



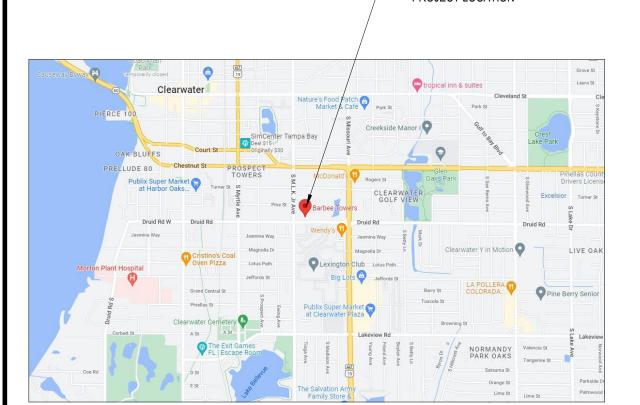
# PERMIT COMMENTS

CONTRACT DRAWINGS FOR THE CONSTRUCTION OF

# BARBEE TOWERS MAIL STRUCTURE & FIRST FLOOR MODIFICATIONS CLEARWATER HOUSING AUTHORITY 1100 DRUID ROAD CLEARWATER, FL 33756

01/22/2024

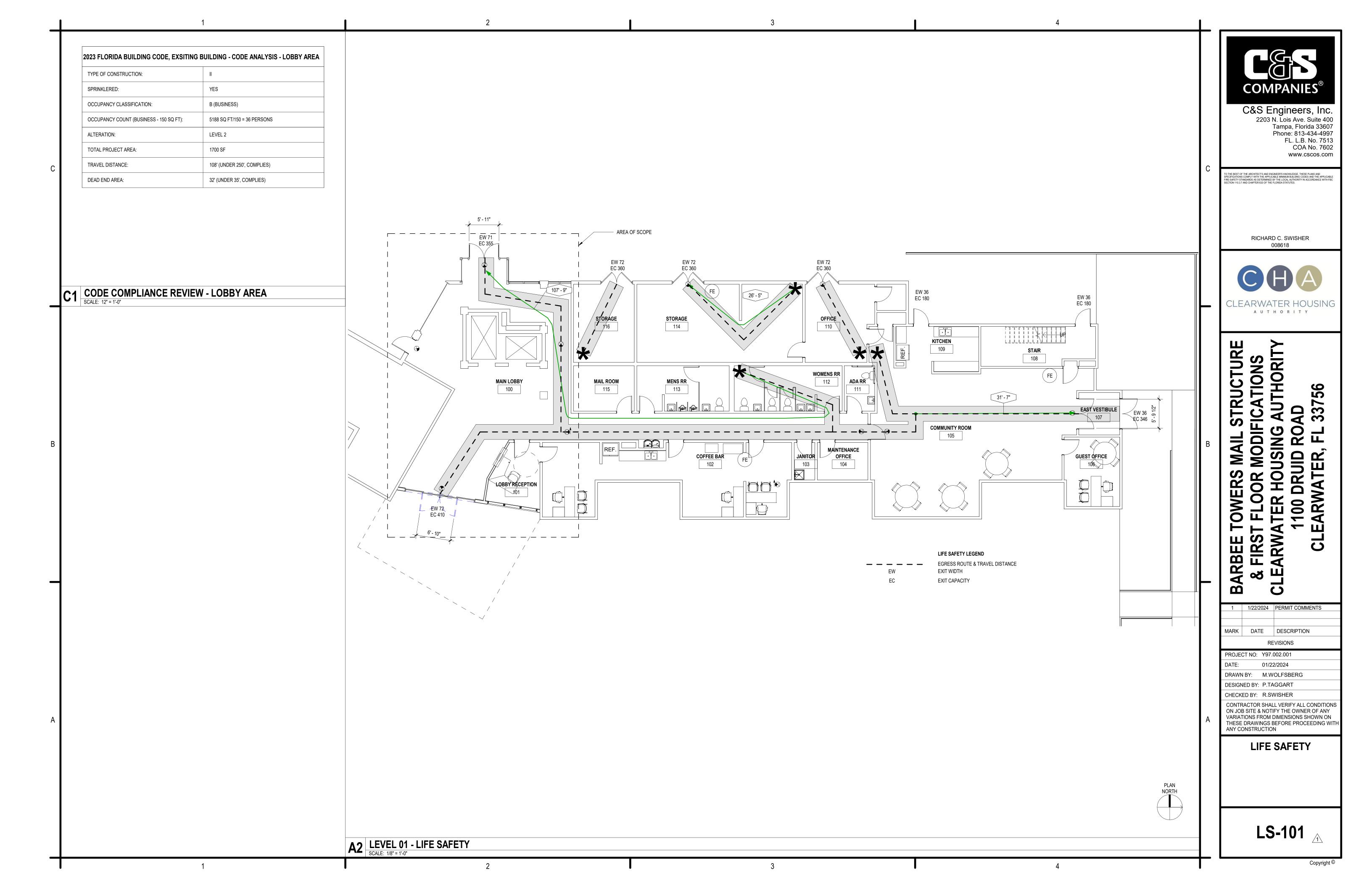
**C&S PROJECT NUMBER: Y97.002.001** 

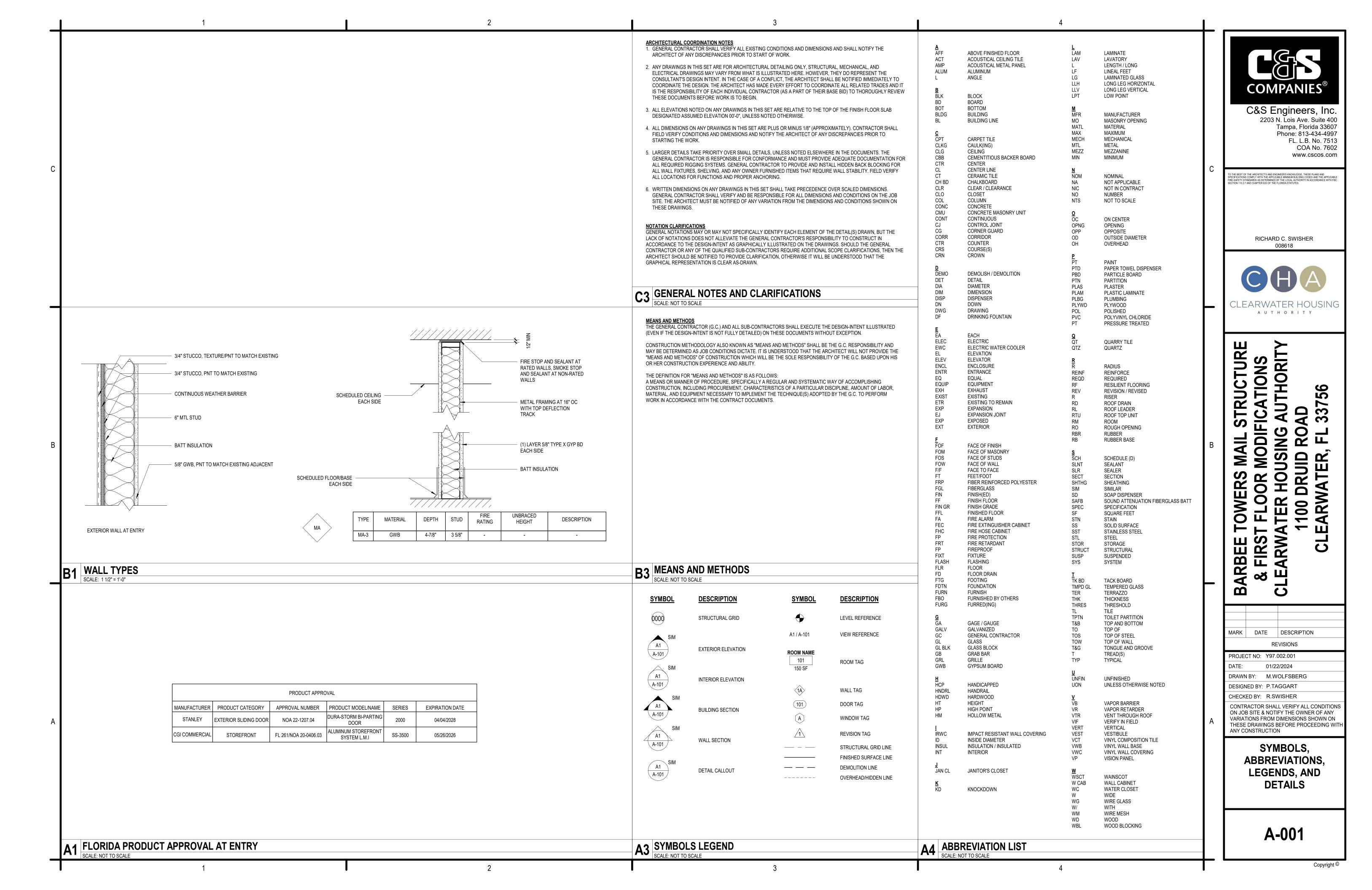


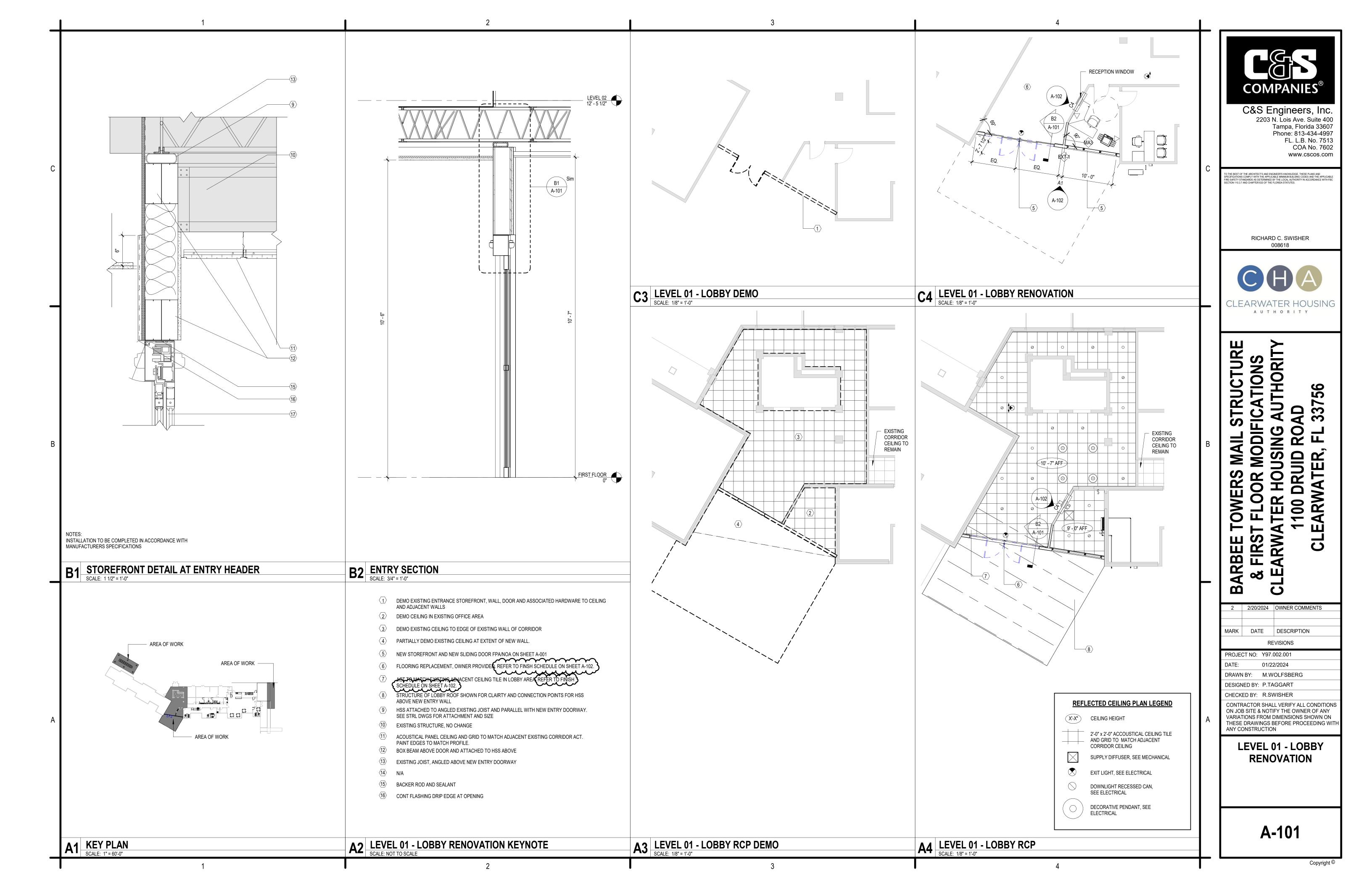
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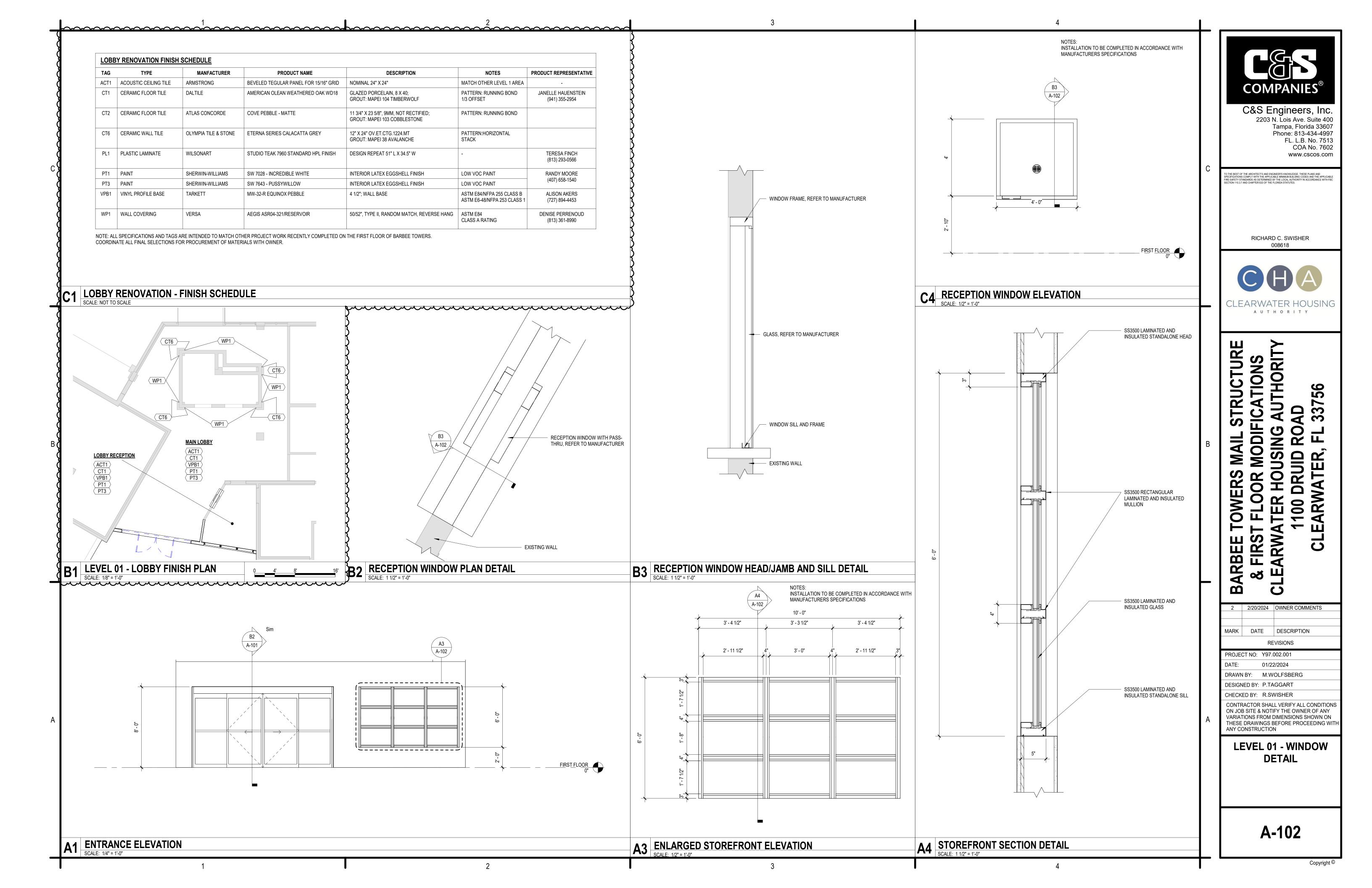
NORTH

