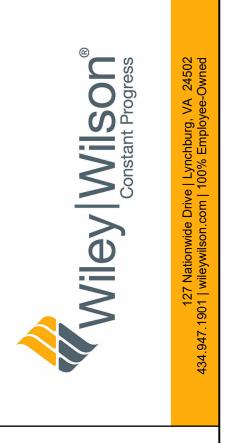
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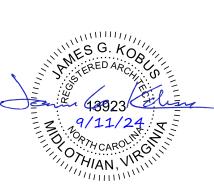
ADMINISTRATION BUILDING

400 JONES FERRY ROAD CARRBORO, NORTH CAROLINA

MONUMENTAL STAIR RENOVATION

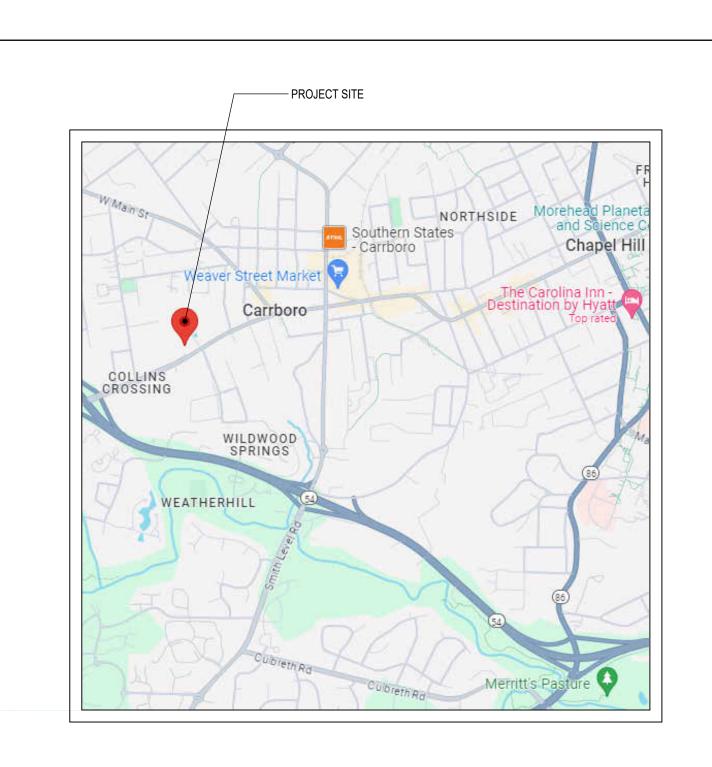
ISSUE FOR BID SUBMISSION SEPTEMBER 11, 2024





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- PROJECT SITE

LOCATION MAP

COMM NO: 9/11/2024 DRAWN: JGK DESIGN: CHECK: SHEET TITLE **COVER SHEET**

REV. NO.

G-001

VICINITY MAP

G-002

REV. NO.

Revised 6/15/2020

2018 NC Administrative Code and Policies

APPENDIX B - PART 2 OF 2

SHT. NO. REV. NO.

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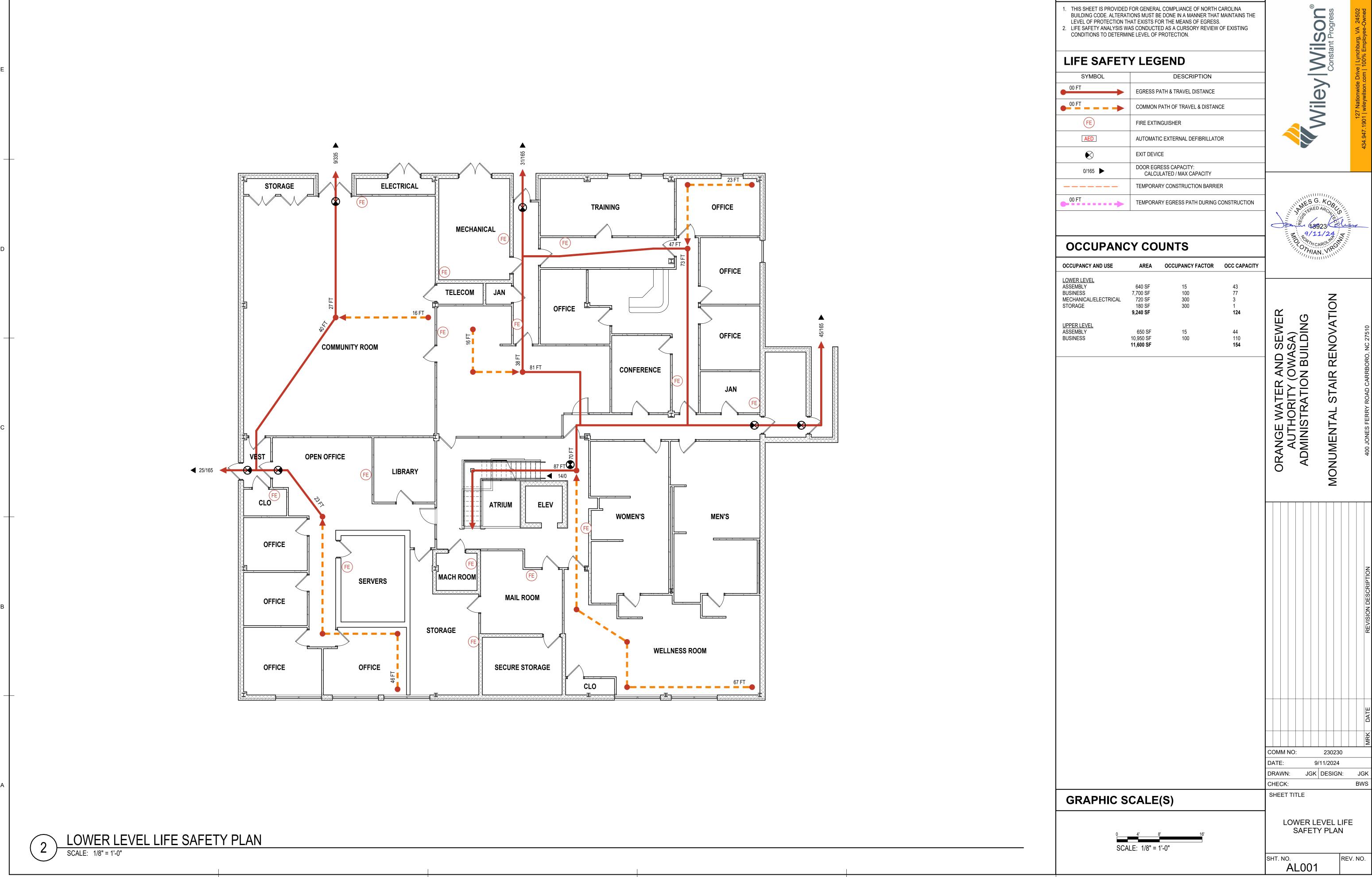
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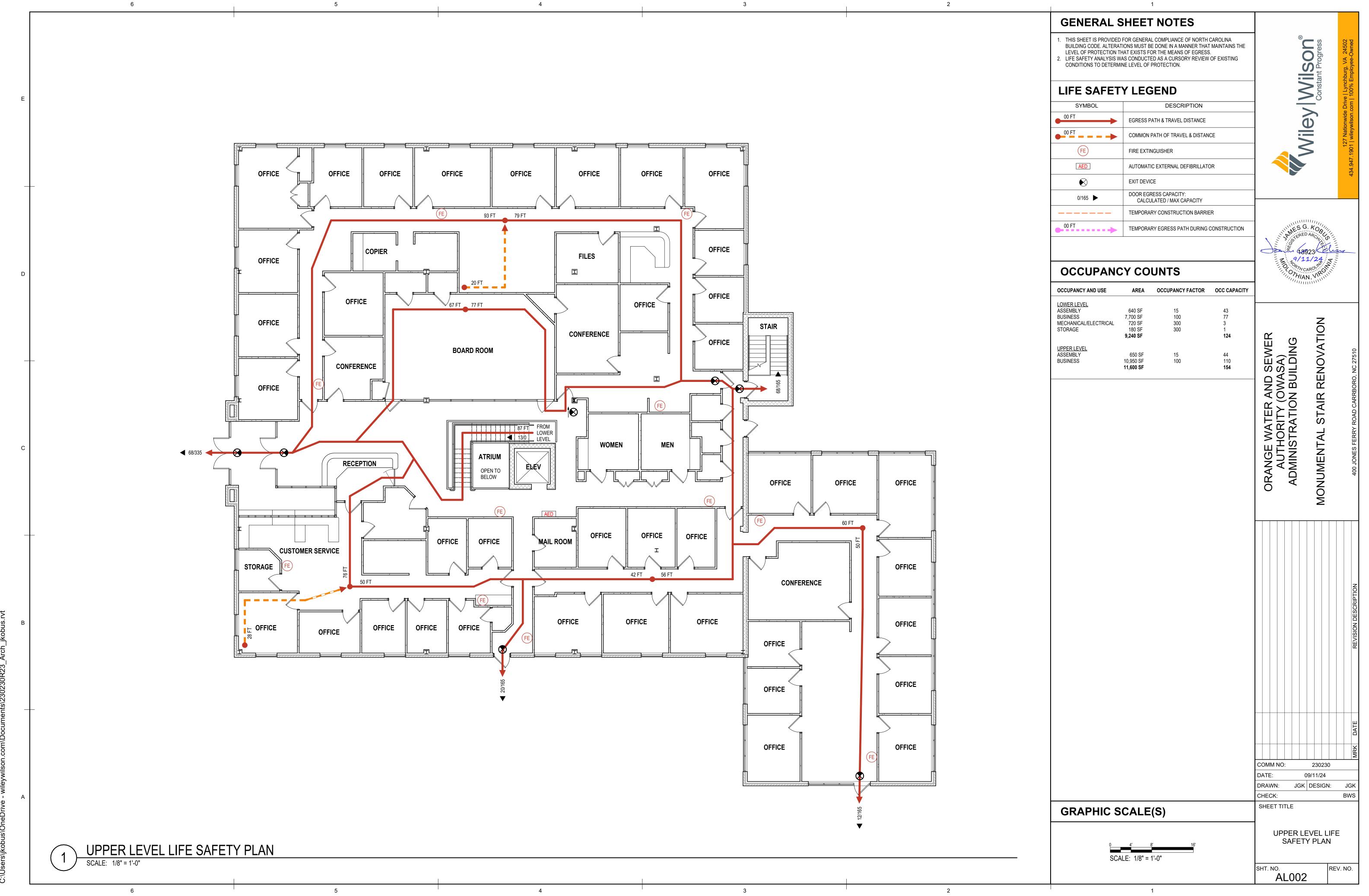
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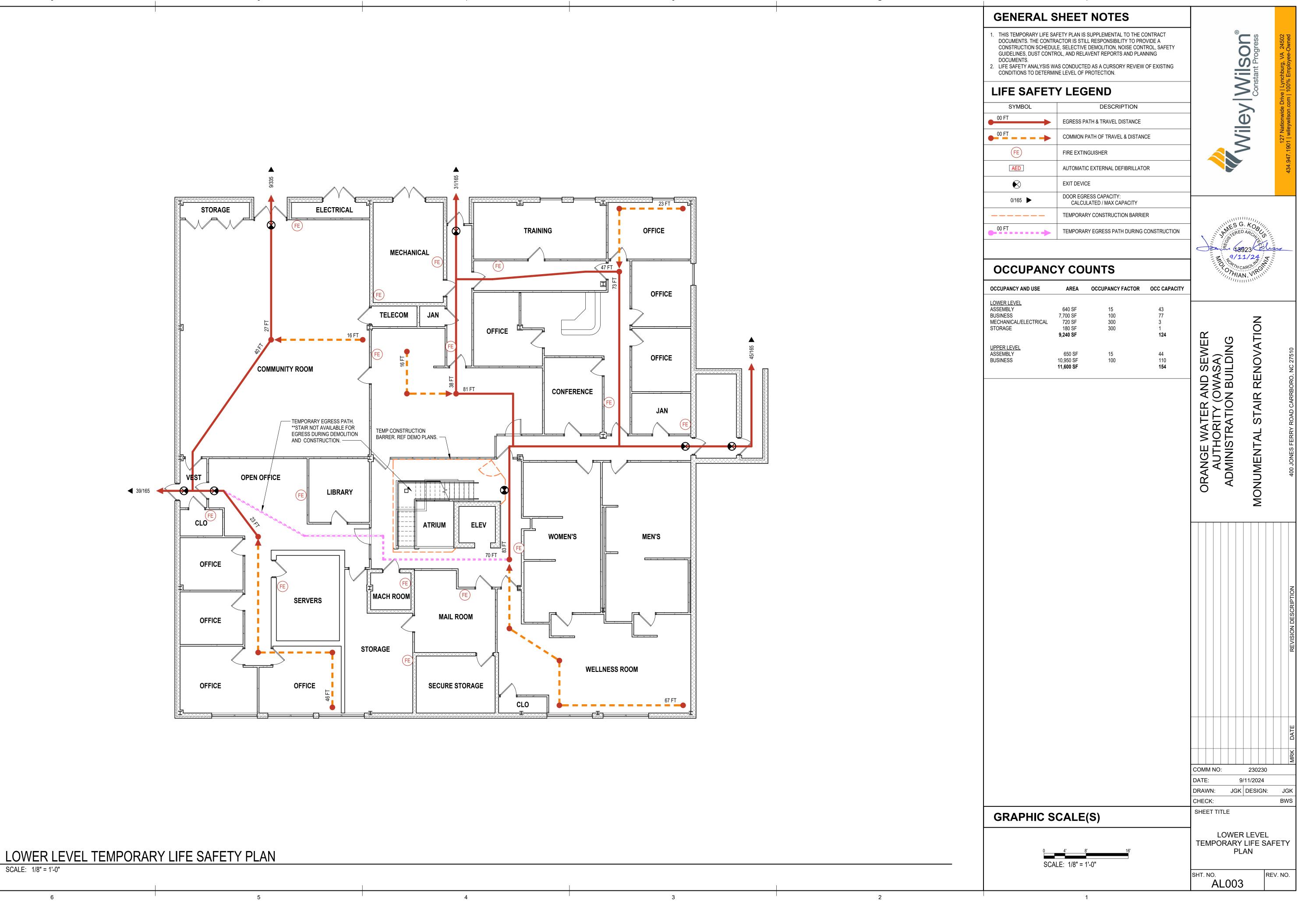
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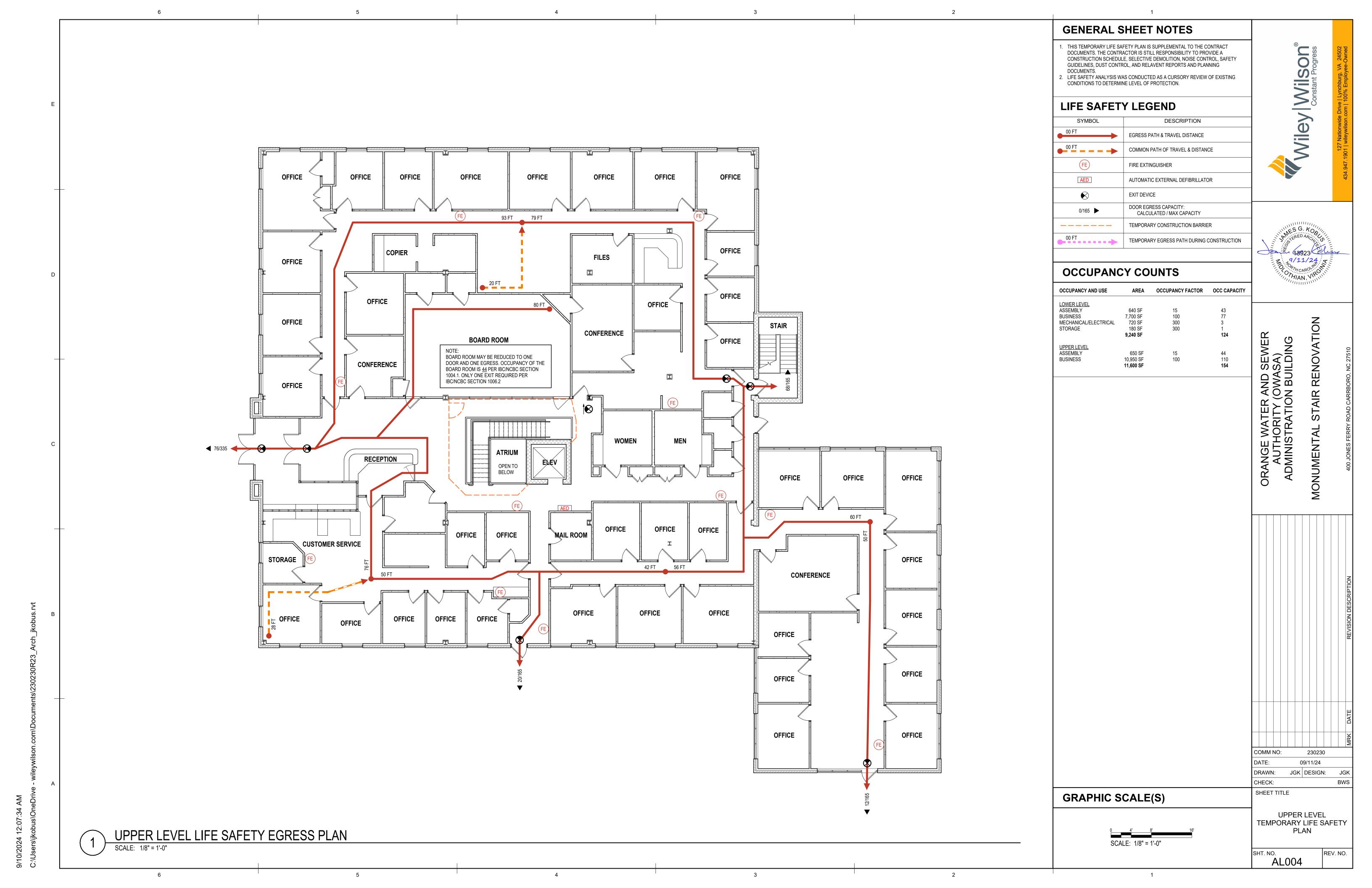


