

Board of County Commissioners

Workshop Agenda

Date of Meeting: April 16, 2024

Date Submitted: April 10, 2024

To: Honorable Chairman and Members of the Board

From: Edward J. Dixon, County Administrator
Roosevelt Morris, Building Official
Tashonda Whaley, Emergency Management Director

Subject: Presentation and Discussion on the Emergency Operations Center Design

Statement of Issue:

This agenda item is for discussion and direction on the Emergency Operations Center (EOC) Design.

Background:

In July 2022, the Board accepted \$200,000.00 from the Florida Division of Emergency Management (FDEM) for the design (the “Work”) of a new, standalone EOC structure. All work had to be approved by the FDEM at various stages to ensure compliance with the FDEM Agreement and codes for the construction of EOC facilities. Since that time, the County has also received state funding to construct the EOC, which is included in the funding for the new public safety facility.

The County contracted with Joel Sampson Architect, Inc., for the work. Before the work began Mr. Sampson and staff visited several EOC facilities in rural, small counties as well as the Leon County EOC to get ideas and best practices for an EOC. Due to the nature and purpose of an EOC, all designs are similar ensuring a smooth workflow, staging, office space and a command center for when the EOC is activated for an event. Mr. Sampson has been working with staff and FDEM to ensure that all FDEM agreement deliverables and requirements were successfully met from concept, spatial design, and 20 percent design to the unofficial final design.

Earlier this year the unofficial final design was transmitted to the FDEM for review and approval to ensure that FDEM found the design and specification compliant with the FDEM Agreement and all federal and state building codes for an EOC facility. In March 2024, the FDEM notified the County that they had accepted the unofficial final design without change or comment.

Presentation:

Mr. Joel Sampson, professional architect, and owner/President of Joel Sampson Architect will present to the Board the background and design of the County's new Emergency Operations Center (EOC).

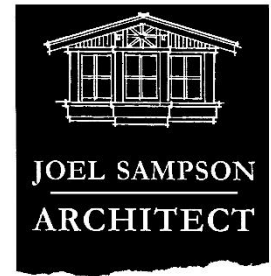
There is an agenda item on the April 16, 2024, Board agenda that will be seeking board approval of the design.

Attachments:

1. Project Description
2. Floor Plan
3. Concept Drawings

THIS WORKSHOP ITEM IS FOR DISCUSSION PURPOSES ONLY.

**NEW GADSDEN COUNTY
EMERGENCY OPERATIONS CENTER
GADSDEN COUNTY, FLORIDA**



PROJECT DESCRIPTION 1/24

The new Gadsden County Emergency Operations Center design is funded through a State of Florida Small County Emergency Operations Center Design Initiative Grant through Florida Department Emergency Management. The following is a description of the proposed project.

PROJECT SITE

The proposed project site is 264 Joe Adams Road in Quincy, Florida. The site is located on a 23+ acre property that adjoins Joe Adams Road and Pat Thomas Parkway and is Gadsden County parcel ID 3-24-2N-4W-0000-00311-0100. A property owned for decades by Gadsden County, it houses the Gadsden County Corrections Facility and the National Guard Armory which leases 14.5 acres of the property. The main access to the site is off Joe Adams Road but an alternate access drive is planned to create access to Pat Thomas Parkway.

The site will have asphalt paved secure parking behind security fencing as well as paved unsecured public parking sized to assist in accommodating event demand. Vehicle barriers are planned between the building and vehicle circulation areas. The site will be minimally landscaped.

Space on site is allocated for future expansion of public safety facilities and additional parking – see architectural site plan. Additional land in a strip of approximately 1.2 acres adjacent to the east of the property should be obtained by the County for future parking expansion as the facility may grow. A potential staging area of use to the EOC exists on the west side of the property in an adjacent area of approximately 1.7 acres. The area is under lease by the National Guard Armory in the rear of their facility and is unfenced. This space could be used for staging during activation with approval by the Guard.

Available utilities that exist on site are public domestic water supply in Joe Adams Rd. R.O.W. and can be extended to the new facility. Overhead electric is available in Joe Adams Rd. R.O.W. and can be extended/buried into the site. A sanitary sewer force main exists in Joe Adams R.O.W. and a lift station tie in will be needed. Natural gas service line is also in Joe Adams R.O.W. and the intention is to tap for building usage.

BUILDING STRUCTURES

The EOC planning has identified the need for three structures. Main EOC building, a equipment/supplies storage building and a vehicle/trailer storage building. The

equipment storage and vehicle storage buildings were not accepted in our scope of work.

EMERGENCY OPERATIONS CENTER BUILDING

The proposed main emergency operations center building is approximately 5,800 square feet and shall be designed to Florida Building Code 2023, Building, Risk Category 4, Essential Facility, ICC 500-2014 with min. design wind speed 160 mph (3 Sec gust), exposure Cat-C, wind directionality factor, Kd-1.00. The spaces and general needs are listed in the Spatial Needs Assessment.