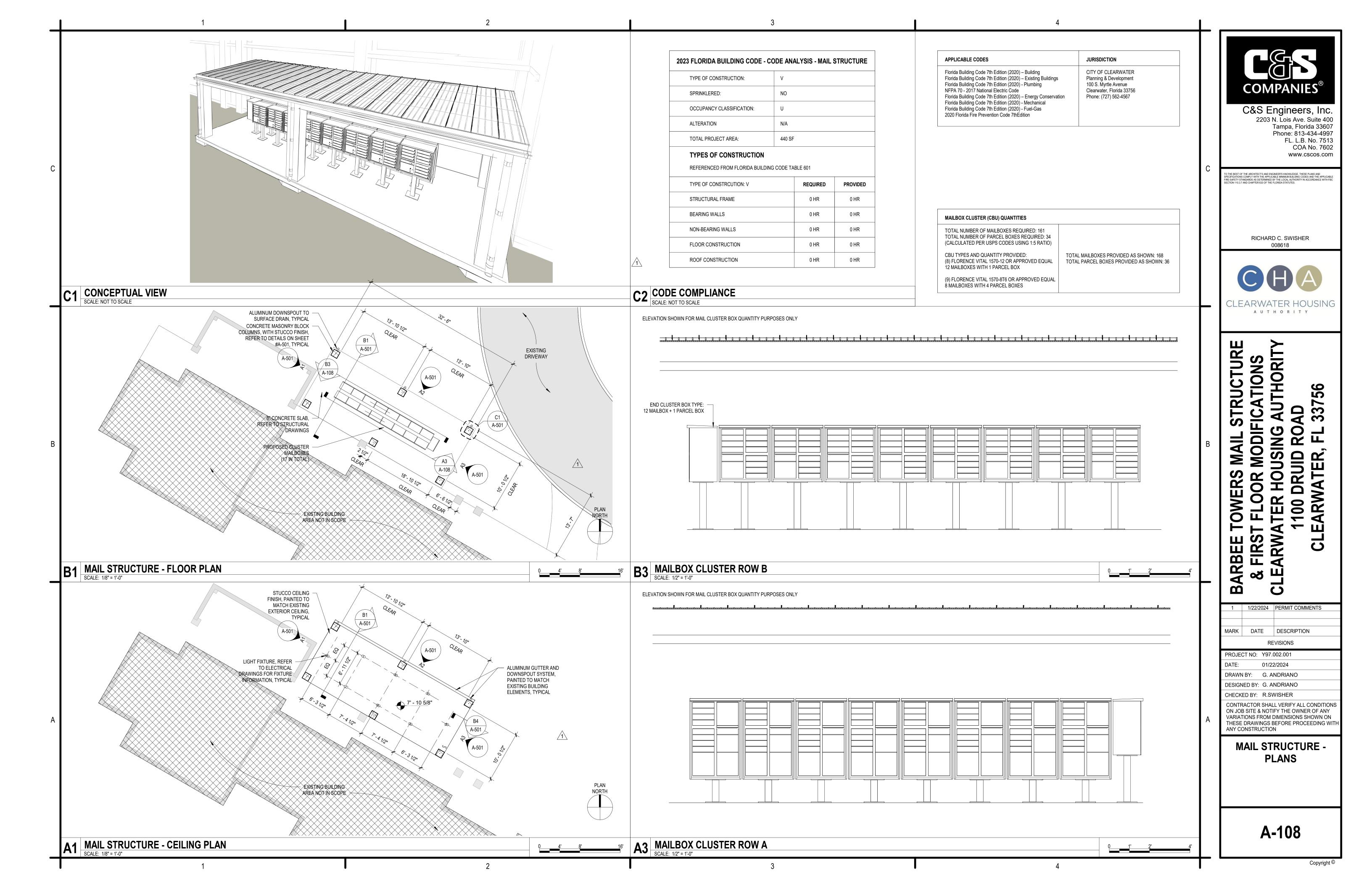
G-001

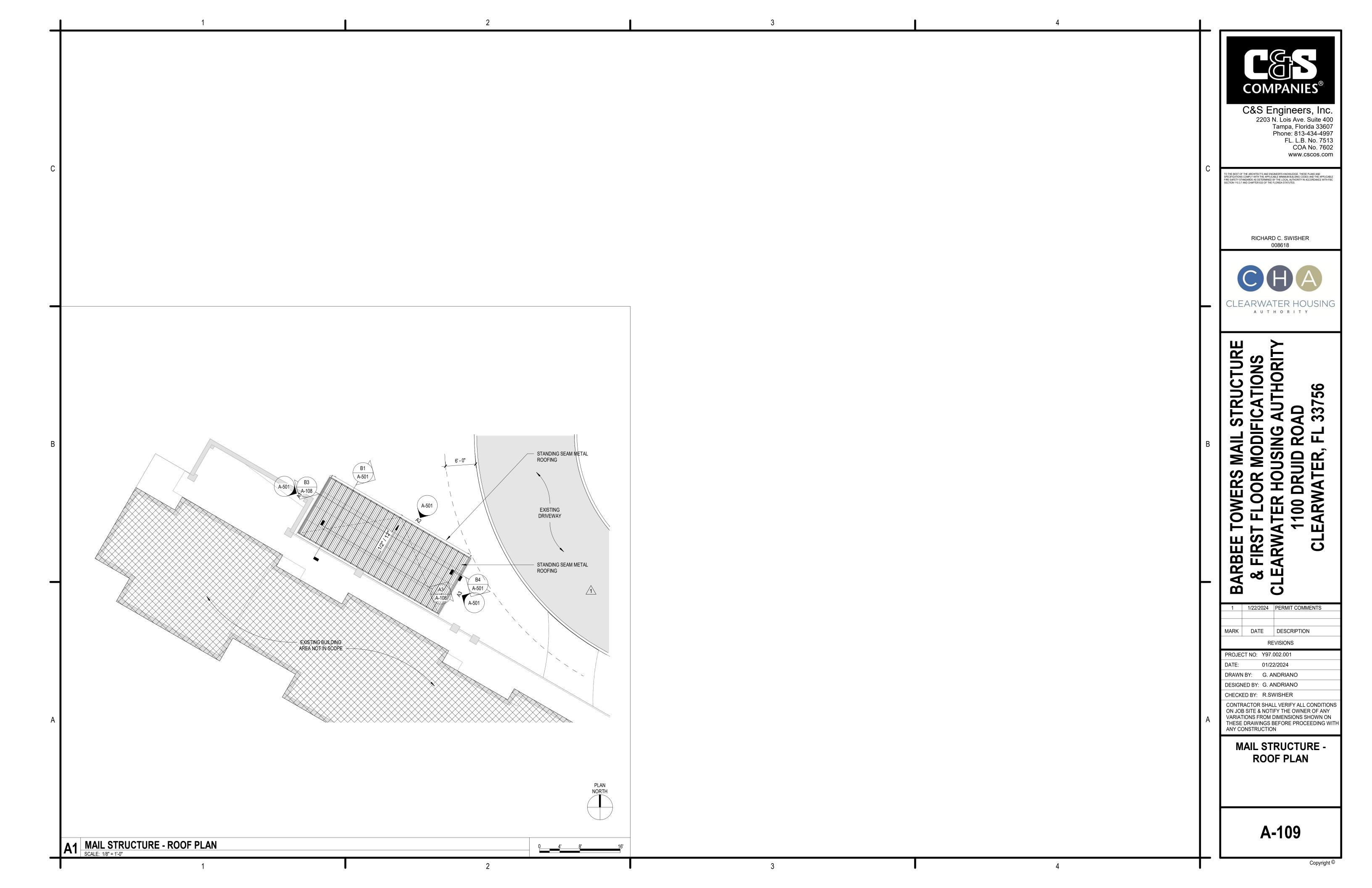


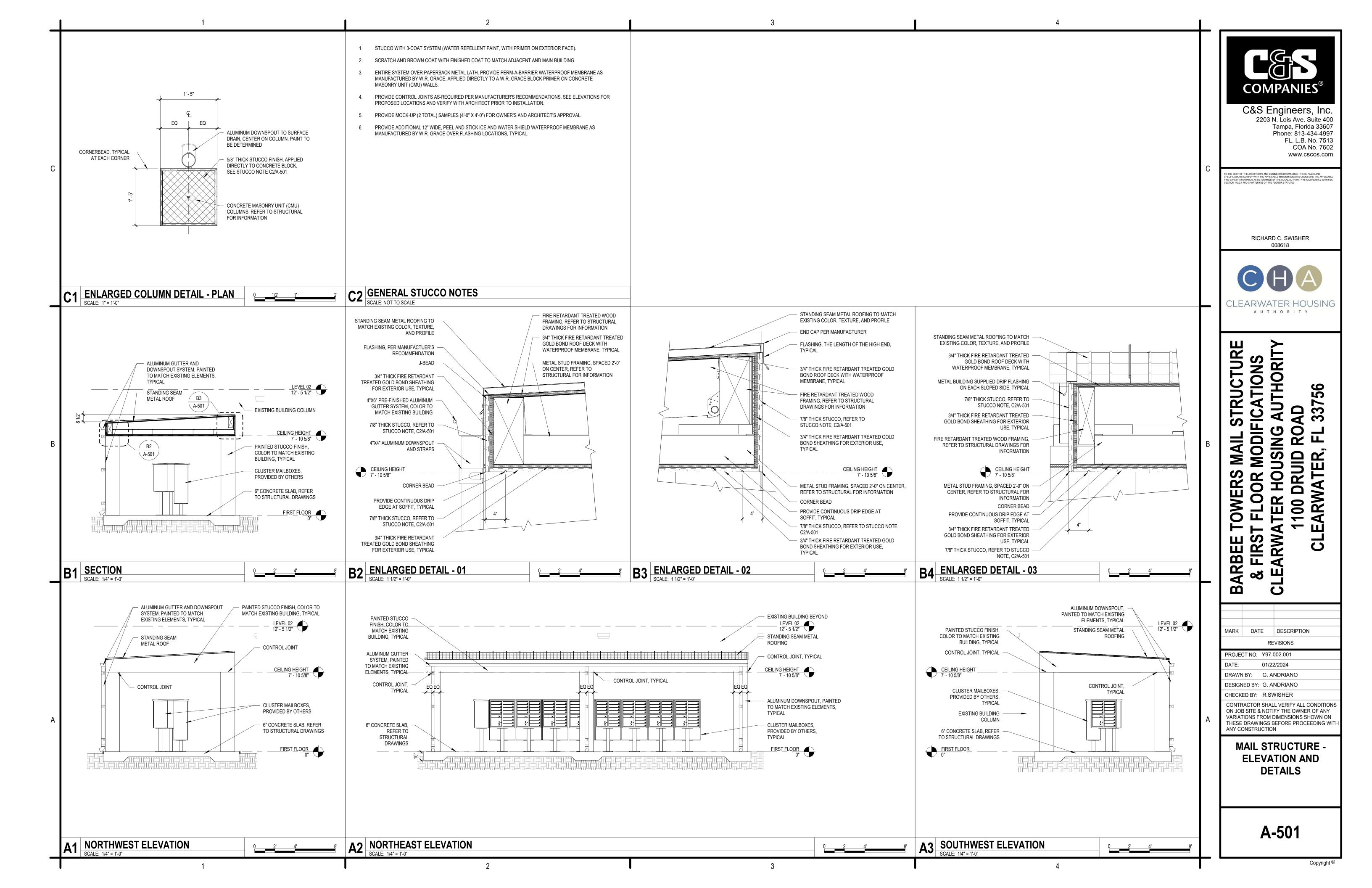












POUNDS PER LINEAR FOOT

POST-TENSIONED

ROOF OPENING

SNOW LOAD

SLAB ON GRADE

SPECIFICATION

STAINLESS STEEL

RADIUS

SIMIL AR

SQUARE

STANDARD

STIFFENER

SHEARWALL

POUNDS PER SQUARE INCH

POUNDS PER SQUARE FOOT

REINFORCED OR REINFORCING

STEEL DECK INSTITUTE

STEEL JOIST INSTITUTE

## **A2** ABBREVIATIONS

LAP SPLICE TABLE

GALV

EQ

EW

EXIST

EXP

EXT

FDN

FLG

FLR

F.S.

FRMG

EQUIP

EQUAL

**EQUIPMENT** 

EACH WAY

FXISTING

**EXPANSION** 

EXTERIOR

FINISH

FLANGE

FLOOR

FRAMING

FOOT (FEET)

FOOTING

GRATING

**FOUNDATION** 

FINISH FLOOR

FLOOR DRAIN

FOUNDATION STEP

YIELD STRESS STEEL

GAGE OR GAUGE

GALVANIZED

GRADE BEAM

SCALE: NOT TO SCAL

]	TENSION LAP SPLICE LENGTH CHART						
	CLASS B						
	F'c = 4000 PSI						
BAR SIZE	TOP BARS		OTHER BARS				
OIZL	CASE 1	CASE 2	CASE 1	CASE 2			
#3	24	36	19	28			
#4	32	48	25	37			
#5	40	60	31	47			
#6	48	72	37	56			
#7	70	106	54	81			
#8	80	121	62	93			
#9	91	136	70	105			
#10	102	153	79	118			
#11	113	170	87	131			

PLF

PSI

PT, P/T

PSF

QTY

RO

RAD

SDI

STD

STIFF

REINF

TABULATED VALUES ARE BASED ON GRADE 60 REINFORCING BARS AND NORMAL WEIGHT CONCRETE.

TENSION DEVELOPMENT LENGTHS AND TENSION LAP SPLICE LENGTHS ARE BASED ON ACI 318. TABULATED VALUES FOR BEAMS OR COLUMNS ARE BASED ON TRANSVERSE REINFORCEMENT AND CONCRETE OVER MEETING MINIMUM CODE REQUIREMENTS. LENGTHS ARE IN INCHES.

CASES 1 AND 2, WHICH DEPEND ON THE TYPE OF STRUCTURAL ELEMENT, CONCRETE COVER, AND THE CENTER-TO-CENTER SPACING OF THE BARS, ARE DEFINED AS:

of Alexander and State, And Self-independent							
	CASE 1	COVER AT LEAST 1 d₀ AND cc. SPACING AT LEAST 2 d₀					
BEAMS OR COLUMNS	CASE 2	COVER LESS THAN 1 db AND cc.					
	07.02.2	SPACING LESS THAN 2 d <sub>b</sub>					
	CASE 1	COVER AT LEAST 1d <sub>b</sub> AND cc.					
ALL OTHERS		SPACING AT LEAST 3d <sub>b</sub>					
ALLOTTILINO		COVER LESS THAN 1 d <sub>b</sub> AND cc.					
	CASE 2	SPACING LESS THAN 3d <sub>b</sub>					
TOD DADO ADELIODIZONITAL DADO MITIL MODE TUAN 40 INQUES OF							

TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.

FOR LIGHTWEIGHT AGGREGATE CONCRETE, MULTIPLY THE

TABULATED VALUES BY 1.3.

FOR EPOXY-COATED BARS, MULTIPLY THE TABULATED VALUES BY ONE OF THE FOLLOWING FACTORS:

CONCRETE COVER AND SPACING TOP BARS OTHER BARS COVER<3db OR C.-C. SPACING<7db COVER>3db AND C.-C. SPACING>7db 1.6 1.20

### **DESIGN CRITERIA**

- 1. CODES AND REFERENCE STANDARDS: FLORIDA BUILDING CODE (FBC) 2020
- 2. 2020 FBC DESIGN DATA:
- A. ROOF LIVE LOAD B. WIND LOAD (3-SEC GUST) BASIC WIND SPEED a. RISK CATEGORY

b. EXPOSURE CATEGORY

GENERAL: (THE FOLLOWING REQUIREMENTS TOGETHER WITH THE PROJECT PLANS AND SPECIFICATIONS SHALL APPLY TO THE STRUCTURES IN THIS CONTRACT.)