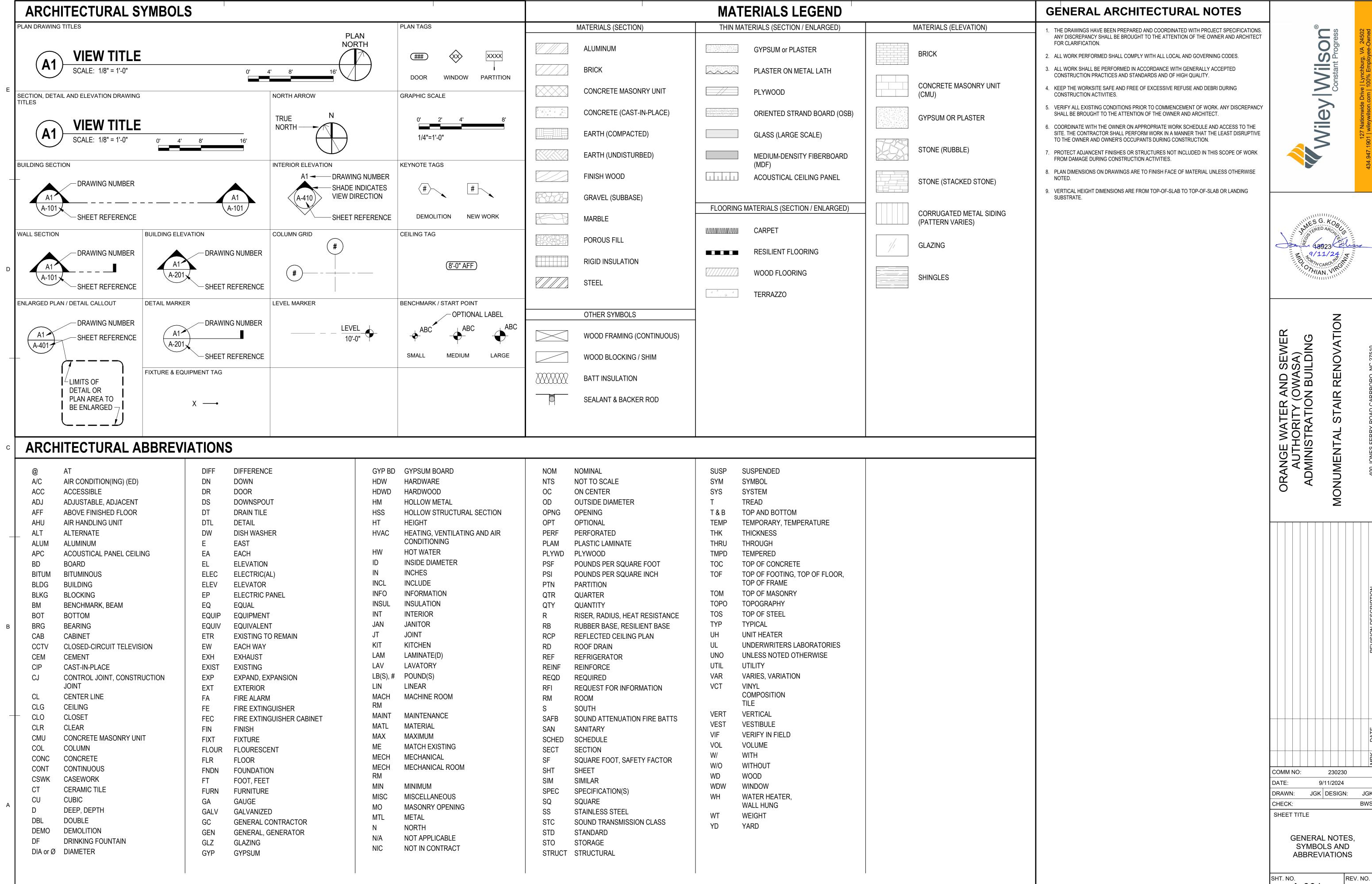
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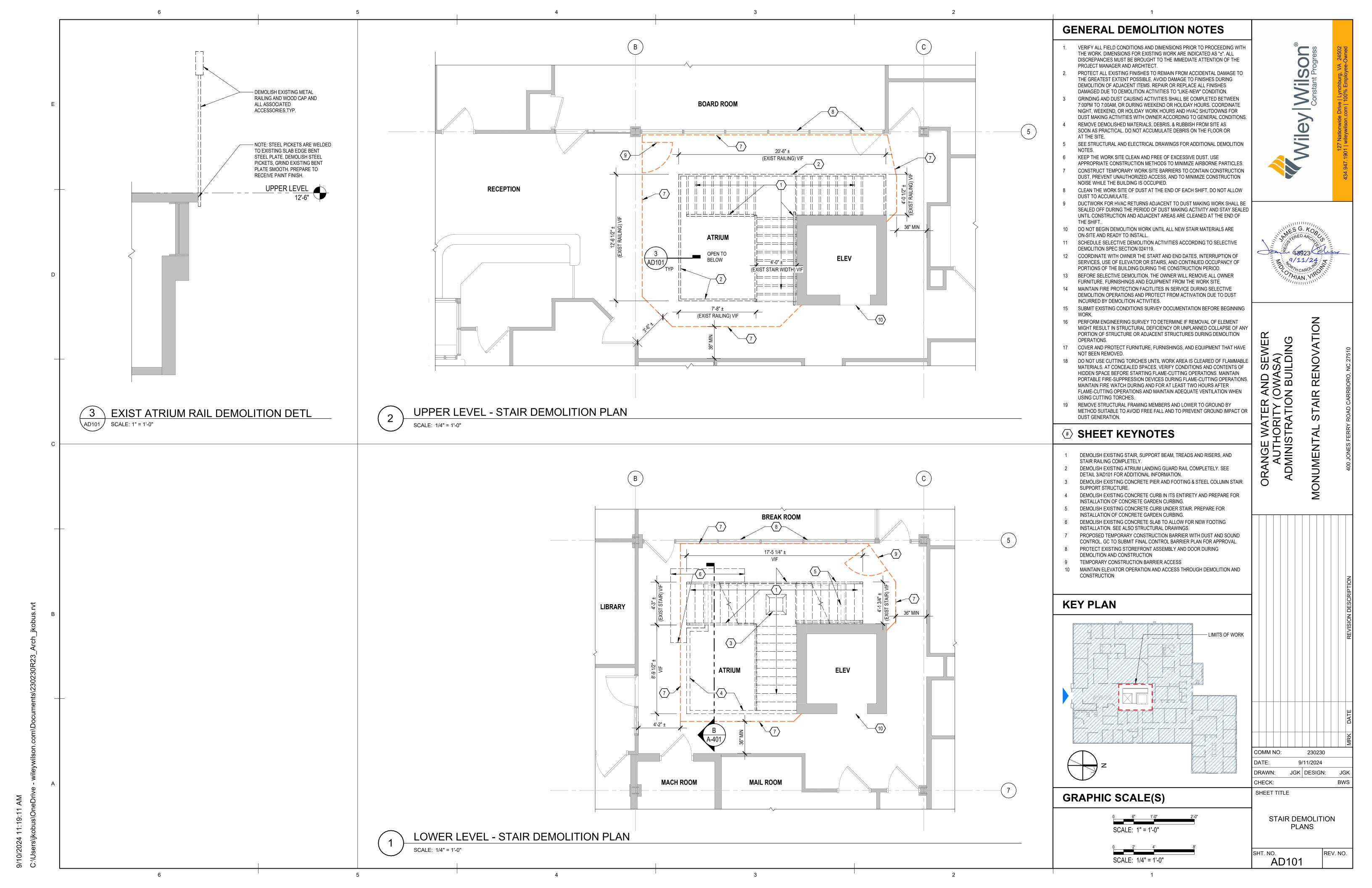
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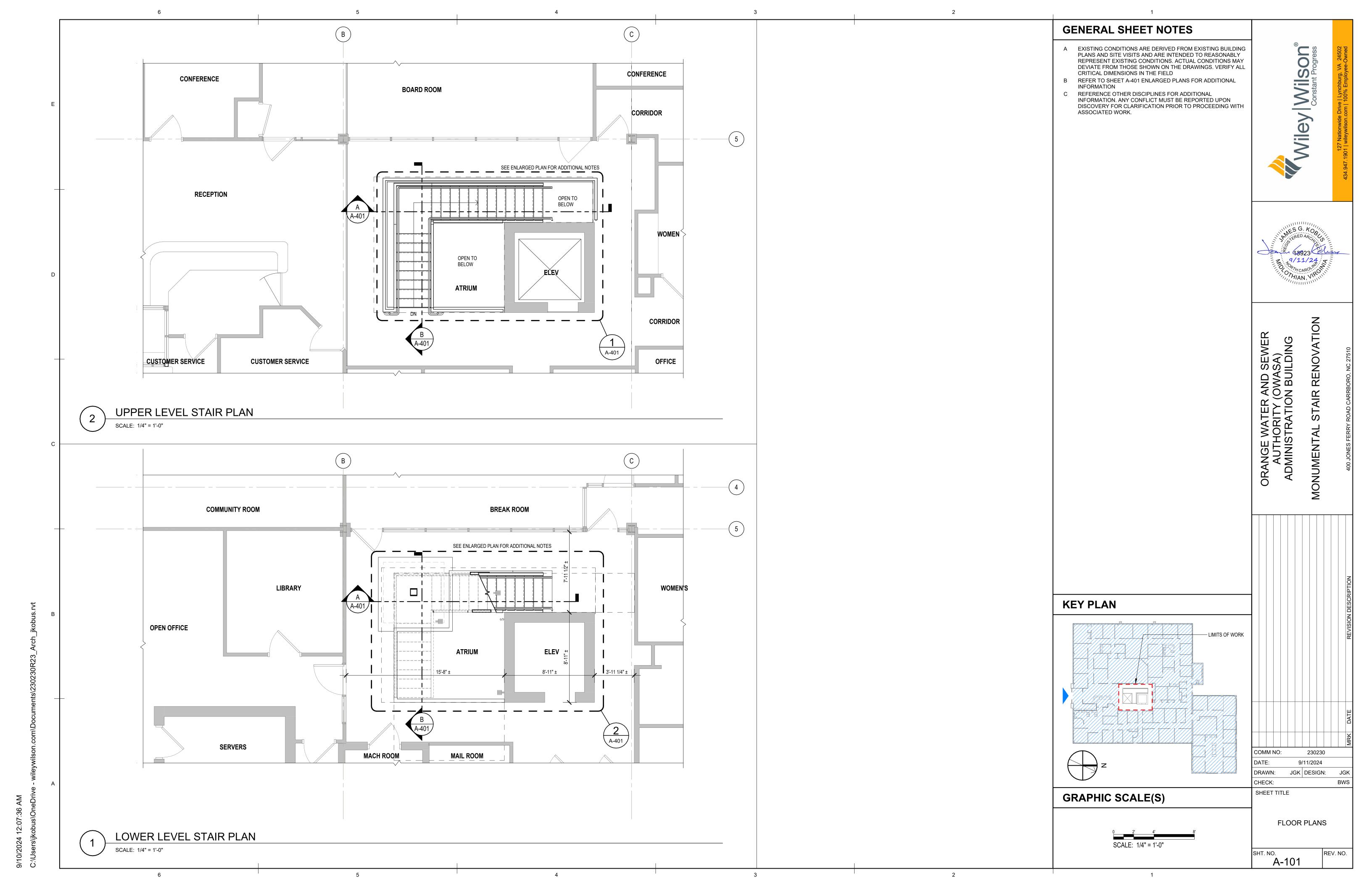