The foundation is proposed concrete spread wall footings & slab-on-grade. The geotechnical engineer's soils investigation noted no adverse issues requiring upgraded foundations. The exterior wall structural systems shall be reinforced concrete masonry with brick veneer in areas. The exterior door and window openings are proposed storm rated and bullet resistant to level 3. The roof shall be poured in place concrete supported by steel deck and steel wide flange beams and finished with thermoplastic polyolefin roofing.

MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION SYSTEMS

HVAC SYSTEMS

APPLICABLE CODES, STANDARDS AND GUIDANCE

Florida Building Code, 2023 Edition

Florida Mechanical Code, 2023 Edition

Florida Fuel Gas Code, 2023 Edition

Florida Energy Conservation Code, 2017 Edition

NFPA 90A Standard for the Installation of Air Conditioning and Ventilating Systems

NFPA 90B Standard for the Installation of Warm Air Heating and Air Conditioning Systems

NFPA 101 Life Safety Code

American Society of Heating, Refrigerating and Air Conditioning Engineers

OUTDOOR AIR DESIGN ENVIRONMENTAL CONDITIONS

For spaces being mechanically cooled:

Dry-Bulb Temperature = 95.5°F

Wet-Bulb Temperature = 76.6°F

Based on 0.4% wet-bulb and mean coincident dry-bulb temperature for Tallahassee, FL as published by the 2017 ASHRAE Handbook - Fundamentals.

Winter:

Dry-Bulb Temperature = 25.4°F

Based on 99.6% dry-bulb conditions for Tallahassee, FL as published by the 2017 ASHRAE Handbook – Fundamentals

HEATING AND COOLING DESIGN CONCEPT

COMMON SPACES and OFFICE SPACES

Heating and cooling provided by all electric heat pump units w/ variable compressor and airflow by Carrier or Trane. All systems shall be located on East side of roof and ducted or split systems with condensing outdoor units in secure area outside. Units shall be equipped w/ barometric relief economizers and duct mounted smoke detectors.

EMERGENCY OPERATIONS ROOM Space shall be served by multiple units for proper staging during part-load conditions.

ELECTRICAL / COMMS Space shall be served by Liebert systems to meet equipment loads provided by owner. Provide 100% redundancy.

VENTILATION and OUTSIDE AIR SYSTEM

OUTSIDE AIR

Building outside air provided at each RTU based on ASHRAE 62.1.

Provide bi-polar ionization devices at each RTU to reduce the total required outside air required using ASHRAE 62.1 IAQ-Procedure calculations.

EXHAUST AIR SYSTEMS

Exhaust air system provided by individual ceiling or cabinet exhaust fans located in each space requiring exhaust. Exhaust will be ducted to roof mounted gravity relief cap located a minimum 10'-0" from all fresh air intakes.

TOILETS Provide ceiling mounted/inline cabinet exhaust fans by Greenheck or Cook. Fans shall be interlocked w/ lights to energize when occupant enters space.

CUSTODIAN Provide inline cabinet exhaust fan by Greenheck or Cook. Fans shall be controlled by wall switch and shall remain on continuously while building is occupied.

KITCHEN Provide inline cabinet exhaust fan by Greenheck or Cook. Fan shall be interlocked w/ lights to energize when occupant enters space. Fan will be sized to maintain slight negative pressure in Kitchen, relative to adjacent spaces.

CONTROLS - BUILDING AUTOMATION SYSTEM

Provide Building Automation System (BAS). Controller to be located in COMMS Room. System shall be coordinated w/ owner-preferred controls contractor.

PUBLIC and NON-PUBLIC AREA THERMOSTATS/WALL SENSORS

Provide remote sensors. All thermostats/wall sensor to be hardwired. No wireless devices are allowed. Locate sensors in each respective zone.

PLUMBING SYSTEMS

APPLICABLE CODES, STANDARDS AND GUIDANCE

Florida Building Code, 2023 Edition

Florida Mechanical Code, 2023 Edition

Florida Fuel Gas Code, 2023 Edition

Florida Plumbing Code, 2023 Edition

Florida Energy Conservation Code, 2017 Edition

ASPE Design Manual

Florida Accessibility Code, 2023 Edition

NFPA 101 Life Safety Code

GADSDEN EOC PROJECT DESCRIPTION

JOEL SAMPSON ARCHITECT, INC. 212 N ADAMS STREET QUINCY, FLORIDA 32351 FLA LIC NO AR0014780

PLUMBING DESIGN CONCEPT

KITCHEN AREAS AND BATHROOMS

Plumbing systems will be designed using builder components with industry standard products equal to Kohler, American Standard, Elkay, etc.

PLUMBING MATERIALS

SOIL WASTE AND VENT

Soil waste and vent systems shall be designed using sch 40 PVC products in accordance with code.

DOMESTIC WATER PIPING

Domestic water piping will use CPVC sch 80 instead of pex and copper systems.

WATER HEATERS

Water heating will be designed using electric instantaneous type products.

WATER CLOSETS

All water closets will be electric hands free flush valve type.

LAVATORIES AND SINKS

Will be electric hands free for public areas with manual type in shower locker areas. Lavatories to be wall or counter mounted based on architect drawings.