146 MPH

- 1. THE CONTRACTOR IS RESPONSIBLE FOR THE SURVEY AND FIELD VERIFYING ALL EXISTING
- 2. WORK ON STRUCTURAL DRAWINGS REPRESENTS FINAL CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRUCTURAL STABILITY OF ALL INTERMEDIATE CONDITIONS DURING CONSTRUCTION.
- 3. THE CONTRACTOR SHALL COORDINATE THE ARCHITECTURAL, PLUMBING, HVAC, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION NOT INDICATED ON THE STRUCTURAL DRAWINGS. SUCH INFORMATION INCLUDES, AS A MINIMUM, EMBEDDED SLEEVES AND INSERTS, MISCELLANEOUS DETAILS, SPECIAL FLOOR FINISHES, DOOR THRESHOLDS, SLOPES TO DRAINS, NAILERS, OPENINGS IN STRUCTURAL ELEMENTS, ETC.
- 4. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS, TIE-DOWNS, AND/OR SHORING MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE
- 5. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROCEDURES. THE STRUCTURAL ENGINEER OF RECORD IS NOT RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION OR FOR RELATED SAFETY
- 6. TYPICAL NOTES AND DETAILS SHOWN ON STRUCTURAL TYPICAL DETAILS SHALL BE APPLICABLE TO ALL PARTS OF THE STRUCTURAL WORK EXCEPT WHERE SPECIFICALLY REQUIRED OTHERWISE ON THE CONTRACT DOCUMENTS. DETAILS NOT SPECIFICALLY SHOWN SHALL BE SIMILAR TO THOSE SHOWN FOR THE MOST NEARLY SIMILAR CONDITION ON THE DRAWINGS AS DETERMINED BY THE ENGINEER.
- 7. DO NOT SCALE DRAWING DIMENSIONS. IN THE EVENT OF A GRID LINE DIMENSION CONFLICT, THE ARCHITECTURAL DRAWINGS SHALL GOVERN.
- 8. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK INCLUDING DESCRIPTION OF DEMOLITION, TEMPORARY BRACING, CONSTRUCTION METHODS AND SEQUENCING, WHERE APPLICABLE NO PERFORMANCE OF WORK SHALL COMMENCE WITHOUT REVIEW OF THE SHOP DRAWINGS BY THE ENGINEER.
- 9. FABRICATION PRIOR TO THE RECEPT OF AN APPROVED SHOP DRAWINGS SHALL BE AT THE CONTRACTOR'S OWN RISK AND THAT INSTALLATION OF ANY WORK PRIOR TO RECEIPT OF AN APPROVED SHOP DRAWING SHALL BE STRICTLY PROHIBITED.
- 10. FOR ELEVATIONS REFER TO THE PLAN SHEETS.
- 11. DRILLING, CORING, SAW CUTTING AND ETC. INTO CONCRETE SHALL MEET THE LATEST OSHA REGULATIONS FOR SILICA DUST EXPOSURE.
- 12. DO NOT PLACE MATERIALS OR EQUIPMENT ON UNFINISHED FLOORS OR ROOFS IN EXCESS OF 20 PSF NOR ON FINISHED FLOORS OR ROOFS IN EXCESS OF THE INDICATED DESIGN LIVE LOADS. AVOID
- 13. INFORMATION RELATED TO EXISTING CONDITIONS REPRESENTS KNOWLEDGE BASED UPON INFORMATION PROVIDED BY THE OWNER BUT WITHOUT GUARANTEE OF ACCURACY. REPORT EXISTING CONDITIONS THAT VARY FROM THOSE SHOWN ON THE CONTRACT DOCUMENTS TO THE OWNER'S REPRESENTATIVE. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE OWNER'S REPRESENTATIVE.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING CONSTRUCTION WHILE PERFORMING WORK. THE CONTRACTOR SHALL PROPERLY REINSTATE EXISTING FINISHES, FIREPROOFING OR ITEMS THAT ARE REMOVED OR DAMAGED WHILE PERFORMING WORK.

