHALL BE FRAMED AS PER INDUSTRY STANDARDS AND WILL BE SHOWN FOR VERIFICATION IN SHOP DRAWINGS.

F. UNLESS NOTED, ELEVATIONS SHOWN ARE TO BE VERIFIED WITH ELEVATION MARKS OF ARCHITECTURAL DRAWINGS.

G. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION IN ORDER TO COMPLY WITH THE CONTRACT DRAWINGS.

SHOP DRAWINGS:

A. THE CONTRACTOR SHALL SUBMIT, AS REQUIRED, PRINTS OF SHOP DRAWINGS FOR ALL FABRICATED MATERIALS TO ARCHITECT FOR REVIEW.

B. REVIEW OF SHOP DRAWINGS BY THE ARCHITECT\ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF THOSE SHOP DRAWINGS.

C. SHOP DRAWINGS REQUIRING A SPECIAL ENGINEERING DESIGN BY THE FABRICATOR SHALL BE STAMPED BY A REGISTERED ENGINEER OF RECORD IN THE STATE WHICH CONSTRUCTION WILL OCCUR BEFORE SUBMITTING FOR REVIEW BY THE ARCHITECT\ENGINEER

SHALLOW FOUNDATIONS:

A. DESIGN SOIL BEARING PRESSURE IS 1500 PSF.

B. THE SITE SHALL BE PREPARED UNIFORM IN ACCORDANCE WITH CIVIL DRAWINGS & SPECIFICATIONS, A QUALIFIED GEOTECHNICAL ENGINEER SHALL VERIFY ALL COMPACTION AND BEARING CONDITIONS AND REPORT TO THE ARCHITECT\ENGINEER ANY VARIATIONS.

C. ALL EXCAVATIONS AND BUILDING PADS SHALL BE INSPECTED BY A QUALIFIED GEOTECHNICAL ENGINEER TO VERIFY THE DESIGN ASSUMPTIONS AND REPORT ADVERSE CONDITIONS.

D. WHERE FILL IS REQUIRED, IT SHALL BE PLACED IN ACCORDANCE WITH INSTRUCTIONS OF A QUALIFIED GEOTECHNICAL ENGINEER TO MAINTAIN DESIGN BEARING PRESSURE.

E. FOOTING ELEVATIONS GIVEN ARE FOR THE PURPOSE OF DESIGN. SOIL BELOW FOOTING NOT MEETING DESIGN BEARING PRESSURE SHALL BE EXCAVATED TO A DEPTH OF VERIFIABLE DESIGN PRESSURE AND BACKFILLED WITH 57 STONE TO A LEVEL OF FOUNDATION BEARING. THIS SHALL BE UNDER SUPERVISION OF A QUALIFIED GEOTECHNICAL ENGINEER.

F. F/S DENOTES STEP IN FOOTING. SEE "TYPICAL STEPPED FOOTING" DETAIL.

CONCRETE:

A. ALL CONCRETE DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318-95 AND ACI 301-96.

B. CEMENT SHALL BE TYPE I OR III CONFORMING TO ASTM C 150 AND CONCRETE SHALL DEVELOP A MINIMUM 28 DAY COMPRESSIVE STRENGTH AS FOLLOWS:
FOOTINGS 3000 PSI
INTERIOR SLAB-ON- GRADE 3000 PSI

C. TEST CYLINDERS SHALL BE TAKEN AS A REPRESENTATIVE SAMPLE OF CONCRETE PLACED IN THE AMOUNT 75 CUBIC YARD OR EVERY 24-HOUR PERIOD. RESULTS SHALL BE AVAILABLE AT JOB SITE.

D . TEST RESULTS SHALL BE FORWARDED TO THE ARCHITECT\ENGINEER UNLESS OTHERWISE NOTED, NORMAL WEIGHT CONCRETE (145 PCF) SHALL BE USED WITH 3/4 " MAX. COARSE AGGREGATE CONFORMING TO ASTM C 33.
(ROOF DECK TO BE LIGHT WEIGHT 115 PCF MAX.)

E. CONCRETE SLUMP SHALL BE 3" - 5" (MAX) FOR REGULAR MIX WITH SUPERPLASTICIZER ADMIXTURES INCREASING SLUMP TO 8" (MAX) CONCRETE AIR-ENTRAINMENT SHALL BE 4.5% TO 7.5% FOR EXTERIOR SLABS AND 0% TO 3% FOR INTERIOR SLABS.

F. UNLESS OTHERWISE NOTED, CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

CONCRETE CAST AGAINST EARTH 3"
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER 2"
INTERIOR SLABS 1"
EXPOSED WALLS 1 1/2"

G. NO ADDITIONAL WATER SHALL BE ADDED TO THE CONCRETE AT THE JOB SITE.

DESIGN LOADS:

A. DESIGN ROOF DEAD LOAD:
1. 20 PSF

B. DESIGN ROOF LIVE LOAD:
1. 20 PSF
2. 30 PSF AT HVAC UNIT SUPPORT.
3. REDUCTIONS APPLIED PER TRIBUTARY
4. AREA AS PERMITTED BY CODE,

C. OMITTED

D. DESIGN FLOOR LIVE LOAD:
1. 125 PSF SLAB-ON-GRADE

E. DESIGN SNOW LOAD:
1. GROUND SNOW LOAD, PG = 5 PSF

F. DESIGN WIND LOAD:
1. BASIC WIND SPEED (3 SECONDS GUST): 90 MPH
2. WIND IMPORTANCE FACTOR, 1w = 1.0
3. BUILDING CATEGORY: 1
4. WIND EXPOSURE CATEGORY: B
5. COMPONENTS AND CLADDING WIND PRESSURE: EDGE ZONE: -25, +20 PSF, INTERIOR ZONE: -21, +20 PSF

G. DESIGN SEISMIC INFORMATION
1. SEISMIC USE GROUP: 1.
2. SPECTRAL RESPONSE COEFFICIENT, SD = 0.40
3. SPECTRAL RESPONSE COEFFICIENT, SD1 = 0.19
4. SITE CLASS: D
5. BASE SEISMIC- FORCE RESISTING SYSTEM: SHEER WALL
6. DESIGN BASE SHEAR:
7. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE (1617.4)
8. DESIGN CATEGORY = C
9. SOIL TYPE S = 2.0
10. REPONSE FACTOR R = 3.5
11. APLIFICATION FACTOR Cd = 2.25

GROUT AND MORTAR:

A. GROUT UNDER BEARING PLATES SHALL BE NON-SHRINK SIKAGROUT 212 (OR APPROVED EQUAL), MIXING AND PLACEMENT SHALL BE IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

SLABS:

A. C.J. DENOTES CONCRETE SLAB "CONTROL JOINT" WHICH SHALL BE CUT INTO THE SLABS AT A DEPTH OF 1/4 TIMES THE THICKNESS OF THE SLAB WITHIN 12 HOURS OF PLACING THE CONCRETE. MAXIMUM SPACING OF INTERIOR SLAB CONTROL JOINTS, UNLESS OTHERWISE NOTED, SHALL BE 20'-0" (MAX) IN EACH DIRECTION.

B. SLAB CONSTRUCTION JOINTS SHALL BE USED IN PLACE OF CONTROL JOINTS WHERE NEEDED TO INTERRUPT A CONTINUOUS POUR. SLAB CONSTRUCTION JOINTS SHALL BE KEYED. JOINT LOCATIONS SHALL BE REVIEWED BY ARCHITECT.

C. PLACEMENT OF WELDED WIRE MESH IN SLAB, WHERE SPECIFIED, SHALL BE AT A CONSISTENT DEPTH OF 1"-2" FORM T\SLAB OVERLAP EACH REINFORCING SHEET TWO FULL PANELS AND TIE CROSS WIRES ON EACH SIDE.

D. REFER TO ARCHITECTURAL\MECHANICAL FOR SLAB FINISHES, SLAB DEPRESSIONS, ELEVATIONS, AND ENCASED OR EMBEDDED ITEMS.

E. PLUMBING AND ELECTRICAL CONDUITS SHALL BE PLACED BELOW THE SLAB AND NOT WITHIN THE SLAB. VERTICAL PENETRATIONS ARE ALLOWED.

F. COLUMN BOX-OUTS SHALL BE USED TO ISOLATE AN ADEQUATE AREA AROUND COLUMN BASE PLATES TO PROVIDE FOR COLUMN PLACEMENT AND LEVELING. BOX-OUTS ARE TO BE CLEAN AND FREE OF DEBRIS TO TOP OF FOOTING PRIOR TO FILLING WITH CONCRETE.

REINFORCING STEEL:

A. REINFORCING STEEL AND ACCESSORIES SHALL BE DETAILED IN ACCORDANCE WITH ACI (MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES AND CRSI (MANUAL OF STANDARD PRACTICE) LATEST EDITIONS.

B. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60 (UNLESS NOTED)

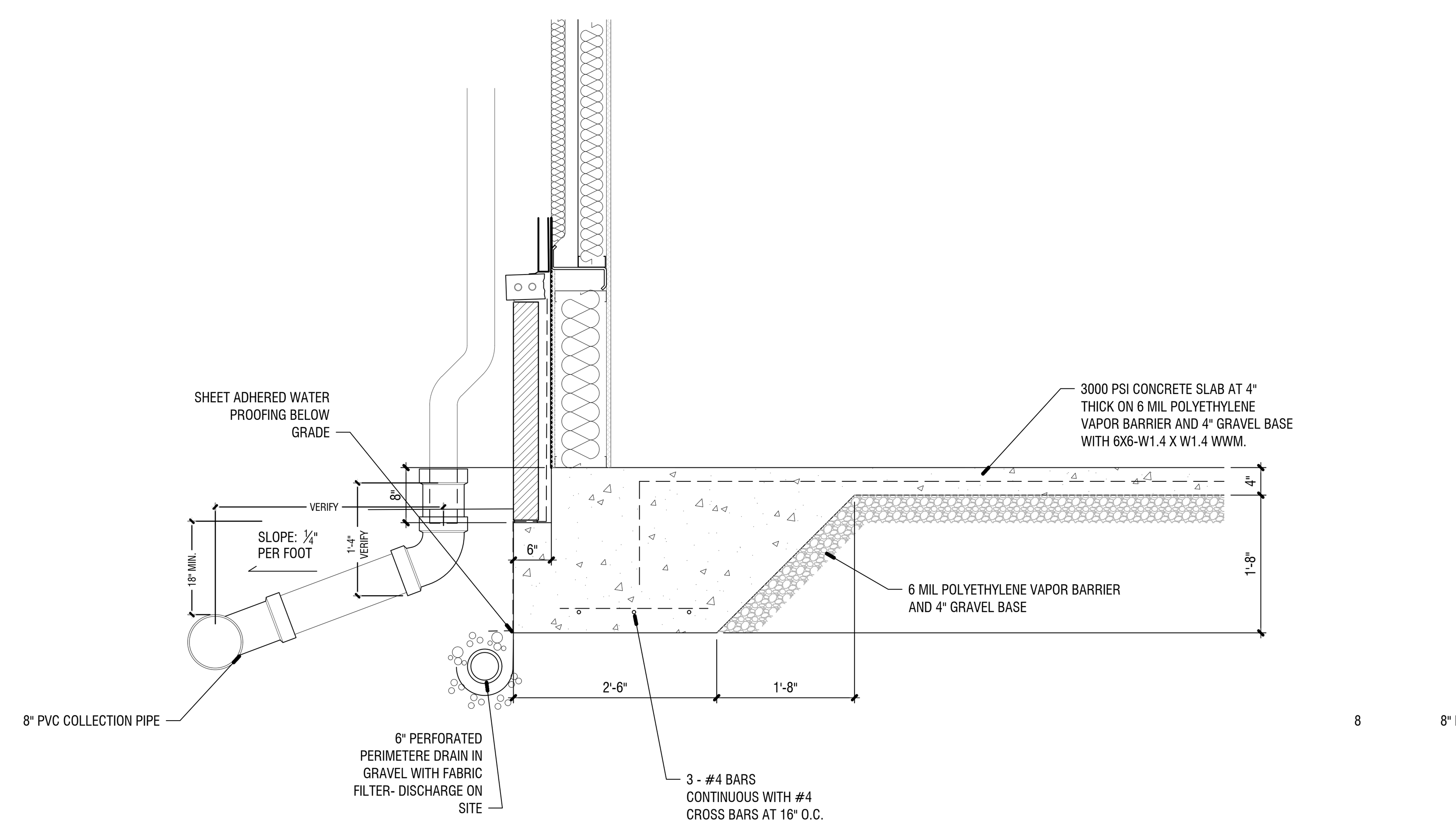
C. ALL TENSION SPLICES , INCLUDING SPLICES FROM BARS LABELED CONTINUOUS , SHALL BE CLASS "B" AND COFORM TO ACI 318-95.

D. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 AND BE LAPPED TWO FULL PANELS AND TIED ON EACH OTHER.

E. LONGITUDINAL REINFORCING BARS IN FOOTINGS SHALL BE PLACED CONTINUOUS AT CORNERS AND INTERSECTIONS.

F. FOR EVERY VERTICAL OR HORIZONTAL BAR DISCONTINUED BY AN OPENING, ONE BAR (MIN. OF 2 BARS) SHALL BE ADDED AT SIDE OF OPENING (HALF TO EACH SIDE - TYPICAL) .

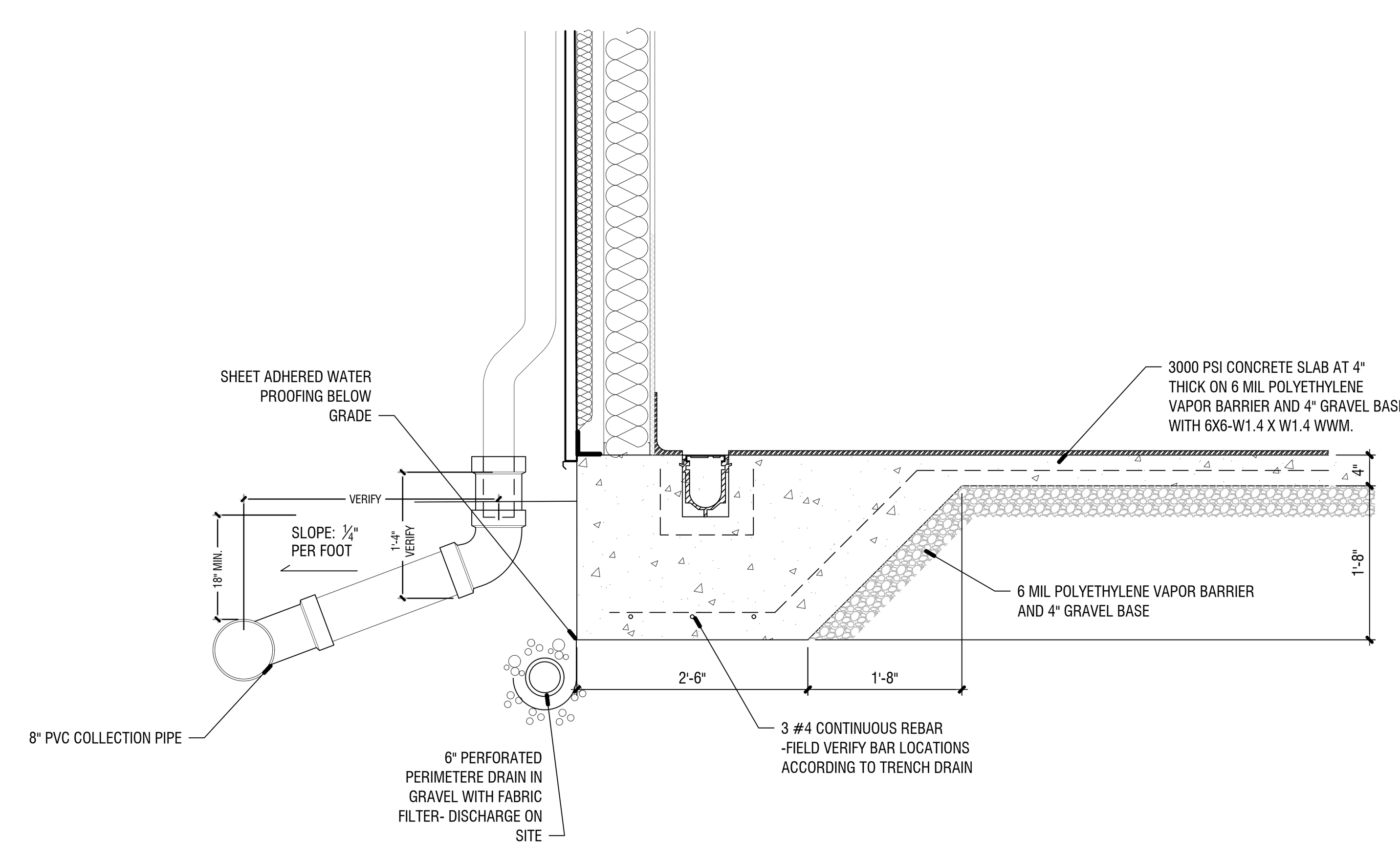
G. SUBMIT REINFORCING STEEL SHOP DRAWINGS.



7 THICKENED SLAB DETAIL W_ WAINSCOT

3/4" = 1'-0"

8



8 THICKENED SLAB WITH TRENCH DRAIN

3/4" = 1'-0"

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REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

CONSULTANTS

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SEAL

STATE OF GEORGIA — BENJAMIN MERCER CARTER — CERTIFICATE NO. — REGISTERED ARCHITECT

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: FOUNDATION DETAILS

PRINTED:

NUMBER: **S-102**

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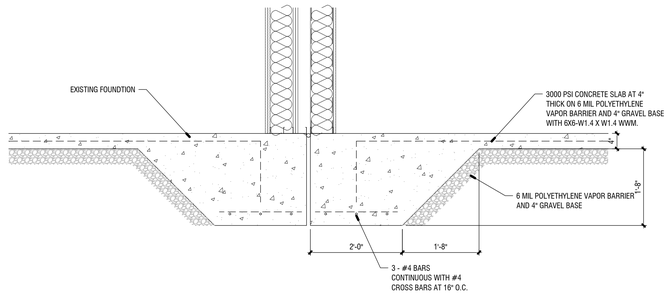
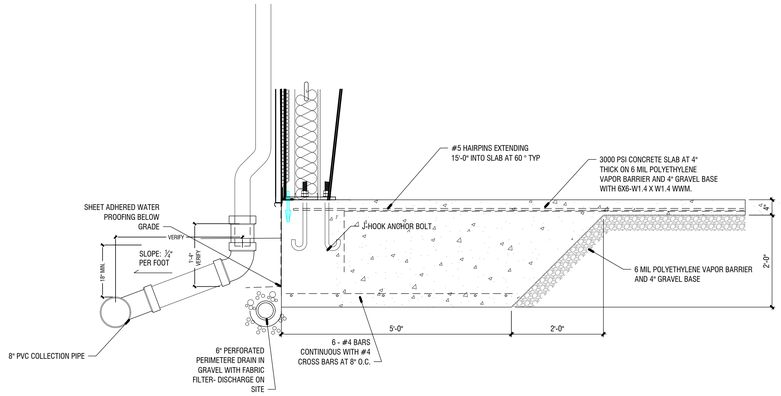


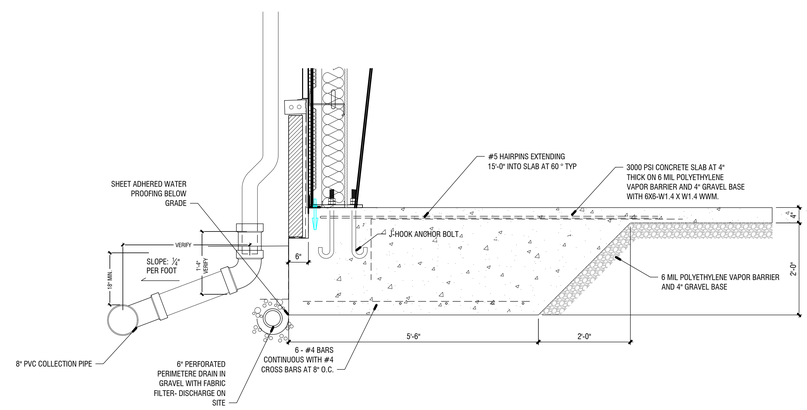
1 SLAB DETAIL AT ADDITION

3/4" = 1'-0"



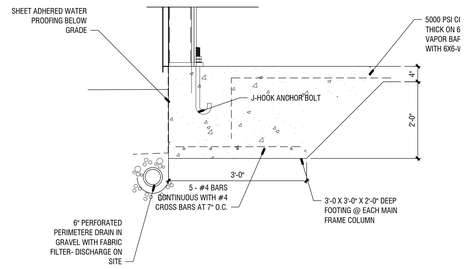
2 COLUMN FOOTER DETAIL

3/4" = 1'-0"



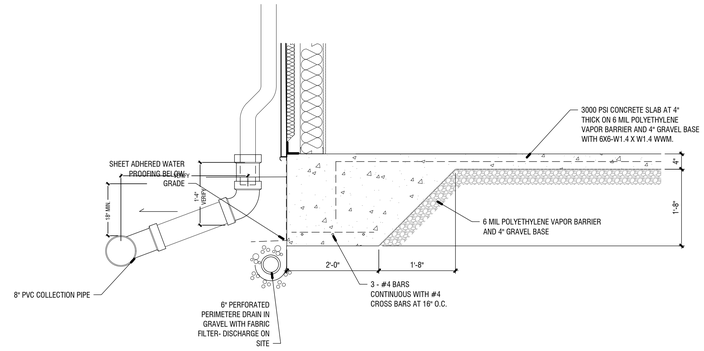
3 COLUMN FOOTER DETAIL W_ WAINSCOT

3/4" = 1'-0"



4 FOOTER AT END WALL COLUMN

3/4" = 1'-0"



5 THICKENED SLAB DETAIL

3/4" = 1'-0"

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1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

CONSULTANTS

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JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
FOUNDATION DETAILS CONT.

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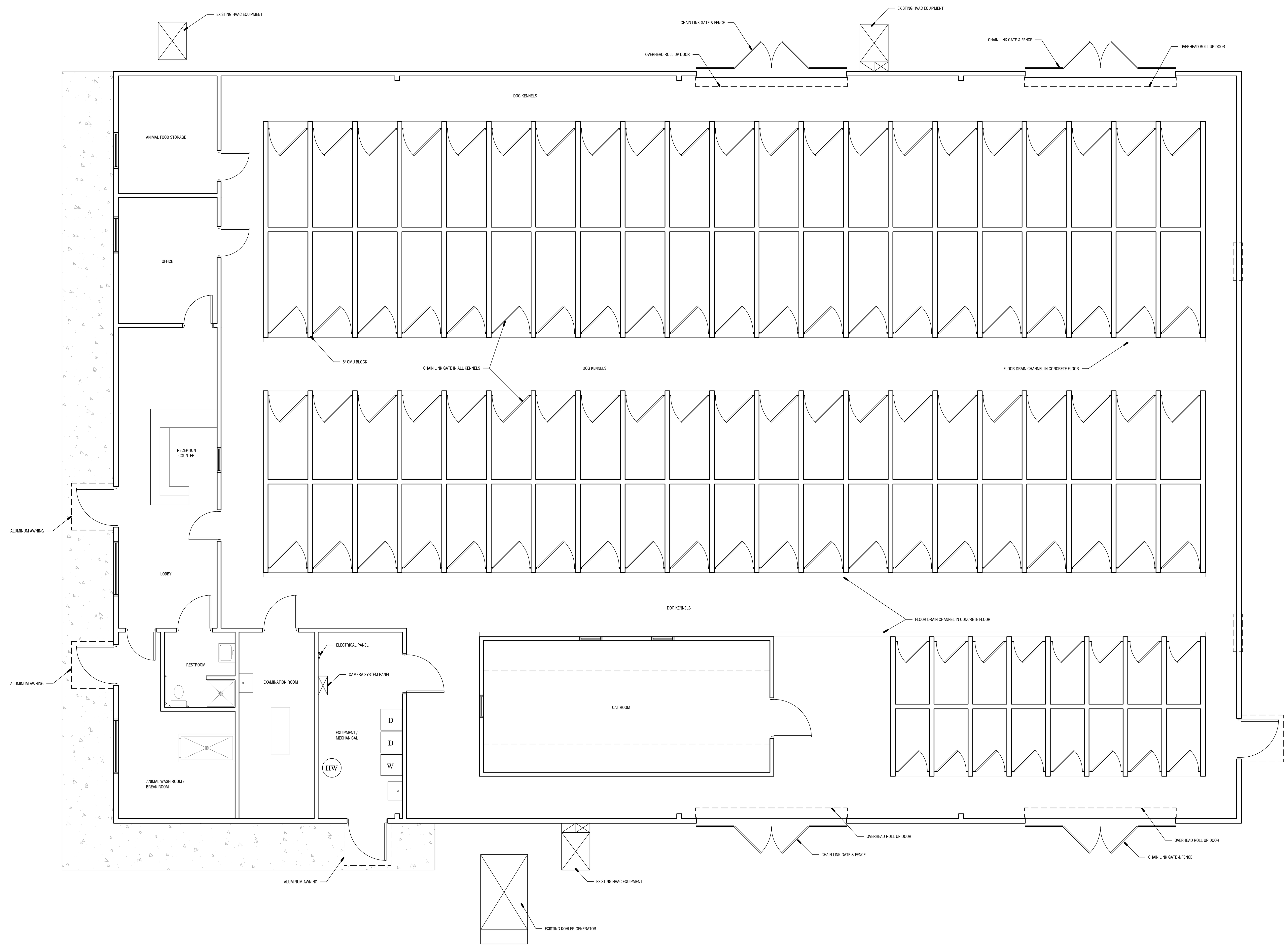
NUMBER:
S-103



1 EXISTING FLOOR PLAN

3/16" = 1'-0"

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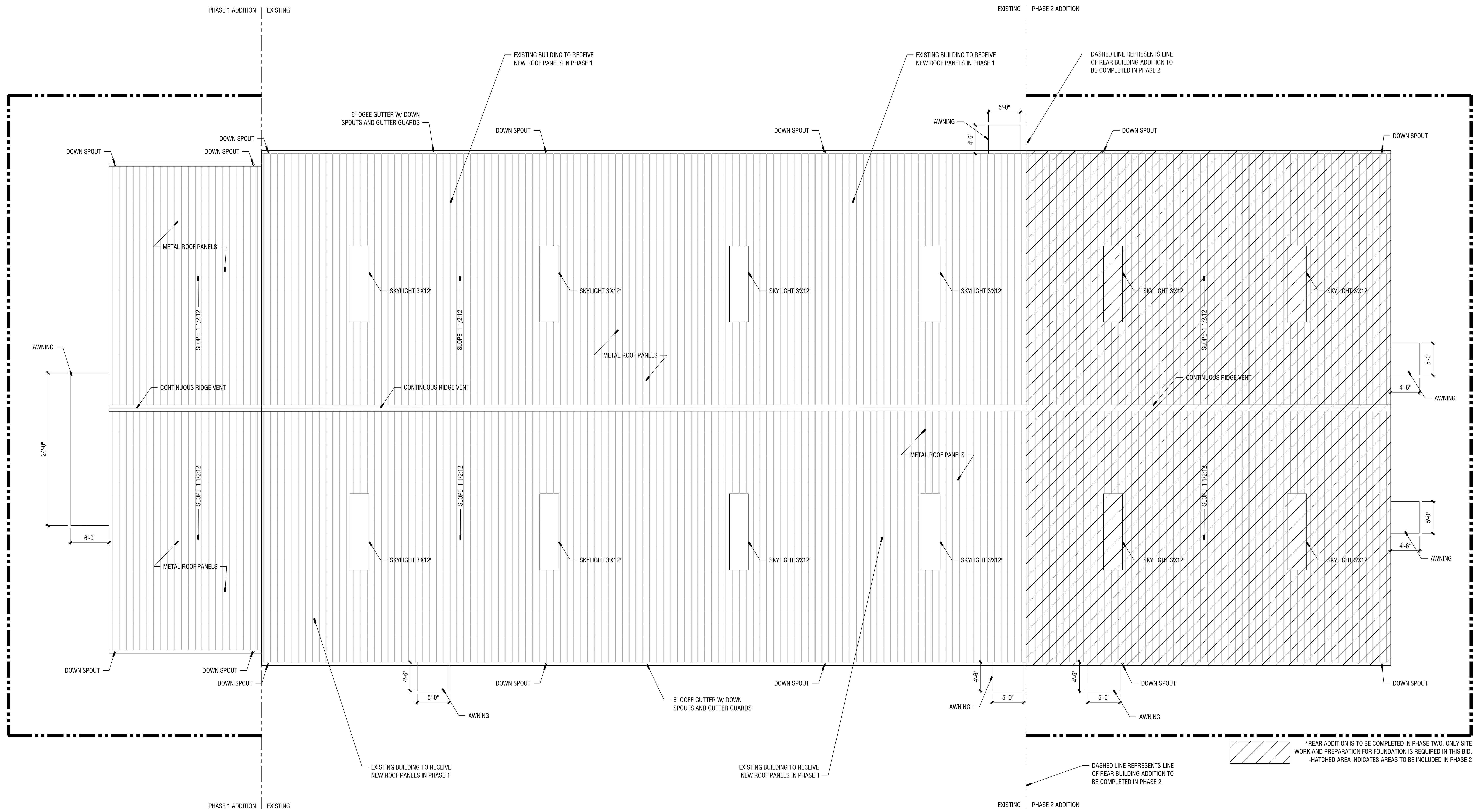
STATE OF GEORGIA BENJAMIN MERCER CARTER REGISTERED ARCHITECT

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: EXISTING FLOOR PLAN

PRINTED:

NUMBER: **A-101**



1 ROOF PLAN

1/8" = 1'-0"

REVISIONS

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1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

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JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: ROOF FRAMING PLAN

PRINTED:

NUMBER: **S-104**

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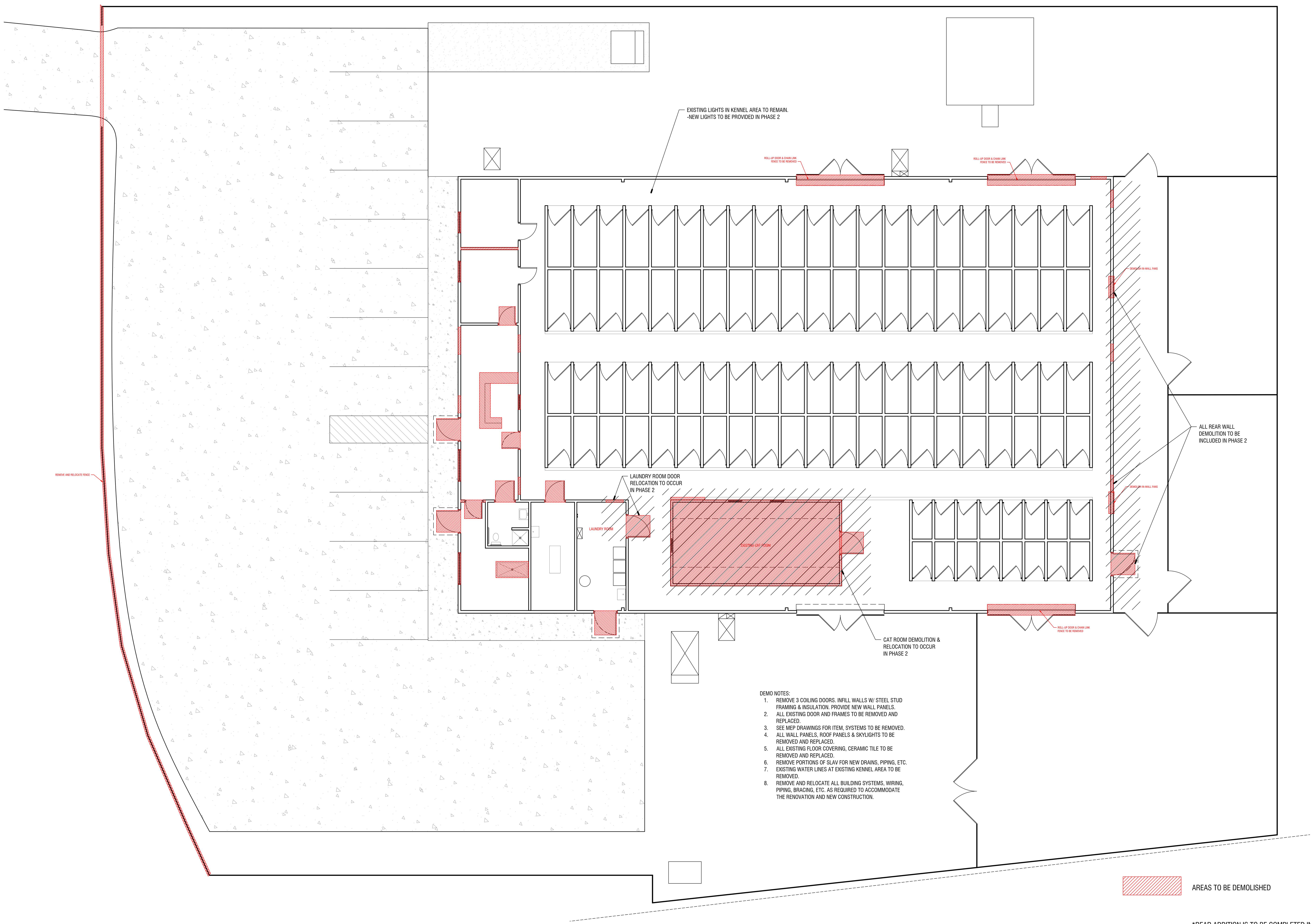

DEMO NOTES:

1. REMOVE 3 COILING DOORS. INFILL WALLS W/ STEEL STUD FRAMING & INSULATION. PROVIDE NEW WALL PANELS.
2. ALL EXISTING DOOR AND FRAMES TO BE REMOVED AND REPLACED.
3. SEE MEP DRAWINGS FOR ITEM, SYSTEMS TO BE REMOVED.
4. ALL WALL PANELS, ROOF PANELS & SKYLIGHTS TO BE REMOVED AND REPLACED.
5. ALL EXISTING FLOOR COVERING, CERAMIC TILE TO BE REMOVED AND REPLACED.
6. REMOVE PORTIONS OF SLAV FOR NEW DRAINS, PIPING, ETC.
7. EXISTING WATER LINES AT EXISTING KENNEL AREA TO BE REMOVED.
8. REMOVE AND RELOCATE ALL BUILDING SYSTEMS, WIRING, PIPING, BRACING, ETC. AS REQUIRED TO ACCOMMODATE THE RENOVATION AND NEW CONSTRUCTION.

AREAS TO BE DEMOLISHED

*REAR ADDITION IS TO BE COMPLETED IN PHASE TWO. ONLY SITE WORK AND PREPARATION FOR FOUNDATION IS REQUIRED IN THIS BID.
-HATCHED AREA INDICATES AREAS TO BE INCLUDED IN PHASE 2

1 DEMOLITION PLAN

1/8" = 1'-0"

REVISIONS

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STATE OF GEORGIA
BENJAMIN MERCER CARTER
REGISTERED ARCHITECT

JACKSON COUNTY ANIMAL SHELTER

JEFFERSON, GEORGIA

SHEET TITLE:
DEMOLITION PLAN

PRINTED:

NUMBER:
A-102

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

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DOOR SCHEDULE - NOTE: PROVIDE FRAME INSULATION AT ALL EXTERIOR DOORS

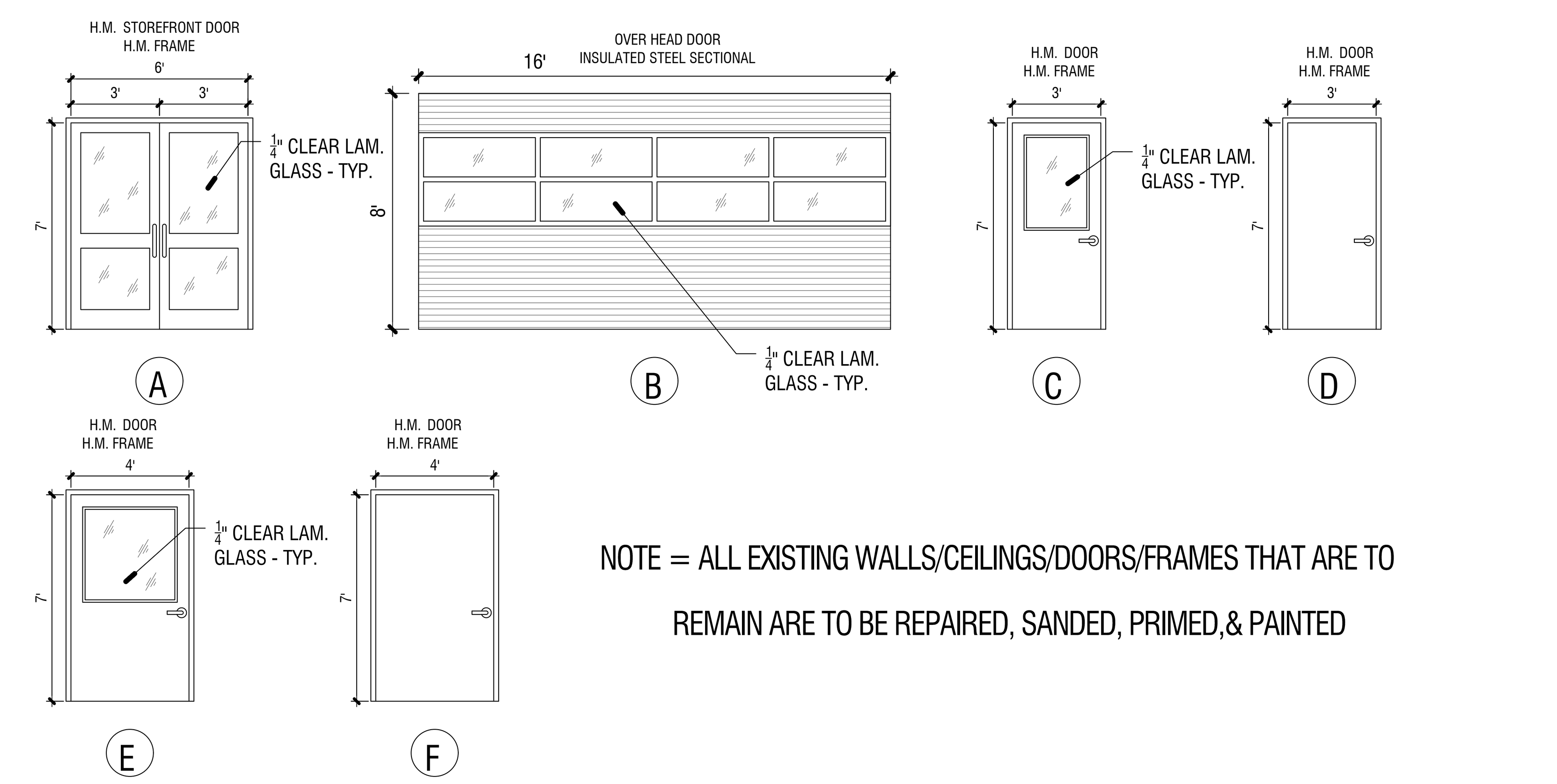
DOOR NO.	DOOR SIZE	DOOR TYPE	DOOR	DOOR FINISH	FRAME	FRAME FINISH	RATING	REMARKS
101A	6'-0" x 7'-0"	A	H.M.	P.T.	H.M.	P.T.		CLOSER
102A	3'-0" x 7'-0"	D	H.M.	P.T.	H.M.	P.T.		
104A	3'-0" x 7'-0"	D	H.M.	P.T.	H.M.	P.T.		
105A	3'-0" x 7'-0"	D	H.M.	P.T.	H.M.	P.T.		CLOSER
106A	3'-0" x 7'-0"	D	H.M.	P.T.	H.M.	P.T.		
107A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
107B	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
108A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
108B	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
109A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
109B	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
110A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
111A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
112A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
113A	3'-0" x 7'-0"	D	H.M.	P.T.	H.M.	P.T.		CLOSER
114A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
115A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
116A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
117A	3'-0" x 7'-0"	D	H.M.	P.T.	H.M.	P.T.		CLOSER
118A	4'-0" x 7'-0"	F	H.M.	P.T.	H.M.	P.T.	20 MIN C LABEL.	CLOSER
118B	4'-0" x 7'-0"	F	H.M.	P.T.	H.M.	P.T.	20 MIN C LABEL.	CLOSER
119A	3'-0" x 7'-0"	E	H.M.	P.T.	H.M.	P.T.		CLOSER
120A	3'-0" x 7'-0"	C	INSUL. H.M.	P.T.	INSUL. H.M.	P.T.		CLOSER
120B	3'-0" x 7'-0"	C	INSUL. H.M.	P.T.	INSUL. H.M.	P.T.		CLOSER
120C	16'-0" x 8'-0"	B	INSUL.	P.T.	METAL	GAL		
121A	3'-0" x 7'-0"	D	H.M.	P.T.	H.M.	P.T.	90 MIN A LABEL.	CLOSER
122A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.	90 MIN A LABEL.	CLOSER
122B	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
123A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.	90 MIN A LABEL.	CLOSER
123B	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
124A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
124B	3'-0" x 7'-0"	D	H.M.	P.T.	H.M.	P.T.		CLOSER
125A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
126A	3'-0" x 7'-0"	C	H.M.	P.T.	H.M.	P.T.		CLOSER
127A	3'-0" x 7'-0"	C	INSUL. H.M.	P.T.	INSUL. H.M.	P.T.		CLOSER
127B	3'-0" x 7'-0"	C	INSUL. H.M.	P.T.	INSUL. H.M.	P.T.		CLOSER
127C	3'-0" x 7'-0"	C	INSUL. H.M.	P.T.	INSUL. H.M.	P.T.		CLOSER

ROOM FINISH SCHEDULE - NOTE:

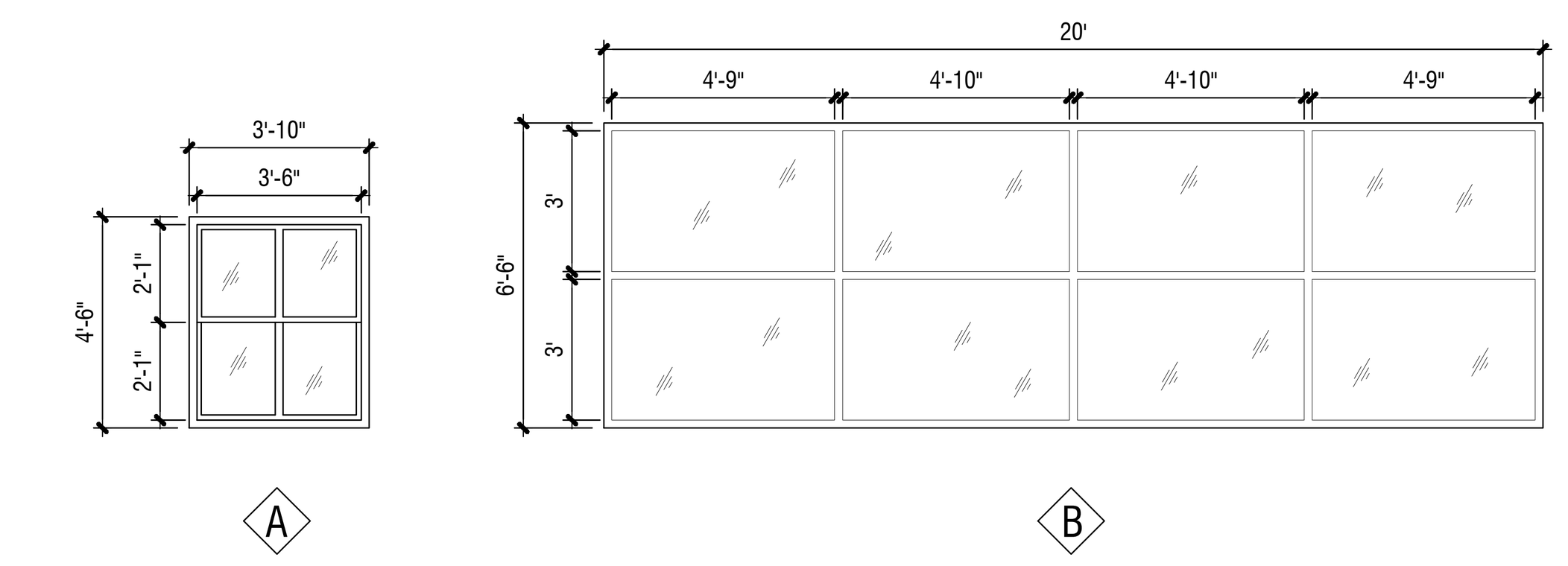
ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	FINISH	CEILINGS	WALL TYPE	REMARKS
101	LOBBY	LVP	PVC	GYP.	PAINT	A.C.T.	1 (1/A-104)	
102	PUBLIC RESTROOM	CERAMIC TILE	C.T.	C.T. / GYP.	PAINT	A.C.T.		
103	RECEPTION / LOBBY	LVP	PVC	GYP.	PAINT	A.C.T.	1 (1/A-104)	
104	DIRECTOR	LVP	PVC	GYP.	PAINT	A.C.T.	1 (1/A-104)	
105	STORAGE	LVP	RUBBER	GYP.	PAINT	A.C.T.	2 (2/A-104)	
106	AC OFFICE	LVP	PVC	GYP.	EPOXY	A.C.T.	1 (1/A-104)	
107	VESTIBULE	EPOXY ON CONC.	RUBBER	GYP.	EPOXY	GYP. BOARD PT.	7 (7/A-104)	
108	DOG BONDING	STONHARD FLOORING	STONHARD	GYP.	EPOXY	GYP. BOARD PT.	6 (6/A-104)	
109	CAT BONDING	STONHARD FLOORING	STONHARD	GYP.	EPOXY	GYP. BOARD PT.	6 (6/A-104)	
110	QUARANTINE	STONHARD FLOORING	STONHARD	DUROCK	EPOXY	PAINT EXISTING	5 (5/A-104)	
111	QUARANTINE	STONHARD FLOORING	STONHARD	DUROCK	EPOXY	PAINT EXISTING	5 (5/A-104)	
112	STAFF HALLWAY	EPOXY ON CONC.	RUBBER	GYP.	PAINT	GYP. BOARD PT.	7 (7/A-104)	
113	STAFF RESTROOM/SHOWER	CERAMIC TILE	C.T.	GYP.	PAINT	PAINT EXISTING		
114	CAT ROOM	STONHARD FLOORING	STONHARD	GYP.	PAINT	A.C.T.	4 (4/A-104)	FULL HT. WALLS
115	CAT QUARANTINE	STONHARD FLOORING	STONHARD	GYP.	EPOXY	A.C.T.	4 (4/A-104)	FULL HT. WALLS
116	BREAK	EPOXY ON CONC.	RUBBER	GYP.	PAINT	PAINT EXISTING	7 (7/A-104)	
117	EVIDENCE ROOM	EPOXY ON CONC.	RUBBER	GYP.	PAINT	PAINT EXISTING	7 (7/A-104)	
118	LAUNDRY/MECHANICAL	EPOXY ON CONC.	RUBBER	GYP.	PAINT	PAINT EXISTING	7 (7/A-104)	
119	CAT INTAKE	STONHARD FLOORING	STONHARD	DUROCK	EPOXY	GYP. BOARD PT.	3 (3/A-104)	FULL HT. WALLS
120	DOG KENNELS	BIO-CEM TC FLOORING	BIO-CEM CB	DUROCK	EPOXY	PAINT	8 (8/A-104)	
121	I.T.	EPOXY ON CONC.	RUBBER	GYP.	PAINT	A.C.T.	2 (2/A-104)	FULL HT. WALLS
122	VESTIBULE	STONHARD FLOORING	STONHARD	GYP.	EPOXY	A.C.T.	4 (4/A-104)	FULL HT. WALLS
123	VESTIBULE	STONHARD FLOORING	STONHARD	GYP.	EPOXY	A.C.T.	4 (4/A-104)	FULL HT. WALLS
124	FOOD STORAGE	EPOXY ON CONC.	RUBBER	GYP.	EPOXY	A.C.T.	2 (2/A-104)	FULL HT. WALLS
125	GROOMING	STONHARD FLOORING	STONHARD	DUROCK	EPOXY	A.C.T.	3 (3/A-104)	FULL HT. WALLS
126	EXAMINATION ROOM	STONHARD FLOORING	STONHARD	DUROCK	EPOXY	A.C.T.	3 (3/A-104)	FULL HT. WALLS
127	DOG KENNELS	BIO-CEM TC FLOORING	BIO-CEM CB	DUROCK	EPOXY	PAINT	9 (9A-104)	

NOTE = ALL EXPOSED STEEL STRUCTURE, BRACING, FURRING, ETC. TO BE PAINTED

HATCHED AREA IN SCHEDULE GRID REPRESENTS ITEMS TO BE CONSTRUCTED IN PHASE 2



NOTE = ALL EXISTING WALLS/CEILINGS/DOORS/FRAMES THAT ARE TO REMAIN ARE TO BE REPAIRED, SANDED, PRIMED,& PAINTED



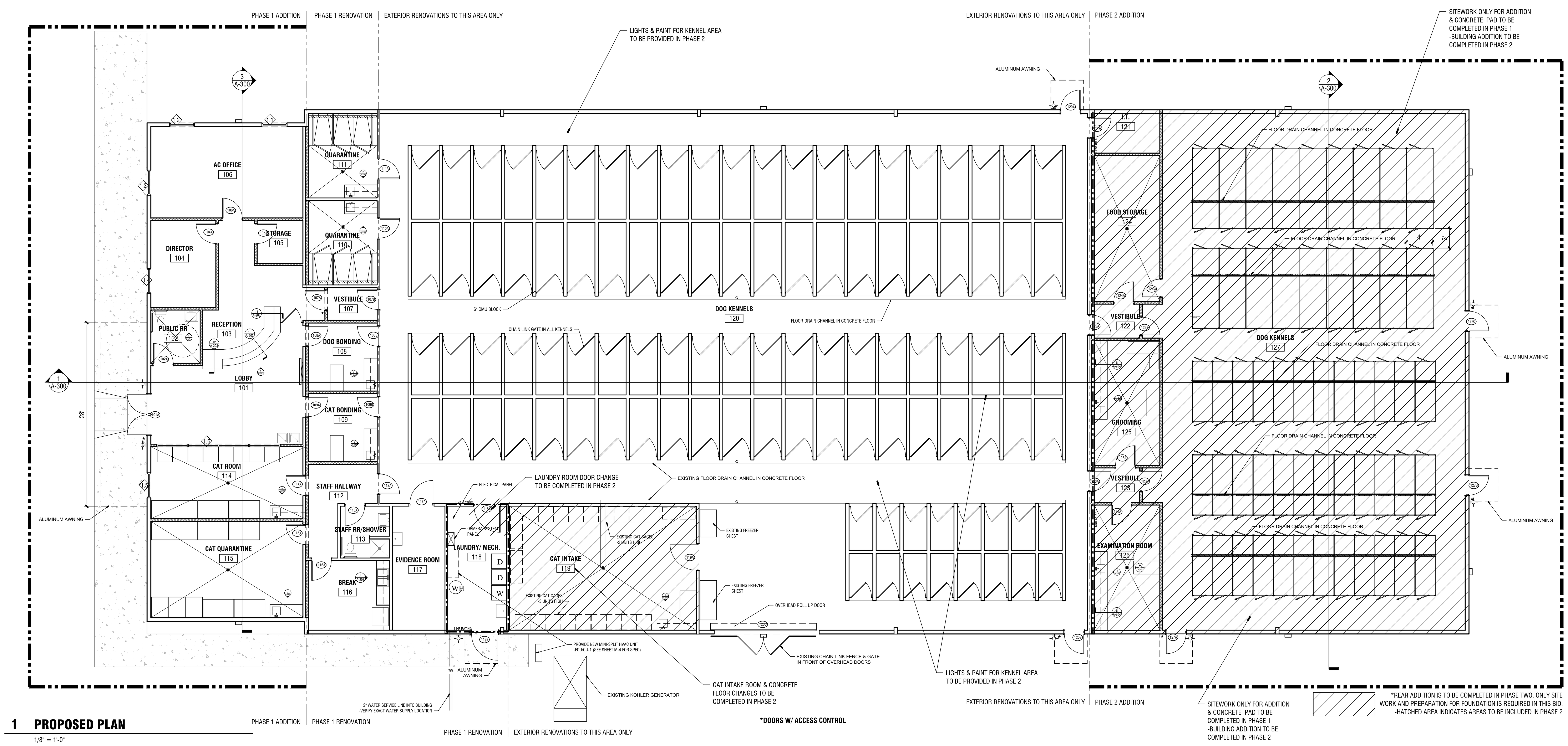
KAWNEER TRI-FAB 451T OR EQUAL

GLASS SCHEDULE

MARK	TYPE	SILL HT.	DETAIL			REMARKS
			SILL	HEAD	JAMB	
1.1	A	2'-6"	10/A-302	8/A-302	9/A-302	--
1.2	A	2'-6"	10/A-302	8/A-302	9/A-302	--
1.3	A	2'-6"	10/A-302	8/A-302	9/A-302	--
1.4	A	2'-6"	10/A-302	8/A-302	9/A-302	--
1.5	A	2'-6"	10/A-302	8/A-302	9/A-302	--
1.6	B	2'-6"	6/A-302	6/A-302	7/A-302	--

NOTE = SEE SHEETS A-302 FOR GLASS MARKS

FINISH NOTES:
1. ALL EXISTING WALLS AND TRIM TO BE PAINTED.
2. ALL EXPOSED STEEL STRUCTURE, BRACES, COLUMNS, PLUMING PIPING, ALL EXPOSED METAL ELEMENTS AND SURFACES TO BE PREPPED AND PAINTED.
3. ALL EXISTING CMU AT KENNELS TO BE PRIMED AND PAINTED W/ EPOXY PAINT.
4. ALL EXISTING WOOD DOORS(IF ANY REMAIN) TO BE REPLACED W/ H.M. DOORS AND FRAMES.



1 PROPOSED PLAN
1/8" = 1'-0"

PRINTED DATE: 07/12/21

JACKSON CO. ANIMAL SHELTER

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

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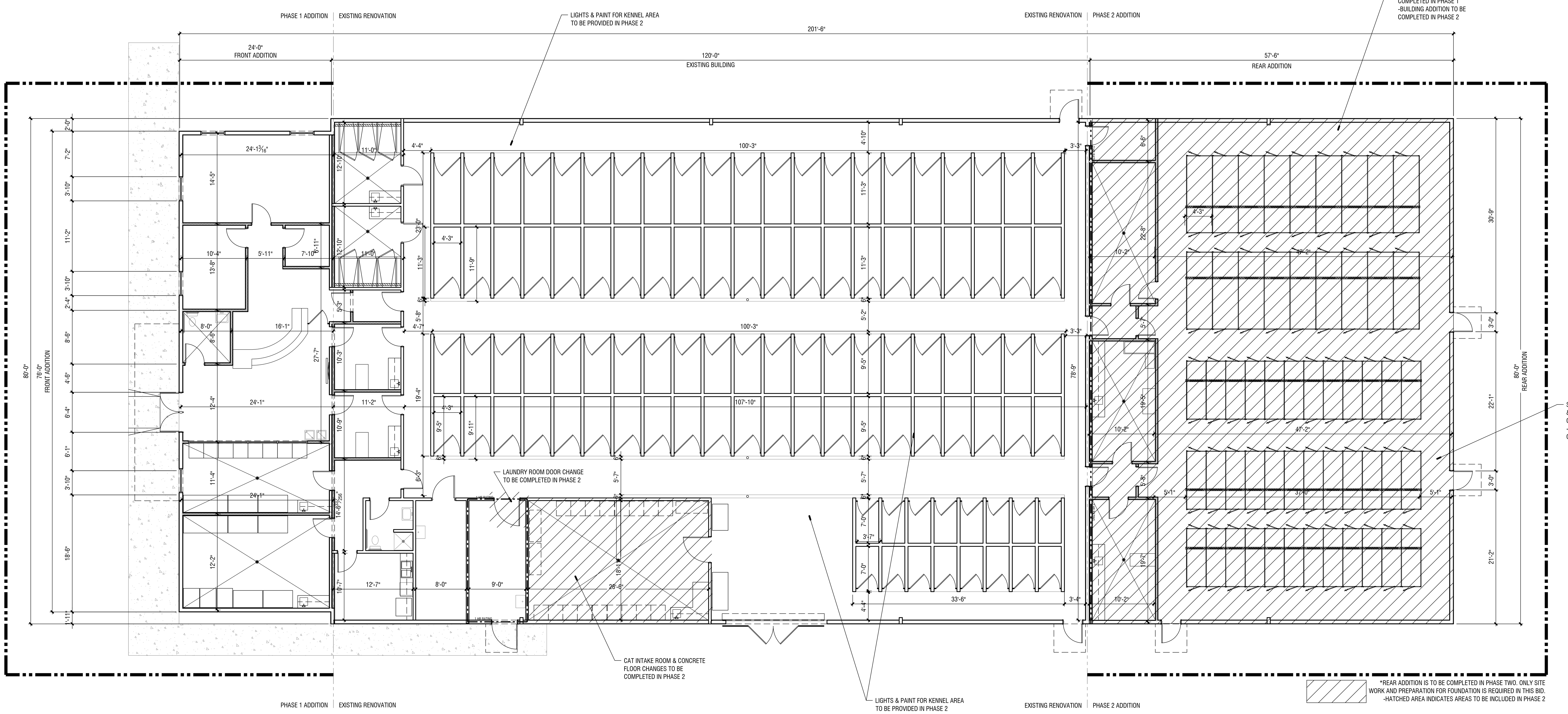
SEAL
STATE OF GEORGIA REGISTERED ARCHITECT BENJAMIN MERCER CARTER

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: PROPOSED FLOOR PLAN

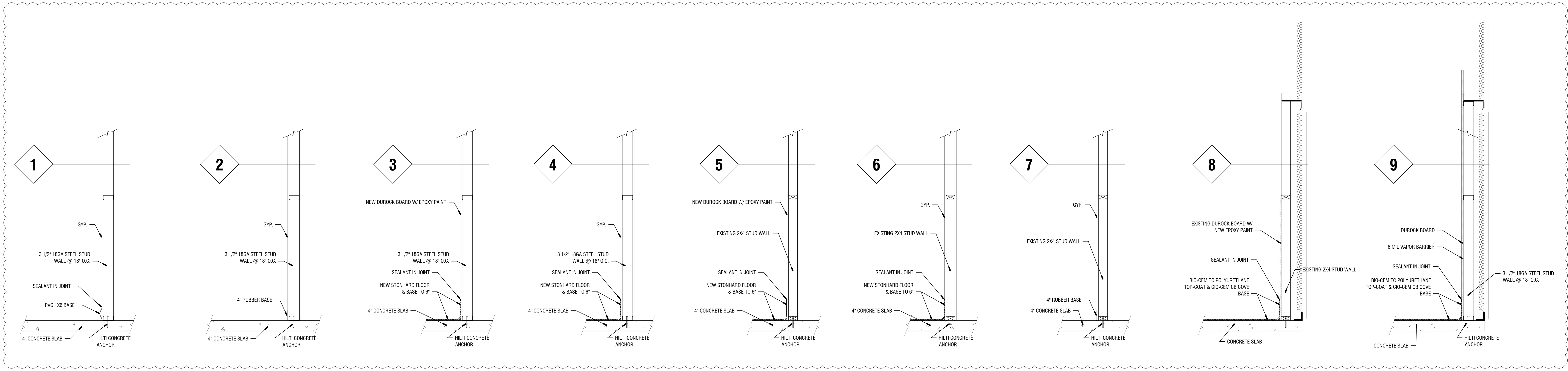
PRINTED:

NUMBER: A-103



1 DIMENSION PLAN

1/8" = 1'-0"



REVISIONS					
Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

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STATE OF GEORGIA — BENJAMIN MERCER CARTER — REGISTERED ARCHITECT

JACKSON COUNTY ANIMAL SHELTER

JEFFERSON, GEORGIA

SHEET TITLE: DIMENSION PLAN

PRINTED:

NUMBER: **A-104**

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

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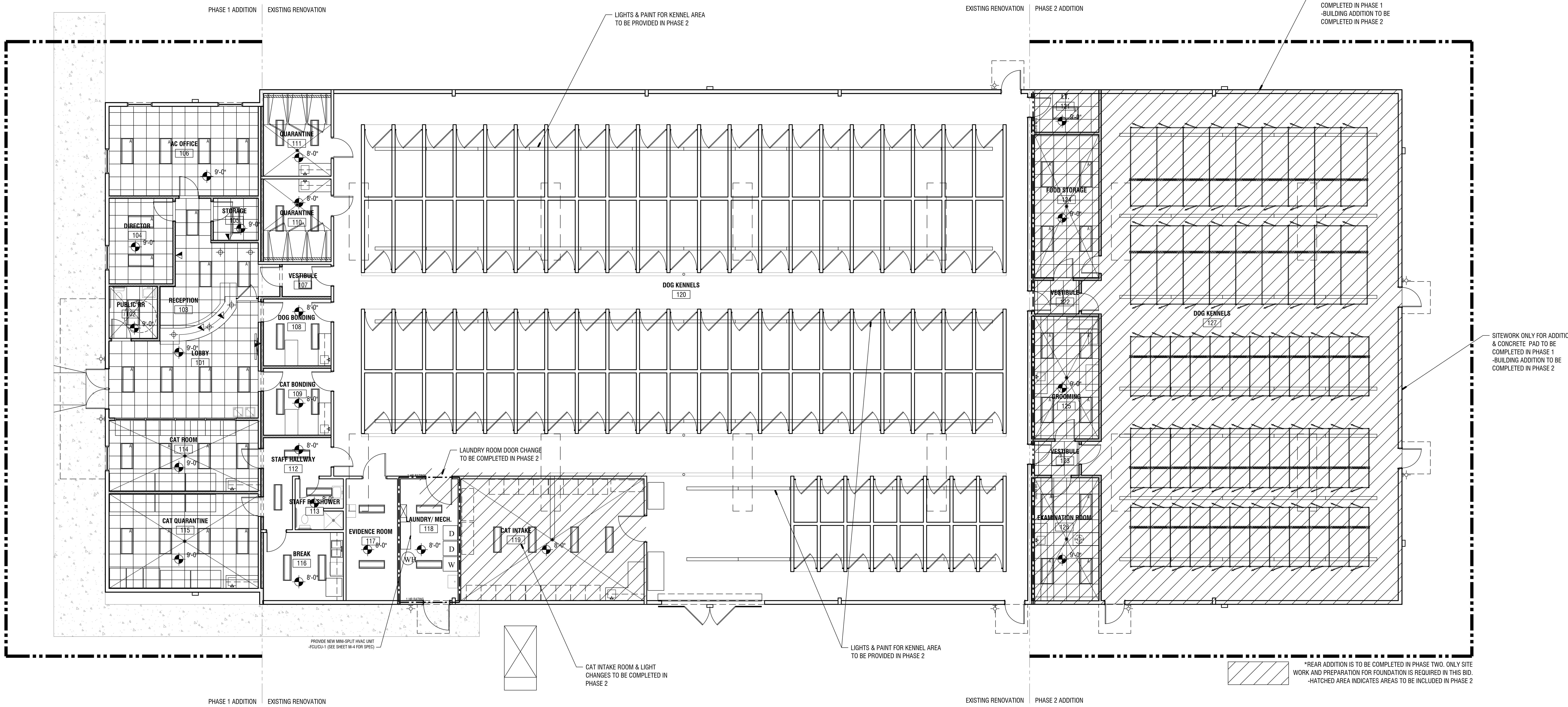

*REAR ADDITION IS TO BE COMPLETED IN PHASE TWO. ONLY SITE WORK AND PREPARATION FOR FOUNDATION IS REQUIRED IN THIS BID.
-HATCHED AREA INDICATES AREAS TO BE INCLUDED IN PHASE 2

1 REFLECTED CIELING PLAN

1/8" = 1'-0"

- LED RECESSED 4" CAN LIGHT
- 2X4 RECESSED MOUNTED LED FIXTURE
- 1X4 RECESSED MOUNTED LED FIXTURE
- 2X2 RECESSED MOUNTED LED FIXTURE
- LED WALL PACK - TRACE-LITE LED DARK BRONZE
- SURGERY LIGHT - VERIFY LOCATION W/ OWNER PROVIDE WIRING FOR LIGHT ONLY
- OUTDOOR WALL SCONCE - LITHONIA LED WALL CYLINDER - DARK BRONZE
- 8' INDUSTRIAL STRIP

COORDINATE ALL FIXTURES WITH ELECTRICAL & NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROGRESSING WITH AFFECTED AREAS.