JANITOR SINK

Shall be floor mounted type.

ELECTRIC WATER COOLERS

To be wall mounted type with bottle filler and filter.

FIRE SPRINKLER

Shall comply with NFPA 13 using dry pipe system for structure with FM chemical system for data storage system.

ELECTRICAL SYSTEMS

STANDARDS

- All equipment, devices, and fixtures will be new and conform to the standards of the following where such standards are applicable:
 - National Electrical Manufacturers Association.
 - Underwriters' Laboratories, Inc.
 - Institute of Electrical and Electronics Engineers.
 - American National Standards Institute.
 - National Fire Protection Association.

CONDUIT

- Raceways will be electrical metallic tubing (EMT) in interior spaces, 3/4" minimum. PVC will be used for below grade or slab locations, 3/4" minimum. Galvanized rigid steel (GRS) conduit or Intermediate Metallic Conduit (IMC) will be used for slab penetrations, for exterior installations, and where otherwise

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required or indicated. Exposed conduit in office areas will be avoided, or if necessary, to install, will be in wire mold.

- All conduits will be installed parallel and perpendicular to walls, beams, joists and columns.
- All homeruns to panelboards will be in conduit, EMT, IMC, or GRS. The use of type MC cable from the junction box above the ceiling where the homerun ends in the space will be allowed. Type MC Cable will be allowed from this junction box to continue to each outlet serving the individual electrical devices.
- Boxes will be ferrous metal or aluminum. Materials will be steel, malleable iron, or copper-free aluminum. Covers will be cast of the same material as the box. Boxes are not to be installed back-to-back due to transmission of sound and due to fire ratings of walls. Thru-wall boxes will not be used. Boxes will be offset 6" minimum.

BUILDING WIRE AND CABLE

- All wire and cable will be copper (type THWN - 2 in ambient temperatures greater than 30°F, and type XHHW - 2 for service entrance conductors and areas with ambient temperatures at 30°F and below). Color coding of all wiring will be provided. The
- minimum size of conductors for power and lighting circuits will be No. 12 AWG. All control conductors will be stranded. Fire alarm cables will be UL listed type FPLP No. 14 AWG plenum rated with 100% aluminum shielding. The type MC cable will also include a green insulated grounding conductor along with two or more current carrying conductors. The type MC Cable will be UL listed and be provided with THWN-2 insulation on the conductors.
- Solid copper conductors will be used for sizes #10AWG and smaller, and stranded copper conductors for sizes #8AWG and larger. All connections to motors in flexible conduit will be stranded regardless of size.

WIRING DEVICES AND COVER PLATES

- General convenience outlets 20A, 120V, grounding, duplex type will be located on each office wall, corridors, common areas, and for each drinking fountain and as necessary for general maintenance requirements.
- Power wiring and connections to all heating, ventilating, air conditioning, and plumbing equipment will be provided.
- Service receptacles will be provided for all required HVAC equipment.
- Power wiring and connections will be provided for all required office equipment. This includes, but not limited to fax machines, plotters, servers, and printers.
- Exterior – GFCI, weatherproof while in use receptacles shall be provided at exterior doors.
- Wall switches for general lighting branch circuits in public or equipment areas will be specification grade; two position AC toggle switches rated 20 amperes at 120/240 volts.
Acceptable devices will be Hubbell or Pass & Seymour, or equal
- Wall receptacles will be specification grade, flush mounting, straight blade grounding type rated 125 volts, and 20 amperes. Acceptable devices will be Hubbell, Pass & Seymour, or equal.

- Color of receptacles and switches will be white for most locations and will be as selected by the Architect for high-profile public areas, based on finishes of each area.
- Cover plates for interior flush-mounting applications will generally be midway 302 stainless steel, with multiple devices at a single location ganged under a common one-piece cover plate with matching screws.
- Typical workstations will be provided with a specification grade quadraplex power receptacle, a telephone outlet, and a data outlet.

SERVICE ENTRANCE

- A temporary service will be provided from a utility company source to the building for electrical light and power requirements while the building is under construction. Conduits will be provided under the direct requirements of the utility provider. Service into the building will be from a primary line and a pad mounted transformer provided by the local electrical power company.
- The electrical service and distribution system will be 120/208 volts, three-phase, four-wire, with solidly grounded neutral. The Utility Transformer location and size is to be coordinated with the local utility and the civil engineering drawings. Coordinate all requirements with local utility including transformer location, size and clearance, and available fault current on transformer secondary

SWITCHBOARDS

- The main switchboard will provide one main service disconnect location for the facility. This main service panel will be of floor-mounted type construction, located on a concrete housekeeping pad, and will sub feed other panelboards for service to lighting, receptacles, and mechanical and utilization equipment. The main breaker will be three-pole, 100% fully rated electrical breaker. Provide arc-reduction blue switch to reduce breaker trip settings for maintenance. All busses to be copper. All distribution equipment will be manufactured by *Cutler-Hammer, Square D, Siemens, General Electric*, or equal.