### **EXCAVATION AND FILL**

- 1. ALL EXCAVATIONS SHALL BE DEWATERED TO MAINTAIN GROUNDWATER AT LEAST 24" BELOW FOOTING BEFORE PLACING OF CONCRETE.
- 2. SLOPE THE EXTERIOR GRADE AWAY FROM THE STRUCTURE.
- 3. PROVIDE TEMPORARY OR PERMANENT SUPPORTS, SHORING, SHEETING OR BRACING SO THAT NO HORIZONTAL MOVEMENT OR VERTICAL SETTLEMENT OCCURS TO ADJACENT STRUCTURES, STREETS, SOILS OR UTILITIES ADJACENT TO OR WITHIN THE PROJECT SITE.
- 4. NO FOUNDATION CONCRETE SHALL BE PLACED IN WATER.

- 1. THE FOUNDATION HAS BEEN DESIGNED WITH A PRESUMED MAXIMUM ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF AND A MODULUS OF MINIMUM SUBGRADE REACTION OF 250 LB/IN<sup>3</sup>
- 2. NO RESPONSIBILITY IS ASSUMED BY THE ENGINEER FOR THE VALIDITY OF THE SUBSURFACE CONDITIONS.
- 3. FOOTINGS TO BEAR ON NATURAL UNDISTURBED SOIL OR COMPACTED FILL TO EXHIBIT A DENSITY OF AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557 (MODIFIED PROCTOR).

### REINFORCED MASONRY

- 1. FURNISH AND CONSTRUCT CONCRETE MASONRY UNIT WORK ACCORDING TO REQUIREMENTS OF ACI 530.1-11 FOR MATERIALS, AND ACI 530-11 FOR DESIGN (MSJC). CONTACT OWNER'S REPRESENTATIVE BEFORE MASONRY WORK TO SCHEDULE PRE- CONSTRUCTION CONFERENCE WITH ENGINEER, GENERAL CONTRACTOR, MASONRY CONTRACTOR AND TESTING LABORATORY.
- 2. TEST (VERIFY) THE COMPRESSIVE STRENGTH OF THE MASONRY BY THE UNIT STRENGTH METHOD. VERIFY THE COMPRESSIVE STRENGTH OF THE MASONRY BEFORE CONSTRUCTION. ALL CONCRETE MASONRY ASSEMBLAGES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (FM) OF 1,750 PSI. MASONRY UNITS SHALL BE ACCORDING TO REQUIREMENTS OF ASTM C90 HOLLOW CORE, GRADE N, WITH A NET AREA COMPRESSIVE STRENGTH 2,000 PSI MINIMUM. MORTAR SHALL BE TYPE S WITH WASHED SAND AGGREGATE ACCORDING TO REQUIREMENTS OF ASTM C144. MORTAR SHALL BE ACCORDING TO REQUIREMENTS OF ASTM C270 (PROPORTION SPECIFICATION TYPE N). SUBMIT FOR REVIEW PRODUCT DATA CONFIRMING THAT MASONRY PRODUCTS MEET OR EXCEED THESE STANDARDS.
- 3. FOR FILLING SPACES 4" OR LARGER IN BOTH DIRECTIONS, USE "COARSE GROUT" WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI. THE GROUT SHALL BE TESTED IN ACCORDANCE WITH ASTM C1019. FOR FILLING SPACES LESS THAN 4" IN ONE OR BOTH DIRECTIONS USE FINE GROUT PROPORTIONED PER ASTM C476.
- 4. PLACE GROUT IN 4'-0" LIFTS AT 9" TO 11" SLUMP (HIGH-RANGE WATER REDUCING ADMIXTURE ASTM C494 TYPE F OR TYPE G).
- 5. PROVIDE CLASS B TENSION LAP AT ALL VERTICAL CMU REINFORCING UNO. ALL BARS SHALL BE TIED.
- 6. CONTRACTOR IS RESPONSIBLE FOR CMU COLUMN BRACING DURING CONSTRUCTION.
- 7. REINFORCED MASONRY IS CONTROLLED MATERIAL THAT REQUIRES CONTINUOUS INSPECTION DURING CONSTRUCTION. COORDINATE CONSTRUCTION WITH THE SPECIAL INSPECTOR.

### CONCRETE

- CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.
- 2. STANDARDS:

ACI 318 - LATEST EDITION DESIGN DETAILS: ACI 315 - LATEST EDITION MATERIALS: ACI 301 - LATEST EDITION

### DESIGN STRENGTH:

- SLAB ON GRADE: 4000 PSI COMPRESSIVE STRENGTH @ 28 DAYS, NORMAL WEIGHT CONCRETE FOUNDATIONS: 4000 PSI COMPRESSIVE STRENGTH @ 28 DAYS, NORMAL WEIGHT CONCRETE
- 4. SUBMIT PROPOSED CONCRETE MIX DESIGN TO THE OWNER'S REPRESENTATIVE AND TESTING LABORATORY CONCURRENTLY FOR REVIEW AND APPROVAL.
- 5. CONCRETE COVER OVER BARS:
  - CONCRETE DEPOSITED ON GROUND 3". FORMED CONCRETE EXPOSED TO GROUND, WEATHER OR WATER 2". WALLS & SLABS NOT DIRECTLY EXPOSED TO GROUND, WATER, OR WEATHER 1-1/2".
- 6. CLEAN AND APPLY BONDING AGENT TO ALL EXISTING CONCRETE SURFACES TO RECEIVE NEW CONCRETE. ALL CONCRETE TO CONFORM WITH THE LATEST ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE. (ACI - 301)
- SECTIONS AND DETAILS MAY NOT SHOW ALL REQUIRED CONCRETE REINFORCEMENT. ADDITIONAL REINFORCEMENT MAY BE DESCRIBED IN SCHEDULES (IF APPLICABLE) AND NOTES.
- 8. PROVIDE BAR SUPPORTS AND SPACERS IN ACCORDANCE WITH REQUIREMENTS OF ACI 315 UNLESS NOTED
- 9. NOT ALL ITEMS EMBEDDED IN THE CONCRETE ARE SHOWN ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL OPENINGS AND EMBEDDED ITEMS IN THE CONCRETE PERTAINING TO THE DIFFERENT TRADES AS SHOWN ON THEIR PERSPECTIVE DRAWINGS. SLEEVES, MECHANICAL OPENINGS, CONDUITS, PIPES, RECESSES, DEPRESSIONS CURBS, AND ALL EMBEDDED ITEMS SHALL BE PROVIDED AS SHOWN ON THE ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS AND AS REQUIRED BY THE EQUIPMENT MANUFACTURERS.
- 10. PROVIDE 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES U.N.O

### REINFORCING

- REINFORCING: MESH: ASTM A-185 (FLAT SHEETS) BARS: ASTM A-615 GRADE 60 - DEFORMED.
- 2. SPLICES IN REINFORCEMENT: UNLESS OTHERWISE NOTED, ALL SPLICES AND ANCHORAGES SHALL BE PER ACI. STAGGER SPLICES WHEREVER POSSIBLE AND LOCATE SO AS NOT TO IMPAIR STRENGTH OF MEMBERS.
- 3. REINFORCEMENT WORK OF DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE ( ACI 318 (ACI DETAILING MANUAL-2004 ( SP 66) CRSI MANUAL OF STANDARD PRACTICE (MSP 2009), AND THE STRUCTURAL WELDING CODE- REINFORCING STEEL
- 4. PROVIDE AND SCHEDULE ON SHOP DRAWINGS THE NECESSARY ACCESSORIES TO HOLD ALL REINFORCEMENT
- WHERE CONTINUOUS REINFORCEMENT IS CALLED FOR, IT SHALL BE EXTENDED CONTINUOUSLY AROUND CORNERS AND LAPPED AT SPLICES OR AT DISCONTINUOUS ENDS. LAPS SHALL BE CLASS B TENSION LAP SPLICES UNLESS OTHERWISE NOTED.
- 6. WHERE REINFORCEMENT IS NOT SHOWN ON DRAWINGS, PROVIDE REINFORCEMENT IN ACCORDANCE WITH APPLICABLE DETAILS AS DETERMINED BY THE ENGINEER. IN NO CASE SHALL THE REINFORCEMENT BE LESS THAN THE MINIMUM PERMITTED BY THE APPLICABLE CODES.
- 7. WHERE REINFORCEMENT IS REQUIRED IN SECTION, REINFORCEMENT IS CONSIDERED TYPICAL WHEREVER THE SECTION APPLIES.
- 8. REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS.
- 9. WELDED WIRE FABRIC SHALL BE LAPPED 8 INCHES OR 1 1/2 SQUARES WHICHEVER IS LARGER AND SHALL BE
- 10. REINFORCEMENT SHALL NOT BE TACK WELDED. REINFORCING BARS TO BE WELDED SHALL CONFORM TO ASTM A706 FY=60KSI.
- PLACEMENT OR SHALL BE COORDINATED WITH THE OWNERS REPRESENTATIVE TO ENSURE PROPER TIME IS ALLOWED FOR THE INSPECTION OF THE REINFORCING. NOTIFY THE ENGINEER OF COMPLETION.
- 12. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE AT THE POSITIONS SHOWN ON THE DRAWINGS

- ALL LUMBER SHALL BE PS 20, NEW AND UNDAMAGED GRADED FIRE RETARDANT TREATED LUMBER IN ACCORDANCE WITH NFPA GRADING RULES. LUMBER STRESSES SPECIFIED DO NOT INCLUDE REPETITIVE MEMBER USE. FRAMING MEMBERS SHALL BE S4S UNLESS NOTED OTHERWISE. ALL WOOD BEARING ON
- A. ROUGH FRAMING (2X4 -2X12) SHALL CONSIST OF #2 SOUTHERN YELLOW PINE (SYP) WITH 19 PERCENT
- 2. NAILS, SPIKES, AND STAPLES SHALL BE GALVANIZED FOR EXTERIOR LOCATIONS, HIGH HUMIDITY LOCATIONS, AND TREATED WOOD; PLAIN FINISH FOR OTHER INTERIOR LOCATIONS; SIZE AND TYPE TO
- 3. BOLTS, NUTS, WASHERS, LAGS AND SCREWS SHALL BE MEDIUM CARBON STEEL; SIZE AND TYPE TO SUIT APPLICATION; GALVANIZED FOR EXTERIOR LOCATIONS, HIGH HUMIDITY LOCATIONS, AND TREATED WOOD;
- 4. ADHESIVE SHALL BE GUN GRADE ACRYLIC COMPOUND, SUCH AS LIQUID NAILS BY MACCO ADHESIVES.
- 5. PLYWOOD SHEATHING CLIPS SHALL BE SIMPSON STRONG-TIE 18 GAGE GALVANIZED STEEL X PLYWOOD
- COMPANY FOR FLUSH TYPE JOIST CONNECTIONS TO SUPPORTING BEAMS. COLUMN CAP AND BASE CONNECTIONS SHALL BE AS MANUFACTURED BY THE SIMPSON COMPANY, TYPE AS RECOMMENDED BY THE MANUFACTURER FOR THE SIZE OF JOIST OR COLUMN AND BEAMS BEING CONNECTED.
- CONDUCTING HIS INSPECTION. (IBC CHAPTER 109.3.4)
- TO THE OWNER AND THE GENERAL CONTRACTOR (AND TO THE BUILDING OFFICIAL IF HE REQUESTS) HIS "REPORT OF REQUIRED SPECIAL INSPECTIONS" AFTER THE GENERAL CONTRACTOR COMPLETES HIS WORK ACCORDING TO THE APPROVED PLANS. THE SPECIAL INSPECTOR SHALL PREPARE HIS "REPORT OF REQUIRED INSPECTIONS" USING THE FORM APPROVED BY AND AVAILABLE FROM THE BUILDING OFFICIAL.