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

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REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

CONSULTANTS

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SEAL

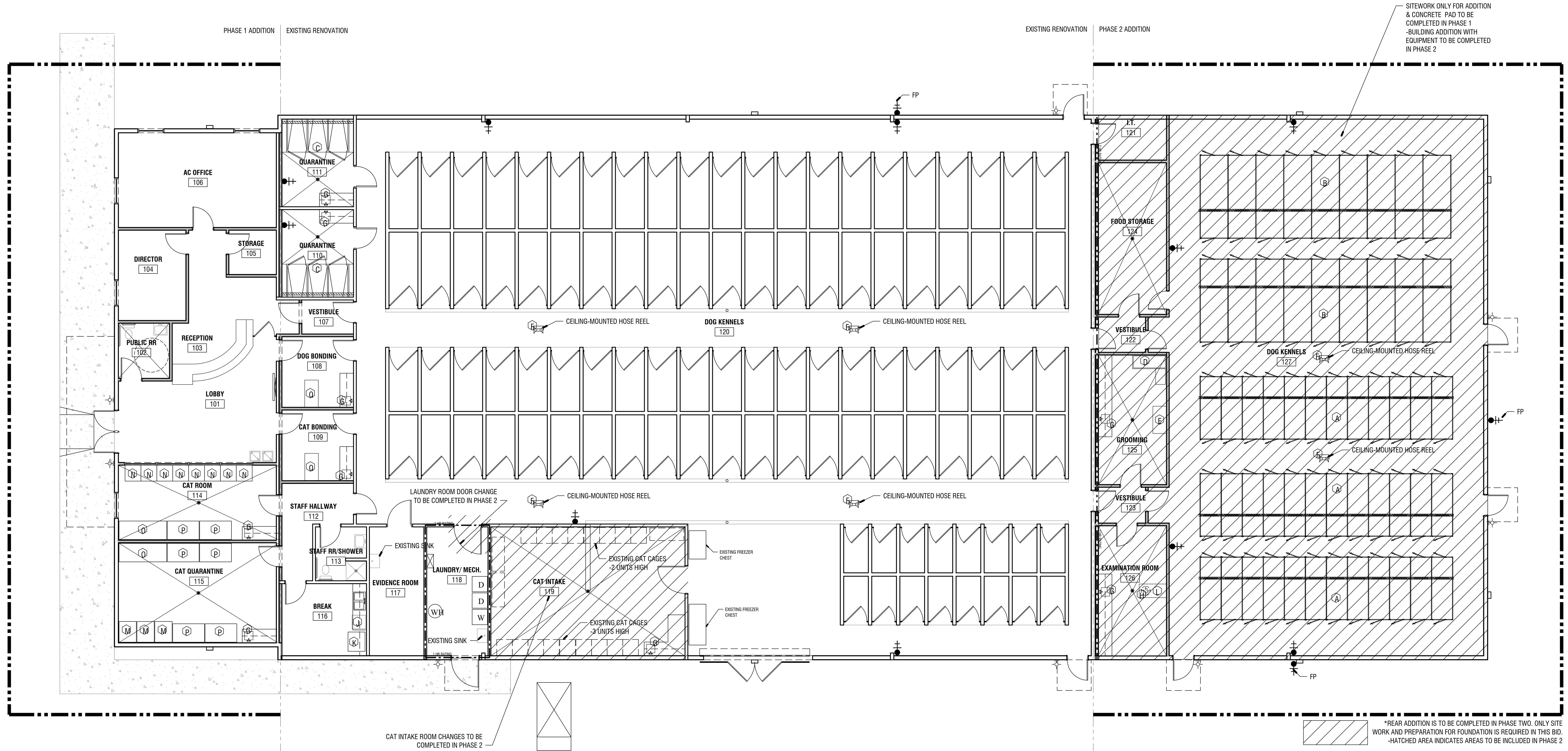
STATE OF GEORGIA BENJAMIN MERCER CARTER CERTIFICATE NO. 008677 REGISTERED ARCHITECT

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: REFLECTED CEILING PLAN

PRINTED:

NUMBER: **A-105**



1 EQUIPMENT PLAN

1/8" = 1'-0"

EQUIPMENT LIST - SEE PROJECT MANUAL FOR DETAILED EQUIPMENT SPECIFICATION

KEY	ITEM	DESCRIPTION	SUPPLIED BY:	INST.BY:
A	MASON COMPANY SANI-KENNEL OR EQ.	3' x 3' BACKED UP TO 3' X 6' MODULES W/ GUILLOTINE DOORS & SIDE PANELS. (36 TOTAL UNITS)	G.C	G.C.
B	MASON COMPANY SANI-KENNEL OR EQ.	4' x 4' BACKED UP TO 4' X 8' MODULES W/ GUILLOTINE DOORS & SIDE PANELS. (18 TOTAL UNITS)	G.C	G.C.
C	MASON COMPANY SANI-KENNEL OR EQ.	4'-8" x 3'-0" KENNEL. 6' HEIGHT (6 TOTAL UNITS)	G.C	G.C.
D	BATHING TABLE	SUB SURG. 60" W/ S.S. SURROUNDS ON 3 SIDES, W/ ROTATING RAMP ON RIGHT SIDE & ACCESS DOOR.	G.C.	G.C.
E	MASON BIG DOG GROOMING TABLE	48X24 TABLE W/ METAL DRAWER AND GROOM ARM	G.C.	G.C.
F	HOSE REEL	COXREELS SPRING DRIVEN HOSE REEL, (F)NPT, 100FT.	G.C	G.C.
G	12" DEEP STAINLESS STEEL SINK	COUNTERTOP MOUNT W/ ACTION GOOSENECK FAUCET W/ WRIST BLADES & ANGLED SPRAYER SUB. SURG OR EQ. 024633-F-M-ZZ-5080-A	G.C	G.C.
H	SURGERY LIGHT	SUBURBAN SURGICAL LIGHT EXCELED EXAM LIGHT. CEILING MOUNTED WITH CEILING ROD FOR 9' CEILINGS MODEL #M1000000-061514. CEILING ROD MODEL NUMBER #M100000-1001187	G.C	G.C.
J	DISHWASHER		OWNER	G.C.
K	REFRIGERATOR		OWNER	G.C.
L	SUB. SURG. TREATMENT TABLE	58X22 RECESSED END TREATMENT TABLE W/ STAINLESS STEEL TOP	G.C	G.C.
M	MASON CO. CAT ISOLATION UNIT	DOUBLE HIGH UNITS, THREE (3) - 30 1/4" WIDE x 36 1/4" DEEP x 6'-9 1/2" HIGH ISOLATION CAGES	G.C	G.C.
N	MASON COMPANY	CAT ADOPTION UNITS, SIXTEEN (16) 28" HIGH X 28" WIDE x 28 3/4" DEEP	G.C	G.C.
O	MASON COMPANY OR EQ.	FIBERGLASS QUIET COTTAGES, TWO (2) MODEL 2 **W/O DRAIN.** 84" WIDE X 69" HIGH	G.C	G.C.
P	MASON COMPANY OR EQ.	FIBERGLASS QUIET COTTAGES, SIX (6) MODEL 6 **W/O DRAIN.** 56" WIDE x 69 HIGH	G.C	G.C.
Q	SUB. SURG. EXAM TABLE	48X24 TABLE W/ STAINLESS STEEL TOP	G.C	G.C.

HATCHED AREA IN SCHEDULE GRID REPRESENTS ITEMS TO BE CONSTRUCTED IN PHASE 2

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

CONSULTANTS

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email@carterwatkins.com www.carterwatkins.com

SEAL

STATE OF GEORGIA BENJAMIN MERCER CARTER CERTIFICATE NO. [illegible] REGISTERED ARCHITECT

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: EQUIPMENT PLAN

PRINTED:

NUMBER: **A-106**

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

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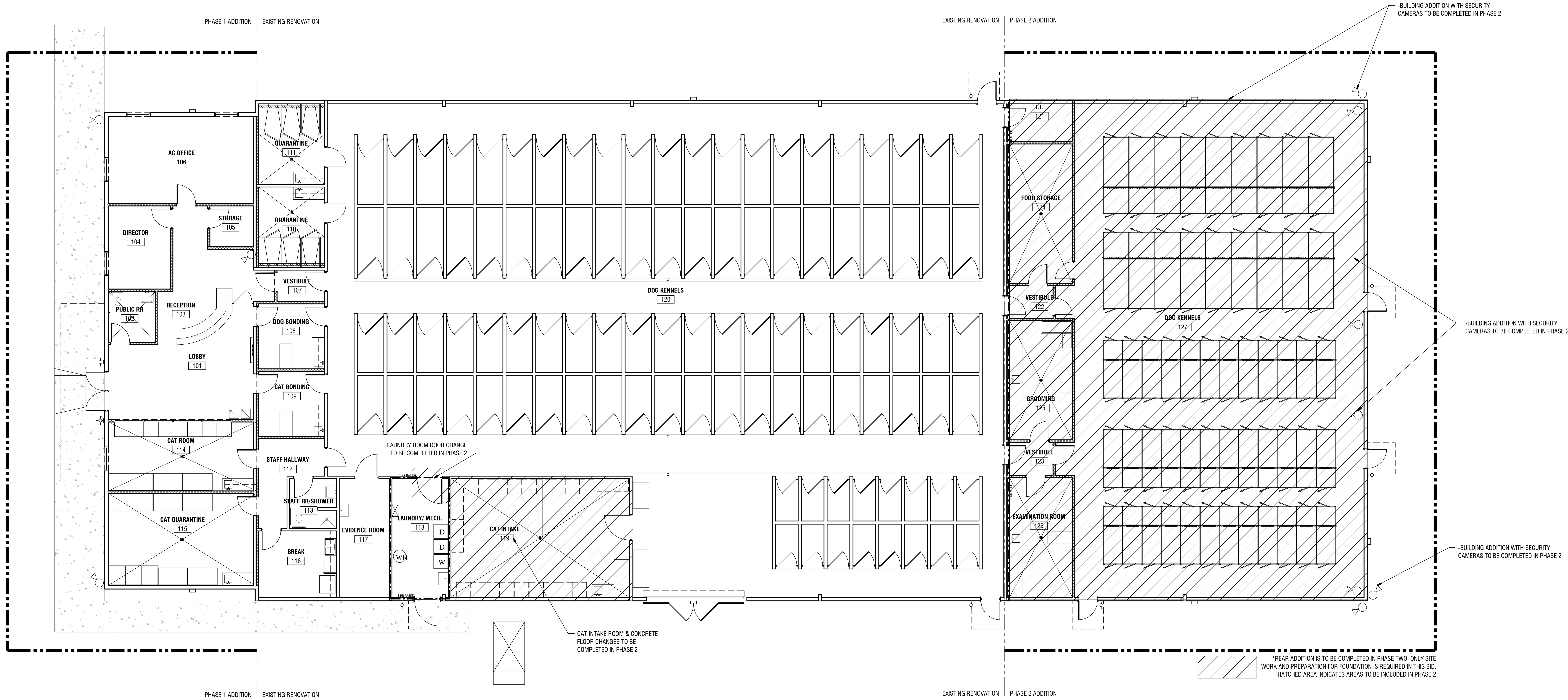

1 SECURITY CAMERA PLAN

1/8" = 1'-0"

SECURITY CAMERA NOTES	SECURITY CAMERA LEGEND	
SECURITY CAMERAS: - ALL DEVICES AND QUANTITIES WILL BE DERIVED FROM THESE DRAWINGS - REVIEW SPECIFICATIONS FOR EQUIPMENT REQUIREMENTS - SECURITY SYSTEMS CONTRACTOR WILL PROVIDE ALL ANCILLARY EQUIPMENT NECESSARY TO PROVIDE A FULLY FUNCTIONING VIDEO SURVEILLANCE MANAGEMENT SYSTEM. THIS INCLUDES BUT IS NOT LIMITED TO: - VIDEO WALL COMPONENTS - CAMERA ACCESSORIES SUCH AS MOUNTS, ETC. - NETWORK SWITCHES FROM THE SAME MANUFACTURER AS CAMERAS FINAL LOCATIONS OF HEAD END / DISTRIBUTED CONTROL EQUIPMENT TO BE DETERMINED BY ARCHITECT AND CLIENT.	▷○	SECURITY CAMERA TYPE 1 LOCATION. SEE SPECIFICATION FOR CAMERA REQUIREMENTS.

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

CONSULTANTS

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STATE OF GEORGIA
BENJAMIN MERCER CARTER
REGISTERED ARCHITECT

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
SECURITY CAMERA PLAN

PRINTED:

NUMBER:
A-107

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

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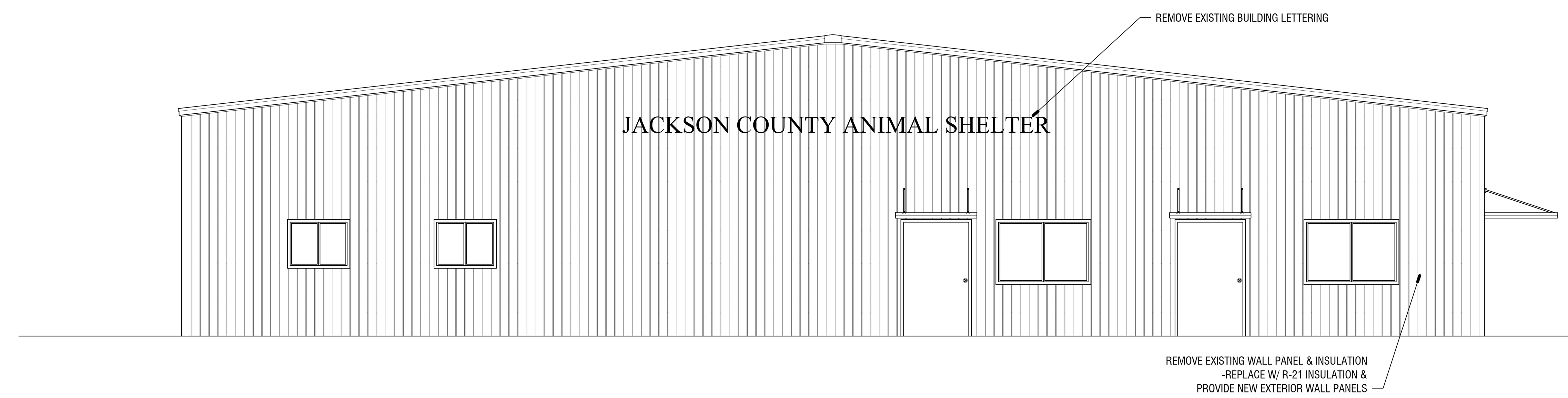
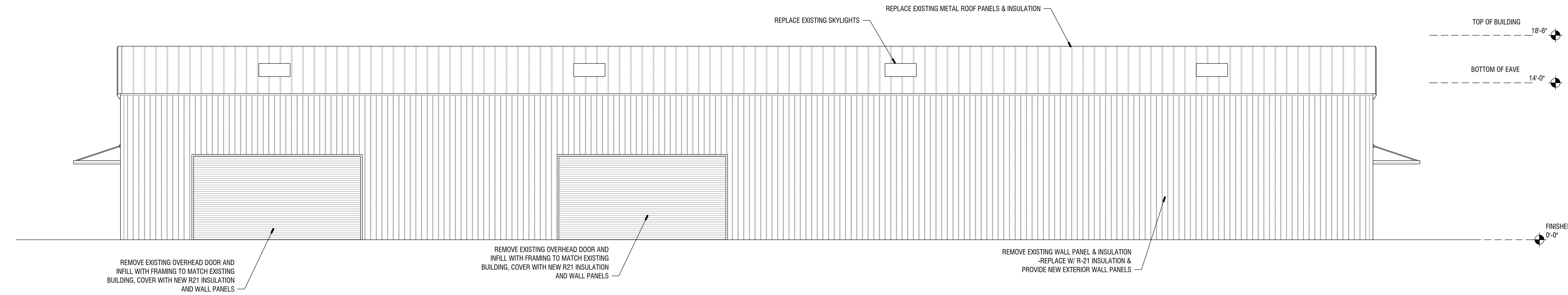


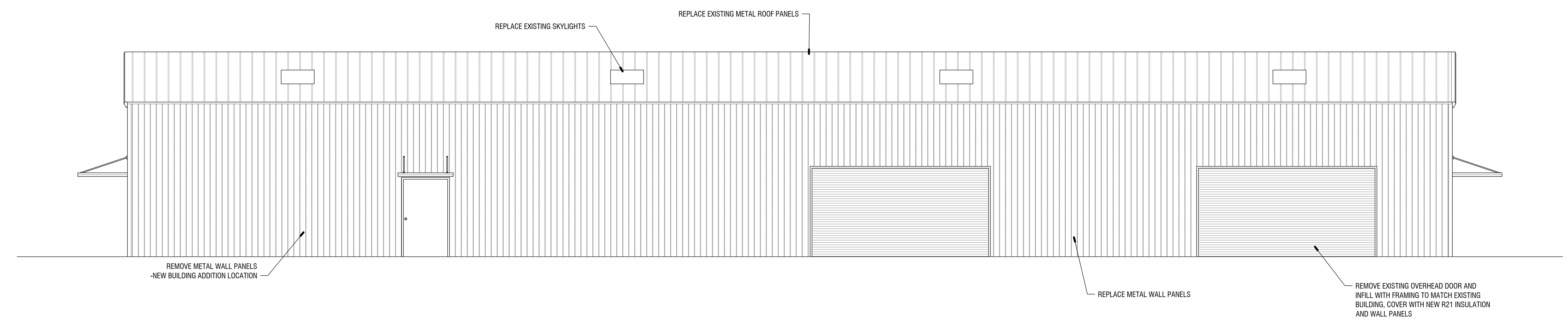
1 EXISTING FRONT ELEVATION

3/16" = 1'-0"



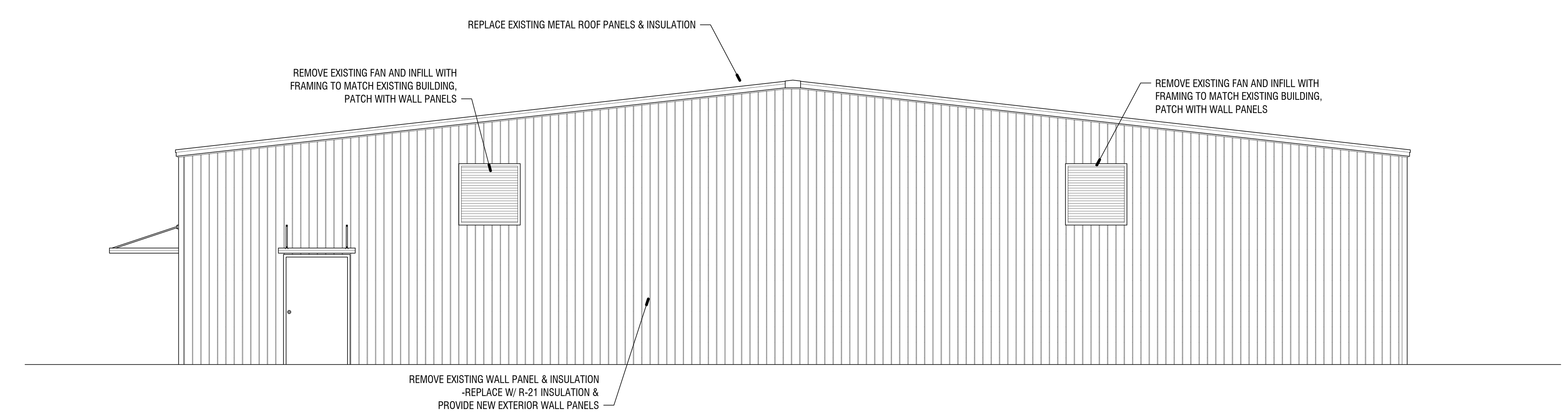
2 EXISTING LEFT ELEVATION

3/16" = 1'-0"



3 EXISTING RIGHT ELEVATION

3/16" = 1'-0"



4 EXISTING REAR ELEVATION

3/16" = 1'-0"

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

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JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
EXISTING EXTERIOR ELEVATIONS

PRINTED:

NUMBER:
A-201

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

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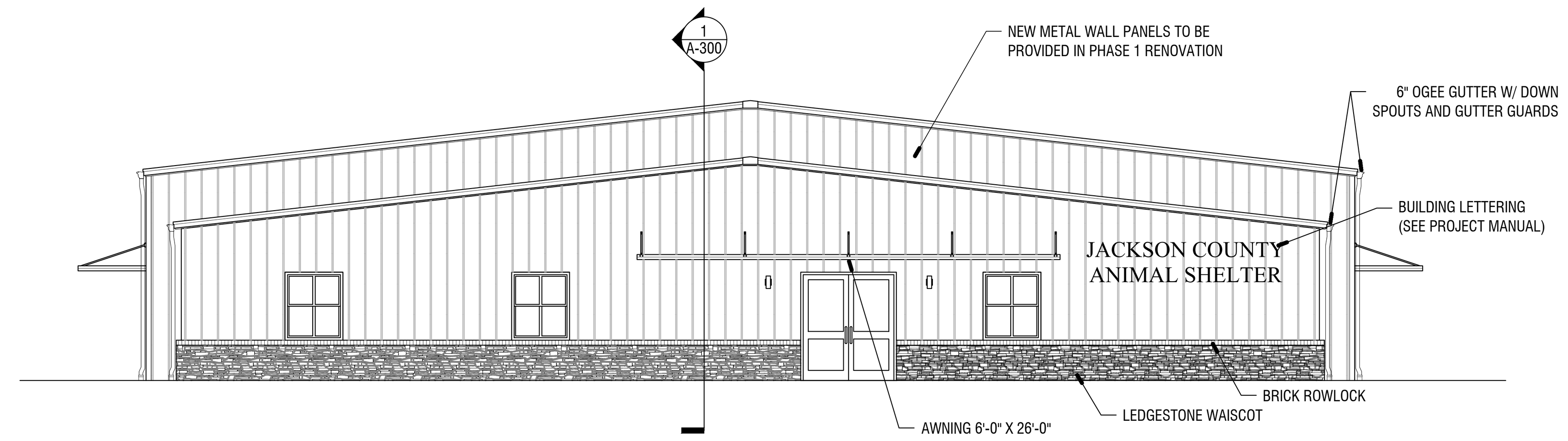
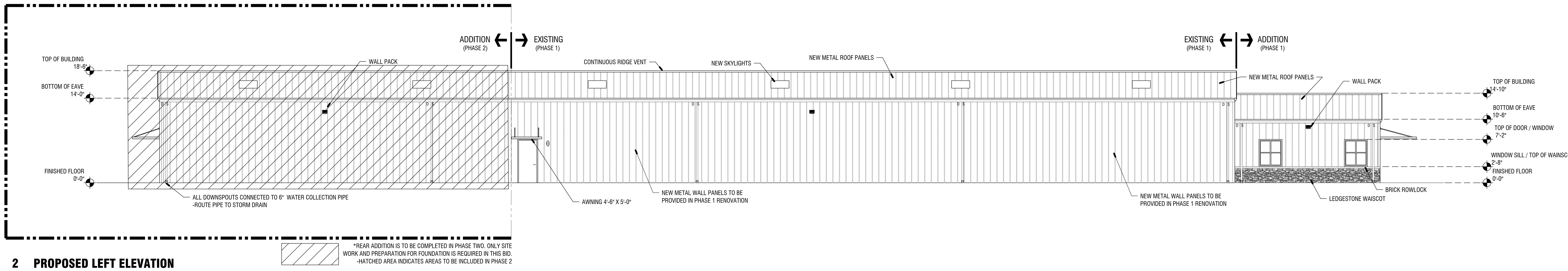


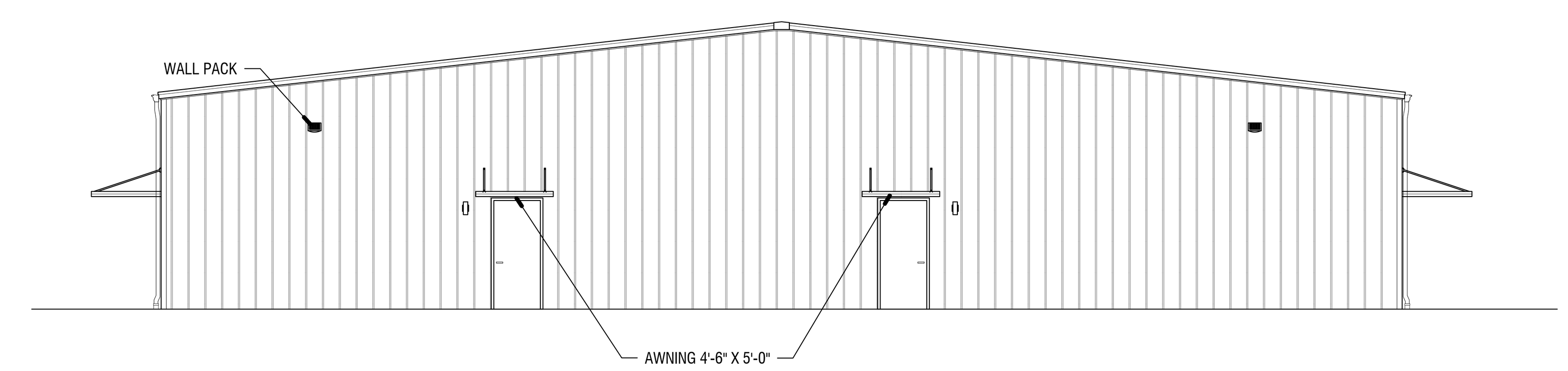
1 PROPOSED FRONT ELEVATION

1/8" = 1'-0"



2 PROPOSED LEFT ELEVATION

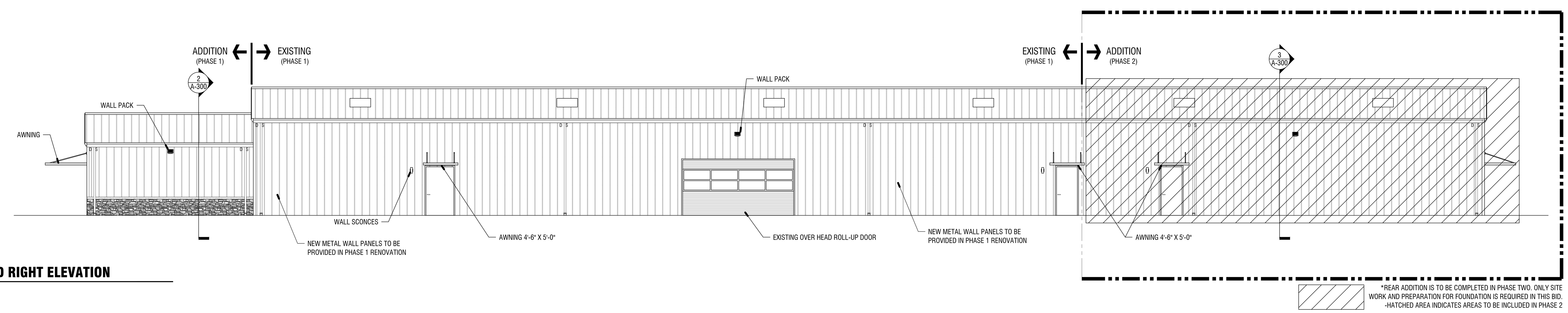
1/8" = 1'-0"



PROJECT NOTES:
1. INSTALL BRICK WAINSCOT AROUND EXISTING AND NEW ADDITIONS
2. NEW METAL ROOF WITH SKYLIGHTS
3. NEW GUTTERS AND DOWNSPOUTS

3 PROPOSED REAR ELEVATION

1/8" = 1'-0"



4 PROPOSED RIGHT ELEVATION

1/8" = 1'-0"

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

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REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

CONSULTANTS

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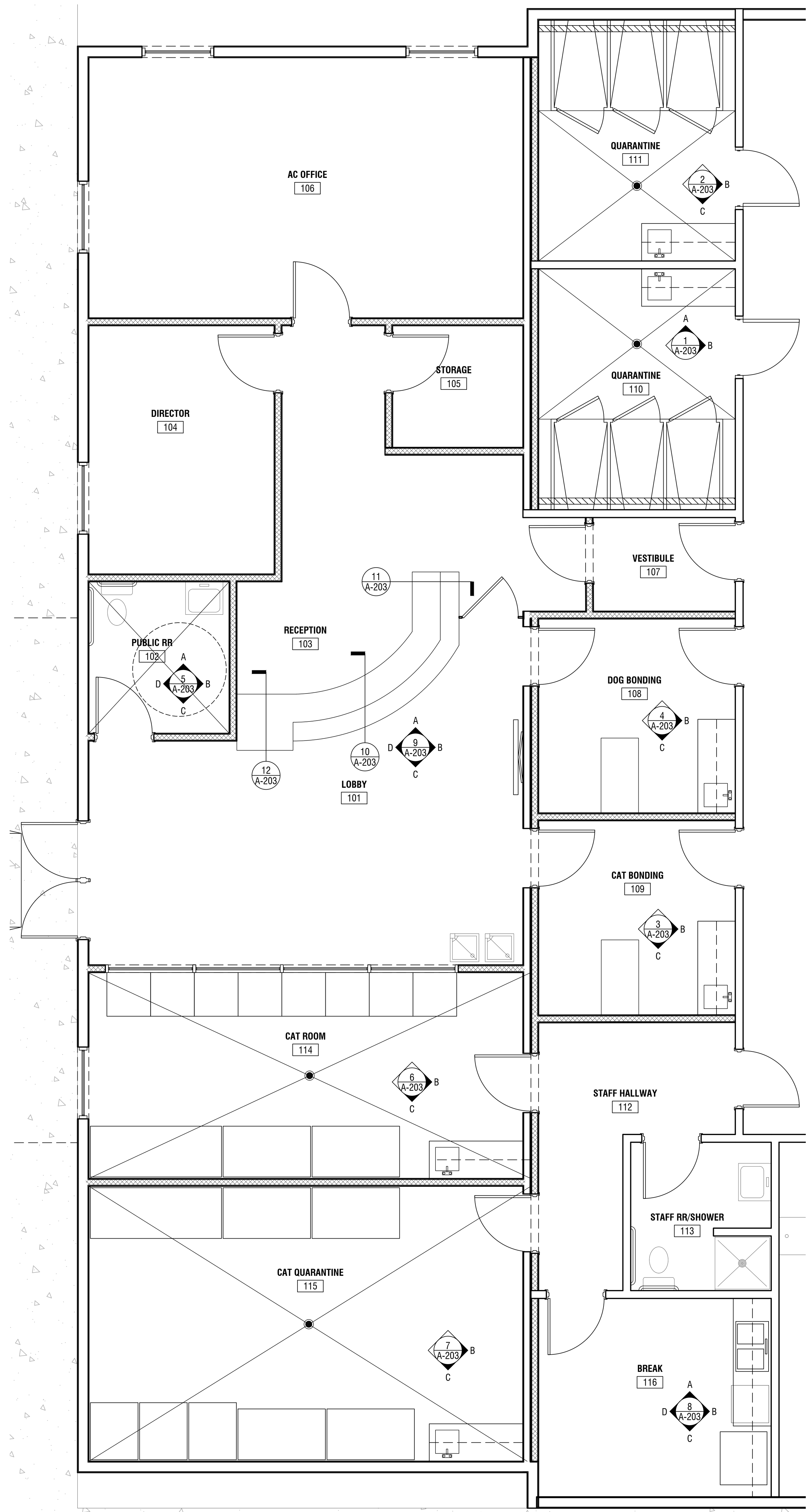
STATE OF GEORGIA · BENJAMIN MERCER CARTER · REGISTERED ARCHITECT

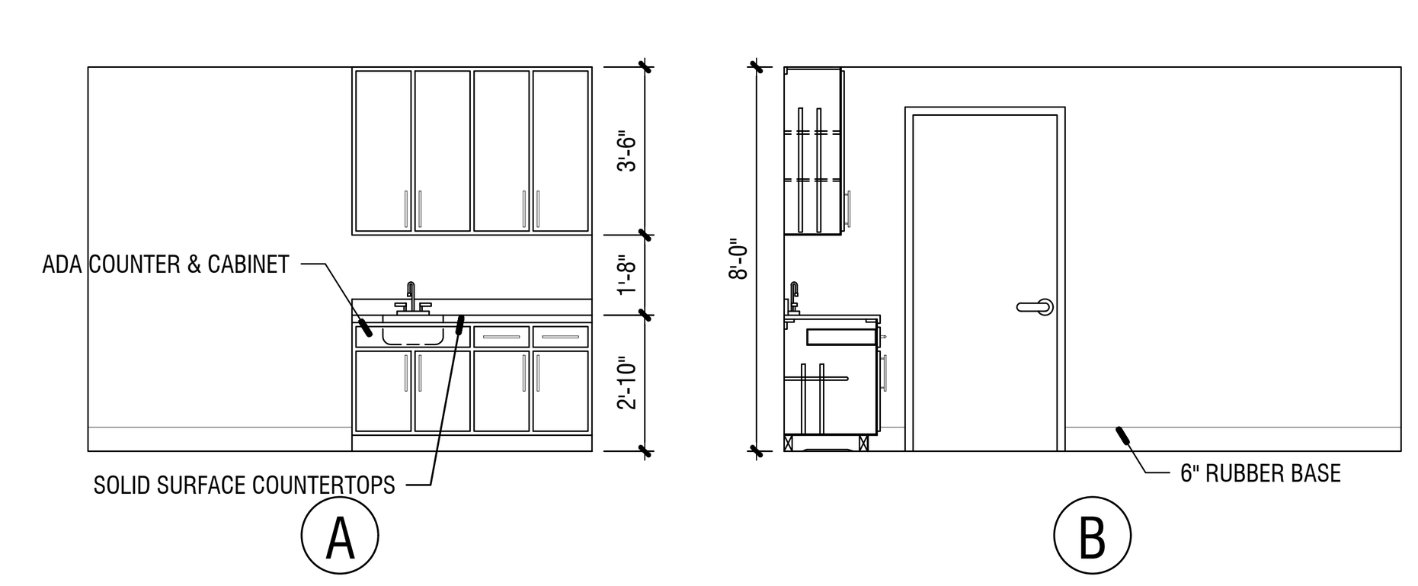
JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
PROPOSED EXTERIOR ELEVATIONS

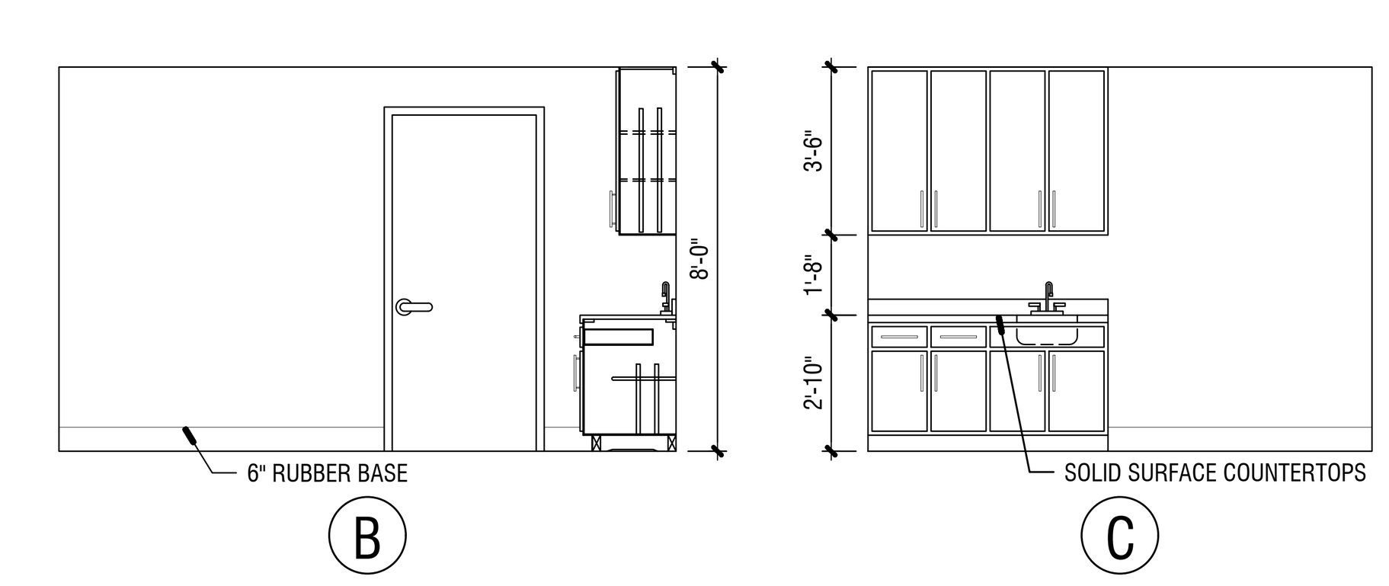
PRINTED:

NUMBER:
A-202

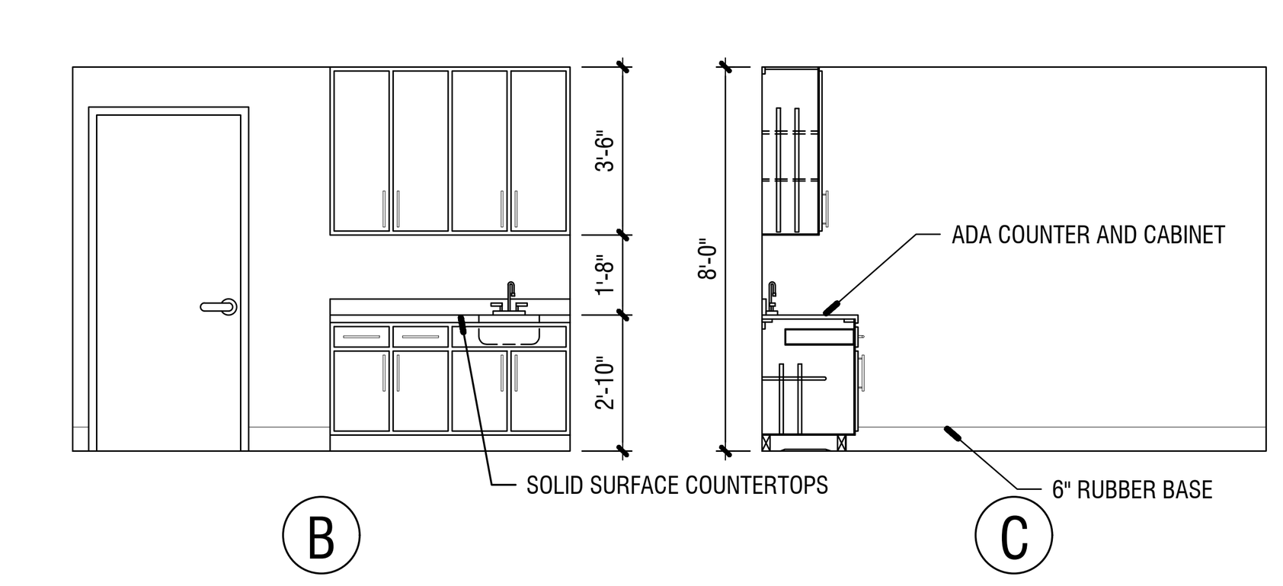




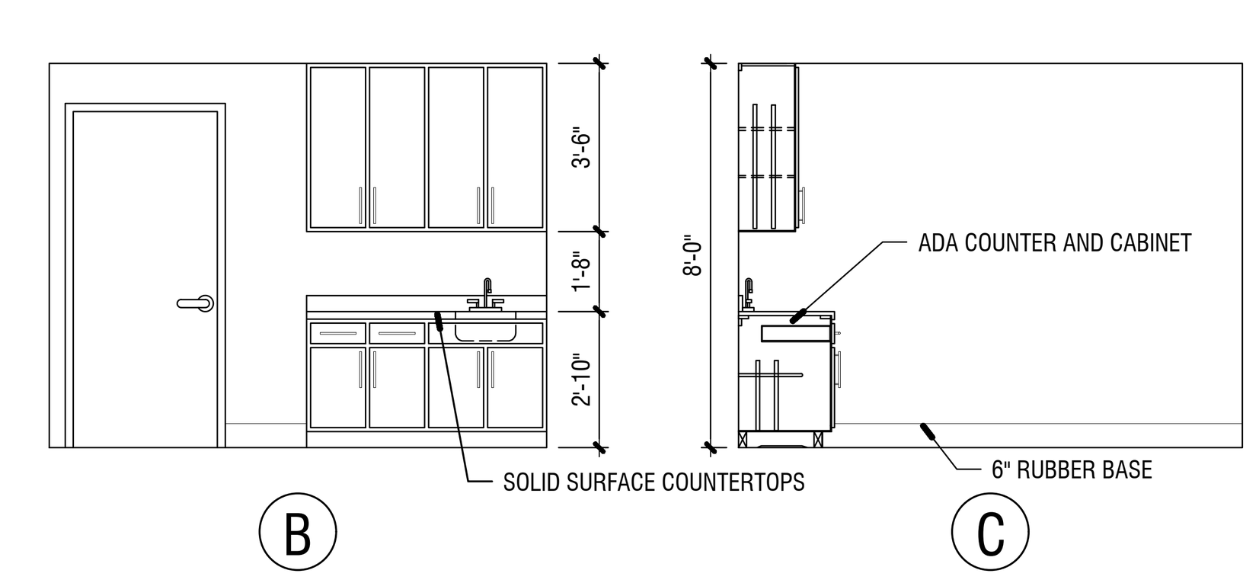
1 QUARANTINE 110
1/4" = 1'-0"



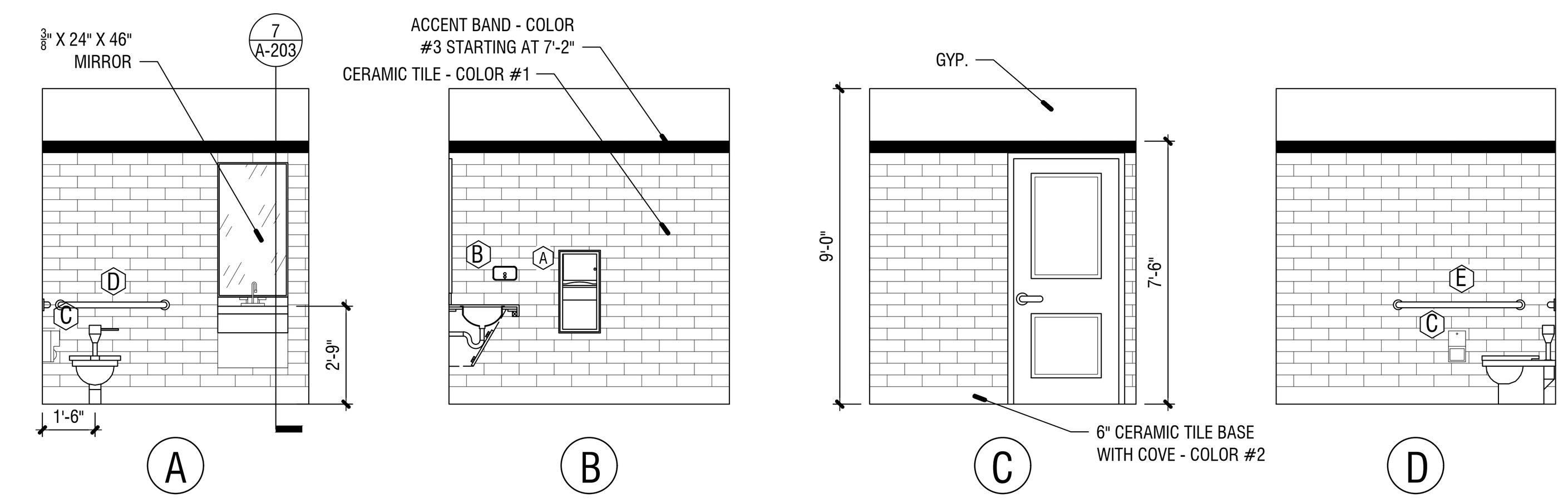
2 QUARANTINE 111
1/4" = 1'-0"



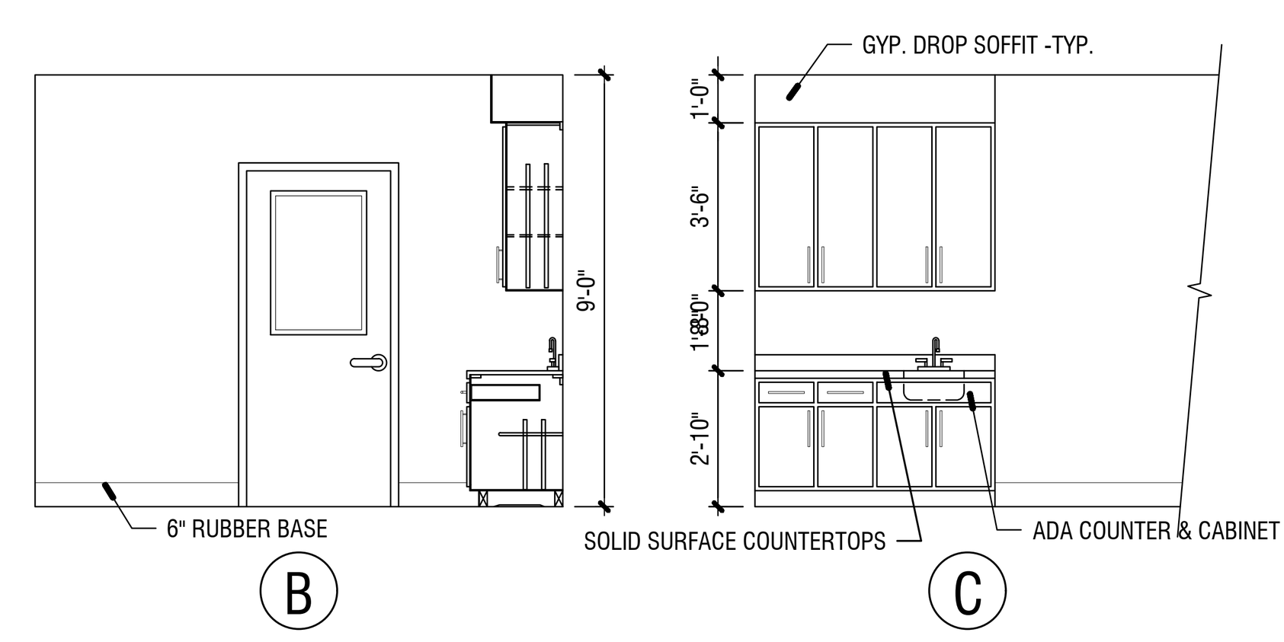
3 CAT BONDING 109
1/4" = 1'-0"



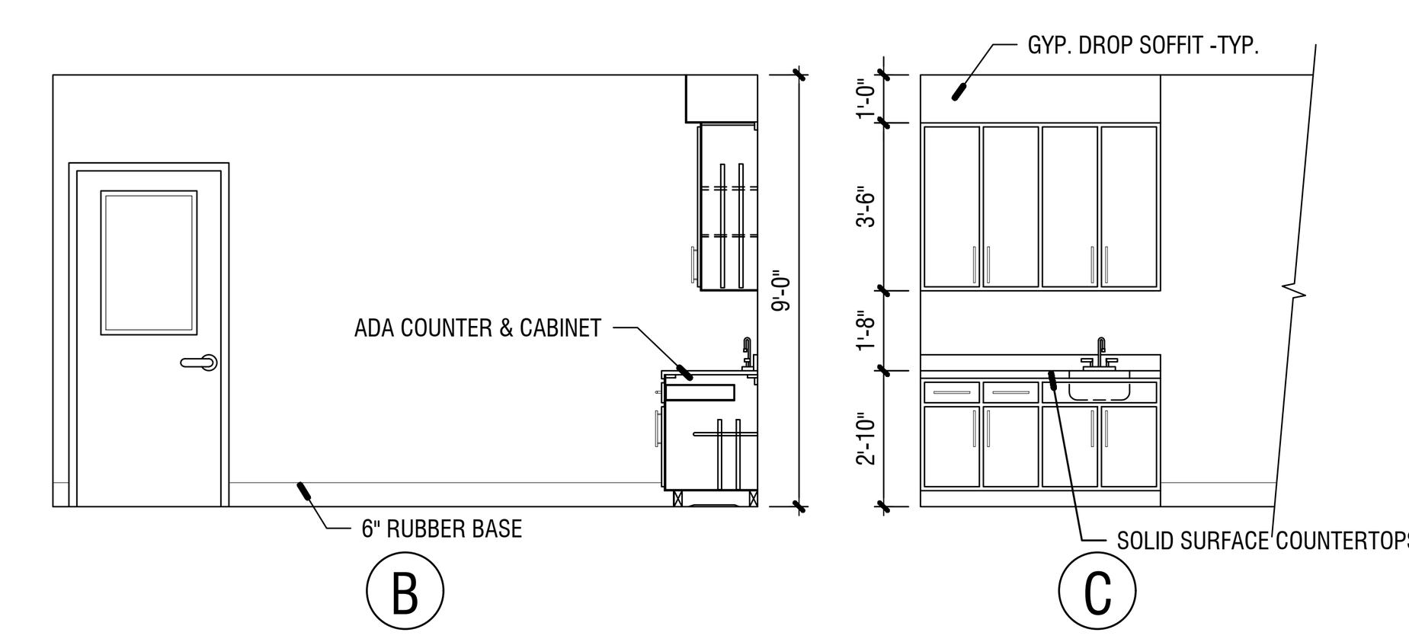
4 DOG BONDING 108
1/4" = 1'-0"



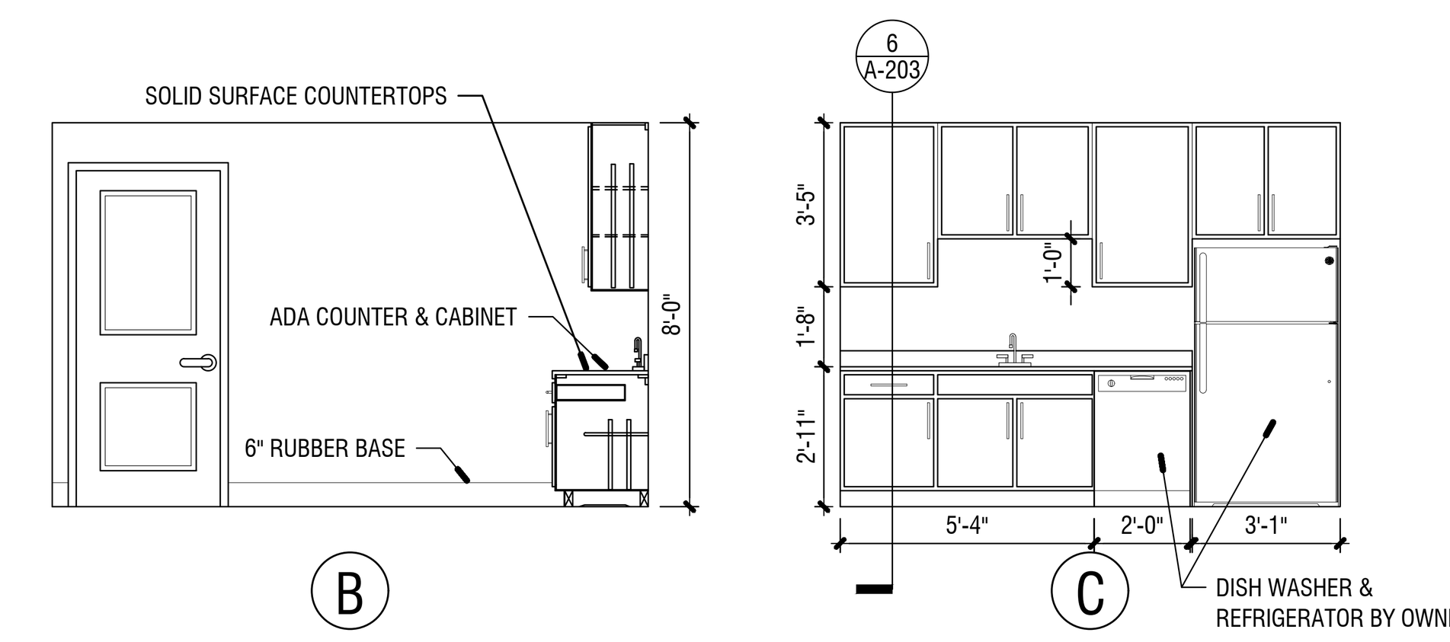
5 PUBLIC RESTROOM 102
1/4" = 1'-0"



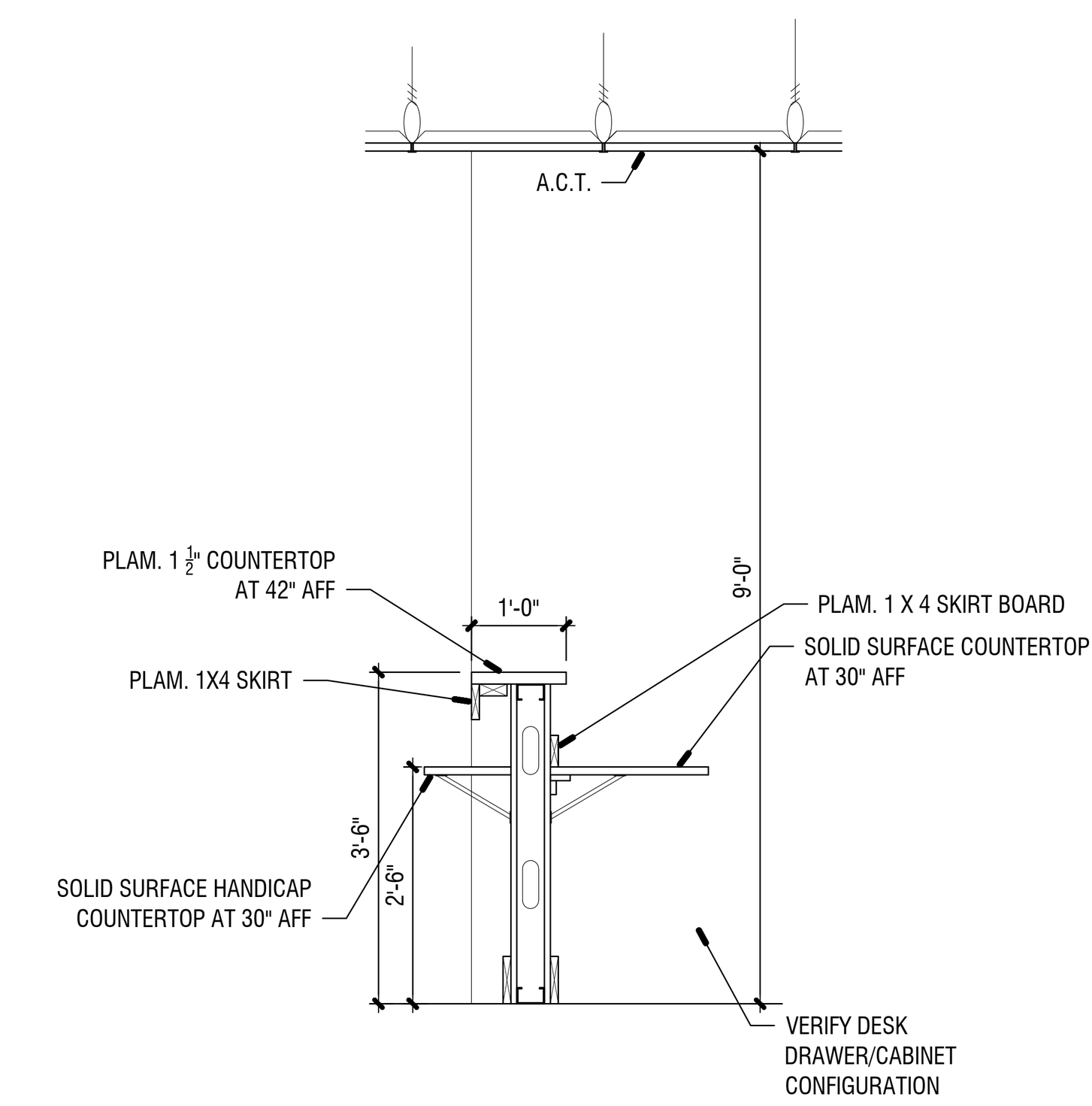
6 CAT ROOM 114
1/4" = 1'-0"



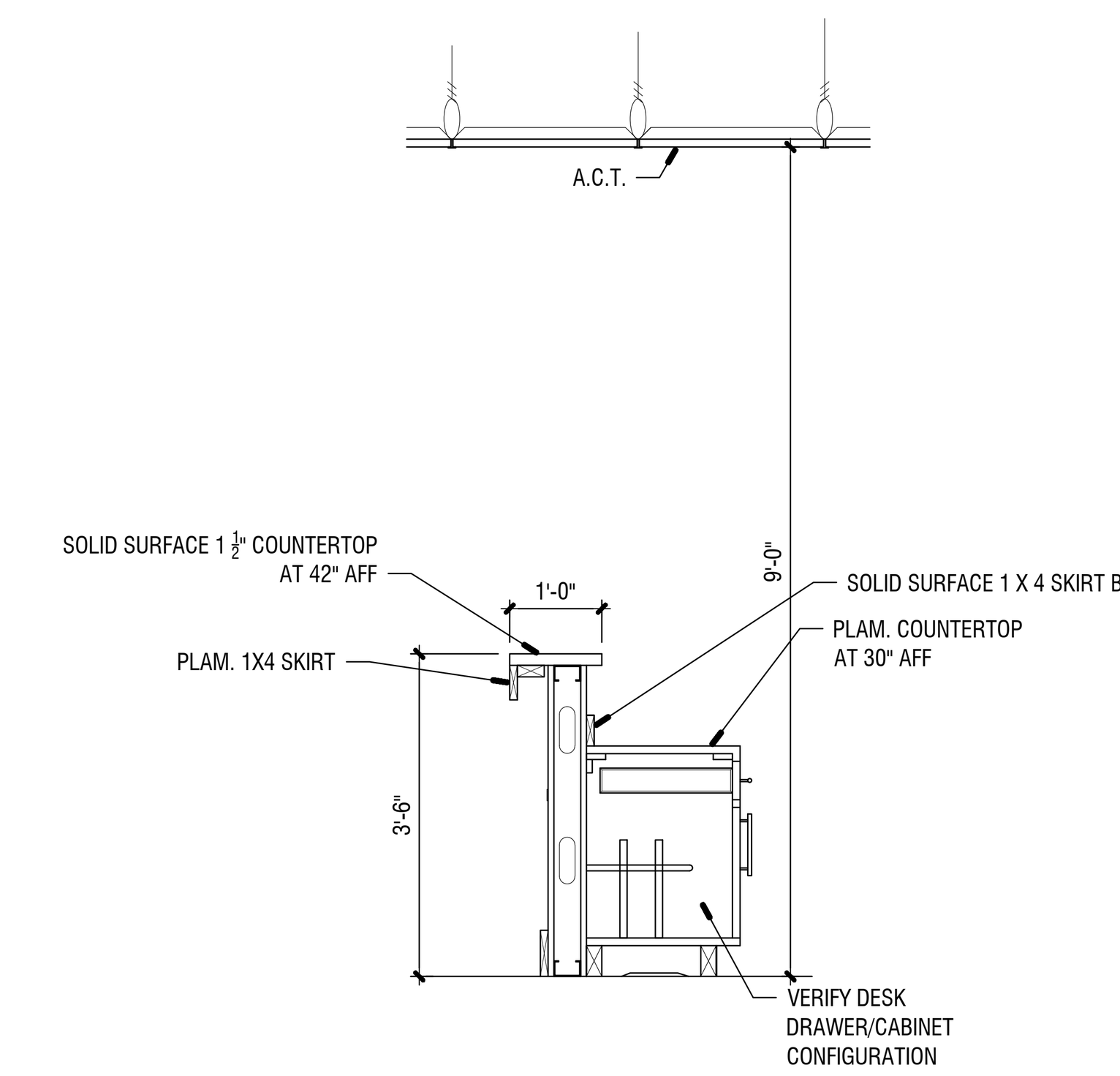
7 CAT QUARANTINE 115
1/4" = 1'-0"



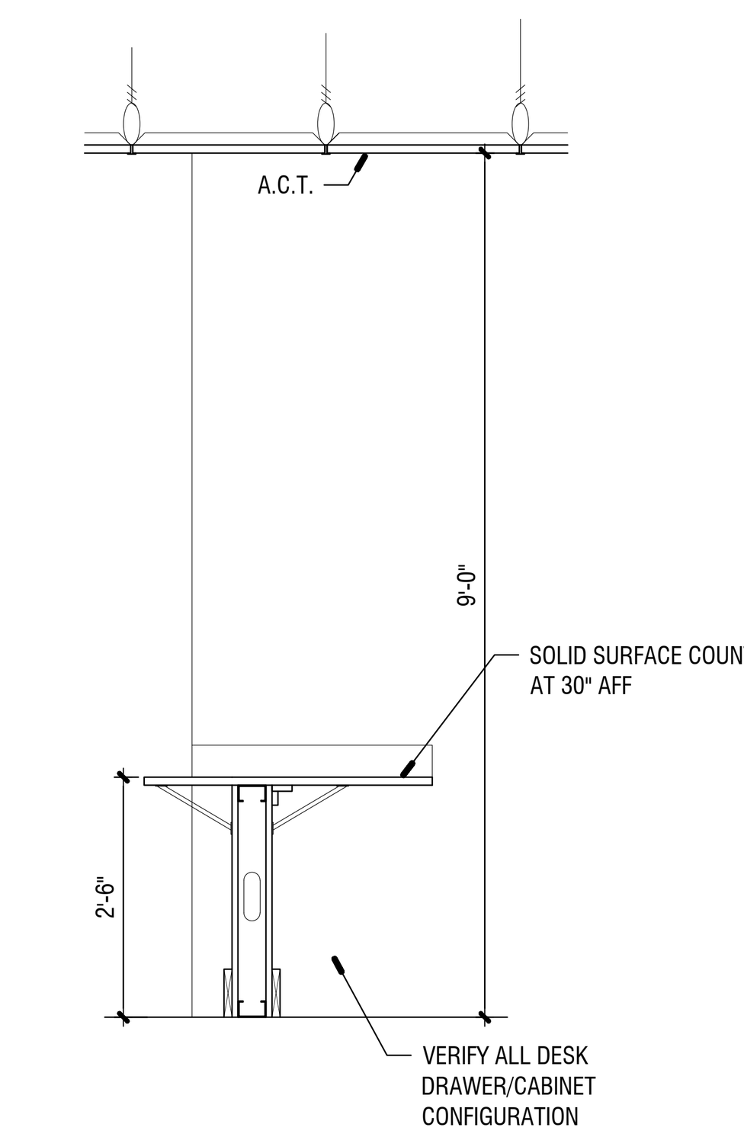
8 BREAK ROOM 116
1/4" = 1'-0"



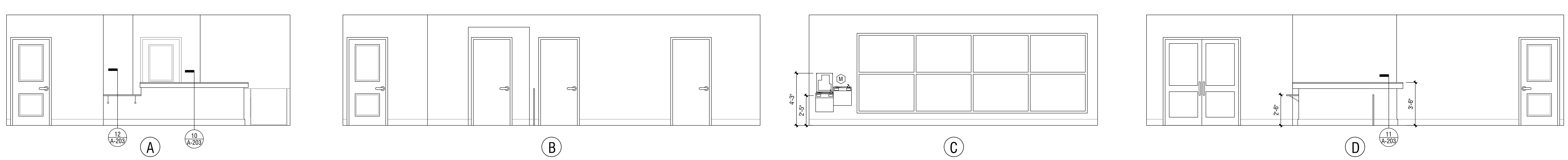
10 RECEPTION DESK DETAIL 1
1/2" = 1'-0"



11 RECEPTION DESK DETAIL 2
1/2" = 1'-0"



12 HANDICAP RECEPTION DESK SECTION
1/2" = 1'-0"



9 RECEPTION 101
1/4" = 1'-0"

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

CONSULTANTS

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email@carterwatkins.com www.carterwatkins.com