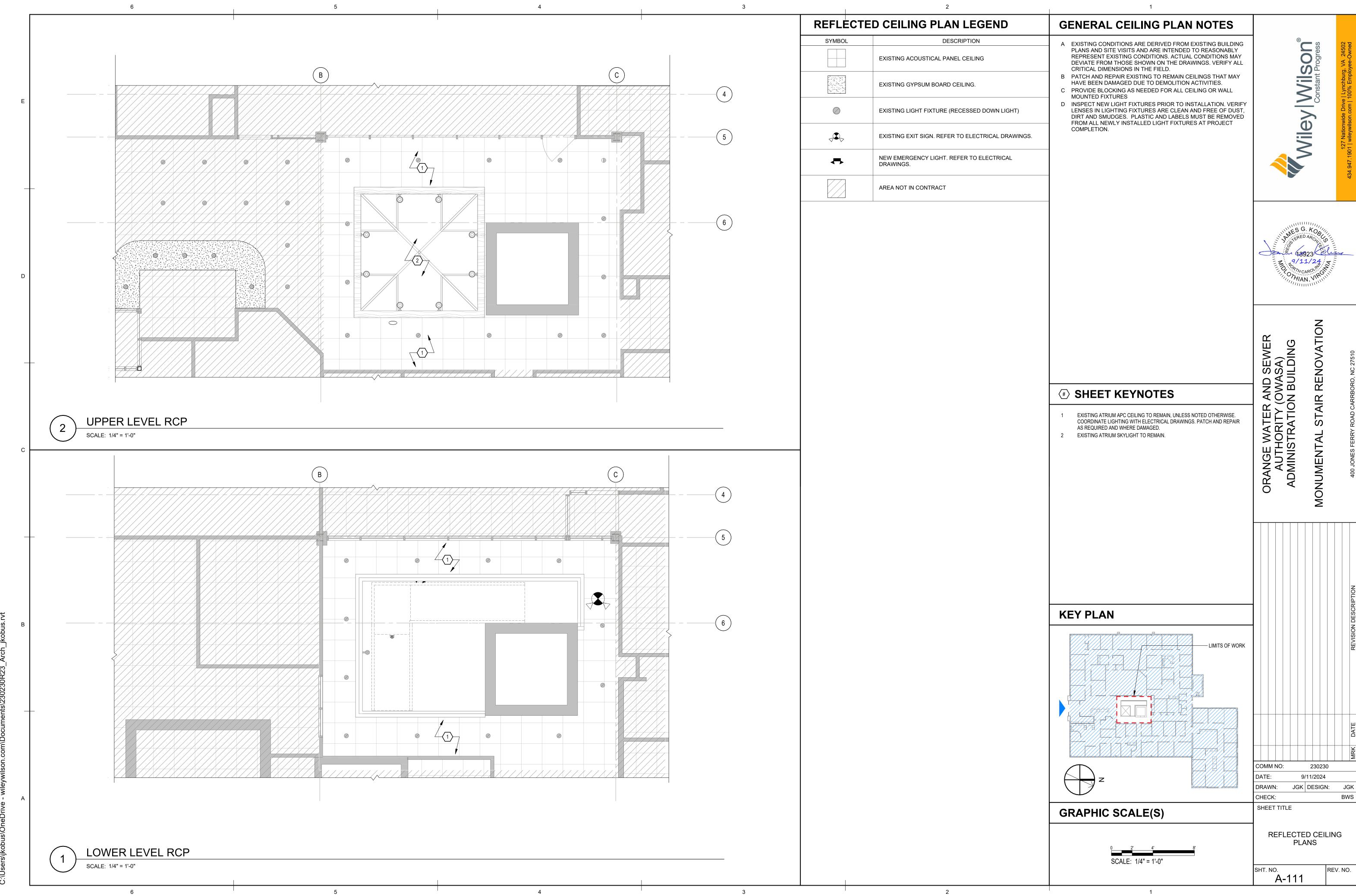




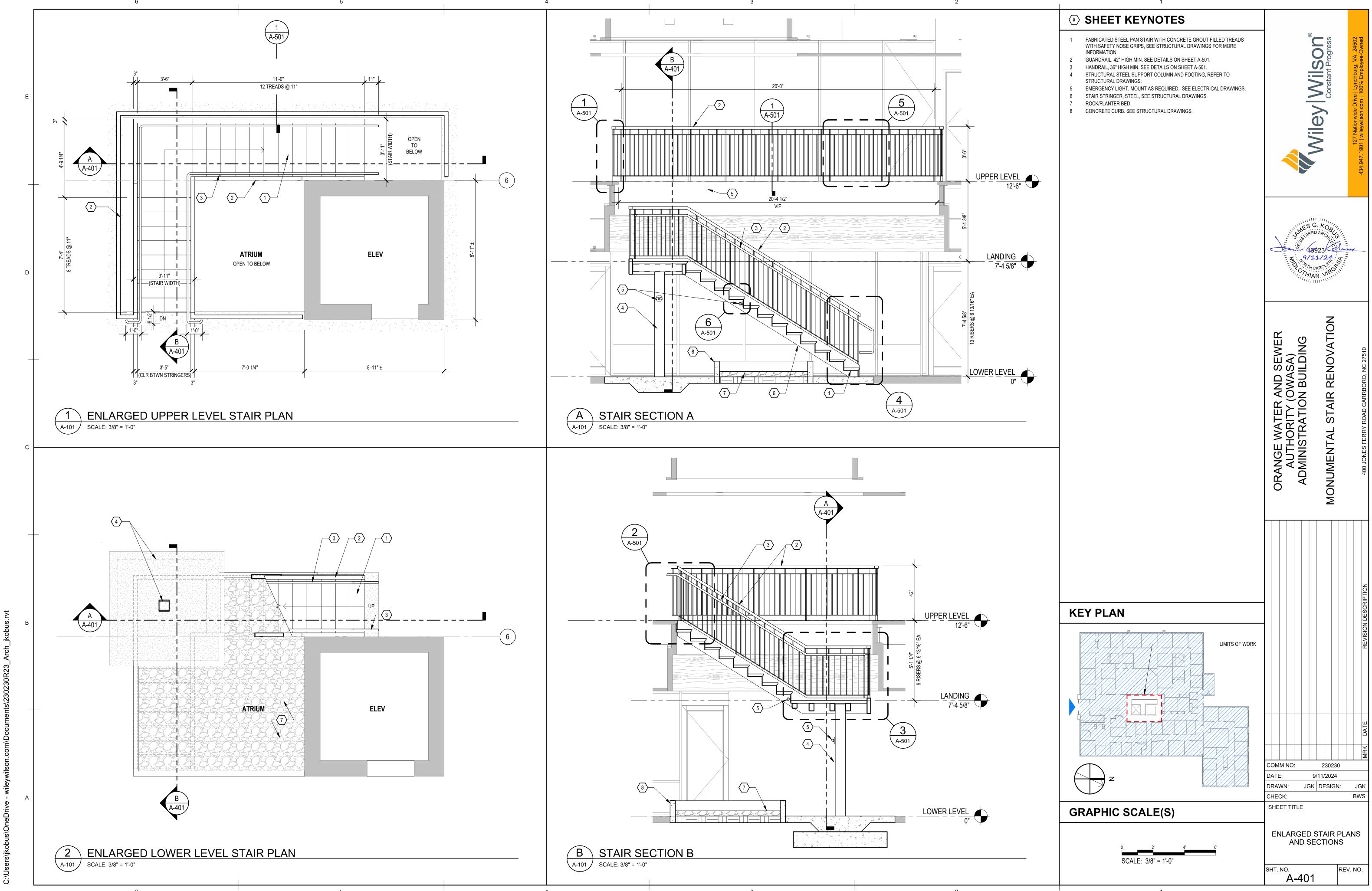
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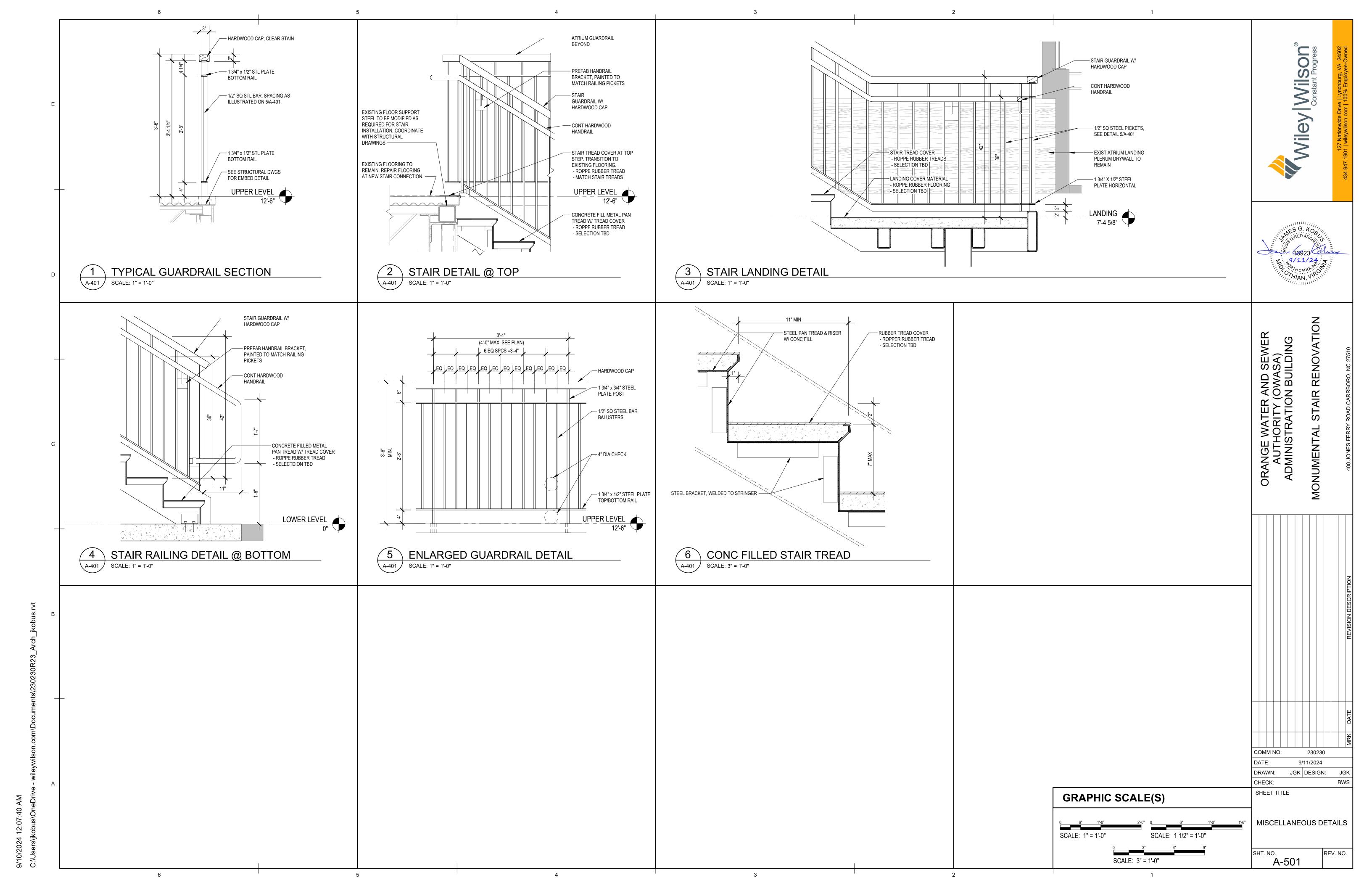




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GRATING

ii. LIVE LOADS: STAIRS AND EXITS HANDRAILS & GUARDRAILS

HANDRAILS/TOP RAIL 50 PLF IN ANY DIRECTION AND 200 LBS POINT LOAD IN ANY DIRECTION NOT ACTING CONCURRENTLY PANEL FILLERS 50 LB HORIZONTAL NORMAL LOAD ON AN AREA NOT TO EXCEED 12"X12"

100 PSF

5 PSF

3. THE GENERAL CONTRACTOR AND SUB-CONTRACTORS MUST DETERMINE THE SCOPE OF THE STRUCTURAL WORK FROM THE CONTRACT DOCUMENTS TAKEN AS A WHOLE. THE STRUCTURAL DRAWINGS MUST NOT BE CONSIDERED SEPARATELY FOR PURPOSES OF BIDDING THE STRUCTURAL WORK. DUE CONSIDERATION MUST BE GIVEN TO OTHER STRUCTURAL WORK OR WORK RELATED TO THE STRUCTURE, INCLUDING NECESSARY COORDINATION DESCRIBED OR IMPLIED BY THE ARCHITECTURAL AND MECHANICAL

4. THE REPRODUCTION OF THE STRUCTURAL CONTRACT DOCUMENTS IN ANY FASHION AS STRUCTURAL SHOP DRAWING DOCUMENTS IS PROHIBITED.