C&S Engineers, Inc. 2203 N. Lois Ave. Suite 400 Tampa, Florida 33607

Phone: 813-434-4997 FL. L.B. No. 7513 COA No. 7602 www.cscos.com

BRANDON C. WARNER 93500



CLEARWATER HOUSING AUTHORITY

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MARK DATE DESCRIPTION

PROJECT NO: Y97.002.001

DRAWN BY: A. AVELLANEDA

DESIGNED BY: B. WARNER, PE

ANY CONSTRUCTION

CHECKED BY: K. STEGMEIEIR II, PE

CONTRACTOR SHALL VERIFY ALL CONDITIONS

ON JOB SITE & NOTIFY THE OWNER OF ANY

VARIATIONS FROM DIMENSIONS SHOWN ON

THESE DRAWINGS BEFORE PROCEEDING WITH

REVISIONS

12/19/2023

11. REINFORCEMENT INSTALLATION SHALL BE COMPLETED AT LEAST 24 HOURS BEFORE A CONCRETE

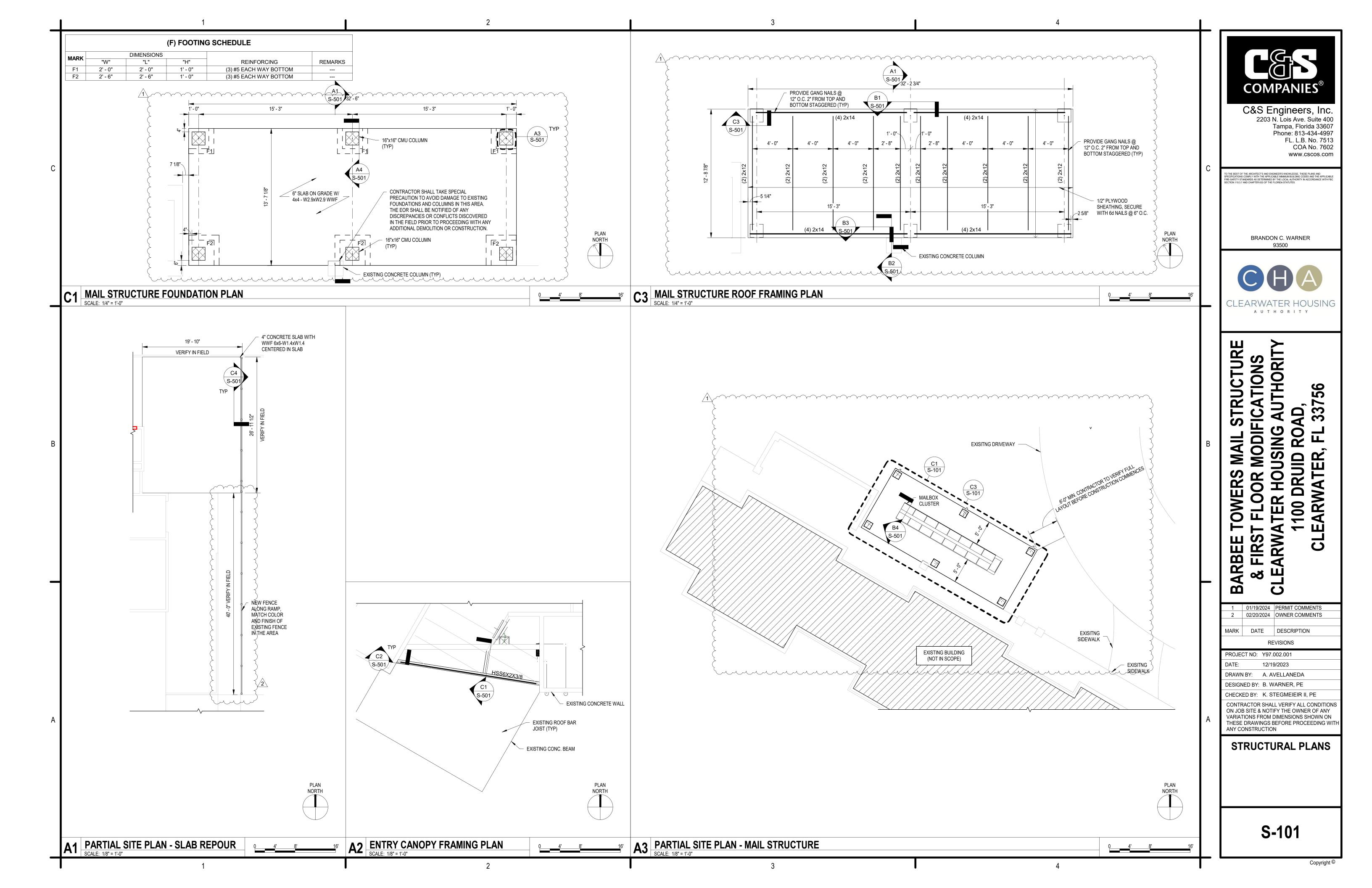
BEFORE PLACING CONCRETE.