SEAL

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

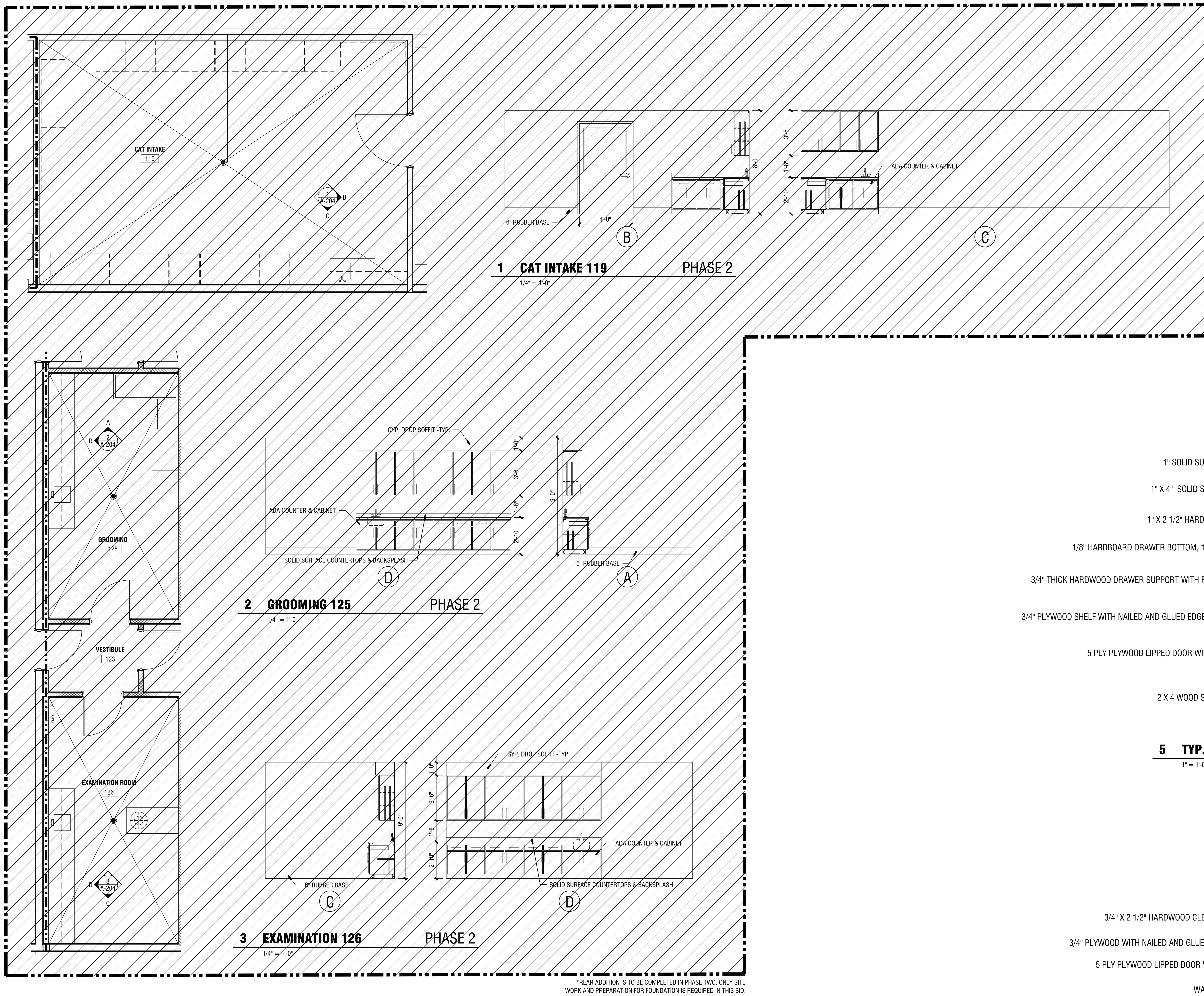
SHEET TITLE:
INTERIOR ELEVATIONS

PRINTED:

NUMBER:
A-203

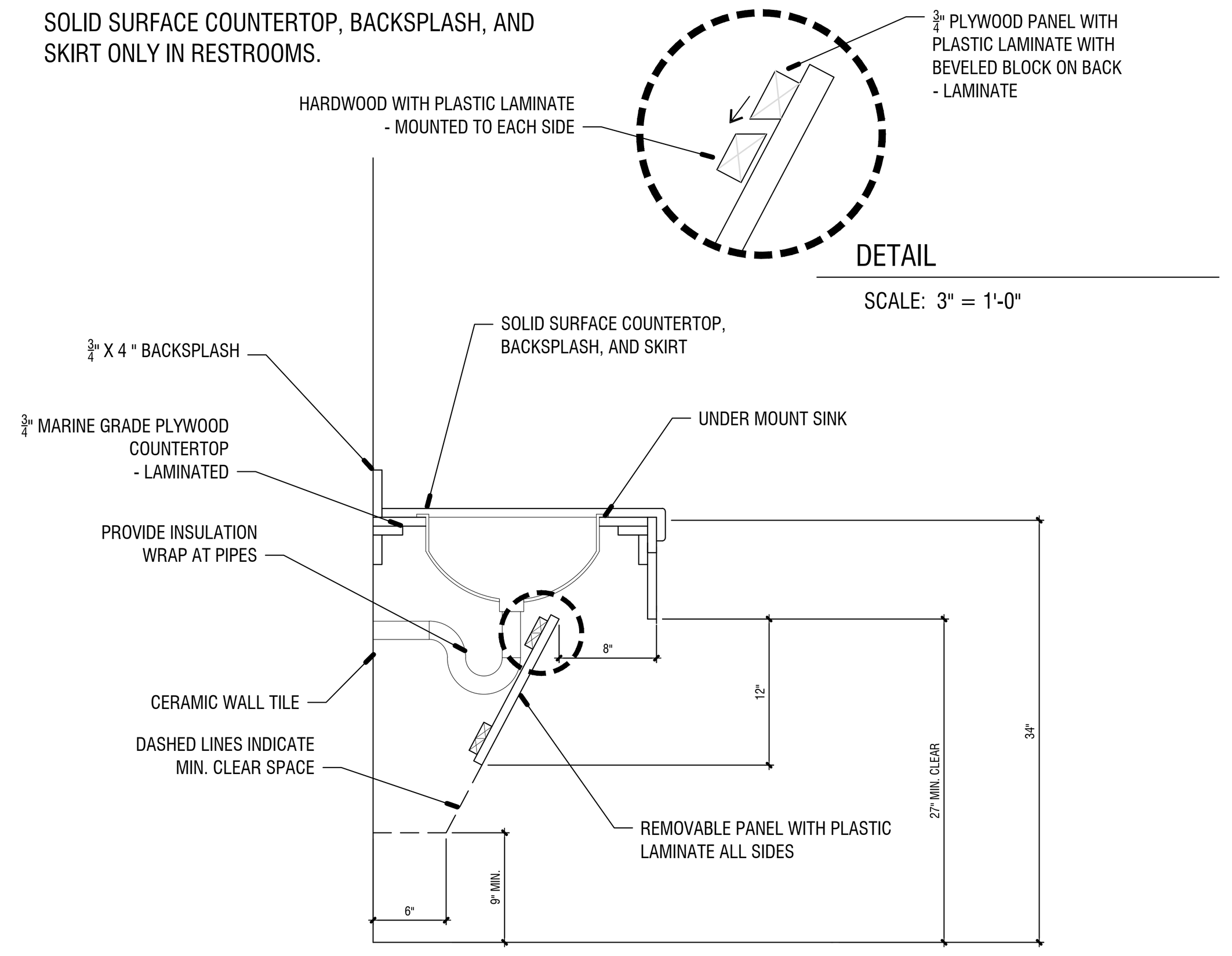
JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

Jul 12 2021 T:\SHARED CAD\Projects 2019\Jackson County Animal Shelter\Sheets\A-203 INTERIOR ELEVATIONS.dwg

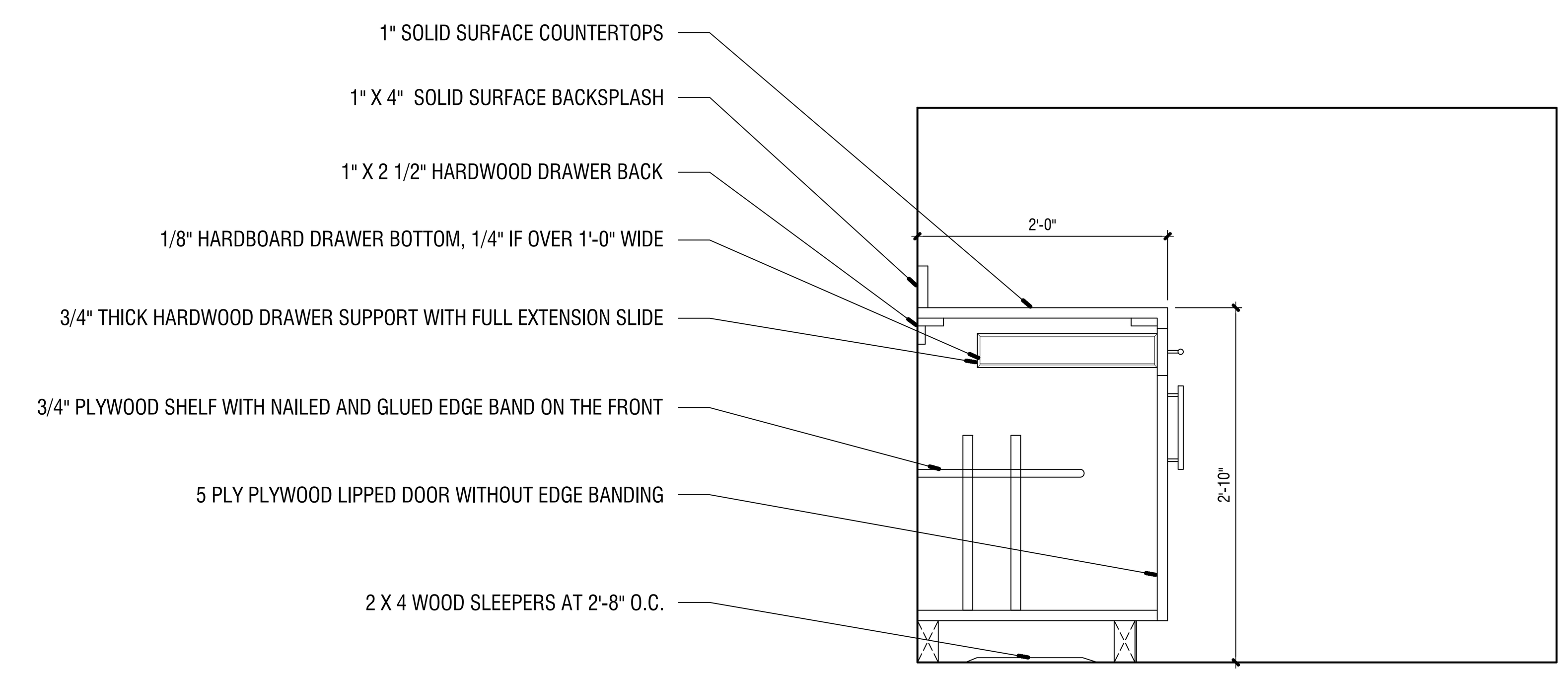


NOTE:

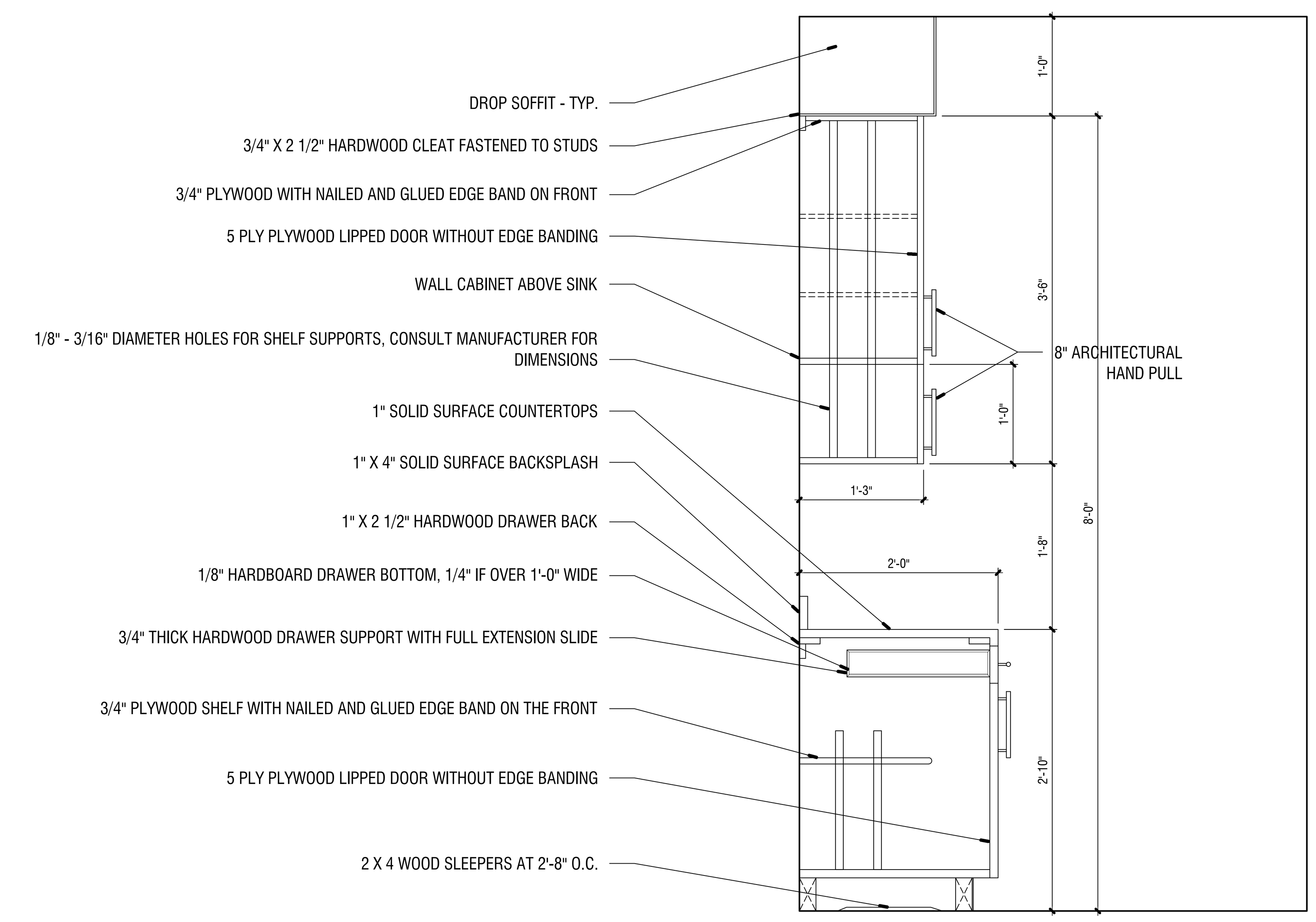
SOLID SURFACE COUNTERTOP, BACKSPLASH, AND SKIRT ONLY IN RESTROOMS.



4 TYP. SINK DETAIL
1" = 1'-0"



5 TYP. CABINET DETAIL
1" = 1'-0"



6 TYP. COUNTER & CABINET DETAIL
1" = 1'-0"

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

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SEAL

STATE OF GEORGIA BENJAMIN MERCER CARTER REGISTERED ARCHITECT

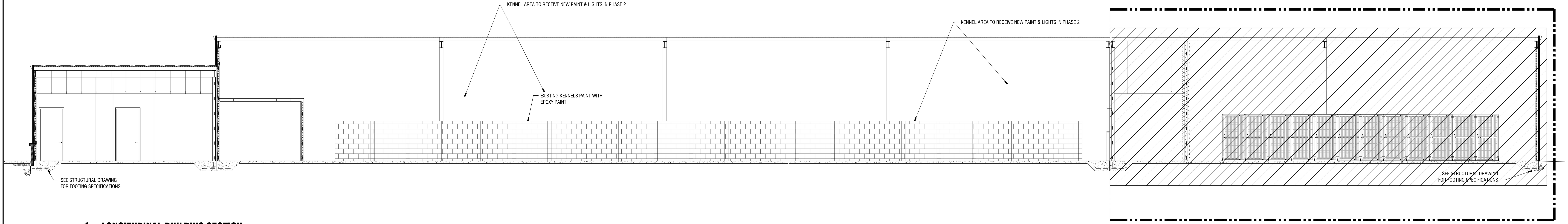
JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: INTERIOR ELEVATIONS CONT.

PRINTED:

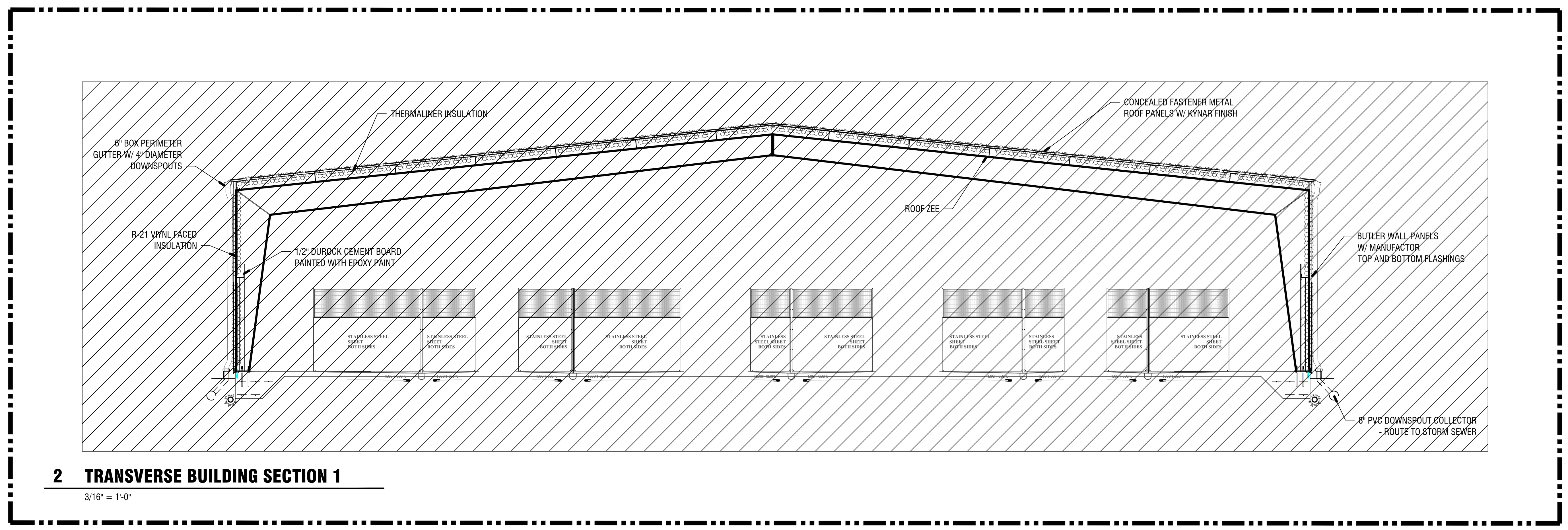
NUMBER: A-204

Jul 12 2021 | T:\SHARED CAD\Projects 2019\Jackson County Animal Shelter\Sheets\A-204 INTERIOR ELEVATIONS CONT..dwg



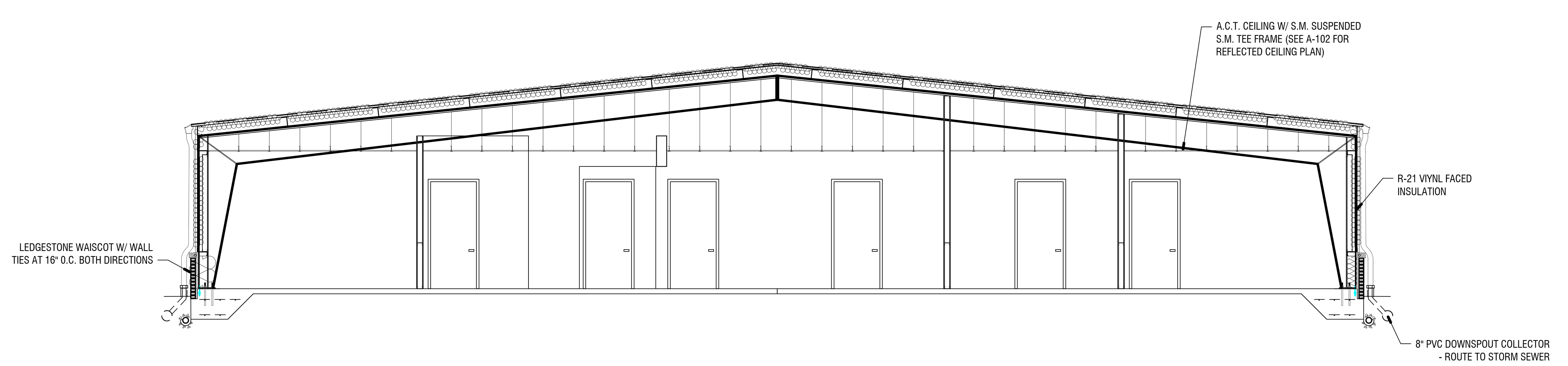
1 LONGITUDINAL BUILDING SECTION

3/16" = 1'-0"



2 TRANSVERSE BUILDING SECTION 1

3/16" = 1'-0"



3 TRANSVERSE BUILDING SECTION 2

3/16" = 1'-0"

Jul 12 2021 | T:\SHARED CAD\Projects 2019\Jackson County Animal Shelter\Sheets\A-300 BUILDING SECTIONS.dwg

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

CONSULTANTS

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SEAL

STATE OF GEORGIA · BENJAMIN MERCER CARTER · REGISTERED ARCHITECT

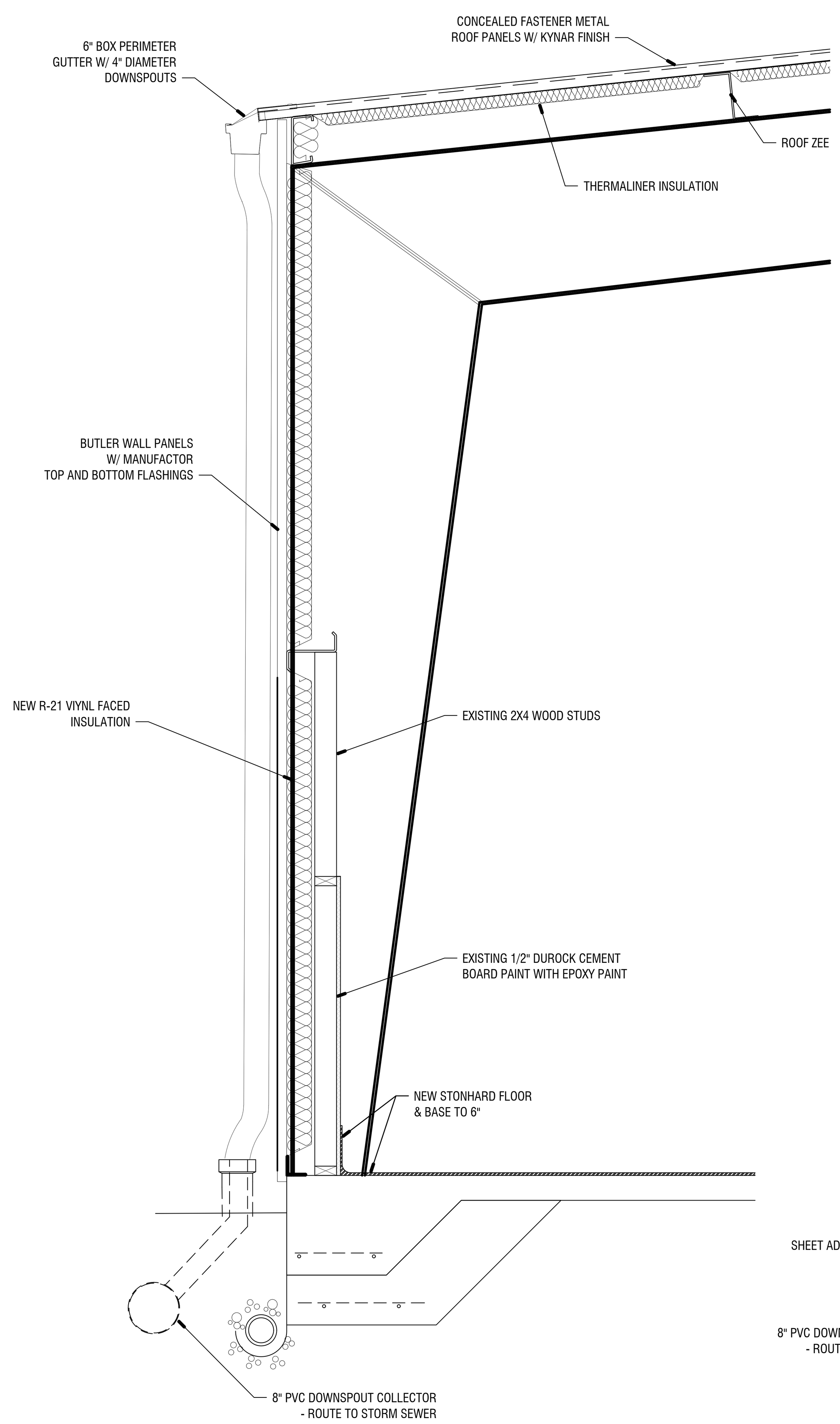
JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: BUILDING SECTIONS

PRINTED:

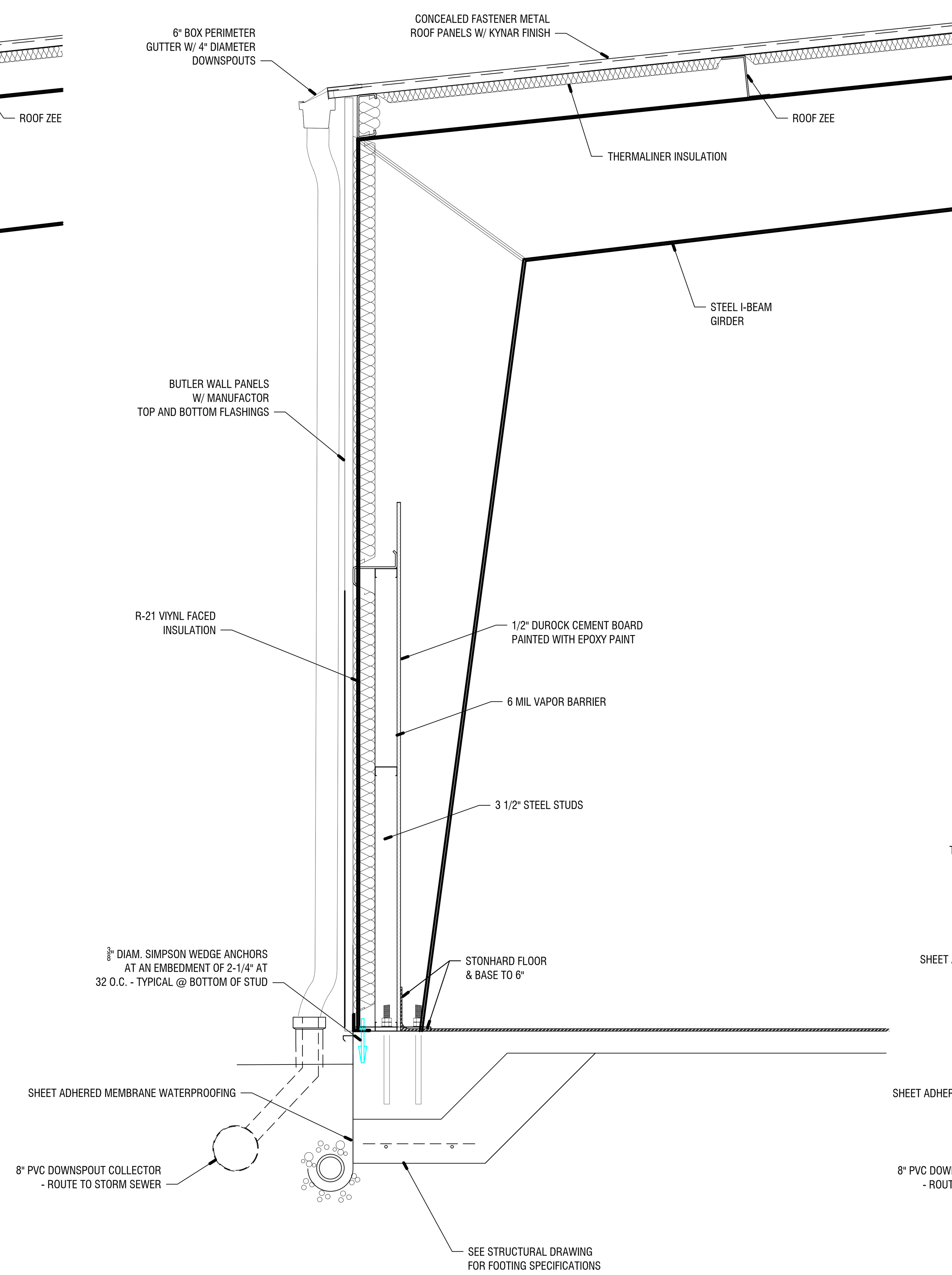
NUMBER: **A-300**

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21



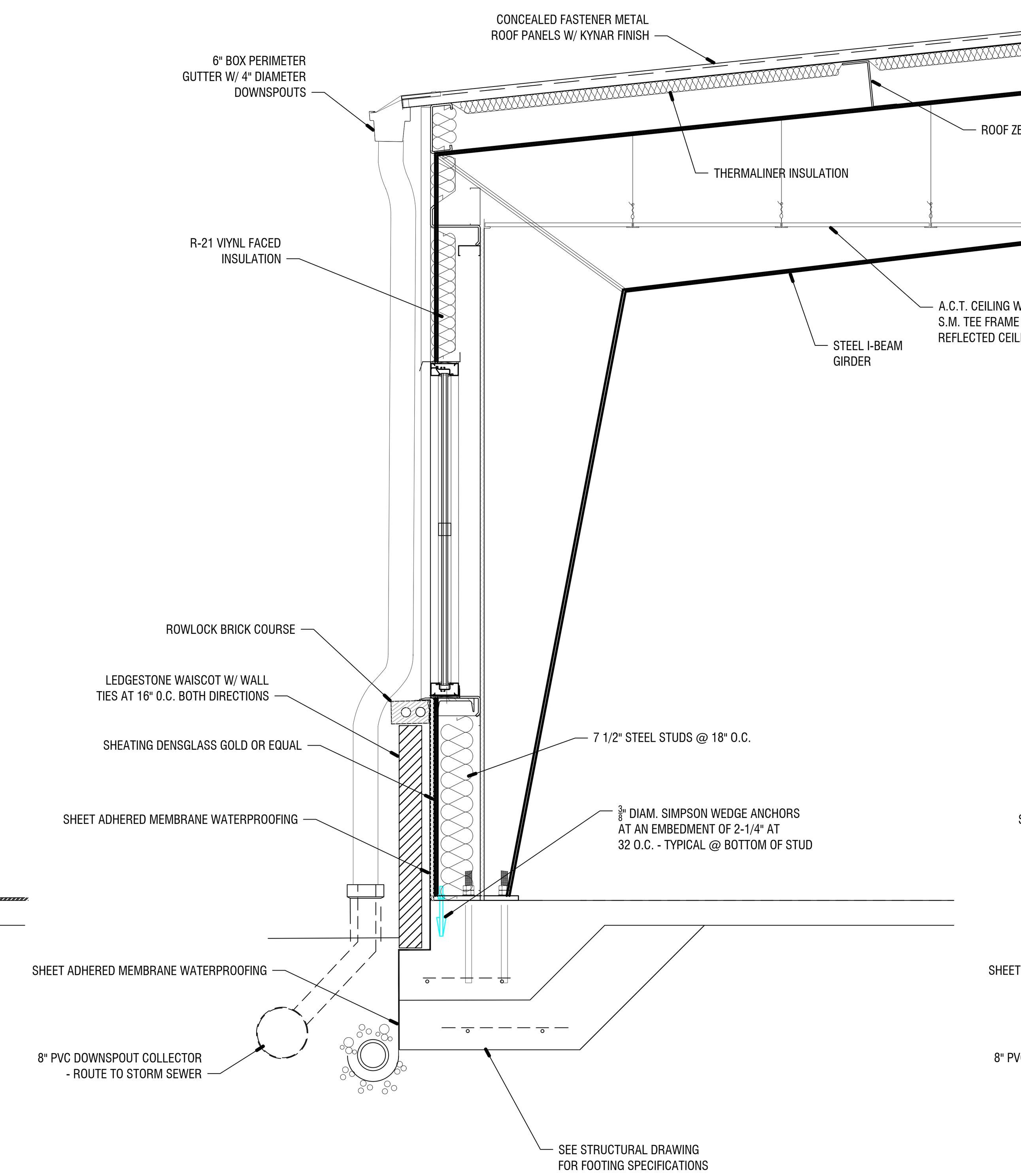
1 EXISTING BUILDING SECTION

3/4" = 1'-0"



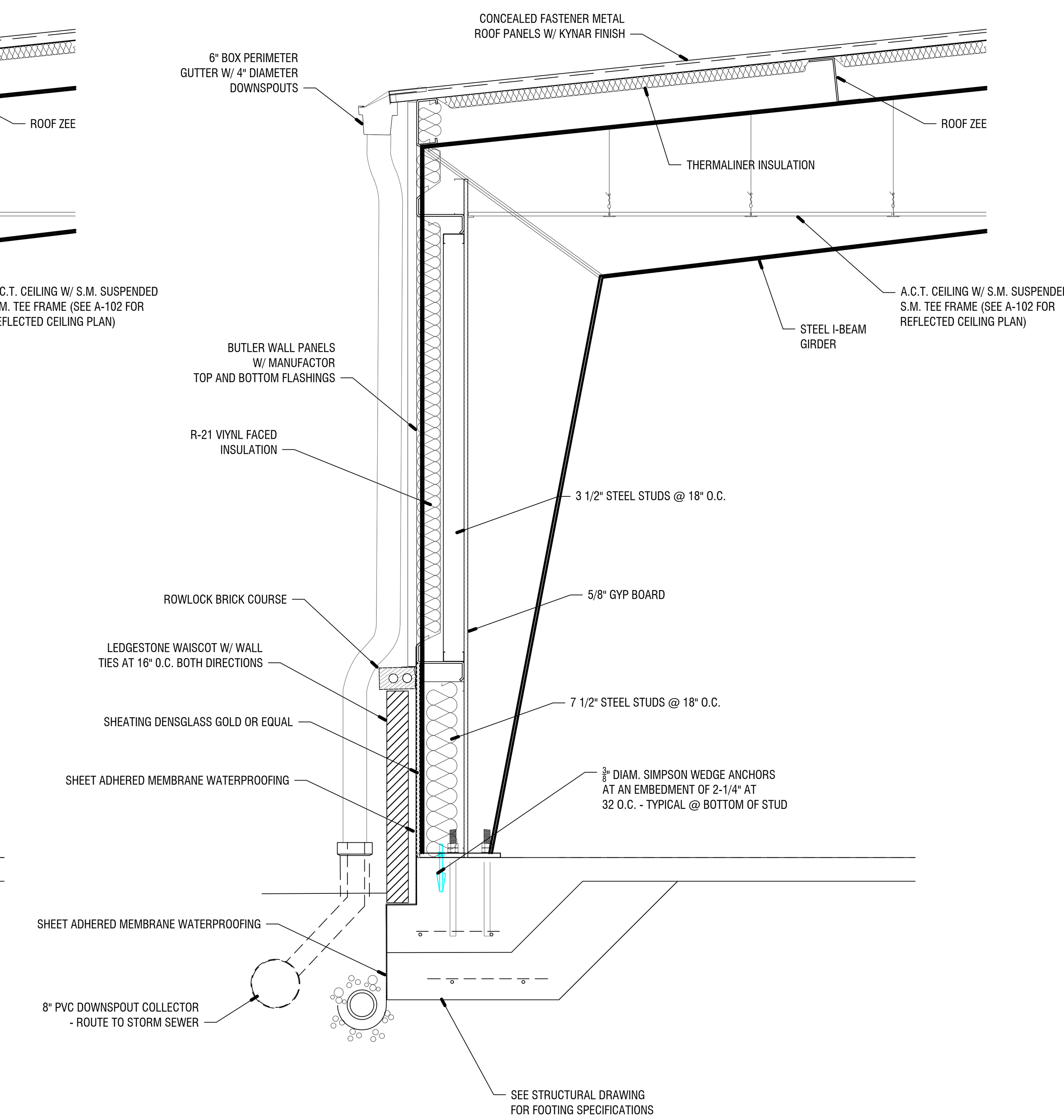
2 REAR ADDITION SECTION

3/4" = 1'-0"



3 FRONT ADDITION SECTION W/ WINDOW

3/4" = 1'-0"



4 FRONT ADDITION SECTION W/ WAINSCOT

3/4" = 1'-0"

Jul 12 2021 | T:\SHARED CAD\Projects 2019\Jackson County Animal Shelter\Sheets\A-301 WALL SECTIONS.dwg

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

CONSULTANTS

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SEAL

STATE OF GEORGIA
BENJAMIN MERCER CARTER
REGISTERED ARCHITECT

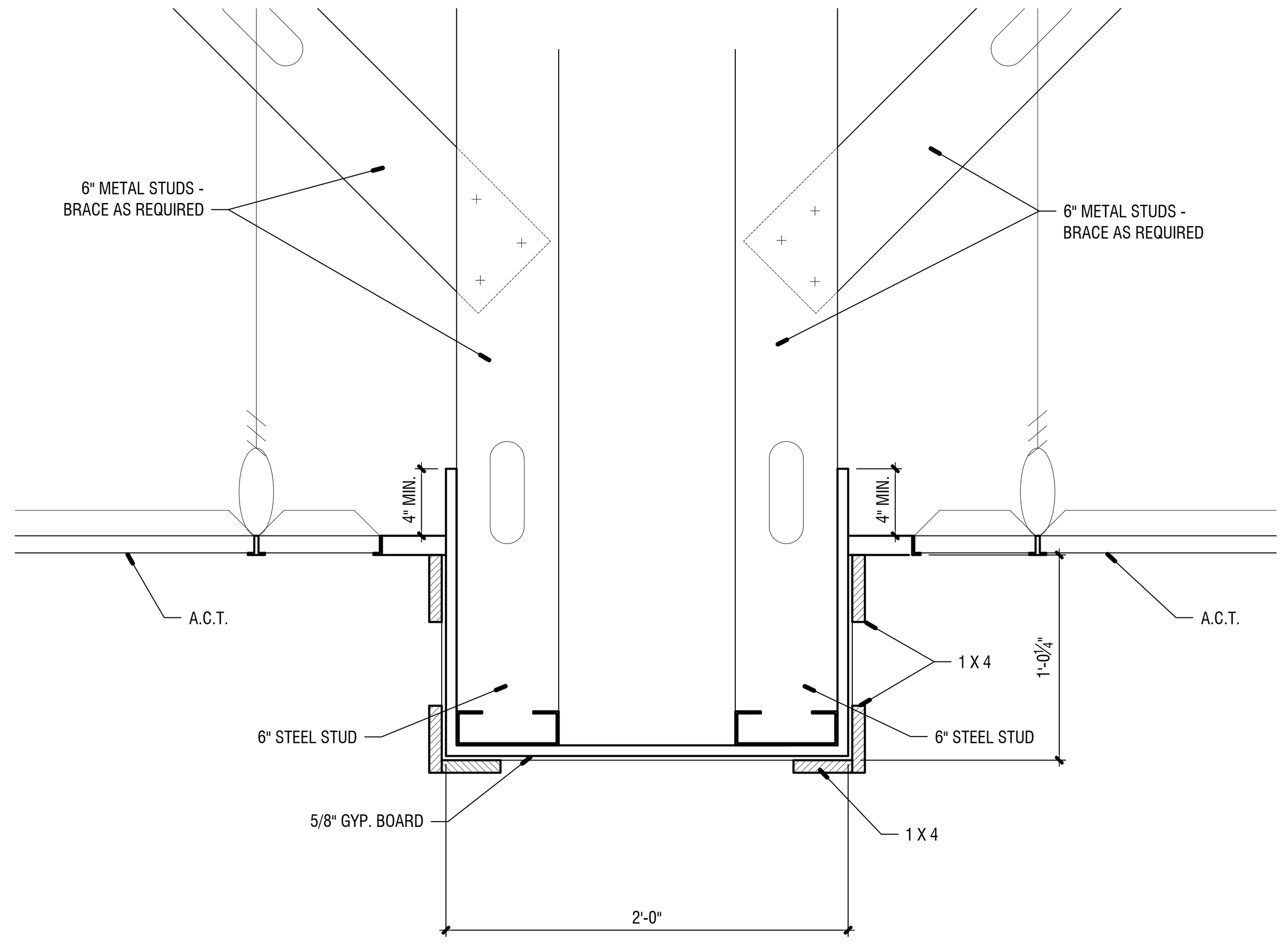
JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
WALL SECTIONS

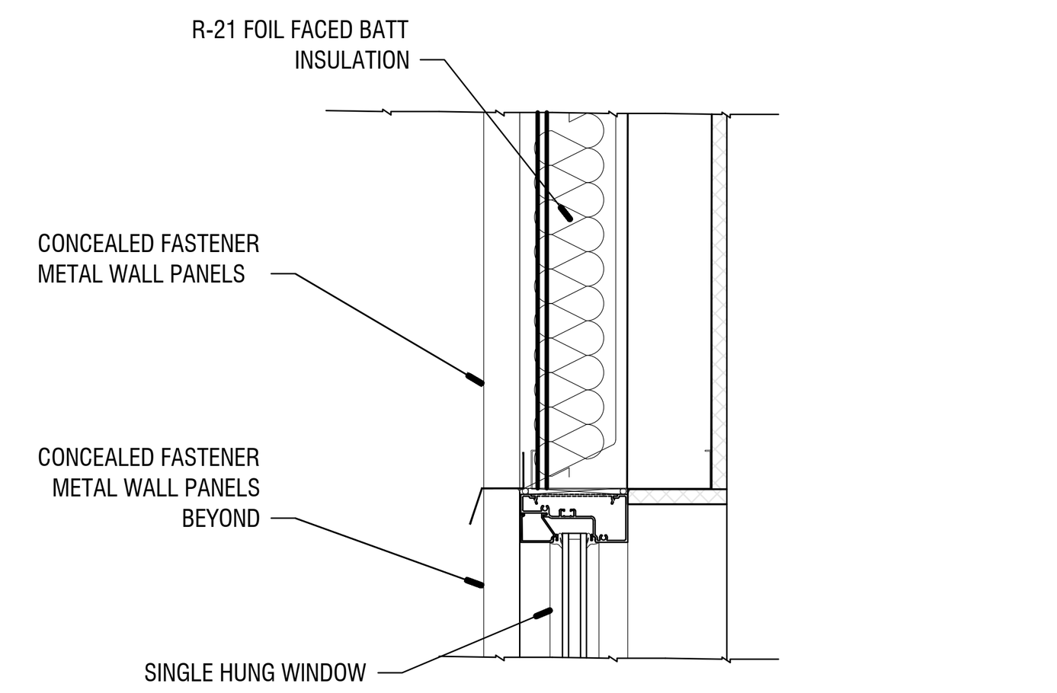
PRINTED:

NUMBER:
A-301

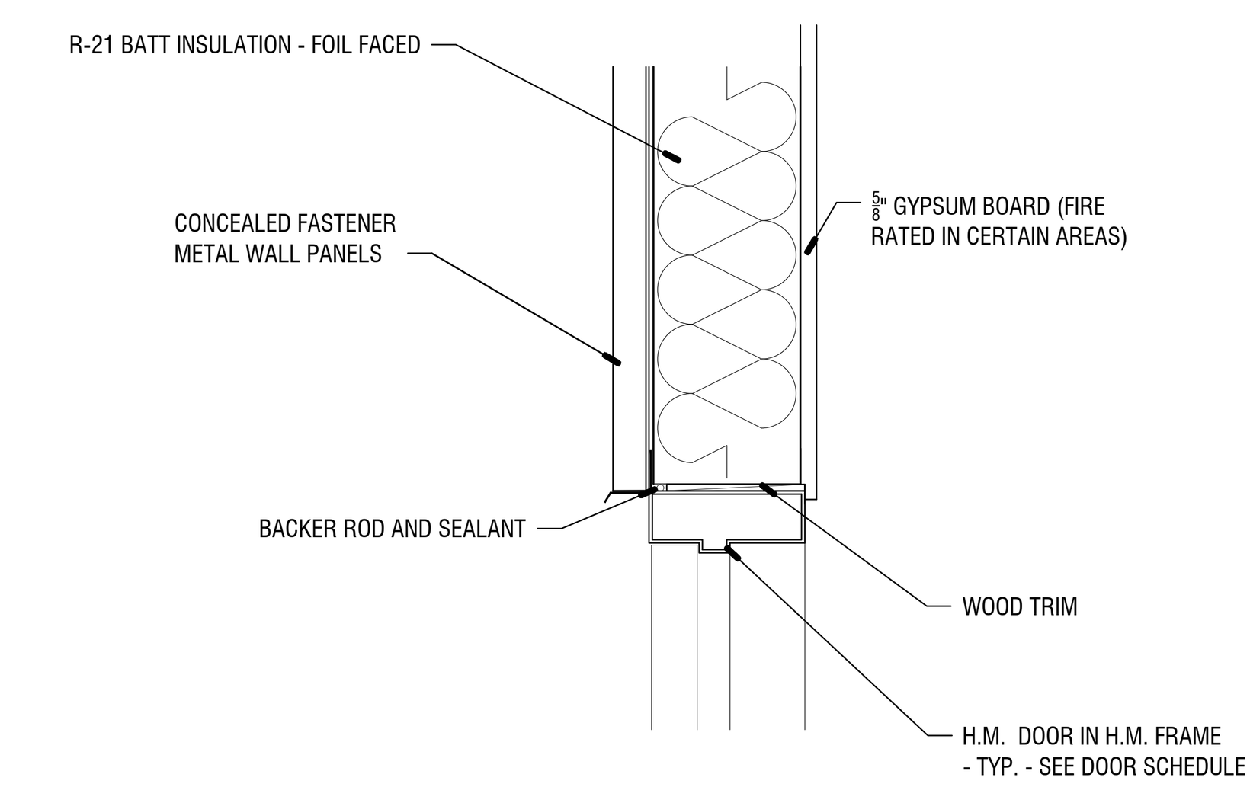
JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21



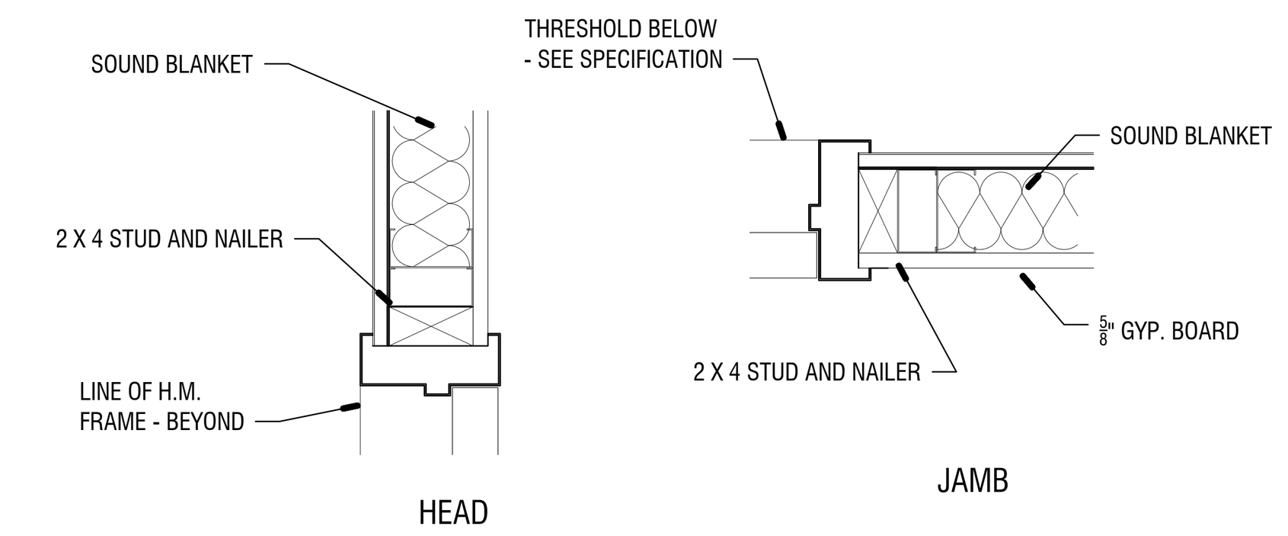
2 INTERIOR SOFFIT
1 1/2" = 1'-0"



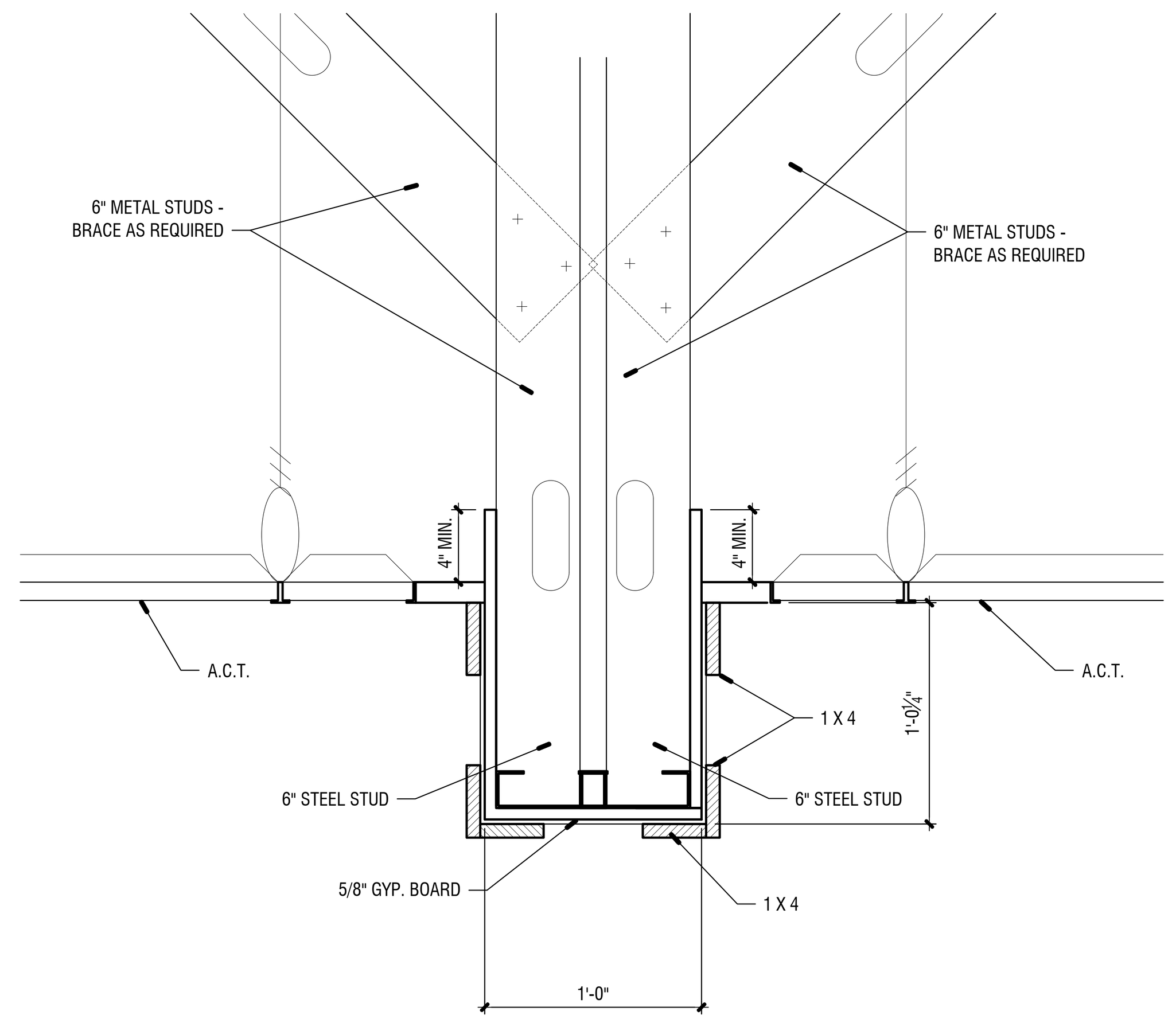
8 WINDOW HEAD - TYPICAL
1 1/2" = 1'-0"



11 EXTERIOR DOOR HEAD - TYPICAL
1 1/2" = 1'-0"

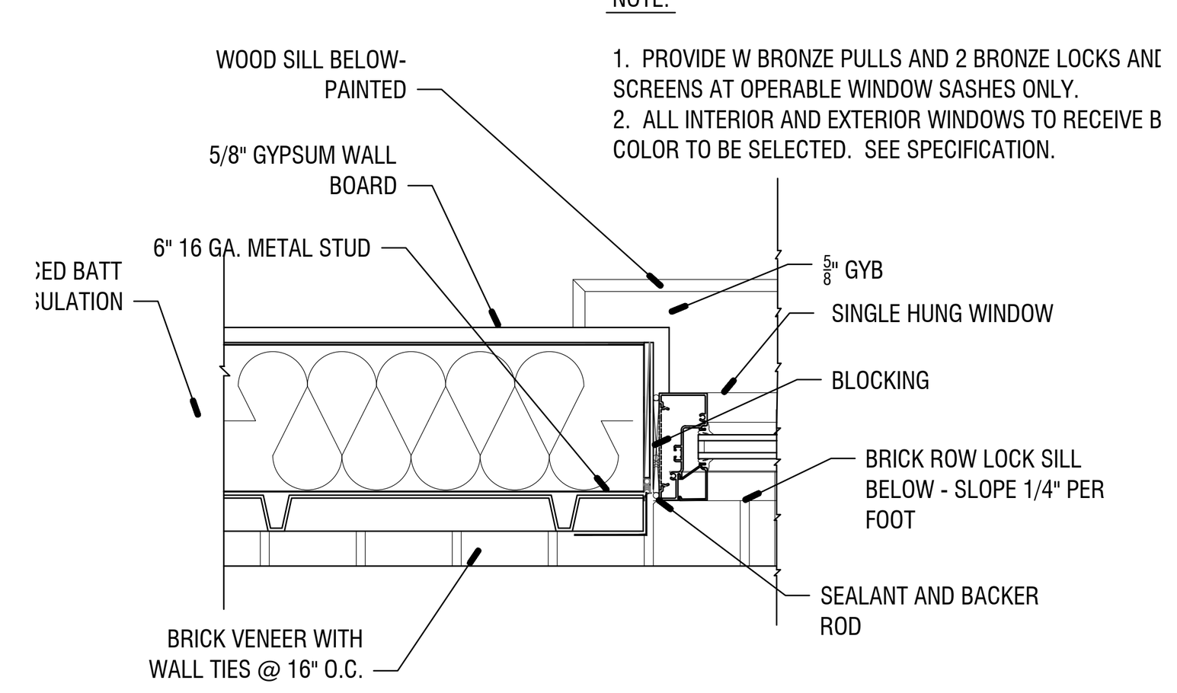


5 INTERIOR DOOR HEAD & JAMB
1 1/2" = 1'-0"

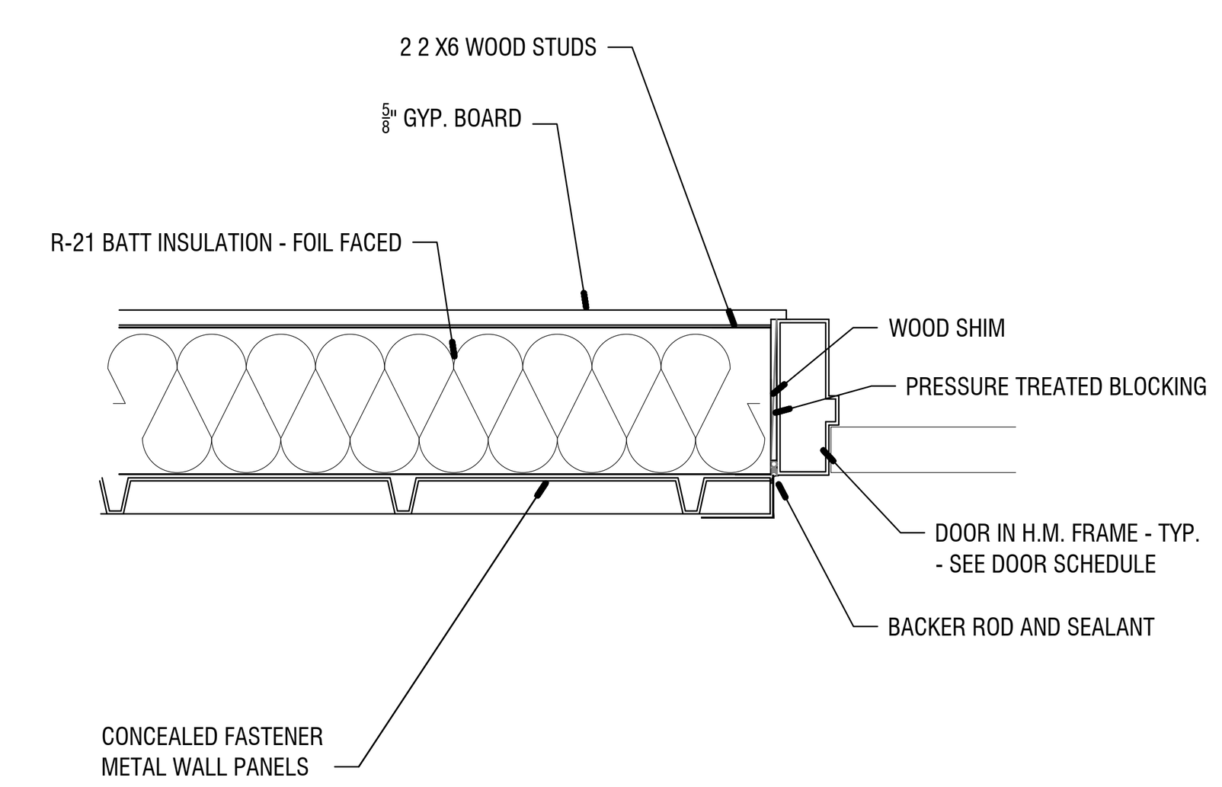


1 BULKHEAD SECTION
1 1/2" = 1'-0"

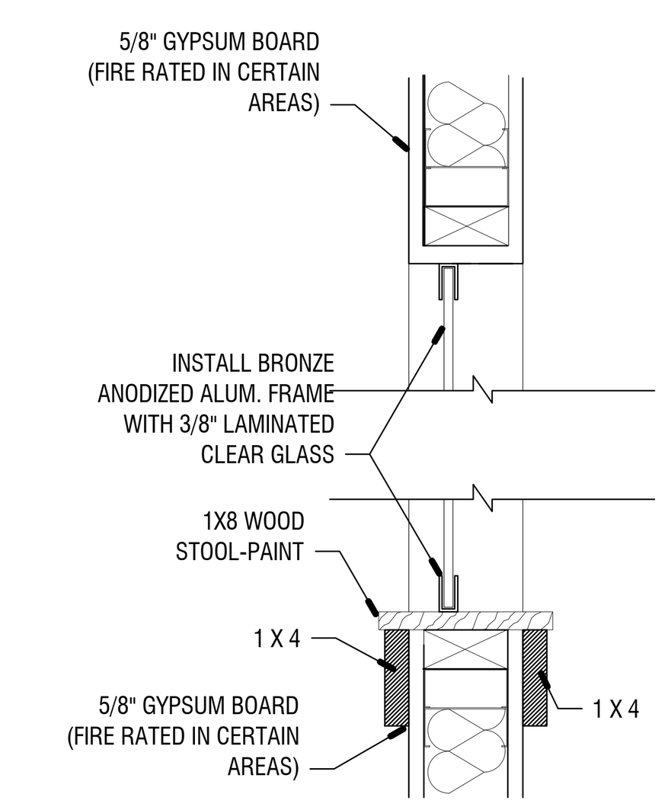
NOTE:
1. PROVIDE W BRONZE PULLS AND 2 BRONZE LOCKS AND SCREENS AT OPERABLE WINDOW SASHES ONLY.
2. ALL INTERIOR AND EXTERIOR WINDOWS TO RECEIVE B COLOR TO BE SELECTED. SEE SPECIFICATION.