5. SCALES NOTED IN THE DRAWINGS ARE FOR GENERAL INFORMATION ONLY. NO DIMENSIONAL INFORMATION MUST BE OBTAINED BY DIRECT SCALING OF THE DRAWINGS.

6. DETAILS, SECTIONS AND NOTES SHOWN ON THESE DRAWINGS ARE INTENDED TO BE TYPICAL AND MUST APPLY TO SIMILAR CONDITIONS ELSEWHERE UNLESS OTHERWISE SHOWN OR NOTED.

7. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL RESULTING REVISIONS TO THE STRUCTURAL SYSTEM AS A RESULT OF ACCEPTANCE OF CONTRACTOR PROPOSED ALTERNATIVES OR

8. THE GENERAL CONTRACTOR (OR CONSTRUCTION MANAGER) MUST SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS FOR APPROVAL. THE STRUCTURAL ENGINEER WILL NOT BE RESPONSIBLE FOR THE STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT IF THE GENERAL CONTRACTOR FAILS TO OBTAIN APPROVAL OF THE SHOP DRAWINGS. SHOP DRAWINGS ARE REVIEWED AS A CONVENIENCE TO THE GENERAL CONTRACTOR AND ARE NOT A CONTRACT DOCUMENT. THE GENERAL CONTRACTOR MUST STATE ON THE SHOP DRAWINGS THAT CONTRACT DOCUMENT REQUIREMENTS HAVE BEEN MET AND THAT ALL DIMENSIONS, CONDITIONS, AND QUANTITIES HAVE BEEN REVIEWED AND VERIFIED AS SHOWN AND/OR CORRECTED ON THE SHOP DRAWINGS.

9. INFORMATION SHOWN REGARDING EXISTING CONDITIONS HAS BEEN OBTAINED BY LIMITED OBSERVATIONS. AREAS NOT VISIBLE HAVE BEEN ASSUMED TYPICAL WITH OBSERVED EXISTING CONDITIONS.

10.THE CONTRACTOR MUST MEASURE AND PROVIDE ALL DIMENSIONS, ELEVATIONS AND CONDITIONS AT THE JOB SITE PRIOR TO CONSTRUCTION AND THE SUBMISSION OF SHOP DRAWINGS AND MUST NOTIFY THE ARCHITECT AND/OR STRUCTURAL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

11.THE GENERAL CONTRACTOR IS RESPONSIBLE FOR FITTING NEW WORK WITH EXISTING CONSTRUCTION. INFORMATION ON THE EXISTING BUILDING SHOWN IN THESE DRAWINGS WAS BASED UPON THE INFORMATION SUPPLIED TO WILEY WILSON, INC. THIS INFORMATION IS NOT AS-BUILT DATA AND THE ACTUAL AS-BUILT CONSTRUCTION MAY DIFFER FROM THAT REPRESENTED IN THE DRAWINGS. THE CONTRACTOR MUST VERIFY ALL INFORMATION. VARIATIONS FROM THE DIMENSIONS INDICATED ON THE CONTRACT DOCUMENTS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND/OR THE STRUCTURAL

12.INFORMATION ON THE EXISTING BUILDING IS TAKEN FROM STRUCTURAL SHEETS S-1 THROUGH S3 BY LASAER HOPKINS ENGINEERS DATED DECEMBER 1988.

13.METHODS, PROCEDURES, AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

14.THE CONTRACTOR MUST FABRICATE AND ERECT STEEL IN ACCORDANCE WITH OSHA'S SAFETY REQUIREMENTS, 29 CFR 1926 SAFETY STANDARDS FOR STEEL ERECTION; FINAL RULE.

B. STRUCTURAL STEEL

1. UNLESS NOTED OTHERWISE, STRUCTURAL STEEL MUST CONFORM TO THE FOLLOWING:

ASTM F1554, GRADE 36 ANCHOR BOLTS ANGLES ASTM A36 PLATES ASTM A36

HSS RECTANGULAR ASTM A500, GRADE C (Fy = 50 KSI)

SUBMIT MILL TEST REPORTS FOR REVIEW.

2. BOLTS FOR STRUCTURAL STEEL CONNECTIONS MUST BE HIGH STRENGTH BOLTS PER THE REQUIREMENTS OF ASTM A325, TYPE N. UNLESS NOTED OTHERWISE, PROVIDE BOLTS DESIGNED AS BEARING TYPE BOLTS AND INSTALL PER THE "SNUG TIGHT" CONDITION. INSTALL A HARDENED WASHER UNDER THE ELEMENT TO BE TIGHTENED.

3. DETAIL, FABRICATE AND ERECT STRUCTURAL STEEL PER THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS," THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND THE SAFETY REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION AND THE LOCAL JURISDICTION. PROVIDE TEMPORARY SEATS TO FACILITATE SAFE ERECTION.

4. PERFORM WELDING IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STANDARD D1.1. PROVIDE ELECTRODES FOR SHOP AND FIELD WELDS IN ACCORDANCE WITH AWS A5.1 OR AWS A5.5, CLASS E70XX, LOW HYDROGEN. ALL WELDS MUST USE FILLER METAL WITH A MINIMUM CVN VALUE OF 20 FT-LBS AT -20 DEGREES FAHRENHEIT.

5. ALL SHOP AND FIELD WELDING MUST BE EXECUTED BY WELDERS AND WELDING OPERATORS WHO ARE CURRENTLY QUALIFIED BY TEST AS PRESCRIBED IN AWS D1.1 OF THE AMERICAN WELDING SOCIETY TO PERFORM THE TYPES OF WELDS REQUIRED ON THE PROJECT.

6. SHOP OR FIELD WELDS AT NON-BOLTED CONNECTIONS THAT ARE NOT SPECIFICALLY DETAILED MUST BE 3/16" CONTINUOUS FILLETS AT EACH CONTACT EDGE OR SURFACE.

7. RETURN ALL WELDS AT CORNERS TWICE THE NOMINAL SIZE OF THE WELD MINIMUM, UNLESS OTHERWISE NOTED.

8. ALL COPES, BLOCKS, CUT-OUTS, AND OTHER CUTTING OF STRUCTURAL MEMBERS MUST HAVE ALL RE-ENTRANT CORNERS SHAPED, NOTCHED FREE TO A RADIUS OF AT LEAST 1/2".

9. SEE ARCHITECTURAL AND OTHER ENGINEERING DRAWINGS FOR MISCELLANEOUS STEEL NOT SHOWN ON THE STRUCTURAL DRAWINGS.

10. NO FABRICATION SHALL PROCEED PRIOR TO SHOP DRAWING APPROVAL.

11. NO OPENINGS IN BEAMS OR COLUMNS ARE PERMITTED UNLESS SPECIFIED IN THE STRUCTURAL DOCUMENTS. CONTRACTOR MUST SUBMIT ALL PROPOSED OPENING IN BEAMS FOR REVIEW BY THE STRUCTURAL ENGINEER.

12. SPLICING OF STRUCTURAL STEEL MEMBERS WHERE NOT DETAILED ON THE CONTRACT DOCUMENTS IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.

13. THE CONTRACTOR MUST NOTIFY WILEY WILSON, INC. OF ANY MISFABRICATION OF STRUCTURAL STEEL PRIOR TO ERECTION OF SAME.

14. ONE 1.5 MIL COAT OF SHOP PAINT MUST BE APPLIED TO ALL NEW STRUCTURAL STEEL WITH THE EXCEPTION OF AREAS TO BE WELDED.

C. CONCRETE

1. ALL CONCRETE WORK MUST BE IN ACCORDANCE WITH ACI 301, ACI 318 AND ACI 302.

2. PROVIDE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 4000 PSI AT 28 DAYS. USE NORMAL WEIGHT AGGREGATES CONFORMING TO ASTM C33 AND TYPE I/II PORTLAND CEMENT CONFORMING TO ASTM C150. CONCRETE MUST MEET THE FOLLOWING DURABILITY EXPOSURE CATEGORIES: F0, S0, W0, C0.

3. FLY ASH CONFORMING TO ASTM C618, TYPE C OR F MAY BE USED AS TO REPLACE A PORTION OF THE PORTLAND CEMENT IN A CONCRETE MIX. THE AMOUNT OF PORTLAND CEMENT CONTENT MUST NOT BE LESS THAN 70 PERCENT OF THE TOTAL AMOUNT OF CEMENTITIOUS MATERIAL IN THE MIX.

4. CONCRETE REINFORCEMENT BARS MUST CONFORM TO ASTM A615, GRADE 60. REINFORCEMENT BARS MUST NOT BE TACK WELDED, WELDED, HEATED OR CUT UNLESS INDICATED ON THE CONTRACT DOCUMENTS OR APPROVED BY THE STRUCTURAL ENGINEER.

5. GROUT UNDER ALL COLUMN BASE PLATES AND BEAM BEARING PLATES WITH NON-SHRINK, NON-METALLIC GROUT WHICH CONFORMS TO CORPS OF ENGINEERS SPECIFICATION CRD-C 621-82 OR ASTM C1107.

6. DETAILING OF CONCRETE REINFORCEMENT BARS AND ACCESSORIES MUST CONFORM TO THE RECOMMENDATIONS OF ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" AND ACI SP-66 "DETAILING MANUAL". PLACING OF REINFORCING BARS MUST CONFORM TO THE RECOMMENDATIONS OF ACI 315R "MANUAL OF ENGINEERING AND PLACING DRAWINGS FOR REINFORCED CONCRETE STRUCTURES" AND CRSI "MANUAL OF STANDARD PRACTICE".

7. MIX, TRANSPORT, AND PLACE CONCRETE PER THE RECOMMENDATIONS OF ACI 301.

8. PROVIDE CONCRETE COVER PROTECTION OF REINFORCEMENT PER ACI 318 SECTION 20.6.1.3 WITH STANDARD BAR CHAIRS AND SPACERS REQUIRED TO MAINTAIN MINIMUM CONCRETE PROTECTION. TYPICAL COMMON MINIMUM CONCRETE COVER APPLYING TO THIS PROJECT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:

CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3 INCHES

ADDITIONALLY, COVERS MUST NOT EXCEED THE FOLLOWING: SLABS ON GRADE 2 INCHES (TOP)

WELDING OF REINFORCEMENT BARS IS NOT PERMITTED.

SLABS ON METAL FORMS 3/4 INCHES

10.HORIZONTAL FOOTING AND HORIZONTAL WALL REINFORCEMENT MUST BE CONTINUOUS AND MUST HAVE 90-DEGREE BENDS AND EXTENSIONS, OR CORNER BARS OF EQUIVALENT SIZE LAPPED 48 BAR DIAMETERS. AT CORNERS AND INTERSECTIONS.

11.TIE DOWELS IN PLACE BEFORE PLACING CONCRETE. DO NOT STAB OR "WET-SET" DOWELS.

12.HORIZONTAL JOINTS WILL NOT BE PERMITTED IN CONCRETE CONSTRUCTION EXCEPT AS SHOWN ON THE CONTRACT DOCUMENTS. VERTICAL JOINTS MUST OCCUR AT CENTER OF SPANS AT LOCATIONS APPROVED BY THE STRUCTURAL ENGINEER.

13.PROVIDE HORIZONTAL CONSTRUCTION JOINTS ONLY WHERE SHOWN IN THE CONTRACT DOCUMENTS. AT HORIZONTAL JOINTS, ROUGHEN THE LOWER CONTACT SURFACE WITH ABOUT A 1/4 INCH AMPLITUDE. REMOVE ANY LAITANCE FROM THE HARDENED CONTACT SURFACE AND MAINTAIN A CLEAN CONTACT SURFACE FOR THE ADJOINING POUR.

14.PROTECT AND CURE ALL CONCRETE SURFACES. BEGIN CURING WALLS IMMEDIATELY AFTER STRIPPING FORMS AND FLATWORK IMMEDIATELY AFTER FINISHING.

15.INSTALL AND SECURE EMBEDMENTS SUCH AS ANCHOR BOLTS AND EMBEDMENT PLATES WITHIN SPECIFIED TOLERANCES BEFORE CONCRETE PLACEMENT.

16.DO NOT PLACE CONDUIT OR PIPES IN ANY CONCRETE ELEMENTS INCLUDING SLABS, BEAMS, WALLS OR COLUMNS UNLESS INDICATED IN THE STRUCTURAL DOCUMENTS.

17.CURING OF FORMED SURFACES MUST BE ACHIEVED BY MOISTURE RETAINING MATERIALS OR PLASTIC FILM IF THE FORMS ARE REMOVED BEFORE THE END OF THE CURING PERIOD.

18.BEGIN CURING CONCRETE SLABS IMMEDIATELY AFTER FINISHING. CONCRETE CURING MUST BE ACHIEVED BY MOSITURE RETAINING MATERIALS OR PLASTIC FILM ACI 308R. CURE FOR NOT LESS THAN 10 DAYS.