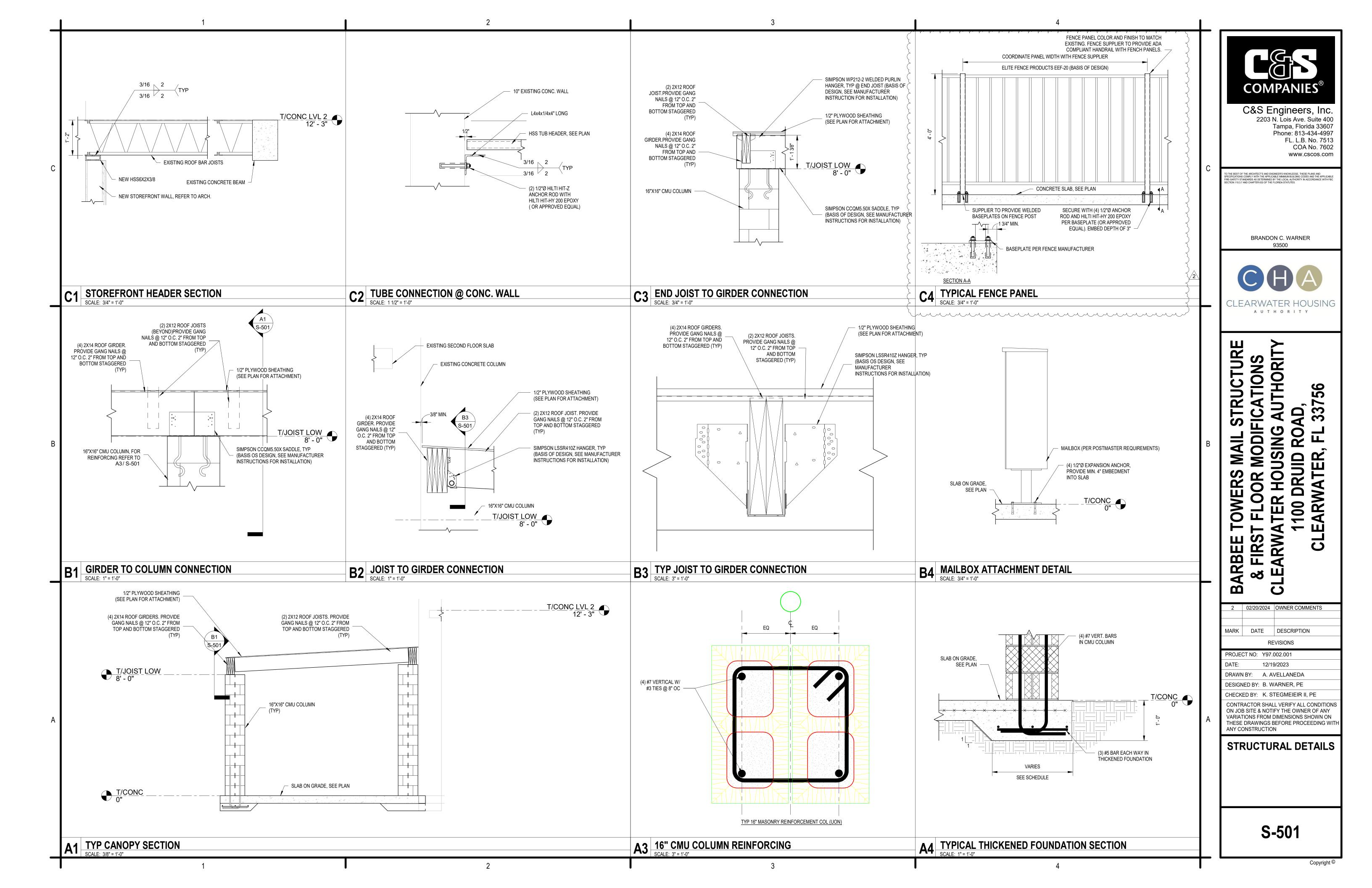
### WOOD FRAMING

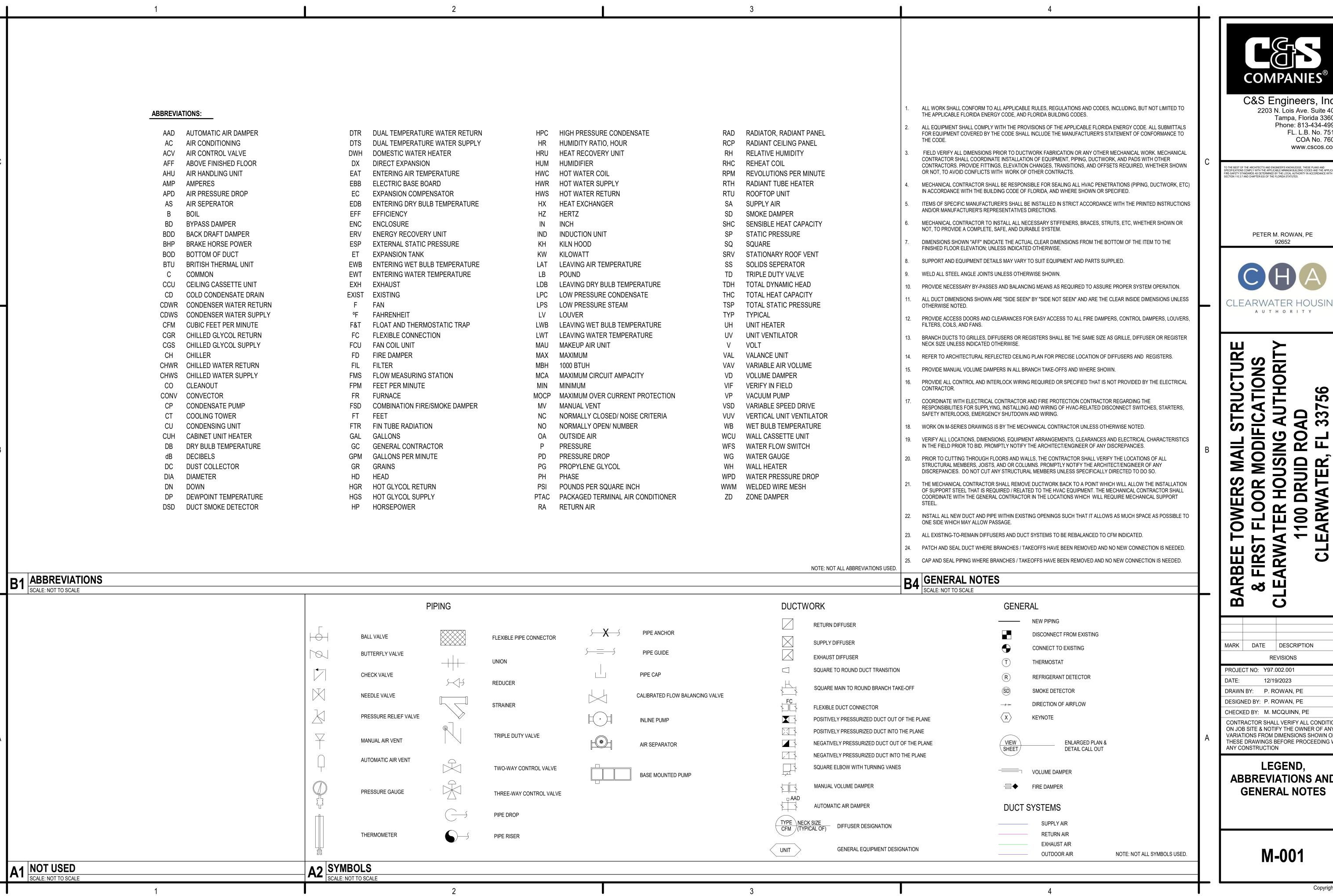
- CONCRETE OR MASONRY SHALL BE WOLMANIZED.
- MAXIMUM MOISTURE CONTENT HAVING NO LESS THAN AN ALLOWABLE BENDING STRESS (FB) OF 1,500 PSI (2X4), 1,250 PSI (2X6), 1,200 PSI (2X8), 1,050 PSI (2X10) AND 975 PSI (2X12), A MODULUS OF ELASTICITY OF 1,600,000 PSI, AND AN ALLOWABLE SHEAR STRESS OF 90 PSI.
- SUIT APPLICATION. TYPICAL NAILING SHALL BE WITH COMMON WIRE NAILS.
- PLAIN FINISH FOR OTHER INTERIOR LOCATIONS.
- 6. UNLESS OTHERWISE INDICATED, USE TYPE LSSR JOIST HANGERS AS MANUFACTURED BY THE SIMPSON
- 7. STORE FRAMING MATERIAL A MINIMUM OF 12" ABOVE THE GROUND IN A MANNER TO ALLOW FOR PROPER DRAINAGE, VENTILATION AND PROTECTION FROM THE WEATHER.
- 8. COORDINATE STRUCTURAL ENGINEER'S REVIEW, THE BUILDING OFFICIAL INSPECTION AND THE SPECIAL INSPECTOR INSPECTION AND TESTING SERVICES.
- 9. THE BUILDING OFFICIAL SHALL INSPECT THE PRIMARY STRUCTURAL FRAMING. THE BUILDING OFFICIAL MAY ACCEPT A REVIEW BY A LICENSED PROFESSIONAL ENGINEER IN PLACE OF THE BUILDING OFFICIAL
- 10. THE SPECIAL INSPECTOR (SI) SHALL INSPECT SITE BUILT ASSEMBLIES (IBC SECTION 1704.6)
- 11. SPECIAL INSPECTORS ARE RESPONSIBLE TO PREPARE, SIGN AND SUBMIT TO THE RDPIRC WITH A COPY

**GENERAL NOTES** 

A2 GENERAL NOTES







**COMPANIES** 

C&S Engineers, Inc.

2203 N. Lois Ave. Suite 400 Tampa, Florida 33607 Phone: 813-434-4997 FL. L.B. No. 7513 COA No. 7602 www.cscos.com

PETER M. ROWAN, PE 92652



CLEARWATER HOUSING

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AUTHORITY

MARK DATE DESCRIPTION REVISIONS

PROJECT NO: Y97.002.001 12/19/2023 DRAWN BY: P. ROWAN, PE DESIGNED BY: P. ROWAN, PE

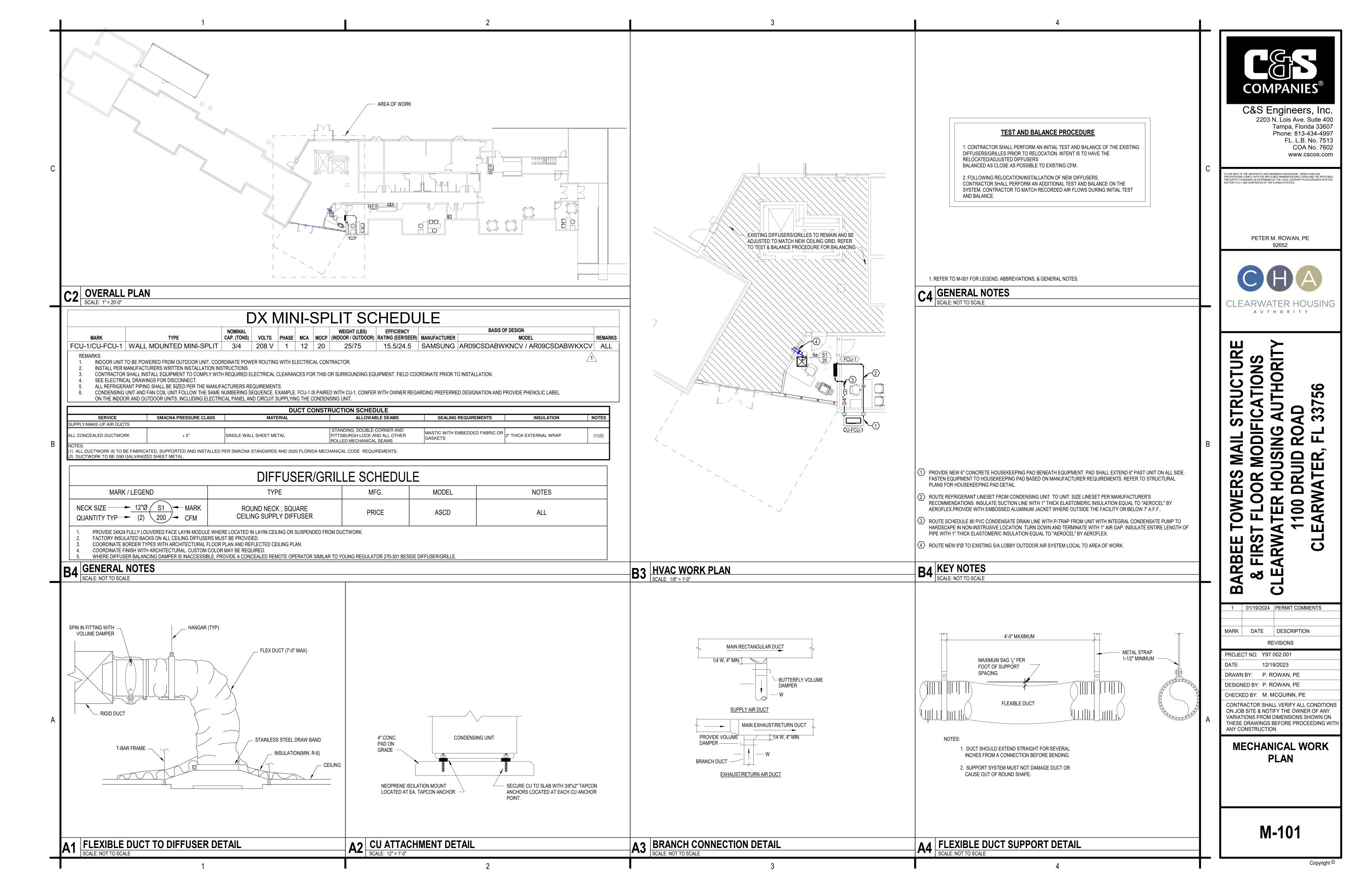
CHECKED BY: M. MCQUINN, PE

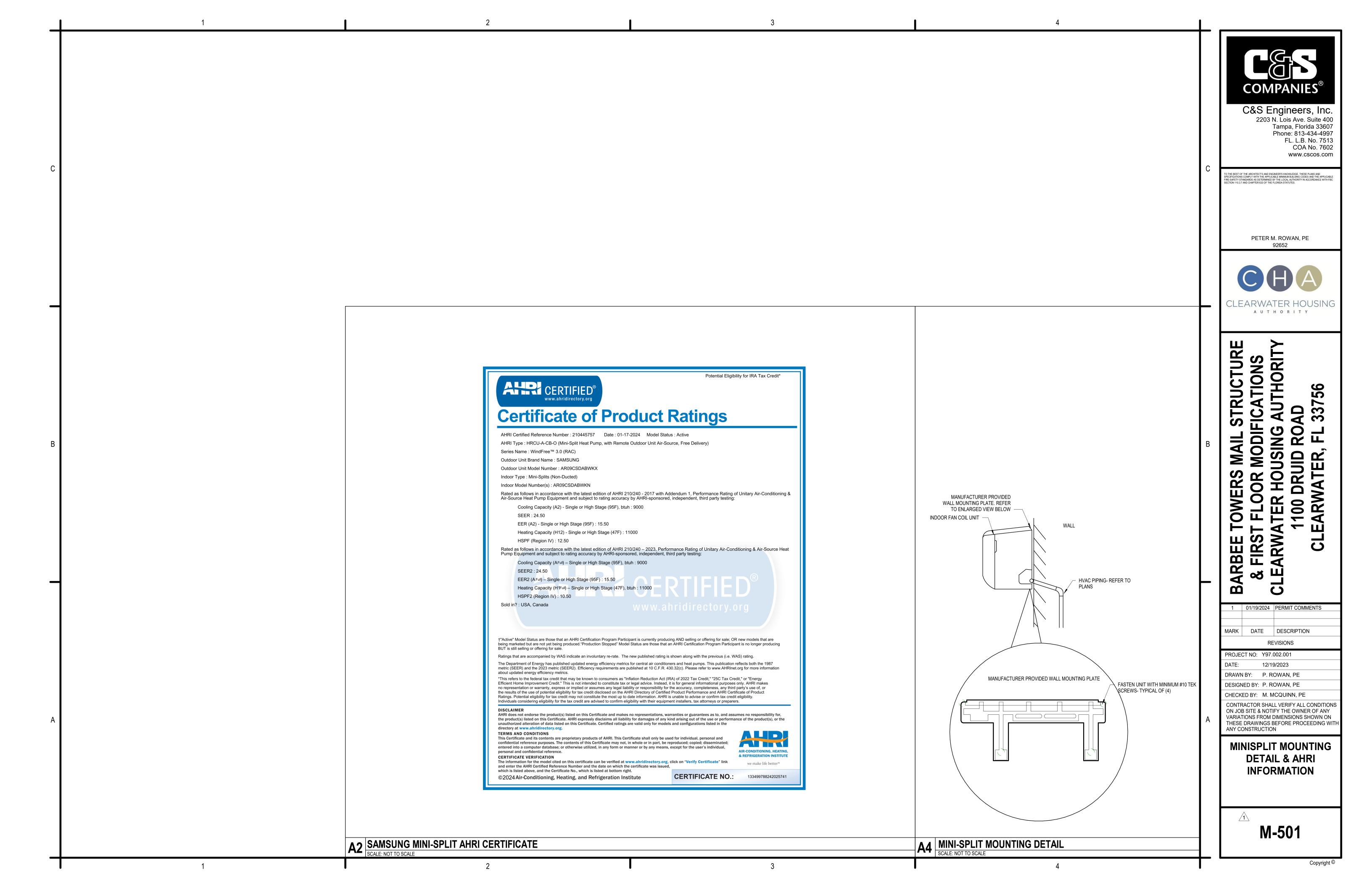
CONTRACTOR SHALL VERIFY ALL CONDITIONS ON JOB SITE & NOTIFY THE OWNER OF ANY VARIATIONS FROM DIMENSIONS SHOWN ON THESE DRAWINGS BEFORE PROCEEDING WI ANY CONSTRUCTION