DISCONNECT SWITCHES

- Disconnects at all locations as required by local codes will be provided. Each switch shall be listed and rated for installation location.

GROUNDING

- The electrical service system neutral (at the service entrance equipment) will be grounded to building steel, metal water pipe and grounding triad. The grounding triad will consist of three (3) 3/4"x10'-0" copper ground rods driven 12' below finished grade in a triangle formation at a distance of ten (10'-0") feet apart from each other. This triad will be located within 6'-0" from edge of the building.
- Each separately derived system neutral will be grounded to the nearest structural steel member or a separate grounding electrode. A separate insulated equipment grounding conductor will be provided in all raceways.
- Grounding will meet the requirements of applicable codes, serving utility companies, equipment manufacturers, and local inspecting authorities having jurisdiction. Grounding conductors will be copper. Equipment grounding conductors will be provided in each raceway. Conduit ground alone will not be acceptable. Bonding jumpers will be connected between receptacles and outlet boxes. The branch circuits will have bond bushings at panelboard terminations.

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PANELBOARDS

- All distribution, lighting and receptacle panelboards will be provided as required, they will be dead front, safety enclosed type with bolt-on molded case circuit breakers. They will be flush or surface mounted as indicated, NEMA 1, general purpose enclosures, with a minimum width of 20 inches, and a minimum depth of 5-3/4". All panelboards will have an integral short circuit rating as required by the distribution system fault current analysis. All busses to be copper. All panelboard equipment will be manufactured by Cutler-Hammer, Square D, Siemens, General Electric, or equal.

INTERIOR LUMINAIRES

- The interior lighting systems will be designed to provide the following average maintained horizontal illumination levels measured in foot-candles at a height of thirty-six inches (3'- 0") above the floor for all finished areas or as noted below.
- All lighting level will be designed per IES recommended foot candle levels.

EMERGENCY LIGHTING

- All emergency lighting required for emergency egress during an emergency will be provided by local battery emergency egress lights. Panel or contactor) and lighting levels and methods to reduce the power consumption of the building.
- Battery packs for select fixtures will be installed for emergency egress from building upon loss of utility company power. Battery packs will provide 90-minute backup.

SITE LIGHTING

- Exterior lighting will be provided and installed at building entrances and along the perimeter of the building to illuminate entrances, driveway, and building facade.
- Parking Lot lighting will be provided with LED fixture heads on metal poles attached to concrete bases.

SURGE SUPPRESSION SYSTEM

- An integrally mounted transient voltage surge suppression (TVSS) system will be provided on the main switchboards and on the 120/240V panelboards serving the computer (data) rooms and computer room(s).

ADDRESSABLE FIRE PROTECTION ALARM SYSTEM

- An addressable class B, supervised, non-coded, multizone fire alarm system will be provided. The system will include initiation devices, notification devices, main control panel and an annunciator panel. The system will have provisions to report an alarm condition at a remote location and be manufactured by *Edwards, Notifier, Simplex, Siemens, or other approved manufacturers*. The fire alarm system will be designed in accordance with NFPA 72, 2019 edition, and all local regulations.

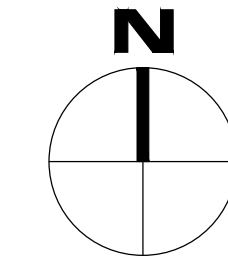
- The system will have the following capabilities:
 1. Alarm notification through Voice, Horn, and Strobe.
 2. Release of door closing mechanisms.
 3. Features for HVAC control.
 4. Features for Elevator control.
 5. Central Station Monitoring.
 6. Hand Held Microphone.
 7. Alarm Initiating devices through pull stations, tamper switches, sprinkler flow switches, and smoke detectors.
 8. Contacts to indicate and receive trouble and alarm signals from the existing Church building.