D. POST-INSTALLED ANCHORS

1. POST-INSTALLED ANCHORS MUST ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS.

2. THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE ENGINEER-OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS.

3. ANCHORAGE TO CONCRETE:

a. MECHANICAL ANCHORS MUST HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.2 AND ICC-ES AC193 FOR CRACKED AND UNCRACKED CONCRETE RECOGNITION.

b. ADHESIVE ANCHORS MUST HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACE 355.4 AND ICC-ES AC 308 FOR CRACKED AND UNCRACKED CONCRETE RECOGNITION.

4. INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.

5. ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.

6. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR MUST REVIEW THE EXISTING STRUCTURAL DRAWINGS AND MUST UNDERTAKE TO LOCATE THE POSITION OF THE

REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS.

7. THE CONTRACTOR MUST TAKE MEASURES TO COORDINATE THE CONSTRUCTION SUCH THAT INTERFERENCE OF EXISTING REINFORCING STEEL WITH PLACEMENT OF NEW ANCHORS (DOWELS, EXPANSION BOLTS, ADHESIVE ANCHORS) DOES NOT OCCUR. IF EXISTING REINFORCING STEEL IS ENCOUNTERED DURING DRILLING, ADJUST THE ANCHOR LOCATION IF POSSIBLE AND NOTIFY THE STRUCTURAL ENGINEER. ABANDONED HOLES MUST BE FILLED WITH GROUT. ANCHORS MUST BE SET WITHIN 3 INCHES OF THEIR SPECIFIED LOCATION, BUT AT LEAST 1 INCH FROM ANY ABANDONED HOLE. CARE MUST BE TAKEN NOT TO BREAK OR DAMAGE REINFORCING STEEL DURING DRILLING, UNLESS OTHERWISE DIRECTED BY THE STRUCTURAL ENGINEER.

E. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS)

1. THE STAIRS MUST CONFORM TO THE REQUIREMENTS OF AESS CATEGORY 2 AS SPECIFIED BY ANSI/AISC 303, SECTION 10.

2. REQUIREMENTS FOR CATEGORY AESS 2:

A. COMPLY WITH OVERALL PROFILE DIMENSIONS OF AWS D1.1/D1.1M FOR WELDED BUILT-UP MEMBERS. KEEP APPEARANCE AND QUALITY OF WELDS CONSISTENT. MAINTAIN TRUE ALIGNMENT OF MEMBERS WITHOUT WARP EXCEEDING SPECIFIED TOLERANCES.

B. PREPARE SURFACES ACCORDING TO PART 2 "SHOP PRIMING" ARTICLE AND SSPC-SP 6 (WAB)/NACE

C. GRIND SHEARED, PUNCHED, AND FLAME-CUT EDGES TO REMOVE BURRS AND PROVIDE SMOOTH SURFACES AND EASED EDGES.

D. MAKE INTERMITTENT WELDS APPEAR CONTINUOUS, USING FILLER OR ADDITIONAL WELDING.

E. SEAL WELD OPEN ENDS OF HOLLOW STRUCTURAL SECTIONS WITH 3/8-INCH CLOSURE PLATES, UNLESS OTHERWISE NOTED

F. LIMIT BUTT AND PLUG WELD PROJECTIONS TO 1/16 INCH.

G. INSTALL BOLT HEADS ON THE SAME SIDE OF EACH CONNECTION AND MAINTAIN ORIENTATION

CONSISTENTLY FROM ONE CONNECTION TO ANOTHER. H. REMOVE WELD SPATTER, SLIVERS, AND SIMILAR SURFACE DISCONTINUITIES.

I. REMOVE BLEMISHES AND SURFACE IRREGULARITIES RESULTING FROM TEMPORARY BRACES OR

FIXTURES BY FILLING OR GRINDING, BEFORE CLEANING, TREATING, AND SHOP PRIMING. J. GRIND TACK WELDS SMOOTH UNLESS INCORPORATED INTO FINAL WELDS.

K. REMOVE BACKING AND RUNOFF TABS, AND GRIND WELDS SMOOTH.

L. LIMIT AS-FABRICATED STRAIGHTNESS TOLERANCE TO ONE-HALF THAT PERMITTED FOR STRUCTURAL-STEEL MATERIALS IN ANSI/AISC 303.

M. LIMIT AS-FABRICATED CURVED STRUCTURAL STEEL TOLERANCE TO THAT PERMITTED FOR STRUCTURAL-STEEL MATERIALS IN ANSI/AISC 303.

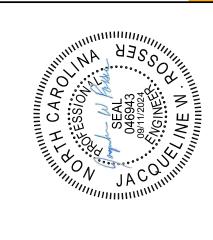
N. LIMIT AS-FABRICATED STRAIGHTNESS TOLERANCE OF WELDED BUILT-UP MEMBERS TO ONE-HALF THAT PERMITTED BY AWS D1.1/D1.1M.

O. CONCEAL FABRICATION AND ERECTION MARKINGS FROM VIEW IN THE COMPLETED STRUCTURE P. MAKE WELDS UNIFORM AND SMOOTH.

ABBREVIATIONS:

@	AT
BP	BASE PLATE
BOTT	BOTTOM
CL	CENTERLINE
CLR	CLEAR
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
DIA	DIAMETER
EQ	EQUIVALENT
EW	EACH WAY
EX	EXISTING
FTG	FOOTING
HORIZ	HORIZONTAL
LLV	LONG LEG VERTICAL
NTS	NOT TO SCALE
PL	PLATE
REINF	REINFORCEMENT
SOG	SLAB ON GRADE
SQ	SQUARE
STL	STEEL
T/	TOP OF
TYP	TYPICAL
VERT	VERTICAL

WITH



IS

COMM NO: 230230

DRAWN: TAG DESIGN: CHECK: SHEET TITLE

STRUCTURAL GENERAL

NOTES

REV. NO.

09/11/2024

S-001

- 1. AN INDEPENDENT AGENCY MUST PERFORM SPECIAL INSPECTIONS PER THE NORTH CAROLINA BUILDING CODE (2018 EDITION) SECTION 1704.2 AND THE INTERNATIONAL BUILDING CODE 2018. IN ACCORDANCE WITH INTERNATIONAL BUILDING CODE SECTION 1704.2.1, THE RESPONSIBLE INSPECTOR MUST MEET THE COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING REQUIREMENTS OF THE STATE WHERE CONSTRUCTION TAKES PLACE. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS SPECIFIED IN SECTION 1110.
- 2. WRITTEN REPORTS MUST BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL STATING COMPLIANCE OR NON-COMPLIANCE WITH DESIGN DOCUMENTS AND SPECIFICATIONS. ALL REPORTS MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE CONSTRUCTION TAKES PLACE.
- 3. WITH REGARDS TO SPECIAL INSPECTIONS:
- A. CONTINUOUS THE CONSTANT MONITORING OF SPECIFIC TASKS BY AN APPROVED SPECIAL INSPECTOR. THESE INSPECTIONS MUST BE CARRIED OUT CONTINUOUSLY OVER THE DURATION OF THE PARTICULAR TASKS.
- B. PERFORM PERFORM THESE TASKS FOR EACH ELEMENT, OCCURANCE, WELD, FASTENER OR BOLTED CONNECTION.
- C. OBSERVE OBSERVE THESE SPECIAL INSPECTION ITEMS ON A PERIODIC DAILY BASIS.
- OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS. D. DOCUMENT MEANS TO DOCUMENT, WITH A REPORT, THAT THE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THIS IS IN ADDITION TO ANY OTHER REPORTS REQUIRED IN THE SPECIAL INSPECTIONS GUIDE SPECIFICATION.
- 4. FAILURE TO RETAIN AN INDEPENDENT TESTING AGENCY TO PERFORM THE REQUIRED SERVICES SPECIFIED ABOVE, OR FAILURE TO SUBMIT SIGNED AND SEALED REPORTS, INDICATES NON-COMPLIANCE WITH THE CONTRACT DOCUMENTS.

STRUCTURAL STEEL - WELDED SECTION

INSPECTION REQ (Y/N) TASK		INSPECTION TYPE	DESCRIPTION					
Υ	VERIFY THAT THE WELDING PROCEDURES SPECIFICATION (WPS) IS AVAILABLE	PERFORM						
Υ	2. VERIFY MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES ARE AVAILABLE	PERFORM						
Υ	3. VERIFY MATERIAL IDENTIFICATION	PERFORM	TYPE AND GRADE					
Υ	4. WELDER IDENTIFICATION SYSTEM	PERFORM	THE FABRICATOR OR ERECTOR, AS APPLICABLE, MUST MAINTAIN A SYSTEM BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED. STAMPS, IF USED SHALL BE THE LOW-STRESS TYPE					
			-JOINT PREPARATION					
			-DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL)					
N	5. FIT-UP GROOVE WELDS (INCLUDING JOINT GEOMETERY)	OBSERVE	-CLEANLINESS (CONDITION OF STEEL SURFACES)					
			-TACKING (TACK WELD QUALITY AND LOCATION)					
			-BACKING TYPE AND FIT (IF APPLICABLE)					
			-DIMENSIONS (ALIGNMENT, GAPS AT ROOT)					
Υ	6. FIT-UP OF FILLET WELDS	OBSERVE	-CLEANLINESS (CONDITION STEEL SURFACES)					
			-TACKING (TACK WELD QUALITY AND LOCATION)					

STEEL INSPECTION DURING WELDED-VERIFT THE FOLLOWING ARE IN COMPLIANCE WITH IBC 1705.2.1, AISC 360-10: TABLE C-N5.4-2								
INSPECTION REQ (Y/N)	TASK INSPECTION		DESCRIPTION					
Υ	7. USE OF QUALIFIED WELDERS	PERFORM	WELDING BY WELDERS, WELDING OPERATORS, AND TACK WELDERS WHO ARE QUALIFIED IN CONFORMANCE WITH REQUIREMENTS					
Y	CONTROL AND HANDLING OF WELDING CONSUMABLES	OBSERVE	-PACKAGING					
			-ELECTRODE ATMOSPHERIC EXPOSURE CONTROL					
Υ	9. NO WELDING OVER CRACKED TACK WELDS	OBSERVE						
Y	10. ENVIRONMENTAL CONDITIONS	OBSERVE	-WIND SPEED WITHIN LIMITS					
1	10. ENVIRONMENTAL CONDITIONS	OBSERVE	-PRECIPITATION AND TEMPERATURE					
	11. WELDING PROCEDURES SPECIFICATIONS FOLLOWED		-SETTINGS ON WELDING EQUIPMENT					
			-TRAVEL SPEED					
			-SELECTED WELDING MATERIALS					
Y		OBSERIVE	-SHIELDING GAS TYPE/FLOW RATE					
· ·			-PREHEAT APPLIED					
			-INTERPASS TEMP MAINTAINED (MIN/MAX)					
			-PROPER POSITION (F, V, H, OH)					
			-INTERMIX OF FILLER MATERIAL AVOIDED					
			-INTERPASS AND FINAL CLEANING					
Υ	12. WELDING TECHNIQUES	OBSERVE	-EACH PASS WITHIN PROFILE LIMITATIONS					
			-EACH PASS MEETS QUALITY REQUIREMENTS					
		1	I .					

			-EACH PASS MEETS QUALITY REQUIREMENTS						
	STEEL INSPECTION AFTER WELDING-VERFIY THE FOLLOWING ARE IN COMPLIANCE WITH IBC 2015 1705.2.1, AISC 360-10: TABLE C-N5.4-3								
INSPECTION REQ (Y/N)	TASK	INSPECTION TYPE	DESCRIPTION						
Y	13. WELDS CLEANED	OBSERVE							
Y	14. SIZE, LENGTH, AND LOCATION OF ALL WELDS	PERFORM	SIZE, LENGTH, AND LOCATION OF ALL WELDS CONFORM TO THE REQUIREMENTS OF THE DETAIL DRAWINGS						
			-CRACK PROHIBITION						
			-WELD/BASE-METAL FUSION						
	15. WELDS MEET VISUAL ACCEPTANCE CRITERIA	PERFORM AND DOCUMENT	-CRATER CROSS SECTION						
Y			-WELD PROFILES						
			-WELD SIZE						
			-UNDERCUT						
			-POROSITY						
Y	16. ARC STRIKES	PERFORM							
N	17. k-AREA	PERFORM	WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS						
Y	18. BACKING REMOVED, WELD TABS REMOVED AND FINISHED, AND FILLET WELDS ADDED WHERE REQUIRED	PERFORM AND DOCUMENT							
Y	19. REPAIR ACTIVITIES	PERFORM AND DOCUMENT							
Y	20. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	PERFORM							