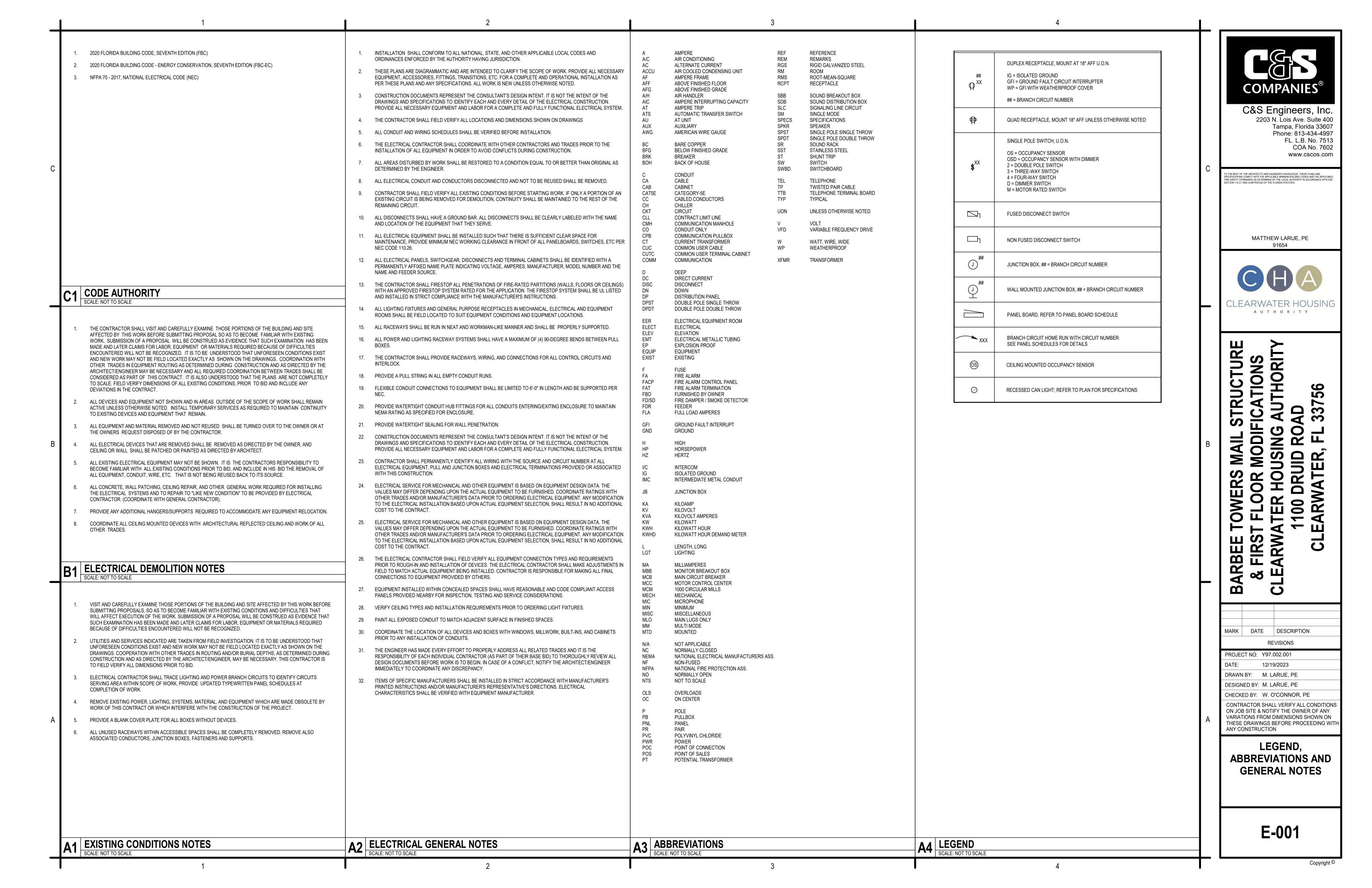
LEGEND, **ABBREVIATIONS AND GENERAL NOTES** 

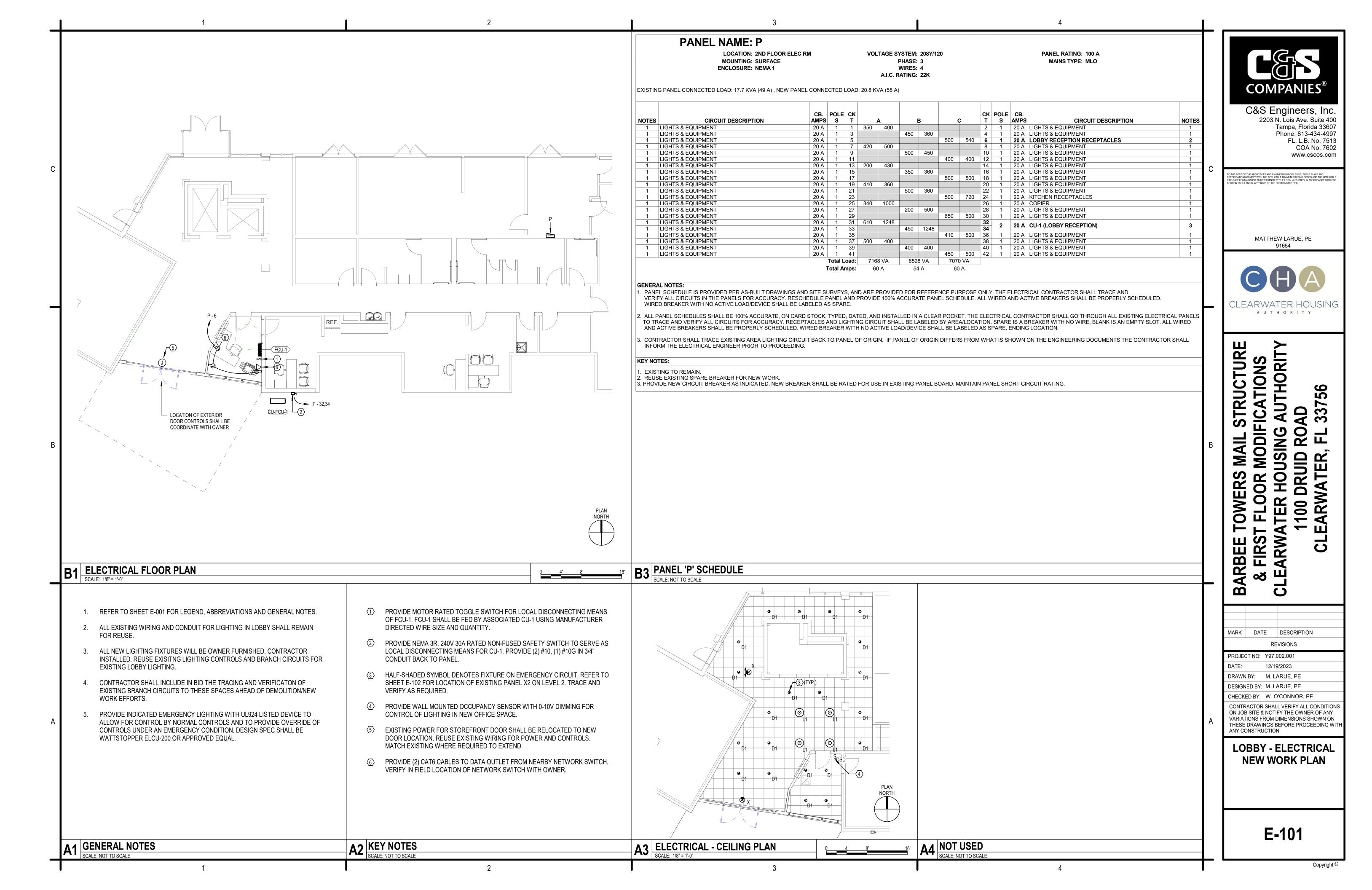
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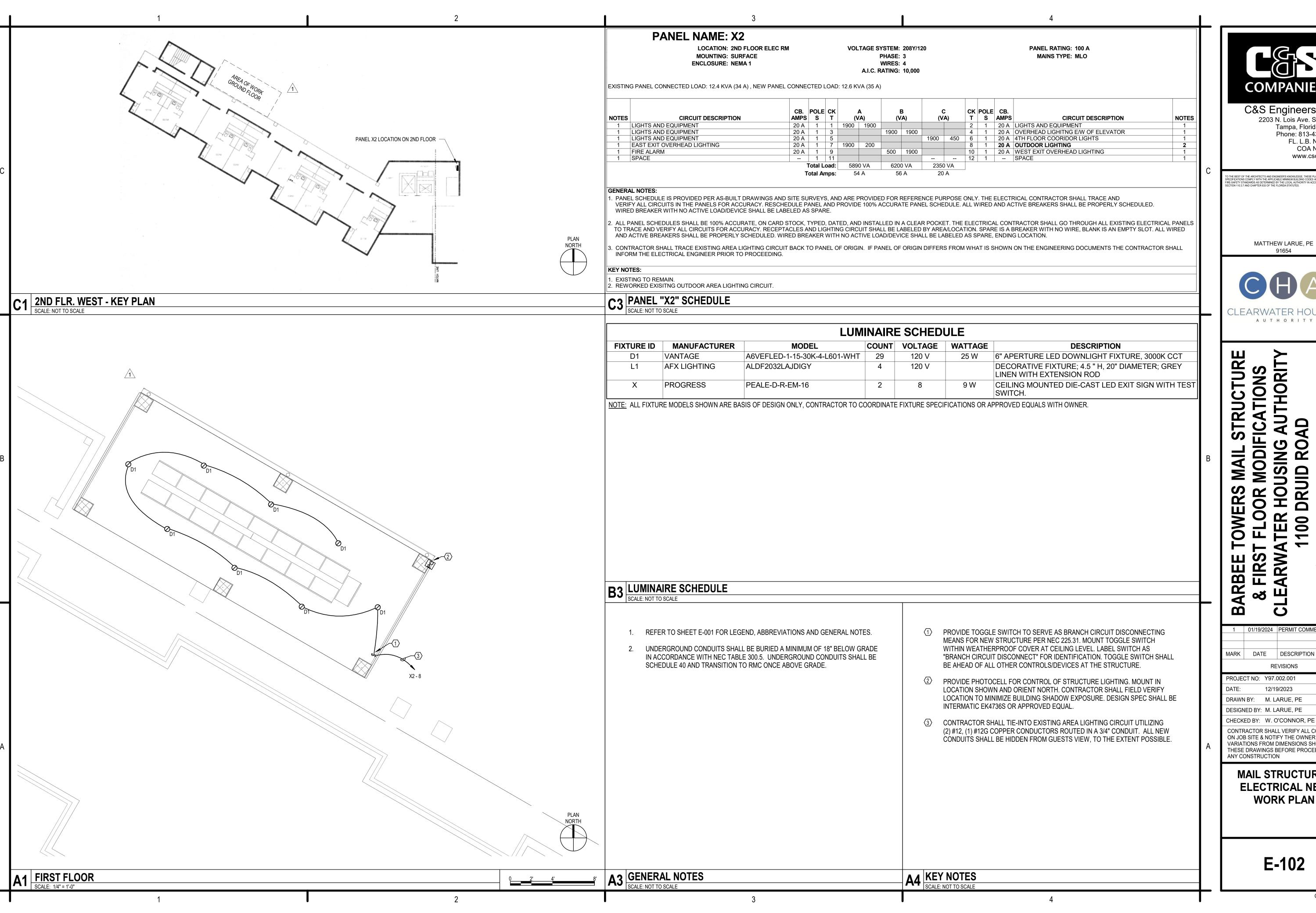
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MATTHEW LARUE, PE 91654









# **AUTHORITY ATIONS** MODIFIC 0 HOUSING DRUID OOR **5 M**

01/19/2024 PERMIT COMMENTS MARK DATE DESCRIPTION

R

**REVISIONS** 

PROJECT NO: Y97.002.001 12/19/2023 DRAWN BY: M. LARUE, PE DESIGNED BY: M. LARUE, PE

CHECKED BY: W. O'CONNOR, PE

CONTRACTOR SHALL VERIFY ALL CONDITIONS ON JOB SITE & NOTIFY THE OWNER OF ANY VARIATIONS FROM DIMENSIONS SHOWN ON THESE DRAWINGS BEFORE PROCEEDING WITH ANY CONSTRUCTION