COMMUNICATION SYSTEMS

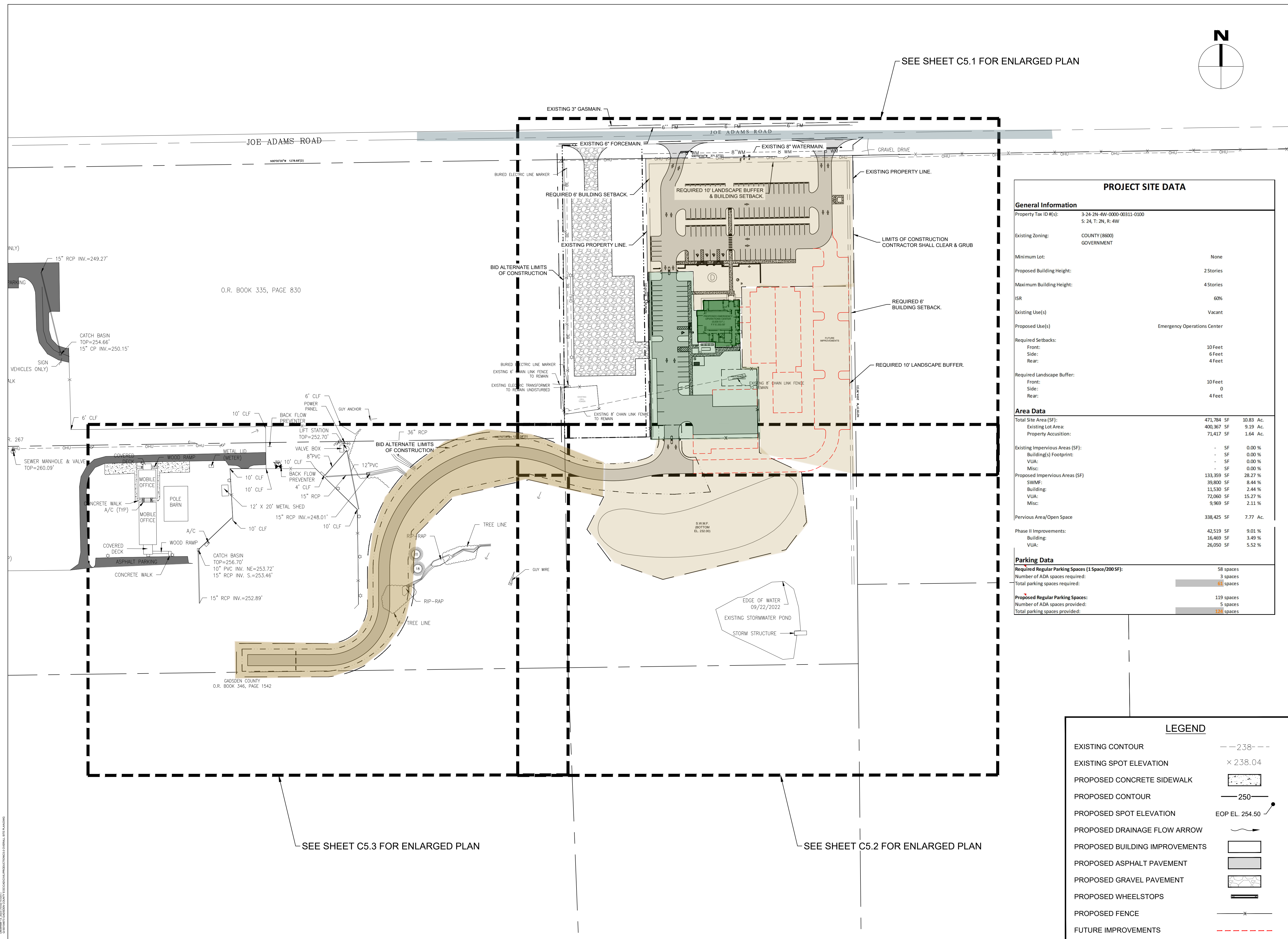
- Two (2) four-inch (4") communications service entrance conduits will be provided to the building from the property line and an additional two (2) four-inch (4") conduits will be routed to the existing building telephone room.
- Equipment mounting boards and dedicated 120 Volt receptacles will be installed as required. Telephone outlet boxes with a three-quarter inch (3/4") conduit terminated above the ceiling will be provided in each office and in the employee amenity area.
- Combined data/telephone outlet boxes with one (3/4") conduit terminated above the ceiling will be provided in each office.
- All communications cabling and necessary hardware will be provided by the owner.

EMERGENCY GENERATOR

- An emergency generator will provided for a whole building emergency operation. An accessible conduit shall be provided for connection of portable whole building generator as redundancy to pad mounted generator.



SEE SHEET C5.1 FOR ENLARGED PLAN



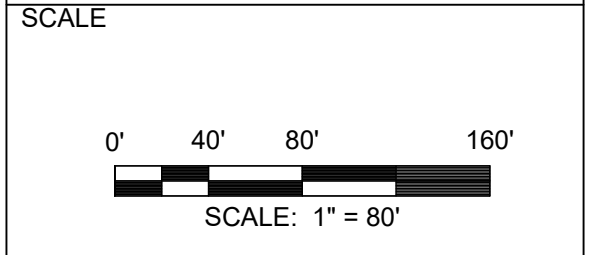
PROJECT SITE DATA

General Information	
Property Tax ID #(s):	3-24-2N-4W-0000-00311-0100 S: 24, T: 2N, R: 4W
Existing Zoning:	COUNTY (8600) GOVERNMENT
Minimum Lot:	None
Proposed Building Height:	2 Stories
Maximum Building Height:	4 Stories
ISR	60%
Existing Use(s)	Vacant
Proposed Use(s)	Emergency Operations Center
Required Setbacks:	
Front:	10 Feet
Side:	6 Feet
Rear:	4 Feet
Required Landscape Buffer:	
Front:	10 Feet
Side:	0
Rear:	4 Feet
Area Data	
Total Site Area (SF):	471,784 SF 10.83 Ac.
Existing Lot Area:	400,367 SF 9.19 Ac.
Property Accusation:	71,417 SF 1.64 Ac.
Existing Impervious Areas (SF):	- SF 0.00%
Building(s) Footprint:	- SF 0.00%
VUA:	- SF 0.00%
Misc:	- SF 0.00%
Proposed Impervious Areas (SF)	
SWMF:	133,359 SF 28.27%
Building:	39,800 SF 8.44%
VUA:	11,530 SF 2.44%
Misc:	72,060 SF 15.27%
Misc:	9,969 SF 2.11%
Pervious Area/Open Space	338,425 SF 7.77 Ac.
Phase II Improvements:	
Building:	42,519 SF 9.01%
VUA:	16,469 SF 3.49%
VUA:	26,050 SF 5.52%
Parking Data	
Required Regular Parking Spaces (1 Space/200 SF):	58 spaces
Number of ADA spaces required:	3 spaces
Total parking spaces required:	61 spaces
Proposed Regular Parking Spaces:	119 spaces
Number of ADA spaces provided:	5 spaces
Total parking spaces provided:	124 spaces