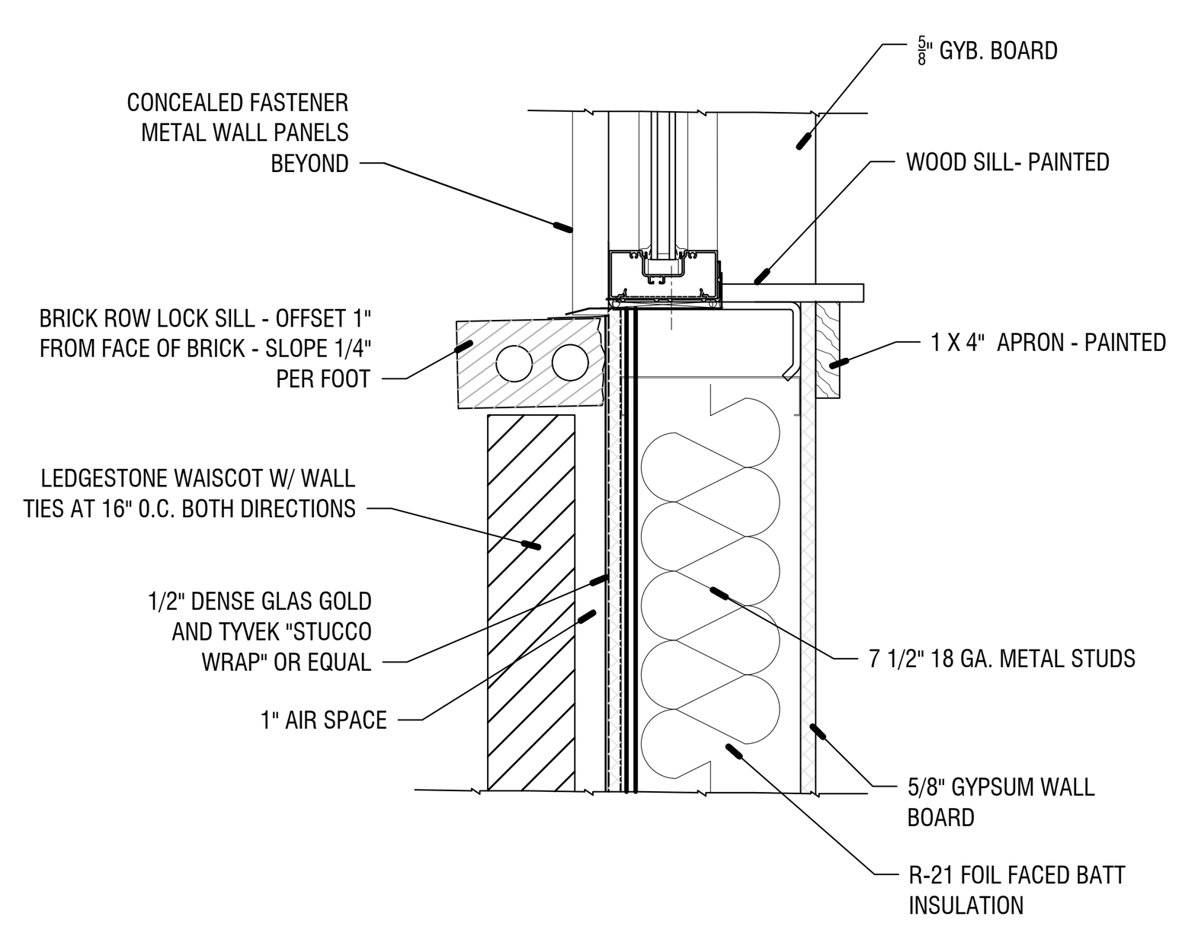
9 WINDOW JAMB - TYPICAL
1 1/2" = 1'-0"



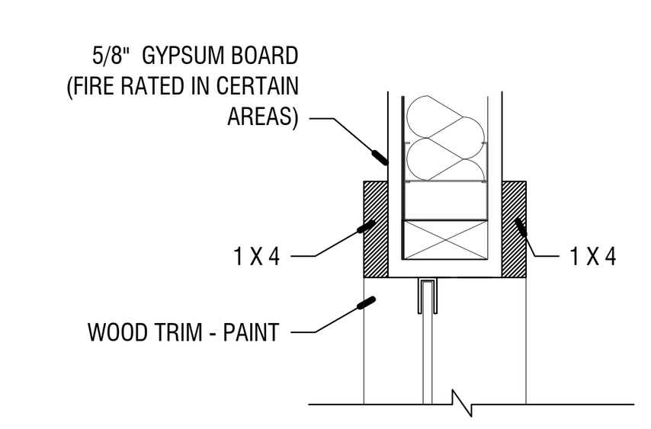
12 EXTERIOR DOOR JAMB - TYPICAL
1 1/2" = 1'-0"



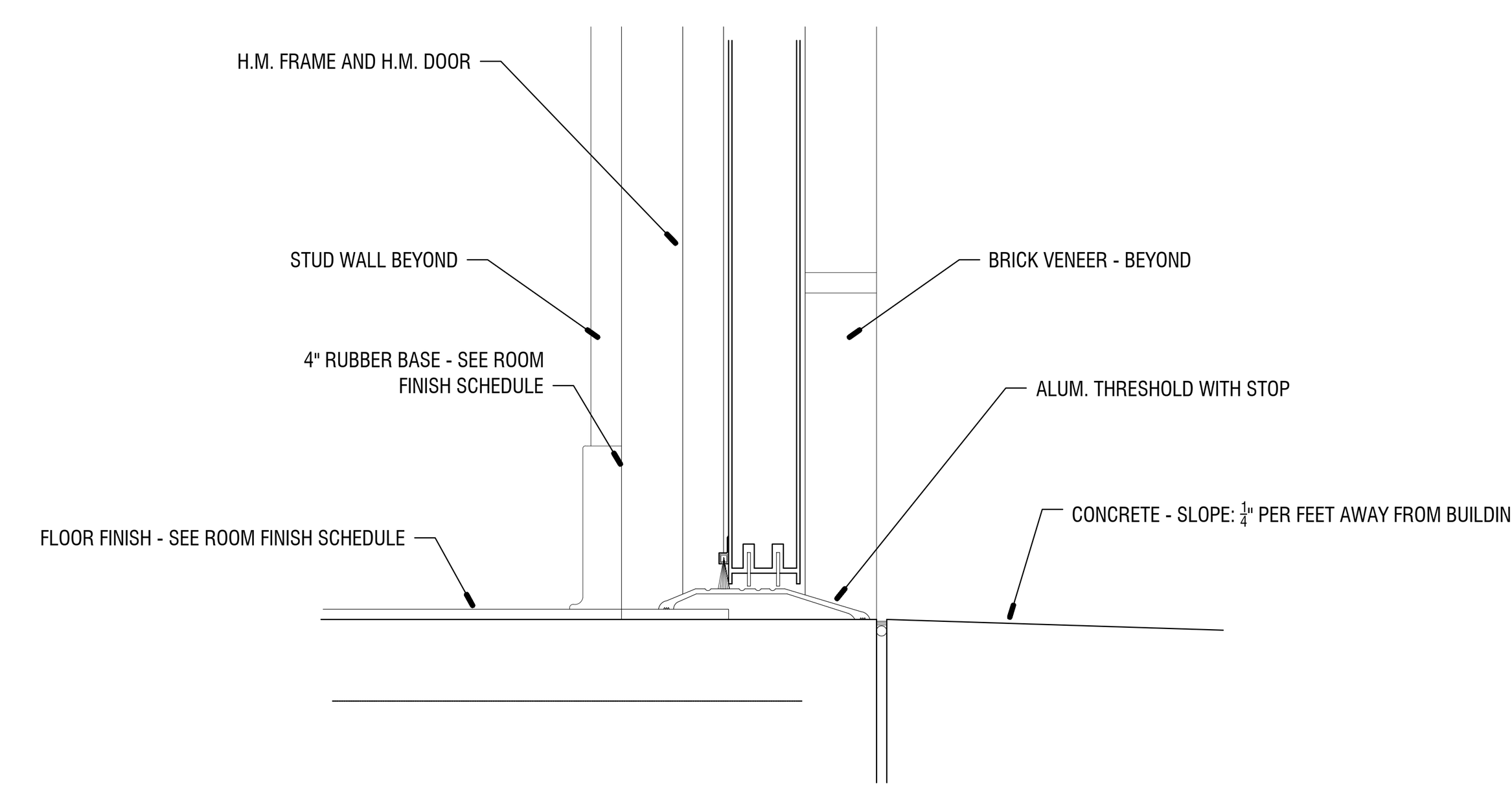
6 INTERIOR WINDOW HEAD & SILL
1 1/2" = 1'-0"



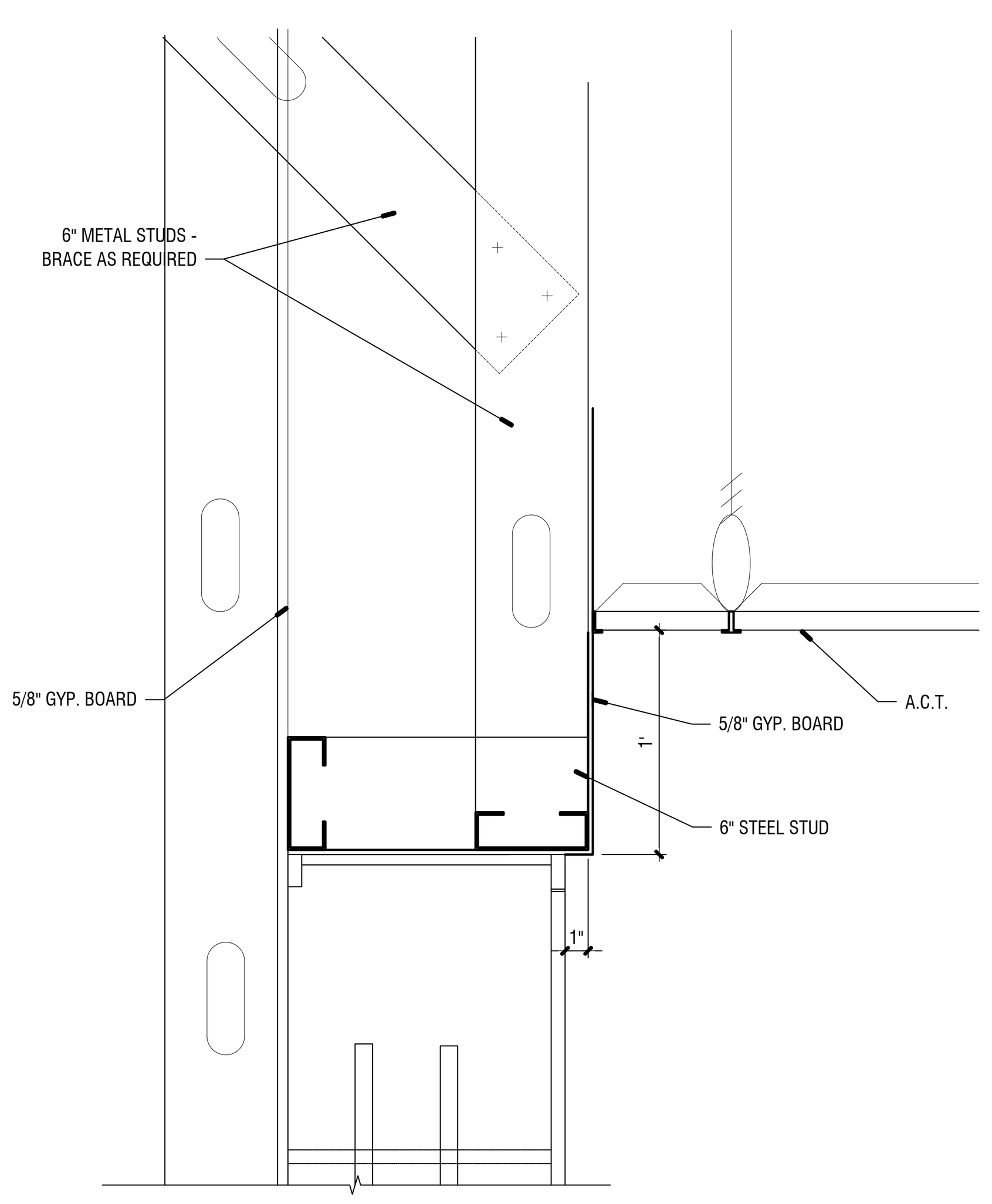
10 WINDOW SILL
1 1/2" = 1'-0"



7 INTERIOR WINDOW JAMB
1 1/2" = 1'-0"



13 EXTERIOR DOOR THRESHOLD - TYPICAL
1 1/2" = 1'-0"



3 SOFFIT ABOVE CABINETS
1 1/2" = 1'-0"

NOTE: SUBMIT COMPLETE, ENGINEERED, DETAILED, DIMENSIONED STEEL STUD DRAWINGS FOR THE ENTIRE BUILDING. SHOW ALL SIZES, GAUGES, BRACING, SUPPORT, HEADERS, JAMBS, SILLS, ETC. FOR ALL WALLS, FRAMED OPENINGS, SOFFITS, AND ALL OTHER BUILDING ELEMENTS.

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

Jul 12 2021 | T:\SHARED CAD\Projects 2019\Jackson County Animal Shelter\Sheets\A-302 DOOR, WINDOW & BULKHEAD DETAILS.dwg

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

CONSULTANTS

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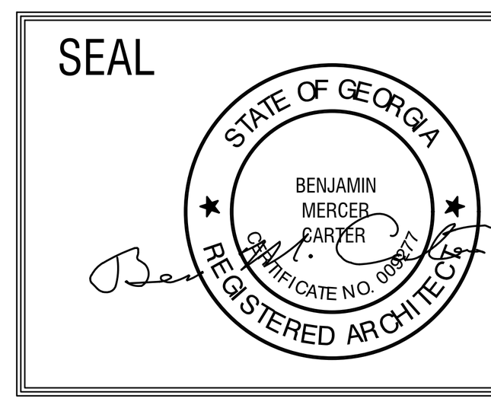
SEAL

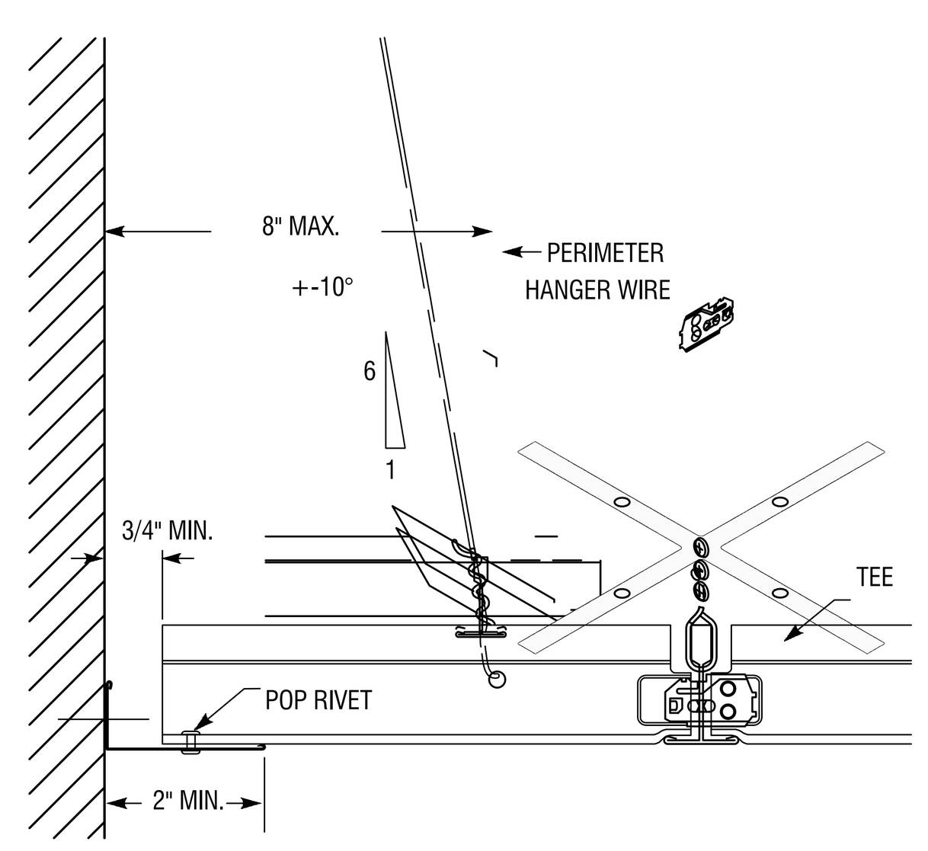


JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

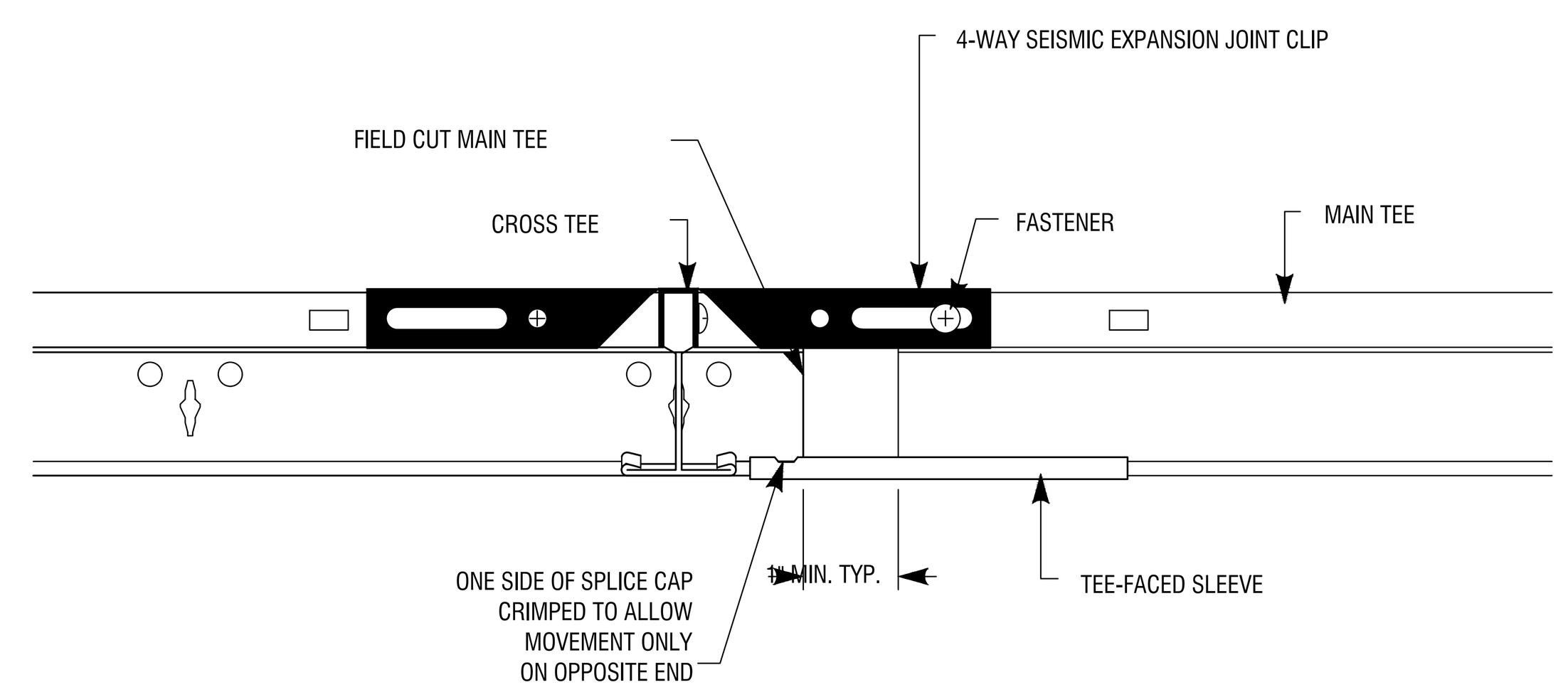
SHEET TITLE: DOOR, WINDOW & BULKHEAD DETAILS

PRINTED:

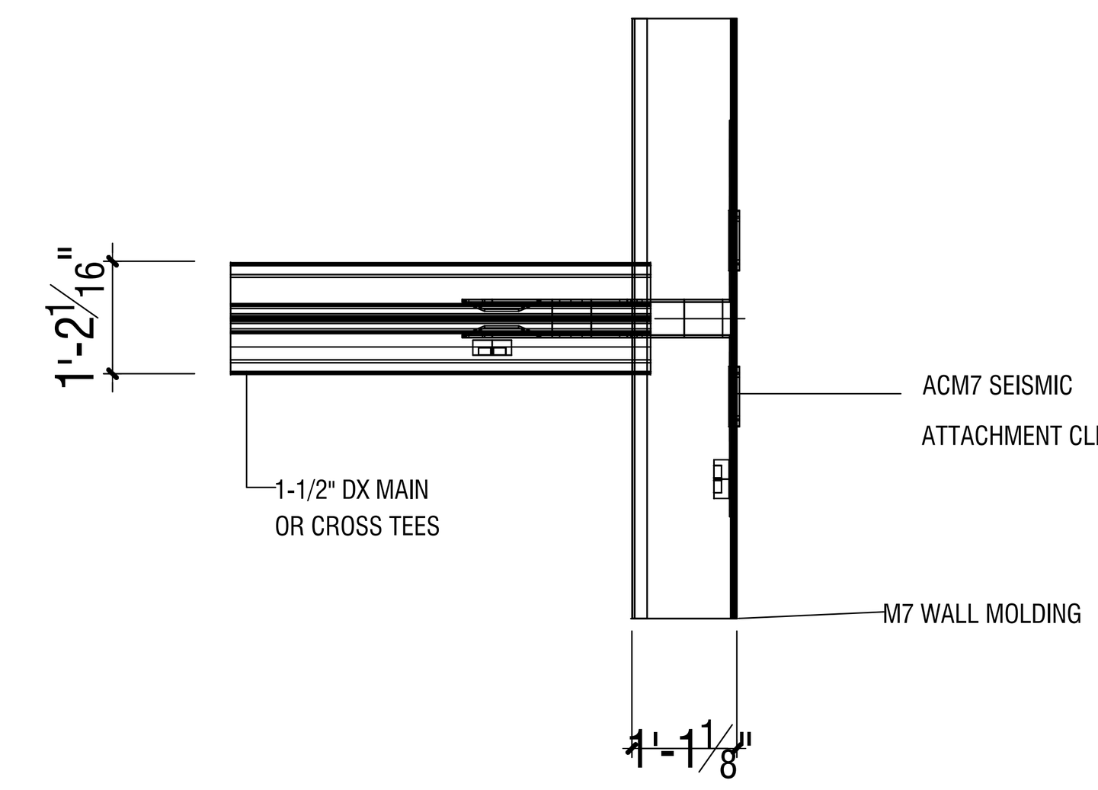
NUMBER: A-302



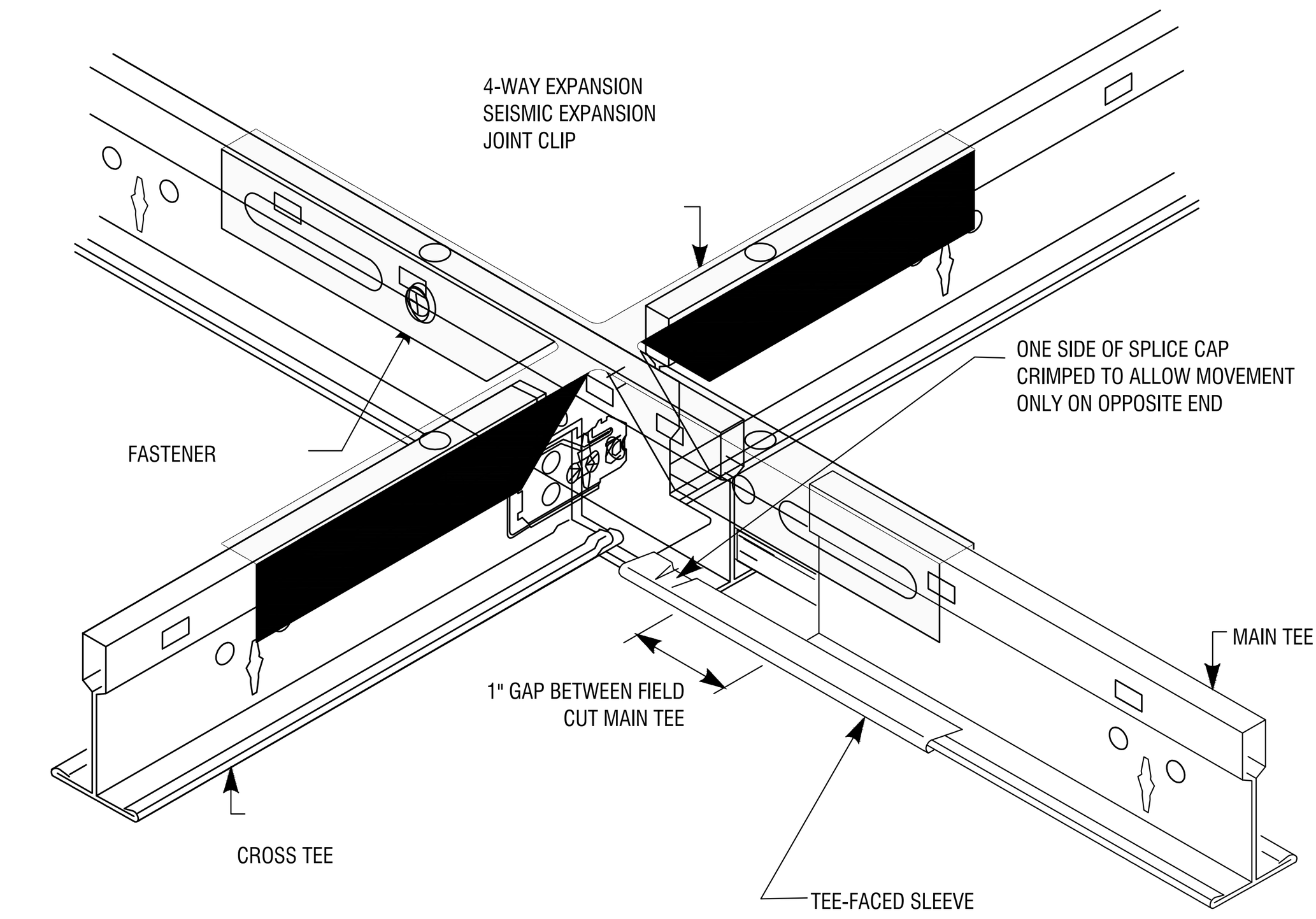
5 WALL MOLDING FIXED
1/2" = 1'-0"



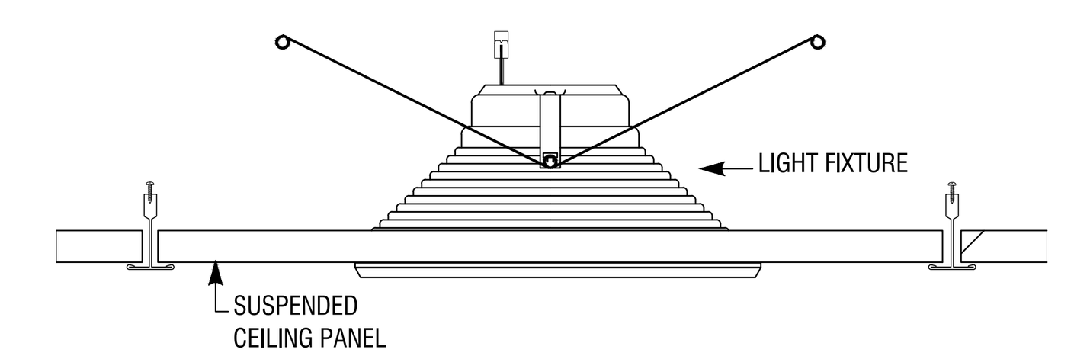
3 EXPANSION JOINT CLIP
1/2" = 1'-0"



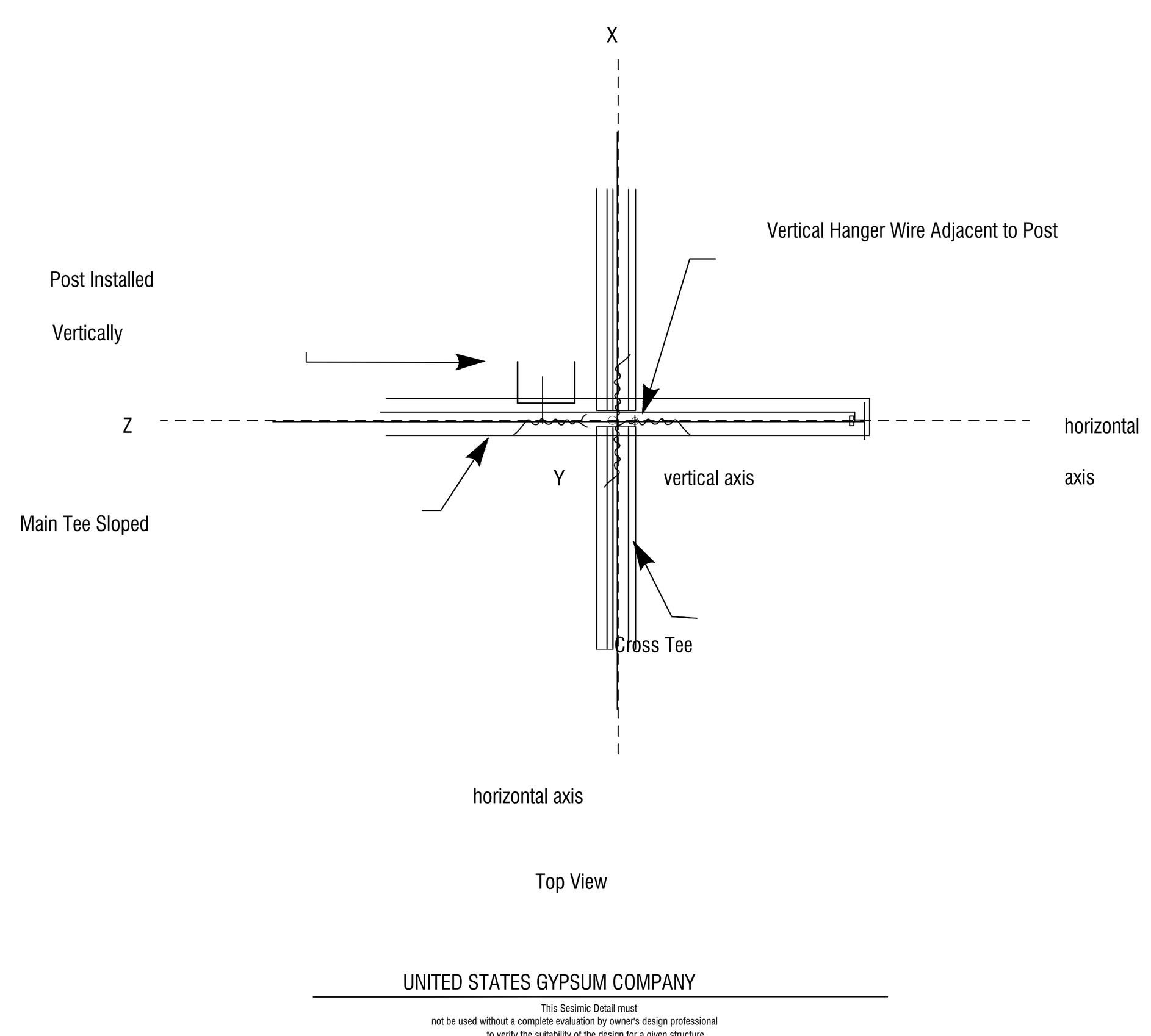
2 CLIP-FLOATING AT WALL
1/2" = 1'-0"



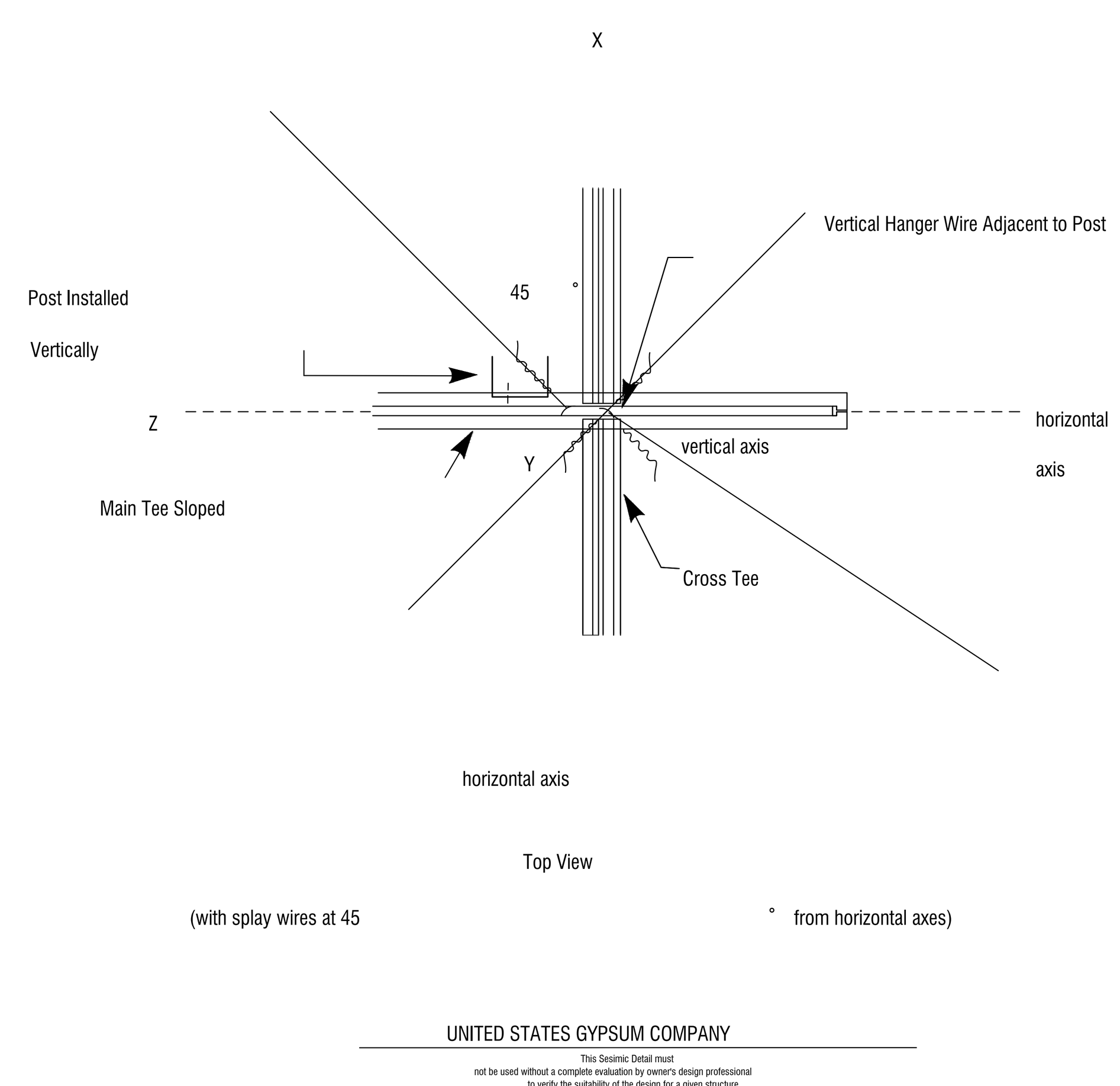
1 ATC 4-WAY CLIP
1/2" = 1'-0"



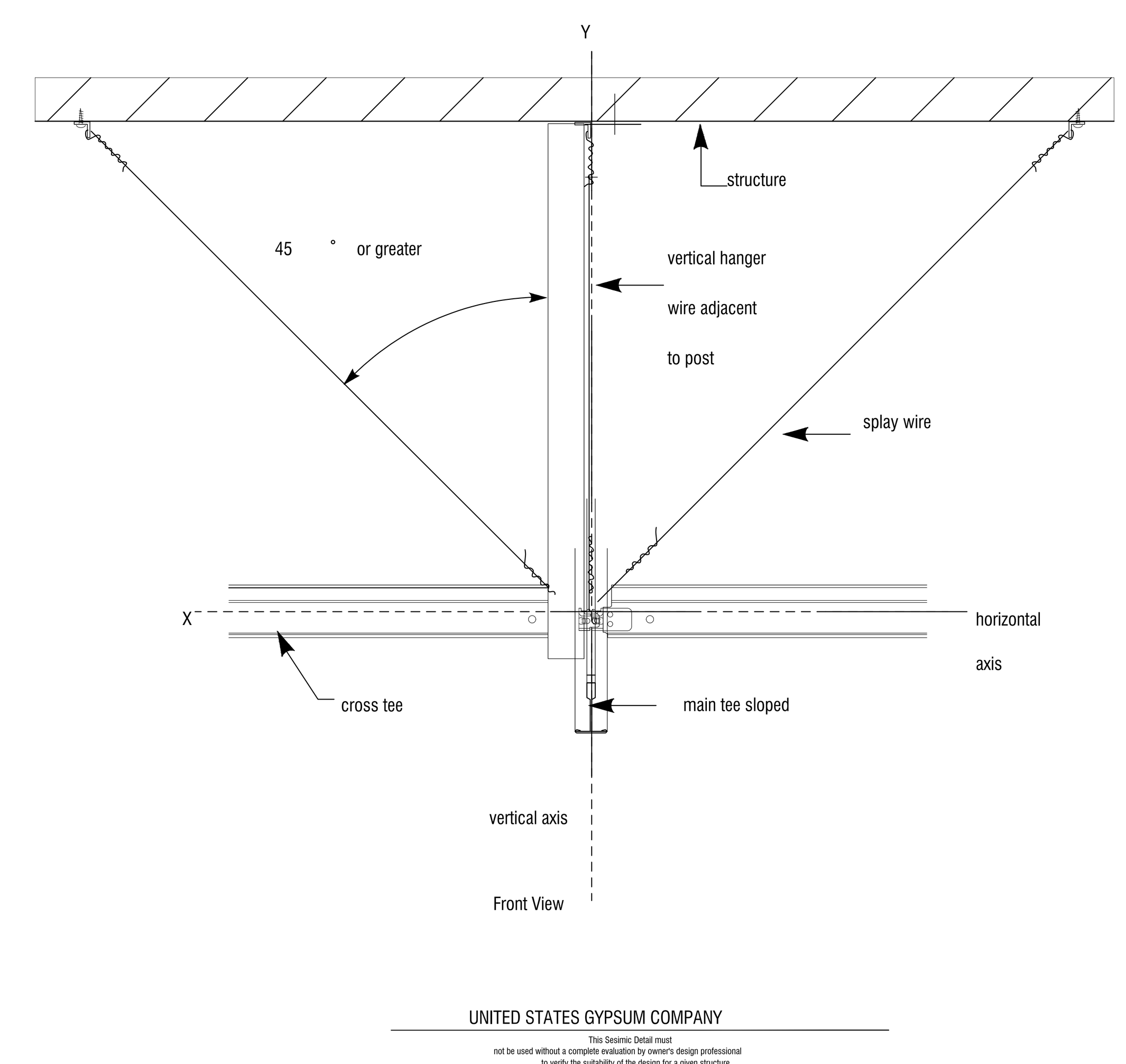
4 RECESSED CAN LIGHT MOUNTING
1/2" = 1'-0"



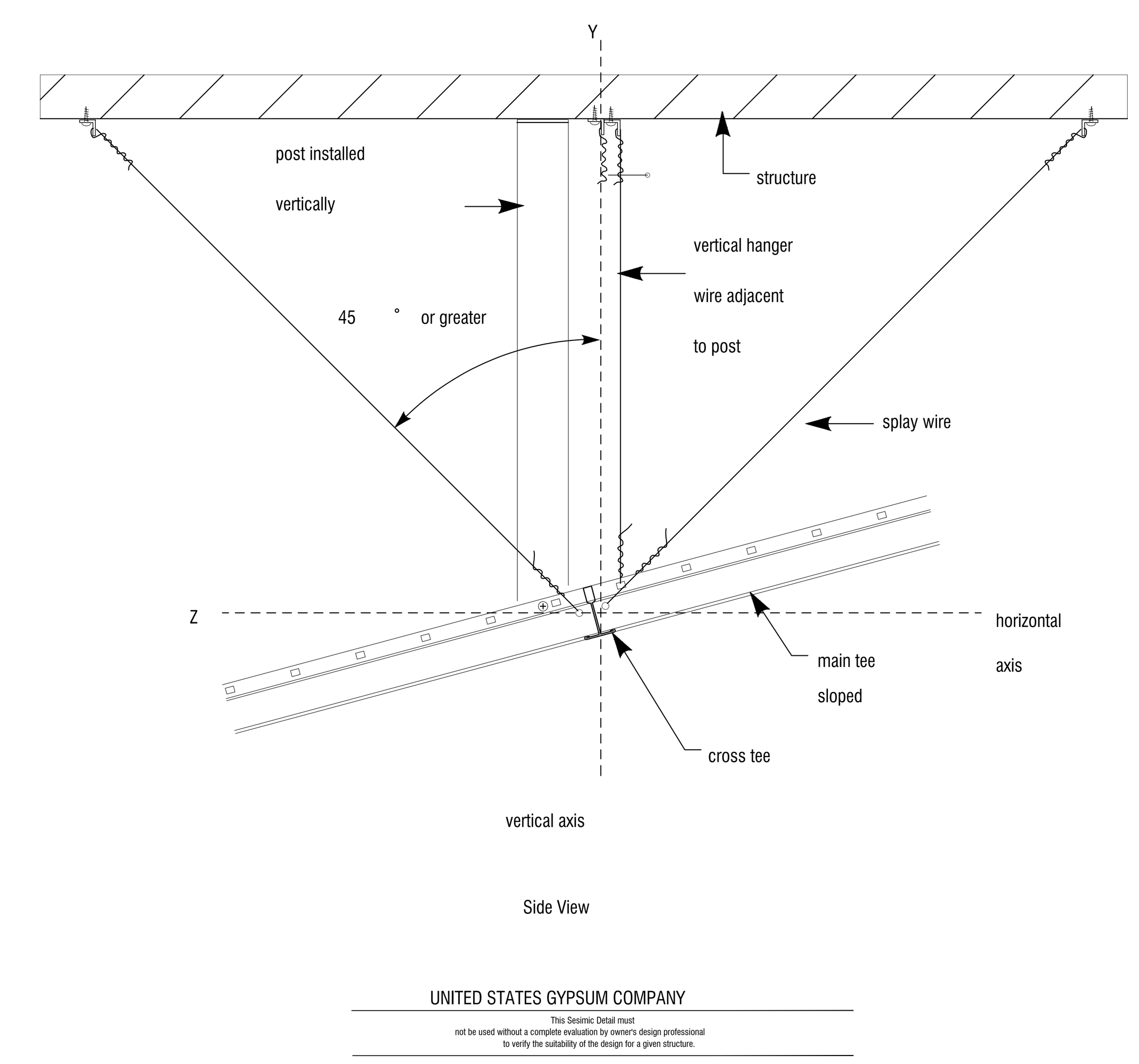
6 HANGER WIRE-HORIZONTAL AXIS TOP VIEW
1/2" = 1'-0"



7 HANGER WIRE-HORIZONTAL AXIS TOP VIEW AT 45
1/2" = 1'-0"



8 HANGER WIRE-VERTICAL AXIS FRONT VIEW
1/2" = 1'-0"



9 HANGER WIRE-VERTICAL AXIS SIDE VIEW
1/2" = 1'-0"

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

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SEAL

STATE OF GEORGIA – BENJAMIN MERCER CARTER – REGISTERED ARCHITECT

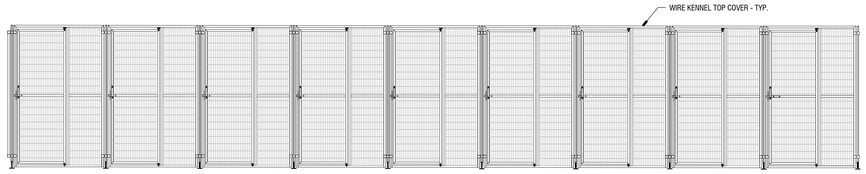
JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

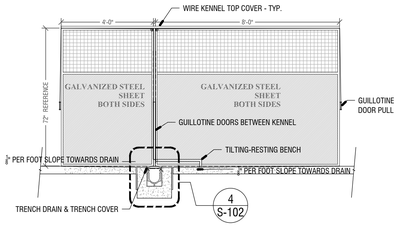
SHEET TITLE:
CEILING GRID DETAILS

PRINTED:

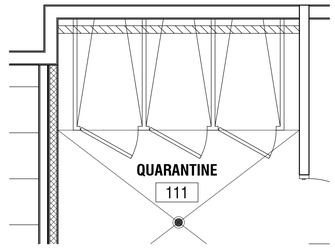
NUMBER:
A-303

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 07/12/21

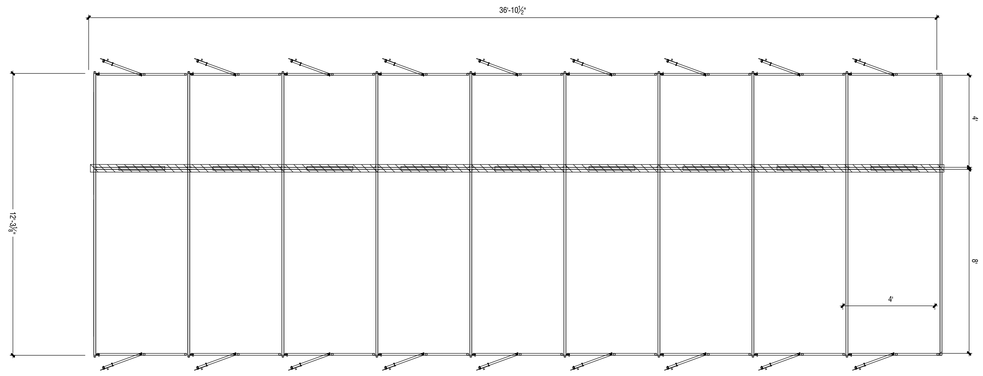




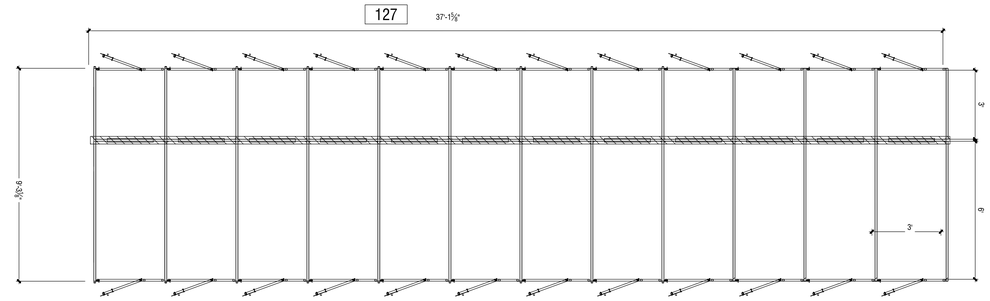
4 KENNEL SECTION
3/8"=1'-0"



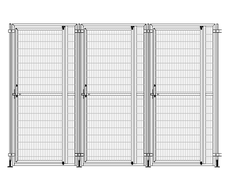
2 QUARANTINE KENNEL PLAN
3/8"=1'-0"

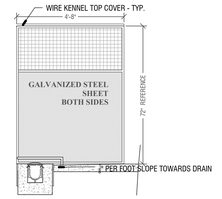


DOG KENNELS
127



1 KENNEL PLAN
3/8"=1'-0"





5 QUARANTINE KENNEL SECTION
3/8"=1'-0"

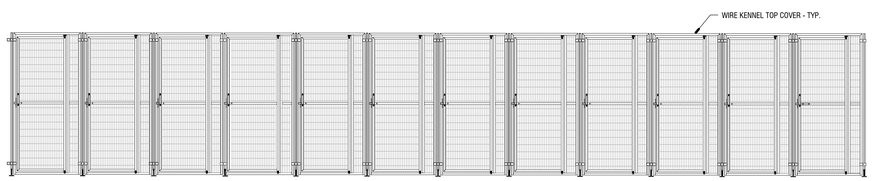
EQUIPMENT LIST - SEE PROJECT MANUAL FOR DETAILED EQUIPMENT SPECIFICATION				
KEY	ITEM	DESCRIPTION	SUPPLIED BY:	INST.BY:
A	MASON COMPANY SANI-KENNEL OR EQ.	3' x 3' BACKED UP TO 3' X 6' MODULES W/ GUILLOTINE DOORS & SIDE PANELS. (36 TOTAL UNITS)	G.C	G.C.
B	MASON COMPANY SANI-KENNEL OR EQ.	4' x 4' BACKED UP TO 4' X 8' MODULES W/ GUILLOTINE DOORS & SIDE PANELS. (18 TOTAL UNITS)	G.C	G.C.
C	MASON COMPANY SANI-KENNEL OR EQ.	4'-8" x 3'-0" KENNEL. 6' HEIGHT (6 TOTAL UNITS)	G.C	G.C.

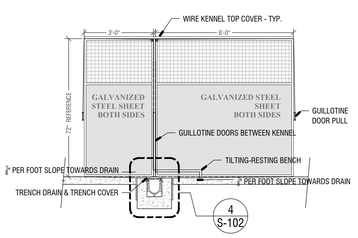
HATCHED AREA IN SCHEDULE GRID REPRESENTS ITEMS TO BE CONSTRUCTED IN PHASE 2

NOTE:

PROVIDE COVER ON TOP OF KENNELS

SEE PAGE A-100 AND PROJECT MANUAL FOR DESCRIPTION AND SPECS ON ALL KENNELS AND OTHER EQUIPMENT





3 KENNEL SECTION
3/8"=1'-0"

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Jul 12 2021 | T:\SHARED CAD\Projects 2019\Jackson County Animal Shelter\Sheets\A-400 KENNEL DETAILS.dwg

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

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SEAL

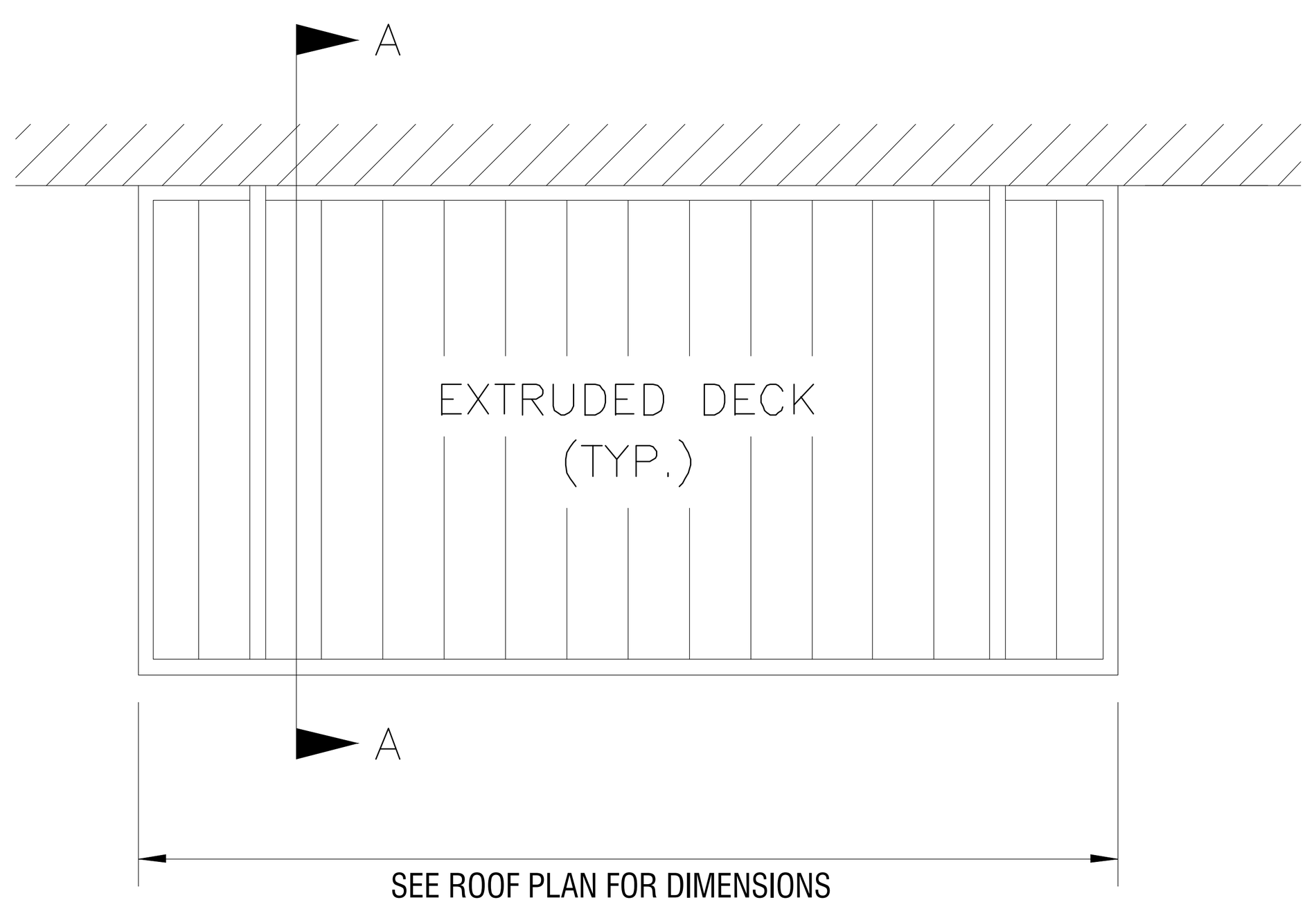
STATE OF GEORGIA
BENJAMIN MERCER FARMER
REGISTERED ARCHITECT

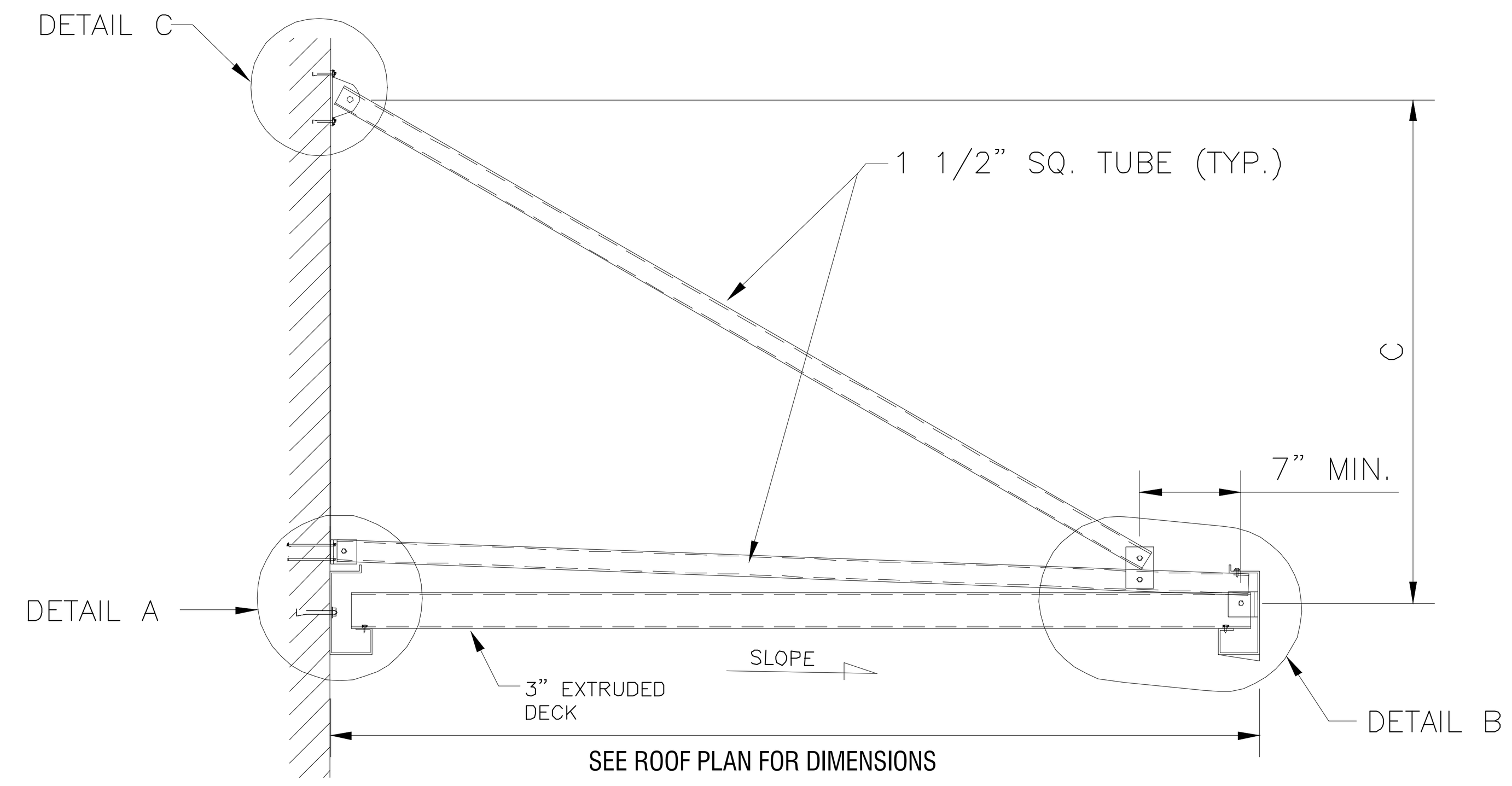
JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
KENNEL DETAILS

PRINTED:

NUMBER:
A-400

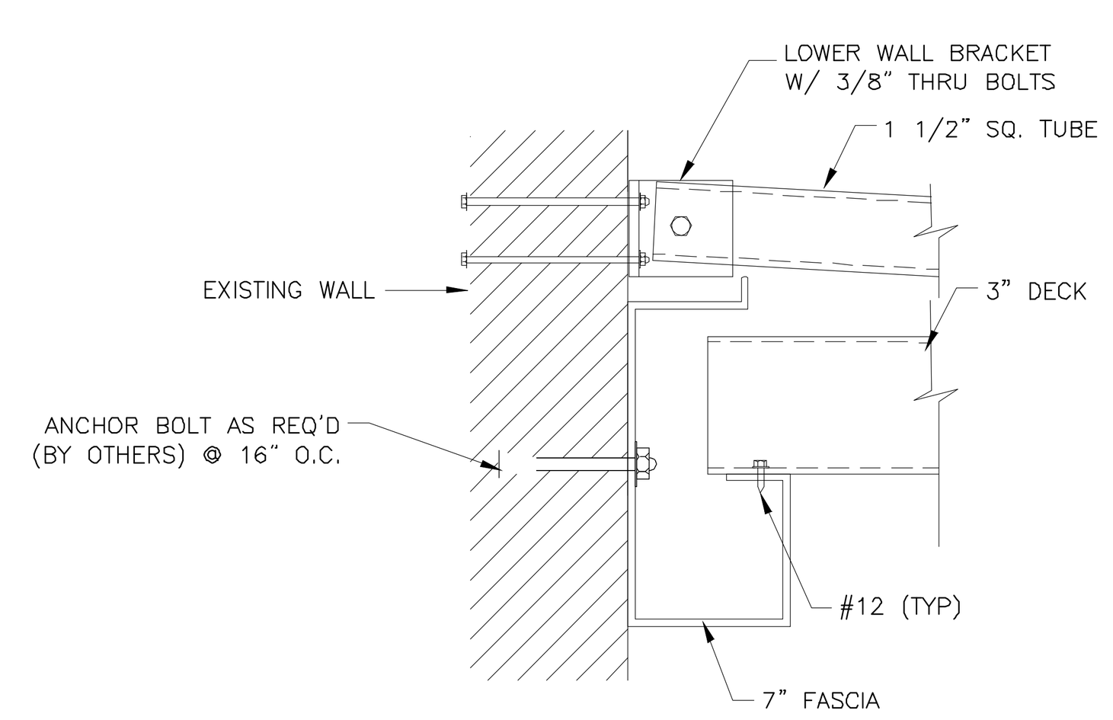




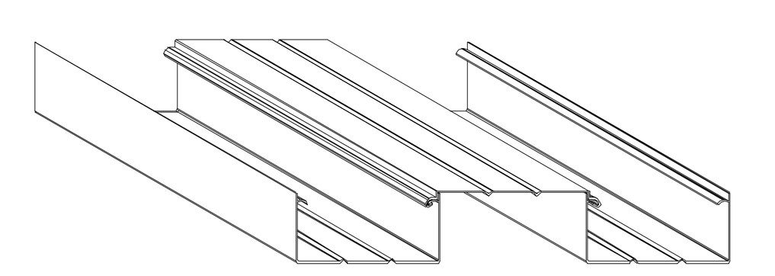
SECTION A-A

GENERAL NOTES:

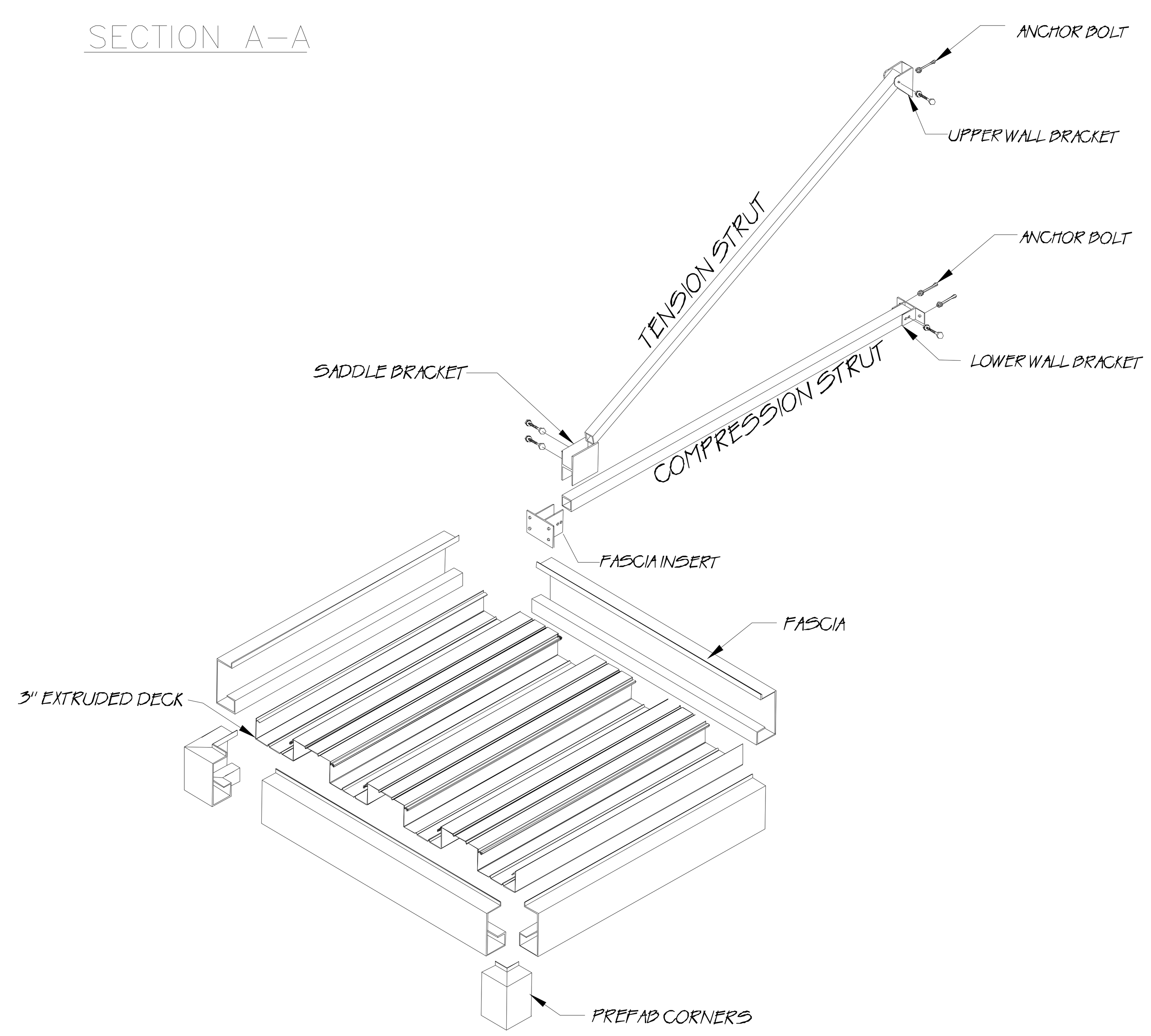
1) COMPONENT MATERIAL
   - ROOF PANEL: 3" x 6" x .060 DECK EXTRUDED ALUMINUM 6063-T6 ALLOY
   - FASCIA: 6" x 3" x .080" EXTRUDED ALUMINUM 6063-T6 ALLOY
   - HANGERS: 1 1/2" SQUARE TUBE EXTRUDED ALUMINUM TUBE 6063-T6
   - FASTENER: FOR ALL PANELS AND TRIM CONNECTIONS USE #12 x 3/4" SS. HEX HEAD CADMIUM PLATED. PANEL TO BEAM CONNECTIONS TO BE #12 x 3/4" TEK WITH NEOPRENE WASHERS. BOLTS GREATER THAN 1/4" TO BE ASTME=307 STEEL OR EQUAL; GALVANIZED.
2) CHECK TO ENSURE DIMENSIONS SHOWN ARE CORRECT WITH FIELD MEASUREMENTS. ONE SET OF APPROVED SHOP DRAWINGS MUST BE RETURNED TO BALLEW'S BUILDING PRODUCTS GROUP PRIOR TO RELEASE OF CANOPY FOR FABRICATION.
3) ROOF PANELS MUST BE PITCHED 1/4" PER FOOT MINIMUM.
4) THE STRUCTURE IS NOT DESIGNED TO BE ENCLOSED IN ANY WAY. THE STRUCTURE HAS NOT BEEN DESIGNED TO RESIST LATERAL LOADS WHICH WOULD BE IMPOSED BY WIND LOADS ON ENCLOSURE WALL.
5) DISSIMILAR METALS MUST BE SEPARATED BY PAINTING WITH BITUMINOUS PAINT OR OTHER ACCEPTABLE COATING OR NEOPRENE GASKET MATERIAL TO PREVENT GALVANIC ACTION.
6) IT IS THE RESPONSIBILITY OF OTHERS TO CHECK THE ADEQUACY OF THE EXISTING BUILDING WALLS TO ASSURE THAT IT WILL RESIST IMPOSED LOADS.
7) SNOW DRIFT AND/OR SLIDING SNOW LOADS HAVE NOT BEEN TAKEN INTO CONSIDERATION. IF THERE IS ANY CHANCE OF SNOW DRIFT AND/OR SLIDING SNOW LOADS ON THE CANOPY, CUSTOMER WILL HAVE TO PROVIDE REQUIRED INFORMATION (BUILDING DIMENSIONS) TO BALLEW'S BUILDING PRODUCTS AND RETURN DRAWINGS FOR REQUOTE AND REDESIGN.

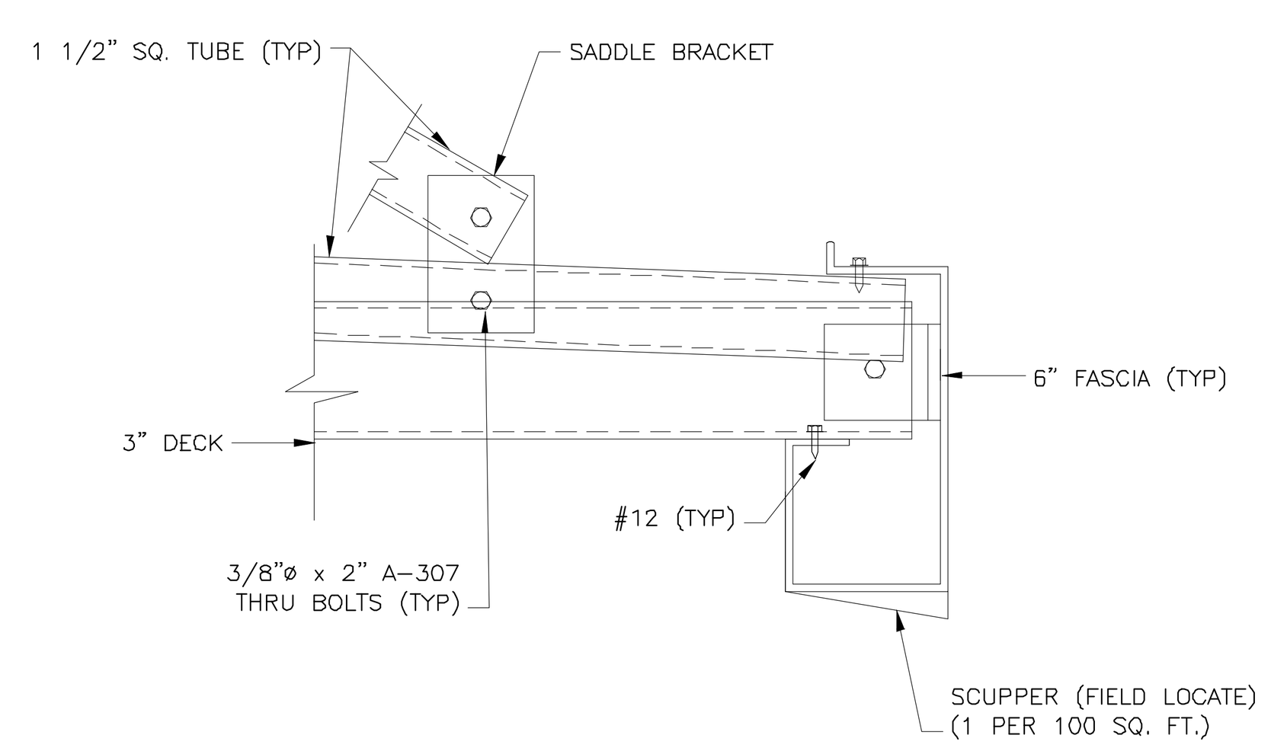


DETAIL A

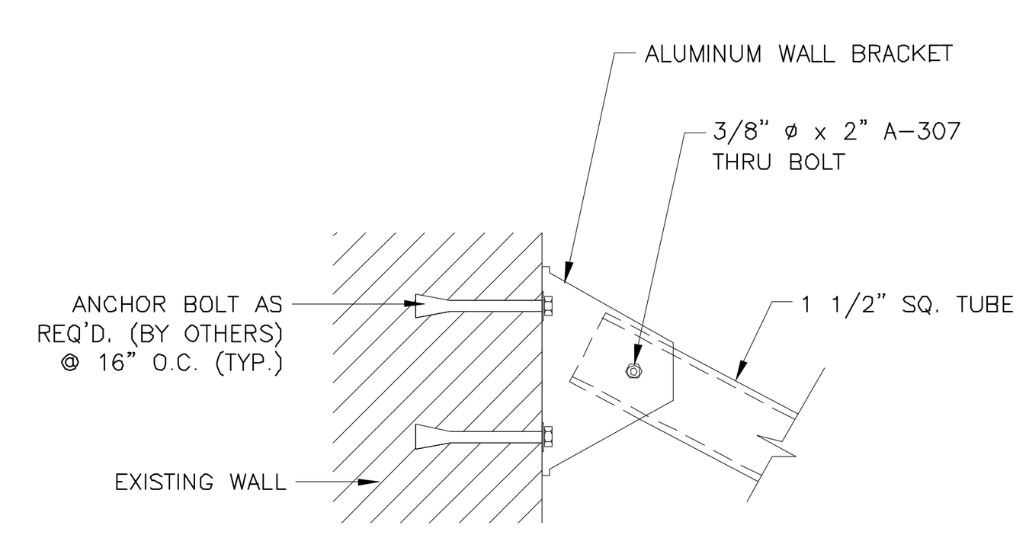


3" DECK





DETAIL B



DETAIL C

1 WALL HUNG CANOPY
3/4" = 1'-0"

NOTES: CANOPY

1. SUBMIT SHOP DRAWINGS SHOWING ACTUAL AS-BUILT CONDITIONS, DIMENSIONS, CONNECTIONS, FRAMING, ETC. AS REQUIRED FOR EACH NEW CONSTRUCTED CANOPY.