**MAIL STRUCTURE -ELECTRICAL NEW WORK PLAN** 

E-102

- J.1 REFER TO SPECIFICATIONS AND INFORMATION CONTAINED ON DRAWINGS.
- A DETERMINATION OF WHETHER A FIRE PUMP IS REQUIRED AND IF SO, THE SPECIFIC VOLUMETRIC FLOW AND PRESSURE RATING OF THE PUMP:
  - K.1 A FIRE PUMP IS NOT REQUIRED FOR THIS SCOPE OF WORK.
- A VERIFICATION OF WHETHER A FIREWATER STORAGE TANK IS REQUIRED ON SITE AND IF SO. A DETERMINATION OF THE SIZE AND CAPACITY REQUIRED:
  - L.1 A FIREWATER STORAGE TANK IS NOT REQUIRED FOR THIS SCOPE OF WORK

- THE LAYOUT, INSTALLATION, AND TESTING OF NEW FIRE PROTECTION, AUTOMATIC WET-PIPE SPRINKLER
- PRIOR TO THE INSTALLATION OF ANY PIPING OR PSRINKLERS, PERFORM VISUAL INTERNAL OBSTRUCTION INVESTIGATION AND COMPLETE FLUSHING PROCDURE ON EXISTING SPRINKLER MAINS, BRANCH PIPING, AND STANDPIPE PIPING TO BE REUSED IN ACCORDANCE WITH NFPA 25. NOTIFY OWNER'S REPRESENTATIVE OF ANY OBSTRUCTIONS OR CORROSION THAT MAY EXIST. DOCUMENT ALL CONDITIONS IN DIGITAL REPORT INCLUDING

### 6. NFPA 241 – 2016, STANDARD OR SAFEGUARDING CONSTRUCTION, ALTERATION, AND DEMOLITION OPERATIONS

### THE DESIGN DOCUMENTS PROVIDED HEREIN IDENTIFY THE MINIMUM SYSTEM REQUIREMENTS, IN ACCORDANCE

- PROVIDE A COMPLETE AUTOMATIC WET-PIPE SPRINKLER SYSTEM FOR AREAS INDICATED. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH NFPA 13. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. REFER TO DRAWINGS FOR HAZARD CLASSIFICATIONS OF SPECIFIC AREAS.
- PERFORM AND DOCUMENT WATER FLOW TEST IN ACCORDANCE WITH NFPA 291. SEE CIVIL DRAWINGS FOR LOCATION OF WATER MAIN AND INFORMATION ON PUBLIC WATER SUPPLY CHARACTERISTICS.
- PIPING HAS NOT BEEN SHOWN. CONTRACTOR IS RESPONSIBLE FOR FINAL SPRINKLER SYSTEM PIPE LAYOUT AND
- CONTRACTOR SHALL SUBMIT FOR REVIEW TO THE ENGINEER OF RECORD (THROUGH THE APPROPRIATE PARTIES) COMPLETE SHOP DRAWINGS OF THE FIRE SPRINKLER SYSTEMS, MATERIAL DATA, AND CALCULATIONS AT THE SAME TIME. INCOMPLETE SUBMITTALS WILL BE RETURNED WITHOUT REVIEW. SHOP DRAWINGS SHALL INCLUDE, AT MINIMUM, WORKING PLANS WITH HYDRAULIC CALCULATIONS, AND COORDINATION WITH OTHER
- ALL SPRINKLER AND SYSTEM COMPONENTS SHALL COMPLY WITH THE LISTING AND/OR PERFORMANCE
- INSTALLATION PERSONNEL SHALL BE SUPERVISED BY PERSONS WHO ARE QUALIFIED AND EXPERIENCED IN THE INSTALLATION, INSPECTION, AND TESTING OF FIRE SPRINKLER SYSTEMS.
- COORDINATE SPRINKLERS WITH ALL OTHER TRADES TO AVOID CONFLICTS. (SUCH AS LIGHTS, CEILING FANS, HVAC DUCTS AND GRILLS, ETC.) IN CEILINGS WITH ACT, CENTER SPRINKLERS IN TILES.
- ALL INTERIOR PIPING SHALL BE BLACK STEEL. EXTERIOR AND/OR PIPING EXPOSED TO A CORROSIVE ENVIRONMENT SHALL BE GALVANIZED.

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### PIPING SHALL BE INSTALLED CONCEALED ABOVE FINISHED CEILINGS UNLESS NOTED OTHERWISE. ALL PENETRATIONS THROUGH FIRE/SMOKE RATED ASSEMBLIES SHALL BE FIRE STOPPED. FIRE STOPPING SHALL BE OF U.L. LISTED ASSEMBLY. WHERE CONNECTING TO EXISTING SPRINKLER SYSTEM INFRASTRUCTURE. CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIAL AND EQUIPMENT REQUIRED TO FACILITATE CONNECTION. **6 M** RBE B4 FIRE PROTECTION GENERAL NOTES B3 F.A.C. 61G15-32.004 INFORMATION $\mathbf{m}$ 0

01/22/2024 PERMIT COMMENTS MARK DATE DESCRIPTION

REVISIONS

PROJECT NO: Y97.002.001 01/22/2024 DRAWN BY: M. OSTROFF

DESIGNED BY: M. OSTROFF CHECKED BY: B. DONNER

CONTRACTOR SHALL VERIFY ALL CONDITIONS ON JOB SITE & NOTIFY THE OWNER OF ANY VARIATIONS FROM DIMENSIONS SHOWN ON THESE DRAWINGS BEFORE PROCEEDING WIT ANY CONSTRUCTION

FIRE PROTECTION **DETAILS, NOTES, & SYMBOLS** 

FIRE PROTECTION SPECIFICATIONS

INTERFERE WITH THE PROGRESS OF THE PROJECT.

OVER TO THE OWNER AND SHALL BE PRESENTED TO THE OWNER IN GOOD CONDITION AT A LOCATION DESIGNATED BY THE OWNER. ALL OTHER FIRE PROTECTION EQUIPMENT SHALL BE REMOVED FROM THE

PREMISES. REMOVE ALL ABANDONED PIPING AND EQUIPMENT NOT BUILT INTO BUILDING CONSTRUCTION.

CEILINGS SHALL REMAIN AND ENDS CAPPED AND MARKED ABANDONED.

WHERE CEILING OR WALLS ARE REMOVED, ALL ABANDONED PIPING SHALL BE REMOVED AND ENDS OF LIVE

SERVICES CAPPED. ABANDONED ELEMENTS BUILT INTO WALLS OR LOCATED ABOVE EXISTING INACCESSIBLE

CONTINUITY OF SERVICES: FIRE PROTECTION SERVICES SHALL BE MAINTAINED IN ALL AREAS WHICH WILL BE

WORKING HOURS AS SHE SHALL DESIGNATE. REFER TO THE OVERALL SCHEDULING OF THE WORK OF THE

PROJECT. SCHEDULE WORK TO CONFORM TO THIS SCHEDULE AND INSTALL WORK TO NOT DELAY NOR

OCCUPIED DURING THE CONSTRUCTION PERIOD. IF AN INTERRUPTION OF FIRE PROTECTION SERVICE BECOMES NECESSARY, SUCH SHALL BE MADE ONLY UPON CONSENT OF THE OWNER AT A TIME OUTSIDE NORMAL

> RETURN BEND - BRANCH LINE ACT OR GYPSUM CEILING SEMI - RECESSED PENDENT DEFLECTOR SHALL BE WITHIN A MINIMUM OF 1" SPRINKLER W/ MATCHING FROM THE CEILING AND A MAXIMUM OF 12" FROM ESCUTCHEON THE CEILING FOR UNOBSTRUCTED CONSTRUCTION

A2 SEMI RECESSED PENDENT SPRINKLER DETAIL

ALL FIRE PROTECTION SYSTEM IMPAIRMENTS SHALL OCCUR IN ACCORDANCE WITH THE FLORDIA FIRE PREVENTION CODE AND NFPA 241.

UNLESS APPROVED BY THE AUTHORITY HAVING JURISDICTION THE AUTOMATIC SPRINKLER SYSTEM SHALL REMAIN OPERATIONAL THROUGHOUT DEMOLITION AND SHALL BE THE LAST SYSTEM DEMOLISHED.

PRIOR TO REMOVING ANY FIRE PROTECTION SYSTEM FROM SERVICE THE FIRE PROTECTION CONTRACTOR SHALL NOTIFY THE OWNER AND CODE ENFORCEMENT OFFICIAL IN WRITING A MINIMUM OF 48 HOURS BEFOREHAND THAT THE SYSTEM IS TO BE REMOVED FROM SERVICE. THE NOTIFICATION SHALL INCLUDE THE DATE AND TIME THE SYSTEM WILL BE REMOVED FROM SERVICE AND THE PROJECTED DATE AND TIME THE

DURING ANY FIRE PROTECTION SYSTEM OUTAGES WITHIN THE OCCUPIED PORTION OF THE BUILDING THE ABOVE INDIVIDUALS SHALL BE NOTIFIED. IN THE EVENT THE FIRE PROTECTION SYSTEM CANNOT BE RESTORED TO SERVICE AT THE CLOSE OF WORK ON THAT DAY THE BUILDING SHALL BE PROVIDED WITH A FIRE WATCH AS REQUIRED BY THE STATE FIRE CODE. THE SOLE RESPONSIBILITY OF THE INDIVIDUAL ASSIGNED TO THE WATCH SHALL BE TO PERFORM CONSTANT PATROLS OF THE IMPAIRED AREA TO KEEP WATCH FOR FIRES. THE FIRE WATCH SHALL BE PROVIDED WITH AN APPROVED MEANS OF NOTIFICATION FOR THE FIRE DEPARTMENT. IF THE BUILDING IS PROTECTED BY MULTIPLE FIRE PROTECTION SYSTEMS, ONLY THE IMPAIRED AREA OF THE BUILDING SHALL BE REQUIRED TO BE PATROLLED BY THE FIRE WATCH. ONCE WORK STARTS ON THE FOLLOWING DAY, THE

AT ANY TIME WHEN A FIRE PROTECTION SYSTEM IS OUT OF SERVICE THE FIRE DEPARTMENT CONNECTION FEEDING THAT SYSTEM SHALL BE AFFIXED WITH AN "OUT OF SERVICE" SIGN. THE SIGN SHALL BE PROVIDED, INSTALLED AND POLICED BY THE FIRE PROTECTION CONTRACTOR.

FIRE WATCH MAY BE PROVIDED BY THE INDIVIDUALS WORKING ON THE SYSTEM.

THE SYSTEM IMPAIRMENT FOR THE RENOVATION SHALL BE CONDUCTED AS A PRE-PLANNED IMPAIRMENT. TO MINIMIZE THE IMPAIRMENT TIME, ALL NECESSARY TOOLS AND MATERIALS SHALL BE ASSEMBLED ON-SITE PRIOR TO THE REMOVING OF THE SYSTEM FROM SERVICE.

WITHIN 24 HOURS OF RESTORING ANY FIRE PROTECTION SYSTEM TO SERVICE, THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE IN WRITING TO THE OWNER, FIRE DEPARTMENT, AND CODE ENFORCEMENT OFFICIAL CERTIFICATION THAT THE FOLLOWING HAS BEEN IMPLEMENTED:

ALL INSPECTIONS AND TESTS HAVE BEEN COMPLETED TO INSURE THE AFFECTED SYSTEM IS

THE IMPAIRMENT TAG HAS BEEN REMOVED. THE OWNER AND OR OCCUPANT HAVE BEEN INSTRUCTED ON THE OPERATION OF THE SYSTEM. THE THIRD PARTY MONITORING COMPANY HAS BEEN ADVISED THAT THE SYSTEM IS IN SERVICE

FIRE PROTECTION IMPAIRMENT NOTES

SYSTEM WILL BE RESTORED.

AA FIRE PROTECTION SYMBOL LIST

PIPING/EQUIPMENT TO BE REMOVED

PENDENT SPRINKLER

CONNECT TO EXISTING

DISCONNECT FROM EXISTING