GADSDEN COUNTY B.O.C.C.
**GADSDEN COUNTY
EMERGENCY OPERATIONS
CENTER**
QUINCY, FLORIDA 32351
GADSDEN COUNTY, FLORIDA

SEAL

MICHAEL A. FREIDIN
ENGINEER OF RECORD LICENSE
#90724
EB # 8794



REVISIONS

NO.	DESCRIPTION	DATE

DRAWN BY _____ C. SMITH
APPROVED BY _____ M. FREIDIN
CHECKED BY _____ J. LUIZ
DATE _____ DECEMBER 2023
TITLE _____

OVERALL SITE PLAN

PROJECT NO. 50154873

C5.0

SHEET NO. _____ OF _____

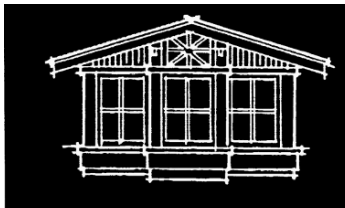
LEGEND

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PROPOSED CONTOUR	—250—
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PROPOSED DRAINAGE FLOW ARROW	[Arrow]
PROPOSED BUILDING IMPROVEMENTS	[Pattern]
PROPOSED ASPHALT PAVEMENT	[Pattern]
PROPOSED GRAVEL PAVEMENT	[Pattern]
PROPOSED WHEELSTOPS	[Symbol]
PROPOSED FENCE	x
FUTURE IMPROVEMENTS	---

SEE SHEET C5.3 FOR ENLARGED PLAN

SEE SHEET C5.2 FOR ENLARGED PLAN

December 13, 2023 10:28:11 AM EST
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JOEL SAMPSON
ARCHITECT