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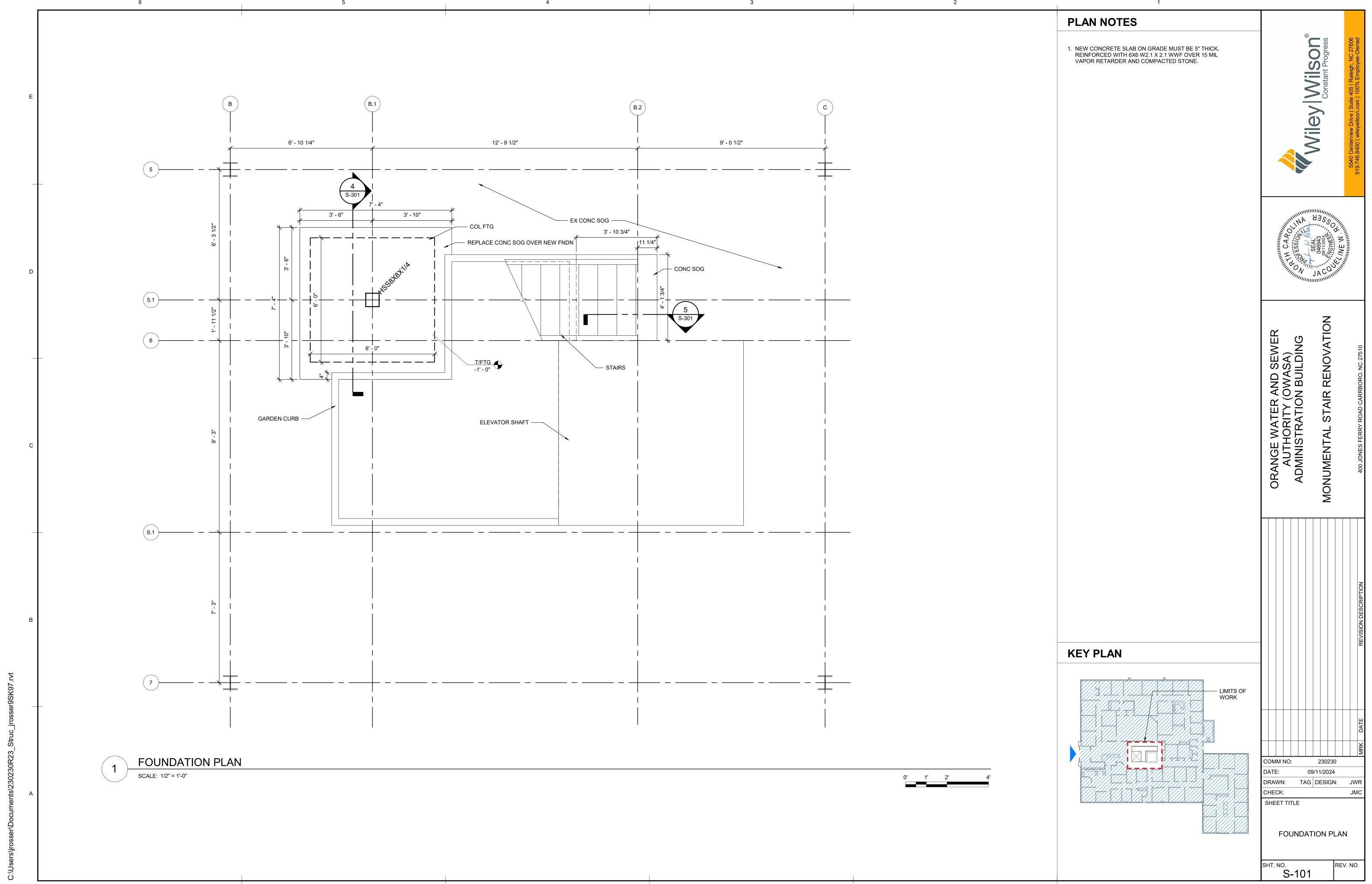
ORANGE WATER AND SEWER AUTHORITY (OWASA) ADMINISTRATION BUILDING

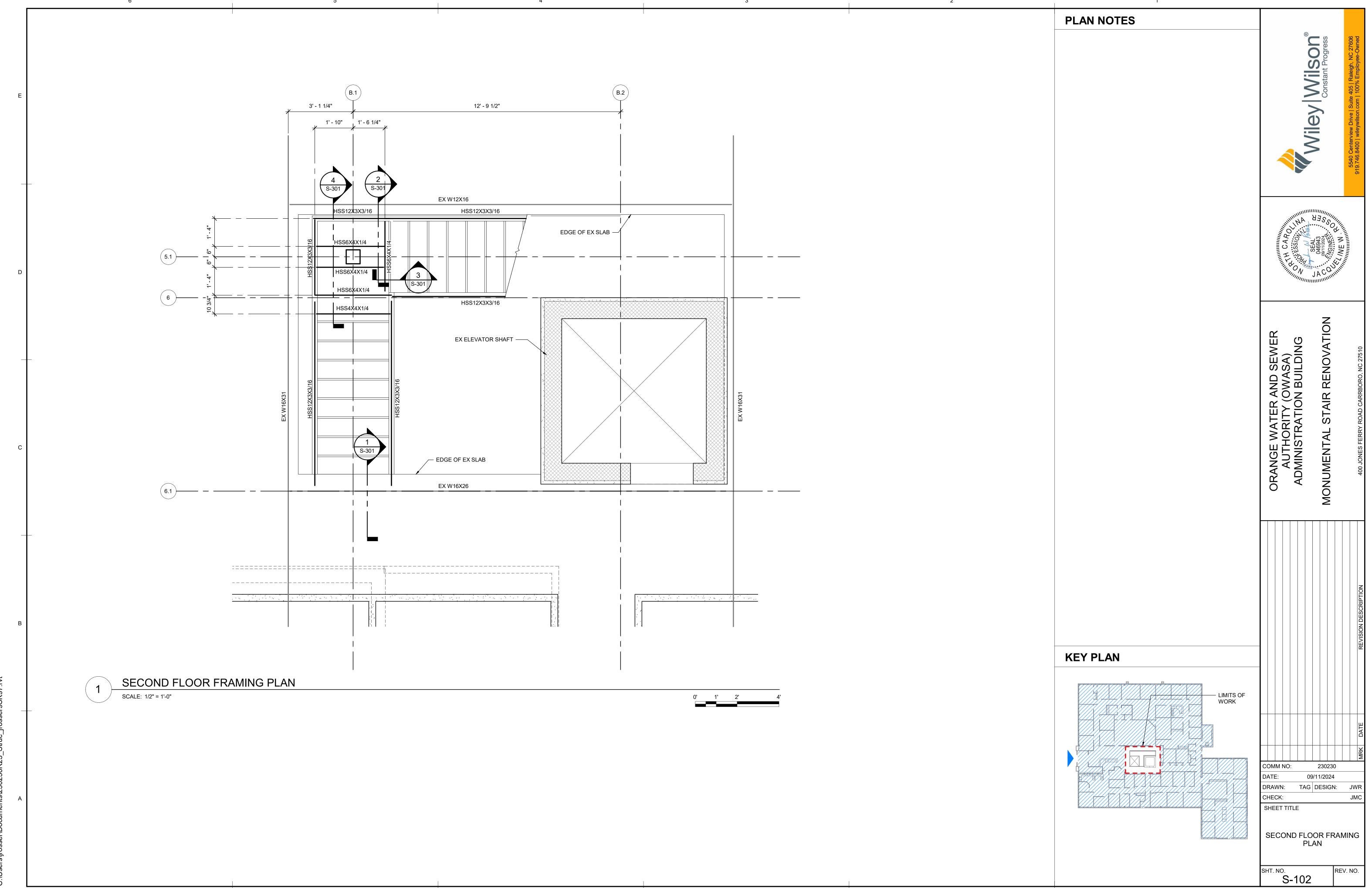
COMM NO: 09/11/2024 DRAWN: TAG DESIGN: JWR

SHEET TITLE

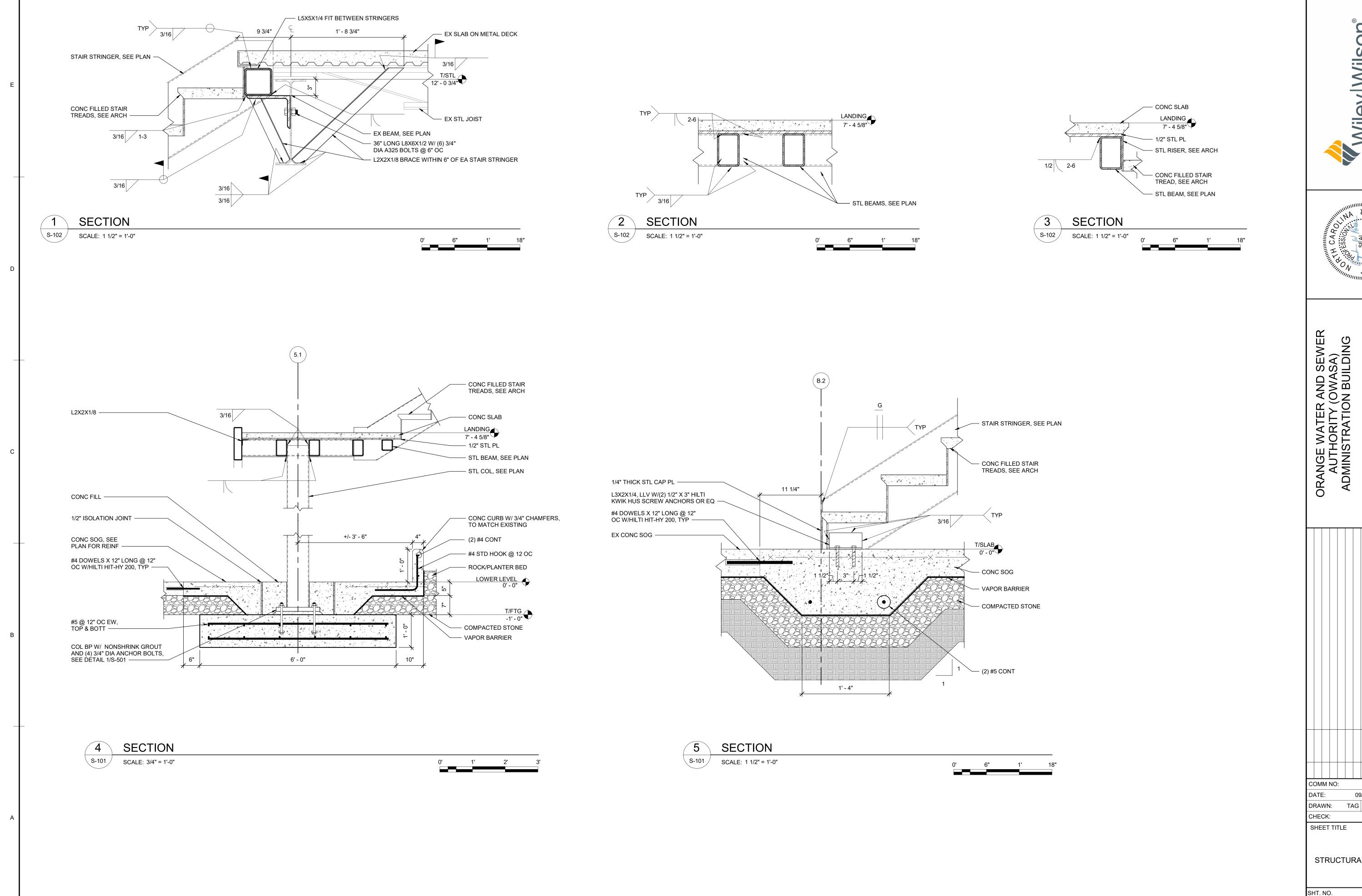
SPECIAL INSPECTIONS

S-002

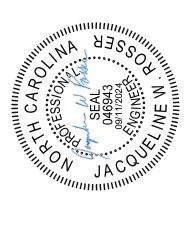




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STRUCTURAL SECTIONS

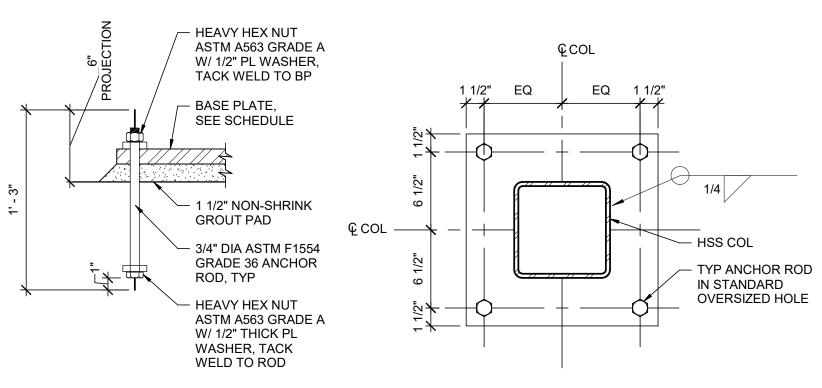
REV. NO. S-301

DRAWN: TAG DESIGN: JWR

SHEET TITLE

TYPICAL STRUCTURAL DETAILS

SHT. NO. S-501



TYP BASE PLATE & ANCHOR ROD DETAIL

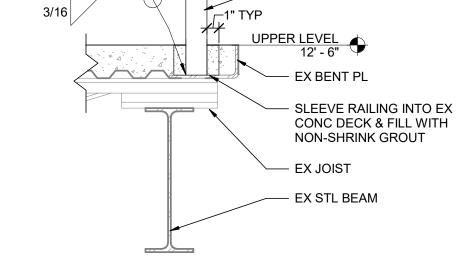
TYPICAL ANCHOR ROD

NOT TO SCALE:

TYPICAL PERIMETER COLUMN BASE PLATE
(SEE SCHEDULE 1)

(SEE SCHEDULE 1)						
BASE PLATE SCHEDULE 1						
COLUMN TYPE	PLATE SIZE					
HSS8X8	1 1/4"X16"X1'-4					

NOT TO SCALE:



RAILING CONNECTION

- RAILING, SEE ARCH

HSS TO HSS CONN

NOT TO SCALE:

REMOVE DEVICES, EQUIPMENT, IN ACCORDANCE

INDICATES DEVICE AND EQUIPMENT STATUS. REFER TO IDENTIFICATION TAG PREFIX DESIGNATOR LIST BELOW.

CIRCUITRY, RACEWAYS AND FEEDERS LEGEND

FEEDER HOMERUN

CONDUIT RUN CONCEALED IN FINISHED AREAS AND EXPOSED IN UNFINISHED AREAS. SEE GENERAL NOTES.

WIRING DEVICES LEGEND

1. REFER TO "TYPICAL DEVICE MOUNTING HEIGHTS" DETAIL FOR DEVICE MOUNTING HEIGHTS.

DUPLEX RECEPTACLE, NEMA 5-20R. RECESSED DEVICE DENOTED AS ROUND HEAD.