2. SHOP DRAWINGS TO BE STAMPED BY A GEORGIA REGISTERED ENGINEER.

3. PROVIDE FACTORY INSTALLED 3X3 DOWNSPOUTS. SEE ROOF PLAN LOCATIONS.

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Number	Date:	Remarks:	Number	Date:	Remarks:
1	05.05.21	UPDATED ROOM FINISH SCHEDULE AND WALL TYPES			

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SEAL

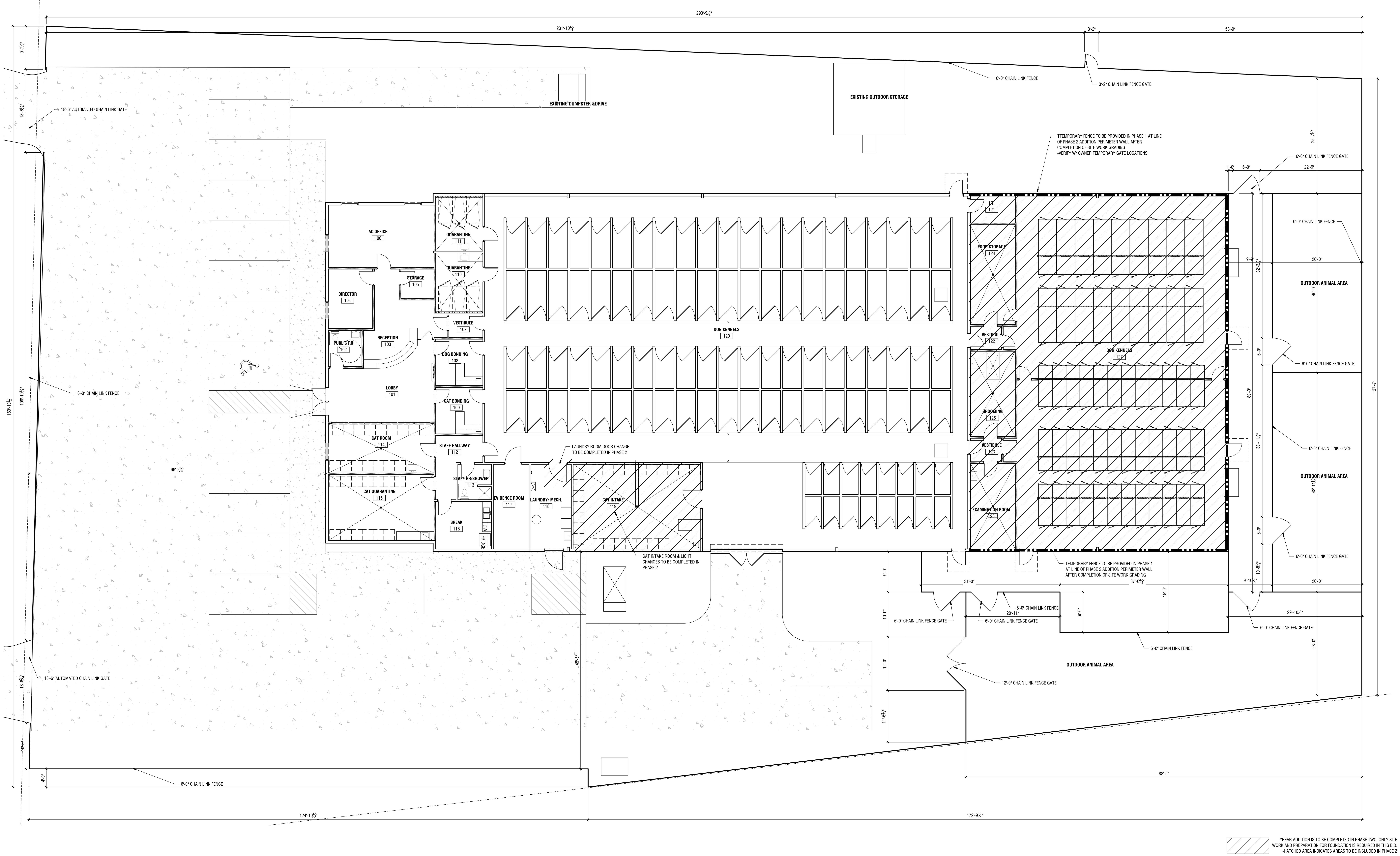
STATE OF GEORGIA — BENJAMIN MERCER CARTER — REGISTERED ARCHITECT

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: AWNING DETAILS

PRINTED:

NUMBER: **A-401**



REVISIONS

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SEAL

STATE OF GEORGIA
BENJAMIN MERCER CARTER
REGISTERED ARCHITECT

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
FENCE PLAN

PRINTED:

NUMBER:
A-402

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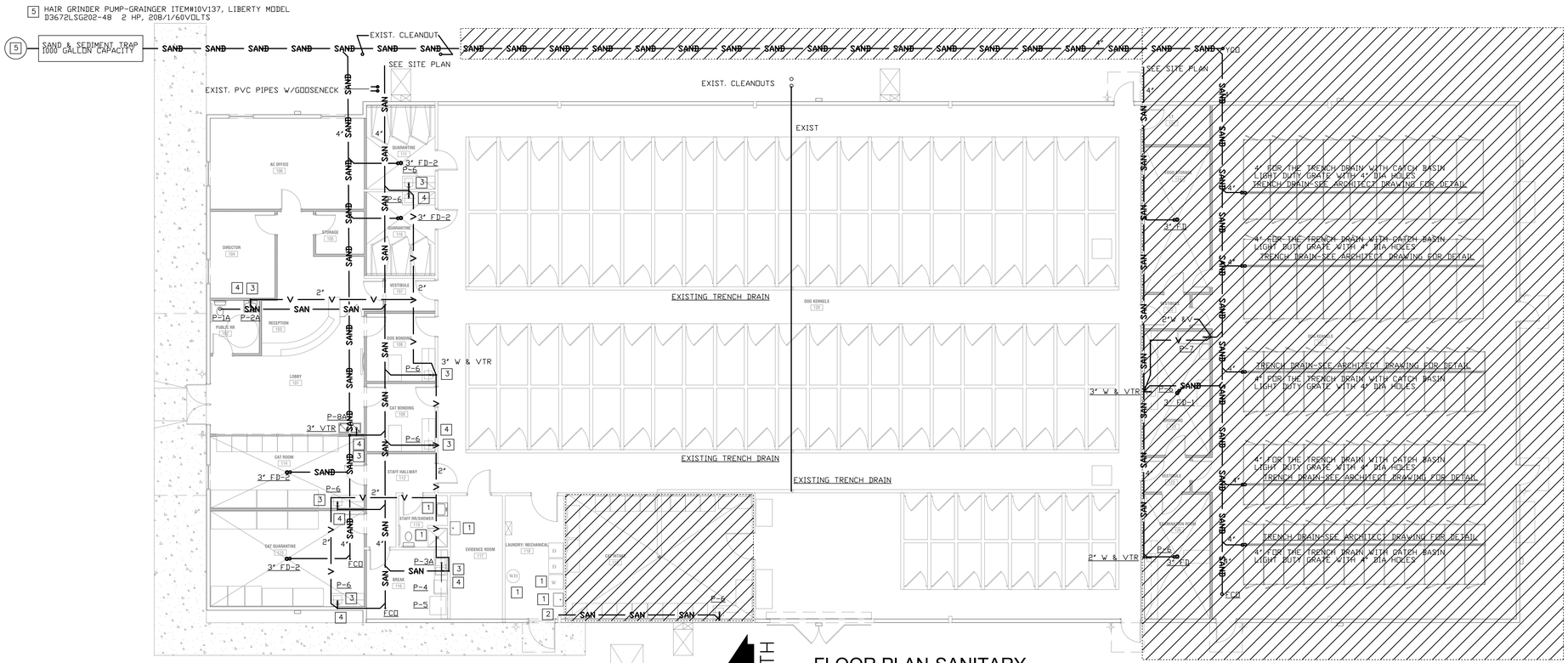


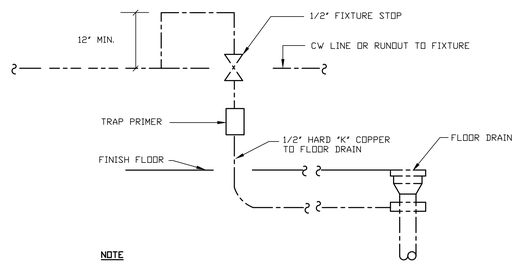
1 EXIST. TO REMAIN
2 CONNECT TO EXISTING SANITARY
3 ALTERNATE: CONNECT TO EXISTING SANITARY
4 2" W & 1 1/2" V
5 HAIR GRINDER PUMP-GRAINGER ITEM#10V137, LIBERTY MODEL D3672LSG202-48 2 HP, 208/1/60VOLTS

FLOOR PLAN-SANITARY

1/8"=1'-0"

PLUMBING FIXTURE CONNECTION SCHEDULE						
SYMBOL	FIXTURE	RUN OUT SIZES MTG HT.				DESCRIPTION
		W	CW	HW		
P-1A	WATER CLOSET (FLUSH)	3"	1 1/2"	-	18"	18" FLOOR TO RIM (HANDICAPPED)
P-2A	LAVATORY (WALL)	1 1/4"	1/2"	1/2"	29"	29" FLOOR TO BOTTOM OF APRON (HANDICAPPED)
P-3A	DBL COMP SINK	1 1/2"	1/2"	1/2"	29"	COUNTER TOP
P-4	DISHWASHER	1 1/2"		1/2"		
P-5	REFRIGEARTOR		1/2"		-	12"AFF
P-6	SINK	1 1/4"	1/2"	1/2"		COUNTER TOP
P-7	BATHING TABLE	2"	1/2"	1/2"		
P-8A	DRINKING FOUNTAIN	1 1/4"	1/2"	-	36"	36" FLOOR TO SPOUT (HANDICAPPED)
FD-2	FLOOR DRAIN	3"	3/4"			CONNECT 3/4" TO DRAIN FRO FLUSHING

1. SEE ARCHITECT DRAWINGS FOR THE ELEVATION AND LOCATION.



NOTE

IF TRAP PRIMER IS LOCATED IN UNACCESSIBLE AREA. PROVIDE 16" X 16" MILCOR 3202-014 STAINLESS STEEL ACCESS PANEL

DETAIL - TRAP PRIMER

SCHEMATIC

TRAP SEAL PRIMER SHALL BE: PRECISION PLUMBING PRODUCTS, INC. MODEL P-2 FOR ONE (1) TWO (2) DRAIN WITH DISTRIBUTION UNIT. MODEL P-1 WITH DISTRIBUTION UNIT PRIMING THREE (3) TO EIGHT (8) DRAINS.

LEGEND		
SAN	SOIL AND WASTE PIPING	SAN
	EXIST. SANITARY	EXIST. SAN
V	VENT PIPING	V V
	SAND PIPE	SAND SAND
C.W.	COLD WATER PIPING	
H.W.	HOT WATER PIPING	
HWR	HOT WATER RECIRCULATING	
	EXIST. COLD WATER	
	EXIST. HOT WATER	EXIST. HW
G.	GAS PIPING	GAS GAS
	EXIST. GAS PIPING	EXIST. GAS
G.V.	GATE VALVE	
G.C.	GAS COCK	
W	WASTE	
V	VENT	
V.T.R.	VENT THRU ROOF	
F.D.	FLOOR DRAIN	
T&P	TEMPERATURE AND PRESSURE	
A.F.F.	ABOVE FINISH FLOOR	
A/C	ABOVE CEILING	
U.F.	UNDER FLOOR SLAB	
W.H.A.	WATER HAMMER ARRESTOR	
P1	INDICATES EQUIPMENT NUMBER FOR PLUMBING ONLY	

-HATCHED AREAS INDICATES AREAS TO BE INCLUDED IN PHASE 2.

-REAR ADDITION TO BE COMPETED IN PHASE 2. ONLY SITE WORK & PREPARATION FOR FOUNDATION IS REQUIRED IN THIS BID.

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

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REVISIONS

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X	00-00-00	N/A			

CONSULTANTS

Date Plotted : Feb 16, 2021 - 9:45am
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SEAL

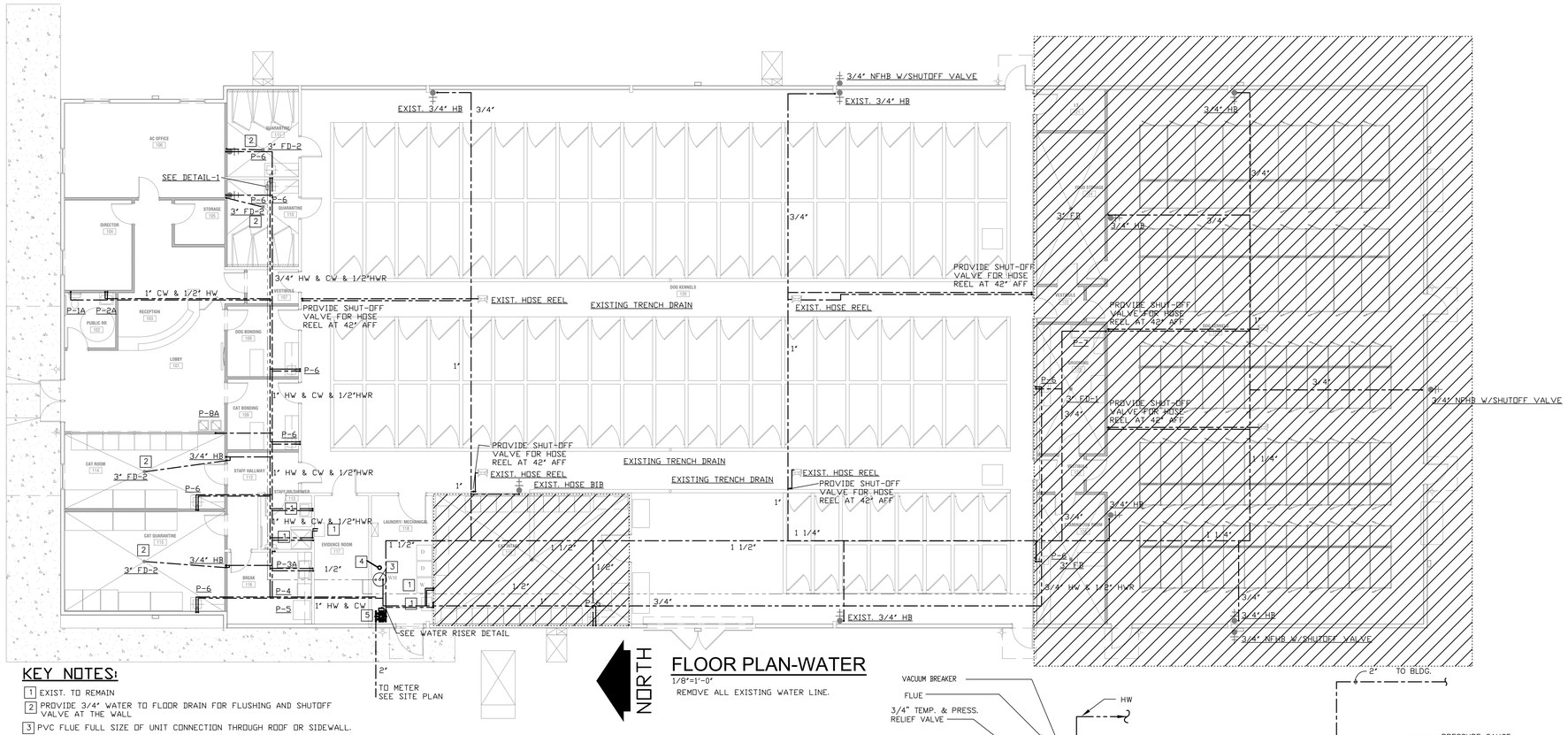
GEORGIA REGISTERED No. 015330 PROFESSIONAL ENGINEER

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: FLOOR PLAN -SANITARY LEGEND

PRINTED: 02/16/21

NUMBER: P-1



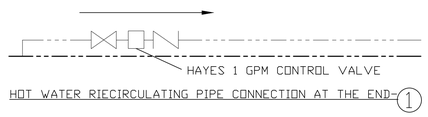
KEY NOTES:

1. EXIST. TO REMAIN
2. PROVIDE 3/4" WATER TO FLOOR DRAIN FOR FLUSHING AND SHUTOFF VALVE AT THE WALL
3. PVC FLUE FULL SIZE OF UNIT CONNECTION THROUGH ROOF OR SIDEWALL.
4. 6"ø COMBUSTION AIR DUCT UP THROUGH ROOF.
5. GRUNDFOS, HYDROMULTI-E2CRE-10-2 3-208VOLT, 50 GALLONS, 69 FT HEAD, WITH REDUNDANT CAPACITY, PRESSURE AND FLOW CONTROLLER, PRESSURE DIFFERENTIAL, LOW FLOW STOP, ECM MOTOR, WATER BOOSTER PACKAGE WITH CONTROL PANEL.

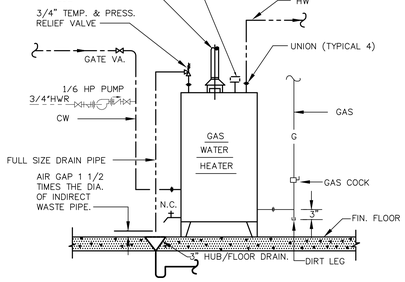
FLOOR PLAN-WATER

1/8"=1'-0"

REMOVE ALL EXISTING WATER LINE.

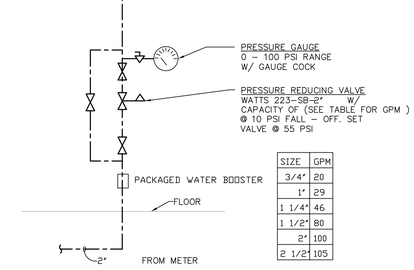


HOT WATER RIECIRCULATING PIPE CONNECTION AT THE END-(1)



WATER HEATER DETAIL

SCALE: NONE



SIZE	GPM
3/4"	20
1"	29
1 1/4"	46
1 1/2"	80
2"	100
2 1/2"	105

WATER RISER DETAIL

NO SCALE - SCHEMATIC ONLY

PACKAGED WATER BOOSTER SYSTEM

GRUNDFOS, HYDROMULTI-E2CRE-10-2 3-208VOLT, 50 GALLONS, 69 FT HEAD, WITH REDUNDANT CAPACITY, PRESSURE AND FLOW CONTROLLER, PRESSURE DIFFERENTIAL, LOW FLOW STOP, ECM MOTOR, WATER BOOSTER PACKAGE WITH CONTROL PANEL.

-HATCHED AREAS INDICATES AREAS TO BE INCLUDED IN PHASE 2.

-REAR ADDITION TO BE COMPETED IN PHASE 2. ONLY SITE WORK & PREPARATION FOR FOUNDATION IS REQUIRED IN THIS BID.

PRINTED DATE: 02/16/21

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SEAL

GEORGIA REGISTERED No. 015330 PROFESSIONAL ENGINEER

JACKSON COUNTY ANIMAL SHELTER

JEFFERSON, GEORGIA

SHEET TITLE: FLOOR PLAN -WATER DETAILS

PRINTED: 02/16/21

NUMBER: P-2

PLUMBING FIXTURE SCHEDULE

PROVIDE WATTS ' 1/2"MMV-UT' THERMOSTATIC MIXING VALVE UNDER EACH SINK AND LAVATORY TO ADJUST MIXED WATER TEMPERATURE TO PREVENT SCALD.

PROVIDE EACH BATHROOM HOSE BIB UNDER THE LAVATORY FOR HOUSEKEEPING PURPOSE.

P-1A FLOOR MOUNTED WATER CLOSETS (FLUSH VALVE TYPE) (HANDICAP)-BATTERY OPERATED

FIXTURE	3461.528	'AMERICAN STANDARD' 16 « HIGH ELONGATED MADERA FLOWISE 1.28 GPF VITREOUS CHINA. WATER SAVER, SIPHON JET FLUSHING ACTION. 1 1/2" TOP SPUD SUPPLY, BOLTS, AND CAPS. WATER SENSE
SEAT	521/5905.100	'BENEKE/AMERICAN STANDARD' EXTRA HEAVY DUTY SOLID PLASTIC SEAT WITHOUT COVER.
SUPPLY		'AMERICAN STANDARD' SELECTRONIC BATTERY OPERATED FLUSH VALVE. 1.28 GPF

ALTERNATE:
P-1A FLOOR MOUNTED WATER CLOSETS (FLUSH VALVE TYPE) (HANDICAP) AC POWERED

FIXTURE	3043.712	'AMERICAN STANDARD' 16 « HIGH ELONGATED MADERA FLOWISE 1.28 GPF VITREOUS CHINA. WATER SAVER, SIPHON JET FLUSHING ACTION. 1 1/2" TOP SPUD SUPPLY, BOLTS, AND CAPS. WATER SENSE
SEAT	521/5905.100	'BENEKE/AMERICAN STANDARD' EXTRA HEAVY DUTY SOLID PLASTIC SEAT WITHOUT COVER.
SUPPLY	6067.121	'AMERICAN STANDARD' SELECTRONIC AC POWERED FLUSH VALVE. 1.28 GPF

ALTERNATE:

P-1A TANK TYPE FLOOR MOUNTED WATER CLOSETS (HANDICAP)

FIXTURE	215FA.104	'AMERICAN STANDARD' CADET 16 1/2" HIGH ELONGATED VITREOUS CHINA, SIPHON JET WITH CLOSED COUPLED TANK CADET TOILET WITH SUPPLY AND CAPS. (MAX. 1.28 GPF)
TANK	4188B.105	RIGHT HAND TRIP LEVER
TRIP LEVER		MUST BE ON WIDE SIDE OF TOILET
SEAT	521	'BENEKE' HEAVY DUTY SOLID PLASTIC SEAT WITH/WITHOUT COVER.
SUPPLY	VA13 LF165	'EBC' 'MCGUIRE

P-2A 20" x 18" WALL HUNG LAVATORY (HANDICAP).

FIXTURE	0355.012	'AMERICAN STANDARD' VITREOUS CHINA, FRONT OVERFLOW AND INTEGRAL BACK.4" FAUCET HOLES AND 0.5 GPM AERATOR.
FAUCETS	S-20-IPS	'SYMMONS' SINGLE LEVER FAUCET WITH AERATOR.
FAUCETS	2175.504	'ANMERICAN STANDARD'COLONY LESS POP-UP
DRAIN AND POP-UP HOLE.		
DRAIN	SG7WC	'EBC' OFFSET DRAIN WITH BRASS PERFORATED GRID DRAIN.
TRAP	TA125	'EBC' 1 1/4" P TRAP WITH CAST BRASS NUTS AND CLEANOUTS PLUG.
SUPPLY	VA13	'EBC'.

HANDI LAV-GUARD INSULATION KIT.

LAVATORY WALL HUNG SUPPORT:

JAY R. SMITH FIG. #700 FOR MASONARY WALLS AND #700-M31 FOR METAL OR WOOD STUD WALLS.

P-3A 33" X 22" X 6 1/2" DOUBLE COMPARTMENT KITCHEN SINK
(1174-KS WILL NOT WORK WITH SPRAYER)

FIXTURE	DL-ADA-2233-A-GR	' JUST ' SELF RIMMING TYPE STAINLESS STEEL DOUBLE COMPARTMENT KITCHEN SINK
FAUCET	J-902	SINGLE LEVER WASHERLESS MIXING FAUCET WITH ESCUTCHEON AND 8" SPOUT AERATOR AND SPRAYER
DRAIN	J-ADA-35	STAINLESS STEEL CUP STRAINER WITH REMOVABLE STAINLESS STEEL BASKET. BASKET HAS RUBBER SEAT STOPPER. 1 1/2" OD CHROME PLATED BRASS OFFSET TAILPIECE.
SUPPLY	VA13	'EBC'

CONTRACTOR SHALL NOT PURCHASE SINK WITHOUT VERIFYING WITH CABINET MANUFACTURER AND ARCHITECT. MAKE SURE THAT SINK WILL FIT INTO CABINET COUNTERTOP.

P-4 DISHWASHER

SUPPLIED BY OWNER AND INSTALLED BY THIS CONTRACTOR.

P-5 REFRIGERATOR

FIXTURE	200-IK	'JAMECO' ICE MAKER CONNECTOR BOX KIT WITH BRASS VALVE ASSEMBLY, MOLDED STURDY FACEPLATE AND SCREWS.

P-6 SINGLE COMPARTMENT KITCHEN SINK

See equipment plan drawing A-101-EQ 1.0

SUPPLY	VA13	'EBC'

P-7 BATHING TABLE

See equipment plan drawing A-101-EQ 1.0

SUPPLY	VA13	'EBC'

P-8A ELECTRIC WATER COOLER SPLIT LEVEL (HANDICAP)

FIXTURE	PGF8ACSL	'OASIS' SPLIT LEVEL ELECTRIC WALL HUNG. COOLER SHALL DELIVER 8.0 GPH OF 50 DEGREE F WATER AT 90 DEGREE F AND 80 DEGREE F INLET WATER TEMPERATURE. 1/4 HP, 4.4 AMPS, 115/1/60 VOLTS
SUPPLY STOP.	LA11	'EBC' SUPPLY TO WALL WITH WHEEL HANDLE WALL ESCHUTCHEON AND FLEXIBLE RISER.
TRAP	TA125	'EBC' 1-1/4" X 1 -1/4" P-TRAP WITH CAST BRASS NUTS AND CLEANOUT PLUG.

SAND TRAP

SEE FLOOR PLAN

TRENCH DRAIN

4.8" WIDE AND 19.68" TRENCH DRAIN GRATES AND CATCH BASINS

MIFAB T1500-PG-ADA

TRENCH DRAIN

MIFAB-T300-6' WIDE, 2-7/8" DEEP PLOY POLYPROPYLENE TRENCH DRAIN SYSTEM

GAS WATER HEATER

A.O. SMITH MODEL BTF-80, 75 US GALLON CAPACITY, 76,000 BTUHR GAS INPUT, 74 GASLLONS/HR RECOVERY AT 100 DEG. F RISE.

CO-EXPOSED CLEANOUT-UNFINISHED AREAS:

JAY R. SMITH FIG. 4470 CAST BRONZE COUNTERSINK PLUG WITH SLOT TO RECEIVE 1/2" THICK STEEL BAR STOCK.

WCO-WALL CLEANOUT - FINISHED AREAS:

JAY R. SMITH FIG. 4436 CAST IRON FERRULE FOR NO HUB OR SERVICE WEIGHT PIPE . NICKEL BRONZE ROUND FRAME AND COVER WITH SECURING SCREWS.

FCO-CONCRETE FLOORS:

JAY R. SMITH FIG. 4238L CAST IRON CLEANOUT WITH GASKET SEAL, THREADED PLUG FOR EASY REMOVAL, ADJUSTABLE ROUND CAST IRON TOP WITH SECURING SCREWS. SPEEDI -SET OUTLET CONNECTION.

FCO-TILE FLOORS:

JAY R. SMITH FIG. 4151 CAST IRON CLEANOUT WITH GASKET SEAL, THREADED PLUG FOR EASY REMOVAL, ADJUSTABLE ROUND NICKEL BRONZE TOP RECESSED FOR TILE WITH SECURING SCREWS. SPEEDI -SET OUTLET CONNECTION.

FCO-CARPETED FLOORS:

JAY R. SMITH FIG. 4031-Y CAST IRON CLEANOUT WITH GASKET SEAL, THREADED PLUG FOR EASY REMOVAL, ADJUSTABLE ROUND NICKEL BRONZE TOP COMPLETE WITH STAINLESS STEEL CARPET MARKER WITH SECURING SCREWS. SPEEDI -SET OUTLET CONNECTION.

YCO-EXTERIOR PAVED/CONCRETE AREAS:

JAY R. SMITH FIG. 4261-U. CAST IRON FLANGED HOUSING WITH HEAVY DUTY CAST IRON COVER , LIFTING DEVICE. GASKET SEAL THREADED PLUG, V. P. SCREWS IN COVER.

YCO-EXTERIOR UNSURFACED AREAS:

JAY R. SMITH FIG. 4261-U. CAST IRON FLANGED HOUSING WITH HEAVY DUTY CAST IRON COVER , LIFTING DEVICE. GASKET SEAL THREADED PLUG, V. P. SCREWS IN COVER. CLEANOUT SHALL BE SET IN 24" X 12" CONCRETE PAD FLUSH WITH SURFACE.

3" FD- GROOM, EXAM, AND FOOD

JAY R. SMITH FIG. 2210-03-P-050 ROUND TOP AND NO HUB OUTLET WITH TRAP PRIMER CONNECTION.

3" FD-2-FLOOR DRAINS-CAT/DOG ROOM:

JAY R. SMITH FIG. 2508A-03-BB ROUND TOP AND NO HUB OUTLET WITH TRAP PRIMER CONNECTION.

LAVATORY WALL HUNG SUPPORT:

JAY R. SMITH FIG. #700 FOR MASONARY WALLS AND #700-M31 FOR METAL OR WOOD STUD WALLS.

NFHB WALL HYDRANT EXPOSED:

JAY R. SMITH FIG. 5609QT NON-FREEZE 3/4" CAST BRONZE HYDRANT WITH BRONZE CASING, INTEGRAL VACUUM BREAKER, CHROME PLATED FACE , AND SIZED IN ACCORDANCE WITH WALL THICKNESS. PROVIDE WITH KEY HANDLE.

HB-HOSE BIBB:

WOODFORD #24/MIFAB HY-9040 W/HY-9000 HOSE BIB FOR INSIDE USE WITH VACUUM BREAKER, BACKFLOW PREVENTER.

BACKFLOW PREVENTER.

BACKFLOW PREVETNER AT BEVERAGE, COFFEE AND TEA MACHINE ETC.

WATTS 9BD

PROVIDE WATER FILTER FOR BEVERAGE, COFFEE, TEA, AND ICE MACHINE.

PLUMBING GENERAL NOTES

1. CONTRACTOR SHALL BRING TO THE ATTENTION OF ARCHITECT ANY CONFLICTS OF WORK PRIOR TO PURCHASE OF EQUIPMENT OR COMMENCEMENT OF WORK.
2. CONTRACTOR SHALL VISIT THE JOB SITE AND HAVE A GOOD WORKING KNOWLEDGE AND ACQUAINTANCE OF THE EXISTING JOB SITE AS WELL AS THE CONDITIONS OF THE JOB SITE AND INCLUDE A STATEMENT ON HIS BID THAT HE HAS DONE SO.
3. REQUEST FOR PAYMENT FOR ADDITIONAL COSTS DUE TO SITE CONDITIONS WILL NOT BE ALLOWED.
4. FURNISH ALL PLAN, LABOR, EQUIPMENT, (EXCEPT AS OTHERWISE INDICATED AND AGREED UPON), AND MATERIALS AS INDICATED, AND PERFORM ALL OPERATIONS IN CONNECTION WITH THE INSTALLATION OF A COMPLETE PLUMBING SYSTEM.
5. THE WORK UNDER THIS SECTION SHALL COMPLY AS MINIMUM REQUIREMENTS WITH APPLICABLE LAWS, ORDINANCES, CODES, AND REGULATIONS OF THE COUNTY, STATE, AND CITY WHERE INSTALLED. WHERE THE REQUIREMENTS OF THESE SPECIFICATIONS ARE MORE THAN RESTRICTIVE THAN APPLICABLE CODES AND REGULATIONS DESCRIBED ABOVE, THE REQUIREMENTS OF PLANS AND SPECIFICATIONS SHALL BE MET.
6. PLUMBING CONTRACTOR SHALL OBTAIN ALL PERMITS AND INSPECTIONS REQUIRED FOR THE INSTALLATION OF THIS WORK AND PAY ALL CHARGES INCIDENT THERETO. HE SHALL DELIVER TO THE ARCHITECT CERTIFICATES OF SAID INSPECTIONS ISSUED BY PROPER AUTHORITIES. HE SHALL PAY ALL COSTS FOR PERMITS AND INSPECTIONS AS REQUIRED BY GOVERNING AUTHORITY.
7. REQUIRED INSURANCE SHALL BE PROVIDED BY THE CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF WORK.
8. VERIFY LOCATION, SIZE, INVERTS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION. ADVICE ENGINEER OF ANY DISCREPANCIES.
9. FURNISH TWO BROCHURES CONTAINING CATALOG CUTS AND DATA ON PLUMBING FIXTURES, WATER HEATER AND SPECIFY ITEMS, AS WELL AS WARRANTIES AND GUARANTIES PERTAINING THERETO.
10. PROTECT ALL PLUMBING EQUIPMENT AND MATERIALS AGAINST DAMAGE. COMPLETED SYSTEM SHALL BE FREE FROM BLOCKAGE, DEBRIS, AND OBSTRUCTIONS.
11. PROVIDE THE OWNER WITH A WRITTEN AND CERTIFIED GUARANTEE FOR THE COMPLETED WORK COVERING A PERIOD OF ONE YEAR, STARTING FROM THE DAY OF FINAL ACCEPTANCE BY THE OWNER OF THE COMPLETED AND APPROVED SYSTEMS.
12. ELECTRICAL EQUIPMENT SHALL BE FURNISHED AND WIRED FOR THE ELECTRICAL CHARACTERISTICS CALLED FOR IN ELECTRICAL PLANS AND SPECIFICATIONS.
13. PROVIDE CHROME PLATED FLOOR, WALL AND CEILING PLATES AT EACH EXPOSED POINT WHERE PIPES PASS THROUGH FLOOR, WALL AND/OR CEILING.
14. ALL WATER PIPING AND ALL RELATED VALVES, FITTINGS, AND JOINTS SHALL BE INSULATED WITH 1/2" COLD AND 1" HOT HEAVY DENSITY FIBERGLASS WITH FKS SELF-SEALING LAP
15. JOINT JACKET: JOINTS AND FITTINGS SHALL BE DONE IN ACCORDANCE WITH RECOMMENDATIONS OF MANUFACTURER SUPPLYING THE INSULATION. INSULATION MATERIALS, INCLUDING INSULATION CLOTHS, CEMENTS, JACKETS, FACINGS, ADHESIVES, MASTIC, TAPES, AND OTHER ACCESSORIES SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATING AS TESTED BY U.L. PROCEDURE U1723, NOT EXCEEDING FLAME SPREAD RATING OF 25 AND SMOKE DEVELOPED RATING OF 50. USE OF WATER SOLUBLE TREATMENTS TO ACHIEVE THESE RATINGS IS NOT ACCEPTABLE.
16. WATER PIPING BELOW FLOOR SLAB ON EARTH AND OUTSIDE SHALL BE TYPE "L" HARD COPPER WITH WROUGHT COPPER FITTINGS MADE USING LEAD FREE SOLDER JOINTS. PIPE SUBJECT TO CORROSION DUE TO SALTY DIRT SHALL RUN INSIDE THE PVC PIPE JACKET.
17. INSIDE WATER PIPING SHALL BE TYPE "M" COPPER WITH WROUGHT COPPER FITTINGS MADE USING LEAD FREE SOLDER JOINTS. PLASTIC WATER PIPE WILL NOT BE APPROVED.
18. SOIL, WASTE, AND VENT PIPING SHALL BE SCHEDULE 40 DWV PVC PLASTIC PIPE WITH SOLVENT WELDED JOINTS FOR ALL SOIL, WASTE AND VENT PIPING. PLASTIC PIPE MAY ONLY BE USED IF APPROVED BY PLUMBING AND FIRE CODES. PLASTIC PIPE OR ANY COMBUSTIBLE MATERIAL SHALL NOT BE USED IN THE RETURN AIR CEILING PLENUM.
19. NO VENTS OR OTHER PIPES SHALL BE VISIBLE FROM THE FRONT OF THE BUILDING.
20. GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL ASTM A53 OR ASTM 106 WITH MALLEABLE IRON SCREWED FITTINGS. ALL PORTIONS OF GAS PIPING UNDERGROUND OR IN FLOOR SLAB SHALL HAVE ASPHALTIC COATING EQUAL TO SOUTHERN WF-1. GAS PIPING RUN IN CONCRETE FLOOR SLAB SHALL HAVE AT LEAST 2" OF CONCRETE ON ALL SIDES. WALLS OR ENCLOSED SPACES WHERE GAS IS RUN SHALL BE VENTED WITH APPROVED GRILLES, OR CONDUIT TO OUTSIDE.
21. FLEXIBLE CONNECTORS SHALL BEAR THE LABEL OF AN APPROVED AGENCY. THE CONNECTORS SHALL BE A MINIMUM OF SIX FEET IN LENGTH.
22. GAS PIPING SHALL BE IDENTIFIED AS AN NATURAL GAS PIPING. IDENTIFICATION SHALL BE IN THE FORM OF A TAG, STENCIL OR OTHER PERMANENT MARKING, SPACED AT INTERVALS OF NOT MORE THAN 25 FEET AND NOT LESS THAN ONCE IN ANY ROOM OR SPACE.
23. PIPE JOINTS SHALL BE THREADED, FLANGED OR WELDED. JOINT COMPOUND SHALL BE RESISTANT TO THE ACTION OF LIQUIDIFIED PETROLEUM GAS OR TO ANY OTHER CHEMICAL CONSTITUENTS OF THE GAS TO BE CONDUCTED THROUGH THE PIPING.
24. JOINTS BETWEEN DIFFERENT METALLIC PIPING MATERIALS SHALL BE MADE WITH APPROVED DIELECTRIC FITTINGS TO ISOLATE ELECTRICALLY ABOVE GROUND PIPING FROM UNDERGROUND PIPING OR TO ISOLATE ELECTRICALLY DIFFERENT METALLIC PIPING MATERIALS JOINED UNDERGROUND.
25. CONCEALED GAS PIPING SHALL NOT BE LOCATED IN SOLID PARTITIONS AND SOLID WALLS, UNLESS INSTALLED IN A CHASE OR CASING.
26. PORTION OF GAS PIPING SYSTEM INSTALLED IN A CONCEALED LOCATIONS SHALL NOT HAVE UNIONS, TUBING FITTINGS, RIGHT AND LEFT COUPLINGS, BUSHINGS, COMPRESSION COUPLINGS AND SWING JOINTS MADE BY COMBINATIONS OF FITTINGS.
27. UNDERGROUND PIPING WHERE INSTALLED BELOW GRADE THROUGH OUTER FOUNDATION OR BASEMENT WALL OF BUILDING, SHALL BE ENCASED IN A PROTECTIVE PIPE SLEEVE. THE ANNULAR SPACE BETWEEN THE GAS PIPING AND THE SLEEVE SHALL BE SEALED.
28. PROTECT PIPES WITH SHIELD PLATES AS PER FUEL GAS CODE SECTION 404.5
29. ALL GAS PIPING INSTALLED OUTDOOR SHALL BE ELEVATED NOT LESS THAN 3 ½" ABOVE THE GROUND AS PER FUEL GAS CODE SECTION 404.7
30. ALL GAS PIPING SHALL BE PROTECTED FROM CORROSION AS PER FUEL GAS CODE SECTION 404.8
31. GAS PIPING SHALL BE INSTALLED MINIMUM DEPTH OF 12 INCHES BELOW GRADE.
32. GAS PIPING SHALL NOT BE INSTALLED BENEATH BUILDING EXCEPT WHERE PIPING IS ENCASED IN A CONDUIT OF WROUGHT IRON, PLASTIC PIPE OR STEEL PIPE DESIGNED TO WITHSTAND THE SUPERIMPOSED LOADS AS PER FUEL GAS CODE SECTION 404.11
33. ALL GAS PIPING SHALL BE INSPECTED, TESTED AND PURGED AS PER FUEL GAS CODE SECTION 406.
34. GAS PIPING (OTHER THAN DRY) SHALL BE SLOPED NOT LESS THAN 1/4" PER 15 FEET TO PREVENT TRAP.
35. SEDIMENT TRAP IS NOT INCORPORATED AS PART OF THE GAS UTILIZATION EQUIPMENT, A SEDIMENT TRAP SHALL BE INSTALLED DOWNSTREAM OF THE EQUIPMENT SHUT-OFF VALVE AS CLOSE TO THE INLET OF THE EQUIPMENT AS PRACTICAL. SEE FUEL GAS CODE SECTION 408.4
36. STEEL GAS PIPING SHALL BE SUPPORTED AT INTERVALS NOT EXCEEDING 6'-0" UP TO ¾" , 8'-0" UP TO 1", AND 10'-0" LARGER THAN 1".
37. PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES AND ALL WATER HAMMER ARRESTERS. ACCESS PANELS IN RATED WALL MUST MAINTAIN THE SAME RATING AND MUST MATCH THE FINISH OF THE WALL IN WHICH IT IS INSTALLED.
38. THESE DRAWINGS CONTAIN BOOK TYPE SPECIFICATIONS. THE PLUMBING SECTIONS OF THESE DRAWINGS AND THE SPECIFICATIONS MUST BE READ IN CONJUNCTION WITH EACH OTHER PRIOR TO BID AND CONSTRUCTION OF THIS PROJECT. ALL ARE CONSIDERED ONE DOCUMENT.
39. PROVIDE PLUMBING FIXTURES AS INDICATED, COMPLETE WITH EVERYTHING REQUIRED FOR CORRECT OPERATION. THERE SHALL BE NO EXPOSED PLASTIC PIPE OR TRAPS ON ANY PLUMBING FIXTURE. ROUND, FRONT WATER CLOSETS WILL NOT BE APPROVED.
40. FIXTURE NUMBERS ARE AMERICAN STANDARD. EQUAL PRODUCTS: CRANE, KOHLER, ELJER, DELTA, SPEAKMAN, ELKAY, CHURCH, BENEKE, BEMIS, SPERZEL, HASLEY TAYLOR, DASIS AND SUNROC.
41. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED BY EVERY APPLICABLE JURISDICTIONS IN THE PERFORMANCE OF THE WORK.
42. ALL WORK SHALL MEET THE LOCAL AND STATE, PLUMBING CODE, AND ENERGY CODE.
43. CONTRACTOR SHALL COORDINATE VOLTAGE AND PHASE OF EACH ITEM OF EQUIPMENT WITH ELECTRICAL CONTRACTOR BEFORE ORDERING.
44. PROVIDE OPERATIONS AND MAINTENANCE MANUALS FOR ALL EQUIPMENT.
45. ALL LOW VOLTAGE CONTROL AND INTERLOCK WIRING IS INCLUDED IN THIS DIVISION.
46. ALL SANITARY PIPE SHALL BE TERMINATED 10'-0" AWAY FROM ANY FRESH INTAKE.
47. WALLS OR ENCLOSED SPACES WHERE GAS IS RUN SHALL BE VENTED WITH APPROVED GRILLES, OR CONDUIT TO OUTSIDE.
48. WATER HEATER SHALL HAVE ASME P & T RELIEF VALVE WITH DISCHARGE PIPE TO DRAIN OR 10" ABOVE FINISHED GRADE.
49. WATER PIPING RUN IN ATTIC SPACES SHALL BE RUN ON HEATED SIDE OF ATTIC OR CEILING INSULATION. WATER PIPING RUN IN OUTSIDE BUILDING WALLS SHALL BE RUN ON HEATED SIDE OF WALL INSULATION.
50. PROVIDE CLEAN-OUTS WHERE INDICATED AND WHERE REQUIRED BY CODE. (75 FT FOR 4" PIPE AND 50 FT. FOR 3" PIPE. CLEAN-OUT COVER PLATES SHALL BE METAL AND HAVE TOP FLUSH WITH FINISHED WALL, FLOOR OR GRADE. WALL CLEAN-OUTS SHALL BE NO HIGHER THAN 12" ABOVE FLOOR, UNLESS OTHERWISE INDICATED. FOR DWV PVC PLASTIC PIPE SYSTEM, USE CLEAN-OUTS MANUFACTURED BY SMITH, JONESPEC, JOSAM, WADE OR ZURN.
51. CONTRACTOR IS TO SUPPLY ALL SAFETY EQUIPMENT AND SUPERVISION REQUIRED TO ASSURE A SAFE CONSTRUCTION SITE. CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SAFETY INSPECTIONS, SUPERVISION, AND COMPLIANCE WITH ALL APPLICABLE LAWS.
52. PIPES PASSING THROUGH CONCRETE OR CINDER WALLS AND FLOORS OR OTHER CORROSIVE MATERIAL SHALL BE PROTECTED AGAINST EXTERNAL CORROSION BY A PROTECTIVE SHEATHING OR WRAPPING OR OTHER MEANS THAT WILL WITHSTAND ANY REACTION FROM LIME AND ACID CONCRETE, CINDER OR OTHER CORROSIVE MATERIAL. SHEATHING OR WRAPPING SHALL ALLOW FOR EXPANSION AND CONTRACTION OF PIPING TO PREVENT ANY RUBBING ACTION.
53. A SOIL OR WASTE PIPE OR BUILDING DRAIN PASSING UNDER A FOOTING OR THROUGH A FOUNDATION WALL, SHALL BE PROVIDED WITH A RELIEVING ARCH, OR THERE SHALL BE BUILT INTO THE MASONRY WALL A PIPE SLEEVE TWO PIPE SIZES GREATER THAN THE PIPE PASSING THROUGH OR AS MAY BE APPROVED IN WRITING BY THE PLUMBING OFFICIAL.
54. TRENCHING INSTALLED PARALLEL TO FOOTINGS SHALL NOT EXTEND BELOW THE 45 DEGREE BEARING PLANE OF THE FOOTING OR WALL UNLESS APPROVED BY THE PLUMBING OFFICIAL.
55. WHEN CLEAN-OUTS ARE INSIDE THE BUILDING, CLEAN-OUTS SHALL BE ABOVE THE FLOOD LEVEL RIM OF THE FIXTURES THAT THE HORIZONTAL PIPE SERVES WHEN PRACTICAL.
56. A SHUT OFF VALVE SHALL BE PROVIDED IN THE COLD WATER SUPPLY TO WATER HEATER AND SHALL BE ACCESSIBLE ON THE SAME FLOOR AND WITHIN 3 FT. OF THE HEATER.
57. PROVIDE VACUUM BREAKER OR ANTI-SIPHON AT THE WATER HEATER AS PER CODE.
58. UNDERGROUND WATER SERVICE PIPE AND THE BUILDING DRAIN OR BUILDING SEWER SHALL NOT BE LESS THAN 5 FT. APART HORIZONTALLY AND SHALL BE SEPARATED BY UNDISTURBED COMPACT EARTH.
59. WATER PIPE SHALL BE DISINFECTED AS PER CODE.
60. PIPE PENETRATING A FIRE RATED WALL OR FLOOR SHALL BE SEALED WITH THE FIRESTOP SEALANT.
61. CONTRACTOR SHALL DESIGN AND PROVIDE THE FIRE SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13. PROVIDE DRY SYSTEM WHERE PIPE IS SUBJECT TO FREEZE.
62. CONTRACTOR SHALL PROVIDE THERMAL EXPANSION TANK AT THE DOWNSTREAM OF SHUT-OFF VALVE OF THE INLET OF WATER HEATER.
63. HORIZONTAL DRAINAGE PIPING SHOULD BE INSTALLED AT A UNIFORM SLOPE. 3" DIAMETER AND SMALLER PIPE SHALL BE INSTALLED WITH A FALL OF NOT LESS THAN 1/4 INCH PER FOOT. 3" DIAMETER AND LARGER PIPE SHALL BE INSTALLED WITH A FALL OF NOT LESS THAN 1/8 INCH PER FOOT. CONTRACTOR SHALL VERIFY THE INVERT ELEVATION OF PIPING WITH CIVIL PLAN BEFORE INSTALLING THE PIPE. SEE PLUMBING CODE SECTION 704, TABLE 704.1
64. PROVIDE THE VACUUM BREAKER AT THE FOLLOWING WATER CONNECTION (SECTION 608.15.4.2):
    a. HOSE BIBS
65. PROVIDE BACK-FLOW PREVENTER AT THE EQUIPMENT WHICH ARE CONNECTED DIRECTLY TO POTABLE WATER SYSTEM. E.G. COFFEE, ICE, TEA, BEVERAGE MACHINES ETC. AS PER SECTION 608.1 TO 608.17.8
66. CONTRACTOR SAW CUT THE FLOOR AS NECESSARY AND RE-PATCH THE FLOOR.
67. CONTRACTOR SHALL NOT CHANGE ANY PIPING LAYOUT WITHOUT WRITTEN PERMISSION.
68. EXPANSION VALVE IS NOT ACCEPTABLE IN LIEU OF EXPANSION TANK.
69. WATER PIPING SHALL NOT BE INSTALLED IN THE ATTIC OR UNHEATED AREA UNLESS OTHERWISE NOTED. IF PIPING IS INSTALLED IN THE ATTIC SPACE, THEN CONTRACTOR SHALL GET APPROVAL FROM THE ENGINEER.
70. CONTRACTOR SHALL NOT INSTALLED ANY PIPING OR FIXTURES WHICH WILL BE IMPEDIMENT TO THE TRAFFIC.
71. DO NOT RUN PIPING OR DUCT-WORK OR LOCATE EQUIPMENT (WITH RESPECT TO SWITCHBOARDS, PANEL BOARDS, POWER PANELS, MOTOR CONTROL CENTERS OR DRY TYPE TRANSFORMERS WITHIN 42" IN FRONT OF EQUIPMENT, OVER EQUIPMENT, OR WITHIN 36" HORIZONTALLY OF SAME SPACE.
72. THIS CONTRACTOR SHALL GIVE ALL ELECTRICAL AND MECHANICAL INFORMATION PERTAINING TO PLUMBING EQUIPMENT TO ELECTRICAL AND MECHANICAL CONTRACTORS BEFORE FINAL CONTRACT SO THAT ELECTRICAL AND MECHANICAL CONTRACTOR INCLUDE IN HIS CONTRACT. CONTRACTOR SHALL NOT PURCHASE ANY EQUIPMENT WITHOUT WRITTEN APPROVAL FROM ELECTRICAL AND STRUCTURAL ENGINEERS AND CONTRACTORS.
73. ALL WATER PIPES SHALL BE IDENTIFIED WITH PIPE MARKER LABEL WHICH INCLUDE THE CONTENTS OF THE PIPING SYSTEM AND ARROW OF FLOW DIRECTION AS PER PLUMBING CODE SECTION 608.8
74. ALL SANITARY AND STORM PIPES SHALL BE IDENTIFIED WITH PIPE MARKER LABEL WHICH INCLUDE THE CONTENTS OF THE PIPING SYSTEM AND ARROW OF FLOW DIRECTION.
75. ALL HORIZONTAL STORM SEWER PIPES SHALL BE INSULATED TO PREVENT CONDENSATION.
76. CONTRACTOR MUST VERIFY THE LOCATION OF EXISTING SEWER AND GREASE LINE INCLUDING INVERT ELEVATIONS BEFORE RUNNING ANY PIPES. ENGINEER HAS NO MEANS TO VERIFY EXISTING CONDITIONS. LOCATION OF PIPES ON PLAN MAY NOT MATCH WITH SITE.
77. BRAINAGE OUTLET SHALL BE RODENTPROOF AS PER PLUMBING CODE SECTION 304.
78. ALL PIPES SUPPORT SHALL BE PROTECTED FROM WEATHER. (PAINT OR STAINLESS STEEL TO PREVENT CORROSION). SEE SECTION 308.
79. CONTRACTOR SHALL PROVIDE TRAP PRIMER TO EACH FLOOR DRAIN UNLESS OTHERWISE NOTED. CONTRACTOR SHALL USE TRAP GUARD DRAIN BY PRO-VENT SYSTEMS (1-800-262-5355,) IF IT IS PERMITTED BY THE LOCAL CODE OFFICIAL.
80. IT IS CONTRACTOR'S RESPONSIBILITY TO REPLACE ANY ITEM OR EQUIPMENT DAMAGED DURING DEMOLITION. ANY ITEM OR EQUIPMENT OR ITEM THAT IS REMOVED TO FACILITATE THE DEMOLITION SHALL BE REINSTALLED BACK TO ITS ORIGINAL CONDITION. PATCH ALL OPENINGS IN FLOOR, WALLS, CEILING MADE IN ADJACENT AREA THAT ARE NOT BEING DEMOLISHED.
81. REMOVE ALL HANGERS, SUPPORTS, AND ACCESSORIES ASSOCIATED WITH ITEMS OR EQUIPMENT BEING DEMOLISHED.
82. CONTRACTOR SHALL COORDINATE WITH OWNER TO SCHEDULE ANY UTILITIES SHUTDOWNS. PROVIDE TEMPORARY CONNECTIONS AS REQUIRED TO MAINTAIN ALL NECESSARY SERVICES.
83. IF REQUIRED, CONTRACTOR SHALL COORDINATE WITH OWNER TO DETERMINE THE SALVAGE VALUE OF DEMOLISHED ITEMS. RECYCLABLE ITEMS WITHOUT SALVAGE VALUE SHALL BE PRESENTED TO RECYCLING FACILITY.

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

Feb 16 2021 | C:\2021-001\jackson animal\2021-001p2.dwg

REVISIONS

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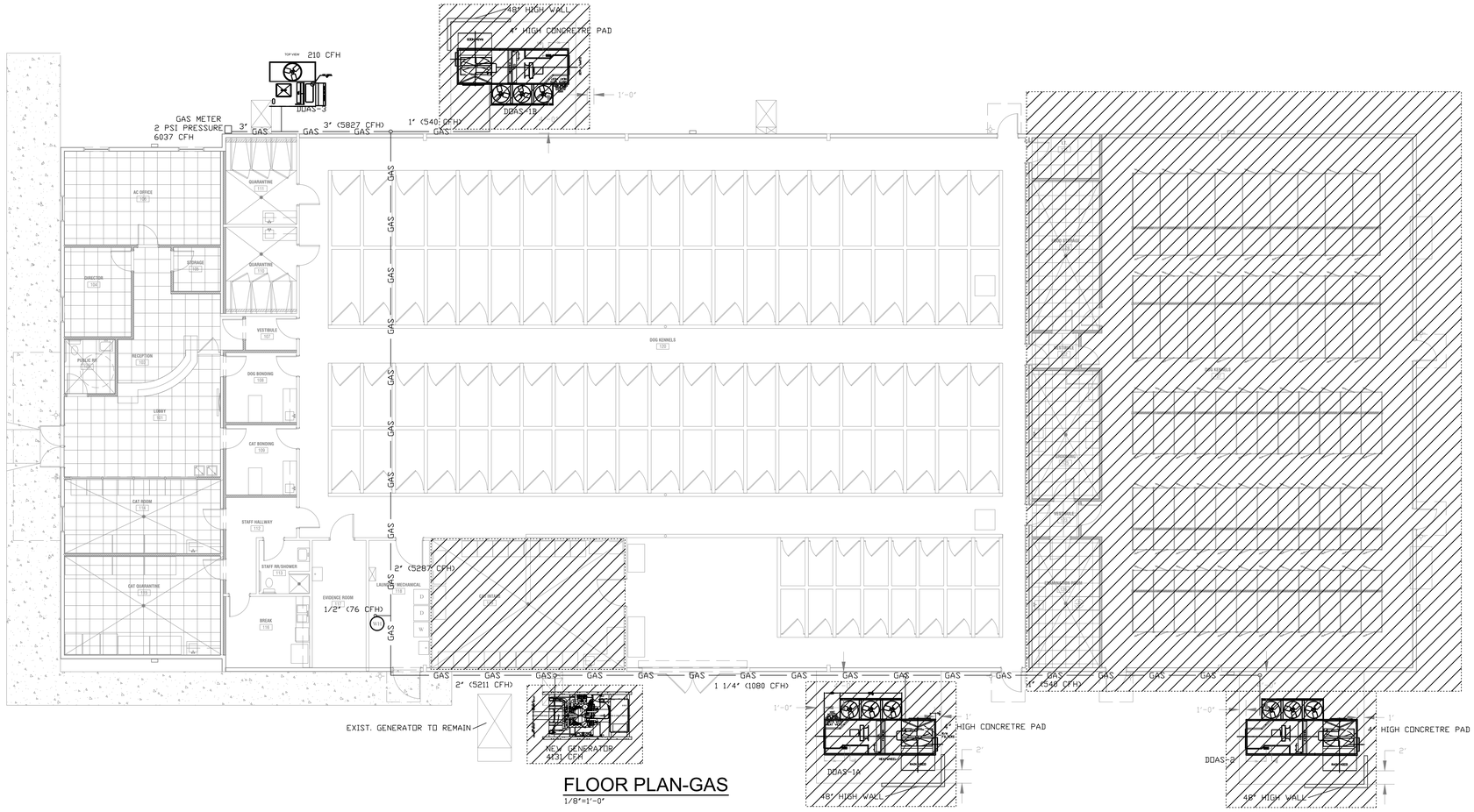
STATE OF GEORGIA REGISTERED No. 015306 PROFESSIONAL ENGINEER

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
PLUMBING GENERAL NOTES
PLUMBING FIXTURES SCHEDULE

PRINTED: 02/16/21

NUMBER: P-3



FLOOR PLAN-GAS

1/8"=1'-0"

PROVIDE PRESSURE REGULATOR AT THE EACH EQUIPMENT
SEE HVAC DRAWINGS (M-5) FOR GAS PIPING SPECIFICATION

-HATCHED AREAS INDICATES AREAS TO BE INCLUDED IN PHASE 2.

-REAR ADDITION TO BE COMPETED IN PHASE 2. ONLY SITE WORK & PREPARATION FOR FOUNDATION IS REQUIRED IN THIS BID.

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

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SEAL

GEORGIA REGISTERED No. 015330 PROFESSIONAL ENGINEER

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: FLOOR PLAN -GAS

PRINTED: 02/16/21

NUMBER: G-1

SAMSUNG DVM-S INSTALLATION ESSENTIALS

THE PURPOSE OF THE FOLLOWING INFORMATION IS TO INSURE THE SAMSUNG DVM-S SYSTEM IS PROPERLY DESIGNED AND INSTALLED FOR OPTIMAL OPERATION. IT IS IMPORTANT THAT THE SYSTEM IS INSTALLED TO SAMSUNG STANDARDS. PLEASE CONTACT INSIGHT PARTNERS FOR ANY QUESTIONS AND COMMENTS, AS WELL AS KEEPING INSIGHT PARTNERS UP-TO-DATE WITH THE PROGRESS OF THE INSTALLATION.

NOTES:

1. SAMSUNG PUBLISHED DATA (INSTALLATION MANUALS, INSTALLATION GUIDES, SUBMITTALS, WHITE PAPERS, ETC.) SUPERCEDES INFORMATION PROVIDED IN THIS DOCUMENT.
2. INFORMATION INDICATED IN THE DVM-S PRO DESIGN SOFTWARE REPORT SUPERCEDES ANY CONFLICTING INFORMATION (PIPE QTY/SIZES, IDU/ODU MODEL(S), CONTROL MODEL(S), ETC.) SHOWN IN THIS DESIGN DRAWING SET.

1.0 PRE-INSTALLATION CONSIDERATIONS (PIPING)

1.1 INSIGHT PARTNERS WILL PROVIDE THE CONTRACTOR WITH A SAMSUNG DVM-S PIPING DIAGRAM CREATED USING SAMSUNG'S DVM-S PRO DESIGN SOFTWARE.
1.2 ALL PIPING SIZES TO BE INSTALLED MUST HAVE ORIGINATED FROM A DVM-S PRO DESIGNED FILE, PRODUCED BY AN INSIGHT PARTNER SAMSUNG TRAINED DESIGNER.
1.3 NO PIPE WORK SHALL BE DONE WITHOUT A DVM PRO PIPING DIAGRAM.
1.4 WHEN PIPE ROUTING OR UNIT LOCATIONS DEVIATE FROM THE MOST RECENT DVM-S FILE, IT IS CRITICAL THAT A REVISED DVM-S DESIGN BE PERFORMED PRIOR TO PIPE WORK FOR ANY PIPE SEGMENT CHANGES OF 10 LINEAR FEET.
1.5 IT IS IMPORTANT THAT IDU/ODU LOCATIONS AND PIPE ROUTES BE FINALIZED PRIOR TO PIPE WORK INSTALLATION TO DETERMINE NEAR ACTUAL LENGTHS.
1.6 AS PIPING INSTALLATION COMMENCES, ALL CHANGES IN PROPOSED LENGTHS MUST BE FORWARDED TO INSIGHT PARTNERS FOR RE-CALCULATION IN DVM-S AND A NEW FIELD DRAWING PRODUCED BEFORE PIPING IS INSTALLED.
1.7 PIPING LENGTHS MUST BE DOCUMENTED ON AS-BUILT DRAWINGS AND DELIVERED TO INSIGHT PARTNERS BEFORE START-UP OF EQUIPMENT CAN BE SCHEDULED.
1.8 PLEASE BE SURE TO PAY ATTENTION TO A POSSIBLE CHANGE IN UNIT CAPACITIES AND PIPE SIZES AS PIPE LENGTH CHANGES.
1.9 FULL PORT BALL VALVES
    1.9.1 IT IS RECOMMENDED THAT FULL PORT BALL VALVES BE USED IN THE LIQUID AND SUCTION TO EACH IDU. THIS WILL ENABLE YOU TO EASILY MAKE FUTURE PIPING AND/OR IDU REPAIRS WITHOUT RECOVERING THE ENTIRE SYSTEM CHARGE.
    1.9.2 THEN MINIMUM PRESSURE RATING FOR THE FULL PORT/BI-FLOW WITH SCHROEDER PORT VALVES IS 600 PSI; A 750 PSI RATING IS RECOMMENDED.
    1.9.3 VALVES WITH SCHROEDER PORTS SHOULD BE UTILIZED TO FACILITATE RECOVERY AND EVACUATION.
    1.9.4 VALVES SHOULD BE USED WHEN A SYSTEM IS DESIGNED FOR FUTURE EXPANSION.
1.10 IN THE MAIN LINE VALVES SHOULD ONLY BE INSTALLED DOWNSTREAM OF THE Y-CONNECTION, UPSTREAM OF THE MODE CHANGE UNIT (MCU) BOXES.
1.11 IN THE BRANCH LINES VALVES SHALL BE INSTALLED AT THE BRANCH TAKEOFF AND/OR AT THE IDU PORT ON MCU'S TO AVOID AN OIL RETURN DEAD LEG.

2.0 INSTALLATION TOOLS (IN ADDITION TO STANDARD TOOLS THAT ARE NECESSARY TO PERFORM PIPING INSTALLATION)

2.1 DEDICATED R-410A MANIFOLD GAUGE SET IS HIGHLY RECOMMENDED WITH 5/16" HOSES SO AS NOT TO CONTAMINATE THE SYSTEM WITH OTHER OILS, SUCH AS MINERAL AND POE.
2.2 R-410A SERVICE ACCESS PORT WILL REQUIRE A SPECIAL ADAPTER TO ATTACH STANDARD 1/4" HOSES.
2.3 SCHROEDER CORE REMOVAL TOOL (5/16").
2.4 NITROGEN REGULATOR (600 PSI TEST).
2.5 R-410A FLARING TOOL. THE INDUSTRY STANDARD "OLD SCHOOL" FLARING TOOL IS NOT SUFFICIENT.