212 NORTH ADAMS ST
QUINCY, FLORIDA 32351
FLA LIC NO ARO04180
850-815-4348

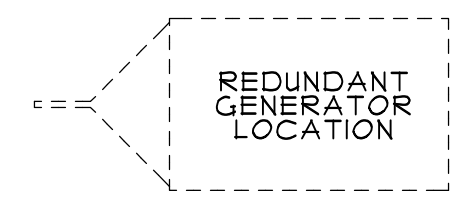
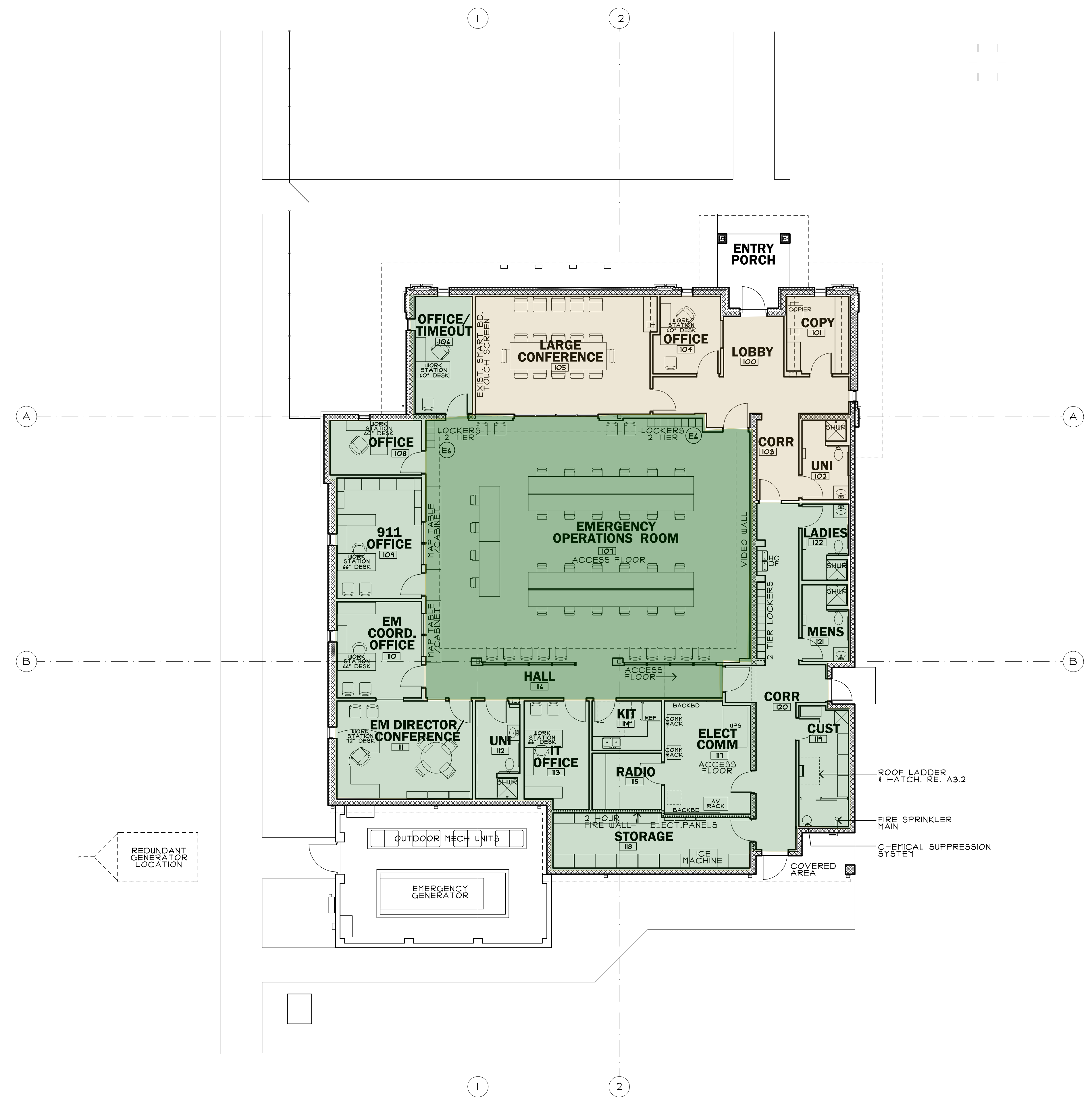
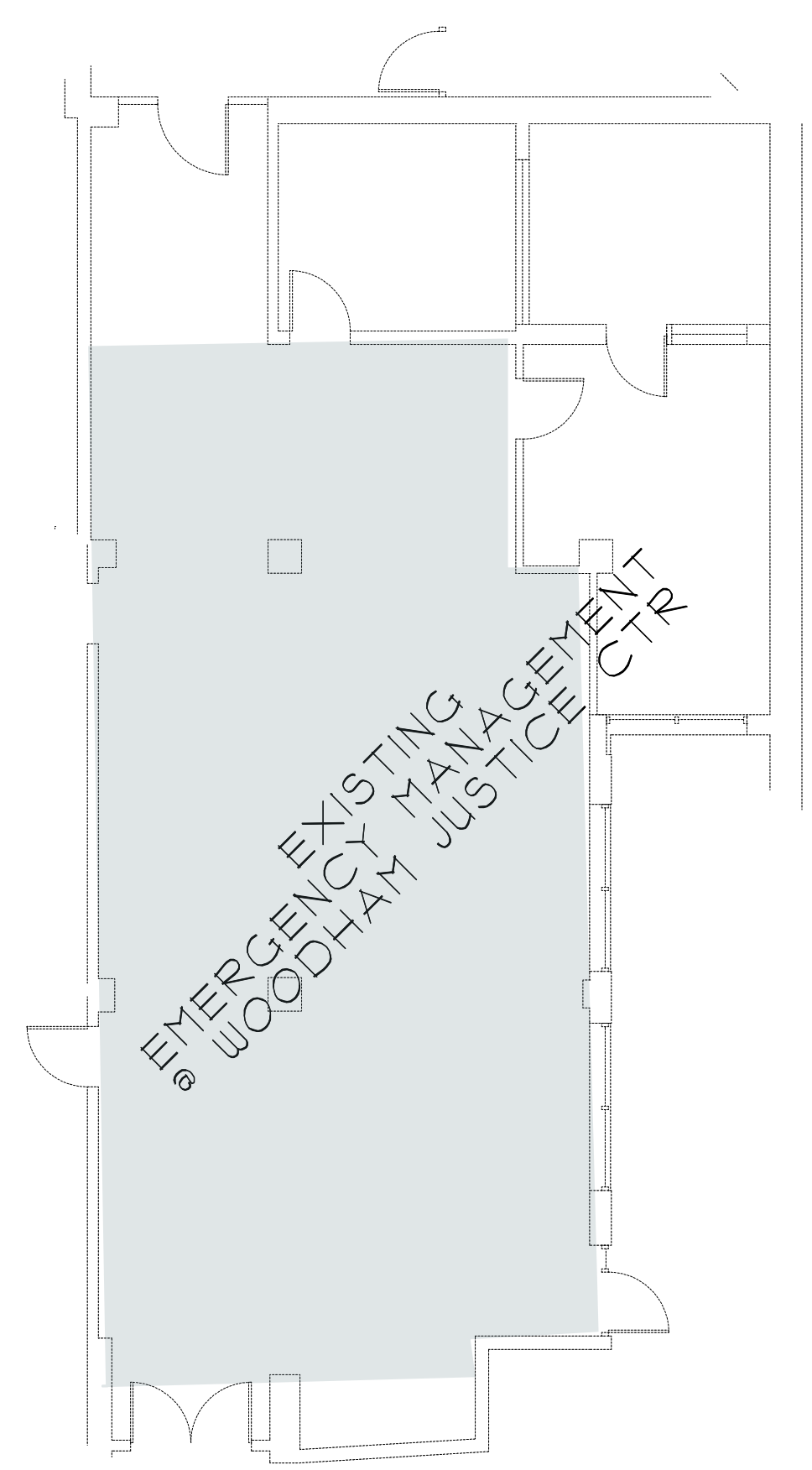
NEW GADSDEN COUNTY EMERGENCY OPERATIONS CENTER
GADSDEN COUNTY BOARD OF COUNTY COMMISSIONERS
GADSDEN COUNTY SHERIFF'S DEPARTMENT
STATE OF FLORIDA DIVISION OF EMERGENCY MANAGEMENT
JOEL ADAMS ROAD QUINCY, FLORIDA