LIGHTING EQUIPMENT LEGEND

EMERGENCY & EXIT LIGHTING SYMBOLS

LUMINAIRES TAGGED WITH #E (EXAMPLE: AE) INDICATE EMERGENCY EGRESS AND DISCHARGE LIGHTING. SPECIFIC

EMERGENCY LIGHTING BATTERY UNIT WITH DUAL HEADS. UNIT SHALL PROVIDE 90 MINUTES (MINIMUM) OF EMERGENCY

MOUNTED

ILLUMINATED EXIT SIGN
TWO SHADED QUADRANT = DOUBLE FACE EXIT SIGN

EXIT SIGN WITH INTEGRAL LIGHTING

REFER TO LUMINAIRE SCHEDULE FOR ADDITIONAL INFORMATION.

LIGHTING GENERAL NOTES

- 1. SEE LUMINAIRE SCHEDULES, LIGHTING CONTROL DIAGRAMS, AND SEQUENCE OF OPERATIONS FOR MORE INFORMATION.
- 2. COORDINATE PLACEMENT OF LUMINAIRES ON AND IN CEILINGS WITH ARCHITECTURAL CEILING PLANS AND ALL OTHER CEILING MOUNTED DEVICES FROM OTHER TRADES.
- 3. SUPPORT LUMINAIRES FROM THE BUILDING STRUCTURE INDEPENDENT OF DUCTS, PIPES, CEILINGS AND THEIR SUPPORT MEMBERS. COORDINATE ALL ELECTRICAL EQUIPMENT WITH ALL OTHER TRADES TO AVOID CONFLICTS. PROVIDE ALL NECESSARY FITTINGS, STRUT CHANNELS, EQUIPMENT, HANGERS, OFFSETS, ROUTING, ETC. TO AVOID CONFLICTS.
- 4. INSTALL DRIVERS, LOW-VOLTAGE TRANSFORMERS, LIGHTING SYSTEM CONTROL DEVICES, AND SIMILAR LUMINAIRES ACCESSORIES IN ACCESSIBLE LOCATION. PROVIDE ACCESS PANELS AS REQUIRED.
- 5. PROVIDE ALL ACCESSORIES INCLUDING LED ARRAYS, DRIVERS, TRANSFORMERS, SUPPORTS, AND CIRCUITRY AS NECESSARY FOR A COMPLETE AND OPERATIONAL LIGHTING SYSTEM PER PROJECT REQUIREMENTS.
- 6. PROVIDE A SEPARATE NEUTRAL FOR EACH SINGLE PHASE LIGHTING CIRCUIT. SHARED NEUTRALS ARE NOT PERMITTED.
- 7. PROVIDE PLENUM RATED LIGHTING CONTROL CABLES FOR LIGHTING CONTROL DEVICES LOCATED ABOVE CEILINGS NOT ROUTED IN
- 8. ENSURE DIMMING DRIVER COMPATIBILITY WITH ASSOCIATED DIMMING CONTROL DEVICES AND ANY BUILDING LIGHTING CONTROL
- 9. PROVIDE CONTROLLED EGRESS LIFE SAFETY LIGHTING WITH A UL924 LISTED BY-PASS RELAY DEVICE TO TRANSFER LIFE-SAFETY LIGHTING FROM CONTROLLED NORMAL POWER TO LIFE SAFETY POWER OR A UL924 LISTED SHUNT DEVICE TO TRANSITION CONTROLLED LIFE SAFETY LIGHTING TO FULL OUTPUT.
- 10. CONNECT EXIT SIGNS AND EMERGENCY LIGHTING UNITS AHEAD OF LOCAL SWITCHING.

				LUMINAIRE SCH	IEDULE								
TYPE MARK	DESCRIPTION	MANUFACTURER	MODEL	LAMP	LUMENS	EMERGENCY LUMENS	VOLTAGE	WATTAGE	DRIVER	CRI	CCT	MOUNTING	COMMENTS
(E1)	EXISTING EXIT SIGN			LED			120 V	5 VA				CEILING MOUNT	EXISTING LUMINAIRE TO REMAIN.
(E2)	EXISTING AMBIENT DOWNLIGHTS			LED			120 V	12 VA		80	4100 K	RECESSED	EXISTING LUMINAIRE TO REMAIN.
(E3)	EXISTING EXIT SIGN WITH EMERGENCY LUMINAIRES	Cooper Lighting		LED								CEILING MOUNT	EXISTING LUMINAIRE TO REMAIN.
(E)	EXISTING WALL MOUNT CYLINDER AT SKYLIGHT LEVEL						120 V					WALL MOUNT	EXISTING LUMINAIRE TO REMAIN.
(R)	UNDERSIDE OF STAIR GROW LIGHT						120 V					WALL MOUNT	EXISTING LUMINAIRE TO BE REMOVED AND STORED FOR REINSTALLATION IN NEW SCOPE OF WORK.
AE	SELF ENCLOSED EMERGENCY LUMINAIRE WITH SELF DIAGNOSTICS AND SELF TESTING. NOMINAL 11-INCH LONG BY 5.5-INCH TALL BY 1.75-INCH DEEP THERMOPLASTIC HOUSING. WHITE FINISH.	SURE-LITES LITHONIA HOLOPHANE	SEL25	LED		108	120 V	1 VA				WALL MOUNT	LUMINAIRE TO BE NORMALLY OFF AND TO PROVIDE FULL LUMEN OUTPUT WHEN NORMAL POWER IS LOST.
AE1	SELF ENCLOSED EMERGENCY LUMINAIRE WITH SELF DIAGNOSTICS AND SELF TESTING. NOMINAL 11-INCH LONG BY 5.5-INCH TALL BY 1.75-INCH DEEP THERMOPLASTIC HOUSING. WHITE FINISH.	SURE-LITES LITHONIA HOLOPHANE	SEL25	LED		108	120 V	1 VA				CEILING MOUNT	LUMINAIRE TO BE NORMALLY OFF AND TO PROVIDE FULL LUMEN OUTPUT WHEN NORMAL POWER IS LOST.

GENERAL SHEET NOTES Wiley | Wilson © Constant Progress **#** SHEET KEYNOTES **KEY PLAN** - LIMITS OF WORK COMM NO: 230230 09/11/2024 DRAWN: DPO DESIGN: CHECK: SHEET TITLE **GRAPHIC SCALE(S)** ELECTRICAL LEGENDS AND SYMBOLS SHT. NO. REV. NO. E-001

- 2. SYMBOLS SHOWN IN THE LEGENDS ARE STANDARD SYMBOLS AND ALL MAY NOT NECESSARILY BE APPLICABLE TO THIS PROJECT.
- 3. CIRCUIT NUMBERS ARE FOR IDENTIFICATION PURPOSES ONLY. CORRECTLY SPACE THE CIRCUITS IN THE PANEL AND BALANCE THE LOAD ON THE PHASES UNDER NORMAL OPERATING CONDITIONS.
- 4. CONDUIT HOMERUNS SHOWN ON THE DRAWING WITH MORE THAN 3 CURRENT CARRYING CONDUCTORS ARE SHOWN DIAGRAMMATICALLY. INSTALL NO MORE THAN 3 CURRENT CARRYING CONDUCTORS IN A RACEWAY UNLESS DONE SO STRICTLY IN COMPLIANCE OF THE NATIONAL ELECTRIC CODE.
- 5. REVIEW ENTIRE CONSTRUCTION DOCUMENTS PACKAGE AND COORDINATE WORK OF OTHER TRADES. COORDINATE LOCATIONS OF EQUIPMENT, MOUNTING HEIGHTS, CONNECTION REQUIREMENTS, CONSTRUCTION HEADROOM, FINISHES, CASEWORK, ETC.
- ALL WORK SHALL BE DONE AT SUCH TIMES AND IN SUCH A MANNER AS WILL LEAST INTERFERE WITH THE MAINTENANCE AND
 OPERATION OF ALL RELATED OR AFFECTED SYSTEMS. COORDINATE ALL POWER OUTAGES, FIRE ALARM SHUT DOWNS, ETC. WITH THE
 OWNER.
- 7. INSTALL ALL EQUIPMENT, DEVICES, AND CONDUIT IN A NEAT AND WORKMANLIKE MANNER PERPENDICULAR AND PARALLEL TO BUILDING STRUCTURE
- 8. FIRESTOP ALL PENETRATIONS OF FLOOR AND WALLS TO RETAIN ORIGINAL FIRE RATING IN ACCORDANCE WITH IBC, NEC, NFPA AND OTHER STANDARDS ENFORCEABLE BY THE AHJ. REFER TO ARCHITECTURAL LIFE SAFETY PLANS FOR LOCATIONS OF ALL RATED WALLS, CEILINGS AND FLOORS.
- 9. REFER TO ARCHITECTURAL PLANS FOR ALL WALL ASSEMBLIES. PROVIDE EXTENDER RINGS WHERE NECESSARY FOR FLUSH MOUNTED WIRING DEVICES.
- 10. PROVIDE ALL RACEWAYS ROUTED ACROSS BUILDING EXPANSION JOINTS WITH EXPANSION FITTINGS.
- 11. CONCEAL ALL CONDUCTORS, RACEWAYS AND CABLES IN CEILING OR WALL UNLESS OTHERWISE NOTED.
- 12. PROVIDE AN UPDATED PRINTED PANEL DIRECTORY IN EACH PANEL AFTER COMPLETION OF WORK.
- 13. VERIFY THAT ALL DOOR SWINGS ARE CORRECT BEFORE INSTALLING LIGHT SWITCH OUTLETS.
- 14. PROVIDE ALL STUBBED UP CONDUIT WITH BUSHINGS TO PROTECT CABLE
- 15. ROUTE CONTROL WIRING IN SEPARATE CONDUITS FROM POWER WIRING.
- 16. INSTALL CONDUCTORS CONTINUOUS BETWEEN DEVICES, WITH SPLICES LOCATED ONLY IN JUNCTION BOXES OR IN CABINETS. CONDUCTORS SHALL BE OF SUFFICIENT LENGTH TO REACH THE FARTHEST TERMINAL IN PANELS. PROVIDE A MINIMUM OF 6" LOOPS WHERE CONNECTIONS OR TAPS ARE TO BE MADE IN BRANCH CIRCUIT WIRING.
- 17. PROVIDE ALL EMPTY CONDUIT RUNS IN EXCESS OF 10 FT. WITH A NYLON PULL WIRE OR FISH TAPE/CORD.
- 18. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

- 19. PROVIDE ELECTRICAL DEVICES AND BACKBOXES INSTALLED WITHIN STC RATED ASSEMBLIES OF 45 AND ABOVE ACOUSTICAL PUTTY MATCHING THE RATING OF THE ASSEMBLY. REFER TO ARCHITECTURAL PLANS AND DRAWING A-610 FOR LOCATIONS OF ALL RATED WALLS, CEILINGS AND FLOORS. SEE DETAIL E6 ON SHEET E-501.
- 20. VERIFY ELECTRICAL REQUIREMENTS OF OWNER PROVIDED EQUIPMENT WITH OWNER PRIOR TO INSTALLATION OF WORK.
- 21. REFER TO ARCHITECTURAL DRAWINGS FOR REFLECTED CEILING PLAN AND EXACT LOCATION AND QUANTITIES OF LUMINAIRES. ELECTRICAL LIGHTING PLANS ARE NOT INTENDED TO BE UTILIZED FOR LUMINAIRE LOCATIONS. BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR CLARIFICATION.
- 22. SUPPORT LUMINAIRES INSTALLED IN SUSPENDED CEILINGS DIRECTLY FROM THE STRUCTURE.
- 23. LABEL ALL ELECTRICAL J-BOXES WITH: PANEL NAME, CIRCUIT NUMBER, VOLTAGE, AND (IF APPLICABLE) EQUIPMENT SERVED.
- 24. ORIENT RECEPTACLES AS FOLLOWS:
- a. MOUNTED VERTICALLY, GROUND CONDUCTOR IS ON TOP.b. MOUNTED HORIZONTALLY, GROUNDED CONDUCTOR (NEUTRAL) IS ON TOP.
- 25. LABEL ALL CURRENT CARRYING CONDUCTORS, WHERE SPLICED OR TERMINATED AT A DEVICE, WITH THE CIRCUIT NUMBER A MINIMUM OF 3 INCHES BEFORE END OF WIRE.
- 26. PERFORM ALL ELECTRICAL WORK IN ACCORDANCE WITH NFPA 70 2023 NATIONAL ELECTRICAL CODE (NEC), LOCAL CODES, AND THE AUTHORITY HAVING JURISDICTION (AHJ). PROVIDE ALL EQUIPMENT, DEVICES, AND MATERIAL WITH UNDERWRITERS LABORATORIES FOR ITS APPLICATION AS INSTALLED AND THE UL LABEL.
- 27. OBTAIN ALL PERMITS AND PAY SUCH FEES AS MAY BE NECESSARY FOR INSPECTIONS, TESTS, AND OTHER SERVICES WHICH ARE REQUIRED FOR THE COMPLETION OF THE WORK.
- 28. VISIT THE SITE AND EXAMINE CONDITIONS OF THE PREMISES AND THE CHARACTER AND EXTENT OF WORK REQUIRED PRIOR TO SUBMISSION OF BIDS. BRING ANY DIFFICULTIES IN COMPLYING WITH THE DRAWINGS AND SPECIFICATIONS TO THE ATTENTION OF ARCHITECT/ENGINEER BEFORE BIDDING.
- 29. SUBMIT REQUIRED SHOP DRAWINGS FOR ELECTRICAL EQUIPMENT, FIXTURES, DEVICES AND MATERIALS FOR APPROVAL BEFORE DELIVERY TO THE JOB SITE. EQUIPMENT, LUMINAIRES, DEVICES, AND MATERIAL DELIVERED TO THE JOB SITE OR INSTALLED PRIOR TO APPROVAL OF THE SHOP DRAWINGS, AND FOR WHICH THE SHOP DRAWINGS ARE SUBSEQUENTLY REJECTED, REPLACE WITH AN APPROVED ITEM AT NO ADDITIONAL COST TO THE OWNER.
- 30. PROVIDE AS BUILT DRAWINGS AND ALL MANUFACTURER'S DATA AND WARRANTY LITERATURE AT THE COMPLETION OF THE CONTRACT
- 31. GUARANTEE WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY OWNER.
- 32. LABEL DEVICE FINISH PLATES (RECEPTACLES AND SWITCHES) WITH PANEL NAME AND CIRCUIT NUMBER ON CLEAR TAPE WITH BLACK TEXT.
- 33. CLEAN ALL FACEPLATES AND LUMINAIRES TO REMOVE ALL SMUDGES AND FINGERPRINTS PRIOR TO SUBSTANTIAL COMPLETION.
- 34. EXISTING CONDITIONS ARE BASED ON LIMITED AVAILABLE RECORD DRAWINGS AND SITE INVESTIGATION. CONTRACTOR TO FIELD VERIFY ALL APPLICABLE EXISTING CONDITIONS PRIOR TO DEMOLITION.