3.0 PIPE INSTALLATION

3.1 DO NOT INSTALL DRIERS, SIGHT GLASSES, SOLENOID VALVES, OR ANY OTHER COMPONENTS IN THE PIPING NETWORK. FULL PORT BALL VALVES ARE THE ONLY EXCEPTION.
3.2 DO NOT INSTALL TRAPS IN THE MAIN PIPING LINES.
    3.2.1 THE ONLY EXCEPTION IS FOR MAIN RUNS BRANCH LINES BETWEEN 2 OR 3 MULTI CHASSIS ODU'S THAT ARE >= 6.5 FEET APART. CONSULT DVM-S PIPING DIAGRAMS.
3.3 USE ONLY ACR (HARD) COPPER ON MAIN LINES.
3.4 ANNEALED TEMPERED (SOFT) COPPER CAN BE USED DOWNSTREAM OF MCU PORTS TO IDU'S. ACR (HARD) COPPER CAN BE USED BUT IS NOT REQUIRED.
3.5 USE BEST PRACTICES DURING PIPE INSTALLATION. ENSURE THAT ENDS OF ALL COPPER ARE SEALED TO PROTECT THE PIPE FROM DUST, WATER, AND OTHER CONTAMINANTS.
3.6 ONLY USE APPROVED TUBING CUTTERS TO CUT TUBING. HACKSAWS, RECIPROCATING SAWS, ETC. ARE NOT PERMITTED.
3.7 ALWAYS REMOVE INNER AND OUTER BURRS FROM PIPE ENDS BEFORE FLARING AND BRAZING.
3.8 FLARE NUTS MUST BE TIGHTEN TO PROPER TORQUE. INSIGHT PARTNERS CAN PROVIDE TORQUE TABLE UPON REQUEST.
3.9 BRAZE PIPING WITH 15% SILVER SOLDER AND A NITROGEN PURGE DURING THE BRAZING PROCESS.
    3.9.1 NITROGEN FLOW DURING BRAZING PROCESS SHALL BE AT 2-3 PSI TO PREVENT OXIDATION.
    3.9.2 NITROGEN PURGE PRESSURE MUST BE INTRODUCED THROUGH BOTH THE LIQUID AND SUCTION LINES AT THE SAME TIME. REMOVE THE HOT GAS SCHROEDER CORE IN THE ODU TO RELIEVE PRESSURE.
3.10 ALL PIPE WORK (LIQUID, SUCTION, HOT GAS) MUST BE INSULATED.
3.11 USE 1/2" TO 1 1/2" WALL THICKNESS CLOSED CELL TUBING INSULATION UNLESS OTHERWISE DIRECTED BY LOCAL CODE TO USE THICKER INSULATION.
3.12 LIQUID, SUCTION, AND HOT GAS TUBES MUST BE SEPARATELY INSULATED.
3.13 PROPER HANGING AND SUPPORT OF PIPING IS CRITICAL.
    3.13.1 APPROVED PRODUCTS FOR HANGING AND SUPPORT ARE:
        3.13.1.1 CUSH-A-CLICK STRUT SYSTEM
        3.13.1.2 CUSH-A-CLAMP STRUT SYSTEM
        3.13.1.3 KLO-SHURE INSULATED COUPLINGS STRUT HANGER
        3.13.1.4 CUSH-A-THERM
    3.13.2 EXPANSION AND CONTRACTION OF COPPER PIPING SYSTEM MUST BE CONSIDERED IN THE PIPING LAYOUT DESIGN.
    3.13.3 ANTICIPATED PIPE EXPANSION/CONTRACTION DUE TO TEMPERATURE CHANGE IS APPROXIMATELY 0.001 INCH PER DEGREE PER 10 FEET OF PIPE OR 0.0001 INCH PER DEGREE PER FOOT.
    3.13.4 THE SUCTION LINE CAN EXPERIENCE A RAPID 50 TO 120 DEGREE TEMPERATURE CHANGE WHEN SWITCHING BETWEEN HEATING AND COOLING. A 120 DEGREE TEMPERATURE DIFFERENCE EQUALS A 1-3/8" CHANGE IN PIPE LENGTH PER 100 FEET OF PIPE.
    3.13.5 PROPER ALLOWANCE FOR EXPANSION/CONTRACTION CAN NOT BE ALLOWED FOR IF PIPE IS HELD RIGIDLY BY PIPE CLAMPS.
3.14 FLARE JOINT CONSIDERATIONS
    3.14.1 WHEN MAKING THE CONNECTION TO THE IDU AND CHANGING FROM HARD TO SOFT COPPER
        3.14.1.1 A LONG RADIUS SWEEP IS USED BEFORE THE CONNECTION TO THE SOFT COPPER.
        3.14.1.2 A BRACKET MUST BE USED BETWEEN THE HARD/SOFT COPPER BRAZE JOINT.
        3.14.1.3 A FLARE CONNECTION MUST BE USED TO ASSURE A LEAK DOES NOT DEVELOP AT THE FLARE FITTING.
    3.14.2 THERE SHALL NOT BE BENDS 4 TO 6 INCHES FROM THE FLARE CONNECTIONS.
    3.14.3 THE "20-INCH RULE" SHALL BE APPLIED BETWEEN FITTINGS, INCLUDING Y-BRANCH FITTINGS. IT IS RECOMMENDED TO HAVE 36" MINIMUM BETWEEN CONSECUTIVE Y-BRANCHES.
    3.14.4 Y-BRANCH JOINTS CAN BE ORIENTED IN EITHER HORIZONTAL OR VERTICAL POSITION.
        3.14.4.1 IN THE HORIZONTAL POSITION, THE POSITION MUST NOT EXCEED +/- 15 DEGREES IN THE LATERAL POSITION, UP OR DOWN.
        3.14.4.2 IN THE VERTICAL POSITION, THE OUTLET OF THE Y-BRANCH CAN FACE UP OR DOWN, WITHIN +/- 3 DEGREES OF PLUMB.
    3.14.5 Y-BRANCH CONNECTIONS ALWAYS HAVE THE SINGLE PIPE END FACING THE ODU.
    3.14.6 ALL HEADERS MUST BE IN THE HORIZONTAL PLANE.
        3.14.6.1 NOT ALL PORTS ON HEADER MUST BE USED.
        CAP UNUSED END OF HEADER AND UNUSED PORTS.
        3.14.6.2 ADDITIONAL HEADERS CAN NOT BE CONNECTED TO A PORT OF A HEADER.
        3.14.6.3 HEADERS CAN ONLY BE USED ON HEAT PUMP SYSTEMS, NOT HEAT RECOVERY SYSTEMS.
    3.14.7 MULTI CHASSIS ODU SYSTEMS
        3.14.7.1 PIPE CONNECTIONS BETWEEN ODU'S MUST BE LESS THAN 33 FEET.
        3.14.7.2 ALL ODU'S ON A MULTI CHASSIS SYSTEM BUT BE INSTALLED AT THE SAME ELEVATION.
        3.14.7.3 CHASSIS MORE THAN 6.5 FEET APART REQUIRE AN INVERTED TRAP ON SUCTION LINE (AND HOT GAS LINE FOR HEAT RECOVERY SYSTEMS), SEE INSTALLATION MANUAL FOR SPECIFIC INVERT LOCATION AND SIZE.
    3.14.8 A HORIZONTAL PIPE RUN SLOPE TO THE ODU'S MAY NOT SLOPE DOWN HILL. LEVEL OR UPHILL ARE ACCEPTABLE.
    3.14.9 SUFFICIENT PIPING PROTECTION AT THE ODU'S MUST BE ASSURED. AS NEEDED, CONTACT INSIGHT PARTNERS FOR ASSISTANCE IN DETERMINING THE PROPER METHOD FOR YOUR PARTICULAR INSTALLATION.

4.0 INSTALLATION OF HEAT RECOVERY UNITS AND OTHER EQUIPMENT

4.1 THE MCU MUST BE INSTALLED RIGHT SIDE UP AND PLUMB HORIZONTAL. UPSIDE DOWN OR SIDEWAYS IS NOT PERMITTED.
4.2 THE MCU MUST BE SUPPORTED FROM (2) HANGERS, BOTH SIDES.
4.3 BE SURE TO CONNECT THE PROPER PIPE TO THE CORRECT CONNECTION. THE CORRECT CONNECTION IS CLEARLY LABELED OF THE UNIT.
    4.3.1 IDU'S CAN BE CONNECTED IN ANY ORDER TO MCU PORTS.
    4.3.2 THE THREE SYSTEM PIPES ON THE OUTLET SIDE OF THE MCU, IF UNUSED MUST BE CAPPED.
4.4 THE "20-INCH RULE" SHALL BE APPLIED BETWEEN FITTINGS, INCLUDING Y-BRANCH FITTINGS. IT IS RECOMMENDED TO HAVE 36" MINIMUM BETWEEN CONSECUTIVE Y-BRANCHES.

5.0 PRESSURE TESTING

5.1 LEAK TEST ONLY THE PIPING AND IDU'S. LEAVE ALL OUTDOOR UNIT SERVICE VALVES CLOSED.
5.2 PRESSURIZE ALL (3) REFRIGERANT LINES (HEAT RECOVERY SYSTEMS) OR BOTH REFRIGERANT LINES (HEAT PUMP SYSTEMS) WITH NITROGEN.
    5.2.1 STEP 1: PRESSURIZE TO 100 PSI FOR (5) MINUTES.
    5.2.2 STEP 2: PRESSURIZE TO 300 PSI FOR (5) MINUTES.
    5.2.3 STEP 3: INCREASE PRESSURE TO 600 PSI FOR (24) HOURS.
5.3 AMBIENT TEMPERATURE PRESSURE CALIBRATION
    5.3.1 USE THE FOLLOWING FORMULA TO ACCOUNT FOR TEMPERATURE DIFFERENCES BETWEEN BEGINNING AND END OF STEP 3 PRESSURE TEST.

    (Tp - Tc) X 0.80 = PRESSURE DROP (PD)

    Tp - TEMPERATURE AT BEGINNING OF TEST PERIOD
    Tc - TEMPERATURE AT END OF TEST PERIOD
    PD - ALLOWABLE PRESSURE DIFFERENCE BASED ON CHANGE IN TEMPERATURE.

    EXAMPLE:
    Tp = 90F, Tc = 80F - - - - - PD = (90 - 80) X 0.80 = 6.4 psi
    IF PRESSURE DROPPED FROM 600 TO 590 IN 24 HR PERIOD,
    600 - 590 = 10 PSI, 10 > 6.4, SYSTEM IS NOT SEALED.
5.3 IF ALL (3) STEPS ARE PASSED, EVACUATION SHALL COMMENCE.

6.0 TRIPLE EVACUATION PROCEDURE
6.1 EVACUATE THE SYSTEM TO 4000 MICRONS
    6.1.1 BREAK VACUUM WITH DRY NITROGEN AND HOLD FOR 15 MINUTES.
6.2 EVACUATE THE SYSTEM DOWN TO 1500 MICRONS.
    6.2.1 BREAK VACUUM WITH DRY NITROGEN AND HOLD FOR 15 MINUTES.
6.3 EVACUATE THE SYSTEM DOWN TO 500 MICRONS OR LESS
    6.3.1 HOLD VACUUM FOR 60 MINUTES.
    6.3.2 DO NOT REMOVE MANIFOLD GAUGES WITH SYSTEM UNDER VACUUM.
    6.3.3 DO NOT LEAVE SYSTEM UNDER VACUUM.
6.4 USE THE SYSTEM VACUUM TO DRAW IN THE ADDITIONAL REFRIGERANT CHARGE AS CALCULATED BY DVM-S AND THEN OPEN THE OUTDOOR UNIT SERVICE VALVES.
    6.4.1 DO NOT ADD REFRIGERANT TO SYSTEM OR OPEN KING VALVES ON ODU'S PRIOR TO COORDINATING WITH THE INSIGHT PARTNERS SERVICE MANAGER.

8.0 CONTROL WIRING

8.1 ALL WIRING MUST BE COMPLETED IN 16 GAUGE, 2-CONDUCTOR, STRANDED, SHIELDED WIRE.
8.2 USE ROUND PRESSURE TERMINALS FOR CONNECTION TO THE POWER TERMINAL BLOCK.
8.3 BE SURE TO MAINTAIN SUFFICIENT SPACING OF COMMUNICATION AND POWER WIRING THAT ARE RUNNING PARALLEL TO ONE ANOTHER.
    8.3.1 SPACING FOR 100 VAC OR MORE:
        8.3.1.1 10A: 11-13/16"
        8.3.1.2 50A: 19-11/16"
        8.3.1.3 100A: 39-3/8"
        8.3.1.4 >100A: 59-1/16"
8.4 ALL WIRING MUST BE IN A DAISY CHAIN CONFIGURATION. "STAR" CONFIGURATION IS NOT ACCEPTABLE.
8.5 SPLICE SHIELDS TOGETHER AT IDU'S, BUT DO NOT GROUND. GROUND ONLY AT ODU MASTER.

9.0 PREPARATION FOR COMMISSIONING

9.1 ENSURE ALL INSTALLATION METHODS PREVIOUSLY LISTED IN THIS DOCUMENTATION HAVE BEEN COMPLETED.
9.2 COMPLETE THE ASSISTED DVM-S START UP PRE-CHECK LIST.
9.3 COMPLETE THE DVM-S AS-BUILT MARKUPS.
9.4 PROVIDE MODEL AND SERIAL NUMBERS OF ALL EQUIPMENT, MATCHED PER SYSTEM.
    9.4.1 EACH FCU IS PROVIDED WITH SERIAL NUMBER STICKERS, THE STICKERS SHOULD BE PUT ON A PLAN DRAWING NEXT TO IT'S ASSOCIATED FCU. THIS WILL BE USED IN THE COMMISSIONING PROCESS.

10.0 VRF SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASHRAE 15.

11.0 CONTACT INFORMATION

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SAMSUNG VRF LEGEND

CONDENSING UNIT; 1-PHASE; HEAT PUMP; AMO__FXMDCH; 3-4.5 TON
CONDENSING UNIT; 1-PHASE; HEAT PUMP; AMO__MXMDCH; 5 TON
CONDENSING UNIT; 1-PHASE; HEAT RECOVERY; AMO__NXMDCB; 3-5 TONS
CONDENSING UNIT; 3-PHASE; HEAT PUMP (208/3); AMO__FXVAFH2AA; 6-44 TONS
HEAT PUMP (460/3); AMO__FXVAJH2AA; 6-44 TONS
HEAT RECOVERY (208/3); AMO__FXVAFR2AA 6-44 TONS
HEAT RECOVERY (460/3); AMO__FXVAJR2AA 6-44 TONS
MCU-S1NEK1N; 1-PORT MODE CHANGE UNIT; 54 MBH PER PORT, 54 MBH MAX, UP TO 8 INDOOR UNITS
MCU-S2NEK2N; 2-PORT MODE CHANGE UNIT; 54 MBH PER PORT, 108 MBH MAX, UP TO 16 INDOOR UNITS
MCU-S4NEK3N; 4-PORT MODE CHANGE UNIT; 54 MBH PER PORT, 216 MBH MAX, UP TO 32 INDOOR UNITS
MCU-S6NEK3N; 6-PORT MODE CHANGE UNIT; 54 MBH PER PORT, 216 MBH MAX, UP TO 32 INDOOR UNITS
MCU-S6NEK3N; 4-PORT MODE CHANGE UNIT; 19 MBH PER PORT, 76 MBH MAX, UP TO 18 INDOOR UNITS
AMO (09, 12, 18, 24, 30, 36, 48) KN4DCHAA; 360 CASSETTE CIRCLE
AMO (09, 12, 18, 24, 30, 36, 48) KN4DCHAA; 360 CASSETTE SQUARE
AMO (07, 09, 12) NNN1DCHAA; WIND-FREE 1-WAY CASSETTE
AMO (09, 12, 18, 24, 30, 36, 48) NN4DCHAA; WIND-FREE 4-WAY CASSETTE (3x3)
AMO (05, 07, 09, 12, 18, 20) NNNDCHAA; WIND-FREE MINI 4-WAY CASSETTE (2x2)
AMO (07, 09, 12, 15, 18) MNMDCHAA; DUCT-S (MEDIUM STATIC) DUCTED FCU
AMO (24, 27, 30, 36, 48) MNHDCHAA; DUCT-S (HIGH STATIC) DUCTED FCU
AMO (54, 76, 96) JNHDCHAA; HPS DUCTED FCU
AMO (07, 09, 12, 18, 24, 30, 36, 48) FNLDCHAA; SLIM DUCT FCU
AMO (18, 24) FNCDCHAA; CEILING / FLOOR STANDING (REQUIRED AND EXTERNAL EEV KIT
AMO (06, 09, 12, 18, 24) JNGDCHAA; FLOOR EXPOSED FCU
AMO (06, 09, 12, 18, 24) JNFDCHAA; FLOOR CONCEALED FCU
AMO (12, 18, 24, 30, 36, 48, 54, 60, 72) JNZDCHAA; MULTI-POSITION AHU
AMO (07, 09, 12, 15, 18, 24, 28) MNVDCHAA; AR-5000 WALL MOUNTED
AMO32MNQDCHAA; MAX WALL MOUNTED
AMO (36, 48) JNCDCHAA; BIG CEILING SUSPENDED
AMO (72, 96) JNESCHAA; OA PROCESSING UNIT
2-PIPE: LIQUID / SUCTION PIPING (SEE PIPING SCHEMATIC FOR SIZING)
3-PIPE: LIQUID/SUCTION/HI-LO GAS LINE (SEE PIPING SCHEMATIC FOR SIZING)
CONDENSATE PIPING
THERMOSTAT / CONTROL WIRING: 16/18 AWG, 2 WIRE, MULTI-STRANDED, NON-SHIELDED AND NON-POLARIZED DAISY CHAIN
POWER WIRING
RISER UP
RISER DOWN
ISOLATION VALVE
NAVIGATION CONTROLLER MN: BRC1E73
Y-BRANCH PIPING HEADER (SEE PIPING SCHEMATIC FOR MODEL NUMBER)

ASSISTED DVM-S START-UP PRE-CHECK LIST

THE FOLLOWING CHECKLIST IS PROVIDED TO INSURE THAT ALL NECESSARY INSTALLATION ITEMS ARE COMPLETED PRIOR TO THE ASSISTED STARTUP OF DVM-S SYSTEM(S).

THIS DOCUMENT IS FOR REFERENCE ONLY AND IS NOT AN INSTRUCTION MANUAL. PLEASE REFER TO SAMSUNG INSTALLATION MANUALS FOR PROPER INSTALLATION METHODS, PROCEDURES, AND DATA. ALL INSTALLING COMPANIES MUST ATTEND DVM TRAINING BEFORE INSTALLATION OF SAMSUNG DVM EQUIPMENT. ONLY BASIC INSTALLATION POINTS ARE NOTED WITHIN THIS DOCUMENT. LOCAL AND STATE CODES IN YOUR AREA WILL TAKE PRIORITY OVER INFORMATION IN THIS CHECKLIST. NOT ALL EQUIPMENT DISCUSSED IN THIS DOCUMENT WILL APPLY TO YOUR PROJECT.

PLEASE FILL OUT 1 FORM PER SYSTEM.

PROJECT/JOB/LOCATION NAME:
SITE ADDRESS:
INSTALLING CONTRACTOR COMPANY:
INSTALLING CONTRACTOR NAME:
OF ODU:

BY PLACING (BLOCK LETTERING) YOUR INITIALS IN THE COLUMN, YOU HAVE AGREED THAT THIS IS COMPLETED TO THE SPECIFICATION(S).

1.0 PIPING		INITIALS
1.01	ALL Y-JOINTS AND OUTDOOR UNIT TEE'S WERE PROVIDED BY SAMSUNG (NON-SAMSUNG FITTINGS WILL VOID WARRANTY)	
1.02	INDOOR REFRIGERANT Y-JOINTS ARE INSTALLED LEVEL, WITHIN 15? IN EITHER DIRECTION	
1.03	OUTDOOR MODULES REFRIGERANT TEE'S ARE INSTALLED LEVEL, NOT POINTING UP OR DOWN (MULTI MODULE SYSTEMS ONLY)	
1.04	UNUSED MCU PORT CAPS HAVE BEEN TIGHTENED TO SPEC AND ARE INSULATED	
1.05	ALL REFRIGERANT PIPES ARE INSULATED PER SAMSUNG RECOMMENDATIONS	
1.06	ALL SAMSUNG REFRIGERANT FITTINGS ARE INSULATED WITH SUPPLIED POLYSTYRENE INSULATION AND SEAMS ARE TAPED/SEALED TO PREVENT CONDENSATION	
1.07	ALL REFRIGERANT PIPE INSULATION JOINTS ARE SEALED WITH APPROPRIATE ADHESIVES AND/OR TAPES	
1.08	ALL CONDENSATION DRAIN PIPES ARE INSTALLED, INSULATED, AND SUPPORTED	
1.09	REFRIGERANT Y-JOINTS ARE SUPPORTED ON BOTH SIDES WITHIN 18"	
1.10	THERE IS A MINIMUM 20" BETWEEN Y-JOINT OUTLET/INLET AND ELBOWS	
1.11	THERE IS A MINIMUM 36" BETWEEN Y-JOINTS	
1.12	ALL ISOLATION VALVES (WHEN USED) ARE INSTALLED IN THE APPROPRIATE DIRECTION, INSULATED, AND COMPLETELY OPEN (ISOLATION VALVES WITH SERVICE PORTS ARE RECOMMENDED. INSTALL SO THE SERVICE PORT IS TOWARDS THE INDOOR UNIT(S) OR MCU(S)	
1.13	REFRIGERANT PIPE SYSTEM WAS PRESSURE CHECKED PER SAMSUNG RECOMMENDATION (150 PSIG FOR 15 MINUTES, 300 PSIG FOR 15 MINUTES, 600 PSIG FOR 24 HOURS)	
1.14	VACUUM PROCESS WAS PERFORMED ON THE REFRIGERANT PIPE SYSTEM PER SAMSUNG RECOMMENDATIONS (TO 500 MICRONS FOR 60 MINUTES)	
1.15	ADDITIONAL REFRIGERANT WAS ADDED TO THE SYSTEM AS CALCULATED BY DVM PRO SOFTWARE. (LENGTH OF EACH DIAMETER OF LIQUID REFRIGERANT PIPE MUST RECORDED TO ACCURATELY CALCULATE ADDITIONAL REFRIGERANT) DO NOT ADD REFRIGERANT PRIOR TO COORDINATING WITH INSIGHT PARTNERS SERVICE MANAGER.	
1.16	CONDENSING UNIT SERVICE VALVES ARE OPEN WITH VALVE COVERS REINSTALLED AND TIGHTENED	
2.0 MCU (MODE CHANGE UNIT) AND MXD EEV KITS		INITIALS
2.01	MCU'S HAVE BEEN INSTALLED LEVEL	
2.02	MEV EEV KITS (SINGLE UNIT) HAVE BEEN INSTALLED VERTICALLY LEVEL AND MUFFLERS ARE INSTALLED ON INLET SIDE OF SINGLE UNIT EEV KITS.	
2.03	ALL 208/230 VAC SUPPLY VOLTAGE TO THE MCU(S) HAS BEEN CONNECTED BY A LICENSED ELECTRICIAN	
3.0 CONDENSING UNIT		INITIALS
3.01	YOU MUST HAVE IN YOUR POSSESSION A COPY OF THE "AS-DESIGNED" DVM PRO PIPING TREE DIAGRAM. BEFORE ANY FIELD PIPE SIZE OR LENGTH CHANGES ARE MADE, PROPOSED CHANGES MUST BE FORWARDED TO THE DESIGN ENGINEER SO THAT THEY CAN INPUT THE CHANGES INTO DVM PRO AND RE-ISSUE A NEW PIPING TREE DIAGRAM.	
3.02	CONDENSING UNIT IS PROPERLY INSTALLED AND MEETS ALL GUIDELINES	
3.03	CORRECT SUPPLY VOLTAGE TO THE CONDENSING UNIT(S) HAS BEEN CONNECTED.	
3.04	ALL COM1 (F1/F2, OF1/OF2) COMMUNICATION WIRES HAVE BEEN CONNECTED (16 AWG X 2 SHIELDED)	
3.05	COM1 SHIELDED CABLE BARE WIRE IS GROUNDED AT THE OUTDOOR UNIT ON A SEPARATE TERMINAL THAN THE MAIN SERVICE GROUND CONNECTION	
3.06	ALL CENTRAL CONTROL COMMUNICATION WIRES (R1/R2) HAVE BEEN CONNECTED R1/R2 TERMINALS IN MAIN OUTDOOR UNIT(S) (REQUIRED FOR PROJECTS WHERE CENTRAL CONTROL OPTIONS ARE BEING INSTALLED. 16 AWG X 2 SHIELDED)	
4.0 INDOOR UNITS		INITIALS
4.01	1-WAY AND MINI 4-WAY CASSETTE UNITS ARE 60" MINIMUM FROM NEARBY WALLS AND OBSTRUCTIONS ON ALL SIDES (1-WAY ON ALL SIDES EXCLUDING RETURN AIR SIDE OF UNIT) MINIMUM 10' BETWEEN INSTALLED 4-WAY AND MINI 4-WAY CASSETTES.	
4.02	WALL MOUNTED UNITS HAVE SUFFICIENT SPACE IN FRONT OF THEM TO THE NEAREST WALL OR OBSTRUCTION (WALL MOUNTED UNITS ARE 6' MINIMUM FROM THE GROUND)	
4.03	ALL CONDENSATE DRAIN PIPES ARE INSTALLED AND INSULATED	
4.04	ALL REFRIGERANT PIPE INSULATION IS INSTALLED, SEALED AND SUPPORTED.	
4.05	ALL COM1 (F1/F2) AND COM2 (F3/F4) WIRE IS 16 AWG X 2, SHIELDED CABLE AND COMMUNICATION WIRES ARE CONNECTED.	
4.06	SHIELD AND BARE WIRE IN COM1 (F1/F2) WIRE IS NOT TOUCHING INDOOR UNIT PCB'S OR OTHER COMMUNICATION OR VOLTAGE CONNECTIONS.	
4.07	CONDENSATE PUMP OVERFLOW RELAY IS CONNECTED TO BREAK CN83 EXTERNAL CONTACT CONNECTION (REQUIRES INDOOR UNIT OPTION SETTING TO FUNCTION) OPTION 14 - SET TO 2 (SYSTEM MUST BE WIRED AND POWER MUST BE APPLIED, FOR WALL MOUNT UNITS ONLY)	
4.08	DUCTED INDOOR UNIT OPTION SETTING HAS BEEN ADJUST FOR USE OF INTERNAL SAMSUNG CONDENSATE PUMPS. OPTION 8 - SET TO 1 FOR PUMP USE, SET TO 2 FOR PUMP USE WITH 3 MINUTE OFF-DELAY (SYSTEM MUST BE WIRED AND POWER MUST BE APPLIED, FOR DUCTED UNITS THAT HAVE OPTIONAL SAMSUNG PUMP FIELD INSTALLED)	
4.09	DUCTED UNIT DUCT CONNECTIONS ARE COMPLETE AND SEALED AND FILTERS ARE IN PLACE.	
5.0 CONTROLLERS		INITIALS
5.01	ALL COM2 (F3/F4) WIRE IS 16 AWG X 2, SHIELDED CABLE THROUGHOUT THE BUILDING	
5.02	CENTRAL CONTROL WIRES HAVE BEEN RUN FROM THE MAIN OUTDOOR UNIT (R1/R2) TO THE INSTALLATION LOCATION OF CENTRAL CONTROLLER(S) FOR PROJECTS WITH CENTRAL CONTROL OPTIONS. 16 AWG X 2 SHIELDED CABLE	
5.03	OPTIONAL REMOTE TEMP. SENSOR MRW-TA HAS BEEN CONNECTED TO INDOOR UNIT(S) INDOOR UNIT OPTION SETTING HAS BEEN ADJUSTED FOR EXTERNAL SENSOR USE. OPTION 4 - SET TO 1 WHEN USING MRW-TA SENSOR (SYSTEM MUST BE WIRED AND POWER MUST BE APPLIED)	
6.0 POWER WIRE & COMMUNICATION CABLES		INITIALS
6.01	GROUND WIRE WAS INSTALLED AND PROPERLY TERMINATED AT THE OUTDOOR UNIT(S).	
6.02	POWER SUPPLIED IS CLEAN WITH VOLTAGE FLUCTUATIONS WITHIN SPECIFICATIONS. (±10% OF NAMEPLATE FOR 208-230V & 460V UNITS)	
6.03	POWER WIRING TO THE OUTDOOR UNIT(S) WAS INSTALLED PER ALL LOCAL ELECTRICAL CODE REQUIREMENTS.	
6.04	POWER WIRING TO EACH INDOOR UNIT WAS INSTALLED PER ALL LOCAL ELECTRICAL CODE REQUIREMENTS.	
6.05	COMMUNICATIONS CABLE BETWEEN THE OUTDOOR UNIT(S) AND INDOOR UNITS WAS CONNECTED IN A DAISY CHAIN CONFIGURATION (I.E., SINGLE PARALLEL CHAIN). NO "STAR" OR MULTIPLE PARALLEL CIRCUITS. NO CABLE SPLICES OR WIRE CAPS WERE USED TO CONNECT COMMUNICATIONS CABLES.	
7.0 INSIGHT PARTNERS INFORMATION		
7.01	INSIGHT PARTNERS VRF PROJECT MANAGER MARK E LEAF MLEAF@INSIGHTUSA.COM CELL: (813) 760-4368	
7.02	COORDINATE PROJECT SITE VISITS (INTERMEDIATE PROGRESS AND COMMISSIONING) WITH SERVICE MANAGER 2 WEEKS IN ADVANCE OF EACH SITE VISIT.	
7.03	COORDINATE WARRANTY SUBMISSION DOCUMENTATION WITH SERVICE MANAGER PRIOR TO PROJECT COMMISSIONING SITE VISIT.	
7.04	COORDINATE PIPING LENGTH AS-BUILTS MARK-UPS PRIOR TO PROJECT COMMISSIONING SITE VISIT.	
7.05	DO NOT POWER EQUIPMENT OR ADD REFRIGERANT PRIOR TO COORDINATING WITH INSIGHT SERVICE MANAGER.	

INSTALLATION NOTES

1. REFRIGERANT PIPING SHOWN ON PLAN IS ROUTED AS ACCURATELY AS POSSIBLE BUT DOES NOT NECESSARILY REFLECT ACTUAL ROUTING REQUIRED DUE TO CONFLICTS WITH INTERIOR STRUCTURAL COMPONENTS, OTHER TRADES, AND/OR ARCHITECTURAL COMPONENTS.
2. DUE TO SAMSUNG CAD SOFTWARE LIMITATIONS PIPE ROUTING AND INDICATED PIPE LENGTHS (ON PIPE TREE DIAGRAMS) DO REFLECT VERTICAL HEIGHT CHANGES FROM FLOOR LEVEL TO FLOOR LEVEL (I.E. FIRST FLOOR TO SECOND FLOOR) BUT DO NOT REFLECT VERTICAL HEIGHT CHANGES WITHIN THE SAME FLOOR LEVEL (I.E. WITHIN FIRST FLOOR, WITHIN SECOND FLOOR).
3. PIPE LENGTH CHANGES PER PIPE SEGMENT CAN AFFECT PIPE DIAMETER SIZES.
4. IT IS THE INSTALLERS RESPONSIBILITY TO COORDINATE ANTICIPATED ACTUAL PIPE LENGTHS TO BE INSTALLED WITH INSIGHT PARTNERS PRIOR TO ORDERING PIPE MATERIAL AND INSTALLING IT.
5. IT IS THE INSTALLERS RESPONSIBILITY TO COORDINATE ALL PIPE SEGMENT LENGTH CHANGES THROUGHOUT THE INSTALL PHASE.
6. INSIGHT PARTNERS AND SAMSUNG HVAC ARE NOT RESPONSIBLE FOR COST ASSOCIATED WITH REMOVING INCORRECTLY SIZED PIPING AND RE-INSTALLING PIPE THAT IS SIZED CORRECTLY.
7. SAMSUNG HVAC WILL NOT WARRANTY SYSTEMS THAT HAVE PIPE SIZES AND PIPE LENGTHS THAT DO NOT MATCH PIPE SIZES AND PIPE LENGTHS INDICATED IN SAMSUNG HVAC'S DVM PRO SOFTWARE.
8. REVIEW ALL SAMSUNG INSTALLATION MANUALS FOR PROPER INSTALLATION OF EQUIPMENT, PIPING, ETC.

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

Feb 16 2021 | C:\2021-001jackson animal\2021-001M1.dwg

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
X	00-00-00	N/A			

CONSULTANTS

Date Plotted : Feb 16, 2021 - 9:41am
file: 2021-001M1.DWG

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SEAL
No. 015330

JACKSON COUNTY
ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
NOTES
LEGEND
PRINTED: 02/16/21

NUMBER:
M-1

SAMSUNG VRF LEGEND

CONDENSING UNIT; 1-PHASE; HEAT PUMP; AMO__FXMDCH; 3-4.5 TON

CONDENSING UNIT; 1-PHASE; HEAT PUMP; AMO__MXMDCH; 5 TON

CONDENSING UNIT; 1-PHASE; HEAT RECOVERY; AMO__NXMDCB; 3-5 TONS

CONDENSING UNIT; 3-PHASE; HEAT PUMP (208/3); AMO__FXVAFH2AA; 6-44 TONS
HEAT PUMP (460/3); AMO__FXVAJH2AA; 6-44 TONS
HEAT RECOVERY (208/3); AMO__FXVAFR2AA 6-44 TONS
HEAT RECOVERY (460/3); AMO__FXVAJR2AA 6-44 TONS

MCU-S1NEK1N; 1-PORT MODE CHANGE UNIT; 54 MBH PER PORT, 54 MBH MAX, UP TO 8 INDOOR UNITS

MCU-S2NEK2N; 2-PORT MODE CHANGE UNIT; 54 MBH PER PORT, 108 MBH MAX, UP TO 16 INDOOR UNITS

MCU-S4NEK3N; 4-PORT MODE CHANGE UNIT; 54 MBH PER PORT, 216 MBH MAX, UP TO 32 INDOOR UNITS

MCU-S6NEK3N; 6-PORT MODE CHANGE UNIT; 54 MBH PER PORT, 216 MBH MAX, UP TO 32 INDOOR UNITS

MCU-S6NEK3N; 4-PORT MODE CHANGE UNIT; 19 MBH PER PORT, 76 MBH MAX, UP TO 18 INDOOR UNITS

AMO (09, 12, 18, 24, 30, 36, 48) KN4DCHAA; 360 CASSETTE CIRCLE

AMO (09, 12, 18, 24, 30, 36, 48) KN4DCHAA; 360 CASSETTE SQUARE

AMO (07, 09, 12) NNN1DCHAA; WIND-FREE 1-WAY CASSETTE

AMO (09, 12, 18, 24, 30, 36, 48) NN4DCHAA; WIND-FREE 4-WAY CASSETTE (3x3)

AMO (05, 07, 09, 12, 18, 20) NNNDCHAA; WIND-FREE MINI 4-WAY CASSETTE (2x2)

AMO (07, 09, 12, 15, 18) MNMDCHAA; DUCT-S (MEDIUM STATIC) DUCTED FCU

AMO (24, 27, 30, 36, 48) MNHDCHAA; DUCT-S (HIGH STATIC) DUCTED FCU

AMO (54, 76, 96) JNHDCHAA; HPS DUCTED FCU

AMO (07, 09, 12, 18, 24, 30, 36, 48) FNLDCHAA; SLIM DUCT FCU

AMO (18, 24) FNCDCHAA; CEILING / FLOOR STANDING (REQUIRED AND EXTERNAL EEV KIT

AMO (06, 09, 12, 18, 24) JNGDCHAA; FLOOR EXPOSED FCU

AMO (06, 09, 12, 18, 24) JNFDCHAA; FLOOR CONCEALED FCU

AMO (12, 18, 24, 30, 36, 48, 54, 60, 72) JNZDCHAA; MULTI-POSITION AHU

AMO (07, 09, 12, 15, 18, 24, 28) MNVDCHAA; AR-5000 WALL MOUNTED

AMO32MNQDCHAA; MAX WALL MOUNTED

AMO (36, 48) JNCDCHAA; BIG CEILING SUSPENDED

AMO (72, 96) JNESCHAA; OA PROCESSING UNIT

2-PIPE; LIQUID / SUCTION PIPING (SEE PIPING SCHEMATIC FOR SIZING)

3-PIPE; LIQUID/SUCTION/HI-LO GAS LINE (SEE PIPING SCHEMATIC FOR SIZING)

CONDENSATE PIPING

THERMOSTAT / CONTROL WIRING: 16/18 AWG, 2 WIRE, MULTI-STRANDED, NON-SHIELDED AND NON-POLARIZED DAISY CHAIN

POWER WIRING

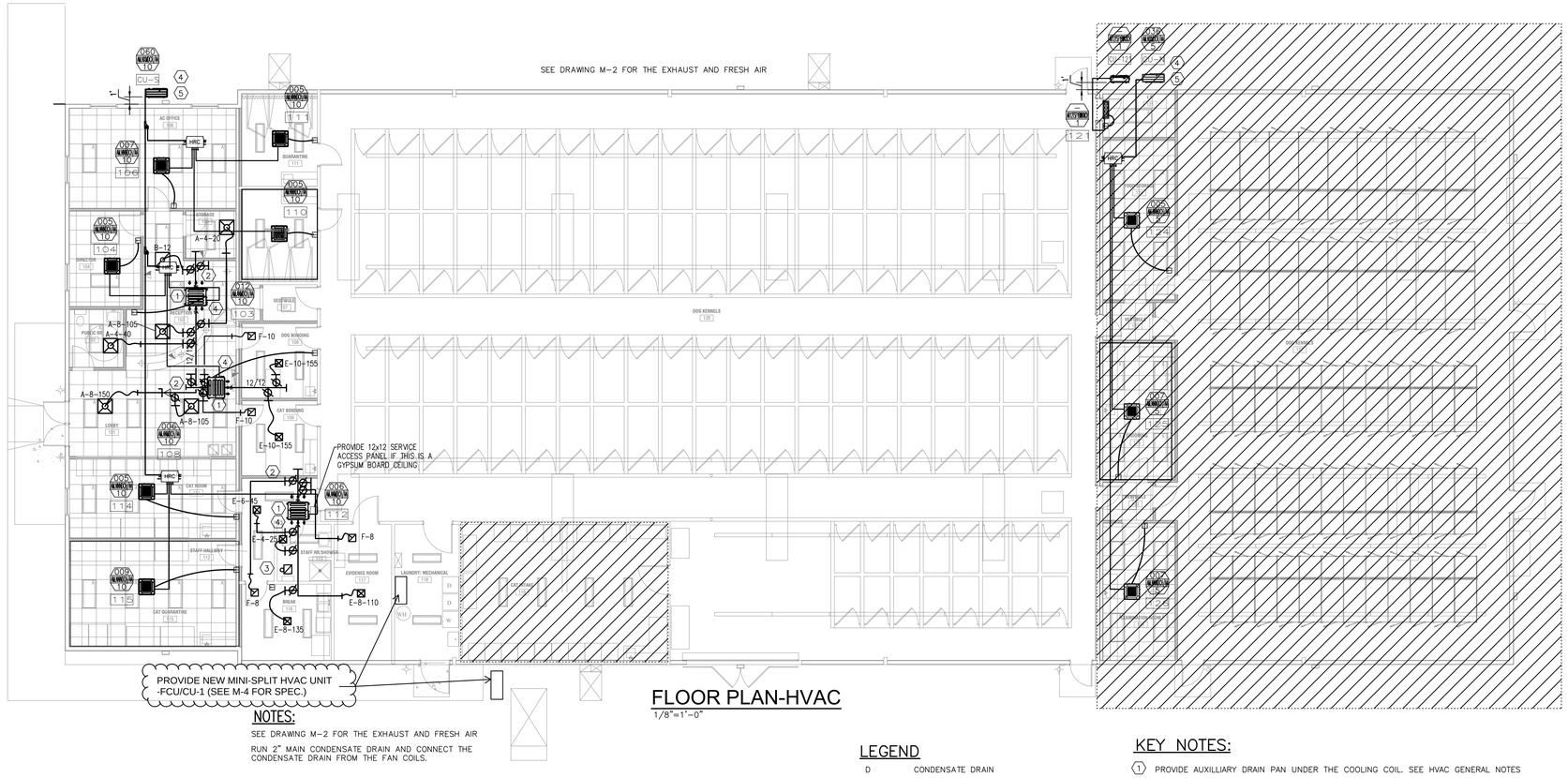
RISER UP

RISER DOWN

BV ISOLATION VALVE

NAVIGATION CONTROLLER MN: BRC1E73

Y-BRANCH PIPING HEADER (SEE PIPING SCHEMATIC FOR MODEL NUMBER)



NOTES:

SEE DRAWING M-2 FOR THE EXHAUST AND FRESH AIR

RUN 2" MAIN CONDENSATE DRAIN AND CONNECT THE CONDENSATE DRAIN FROM THE FAN COILS.

FLOOR PLAN-HVAC

1/8"=1'-0"

LEGEND

D CONDENSATE DRAIN

EXHAUST AIR

FD FIRE DAMPER WITH ACCESS PANEL.

SA SUPPLY AIR

RA RETURN AIR

T THERMOSTAT (PROGRAMMABLE)

SD SMOKE DETECTOR IN SUPPLY AIR DUCT AS PER GA. AMENDMENTS606.2.1

A-8-100 — CFM
NECK SIZE
AIR DISTRIBUTION DEVICE SEE SCHEDULE.

SPIN IN FITTING WITH MANUAL VOLUME DAMPER

MVD MANUAL VOLUME DAMPER

CONTINUOUS LINE INDICATES NEW DUCTWORK

KEY NOTES:

1. PROVIDE AUXILLIARY DRAIN PAN UNDER THE COOLING COIL. SEE HVAC GENERAL NOTES
2. RETURN AIR DUCT PLENUM: FULL SIZE OF UNIT CONNECTION.
3. EXISTING FAN TO REMAIN.
4. MAINTAIN CLEARANCES AROUND AND BETWEEN UNITS AS RECOMMENDED BY MANUFACTURER.
5. MOUNT CONDENSING UNIT ON 4" HIGH CONCRETE PAD.

-HATCHED AREAS INDICATES AREAS TO BE INCLUDED IN PHASE 2.

-REAR ADDITION TO BE COMPETED IN PHASE 2. ONLY SITE WORK & PREPARATION FOR FOUNDATION IS REQUIRED IN THIS BID.

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

REVISIONS					
Number	Date:	Remarks:	Number	Date:	Remarks:
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Date Plotted : Feb 16, 2021 - 9:42am
file: 2021-001M1.DWG

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SEAL

GEORGIA REGISTERED No. 015330 PROFESSIONAL ENGINEER

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: FLOOR PLAN-HVAC LEGEND

PRINTED: 02/16/21

NUMBER: M-2

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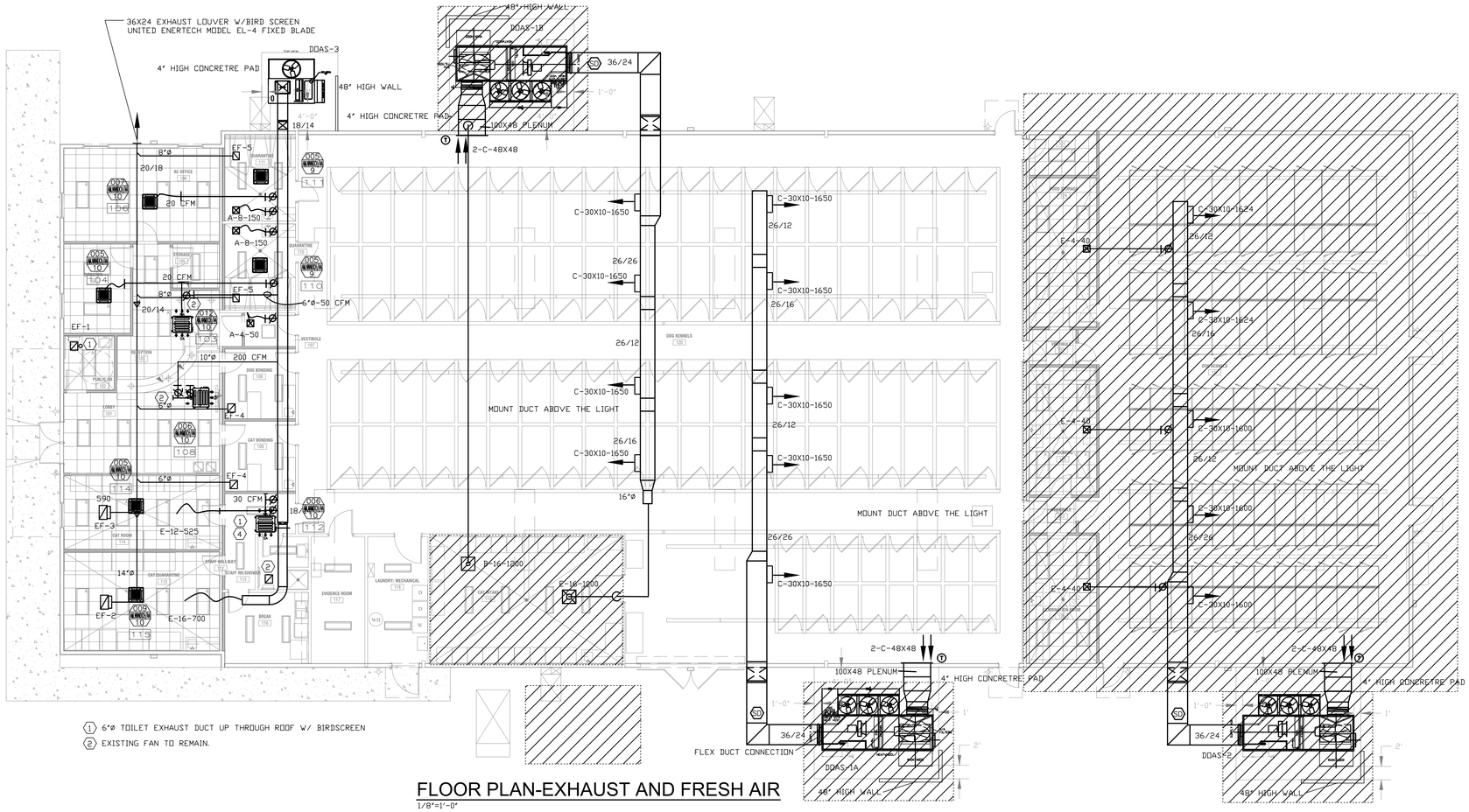

1 6"ø TOILET EXHAUST DUCT UP THROUGH ROOF W/ BIRDSCREEN

2 EXISTING FAN TO REMAIN.

FLOOR PLAN-EXHAUST AND FRESH AIR

1/8"=1'-0"

-HATCHED AREAS INDICATES AREAS TO BE INCLUDED IN PHASE 2.

-REAR ADDITION TO BE COMPETED IN PHASE 2. ONLY SITE WORK & PREPARATION FOR FOUNDATION IS REQUIRED IN THIS BID.

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

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SEAL

GEORGIA REGISTERED PROFESSIONAL ENGINEER

JACKSON COUNTY ANIMAL SHELTER

JEFFERSON, GEORGIA

SHEET TITLE:
FLOOR PLAN
EXHAUST AND FRESH AIR

PRINTED: 02/16/21

NUMBER: M-3

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VARIABLE REFRIGERANT FLOW FAN COIL UNIT SCHEDULE

DESCRIPTION								NOMINAL CAPACITY				SUPPLY					ELECTRICAL			SOUND	SOUND	LIQUID	SUCTION	
LEVEL	ROOM NAME	FCU TAG	CONNECTS TO	MANUFACTURER	MODEL	DESCRIPTION	MODE	NOMINAL TONAGE (LBS)	TOTAL COOLING (BTUH / H)	SENSIBLE COOLING (BTUH / H)	TOTAL HEATING (BTUH / H)	AIRFLOW HIGH / MED/ LOW (CFM)	E.S.P. MIN/STND/MAX (IN. WG)	REFRIG. TYPE	DIMENSIONS (W x H x D) (IN)	WEIGHT (LBS)	VOLTAGE (V / Ph / Hz) (A)	MCA (A)	MOCP (A)	PRESSURE L / M / H dB(A)	POWER COOLING dB(A)	PIPIE SIZE (IN)	PIPIE SIZE (IN)	NOTES
1F	124 FOOD STORAGE	124	CU-N	SAMSUNG	AM005NNNDCH/AA	4-WAY MINI CASSETTE (2x2) "WIND-FREE"	HP / HR	0.42	5,000	3,400	6,000	300 / 254 / 230	0	R410A	22-5/8 x 9-13/16 x 22-5/8	25.7	208-230/1/60	0.2	15.0	30 / 28 / 23	46	1/4"	1/2"	1-12
1F	125 GROOMING	125	CU-N	SAMSUNG	AM007NNNDCH/AA	4-WAY MINI CASSETTE (2x2) "WIND-FREE"	HP / HR	0.63	7,500	5,100	8,700	318 / 272 / 230	0	R410A	22-5/8 x 9-13/16 x 22-5/8	26.5	208-230/1/60	0.2	15.0	32 / 29 / 25	47	1/4"	1/2"	1-12
1F	126 EXAMINATION	126	CU-N	SAMSUNG	AM007NNNDCH/AA	4-WAY MINI CASSETTE (2x2) "WIND-FREE"	HP / HR	0.63	7,500	5,100	8,700	318 / 272 / 230	0	R410A	22-5/8 x 9-13/16 x 22-5/8	26.5	208-230/1/60	0.2	15.0	32 / 29 / 25	47	1/4"	1/2"	1-12
1F	106 AC OFFICE	106	CU-S	SAMSUNG	AM007NNNDCH/AA	4-WAY MINI CASSETTE (2x2) "WIND-FREE"	HP / HR	0.63	7,500	5,100	8,700	318 / 272 / 230	0	R410A	22-5/8 x 9-13/16 x 22-5/8	26.5	208-230/1/60	0.2	15.0	32 / 29 / 25	47	1/4"	1/2"	1-12
1F	104 DIRCTOR	104	CU-S	SAMSUNG	AM005NNNDCH/AA	4-WAY MINI CASSETTE (2x2) "WIND-FREE"	HP / HR	0.42	5,000	3,400	6,000	300 / 254 / 230	0	R410A	22-5/8 x 9-13/16 x 22-5/8	25.7	208-230/1/60	0.2	15.0	30 / 28 / 23	46	1/4"	1/2"	1-12
1F	103 RECEPTION	103	CU-S	SAMSUNG	AM012ANMDCH/AA	DUCT-S (NEW)	HP / HR	1.00	12,000	9,100	13,500	424 / 353 / 300	0.00 / 0.04 / 0.59	R410A	33-7/16 x 9-13/16 x 27-9/16	60.6	208-230/1/60	0.9	15.0	29/27/25	51	1/4"	1/2"	1-12
1F	114 CAT ROOM	114	CU-S	SAMSUNG	AM005NNNDCH/AA	4-WAY MINI CASSETTE (2x2) "WIND-FREE"	HP / HR	0.42	5,000	3,400	6,000	300 / 254 / 230	0	R410A	22-5/8 x 9-13/16 x 22-5/8	25.7	208-230/1/60	0.2	15.0	30 / 28 / 23	46	1/4"	1/2"	1-12
1F	115 CAT QUARANTINE	115	CU-S	SAMSUNG	AM009NNNDCH/AA	4-WAY MINI CASSETTE (2x2) "WIND-FREE"	HP / HR	0.79	9,500	6,800	10,500	353 / 300 / 265	0	R410A	22-5/8 x 9-13/16 x 22-5/8	26.5	208-230/1/60	0.2	15.0	33 / 30 / 26	50	1/4"	1/2"	1-12
1F	111 QUARANTINE	111	CU-S	SAMSUNG	AM005NNNDCH/AA	4-WAY MINI CASSETTE (2x2) "WIND-FREE"	HP / HR	0.42	5,000	3,400	6,000	300 / 254 / 230	0	R410A	22-5/8 x 9-13/16 x 22-5/8	25.7	208-230/1/60	0.2	15.0	30 / 28 / 23	46	1/4"	1/2"	1-12
1F	110 QUARANTINE	110	CU-S	SAMSUNG	AM005NNNDCH/AA	4-WAY MINI CASSETTE (2x2) "WIND-FREE"	HP / HR	0.42	5,000	3,400	6,000	300 / 254 / 230	0	R410A	22-5/8 x 9-13/16 x 22-5/8	25.7	208-230/1/60	0.2	15.0	30 / 28 / 23	46	1/4"	1/2"	1-12
1F	108_109 DOG & CAT BONDING	108_109	CU-S	SAMSUNG	AM006ANMDCH/AA	DUCT-S (NEW)	HP / HR	0.53	6,300	4,900	7,100	318 / 283 / 247	0.00 / 0.04 / 0.59	R410A	33-7/16 x 9-13/16 x 27-9/16	60.6	208-230/1/60	0.9	15.0	27/25/23	50	1/4"	1/2"	1-12
1F	112 STAFF HALLWAY	112	CU-S	SAMSUNG	AM006ANMDCH/AA	DUCT-S (NEW)	HP / HR	0.53	6,300	4,900	7,100	318 / 283 / 247	0.00 / 0.04 / 0.59	R410A	33-7/16 x 9-13/16 x 27-9/16	60.6	208-230/1/60	0.9	15.0	27/25/23	50	1/4"	1/2"	1-12

NOTES

1. BASIS OF DESIGN: SAMSUNG DVM-S-ECO (SINGLE PHASE) HEAT RECOVERY SYSTEM
2. PROVIDE A (FULLY PROGRAMMABLE) ADVANCED WIRED CONTROLLER MN: MWR-WG00UN
3. INDOOR UNITS ARE SEPARATELY POWERED WITH 208-230/1/60
4. PROVIDE WITH Y-JOINT PIPING KITS. SEE FLOOR PLANS AND PIPING DIAGRAM FOR ADDITIONAL INFORMATION
5. PROVIDE REFRIGERANT ISOLATION VALVES JUST AFTER Y-BRANCH SERVING EACH FCU OR JUST AFTER MCU FEEDING THE ASSOCIATED FAN COIL. VALVES TO BE COMPATIBLE WITH R40A REFRIGERANT WORKING PRESSURE UP TO 700 PSI, FULL FLOW VALVE WITH 0 PRESSURE DROP, BI-DIRECTIONAL FLOW, SERVICE PORT AND BRAZED CONNECTION.
6. CONTRACTOR TO PROVIDE DAISY CHAIN CONTROL WIRING. WIRE SPECIFICATIONS ARE 2 WIRE, 16 AWG, NON-POLARITY, SHIELDED, STRANDED BETWEEN ALL SYSTEM COMPONENTS
7. TOGGLE DISCONNECTS PROVIDED BY DIVISION 16
8. FOR ALL (2x2) 4-WAY CASSETTE FCU'S MN: AM0(05-20)NNNDCH/AA PROVIDE A FASCIA PANEL (WIND-FREE) MN: PC4SUFMUN
9. CONTRACTOR TO PROVIDE A FILTER RACK/FILTER OR A FILTER GRILLE FOR ALL DUCTED FCU'S
10. PROVIDE SIZE AND QUANTITY OF MCU'S (MODE CHANGE UNITS) IN ACCORDANCE WITH THE ENGINEERING VRF PIPING PLANS AND DIAGRAMS
11. START-UP ASSISTANCE TO BE PROVIDED BY MANUFACUTRER
12. PROVIDE A 10-YEAR PARTS ONLY WARRANTY ON ENTIRE SYSTEM WITH PRODUCT REGISTRATION.

VARIABLE REFRIGERANT FLOW CONDENSING UNIT SCHEDULE

DESCRIPTION			CONN. RATIO	CONN. RATIO	SYSTEM INFO			CAPACITY					AMBIENT	AMBIENT	REFRIGERANT			ELECTRICAL			SOUND	SOUND	SEER	EER		IEER		HIGH COP (47F)		HSPF (1-PHASE) SCHE (3-PHASE)		NOTES
LEVEL	TAG	MODEL NUMBER	COOLING (%)	HEATING (%)	PAIRED SYTEM COMBINATIONS (BTUH)	TYPE	MODE	NOMINAL TONAGE (TONS)	NOMINAL COOLING (BTUH/H)	NOMINAL HEATING (BTUH/H)	RATED COOLING (BTUH/H)	RATED HEATING (BTUH/H)	DESIGN COOLING (DF DB)	DESIGN HEATING (DF DB)	TYPE	BASE CHARGE (LBS)	DIMENSIONS (W x H x D) (IN)	WEIGHT (LBS)	VOLTAGE (V / Ph / Hz) (A)	MCA (A)	MOCP (A)	PRESSURE COOLING dB(A)	POWER COOLING dB(A)	DUCTED / NON-DUCTED –	NON-DUCTED (BTUH/H)	DUCTED (BTUH/H)	NON-DUCTED (BTUH/H)	DUCTED (BTUH/H)	NON-DUCTED (W)	DUCTED (W)	NON-DUCTED (BTUH/H)	DUCTED (BTUH/H)	
1F	CU-N	AM036NXMDCR/AA	52.60	55.70	–	DVM-S ECO	HEAT RECOVERY	3	38,000	42,000	–	–	80.0	67.0	R410A	7.10	37.0x47.64x13.0	235.9	208/1/60	23.0	40.0	50.0	66.0	17.2/22.0	12.50	11.20	–	–	–	3.00	9.50	10.00	1-12
1F	CU-S	AM060NXMDCR/AA	102.67	107.42	–	DVM-S ECO	HEAT RECOVERY	5	60,000	66,000	–	–	80.0	67.0	R410A	8.20	37.0x55.9 x13.0	297.6	208/1/60	32.0	50.0	58.0	76.0	17.1/20.6	11.20	10.90	–	–	–	3.54	10.90	11.50	1-12

NOTES

1. BASIS OF DESIGN: SAMSUNG DVM-S-ECO (SINGLE PHASE) HEAT RECOVERY SYSTEM (SIMULTANEOUS HEATING AND COOLING)
2. THE POWER SUPPLY TO THE OUTDOOR UNIT IS 208-230 VOLTS, 1 PHASE, 60 HERTZ +/- 10%
3. INVERTER (VFD DRIVEN) SCROLL COMPRESSOR(S)
4. CONTRACTOR TO PROVIDE INSULATED ACR RATED COPPER. REFER TO REFRIGERANT PIPING NOTES SPECIFIC REQUIREMENTS
5. EACH CONDENSING UNIT TO CONNECT TO INDIVIDUAL SAMSUNG INDOOR UNITS AS SHOWN ON FLOOR PLAN, PIPING AND CONTROLS DIAGRAM.
6. PROVIDED SINGLE POINTS OF CONNECTION. ELECTRICAL CONTRACTOR SHALL PROVIDE DISCONNECTS AND GFI CONVENIENCE OUTLETS.
7. STANDARD ACCESSORIES INCLUDE INTERNAL COMPRESSOR HIGH AND LOW PRESSURE AND TEMPERATURE PROTECTION, LIQUID LINE FILTER/DRYERS, LOW PRESSURE SWITCHES, ELECTRONIC EXPANSION VALVES AND VFD CONTROLLED OUTDOOR FAN MOTOR.
8. THE MECHANICAL CONTRACTOR MUST OBTAIN SUBMITTAL APPROVAL FROM BOTH THE ELECTRICAL AND MECHANICAL ENGINEERS BEFORE PLACING THE FINAL ORDER.
9. THE OUTDOOR UNIT IS CAPABLE OF HEATING OPERATION AT 0°F DRY BULB AMBIENT TEMPERATURE WITHOUT ADDITIONAL LOW AMBIENT CONTROLS
10. CONTRACTOR TO PROVIDE DAISY CHAIN CONTROL WIRING. WIRE SPECIFICATIONS ARE 2 WIRE, 16 AWG, NON-POLARITY, SHIELDED, STRANDED BETWEEN ALL SYSTEM COMPONENTS
11. THE CONDENSING UNIT COIL SHALL HAVE A MINIMUM OF 2,280 HOUR CORROSION COATING AS PER SALT SPRAY TEST METHOD ASTM-B117.
12. PROVIDE A 10-YEAR PARTS ONLY WARRANTY ON ENTIRE SYSTEM WITH PRODUCT REGISTRATION.

AIR DISTRIBUTION SCHEDULE

MARK	DESCRIPTION	KRUEGER MODEL	TITUS	PANEL SIZE	REMARKS
A	NAILOR "4320" PERFORATED SUPPLY AIR CEILING DIFFUSER.	6604	PAS	24X24	1,2,3
B	NAILOR "51EC" EGGCRATE 1/2"X1/2"X1/2" GRID RETURN AIR GRILLE.	ECG5	50P	24X24	1
C	NAILOR "45DL1-O-POB" DRUM LOUVER SUPPLY AIR REGISTER			30X10	1,2,4
D	NAILOR "61FH-HD-RETURN AIR GRILLE			48X48	1
E	NAILOR "4320" PERFORATED SUPPLY AIR CEILING DIFFUSER.	6604	PAS	12X12	1,2,3
F	NAILOR "51EC" EGGCRATE 1/2"X1/2"X1/2" GRID RETURN AIR GRILLE.	ECG5	50P	12X12	1

1. STEEL. FINISH AND BORDER SHALL MATCH CEILING. SEE ARCHITECT DRAWING FOR THE TYPE OF CEILING.
2. MANUAL VOLUME DAMPER.
3. FACTORY INSULATED DIFFUSER AT UNCONDITIONED AREA OR NO RETURN AIR PLENUM.
4. POLE OPERATOR BRACKET

FAN SCHEDULE

MARK	CFM	EXP.SP	RPM	T.S.	SONES	H.P.	MANUFACTURER	MODEL #	VOLTAGE	WEIGHT	REMARKS
EF-1	75	0.25	717	1173	1.3	1/18	PENN	ZJ1	115/1/60	15	1,2,4
EF-2	775	0.5	1013	2121	5.3	1/5	PENN	Z121S	115/1/60	44	1,2,3
EF-3	590	0.5	929	1945	4.1	1/5	PENN	Z121S	115/1/60	44	1,2,3
EF-4	150	0.5	1128	1993	3.1	1/12	PENN	Z8H	115/1/60	20	1,2,3
EF-5	200	0.5	1166	2060	3.3	1/12	PENN	Z8H	115/1/60	20	1,2,3
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1. SPEED CONTROLLER.
2. CEILING MOUNTED WITH BACKDRAFT DAMPER.
3. FAN OPERATES CONTINUOUSLY
4. FAN OPERATES FROM THE WALL SWITCH.

DUCTLESS MINI-SPLIT SCHEDULE

TAGGING	UNIT TAG	–	FCU/CU-1
	TYPE	–	WALL MOUNTED
PERFORMANCE	COOLING CAPACITY	BTU/H	12,000
	COOLING RANGE	BTU/H	3,000 – 14,500
	HEATING CAPACITY	BTU/H	12,000
	HEATING RANGE	BTU/H	2,600 – 20,000
		SEER	21.50
		EER	12.05
	EFFICIENCY	COP	3.65
		HSPF	12.00
POWER	ELECTRICAL	VOLT/ PHASE/ Hz	208-230 / 1 / 60
	MCA	AMPS	12.50
	MOCP	AMPS	20.00
INDOOR UNIT	MODEL	#	AR12TSFYBWKNCV
	USA MODEL	#	RNS12YBT
	CFM	(L / M / H / T)	300 / 335 / 370 / 384
	EXTERNAL STATIC PRESSURE	MIN / STND / MAX	–
	DIMENSIONS (W X H X D)	IN. / IN. / IN.	32.3 x 11.8 x 8.5
	WEIGHT	LBS	20.1
OUTDOOR UNIT	MODEL	#	AR12TSFYBWKXCV
	USA MODEL	#	RXS12YBT
	CFM	MAX	1,589
	REFRIGERANT	TYP	R410A
	DIMENSIONS (W X H X D)	IN. / IN. / IN.	31.1 x 21.6 x 11.2
	WEIGHT	LBS	70.0
OPERATING TEMPERATURE	COOLING	°F	14 < T < 115
	HEATING	°F	5 < T < 75
PIPE CONNECTIONS	LIQUID / SUCTION	INCHES / INCHES	1/4 / 3/8
	MAX. LENGTH OVERALL	FT.	66
	MAX. LENGTH VERTICAL	FT.	49
NOTES			1-8

NOTES

1. BASIS OF DESIGN: SAMSUNG.
2. UNIT SHALL SHIP WITH A WIRELESS CONTROLLER AND BATTERIES AS A STANDARD.
3. THE INDOOR UNIT SHALL HAVE WI-FI CAPABILITY AS STANDARD
4. ALL UNITS ARE HEAT PUMP AND CAN BE CONVERTED TO COOLING ONLY THRU PROGRAMMING IN CONTROLLERS.
5. OUTDOOR UNIT SHALL PROVIDE 208/230V POWER TO INDOOR UNIT VIA 14 AWG X 3 INTERCONNECT POWER CABLE
6. PROVIDE ADVANCED WIRED CONTROLLER W/ DUAL SETPOINT TEMPERATURES (PROGRAMMABLE) MN: MWR-WG00UN WITH COMMUNICATION MODULE (REQUIRED FOR ALL WIRED CONTROLLERS) MN: MIM-A00UN
7. PROVIDE CONDENSATE PUMP MN: ASP-MO-UNIV 110-250, 115-230V MINI PUMP FOR WALL UNITS UP TO 24K BTU, 33' HEAD, 5.0' SUCTION LIFT
8. PROVIDED 10-YEAR COMPRESSOR, 10-YEAR PARTS WARRANTY WITH PRODUCT REGISTRATION.