DATE: 12/11/23
REV: 1/23/24

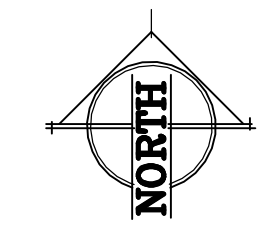
JOB NO: 22-001

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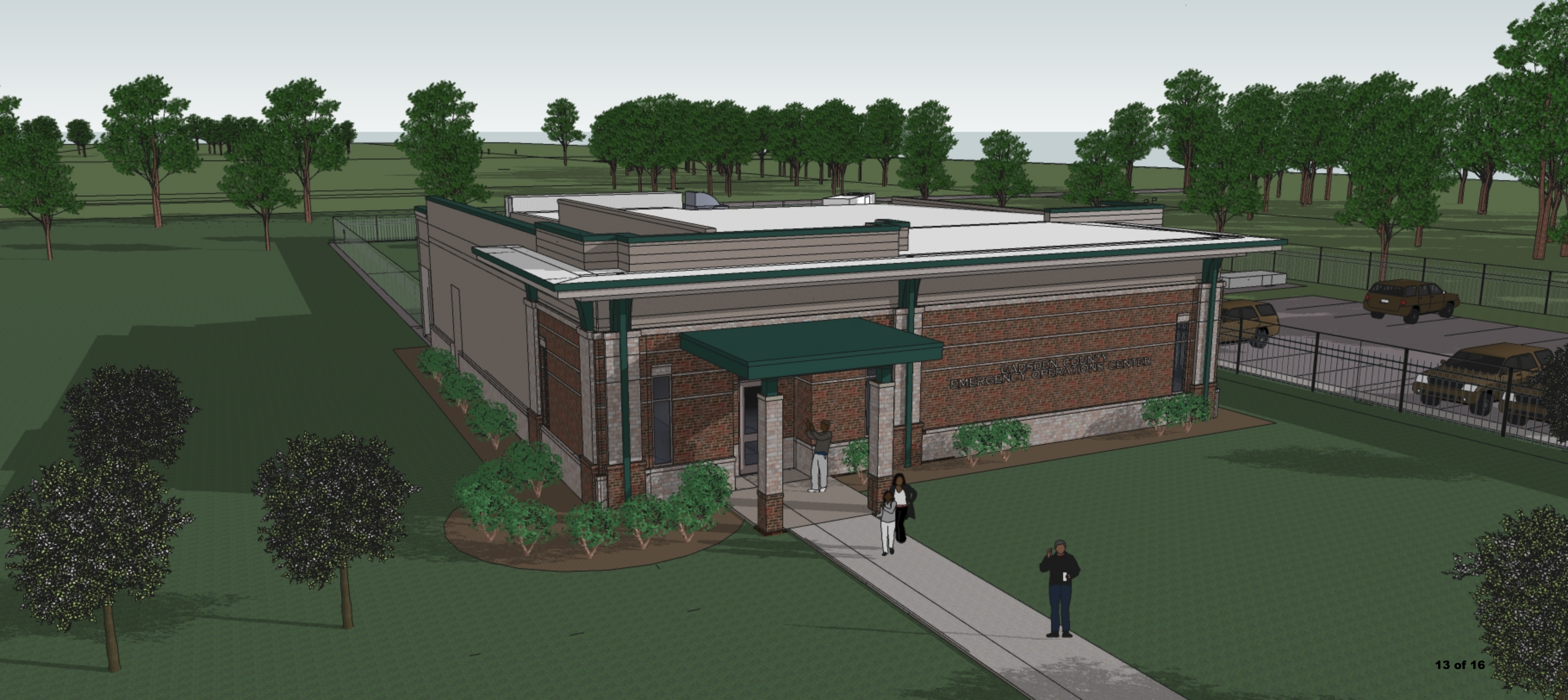
SHEET NO.



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



- ROOF LADDER HATCH, RE. A3.2
- FIRE SPRINKLER MAIN
- CHEMICAL SUPPRESSION SYSTEM



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