ELECTRICAL DEMOLITION NOTES

- 1. PERFORM DEMOLITION IN PHASES WHERE INDICATED OR REQUIRED. PROVIDE TEMPORARY SERVICES TO AFFECTED SYSTEMS FROM SOURCES OUTSIDE AFFECTED AREA TO MAINTAIN SERVICE WHERE REQUIRED.
- 2. VISIT THE PROJECT LOCATION AND FIELD-VERIFY THE EXISTING CONDITIONS PRIOR TO BEGINNING WORK. FAILURE BY THE CONTRACTOR TO HAVE ACQUAINTED THEMSELVES WITH AVAILABLE INFORMATION CONCERNING EXISTING CONDITIONS, INCLUDING EXISTING DRAWINGS, DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITIES OF PERFORMANCE OF WORK IN ACCORDANCE WITH REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- 3. COORDINATE DEMOLITION WORK WITH THE OWNER OR THE OWNER'S REPRESENTATIVE AND DO NOT INTERFERE WITH ACTIVITIES IN OTHER BUILDING AREAS. PROMPTLY REMOVE AND DISPOSE OF DEMOLISHED MATERIALS, UNLESS SPECIFICALLY INDICATED TO REMAIN OR BE TURNED OVER TO THE OWNER, PARTICULARLY MATERIALS CONTAINING HAZARDOUS MATERIALS SUCH AS LAMPS CONTAINING MERCURY OR TRANSFORMERS CONTAINING PCB'S. COORDINATE APPROPRIATE STAGING AREA WITH THE OWNER. COORDINATE WITH OWNER FOR OWNER-REMOVAL OF PROPERTY FROM THE PROJECT LOCATION.
- 4. COORDINATE ALL DEMOLITION WORK WITH THE HAZMAT ABATEMENT/MITIGATION WORK. REMOVE ELECTRICAL WORK WHICH MUST BE REMOVED PRIOR TO ABATEMENT ACTIVITIES TO ACCOMMODATE THE ABATEMENT IN A MANNER SO THAT THE HAZARDOUS MATERIALS ARE NOT DISTURBED. EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO:
- a. WHERE HANGERS/SUPPORTS ARE INSTALLED ON ASBESTOS-COATED STRUCTURE, EQUIPMENT OR CIRCUITRY MAY BE REMOVED PRIOR TO ABATEMENT; HOWEVER THE HANGERS/SUPPORTS TO REMAIN FOR REMOVAL DURING ABATEMENT.
- b. WHERE CIRCUITRY PASSES THROUGH ASBESTOS-COATED STRUCTURE, THE ASSOCIATED CONDUIT MAY BE REMOVED TO WITHIN 6" OF THE PENETRATION PRIOR TO ABATEMENT. REMOVE THE REMAINDER OF THE CONDUIT DURING ABATEMENT AND PERFORM WALL
- 5. REPAIR DAMAGE TO THE BUILDING AREAS IDENTIFIED TO REMAIN WHICH OCCURS DURING THE COURSE OF THE DEMOLITION. REPAIR TO MATCH SURROUNDING SURFACES.
- 6. COORDINATE SHUTDOWNS OR SERVICE INTERRUPTIONS WITH AND APPROVED BY THE OWNER. PROVIDE NOTICE AND WORK PLAN FOR APPROVAL A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO SHUTDOWN OR SERVICE INTERRUPTION.
- 7. PROVIDE TEMPORARY POWER FOR EQUIPMENT REQUIRED TO REMAIN OPERATIONAL FOR THE PRESERVATION OF THE BUILDING. EXISTING ELECTRICAL WORK ASSOCIATED WITH SUCH EQUIPMENT TO REMAIN UNTIL REPLACEMENT EQUIPMENT IS OPERATIONAL.
- 8. COORDINATE ELECTRICAL DEMOLITION WORK WITH WORK OF OTHER TRADES. SEE ARCHITECTURAL, STRUCTURAL, CIVIL, MECHANICAL PLUMBING AND FIRE PROTECTION FOR RELATED WORK.
- 9. PROTECT ALL EXISTING EQUIPMENT AND SYSTEMS INDICATED TO REMAIN WITHIN THE PROJECT AREA. DEMONSTRATE FUNCTIONALITY DURING TESTING OF THE NEW SYSTEMS.
- 10. PERFORM DEMOLITION IN PHASES WHERE INDICATED OR REQUIRED. PROVIDE TEMPORARY SERVICES TO AFFECTED SYSTEMS FROM SOURCES OUTSIDE AFFECTED AREA TO MAINTAIN SERVICE WHERE REQUIRED.

- 11. WHERE TEMPORARY REMOVAL OF WORK IS REQUIRED TO ACCOMMODATE WORK OF THIS OR OTHER TRADES, REMOVE AND STORE ELECTRICAL/TECHNOLOGY ITEMS IN THE PATH OF WORK. REINSTALL AND RECONNECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND/OR AS DIRECTED AFTER COMPLETION OF THE WORK IN THE AREA. PROVIDE TEMPORARY SERVICES SUCH AS EGRESS LIGHTING AND EXIT SIGNAGE AND ASSOCIATED CIRCUITRY TO AN UNAFFECTED APPROPRIATE POWER SOURCE WHERE THE WORK AREA MUST BE MAINTAINED OPEN FOR EGRESS.
- 12. WHERE CEILINGS ARE REMOVED TEMPORARILY FOR ABOVE-CEILING WORK, REMOVE/STORE OR TEMPORARILY SUPPORT CEILING-MOUNTED DEVICES/EQUIPMENT IN PLACE. REINSTALL AND RECONNECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND/OR AS DIRECTED AFTER COMPLETION OF THE WORK IN THE AREA.
- 13. REMOVE EACH EQUIPMENT ITEM, DEVICES, AND FIXTURES INDICATED ON DEMOLITION PLANS. REMOVE ALL ASSOCIATED CIRCUITRY BACK TO THE PROTECTIVE DEVICE IN THE PANEL, SWITCHBOARD, OR CONTROLLER, EXCEPT AS OTHERWISE INDICATED. REMOVE ALL SIGNAL CABLING BACK TO THE SOURCE EQUIPMENT, RACK OR BACKBOARD.
- a. ASSOCIATED CIRCUITRY IS DEFINED TO INCLUDE ALL RACEWAYS, CONDUCTORS, BOXES, WIRING DEVICES, WALL PLATES, LAMPS, FIXTURES, SWITCHES, STARTERS, SUPPORTS, ETC. WHICH ARE ASSOCIATED WITH THE ITEM TO BE REMOVED.
- b. THE PROTECTIVE DEVICE REMAINS AS AN INTEGRAL PART OF THE EXISTING PANEL OR SWITCHBOARD. LABEL AS SPARE OR USE FOR NEW CIRCUITS AS INDICATED.
- c. TECHNOLOGY HEADEND EQUIPMENT TO REMAINS IN SERVICE UNLESS INDICATED FOR DEMOLITION.
- d. WHERE CONDUIT ASSOCIATED WITH AN ITEM TO BE REMOVED IS IN AN INACCESSIBLE AREA, SUCH AS WHERE ENCASED IN CONCRETE, ABANDON ONLY THE INACCESSIBLE CONDUIT IN PLACE, UNLESS INDICATED TO BE REUSED. REMOVE ALL CONDUCTORS AND CUT CONDUIT OFF FLUSH, THEN SEAL OR CAP.
- e. WHERE SUCH INACCESSIBLE CONDUIT ENDS OR MUST BE TERMINATED IN FINISHED SPACE, REMOVE THE CONDUIT OR BOX TO BELOW THE FINISHED SURFACE OF WALL, CEILING OR FLOOR, FILL VOID WITH NON-SHRINKING GROUT AND FINISH TO MATCH SURROUNDING SURFACES.
- 14. WHERE A PORTION OF A CIRCUIT'S LOAD IS SCHEDULED TO BE REMOVED, REMOVE ONLY THAT PORTION ASSOCIATED WITH THE DEMOLISHED DEVICE TO A POINT WHERE THE REMAINING LOAD IS ACTIVE; MAINTAIN IN A GOOD OPERATING CONDITION.
- 15. WHERE EXTENSION OF AN EXISTING CIRCUIT IS REQUIRED TO MAINTAIN SERVICE, RUN CONDUIT AND WIRE AS INDICATED FROM THE CIRCUIT'S EXISTING LOCATION TO ITS NEW LOCATION.
- 16. WHERE AN ITEM OF EQUIPMENT IS INDICATED TO BE REMOVED AND RELOCATED, REMOVE ANY CIRCUITRY, SWITCHES, DEVICES, ETC. ASSOCIATED WITH THE EQUIPMENT. RELOCATE THE EQUIPMENT TO THE NEW LOCATION AND PROVIDE CONNECTION OF ALL ASSOCIATED ITEMS TO NEW OR EXTENDED CIRCUITRY AS INDICATED.

ELECTRICAL ABBREVIATIONS

ADDDE #ATION	ELECTRICAL ABBREVIATIONS
ABBREVIATION ACSR	DEFINITION ALUMINUM CONDUCTOR STEEL REINFORCED
AF	AMPERE FRAME OR AMPERE FUSE
AFD	ADJUSTABLE FREQUENCY MOTOR DRIVE UNIT
AFF AFG	ABOVE FINISHED FLOOR ABOVE FINISHED GRADE
AFG AS	AMPERE SWITCH
AT	AMPERE TRIP OR AIR TERMINAL
AWG	AMERICAN WIRE GUAGE
B, CB, CKT BKR BAS	CIRCUIT BREAKER BUILDING AUTOMATION SYSTEM
BFG	BELOW FINISHED GRADE
BMGB	MAIN BUILDING GROUND BUSBAR
C CATV	CONDUIT CABLE TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
COMM DDC	COMMUNICATIONS DIRECT DIGITAL CONTROLS
DISC SW	DISCONNECT SWITCH
DS	DISCONNECT SWITCH OR DISTRIBUTION SECTION
E OR EXIST.	EXISTING
EGB EM	EQUIPMENT GROUND BUSBAR EMERGENCY
EPO	EMERGENCY POWER OFF
FTL	FEED THRU LUGS
FUS FVNR	FUSE FULL VOLTAGE NON-REVERSING
G	GROUND
GF, GFI	GROUND FAULT CIRCUIT INTERRUPTER
GFCI, (OFCI)	GOVERNMENT (OWNER) FURNISHED CONTRACTOR INSTALLED
GFGI, (OFOI) GP	GOVERNMENT (OWNER) FURNISHED GOVERNMENT (OWNER) INSTALLED GENERAL PURPOSE
HP	HORSE POWER
J, JB	JUNCTION BOX
KV KVA	KILOVOLTS KILOVOLT AMPERES
KW	KILOWATTS
LAN	LOCAL AREA NETWORK
LED LPS	LIGHT EMITTING DIODE LIGHTNING PROTECTION SYSTEM
M	MAIN OR METER
MB, MCB	MAIN CIRCUIT BREAKER
MCCB MLO	MOLDED CASE CIRCUIT BREAKER MAIN LUGS ONLY
MS	MAGNETIC STARTER
MSWBD	MAIN SWITCHBOARD
MTD MTR	MOUNTED METER
N N	NEUTRAL
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NETA NF	NATIONAL ELECTRICAL TESTING ASSOCIATION NON-FUSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
O.C. OS	ON CENTER OCCUPANCY SENSOR
P	POLE OR PRIMARY
PBD	PANELBOARD
PC PH	PHOTOELECTRIC CELL PHASE
PVC	POLYVINYL CHLORIDE
PWR	POWER
R PORT OR REORT	RELOCATE
RCPT OR RECPT S	RECEPTACLE SECONDARY OR SURFACE WALL MOUNTED
SC	SHORT CIRCUIT
SCC	SHORT CIRCUIT CURRENT
SPD ST	TRANSIENT VOLTAGE SURGE PROTECTIVE DEVICE SHUNT TRIP CIRCUIT BREAKER
SW	SWITCH
SYM	SYMMETRICAL
TMGB	TELECOM MAIN GROUND BUSBAR COMMUNICATIONS ROOM
TR TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
V VFD	VOLTS VARIABLE FREQUENCY DRIVE
W	WIRE OR WATT
WP	WEATHERPROOF IN USE
XFMR OR T XMTR	TRANSFORMER TRANSMITTER
/\!V! ! ! \	110 WOMITTER
Υ	WYE CONNECTED

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ANGE WATER AND SEWER AUTHORITY (OWASA) OMINISTRATION BUILDING IMENTAL STAIR RENOVATION

KEY PLAN

LIMITS OF WORK

COMM NO: 230230

DATE: 09/11/2024

GRAPHIC SCALE(S)

ELECTRICAL GENERAL NOTES AND ABBREVIATIONS

REV. NO.

DPO DESIGN:

E-002

DRAWN:

HECK:

SHEET TITLE

3

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