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

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REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
X	00-00-00	N/A			

CONSULTANTS

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SEAL

GEORGIA REGISTERED No. 015330 PROFESSIONAL ENGINEER

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: SCHEDULES

PRINTED: 02/16/21

NUMBER: M-4

100% OUTSIDE AIR UNITS SCHEDULE

Mark	Supply Fan			Exhaust Fan			Heat Wheel (Summer)					Heat Wheel (Winter)					GROSS DX Cooling						Hot Gas Reheat			Gas Heating				Electric Data			Weight (Lbs)	AAON Nomenclature
	CFM	ESP (In)	HP	CFM	ESP (In)	HP	Capacity (MBH) Total	Ent Air DB	Ent Air WB	Lvg Air DB	Lvg Air WB	Capacity (MBH) Total	Ent Air DB	Ent Air WB	Lvg Air DB	Lvg Air WB	Capacity (MBH) Sensible	Capacity (MBH) Total	Ent Air DB	Ent Air WB	Lvg Air DB	Lvg Air WB	Capacity (MBH) Total	Lvg Air Temp DB	Lvg Air Temp RH	Capacity (MBH) Input	Capacity (MBH) Output	Air Temp Ent	Air Temp Lvg	Voltage V / PH	MCA AMPS	Max Fuse AMPS		
DOAS-1A	8250	0.75"	10	8500	0.75"	10	183	95.0	75.0	85.0	69.1	344.8	17.0	15.0	42.3	38.5	244.2	339.1	85.0	69.1	55.7	55.4	166.0	75.0	50.0%	540.0	432.0	42.3	91.1	208/3	193.0	250.0	4,900	AAON RNA-030-C-0-8-CAB0A-DB3L0
DOAS-1b	8250	0.75"	10	8500	0.75"	10	183	95.0	75.0	85.0	69.1	344.8	17.0	15.0	42.3	38.5	244.2	339.1	85.0	69.1	55.7	55.4	166.0	75.0	50.0%	540.0	432.0	42.3	91.1	208/3	193.0	250.0	4,900	AAON RNA-030-C-0-8-CAB0A-DB3L0
DOAS-2	8200	0.75"	10	7700	0.75"	10	183	95.0	75.0	84.9	69.1	344.8	17.0	15.0	42.5	38.7	244.8	338.1	84.9	69.1	55.6	55.2	166.0	75.0	50.0%	540.0	432.0	42.5	91.2	208/3	193.0	250.0	4,900	AAON RNA-030-C-0-8-CAB0A-DB3L0
DOAS-3	1895	1.0"	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	76.7	122.1	95.0	75.0	54.4	54.2	41.0	75.0	48.0%	210.0	168.0	17.0	99.1	208/3	52.0	80.0	1,350	AAON RN-010-8-0-EB09-3LB

REMARKS:

1. FACTORY ASSEMBLED, PIPED, WIRED AND TESTED AS A SINGLE PACKAGE. MUST BE ETL AND UL LISTED AS A PACKAGED UNIT.
2. PROVIDE HORIZONTAL DISCHARGE AND RETURN CONFIGURATION. INSTALL UNIT ON CONCRETE HOUSEKEEPING PAD.
3. UNITS SHALL INCLUDE ALUMINUM ENTHALPY HEAT WHEEL WITH PURGE SECTION.
4. UNITS SHALL INCLUDE 2 STAGE COOLING, 2 COMPRESSOR CIRCUITS WITH INTERLACED-CIRCUIT DX COILS (FACE SPLIT NOT ACCEPTABLE)
5. UNITS SHALL INCLUDE MINIMUM 10:1 TURNDOWN MODULATING NATURAL GAS HEATING WITH 304 SERIES STAINLESS STEEL HEAT EXCHANGER WITH A 25 YEAR WARRANTY (PARTS ONLY)
6. UNITS SHALL INCLUDE HOT GAS BYPASS ON LAG CIRCUITS (FROST-STAT COMPRESSOR CYCLING NOT ACCEPTABLE)
7. UNITS SHALL INCLUDE MODULATING HOT GAS REHEAT COILS FOR DEHUMIDIFICATION (2-POSITION OR DEDICATED HEAT PUMP CIRCUIT NOT ACCEPTABLE)
8. UNITS SHALL INCLUDE STAINLESS STEEL DRAIN PAN
9. UNITS SHALL INCLUDE MANUAL RESET HIGH PRESSURE SWITCHES & AUTO RESET LOW PRESSURE SWITCHES
10. UNITS SHALL INCLUDE MODULATING CONDENSER FAN MOTORS FOR HEAD PRESSURE CONTROL
11. UNITS SHALL INCLUDE 2" MERV 8 FILTERS FOR OUTSIDE AIR SECTION, EXHAUST AIR SECTION, AND MAIN AIR SECTION.
12. CONTROLS: AAON VCCX CONTROLLER WITH AMBIENT DEWPOINT SENSOR; ELECTRONIC SEQUENCING OF COMPRESSORS AND HEATING AND MODULATING HOT GAS RE-HEATING.
    FIELD MOUNTED CONTROLS SHALL INCLUDE A DUCT MOUNTED LEAVING AIR SENSOR AND A WALL MOUNTED SPACE SENSOR (SEE PLANS FOR LOCATION)
    ALL UNIT MOUNTED CONTROLS FOR COMPLETE OPERATION SHALL BE INSTALLED BY THE EQUIPMENT MANUFACTURER
13. 2" FOAM INJECTED INSULATED (MINIMUM R13 VALUE) DOUBLEWALL CABINET CONSTRUCTION
14. UNITS SHALL INCLUDE INTEGRAL NON-FUSED DISCONNECT
15. UNITS SHALL INCLUDE REMOTE SAFETY SHUTDOWN TERMINALS
16. PHASE PROTECTION
17. DUCT MOUNTED SMOKE DETECTORS PROVIDED BY ELECTRICAL, INSTALLED BY MECHANICAL
18. UNIT SHALL BE AHRI LISTED AND CERTIFIED (COIL ONLY CERTIFICATION IS NOT ACCEPTABLE)
19. SUPPLY AND EXHAUST FANS SHALL BE DIRECT DRIVE WITH FACTORY MOUNTED VFD FOR BALANCING AND/OR CONTROL
20. COMPRESSORS SHALL HAVE 5 YEAR WARRANTY (PARTS ONLY)
21. DOAS-3 SHALL BE A 100% OUTSIDE AIR UNIT WITH NO HEAT WHEEL
21. CONTACT JOSH TAYLOR FOR ADDITIONAL INFORMATION 770-653-2679

HVAC GENERAL NOTES

1. CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ARCHITECT ANY CONFLICTS OF WORK PRIOR TO PURCHASE OF EQUIPMENT OR COMMENCEMENT OF WORK. CONTRACTOR SHALL NOT FABRICATE ANY DUCTWORK WITHOUT COORDINATING WITH OTHER DISCIPLINES AND VERIFYING CLEARANCE FOR THE DUCTWORK.

2. NO EQUIPMENT SHALL BE VISIBLE FROM THE FRONT.

3. CONTRACTOR SHALL REMOVE ALL THE EXISTING AIR-CONDITIONING EQUIPMENT AND WALL EXHAUST FANS. DISPOSE ALL THE EQUIPMENT AS PER THE OWNER'S INSTRUCTIONS.

4. CONTRACTOR SHALL VISIT THE JOB SITE AND HAVE A GOOD WORKING KNOWLEDGE AND ACQUAINTANCE OF THE EXISTING JOB SITE AS WELL AS THE CONDITIONS OF THE JOB SITE AND INCLUDE A STATEMENT ON HIS BID THAT HE HAS DONE SO.

5. DEVIATIONS FROM MATERIAL, METHODS, AND PROCEDURES SET FORTH HEREIN MUST BE APPROVED IN WRITING WITH EQUIPMENT AND INSTALLATION SUBMITTALS.

6. CONTRACTOR SHALL REVIEW STRUCTURAL, ELECTRICAL, AND ARCHITECTURAL DRAWINGS BEFORE FABRICATING OR INSTALLING DUCTWORK OR EQUIPMENT TO AVOID ANY CONFLICTS.

7. FIRE DAMPERS SHALL BE RUSKIN MODEL D-IBD2 TYPE "B" WITH 1 ½ HR RATING. (VERIFY RATING BEFORE SPECIFYING).

8. REQUEST FOR PAYMENT FOR ADDITIONAL COST DUE TO SITE CONDITIONS WILL NOT BE ALLOWED.

9. ALL DUCT DIMENSIONS ARE INSIDE CLEAR

10. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED BY EVERY APPLICABLE JURISDICTION FOR THE PERFORMANCE OF THE WORK.

11. ALL WORK SHALL MEET THE LOCAL AND STATE, HEATING AND AIR-CONDITIONING, AND ENERGY CODES.

12. SHEET METAL DUCTWORK SHALL BE GALVANIZED STEEL SHEETS OF THICKNESS AS RECOMMENDED, CONSTRUCTED AND DETAILED IN THE LATEST SMACNA CONSTRUCTION STANDARDS. NO FIBERGLASS DUCTWORK SHALL BE USED.

13. ON DUCTWORK SIZES; FIRST DIMENSION GIVEN IS SIDE SHOWN.

14. DUCT TURNS MAY BE ROUND OR SQUARE. ROUND ELBOWS SHALL HAVE INSIDE RADIUS NOT LESS THAN DUCT WIDTH. SQUARE ELBOWS SHALL HAVE SINGLE THICKNESS WALL TURNING VANES.

15. SUPPLY, RETURN, AND OUTSIDE AIR INTAKE DUCTWORK SHALL BE INSULATED WITH 3 INCH THICK BLANKET, TYPE 75 WITH REINFORCED FOIL FACE VAPOR BARRIER, U. L. LISTED. (SEE STANDARD MECHANICAL AND ENERGY CODE). ANY AIR SUPPLYING EQUIPMENT (GRILLES, DIFFUSER, REGISTERS, AHU, AND OTHERS) LOCATED IN A NON-AIR-CONDITIONING AREA AND WHICH ARE SUBJECT TO FORM CONDENSATION ON THE SURFACE SHALL BE INSULATED. ALL SUPPLY AND RETURN DUCTS AND PLENUM SHALL BE INSULATED WITH A MINIMUM OF R-5 INSULATION WHEN LOCATED IN UNCONDITIONED SPACES AND WITH A MINIMUM OF R-8 INSULATION WHEN LOCATED OUTSIDE THE BUILDING (E.G. ATTIC).

16. CONTRACTOR SHALL COORDINATE VOLTAGE AND PHASE OF EACH EQUIPMENT WITH ELECTRICAL CONTRACTOR BEFORE ORDERING.

17. SYSTEM SHALL BE AIR BALANCED.

18. FLEX DUCT SHALL NOT EXCEED 8'-0" IN LENGTH.

19. ALL ROUND DUCT SHALL BE PROPERLY WRAPPED, TAPED AND SUPPORTED SO AS TO REDUCE NOISE AND VIBRATION.

20. PROVIDE OPERATIONS AND MAINTENANCE MANUALS FOR ALL EQUIPMENT.

21. ALL LOW VOLTAGE (24 VOLTS AND BELOW) CONTROL AND INTERLOCK WIRING IS INCLUDED IN THIS DIVISION.

22. SMOKE DETECTORS SHALL BE PROVIDED AT ALL EQUIPMENT SUPPLYING OR EXHAUSTING GREATER THAN 2000 CFM OR SERVING MEANS OF EGRESS (CORRIDOR)IN THE RETURN DUCT (CORRIDOR) PRIOR TO OUTDOOR AIR CONNECTIONS (IMC-2006) AND SUPPLY AIR DUCT (Ga. Amendments).
    a. SMOKE DETECTORS ARE NOT REQUIRED IN THE RETURN/SUPPLY AIR SYSTEM WHERE CONNECTION ACCORDING TO NFPA-90A, MECHANICAL CODE SECTION606, AND LOCAL CODES. AIR SYSTEM WHERE ALL PORTIONS OF THE BUILDING SERVED BY THE AIR DISTRIBUTION SYSTEM ARE PROTECTED BY AREA SMOKE DETECTORS CONNECTED TO A FIRE ALARM SYSTEM IN ACCORDANCE WITH THE INTERNATIONAL FIRE CODE.

23. THE SMOKE DETECTOR ACTIVATION SHALL CAUSE A VISUAL AND AN AUDIBLE SIGNAL IN A NORMALLY OCCUPIED AREA, AND SMOKE DETECTOR TROUBLE CONDITIONS SHALL BE INDICATED VISUALLY OR AUDIBLY IN A NORMALLY OCCUPIED AREA AND SHALL BE IDENTIFIED AS AIR DUCT DETECTOR TROUBLE. (COORDINATE WITH FIRE ALARM CONTRACTOR). CONTRACTOR SHALL PROVIDE AND INSTALL SMOKE DETECTORS UNLESS OTHERWISE NOTED. COORDINATE WITH ELECTRICAL AND FIRE ALARM CONTRACTOR FOR THE TYPE OF SMOKE DETECTOR.

24. EACH AIR DISTRIBUTION SYSTEM SHALL BE PROVIDED WITH NOT LESS THAN ONE MANUALLY OPERABLE MEANS TO STOP THE OPERATION OF SUPPLY, RETURN, AND EXHAUST FANS IN AN EMERGENCY. THE MEANS OF MANUAL OPERATION SHALL BE LOCATED AT AN APPROVED LOCATION.

25. RUN MIN. 3/4" OR FULL SIZE OF UNIT CONNECTION PVC CONDENSATE DRAIN FROM UNIT TO THE APPROVED PLACE OF DISPOSAL AS PER MECHANICAL CODE SECTION 307.2. PROVIDE CONDENSATE DRAIN PUMP IF NECESSARY.

26. AIR-CONDITIONING UNITS SHALL HAVE FACTORY INSTALLED VIBRATION (INTERNAL) ISOLATORS.

27. DIFFUSERS ARE TO BE CONNECTED TO DUCTWORK WITH SPIN-IN FITTING EXTRACTOR AND MANUAL VOLUME DAMPER. EXACT LOCATION OF ALL DIFFUSERS TO BE COORDINATED WITH LIGHTING LAYOUT AND REFLECTED CEILING PLAN.

28. AIRFOIL SHAPED SPLITTER DAMPER IS REQUIRED AT EACH DUCT SPLIT WHERE ANY DUCT DIMENSION EXCEEDS 8". PROVIDE LOCKING QUADRANT.

29. ADJUSTABLE, MULTI-BLADE EXTRACTOR SHALL BE REQUIRED AT EACH BRANCH DUCT TAKEOFF WHERE NO OTHER PROVISION HAS BEEN MADE TO DIVERT THE AIR.

30. CONTRACTOR SHALL COORDINATE WITH OTHER DISCIPLINES AND CHECK CLEARANCES TO PREVENT ANY CONFLICTS.

31. PROVIDE REGISTERS AND GRILLES THAT MATCH MOUNTING SURFACE FINISHES AS APPROVED BY THE ARCHITECT.

32. COORDINATE THE EXACT LOCATION OF THE GAS METER WITH THE OWNER.

33. GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL ASTM A53 OR ASTM 106 WITH MALLEABLE IRON SCREWED FITTINGS. ALL PORTIONS OF GAS PIPING UNDERGROUND OR IN FLOOR SLAB SHALL HAVE ASPHALTIC COATING EQUAL TO SOUTHERN WF-1. GAS PIPING RUN IN CONCRETE FLOOR SLAB SHALL HAVE AT LEAST 2" OF CONCRETE ON ALL SIDES. WALLS OR ENCLOSED SPACES WHERE GAS IS RUN SHALL BE VENTED WITH APPROVED GRILLES, OR CONDUIT TO OUTSIDE.

34. FLEXIBLE CONNECTORS SHALL BEAR THE LABEL OF AN APPROVED AGENCY. THE CONNECTORS SHALL BE A MAXIMUM OF SIX FEET IN LENGTH. SEE FUEL GAS CODE 411.1

35. GAS PIPING SHALL BE IDENTIFIED AS AN NATURAL GAS PIPING. IDENTIFICATION SHALL BE IN THE FORM OF A TAG, STENCIL OR OTHER PERMANENT MARKING, SPACED AT INTERVALS OF NOT MORE THAN 25 FEET AND NOT LESS THAN ONCE IN ANY ROOM OR SPACE.

36. PIPE JOINTS SHALL BE THREADED, FLANGED OR WELDED. JOINT COMPOUND SHALL BE RESISTANT TO THE ACTION OF LIQUIDIFIED PETROLEUM GAS OR TO ANY OTHER CHEMICAL CONSTITUENTS OF THE GAS TO BE CONDUCTED THROUGH THE PIPING.

37. JOINTS BETWEEN DIFFERENT METALLIC PIPING MATERIALS SHALL BE MADE WITH APPROVED DIELECTRIC FITTINGS TO ISOLATE ELECTRICALLY ABOVE GROUND PIPING FROM UNDERGROUND PIPING OR TO ISOLATE ELECTRICALLY DIFFERENT METALLIC PIPING MATERIALS JOINED UNDERGROUND.

38. STEEL GAS PIPING SHALL BE SUPPORTED AT INTERVALS NOT EXCEEDING 6'-0" UP TO ½" , 8'-0" UP TO 1", AND 10'-0" LARGER THAN 1". SEE FUEL GAS CODE TABLE 415.1

39. CONCEALED GAS PIPING SHALL NOT BE LOCATED IN SOLID PARTITIONS AND SOLID WALLS, UNLESS INSTALLED IN A CHASE OR CASING.

40. GAS PIPING SHALL NOT BE INSTALLED IN OR THROUGH A CIRCULATING AIR DUCT, CLOTHES CHUTE, CHIMNEY OR GAS VENT, VENTILATING DUCT, DUMWAITER OR ELEVATOR SHAFT. PIPING INSTALLED DOWNSTREAM OF THE POINT OF DELIVERY SHALL NOT EXTEND THROUGH ANY TOWNHOUSE UNIT OTHER THAN THE UNIT SERVED BY SUCH PIPING.

41. PORTION OF GAS PIPING SYSTEM INSTALLED IN A CONCEALED LOCATIONS SHALL NOT HAVE UNIONS, TUBING FITTINGS, RIGHT AND LEFT COUPLINGS, BUSHINGS, COMPRESSION COUPLINGS AND SWING JOINTS MADE BY COMBINATIONS OF FITTINGS.

42. UNDERGROUND PIPING WHERE INSTALLED BELOW GRADE THROUGH OUTER FOUNDATION OR BASEMENT WALL OF BUILDING, SHALL BE ENCASED IN A PROTECTIVE PIPE SLEEVE. THE ANNULAR SPACE BETWEEN THE GAS PIPING AND THE SLEEVE SHALL BE SEALED.

43. ALL GAS PIPING INSTALLED OUTDOOR SHALL BE ELEVATED NOT LESS THAN 3 ½" ABOVE THE GROUND AS PER FUEL GAS CODE SECTION 404.7

44. ALL GAS PIPING SHALL BE PROTECTED FROM CORROSION AS PER FUEL GAS CODE SECTION 404.8

45. UNDERGROUND GAS PIPING SHALL BE INSTALLED MINIMUM DEPTH OF 12 INCHES BELOW GRADE. SEE FUEL GAS CODE 404.9

46. GAS PIPING SHALL NOT BE INSTALLED BENEATH BUILDING EXCEPT WHERE PIPING IS ENCASED IN A CONDUIT OF WROUGHT IRON, PLASTIC PIPE OR STEEL PIPE DESIGNED TO WITHSTAND THE SUPERIMPOSED LOADS AS PER FUEL GAS CODE SECTION 404.11

47. ALL GAS PIPING SHALL BE INSPECTED, TESTED AND PURGED AS PER FUEL GAS CODE SECTION 406.

48. GAS PIPING (OTHER THAN DRY) SHALL BE SLOPED NOT LESS THAN 1/4" PER 15 FEET TO PREVENT TRAP.

49. SEDIMENT TRAP IS NOT INCORPORATED AS PART OF THE GAS UTILIZATION EQUIPMENT, A SEDIMENT TRAP SHALL BE INSTALLED DOWNSTREAM OF THE EQUIPMENT SHUT-OFF VALVE AS CLOSE TO THE INLET OF THE EQUIPMENT AS PRACTICAL. SEE FUEL GAS CODE SECTION 408.4

50. PRESSURE REGULATORS THAT REQUIRED VENT SHALL BE VENTED DIRECTLY TO THE OUTDOORS. THE VENT SHALL BE DESIGNED TO PREVENT THE ENTRY OF INSECTS, WATER, AND FOREIGN OBJECTS. VENT PIPING SHALL BE FULL SIZED OF PRESSURE REGULATOR VALVE CONNECTION.

51. HORIZONTAL UPPER COMBUSTION AIR DUCTS SHALL NOT SLOPE DOWNWARD TOWARD THE SOURCE OF COMBUSTION AIR. SEE FUEL GAS CODE SECTION 304.11

52. GAS APPLIANCE AND EQUIPMENT HAVING AN IGNITION SOURCE SHALL BE ELEVATED SUCH THAT THE SOURCE OF IGNITION IS NOT LESS THAN 18 INCHES ABOVE THE FLOOR IN HAZARDOUS LOCATIONS, PUBLIC GARAGES, PRIVATE GARAGES, REPAIR GARAGES, MOTOR FUEL-DISPENSING FACILITIES AND PARKING GARAGES AS PER FUEL GAS CODE SECTION 305.3

53. CLEARANCE TO COMBUSTIBLE MATERIAL IS IN ACCORDANCE OF FUEL GAS CODE 308.

54. PROVIDE 30" X 30" MINIMUM SERVICE SPACE AT THE FRONT OR SERVICE SIDE OF THE EQUIPMENT. SEE FUEL GAS CODE 306.3

55. TEST MEDIUM SHALL BE AIR, NITROGEN, CARBON DIOXIDE, OR INERT GAS. OXYGEN SHALL NOT BE USED. SEE FUEL GAS CODE 406.2

56. GAS PIPING SHALL NOT BE USED AS GROUNDING ELECTRODE. SEE FUEL GAS CODE 309.1

57. SEE GAS FUEL CODE FOR GAS PIPING BONDING.

58. FOR OTHER THAN STEEL PIPE, EXPOSED PIPING SHALL IDENTIFIED BY A YELLOW LABEL MARKED "GAS" IN BLACK LETTER. THE MARKING SHALL BE SPACE AT INTERVALS NOT EXCEEDING 5 FEET. SEE FUEL GAS CODE 401.5.

59. CAST IRON PIPE SHALL NOT BE USED. SEE GAS FUEL GAS CODE 403.4.1

60. COPPER AND BRASS PIPE OR TUBING SHALL NOT BE USED IF THE GAS CONTAINS MORE THAN AN AVERAGE OF 0.3 GRAINS OF HYDROGEN SULFIDE PER 100 STANDARD CUBIC FEET OF GAS.

61. PLASTIC PIPE, TUBING AND FITTING SHALL BE USED OUTDOORS ONLY. SEE FUEL GAS CODE 403.6 AND 404.14

62. PVC REGULATOR VENT PIPING SHALL NOT BE INSTALLED INSIDE.

63. IN CONCEALED LOCATIONS, WHERE PIPING OTHER THAN BLACK OR GALVANIZED STEEL IS INSTALLED THROUGH HOLES OR NOTCHES IN WOOD STUDS, JOISTS, RAFTERS, OR SIMILAR MEMBERS LESS THAN 1.5 INCHES FROM THE NEAREST EDGE OF THE MEMBER, PIPE SHALL BE PROTECTED BY SHIELD PLATES. SHIELD PLATES SHALL BE 1/16" THICK STEEL, SHALL COVER THE AREA OF THE PIPE WHERE THE MEMBER IS NOTCHED OR BORED AND SHALL EXTEND MINIMUM OF 4 INCHES ABOVE THE SOLE PLATES, BELOW TOP PLATES AND TO EACH SIDE OF A STUD, JOIST OR RAFTER. SEE FUEL GAS CODE 404.5

64. LEAK TESTING SHALL BE AS PER FUEL GAS CODE 406.

65. A TEE FITTING WITH ONE OPENING CAPPED OR PLUGGED SHALL BE INSTALLED BETWEEN THE MP REGULATOR AND ITS UPSTREAM SHUT-OFF VALVE. SEE FUEL GAS CODE 410.2

66. A TEE FITTING SHALL BE INSTALLED NOT LESS THAN 10 PIPE DIAMETERS DOWNSTREAM OF MP REGULATOR. SUCH FITTING SHALL BE POSITIONED TO ALLOW CONNECTION OF PRESSURE MEASURING INSTRUMENT AND TO SERVE AS A SEDIMENT TRAP. SEE FUEL GAS CODE 410.2

67. TERMINATE FLUE ABOVE ROOF IN ACCORDANCE WITH LOCAL AND STANDARD MECHANICAL CODE. PROVIDE ROOF JACK, WATERPROOF AT FLUE ROOF PENETRATIONS. LOCATIONS OF ROOF PENETRATION SHALL BE COORDINATED W/OWNER.

68. COORDINATE GRILLE AND DIFFUSER LOCATIONS WITH REFLECTED CEILING PLAN.

69. FLEXIBLE DUCT SHALL BE THERMAFLEX M-KC. (SEE LOCAL AND STANDARD MECHANICAL CODE).

70. MOUNT ALL THERMOSTATS AT 4'-6" AFF.(TOP)

71. PROVIDE LOCKING COVER FOR EACH THERMOSTATS.

72. PROVIDE SEVEN-DAY (5-1-1) DAY PROGRAMMABLE THERMOSTATS SINGLE/TWO STAGE HEAT-OFF-COOL-AUTO OR AS APPROVED BY ARCHITECT. CONTRACTOR SHALL MAKE SURE THAT THESE THERMOSTAT ARE COMPATIBLE WITH THE UNITS PROVIDED.

73. BRANCH DUCT FROM MAIN TO THE DIFFUSER SHALL BE SAME SIZE OF DIFFUSER NECK CONNECTION UNLESS OTHERWISE NOTED.

74. ALL CONDENSING UNITS SHALL BE MOUNTED ON 4" HIGH CONCRETE PAD AND PROVIDE CLEARANCE AROUND AND TOP OF THE UNITS AS RECOMMENDED BY THE MANUFACTURER.

75. CONTRACTOR SHALL PREPARE COMPLETE ISOMETRIC DRAWINGS OF REFRIGERANT PIPING AND SHALL BE APPROVED BY THE MANUFACTURER. CONTRACTOR SHALL SUBMIT MANUFACTURER APPROVED DRAWINGS TO THE ARCHITECT WITH MANUFACTURER LETTER STATING THAT REFRIGERANT PIPING IS IN ACCORDANCE WITH FACTORY RECOMMENDATIONS AND WILL NOT HARM EQUIPMENT.

76. PROVIDE AUXILIARY DRAIN PAN UNDER THE UNIT AS REQUIRED BY LOCAL AND STANDARD MECHANICAL CODE SECTION 307.
    a. AN AUXILIARY DRAIN PAN WITHOUT A SEPARATE DRAIN LINE SHALL BE PROVIDED UNDER THE COILS ON WHICH CONDENSATE WILL OCCUR. SUCH PAN SHALL BE EQUIPPED WITH A WATER LEVEL DETECTION DEVICE THAT WILL SHUT-OFF THE EQUIPMENT SERVED PRIOR TO OVERFLOW OF THE PAN.
    b. AN AUXILIARY DRAIN PAN WITH A SEPARATE DRAIN SHALL BE PROVIDED UNDER THE COILS ON WHICH CONDENSATION WILL OCCUR. THE AUXILIARY PAN DRAIN SHALL DISCHARGE TO A CONSPICUOUS POINT OF DISPOSAL TO ALERT OCCUPANTS IN THE EVENT OF A STOPPAGE OF THE PRIMARY DRAIN. THE PAN SHALL HAVE A MINIMUM DEPTH OF 1.5 INCHES, SHALL NOT BE LESS THAN 3 INCHES LARGER THAN THE UNIT OR THE COIL DIMENSIONS IN WIDTH AND LENGTH AND SHALL BE CONSTRUCTED OF CORROSION-RESISTANT MATERIAL. METALLIC PANS SHALL HAVE A MINIMUM THICKNESS OF NOT LESS THAN 0.0276 INCH GALVANIZED SHEET METAL. NON-METALLIC PANS SHALL HAVE A MINIMUM THICKNESS OF NOT LESS THAN 0.0625 INCH.
    c. A SEPARATE OVERFLOW DRAIN LINE SHALL BE CONNECTED TO THE DRAIN PAN PROVIDED WITH THE EQUIPMENT. SUCH OVERFLOW DRAIN SHALL DISCHARGE TO A CONSPICUOUS POINT OF DISPOSAL TO ALERT OCCUPANTS IN THE EVENT OF A STOPPAGE OF THE PRIMARY DRAIN. THE OVERFLOW DRAIN LINE CONNECT TO THE DRAIN PAN AT A HIGHER LEVEL THAN THE PRIMARY DRAIN CONNECTION.

77. CONTRACTOR SHALL VERIFY DUCT PENETRATION THROUGH FIRE RATED WALL WITH ARCHITECTURAL FLOOR PLAN AND INCLUDE IN HIS BID ANY MISSING FIRE DAMPER AND ACCESS PANEL.

78. AIR SHALL BE BALANCED BY A CERTIFIED INDEPENDENT BALANCING CONTRACTOR NOT AFFILIATED WITH TENANT'S MECHANICAL CONTRACTOR. CONTRACTOR SHALL PROVIDE SIX COPIES OF CERTIFIED BALANCING REPORT TO THE OWNER.

79. FRESH AIR INTAKES SHALL NOT BE TAKEN FROM A LOCATION CLOSER THAN 10'-0" FROM ANY SANITARY SEWER VENT OUTLET OR FLUE OR ANY EXHAUST AIR OUTLET, UNLESS SUCH OUTLET IS NOT LESS THAN 24 INCH ABOVE THE FRESH AIR INLET AND SHALL COMPLY LOCAL AND STANDARD MECHANICAL CODE.

80. DRAWINGS INDICATE LOCATIONS OF FIXTURES, APPARATUS, DUCTWORK AND PIPING; AND WHILE THESE ARE TO BE FOLLOWED AS CLOSELY AS POSSIBLE, IF IT IS NECESSARY TO CHANGE THE LOCATION OF SAME TO ACCOMMODATE BUILDING CONDITIONS, MAKE CHANGES WITHOUT ADDITIONAL COST TO THE OWNER AND AS APPROVED BY THE ARCHITECT.

81. PROVIDE ACCESS TO EQUIPMENT AND APPARATUS REQUIRING OPERATION SERVICE OR MAINTENANCE WITHIN THE LIFE OF THE SYSTEM.

82. DO NOT RUN PIPING OR DUCTWORK OR LOCATE EQUIPMENT (WITH RESPECT TO SWITCHBOARDS, PANEL BOARDS, POWER PANELS, MOTOR CONTROL CENTERS OR DRY TYPE TRANSFORMERS WITHIN 42" IN FRONT OF EQUIPMENT, OVER EQUIPMENT, OR WITHIN 36" HORIZONTALLY OF SAME SPACE.

83. CONTRACTOR SHALL STOP WORKING IF ANY ASBESTOS IS FOUND IN THE BUILDING AND INFORM THE ARCHITECT.

84. ALL MATERIALS AND EQUIPMENT SHALL FIT THE SPACE AVAILABLE, WITH MANUFACTURER'S RECOMMENDED CLEARANCE FOR ACCESS.

85. SCHEDULED FAN STATIC PRESSURES ARE ESTIMATED. PROVIDE AND ADJUST DRIVES TO DELIVER SCHEDULED AIR QUANTITIES AGAINST ACTUAL SYSTEM RESISTANCE. CONTRACTOR SHALL MAKE CHANGES TO SHEAVES, BELTS, VALVES, AND DAMPERS OR PROVIDE ADDITIONAL DAMPERS REQUIRED TO PROVIDE AIR QUANTITIES SHOWN ON THE DRAWINGS.

86. PROVIDE LABELS FOR EACH EQUIPMENT. LABELS TO BE ENGRAVED LAMINATED BAKELITE NAMEPLATES WITH 1/4" HIGH WHITE CUT LETTERS; SECURE TO EQUIPMENT.

87. DIMENSIONS, CONNECTIONS, AND INSTALLATION DETAILS OF EQUIPMENT SUPPLIED BY SEVERAL ACCEPTABLE MANUFACTURERS MAY VARY. CONTRACTOR SHALL BE FULLY RESPONSIBLE OF COMPLIANCE WITH REQUIREMENTS OF PLANS AND SPECIFICATION FOR ANY SUBSTITUTE EQUIPMENT.

88. BLADES OF FIRE DAMPERS SHALL BE OUT OF AIR STREAM.

89. CONTRACTOR SHALL NOT FABRICATE ANY DUCT WORK WITHOUT COORDINATING WITH OTHER DISCIPLINE AND VERIFYING THE CLEARANCE ABOVE THE CEILING.

90. DUCT OR PIPE PENETRATING A FIRE RATED WALL OR FLOOR SHALL BE SEALED WITH THE FIRESTOP SEALANT.

91. ACCEPTABLE MANUFACTURERS: SAMSUNG, PANASONIC, DAIKIN, HITACHI, LG, CARRIER, TRANE, LENNOX, YORK, TITUS, KRUEGER, PENN, ACME, COOK.

92. CONTRACTOR SHALL SUBMIT EQUIPMENT DATA FOR APPROVAL.

93. START-UP OF MECHANICAL SYSTEMS SHOULD INCLUDE TEMPORARY FILTERS TO ELIMINATE CONSTRUCTION DUST AND DEBRIS, AND A SYSTEM FLUSHING WITH MAXIMUM OUTSIDE AIR INTAKE FOR AN EXTENDED PERIOD TO DISSIPATE CHEMICALS DISCHARGED FROM BUILDING MATERIALS AND PRODUCTS. INSTALL PERMANENT FILTERS PRIOR TO BUILDING OCCUPANCY BY OWNER. PROVIDE INSTALLATION AND START-UP CERTIFICATION FROM MAJOR EQUIPMENT MANUFACTURERS.

94. FLUE FOR WATER HEATER SHALL BE INSTALLED BY MECHANICAL CONTRACTOR UNLESS OTHERWISE NOTED. SEE PLUMBING DRAWINGS.

95. BACK SIDE OF (NON-AIR-CONDITIONING SIDE) SUPPLY DIFFUSER INCLUDING FLANGE SITTING ON METAL CEILING GRID SHALL BE INSULATED TO PREVENT CONDENSATION. INSULATION SHALL BE ADHERE TO DIFFUSER TO PREVENT ANY AIR MOVEMENT BETWEEN DIFFUSER AND INSULATION. INSULATION IS NOT REQUIRED IF CEILING IS USED AS A RETURN AIR PLENUM.

96. THIS CONTRACTOR SHALL GIVE ALL ELECTRICAL INFORMATION (INCLUDING VOLTAGES, AMPS, PHASE) PERTAINING TO MECHANICAL EQUIPMENT TO ELECTRICAL CONTRACTOR BEFORE FINAL CONTRACT SO THAT ELECTRICAL CONTRACTOR INCLUDES IN HIS CONTRACT. CONTRACTOR SHALL GET APPROVAL FROM ELECTRICAL CONTRACTOR BEFORE ORDERING EQUIPMENT.

97. MOUNTING FRAME OF CEILING MOUNTED AIR DISTRIBUTION DEVICES SHALL BE COMPATIBLE WITH CEILING TYPE.

98. FLEXIBLE DUCT RUN-OUTS TO DIFFUSERS SHALL BE INSTALLED FREE OF KINKS AND SAGS.

99. PORTION OF DUCTWORK OR PIPING VISIBLE THROUGH GRILLES AND REGISTERS IN FINISHED AREAS SHALL BE PAINTED FLAT BLACK.

100. PROVIDE MANUAL VOLUME DAMPER IN OUTSIDE AIR INTAKE DUCT AT RETURN AIR DUCT CONNECTION AND IN RETURN AIR DUCT TO BALANCE OUTSIDE AIR AND RETURN AIR REGARDLESS WHETHER IT IS SHOWN ON PLANS OR NOT.

101. CONTRACTOR SHALL NOT PURCHASE ANY EQUIPMENT WITHOUT WRITTEN APPROVAL OF MECHANICAL, ELECTRICAL, AND STRUCTURAL ENGINEER. ARCHITECT AND ENGINEER MAY NOT HAVE CO-ORDINATED FINAL EQUIPMENT DATA.

102. ALL VRF SYSTEM SHALL COMPLY WITH ASHRAE STANDARD 15 SAFETY STANDARD FOR REFRIGERATION SYSTEMS, REQUIREMENTS FOR VRF SYSTEM. NOT IN HOSPITAL OR JAIL (MORE DIFFICULTY FOR EVACUATION), INDUSTRIAL, MIXED OCCUPANCY. (DIRECT SYSTEM, CLASS A1 LOWER TOXICITY, REFRIGERANT CONCENTRATION LIMIT (RCL VALUE-# OF REFRIGERANT PER 1000 CU. FT.)

103. ALL REFRIGERANT PIPES SHALL BE INSULATED WITH U EQUAL 0.20 TO 0.26 , 1" THICK, AND COVER WITH THE PVC PIPE JACKET.

104. OUTSIDE AIR DUCT INSULATION SHALL BE REFLECTIX R-8 OR APPROVED.

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
X	00-00-00	N/A			

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Date Plotted : Feb 16, 2021 - 9:43am
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ATLANTA MANAGEMENT AND ENGINEERING CONSULTANTS, INC.
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SEAL
No. 015330

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
100% OUTSIDE AIR UNITS
HVAC GENERAL NOTES

PRINTED: 02/16/21

NUMBER:
M-5

CU-S(AM060NXMDCR/AA)

Cooling Capa / Heating Capa
60000(0)BTU/h / 66000(0)BTU/h

Pipe Size : 3/8" / 3/4" / 5/8"
Pipe Length : 3.73ft / 3.73ft / 0

MXJ-YA2512M
MXJ-YA1500M

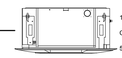
Pipe Size : 3/8" / 5/8" / 5/8"
Pipe Length : 21.57ft / 21.57ft / 0

MXJ-YA1509M
MXJ-YA1500M

Pipe Size : 3/8" / 5/8" / 5/8"
Pipe Length : 23.74ft / 23.74ft / 0

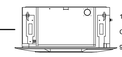
HRC
MCU-R4NEK0N

Pipe Size : 1/4" / 1/2"
Pipe Length : 6.98ft / 7.64ft / 1



114(AM005NNNDCH/AA)
Cooling Capa / Heating Capa
5000(0)BTU/h / 6000(0)BTU/h

Pipe Size : 1/4" / 1/2"
Pipe Length : 20.15ft / 20.81ft / 1



115(AM009NNNDCH/AA)
Cooling Capa / Heating Capa
9500(0)BTU/h / 10500(0)BTU/h

Pipe Size : 1/4" / 1/2"
Pipe Length : 29.32ft / 30.63ft / 2

112(AM006ANMDCH/AA)
Cooling Capa / Heating Capa
6300(0)BTU/h / 7100(0)BTU/h

CU-N(AM036NXMDCR/AA)

Cooling Capa / Heating Capa
38000(0)BTU/h / 42000(0)BTU/h

Pipe Size : 3/8" / 3/4" / 5/8"
Pipe Length : 13.25ft / 14.44ft / 2

HRC
MCU-R4NEK0N

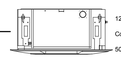
Pipe Size : 1/4" / 1/2"
Pipe Length : 61.28ft / 61.94ft / 1

126(AM007NNNDCH/AA)
Cooling Capa / Heating Capa
7500(0)BTU/h / 8700(0)BTU/h

Pipe Size : 1/4" / 1/2"
Pipe Length : 35.82ft / 36.47ft / 1

125(AM007NNNDCH/AA)
Cooling Capa / Heating Capa
7500(0)BTU/h / 8700(0)BTU/h

Pipe Size : 1/4" / 1/2"
Pipe Length : 9.13ft / 9.78ft / 1

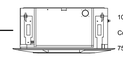


124(AM005NNNDCH/AA)
Cooling Capa / Heating Capa
5000(0)BTU/h / 6000(0)BTU/h

Pipe Size : 3/8" / 5/8" / 5/8"
Pipe Length : 6.69ft / 7.51ft / 1

HRC
MCU-R4NEK0N

Pipe Size : 1/4" / 1/2"
Pipe Length : 5.43ft / 5.43ft / 0

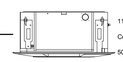


105(AM007NNNDCH/AA)
Cooling Capa / Heating Capa
7500(0)BTU/h / 8700(0)BTU/h

Pipe Size : 1/4" / 1/2"
Pipe Length : 22.06ft / 22.06ft / 0

110(AM005NNNDCH/AA)
Cooling Capa / Heating Capa
5000(0)BTU/h / 6000(0)BTU/h

Pipe Size : 1/4" / 1/2"
Pipe Length : 14.85ft / 14.85ft / 0

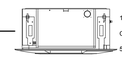


111(AM005NNNDCH/AA)
Cooling Capa / Heating Capa
5000(0)BTU/h / 6000(0)BTU/h

Pipe Size : 3/8" / 5/8" / 5/8"
Pipe Length : 4.17ft / 4.99ft / 1

HRC
MCU-R4NEK0N

Pipe Size : 1/4" / 1/2"
Pipe Length : 30.56ft / 30.56ft / 0



104(AM005NNNDCH/AA)
Cooling Capa / Heating Capa
5000(0)BTU/h / 6000(0)BTU/h

Pipe Size : 1/4" / 1/2"
Pipe Length : 20.42ft / 20.42ft / 0

108_109(AM005ANMDCH/AA)
Cooling Capa / Heating Capa
6000(0)BTU/h / 6000(0)BTU/h

Pipe Size : 1/4" / 1/2"
Pipe Length : 9.61ft / 10.26ft / 1

103A(AM012ANMDCH/AA)
Cooling Capa / Heating Capa
12000(0)BTU/h / 13500(0)BTU/h

PIPING DIAGRAMS

NOT TO SCALE

REVISIONS					
Number	Date:	Remarks:	Number	Date:	Remarks:
X	00-00-00	N/A			

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SEAL

GEORGIA REGISTERED PROFESSIONAL ENGINEER 015330

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

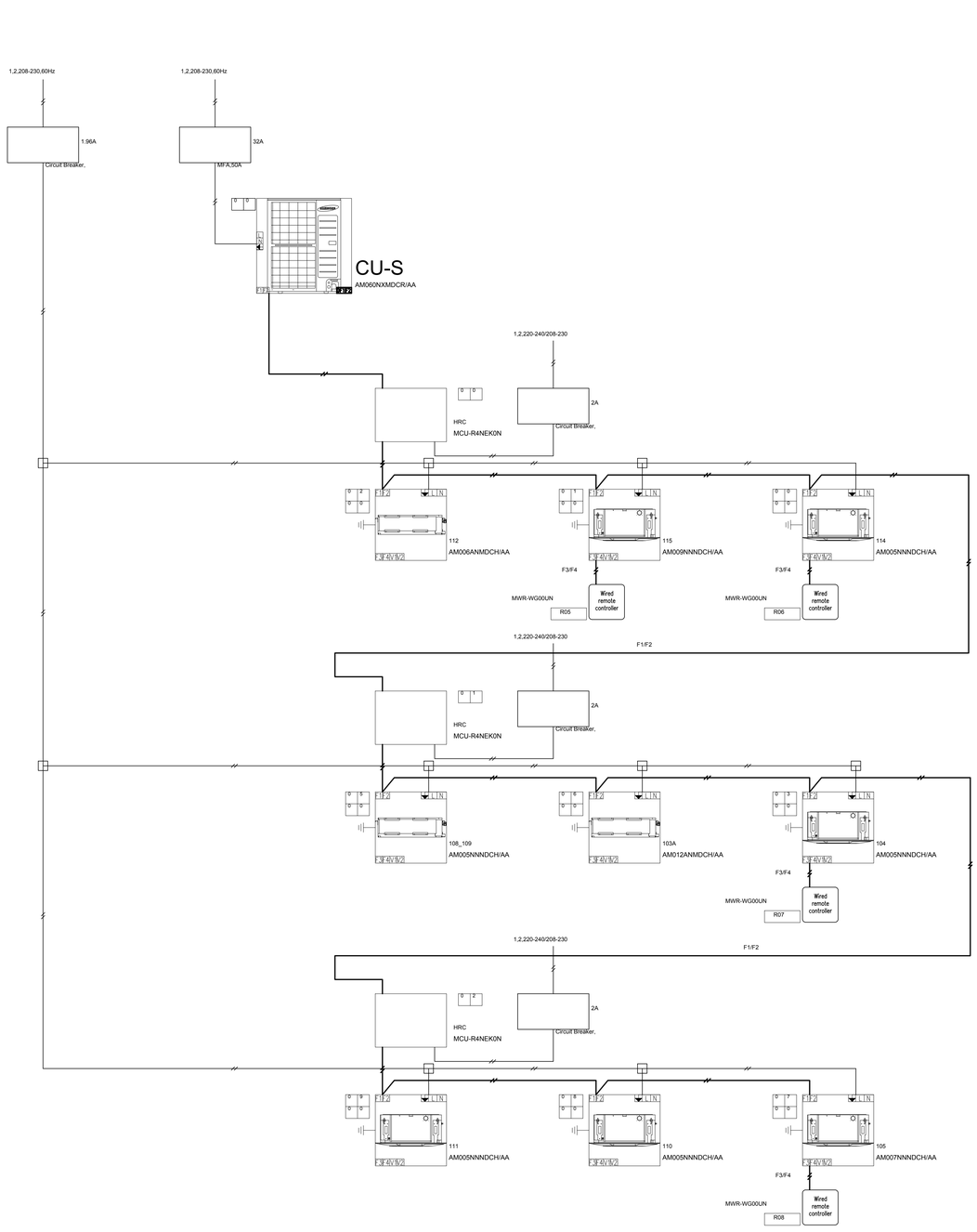
SHEET TITLE:
PIPING DIAGRAM

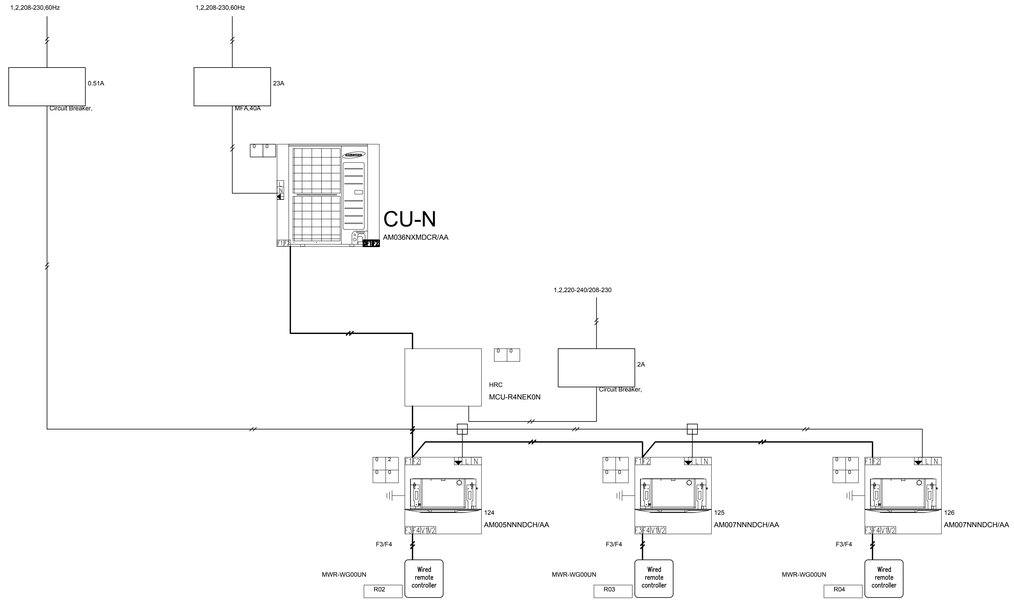
PRINTED: 02/16/21

NUMBER:
M-6

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

Feb 16 2021 | C:\2021-001\jackson animal\2021-001M1.dwg





WIRING DIAGRAMS

NOT TO SCALE

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

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REVISIONS					
Number	Date:	Remarks:	Number	Date:	Remarks:
X	00-00-00	N/A			

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SEAL

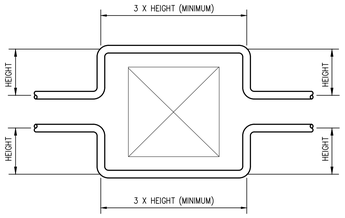
GEORGIA REGISTERED No. 015302 PROFESSIONAL ENGINEER

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: WIRING DIAGRAM

PRINTED: 02/16/21

NUMBER: M-7



NOTES
1. WHEN AN OBSTACLE, SUCH AS A BEAM OR CONCRETE STRUCTURE, IS IN THE PATH OF THE PLANNED REFRIGERANT PIPE RUN, IT IS BEST PRACTICE TO ROUTE THE PIPING OVER THE OBSTACLE OR UNDER.
2. IF ADEQUATE SPACE IS NOT AVAILABLE TO ROUTE THE INSULATED PIPE OVER THE OBSTACLE, THEN ROUTE THE PIPE UNDER THE OBSTACLE.
3. IN EITHER CASE, IT IS IMPERATIVE THE LENGTH OF THE HORIZONTAL SECTION OF PIPE ABOVE OR BELOW THE OBSTACLE BE A MINIMUM OF THREE (3) TIMES THE LONGEST VERTICAL RISE (OR FALL) AT EITHER END OF THE SEGMENT.

PIPING UNDER/OVER OBSTACLES DETAIL

NOT TO SCALE

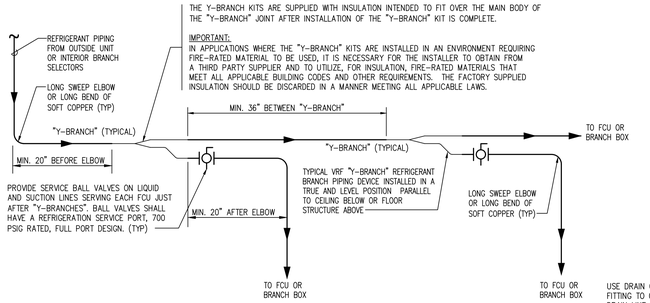
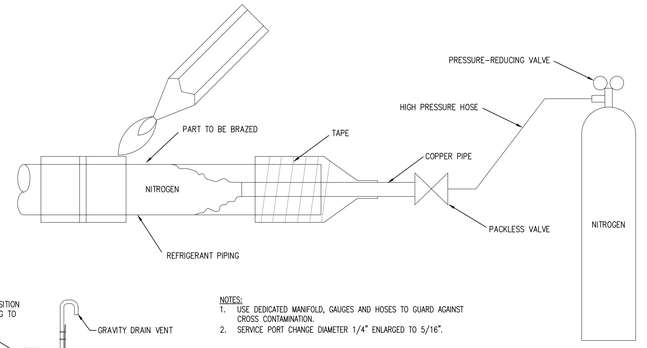


DIAGRAM - "Y-BRANCH" PIPING CLEARANCE REQUIREMENTS

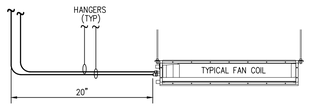
NOT TO SCALE (REFER TO MANUFACTURERS INSTRUCTIONS)



NOTES:
1. USE DEDICATED MANIFOLD, GAUGES AND HOSES TO GUARD AGAINST CROSS CONTAMINATION.
2. SERVICE PORT CHANGE DIAMETER 1/4" ENLARGED TO 5/16".

TYPICAL NITROGEN PURGING SET-UP

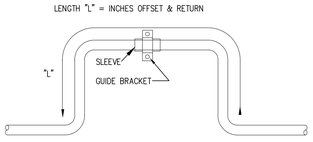
NOT TO SCALE



TYPICAL ALL FAN COIL UNITS

RECOMMENDED PIPE CLEARANCES FOR INDOOR UNITS

NOT TO SCALE (REFER TO MANUFACTURERS INSTRUCTIONS)



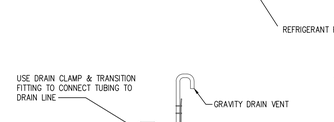
NOTE:
CALCULATION FOR EXPANSION AND CONTRACTION SHOULD BE BASED ON THE AVERAGE COEFFICIENT OF EXPANSION OF COPPER WHICH IS 0.0000094 INCH PER INCH PER DEGREE F, BETWEEN 70° F AND 212°F.

(EXAMPLE: EXPANSION OF A 100 DEGREE F RISE FOR EACH 100 FT. OF ANY SIZE IS 1.128 INCHES)

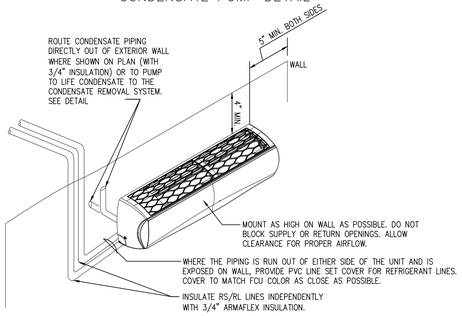
EXPANSION DIMENSION "L" FOR OFFSET & RETURN TO BE BASED ON THE EXPECTED EXPANSION INCHES PER DIMENSION OF PIPE

PLAN - EXPANSION LOOPS

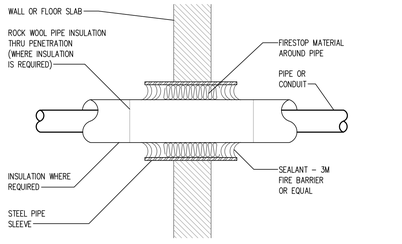
NOT TO SCALE



CONDENSATE PUMP DETAIL

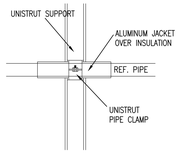


NOTES
1. PROVIDE MANUFACTURER'S CONDENSATE PUMP MN: ASP-MO-UNIV 110-250, 115-230V WITH 33' HEAD, 5'-0" SUCTION LIFT OR GRAVITY FEED TO DRYWELL OR FLOOR DRAIN.



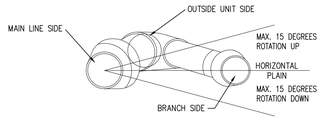
FIRE RATED WALL PENETRATION DETAIL

NOT TO SCALE



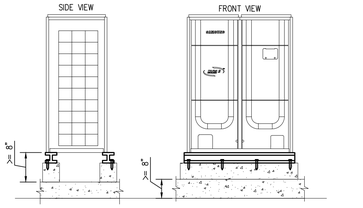
REFRIGERANT PIPE UNISTRUT SUPPORT

NOT TO SCALE



MAXIMUM ROTATION OF HORIZONTAL INSTALLED "Y-BRANCH"

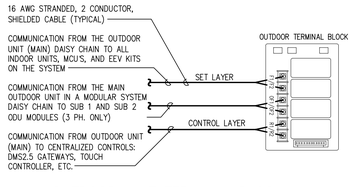
NOT TO SCALE (REFER TO MANUFACTURERS INSTRUCTIONS)



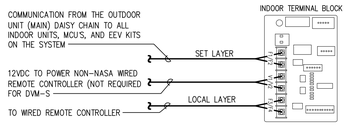
NOTES
- SUPPORT THE OUTDOOR UNIT ABOVE GRADE A MINIMUM OF 8 INCHES
- FRONT AND REAR FACE TO BE SUPPORTED FULL LENGTH OF CABINET
- EACH UNIT MUST BE SECURELY ANCHORED TO THE BASE SUPPORT: ROOF OR GROUND
- SUPPORT THE FULL WIDTH OF THE UNIT FRONT & REAR
- •• (INDIVIDUAL UNIT WEIGHT 413-83 LB. DEPENDING ON MODEL)
- THE OUTDOOR UNITS MUST BE PROPERLY ANCHORED FOR STABILITY IN WINDY CONDITIONS
- AVOID LOCATIONS WHERE BUILDING EXHAUSTS ARE PRESENT
- •• BATHROOM, KITCHEN, OXIDES, SULFUR, ETC.
- PLACE OUTDOOR UNITS WHERE SERVICE AND MAINTENANCE ACCESS IS MAINTAINED
- SUPPORT AS PER LOCAL CODES

INDOOR WALL MOUTED FCU DETAIL

NOT TO SCALE



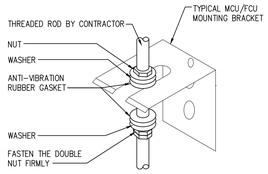
OUTDOOR UNIT TERMINAL BLOCK



INDOOR UNIT TERMINAL BLOCK

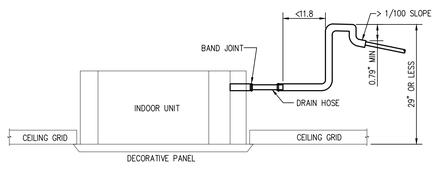
TERMINAL BLOCK WIRING DETAIL

NOT TO SCALE



TYPICAL ABOVE CEILING MOUNTING DETAIL

NOT TO SCALE



NOTES:
- CURRENT CEILING CASSETTE MODELS HAVE CONDENSATE LIFT PUMPS RATED FOR A MAXIMUM 29" OF LIFT FROM THE BOTTOM OF THE UNIT
- INSIDE DIAMETER OF THE CONDENSATE DRAIN OUTLET & RISER PIPING MUST NOT EXCEED 3/4" ID
- THE FLEXIBLE HOSE SHOULD BE INSTALLED LEVEL OR BENT DOWNWARD
- ALL CONDENSATE LINES MUST BE INSULATED THROUGHOUT THE BUILDING
- THE HORIZONTAL MAIN CONDENSATE LINES MUST BE PROPERLY SUPPORTED WITH HANGARS EVERY 40" TO 60".
- CONDENSATE PIPING INSTALLATION MUST BE IN ACCORDANCE WITH STATE AND LOCAL CODES

TYPICAL FOR 360, 4-WAY, 4-WAY MINI, AND 1-WAY CASSETTE FAN COIL UNITS

CONDENSATE PUMP DRAIN PIPING DETAIL

NOT TO SCALE

REVISIONS					
Number	Date:	Remarks:	Number	Date:	Remarks:
X	00-00-00	N/A			

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SEAL

GEORGIA REGISTERED No. 015330 PROFESSIONAL ENGINEER

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: DETAILS

PRINTED: 02/16/21

NUMBER: M-8

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

Feb 16 2021 | C:\2021-001\jackson animal\2021-001M1.dwg

LEGEND

ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT
MOUNTING HEIGHT FROM THE CENTER OF ITEM

FIRE ALARM SYSTEM

F	MANUAL PULL STATION, 4'-0" AFF
F	COMBINATION ALARM HORN/STROBE, 6'-8" AFF
F	UNIT MINI-HORN
S	CEILING MOUNTED SYSTEM SMOKE DETECTOR
SD	SINGLE STATION UNIT SMOKE DETECTOR
SD	DUCT SMOKE DETECTOR
F	STROBE ALARM, 6'-8" AFF
FACP	FIRE ALARM CONTROL PANEL, TOP AT 6'-6" AFF
ANN	FIRE ALARM ANNUNCIATOR, FLUSH, 5'-0" AFF

POWER/MOTORS

	MOTOR
30/3/20	DISCONNECT SWITCH, AMPS/POLES/FUSE
	PANELBOARD
	MOTOR STARTER

SIGNAL COMMUNICATIONS

	TELEPHONE OUTLET 18" AFF, RUN 3/4" CONDUIT TO IT ROOM STRING 0'-6" ABOVE CEILING AND/OR INSULATION.
	TELEPHONE/DATA OUTLET 18" AFF, RUN 3/4" CONDUIT TO IT ROOM
TV	TELEVISION OUTLET, STUB 1"CONDUIT, WITH PULL STRING FROM RECESSED JUNCTION BOX 0-6" ABOVE CEILING AND/OR INSULATION

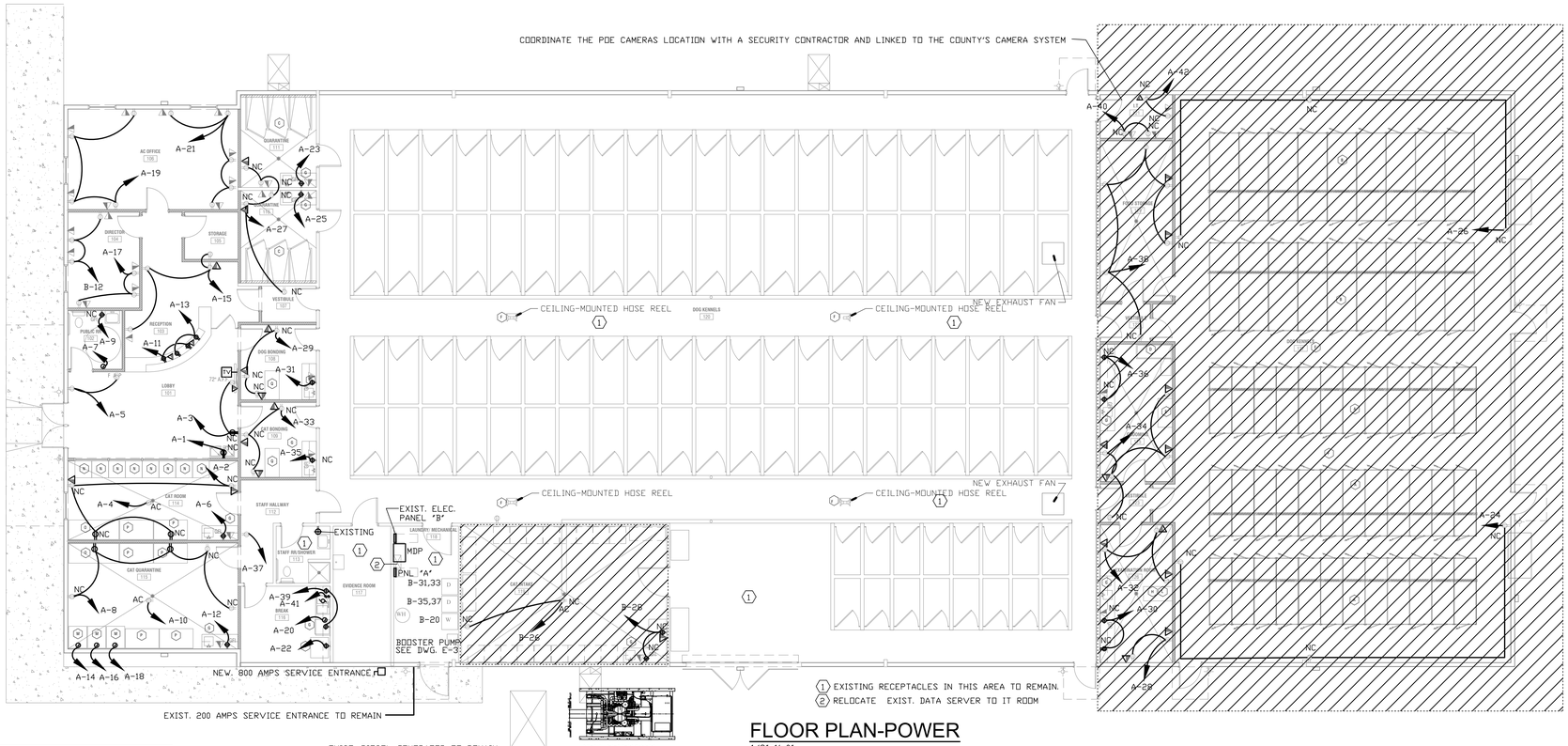
WIRING

$	SINGLE POLE SWITCH, 3'6" AFF
$3	SUBSCRIPT INDICATES NUMBER OF POLES FOR SWITCH 3 FOR 3 WAY, 4 FOR 4 WAY, M FOR MOTOR CONTROLLER
	CONDUIT IN WALL OR ABOVE CEILING
	CONDUIT IN FLOOR SLAB OR UNDER GROUND
	EXPOSED CONDUIT
	HOME RUN, 2#12 AND 1#12 GROUND COPPER THHN 1/2"C OR AS NOTED.
J JH	JUNCTION BOX, CEILING WALL
T	THERMOSTAT

RECEPTACLES/WIRING DEVICES

	DUPLEX OUTLET, 20A, 125V, HUBBELL #BR20C1WHI* OR EQUAL (MOUNT 18" A.F.F.)-HALF CONTROL
NC	DUPLEX OUTLET, 20A, 125V, HUBBELL #CBR20* OR EQUAL (MOUNT 18" A.F.F.)
	DUPLEX OUTLETMOUNTED ABOVE COUNTER (COORDINATE W/CABINET WORK)
	DUPLEX OUTLET IN FLOOR PLUS CARPET RING FOR CARPET
	DUPLEX OUTLET W/G.F.I., HUBBELL #GF5352*A OR EQUAL (MOUNT 18" AFF)
	DUPLEX OUTLET W/G.F.I. MOUNTED ABOVE COUNTER
D	SPECIAL OUTLET FOR DRYER, 30A, 125/250V, HUBBELL #HBL9350 OR EQUAL (MOUNT AFF)

M	LEVINTON OCCUPANCY SENSOR OSC05/10/20-MWW
M1	LEVINTON OCCUPANCY SENSOR OSW12-MDW
$m	LEVINTON OCCUPANCY SENSOR SWITCH-OSMTT
HW	HALLWAY SENSOR SHALL REDUCE LIGHT 50% NO OCCUPANCY
$k	WALL SWITCH WITH ON/OFF AND DIMMING -ADAPTABLE WALL SWITCH LEVINTON-RLVSW-4LW
DS	LEVINTON OCCUPANCY SENSOR OSC05/10/20-MWW



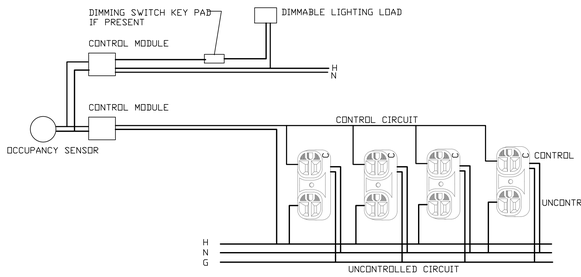
FLOOR PLAN-POWER

1/8"=1'-0"

COPPER WIRING SCHEDULE

BREAKER SIZE	WIRING SIZE	DISCONNECT SIZE
20/1	2#12,1#12G, 1/2"C	30/2/NF
20/2	3#12,1#12G, 1/2"C	30/2/NF
20/3	3#12,1#12G, 1/2"C	30/3/NF
30/1	2#10,1#10G, 1/2"C	30/2/NF
30/2	3#10,1#10G, 1/2"C	30/2/NF
30/3	3#10,1#10G, 1/2"C	30/3/NF
40/1	2#8,1#10G, 3/4"C	60/2/NF
40/2	3#8,1#10G, 3/4"C	60/2/NF
40/3	3#8,1#10G, 3/4"C	60/3/NF
50/1	2#6,1#10G, 3/4"C	60/2/NF
50/2	3#6,1#10G, 3/4"C	60/2/NF
50/3	3#6,1#10G, 3/4"C	60/3/NF
60/1	2#4,1#10G, 1"C	60/2/NF
60/2	3#4,1#10G, 1"C	60/2/NF
60/3	3#4,1#10G, 1"C	60/3/NF
70/1	2#4,1#8G, 1"C	100/2/NF
70/2	3#4,1#8G, 1"C	100/2/NF
70/3	3#4,1#8G, 1"C	100/3/NF
80/1	2#3,1#8G, 1"C	100/2/NF
80/2	3#3,1#8G, 1 1/4"C	100/2/NF
80/3	3#3,1#8G, 1 1/4"C	100/3/NF
90/1	2#2,1#8G, 1 1/4"C	100/2/NF
90/2	3#2,1#8G, 1 1/4"C	100/2/NF
90/3	3#2,1#8G, 1 1/4"C	100/3/NF
100/1	2#1,1#8G, 1 1/4"C	100/2/NF
100/2	3#1,1#8G, 1 1/4"C	100/2/NF
100/3	3#1,1#8G, 1 1/4"C	100/3/NF

* MAXIMUM LEGNTH=100 FT.
** OUTDOOR DISCONNECT SHALL BE WEATHERPROOF
PROVIDE NEUTRAL WIRE FOR DRYER, RANGE, AND OVEN.



LIGHTING AND RECEPTACLES CONTROL

NO SCALE
OPTIONAL: WIRELESS OCCUPANCY SENSOR

EQUIPMENT LIST - SEE PROJECT MANUAL FOR DETAILED EQUIPMENT SPECIFICATION

A	MASON COMPANY SANI-KENNEL OR EQ	3' x 3' BACKED UP TO 3' X 6' MODULES W/ GUILLOTINE DOORS & SIDE PANELS. (36 TOTAL UNITS)	G.C	G.C.
B	MASON COMPANY SANI-KENNEL OR EQ	4' x 4' BACKED UP TO 4' X 8' MODULES W/ GUILLOTINE DOORS & SIDE PANELS. (18 TOTAL UNITS)	G.C	G.C.
C	MASON COMPANY SANI-KENNEL OR EQ	4'-8" x 3'-0" KENNEL, 6' HEIGHT (6 TOTAL UNITS)	G.C	G.C.
D	BATHING TABLE	SUB SURG. 60" W/ S.S. SURROUNDS ON 3 SIDES, W/ ROTATING RAMP ON RIGHT SIDE & ACCESS DOOR	G.C.	G.C.
E	MASON BIG DOG GROOMING TABLE	48X24 TABLE W/ METAL DRAWER AND GROOM ARM	G.C.	G.C.
F	HOSE REEL	CDXREELS SPRING DRIVEN HOSE REEL, 0'MPT, 100'T.	G.C	G.C.
G	12" DEEP STAINLESS STEEL SINK	COUNTERTOP MOUNT W/ ACTION GOOSENECK FAUCET W/ WRIST BLADES & ANGLED SPRAYER SUB. SURG OR EQ. 0246J3-F-M-ZZ-5080-A	G.C	G.C.
H	SURGERY LIGHT	SUBURBAN SURGICAL LIGHT EXCELED EXAM LIGHT. CEILING MOUNTED WITH CEILING ROD FOR 9' CEILINGS. MODEL #M1000000-061514 CEILING ROD MODEL NUMBER #M1000000-1001187	G.C	G.C.
J	DISHWASHER		OWNER	G.C.
K	REFRIGERATOR		OWNER	G.C.
L	SUB. SURG. TREATMENT TABLE	48X30 RECESSED END TREATMENT TABLE W/ STAINLESS STEEL TOP	G.C	G.C.
M	MASON CO. CAT ISOLATION UNIT	DOUBLE HIGH UNITS, THREE (3) - 30 1/2" WIDE x 36 1/2" DEEP x 6'-9 1/2" HIGH ISOLATION CAGES.	G.C	G.C.
N	MASON COMPANY	CAT ADDITION UNITS, SIXTEEN (16) 28" HIGH X 28" WIDE x 28 3/4" DEEP	G.C	G.C.
O	MASON COMPANY DR EQ	FIBERGLASS QUIET COTTAGES, TWO (2) MODEL 2 **W/O DRAIN**, 84" WIDE X 69" HIGH	G.C	G.C.
P	MASON COMPANY DR EQ	FIBERGLASS QUIET COTTAGES, SIX (6) MODEL 6 **W/O DRAIN**, 56" WIDE x 69 HIGH	G.C	G.C.
Q	SUB. SURG. EXAM TABLE	48X24 TABLE W/ STAINLESS STEEL TOP	G.C	G.C.

-HATCHED AREAS INDICATES AREAS TO BE INCLUDED IN PHASE 2.

-REAR ADDITION TO BE COMPETED IN PHASE 2. ONLY SITE WORK & PREPARATION FOR FOUNDATION IS REQUIRED IN THIS BID.

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

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REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
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SEAL

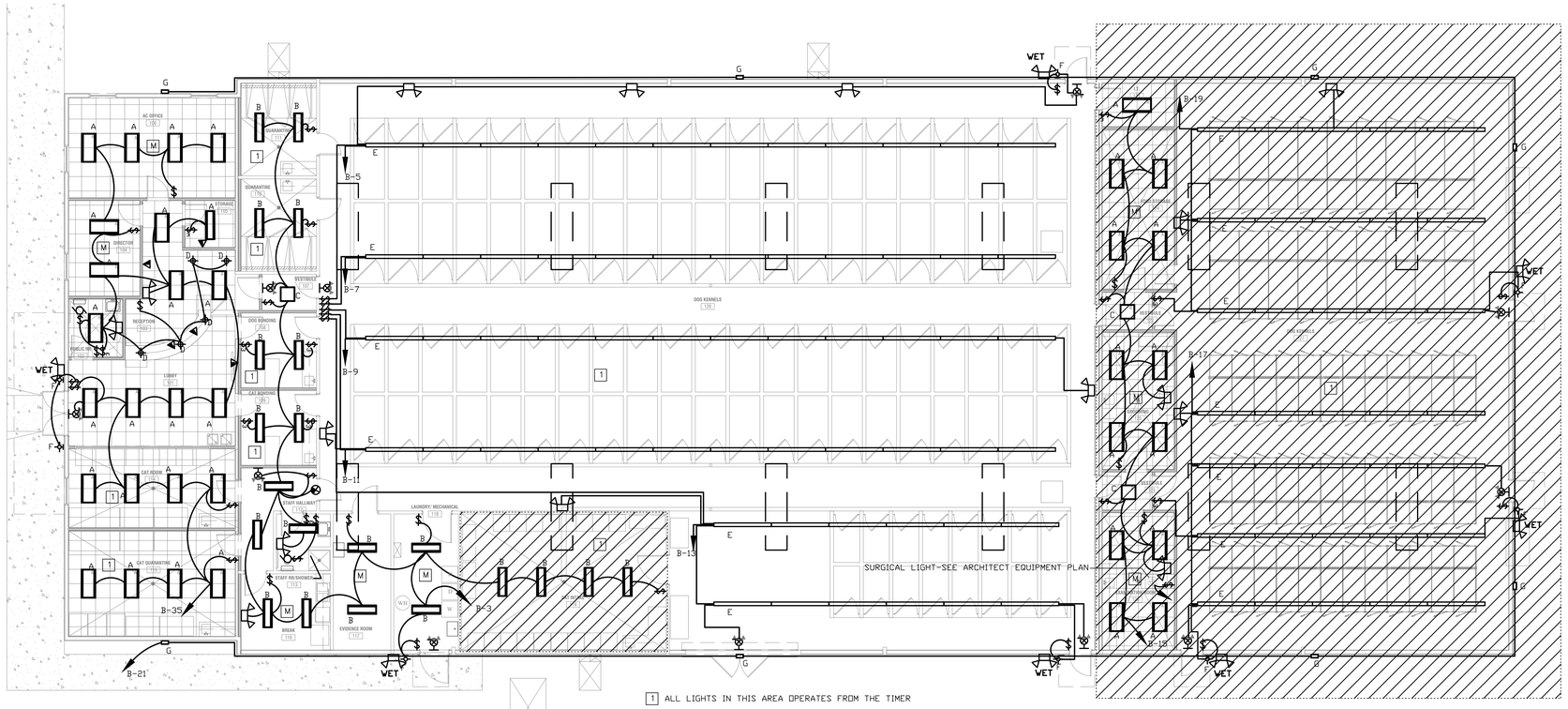
GEORGIA REGISTERED No. 015330 PROFESSIONAL ENGINEER

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
FLOOR PLAN -POWER
LEGEND

PRINTED: 02/16/21

NUMBER:
E-1



1 ALL LIGHTS IN THIS AREA OPERATES FROM THE TIMER

FLOOR PLAN-LIGHTS

1/8"=1'-0"

EMERGENCY LIGHTS NOTES:

1. THE BRANCH CIRCUIT FEEDING THE EMERGENCY LIGHT AND EXIT LIGHT SHALL BE THE SAME BRANCH CIRCUIT AS THAT SERVING THE NORMAL LIGHTING IN THE AREA AND CONNECTED AHEAD OF ANY LOCAL SWITCHES AS PER NEC CODE 700-12(E).

   a. EMERGENCY AND EXIT LIGHTS CONNECTED TO CIRCUITS CONTROLLED BY TIME CLOCK, OR PHOTOCELL SHALL HAVE BYPASS MEANS TO BE CONTINUOUSLY ENERGIZED WHEN CIRCUIT IS ACTIVE.

   b. CIRCUIT WITH EMERGENCY AND EXIT LIGHTS WITH NO SWITCH, TIME CLOCK OR PHOTOCELL SHALL BE PROGRAMMED TO OPERATE CONTINUOUSLY.

LIGHT FIXTURES SCHEDULE (CONTRACTOR MUST VERIFY THE TYPE OF CEILING-SEE ARCHITECT DRAWING)

Symbol	Label	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens per Lamp	Lumen Multiplier	LLF	Wattage	Efficiency
	A	VISCOR	LRTH2X4-LED840K050LUNV RECESSED	VISIONEERING 2X4 RECESSED T-BAR LED LUMINAIRE POST-PAINTED WHITE INTERIOR AND ROUND LINEAR RIBBED FROSTED ACRYLIC DIFFUSER		2	LSTH2X4-LED840K050LUNV-G003043.IES	2470	1	0.95	36	100%
	B	VISCOR	LSTH1X4-LED840K040LUNV SURFACE MOUNTED	VISIONEERING 1X4 SURFACE MOUNTED LED LUMINAIRE POST-PAINTED WHITE INTERIOR AND ROUND LINEAR RIBBED FROSTED ACRYLIC DIFFUSER		2	LSTH1X4-LED840K040LUNV-G003043.IES	2066	1	0.95	33	100%
	C	VISCOR	LRTH2X2-LED840K032LUNV	VISIONEERING 2X2 RECESSED T-BAR LED LUMINAIRE WHITE POST-PAINTED HIGH REFLECTANCE FROSTED ACRYLIC DIFFUSER		2	LSTH2X2-LED840K032LUNV-G003046.IES	1866	1	0.95	30	100%
	D	Cree Inc	S-DL4-11L-40K w_S-DL4T-M-SS-C RECESSED	4-inch Downlight, 11L Lumen Package, 4000K, Medium Distribution	CXB1512	1	S-DL4-11L-40K w_S-DL4T-M-SS-C_PL08046-001A.IES	962	1	0.95	11.18	100%
	E	Industrial Lighting Products Inc	WTZ8-10L-U-50-RAFL	Amazon 8ft, 10,000 Lumens, 5000K, Ribbed Acrylic Frosted Lens.		1	WTZ8-10L-U-50--RAFL.ies	10539	1	0.95	76.21	100%
	F	KUZCO	LUND-EW3210					1600	1	0.95	24	100%
	G	TRACE-LITE	WLZ7-4-5K-BL-PC					5021	1	0.95	70	100%
		EXITRONIX	ILX-R-EM-BL EXIT LIGHT					5021	1	0.95	70	100%
		EXITRONIX	VLED-U-BL-EL90-G2 COMBO EMERGENCY AND EXIT LIGHT									
WET		EXITRONIX EXITRONIX	LED-90-BL-G2 EMERGENCY LIGHT LEM54-N4-BL WET LABEL AT THE EXIST DOOR									

-HATCHED AREAS INDICATES AREAS TO BE INCLUDED IN PHASE 2.

-REAR ADDITION TO BE COMPETED IN PHASE 2. ONLY SITE WORK & PREPARATION FOR FOUNDATION IS REQUIRED IN THIS BID.

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

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SEAL

GEORGIA REGISTERED No. 015330 PROFESSIONAL ENGINEER

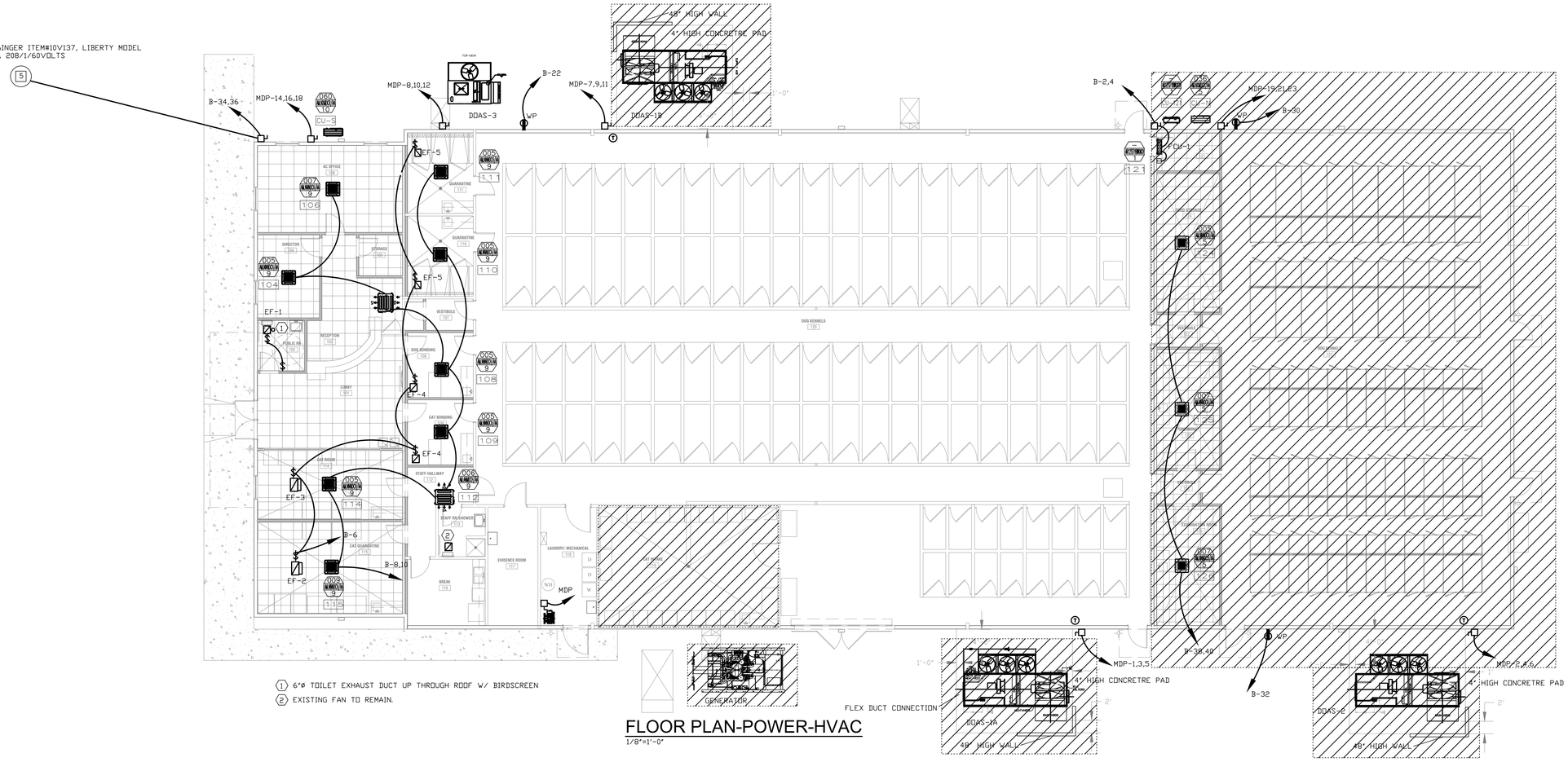
JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
FLOOR PLAN -LIGHTS
LIGHT FIXTURES SCHEDULE

PRINTED: 02/16/21

NUMBER:
E-2

HAIR GRINDER PUMP-GRAINGER ITEM#10V137, LIBERTY MODEL
D3672LSG202-48 2 HP, 208/1/60VOLTS



1 6"ø TOILET EXHAUST DUCT UP THROUGH ROOF W/ BIRDSCREEN
2 EXISTING FAN TO REMAIN.

FLOOR PLAN-POWER-HVAC
1/8"=1'-0"

-HATCHED AREAS INDICATES AREAS TO BE INCLUDED IN PHASE 2.

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GEORGIA REGISTERED No. 015330 PROFESSIONAL ENGINEER

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE: FLOOR PLAN -POWER-HVAC

PRINTED: 02/16/21

NUMBER: E-3

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

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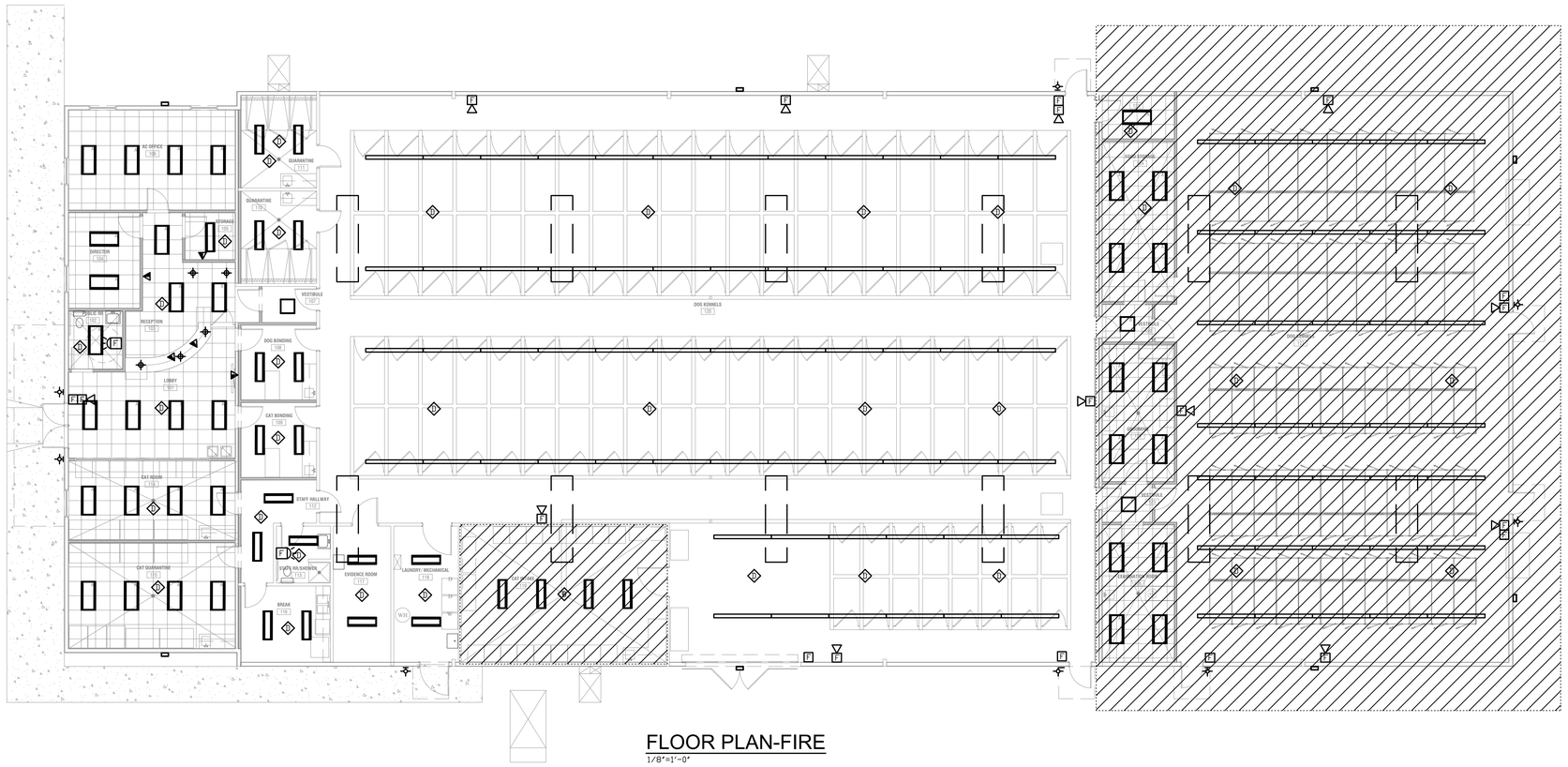

FLOOR PLAN-FIRE

1/8"=1'-0"

▨ -HATCHED AREAS INDICATES AREAS TO BE INCLUDED IN PHASE 2.

-REAR ADDITION TO BE COMPETED IN PHASE 2. ONLY SITE WORK & PREPARATION FOR FOUNDATION IS REQUIRED IN THIS BID.

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REVISIONS

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No. 015330

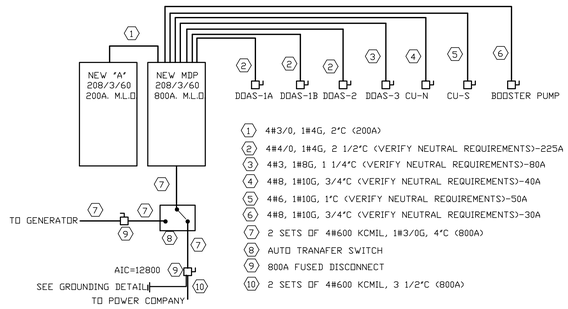
JACKSON COUNTY
ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
FLOOR PLAN -FIRE

PRINTED: 02/16/21

NUMBER:
E-4

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21



ALL WIRES SHALL BE COPPER

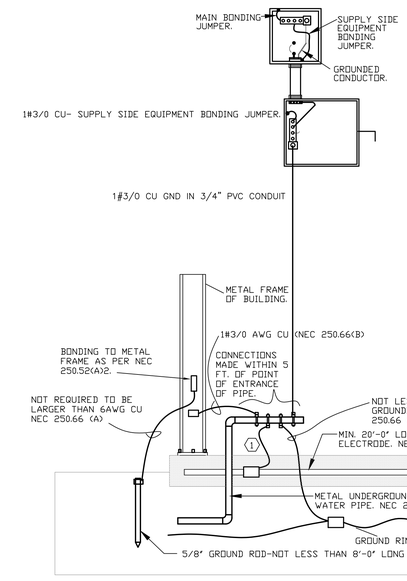
POWER RISER

NO SCALE

GENERATOR:

GENERATOR SHALL BE KOHLER- MODEL 350REZXD-5M4027, 350 KW, NATURAL GAS-4131 CFH, 208/3/60 VOLTS, UL-2200, EPA CERTIFIED ENGINE, STANDBY, BATTERY CHARGER, BATTERY, REMOTE EMERGENCY STOP,BLOCK HEATER, RS232 COMMUNICATIONS, OUTSIDE AUTO TRANSFER SWITCH.

AIC IS BASE ON 5.75 IMPEDANCE OF SECONDARY, 50'-0" MINIMUM DISTANCE BETWEEN TRANSFORMER AND DISCONNECT



GROUNDING ELECTRODE SYSTEM

NTS

SEE NEC 250.50 FOR MORE DETAIL OF GROUNDING REQUIREMENTS.

PANEL "A" SCHEDULE

MAIN: 225A M.L.O.			VOLTAGE			208		3ø		WIRES: 4			MOUNTING: SURFACE						AIC: 22,000		
CKT#	BRKR	DESCRIPTION	LTG	REC	MTR	A/C	HTG	KIT	MISC	A	B	C	LTG	REC	MTR	A/C	HTG	KIT	MISC	DESCRIPTION	BRKR	CKT#
1	20/1	DRINKING FOUNTAIN	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.1			0.0	1.6	0.0	0.0	0.0	0.0	0.0	RECP-CAT-114	20/1	2
3	20/1	RECP-LOBBY-101	0.0	0.8	0.0	0.0	0.0	0.0	0.0		1.2		0.0	0.4	0.0	0.0	0.0	0.0	0.0	RECP-CAT-114	20/1	4
5	20/1	RECP-LOBBY-101	0.0	0.8	0.0	0.0	0.0	0.0	0.0			1.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	RECP-CAT-114	20/1	6
7	20/1	HAND DRYER	0.0	0.0	0.0	0.0	0.0	0.0	1.6	3.2			0.0	1.6	0.0	0.0	0.0	0.0	0.0	CAT-QUARANTINE	20/1	8
9	20/1	RECP-RR-102	0.0	1.6	0.0	0.0	0.0	0.0	0.0		2.0		0.0	0.4	0.0	0.0	0.0	0.0	0.0	CAT-QUARANTINE	20/1	10
11	20/1	RECP-RECPTION-103	0.0	0.8	0.0	0.0	0.0	0.0	0.0			1.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	CAT-QUARANTINE	20/1	12
13	20/1	RECP-RECPTION-103	0.0	0.8	0.0	0.0	0.0	0.0	0.0	1.2			0.0	0.4	0.0	0.0	0.0	0.0	0.0	CAT-QUARANTINE	20/1	14
15	20/1	RECP-RECPTION-103	0.0	1.6	0.0	0.0	0.0	0.0	0.0		2.0		0.0	0.4	0.0	0.0	0.0	0.0	0.0	CAT-QUARANTINE	20/1	16
17	20/1	RECP-DIR-104	0.0	1.2	0.0	0.0	0.0	0.0	0.0			1.6	0.0	0.4	0.0	0.0	0.0	0.0	0.0	CAT-QUARANTINE	20/1	18
19	20/1	RECP-ACOFFICE-106	0.0	1.6	0.0	0.0	0.0	0.0	0.0	1.9			0.0	0.0	0.0	0.0	0.0	0.0	0.3	DISHWASHER-116	20/1	20
21	20/1	RECP-ACOFFICE-106	0.0	1.6	0.0	0.0	0.0	0.0	0.0		1.8		0.0	0.0	0.0	0.0	0.0	0.0	0.2	REFRIGERETOR-116	20/1	22
23	20/1	RECP-QUARANTINE	0.0	0.4	0.0	0.0	0.0	0.0	0.0			1.6	0.0	1.2	0.0	0.0	0.0	0.0	0.0	RECP-DOG KNNELS	20/1	24
25	20/1	RECP-QUARANTINE	0.0	0.4	0.0	0.0	0.0	0.0	0.0	1.6			0.0	1.2	0.0	0.0	0.0	0.0	0.0	RECP-DOG KNNELS	20/1	26
27	20/1	RECP-QUARANTINE	0.0	1.6	0.0	0.0	0.0	0.0	0.0		2.4		0.0	0.8	0.0	0.0	0.0	0.0	0.0	RECP-EXAM-126	20/1	28
29	20/1	RECP-DOG BND-108	0.0	1.2	0.0	0.0	0.0	0.0	0.0			2.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	RECP-EXAM-126	20/1	30
31	20/1	RECP-DOG BND-108	0.0	0.4	0.0	0.0	0.0	0.0	0.0	1.6			0.0	1.2	0.0	0.0	0.0	0.0	0.0	RECP-EXAM-126	20/1	32
33	20/1	RECP-CAT BND-109	0.0	1.2	0.0	0.0	0.0	0.0	0.0		2.8		0.0	1.6	0.0	0.0	0.0	0.0	0.0	RECP-GRMING-125	20/1	34
35	20/1	RECP-CAT BND-109	0.0	0.4	0.0	0.0	0.0	0.0	0.0			1.2	0.0	0.8	0.0	0.0	0.0	0.0	0.0	RECP-GRMING-125	20/1	36
37	20/1	RECP-HALL-112	0.0	0.4	0.0	0.0	0.0	0.0	0.0	2.0			0.0	1.6	0.0	0.0	0.0	0.0	0.0	RECP-FOOD 124	20/1	38
39	20/1	RECP-BREAK-116	0.0	0.8	0.0	0.0	0.0	0.0	0.0		1.6		0.0	0.8	0.0	0.0	0.0	0.0	0.0	RECP-IT-121	20/1	40
41	20/1	GARBAGE DISPOSER	0.0	0.0	0.0	0.0	0.0	0.0	0.8			1.6	0.0	0.8	0.0	0.0	0.0	0.0	0.0	RECP-IT-121	20/1	42
			0.0	17.6	0.0	0.0		0.0	2.9				0.0	16.8	0.0	0.0	0.0	0.0	0.5			
							0.0															
RECEPTACLES		34.4																		CONNECTED LOAD		37.8
MOTORS		0.0						KVA		13.6	13.8	10.4								DEMAND LOAD		25.6
A/C		0.0						AMPS		113.3	115.0	86.7										
HEATING		0.0																		CONNECTED AMPS		105.0
KITCHEN		0.0																		DEMAND AMPS		71.1
MISC.		3.4																				
LIGHTING		0.0																				

NOTES: ✖ HACR BREAKER ✖✖ARC FAULT BREAKER ✖✖✖ SHUNT BREAKER ✖✖✖✖ TIMER ✖✖✖✖ GFI BREAKER

EXIST. PANEL "B" SCHEDULE

MAIN: 200 M.L.O.			VOLTAGE			208		3ø		WIRES: 4			MOUNTING: ?						AIC: 22,000		
CKT#	BRKR	DESCRIPTION	LTG	REC	MTR	A/C	HTG	KIT	MISC	A	B	C	LTG	REC	MTR	A/C	HTG	KIT	MISC	DESCRIPTION	BRKR	CKT#
1	20/1	EXIST. REACH IN	1.1	0.0	0.0	0.0	0.0	0.0	0.4	2.8			0.0	0.0	0.0	1.3	0.0	0.0	0.0	CU-1 & FCU-1 ✖	20/2	2
3	20/1	LIGHTS-CATINTAKE	0.8	0.0	0.0	0.0	0.0	0.0	0.0		2.1		0.0	0.0	0.0	1.3	0.0	0.0				4
5	20/1	LIGHT-DOG 120	1.0	0.0	0.0	0.0	0.0	0.0	0.0			2.2	0.0	0.0	1.2	0.0	0.0	0.0	0.0	EXHAUST FANS	20/1	6
7	20/1	LIGHT-DOG 120	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4			0.0	0.0	0.0	0.4	0.0	0.0	0.0	FAN COIL UNITS	20/2	8
9	20/1	LIGHT-DOG 120	1.0	0.0	0.0	0.0	0.0	0.0	0.0		1.4		0.0	0.0	0.0	0.4	0.0	0.0	0.0		20/1	10
11	20/1	LIGHT-DOG 120	1.0	0.0	0.0	0.0	0.0	0.0	0.0			2.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0	RECP-DIRECTOR	20/1	12
13	20/1	LIGHT-DOG 120	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4			0.0	0.4	0.0	0.0	0.0	0.0	0.0	EXIST. REF. RECP	20/1	14
15	20/1	LIGHT-EXAM-ETC.	0.6	0.0	0.0	0.0	0.0	0.0	0.0		1.0		0.0	0.4	0.0	0.0	0.0	0.0	0.0	EXIST. RECP	20/1	16
17	20/1	LIGHTS-DOG-127	1.6	0.0	0.0	0.0	0.0	0.0	0.0			2.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	EXIST. RECP-WASH	20/1	18
19	20/1	LIGHTS-DOG-127	1.2	0.0	0.0	0.0	0.0	0.0	0.0	1.5			0.0	0.0	0.0	0.3	0.0	0.0	0.0	RECP-WASHER	20/1	20
21	20/1	WALL PACKS	0.6	0.0	0.0	0.0	0.0	0.0	0.0		1.0		0.0	0.4	0.0	0.0	0.0	0.0	0.0	RECP-SERVICE	20/1	22
23	20/1	RECP	0.0	0.4	0.0	0.0	0.0	0.0	0.0			0.8	0.0	0.4	0.0	0.0	0.0	0.0	0.0	EXIST. RECP-PET BATHS	20/1	24
25	20/1	RECP	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.8			0.0	0.4	0.0	0.0	0.0	0.0	0.0	CAT INTAKE	20/1	26
27	30/2	EXIST. DRYER	0.0	0.0	0.0	0.0	0.0	0.0	2.7		3.1		0.0	0.4	0.0	0.0	0.0	0.0	0.0	CAT INTAKE	20/1	28
29			0.0	0.0	0.0	0.0	0.0	0.0	2.7			3.1	0.0	0.4	0.0	0.0	0.0	0.0	0.0	RECP-SERVICE	20/1	30
31	30/2	EXIST. DRYER	0.0	0.0	0.0	0.0	0.0	0.0	2.7	3.1			0.0	0.4	0.0	0.0	0.0	0.0	0.0	RECP-SERVICE	20/1	32
33	20/1		0.0	0.0	0.0	0.0	0.0	0.0	2.7		4.5		0.0	0.0	1.8	0.0	0.0	0.0	0.0	GRINDER PUMP	30/2	34
35	20/1	LIGHTS-OFFICE	1.1	0.0	0.0	0.0	0.0	0.0	0.0			2.9	0.0	0.0	1.8	0.0	0.0	0.0	0.0		20/1	36
37	20/1	RECP	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.5			0.0	0.0	0.0	0.1	0.0	0.0	0.0	FAN COIL UNITS	20/2	38
39	20/1	RECP	0.0	0.4	0.0	0.0	0.0	0.0	0.0		0.5		0.0	0.0	0.0	0.1	0.0	0.0	0.0		20/1	40
41	20/1	RECP	0.0	0.4	0.0	0.0	0.0	0.0	0.0			0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.4	EXIST. REACH IN	20/1	42
			12.0	2.0	0.0	0.0		0.0	11.2				0.0	4.8	4.8	3.9	0.0	0.0				
							0.0												0.4			
RECEPTACLES		6.8																		CONNECTED LOAD		39.1
MOTORS		4.8						KVA		11.5	13.6	14.0								DEMAND LOAD		44.3
A/C		3.9						AMPS		95.9	113.3	116.7										
HEATING		0.0																		CONNECTED AMPS		108.7
KITCHEN		0.0																		DEMAND AMPS		123.1
MISC.		11.6																				
LIGHTING		12.0																				

NOTES: REPLACE EXISTING CIRCUIT BREAKERS AS NECESSARY

PANEL "MDP" SCHEDULE

MAIN: 800A			VOLTAGE			208		3ø		WIRES: 4			MOUNTING: ?						AIC: 22,000		
CKT#	BRKR	DESCRIPTION	LTG	REC	MTR	A/C	HTG	KIT	MISC	A	B	C	LTG	REC	MTR	A/C	HTG	KIT	MISC	DESCRIPTION	BRKR	CKT#
1	225/3	DDAS-1A ✖	0.0	0.0	0.0	19.3	0.0	0.0	0.0	38.6			0.0	0.0	0.0	19.3	0.0	0.0	0.0	DDAS-2 ✖	225/3	2
3			0.0	0.0	0.0	19.3	0.0	0.0	0.0		38.6		0.0	0.0	0.0	19.3	0.0	0.0	0.0			4
5			0.0	0.0	0.0	19.3	0.0	0.0	0.0			38.6	0.0	0.0	0.0	19.3	0.0	0.0	0.0			6
7	225/3	DDAS-1B ✖	0.0	0.0	0.0	19.3	0.0	0.0	0.0	24.5			0.0	0.0	0.0	5.2	0.0	0.0	0.0	DDAS-3 ✖	80/3	8
9			0.0	0.0	0.0	19.3	0.0	0.0	0.0		24.5		0.0	0.0	0.0	5.2	0.0	0.0	0.0			10
11			0.0	0.0	0.0	19.3	0.0	0.0	0.0			24.5	0.0	0.0	0.0	5.2	0.0	0.0	0.0			12
13	200/3	PANEL "A"	0.0	10.9	0.0	0.0	0.0	0.0	1.6	15.7			0.0	0.0	0.0	3.2	0.0	0.0	0.0	CU-S ✖	50/3	14
15			0.0	10.9	0.0	0.0	0.0	0.0	1.6		15.7		0.0	0.0	0.0	3.2	0.0	0.0	0.0			16
17			0.0	10.9	0.0	0.0	0.0	0.0	1.6			15.7	0.0	0.0	0.0	3.2	0.0	0.0	0.0			18
19	40/3	CU-N ✖	0.0	0.0	0.0	2.3	0.0	0.0	0.0	3.3			0.0	0.0	1.0	1.0	0.0	0.0	0.0	BOOSTER PUMP	30/3	20
21			0.0	0.0	0.0	2.3	0.0	0.0	0.0		3.3		0.0	0.0	1.0	0.0	0.0	0.0	0.0			22
23			0.0	0.0	0.0	2.3	0.0	0.0	0.0			3.3	0.0	0.0	1.0	0.0	0.0	0.0	0.0			24
25			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0		20/1	26
27			0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		20/1	28
29			0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		20/1	30
31			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0		20/1	32
33			0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		20/1	34
35			0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		20/1	36
37			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0		20/1	38
39			0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		20/1	40
41			0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		20/1	42
			0.0	32.7	0.0	122.7	0.0	0.0	4.8				0.0	0.0	3.0	83.1	0.0	0.0	0.0			
RECEPTACLES		32.7																		CONNECTED LOAD		246.3
MOTORS		3.0						KVA		82.1	82.1	82.1								DEMAND LOAD		287.2
A/C		205.8						AMPS		684.4	684.2	684.2										
HEATING		0.0																		CONNECTED AMPS		684.6
KITCHEN		0.0																		DEMAND AMPS		798.0
MISC.		4.8																				
LIGHTING		0.0																		AMPACITY REQUIRED		798.0

NOTES: ✖ HACR BREAKER

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

Feb 16 2021 | C:\2021-001\jackson animal\2021-001st1.dwg

REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
X	00-00-00	N/A			

CONSULTANTS

Date Plotted : Feb 16, 2021 - 9:37am
file: 2021-001E1.DWG

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SEAL

GEORGIA REGISTERED No. 015330 PROFESSIONAL ENGINEER JOHN F. PALMER

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
PANELS SCHEDULE
ELECTRICAL POWER RISER

PRINTED: 02/16/21

NUMBER:
E-5

ELECTRICAL NOTES

1. CONTRACTOR SHALL NOT RUN ANY WIRES WITHOUT VERIFYING WITH ELECTRICAL CHARACTERISTICS OF EQUIPMENT. DESIGN DOCUMENTS MAY DIFFER FROM ACTUAL ELECTRICAL CHARACTERISTICS OF EQUIPMENT. ENGINEER DOES NOT HAVE ACTUAL EQUIPMENT DATA DURING DESIGN PROCESS. CONTRACTOR SHALL BRING TO ATTENTION OF ENGINEER FOR ANY DISCREPANCIES. CONTRACTOR MUST SUBMIT EQUIPMENT DATA WHICH REQUIRED ELECTRICAL POWER TO ENGINEER. APPROVED EQUIPMENT BY ENGINEER OR ARCHITECT DOES NOT RELIEVE CONTRACTOR FROM RESPONSIBILITY OF VERIFICATION OF ELECTRICAL CHARACTERISTICS OF EQUIPMENT AND MODIFY CIRCUITS AS NECESSARY.

2. CONTRACTOR SHALL VERIFY UTILITY COMPANY'S POWER SUPPLY (VOLTAGES AND PHASE) BEFORE PURCHASING ANY EQUIPMENT, LIGHT FIXTURES AND NOTIFY ENGINEER FOR ANY DISCREPANCIES. CONTRACTOR SHALL SUBMIT ALL EQUIPMENT DATA AND LIGHT FIXTURES FOR APPROVAL.

3. RUN 4 (TWO LIVE WIRES, ONE NEUTRAL, ONE GROUND) WIRES FOR DRYER. THIS NOTE SUPERCEDES NUMBER OF WIRES ON DRAWINGS.

4. ANY EQUIPMENT REQUIRES DUAL VOLTAGES (e.g. 240/120V FOR OVEN AND DRYER OR 277/120 VOLTS WITH CONTROL WIRES), CONTRACTOR SHALL RUN NEUTRAL WIRE

5. PROVIDE GROUND FAULT OUTLET WITHIN 25 FEET OF ALL AIR CONDITIONING EQUIPMENT AS PER NEC CODE 210-8(B) & 210-63. CONNECT TO NEAREST RECEPTACLE CIRCUIT UNLESS OTHERWISE INDICATED.

6. PROVIDE ELECTRICAL CONNECTIONS TO ALL ITEMS SHOWN AS PART OF THE GENERAL CONTRACT WHICH REQUIRES ELECTRICITY.

7. COORDINATE ALL CONNECTIONS WITH EQUIPMENT SUPPLIER FOR EXACT LOCATION AND REQUIREMENTS.

8. PROVIDE CONNECTION TO ALL APPLIANCES, MECHANICAL AND PLUMBING EQUIPMENT INCLUDING TOILET EXHAUST FANS AND UNDER CABINET LIGHTS, SIGNS, ETC.,. CONTRACTOR MUST VERIFY WITH ARCHITECTURAL, INTERIOR, CIVIL, MECHANICAL, AND PLUMBING CONTRACTORS THE QUANTITY OF EQUIPMENT CONNECTIONS BEFORE BIDDING AND FINAL CONTRACT. NEGLIGENCE OF VERIFYING QUANTITY WILL NOT BE COMPENSATED.

9. PROVIDE MINIMUM OF 1/0 COPPER GROUND CONDUCTOR FROM TELEPHONE BACKBOARD TO BUILDING GROUNDING SYSTEM. CONTRACTOR SHALL PROVIDE 8'-0" X 4'-0" X 3/4" THICK FIRE RETARDANT PLYWOOD TELEPHONE BACKBOARD AND 120 VOLT CONVENIENCE DUPLEX OUTLET NEXT TO TELEPHONE BACKBOARD. CONTRACTOR SHALL RUN TWO 4" PVC CONDUIT FROM TELEPHONE BOARD TO THE PUBLIC RIGHT OF WAY OR A POLE. CONTRACTOR SHALL COORDINATE WITH TELEPHONE COMPANY FOR THE THEIR REQUIREMENTS BEFORE FINAL CONTRACT. CONTRACTOR SHALL INFORM ARCHITECT FOR ANY DISCREPANCIES.

10. COORDINATE ALL ELECTRICAL AND COMMUNICATION OUTLETS WITH MILLWORK. IF ACCESS GROMMETS ARE NOT PROVIDED IN COUNTER TOP, INSTALL OUTLETS ABOVE COUNTER.

11. EXPOSED WIRING SHALL BE IN EMT OR RIGID CONDUIT.

12. SEE MECHANICAL DRAWINGS FOR LOCATION OF HEATING AND A/C EQUIPMENT.

13. CONTRACTOR SHALL VERIFY THE TYPE CEILING WITH ARCHITECT PLAN AND SHALL PROVIDE THE TYPE OF LIGHT FIXTURES ACCORDING TO THE ARCHITECT CEILING PLAN.

14. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF A COMPLETE CABLE TELEVISION SYSTEM WITH OWNER AND LOCAL CABLE TV COMPANY. INSTALL MINIMUM 4" DIA. PVC CONDUIT UNDERGROUND AND UNDER SLAB, FROM BUILDING EXTERIOR TO CABLE TV PANEL IN UTILITY ROOM. CONDUIT SHALL BE INSTALLED WITH LONG RADIUS SWEEPS AND BE STUBBED UP 6" A.F.F. NOTE – MINIMUM CONDUIT SIZE FOR CABLE TV SYSTEM SHALL BE 1" DIA.

15. ALL RECEPTACLES AT GARAGE, VANITY, BATH, KITCHEN COUNTER AREAS, AND WET LOCATION SHALL BE GROUND FAULT INTERRUPTER TYPE.

16. VERIFY EXACT LOCATIONS AND LOADS OF SERVICES TO EQUIPMENT TO BE SUPPLIED BY OTHERS, SUCH AS BUILDING SIGNAGE, LAUNDRY EQUIPMENT, VENDING MACHINES, ETC., AS WELL AS ALL MECHANICAL EQUIPMENT.

17. RECESSED LIGHT FIXTURES IN RATED CEILINGS MUST BE PROTECTED OR LISTED FOR USE IN THE RATED ASSEMBLY.

18. ELECTRICAL OUTLETS BOXES ON OPPOSITE SIDES OF RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24" MINIMUM.

19. MAINTAIN CLEARANCES IN FRONT OF ELECTRICAL EQUIPMENT (TRANSFORMER, PANELS, ETC.) AS REQUIRED BY MANUFACTURER AND NEC CODE 110-26(A). SEE TABLE.26(A)(1). (3'-0" TO 4'-0"). MINIMUM WIDTH 30" OR SIZE OF EQUIPMENT.

20. CONTRACTOR SHALL VERIFY ELECTRICAL CHARACTERISTICS BEFORE RUNNING CONDUIT AND WIRES.

21. SEE ARCHITECTURAL DRAWINGS FOR UNDER CABINET LIGHTING AND PROVIDE NECESSARY CIRCUITS.

22. CONTRACTOR SHALL VERIFY WITH UTILITY COMPANY VOLTAGES AND UTILITY COMPANY'S SCOPE OR WORK.

23. FIRE ALARM CONTRACTOR SHALL PROVIDE, INSTALL, AND WIRE DUCT SMOKE DETECTORS. COORDINATE WITH MECHANICAL CONTRACTOR FOR LOCATION. SEE MECHANICAL DRAWINGS AND NOTES.

24. CONTRACTOR SHALL PROVIDE WIRES AND CONDUIT FROM TRANSFORMER TO ELECTRICAL ROOM. SEE SITE PLAN FOR EXACT LOCATION OF TRANSFORMER AND ELECTRICAL POWER RISER FOR WIRES AND CONDUITS SIZES.

25. CONTRACTOR SHALL PAY APPLICATION, COORDINATION, AND FEES FOR ELECTRICAL TRANSFORMER.

26. COORDINATE WITH THE ELECTRICAL UTILITY AND VERIFY LOCATION AND ORIENTATION OF SERVICE EQUIPMENT AND ASSOCIATED METERING EQUIPMENT.

27. PROVIDE AND INSTALL ALL MATERIALS DESIGNATED BY THE ELECTRICAL UTILITY TO BE FURNISHED BY "CUSTOMER". THIS MAY INCLUDE BUT NOT LIMITED TO, COMPRESSION LUGS FOR TRANSFORMER SECONDARY CONNECTION, CONCRETE PAD FOR SERRIA TRANSFORMER, GROUNDING MATERIAL, METER BASE AND EMPTY CONDUITS FOR PRIMARY LINES.

28. CONTRACTOR SHALL PROVIDE COMPLETE TELEPHONE WIRING FROM TELEPHONE OUTLETS TO TELEPHONE COMPANY'S MAIN TELEPHONE WIRES. CONTRACTOR SHALL COORDINATE THE SCOPE OF WORK WITH TELEPHONE COMPANY FOR COMPLETE OPERATION OF TELEPHONE SYSTEM.

29. THE BRANCH CIRCUIT FEEDING THE EMERGENCY LIGHT AND EXIT LIGHT (UNIT EQUIPMENT) SHALL BE THE SAME BRANCH CIRCUIT AS THAT SERVING THE NORMAL LIGHTING IN THE AREA AND CONNECTED AHEAD OF ANY LOCAL SWITCHES AS PER NEC CODE 700-12(F).

    a. EMERGENCY AND EXIT LIGHTS CONNECTED TO CIRCUITS CONTROLLED BY TIME CLOCK, OR PHOTOCELL SHALL HAVE BYPASS MEANS TO BE CONTINUOUSLY ENERGIZED WHEN CIRCUIT IS ACTIVE.

    b. CIRCUIT WITH EMERGENCY AND EXIT LIGHTS WITH NO SWITCH, TIME CLOCK OR PHOTOCELL SHALL BE PROGRAMMED TO OPERATE CONTINUOUSLY.

30. PROVIDE ON EVERY CORRIDOR A TWO HEAD BATTERY EMERGENCY LIGHT WITHIN THIRTY FEET OF THE END OF CORRIDOR AND MAXIMUM 60'-0 ON CENTER THROUGH THE CORRIDOR AS PER NFPA 101-7.9.1.2

31. PROVIDE TWO HEAD WALL MOUNTED BATTERY EMERGENCY LIGHT AT EACH EXIT WALKWAYS AS PER NFPA-101-7.9.1.2

32. NO PIPING, DUCT, OR EQUIPMENT FOREIGN TO THE ELECTRICAL INSTALLATION SHALL BE INSTALLED ABOVE THE ELECTRICAL PANEL BOARD, MOTOR CONTROL CENTER, OR SWITCHBOARD.

33. PROTECT PANELBOARDS, TRANSFORMERS, ETC. AS PER NEC CODE 110-27(B).

34. CONTRACTOR SHALL SUBMIT GROUND FAULT PERFORMANCE TESTS TO BUILDING INSPECTOR AND ENGINEER.

35. PROVIDE APPLICABLE PENETRATION FIRE-STOP SYSTEM AS PER SBC SECTION 705.4.

36. COMBINATION HORN STROBE SHALL BE INSTALLED WITHIN 15'-0" OF THE END OF EACH CORRIDOR AND MAXIMUM OF 50'-0" ON CENTER THROUGHOUT THE CORRIDOR AS PER NATIONAL FIRE ALARM CODE SECTION 6-4.4.2.2. (MIN. 90" ABOVE FINISHED FLOOR AND BELOW THE FINISHED CEILINGS OF NOT LESS THAN 6 INCH.

37. INSTALL MANUAL PULL STATION AT EVERY FIRST FLOOR EXIT. ADDITIONAL MANUAL PULL STATION SHALL BE PROVIDED SO THAT TRAVEL DISTANCE TO THE NEAREST MANUAL PULL STATION SHALL NOT EXCEED OF 200 FT MEASURED HORIZONTALLY ON THE SAME FLOOR.MOUNTING HEIGHT SHALL BE NOT LESS THAN 42" AND NOT MORE THAN 54" ABOVE FINISHED FLOOR. SEE NATIONAL FIRE ALARM CODE SECTION 5-8.1.2

38. PROVIDE FIRE ALARM STROBE LIGHT IN EVERY PUBLIC REST ROOM AND OTHER GENERAL USAGE AREAS (E.G. CLASSROOMS, MEETING ROOMS), HALLWAYS, LOBBIES, AND ANY OTHER AREAS OF COMMON USE AS PER GA. ACCESSIBILITY CODE SECTION 120-3-20-.39

39. INSTALL SMOKE DETECTORS IN ALL COMMON AREAS SUCH AS LOBBIES, STORAGE ROOMS, EQUIPMENT ROOMS, ATTICS, SPACE ABOVE THE CEILINGS, CLOSETS, AND OTHER TENANTLESS SPACES. SEE NATIONAL FIRE ALARM CODE SECTION 5-1.4.2

40. CEILING SMOKE DETECTORS SHALL BE INSTALLED IN ALL CORRIDORS. SMOKE DETECTORS SHALL BE INSTALLED WITHIN 15'-0" OF THE END OF EACH CORRIDOR AND MAXIMUM 30'-0" ON CENTER THROUGHOUT THE CORRIDOR.

41. ALL OUTLETS WITHIN SIX FEET OF ANY SINK SHALL BE GROUND FAULT PROTECTION TYPE.

42. PROVIDE POWER TO GARBAGE DISPOSAL AND DISHWASHER. SEE PLUMBING AND ARCHITECTURAL PLANS.

43. PROVIDE FIRE SAFE BLANKET WRAP AROUND EACH OUTLET BOX IN FIRE RATED ASSEMBLY TO MAINTAIN ASSEMBLY FIRE RATING.

44. A WRITTEN RECORD OF THE GROUND FAULT PERFORMANCE TEST RESULTS SHALL BE MADE AVAILABLE TO THE COUNTY INSPECTOR OR PLAN REVIEWER.

56. PROVIDE GROUND FAULT PROTECTION TYPE (GFI) RECEPTACLES AT THE FOLLOWING LOCATION:

    a. BATHROOM
    b. WITHIN SIX FEET OF ANY SINK
    c. GARAGE (READILY ACCESSIBLE)
    d. OUTSIDE WITH WEATHERPROOF (READILY ACCESSIBLE).
    e. WET LOCATION.
    f. AS PER NEC 210-8.

45. BRANCH CIRCUIT CONDUCTORS:

    WIRES RUN OVER 100 FEET LONG SHALL BE SIZED NEXT SIZE OF WIRE SCHEDULE. THIS APPLIES TO THE ENTIRE CIRCUIT OR CIRCUITS.

46. ELECTRIC ROOM WITH 800AMP AND GREATER SHALL HAVE PANIC DOOR HARDWARE.

47. EMERGENCY POWER EQUIPMENT SHALL BE LOCATED IN A SEPARATE TWO HOUR RATED ROOM AS PER NFPA-110-7.2.1.1

48. ALL DISCONNECTING SWITCHES SHALL BE IDENTIFIED AS PER NEC CODE SECTION 110.22.

49. ELECTRIC ROOM SHALL HAVE MINIMUM 30 FC AND EMERGENCY LIGHT SHALL 1 FOOTCANDLE LIGHT LEVEL.

50. LAY-IN LIGHT FIXTURES SHALL BE SUPPORTED WITH FOUR WIRE HANGERS INDEPENDENT OF THE CEILING GRID SYSTEM AND SECURED TO THE GRID SYSTEM.

51. CONTRACTOR SHALL VERIFY THE TYPE OF THE LIGHT FIXTURES AGAINST THE TYPE CEILING BEFORE BIDDING THE PROJECT.

52. ALL LIGHT FIXTURES SHALL BE AIR-LOCK TYPE. ALL LIGHT FIXTURES SHALL BE IC RATED.

53. CONTRACTOR SHALL RELOCATE EXISTING UNDERGROUND ELECTRICAL SERVICE CABLE, TRANSFORMER, TELEPHONE CABLES, AND OTHER CONDUITS WHICH ARE GOING TO BE UNDER THE NEW SLAB.

54. DISCONNECT SWITCH SHALL BE INSTALLED AS PER NEC 404.8(A). ALL SWITCHES AND BREAKERS USED AS SWITCHES SHALL BE LOCATED SO THAT THEY MAY BE OPERATED FROM READILY ACCESSIBLE PLACE. THEY SHALL BE INSTALLED SUCH THAT THE CENTER OF THE GRIP OF THE OPERATING HANDLE OF THE SWITCH OR CIRCUIT BREAKER, WHEN IN THE HIGHEST POSITION, IS NOT MORE THAN 6'-7" ABOVE THE FLOOR OR WORKING PLATFORM.

55. AUTOMATIC TRANSFER SWITCH AND EMERGENCY PANELS SHALL BE LOCATED IN ONE HOUR RATED ROOM OR FULLY FIRE SPRINKLER SYSTEM BUILDING AS PER NEC 700.10(D-2)

56. EMERGENCY GENERATOR REQUIREMENTS:

    a. WEATHER PROOF ENCLOSURE.
    b. EPA CERTIFICATION. (Only operates when the utility has failed)
    c. no Load certification.
    d. LOAD BANKING IS REQUIRED ON STARTING.
    e. MEET NFPA-100 LIFE SAFETY CODE
    f. NEMA 3R ENCLOSURE
    g. 4-POLES SWITCH
    h. DBA RATING AT 7 METERS
    i. Sound attenuation housing
    j. Block heater and battery charger
    k. Remote annunciator and estop.

OCCUPANCY SENSOR NOTES:

A. ALL SENSOR LOCATIONS ARE APPROXIMATE. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO INSTALLATION.

B. CEILING MOUNTED SENSORS LOCATED OVER DOORWAYS SHOULD PLACED ONE FOOT INSIDE THRESHOLD.

C. ULTRASONICE CEILING MOUNTED SENSORS SHOULD BE LOCATED A MINIMUM OF SIX FEET FROM HVAC SUPPLY /RETURN VENTS.

D. THOUGH MOUNTED, PENDANT MOUNTED, AND PENDANT MOUNTED INDIRECT LIGHTING SOURCES AFFECT THE OPERATION OF LOCALLY MOUNTED SENSORS. CONTRACOTR IS RESPONSIBLE FOR ADJUSTING SENSOR LOCATIONS TO ALLOW FOR PROPER OPERATION.

E. CONTRACTOR IS RESPONSIBLE FOR PROPER SENSITIVITY AND TIME DELAY SETTING FOR NON-ADAPTIVE PRODUCTS, FOLLOWING THE MANUFACTURER'S RECOMMENDED PLACEMENT, AND FIELD VERIFICATION OF CIRCUITS WITH RESPECT TO POWER PACK PLACEMENT.

F. CONTRACTOR IS RESPONSIBLE FOR ORDERING THE APPOPRIATE SENSOR.

G. CONTRACTOR IS RESPONSIBLE FOR RELATED CIRCUIT CONTROL EQUIPMENT. THIS INCLUDES, NOT LIMITED TO, LAOD CONTROL, SWITCHING/CONTROL STATIONS, ATC, FACILITY-WIDE CONTROL INTEGRATION, EVENT SCHEDULING, BAS.BMS INTEGRATION.

H. PHOTOCELLS MUST BE PLACED WITHIN DAYLIGHTING ZONE AS DEFINED BY LOCAL CODE.

ELECTRICAL SPECIFICATIONS

I. GENERAL

A. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND NECESSARY ITEMS AND OBTAIN AND PAY FOR ALL FEES AND PERMITS REQUIRED TO INSTALL A COMPLETE ELECTRICAL SYSTEM.

B. IT IS THE INTENT OF THESE PLANS TO PROVIDE A COMPLETE ELECTRICAL SYSTEM, REGARDLESS OF WHETHER EACH INDIVIDUAL COMPONENT IS MENTIONED OR NOT.

C. THE WORK SHALL COMPLY WITH THE STANDARDS OF THE FOLLOWING CODES AND ORDINANCES:

    1. NFPA NO. 70, "NATIONAL ELECTRIC CODE,"LATEST ED.
    2. NECA "STANDARD OF INSTALLATION"
    3. THE ELECTRICAL UTILITY COMPANY SERVICE STANDARDS
    4. UNDERWRITER'S LABORATORY STANDARDS
    5. OTHER LOCAL CODES, ORDINANCES AND LAWS APPLICABLE TO THE LOCATION OF THIS PROJECT.

D. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH TELEPHONE SYSTEM, CABLE TV, AND SECURITY SYSTEM INSTALLATIONS.

II. MATERIALS AND WORKMANSHIP:

A. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR TIMELY PLACEMENT OF ALL CONDUITS, OUTLET BOXES, CABINETS, AND OTHER WIRING DEVICES IN FLOORS, WALLS, CEILINGS, ETC. AS THE CONSTRUCTION PROGRESSES.

B. OUTLET BOXES SHALL BE LOCATED AS FOLLOWS:

    1. WALL SWITCHES - 4'-0"ABOVE FINISH FLOOR.
    2. CONVENIENCE OUTLETS - 16" A.F.F.
    3. EQUIPMENT OUTLETS AS REQUIRED (VERIFY)

C. WIRING SYSTEM SHALL BE AS FOLLOWS:

    1. RIGID CONDUIT-GALVANIZED STEEL OR RIGID ALUMINUM AS PERMITTED BY N. E. C.
    2. EMT- ELECTRIC METALLIC TUBING CONDUIT MAY BE USED ONLY WHERE IT IS NOT SUBJECT TO MECHANICAL DAMAGE AND WHERE PERMITTED BY THE N. E. C. AND LOCAL CODES. EMT CONDUIT SHALL NOT BE USED OUTSIDE THE BUILDING.
    3. FLEXIBLE METAL TUBING - TO BE USED AT CONNECTIONS WHERE REQUIRED. CONNECTIONS SHALL BE MADE WITH GROUND. ALL SUCH CONNECTIONS SHALL BE LIQUID TIGHT.
    4. UNDERGROUND CIRCUIT SHALL BE SCHEDULE 40 PVC.

D. CONDUCTORS SHALL BE COPPER, TYPE THWN/THHN.

E. CONVENIENCE RECEPTACLES SHALL BE 15 (20)AMP., 125 VOLT NEMA 5-15(20)R.

F. WALL SWITCHES SHALL BE 20 AMP. 120/277 V. AC, SINGLE POLE OR AS INDICATED ON THE DRAWING.

G. PANELBOARDS SHALL BE BY SQUARE D, SIEMENS, OR GENERAL ELECTRIC.

H. GROUNDING OF ELECTRICAL SYSTEMS SHALL BE IN ACCORDANCE WITH THE NEC AND LOCAL REQUIREMENTS.

I. ELECTRICAL CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO ITEMS SHOWN AS PART OF THE GENERAL CONTRACT WHICH REQUIRE ELECTRICITY-INCLUDING ALL SIGNAGE, BUILDING LIGHTING, AND CONTROL WIRING.

J. FUSES SHALL BE DUEL-ELEMENT CURRENT LIMITING FUSES IN ALL DISCONNECT SWITCHES OR OTHER FUSIBLE DEVICES. FURNISH A SPARE FUSE OF EACH TYPE USED ON THE JOB.

K. ELECTRICAL CONTRACTOR SHALL INSTALL AND CONNECT MOTOR STARTERS, RELAYS, SWITCHES, AND RELATED ITEMS WHICH ARE SUPPLIED BY OTHERS.

L. ALL MATERIAL SHALL BE NEW AND UL APPROVED AND LABELED.

M. ALL ELECTRICAL EQUIPMENT AND SYSTEMS SHALL BE TESTED AND ADJUSTED FOR PROPER OPERATION. COMPLETE WIRING SYSTEM SHALL BE FREE OF SHORT CIRCUITS.

N. CONTRACTOR SHALL MAKE COMPLETE CONNECTIONS TO ALL EQUIPMENT. COORDINATE WITH EQUIPMENT SUPPLIER FOR EXACT LOCATIONS AND REQUIREMENTS.

O. RUN 3/4"C FROM TV, TELEPHONE AND DATA OUTLETS TO COMPUTER/IT ROOM.

P. RUN 2-2"PVC CONDUITS W/PULL WIRE TO PROPERTY LINE FOR TELEPHONE. COORDINATE W/TELEPHONE UTILITY.

Q. RUN 1 ¼" PVC PULL WIRE TO PROPERTY LINE FOR TV CABLE. COORDINATE W/CABLE SUPPLIER.

R. CONTRACTOR MUST SUBMIT EQUIPMENT DATA FOR APPROVAL TO ENGINEER.

S. DATA CABLE SHALL BE CAT-6.

JACKSON CO. ANIMAL SHELTER PRINTED DATE: 02/16/21

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REVISIONS

Number	Date:	Remarks:	Number	Date:	Remarks:
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GEORGIA REGISTERED No. 015102 PROFESSIONAL ENGINEER

JACKSON COUNTY ANIMAL SHELTER
JEFFERSON, GEORGIA

SHEET TITLE:
ELECTRICAL NOTES
ELECTRICAL SPECIFICATION

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