

# TULSA METROPOLITAN UTILITY AUTHORITY

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175 E. 2<sup>nd</sup> Street

TULSA, OKLAHOMA 74103

February 17, 2025

**ADDENDUM NO. 1  
TO  
HAIKEY CREEK OPERATION AND MAINTENANCE  
CAPITAL EQUIPMENT REPLACEMENTS  
RMUA PROJECT NO. WPC 25-2  
BAMA PROJECT NO. 2354170**

This Addendum No. 1, consisting of four (2) items is hereby made a part of the Contract Documents to the same extent as though it were originally included therein, and shall supersede anything contained in the Plans and Specifications with which it might conflict. **All addenda to the contract documents should be denoted on the last page of the Proposal in the space provided.**

All other provisions of the Plans and Specifications shall remain in full force and effect.

**CITY OF TULSA WATER AND SEWER DEPARTMENT**

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Cindy Cantero  
Water Pollution Control Section Manager



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**ENGINEERS**

**ADDENDUM NO. 1**  
**February 14, 2025**

**HAIKEY CREEK OPERATION & MAINTENANCE**  
**CAPITAL EQUIPMENT REPLACEMENTS**  
**RMUA PROJECT NO. WPC 25-2**  
**BAMA PROJECT NO. 2354170**

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This Addendum No. 1, consisting of two (2) items is hereby made a part of the Contract Documents to the same extent as though it were originally included therein, and shall supersede anything contained in the Plans and Specifications with which it might conflict. **All addenda to the contract documents should be denoted on the last page of the Proposal in the space provided.**

**CONSTRUCTION DRAWINGS:**

1. REFER TO DRAWING INDEX OF SHEETS & GENERAL NOTES & LOCATION MAP (SHEET 2):

a. Add Note #10 with the following:

“Contractor shall be aware of the workspace safety requirements in all areas of work and provide necessary safety equipment, work plans and methods as required to complete the work. It is the Contractors obligation to provide any classified space and confined space requirements necessary to complete the work.”

2. INCLUDE THE ATTACHED DRAWINGS MARKED ADDENDUM #1:

a. ELECTRICAL LEGEND (SHEET E1).

b. DRAWING 203.800 (SHEET E2) – ELECTRICAL OPERATOINS BUILDING LIGHTING

c. DRAWING SHEET 203.200 (SHEET E3) OPERATIONS LABORATORY & OPERATIONS ROOM REMODEL ELECTRICAL AND MECHANICAL PLAN.

HOLLOWAY, UPDIKE AND BELLEN, INC.



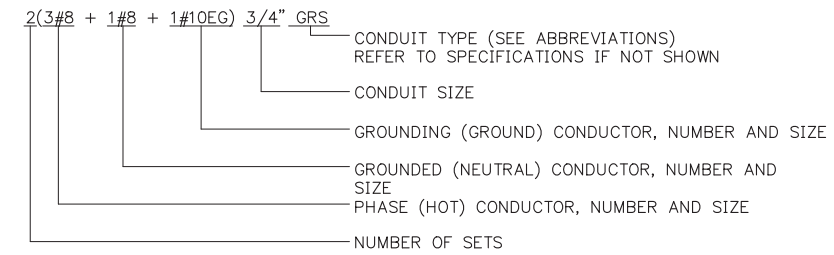
*[Handwritten signature]*  
Stephen Tolar, P.E., S.E.  
President

END ADDENDUM NO. 1

**POWER, LIGHTING & SYSTEM LEGEND**

	UNDER CABINET LIGHT FIXTURE
	1x4 FLUORESCENT LIGHT
	2x4 FLUORESCENT LIGHT
	FLUORESCENT LIGHT WITH EMERGENCY LIGHT (EL) BATTERY 1400 LUMENS MINIMUM FOR 2 LAMPS
	2x2 FLUORESCENT LIGHT
	RECESSED LIGHT, UNLESS OTHERWISE SHOWN
	WALL MOUNTED LIGHT—MOUNTING HEIGHT AS INDICATED
	LED EXIT LIGHT, CEILING MOUNTED OR AS INDICATED, DARKENED AREA INDICATES FACE, ARROWS INDICATE DIRECTION OF EGRESS
	EMERGENCY EXIT LIGHT, WALL MOUNT 7'-6" A.F.F. OR AS NOTED
	4 FT. STRIP FLUORESCENT LIGHT
	LIGHT SWITCH, MTD. 4'-0" A.F.F.
	LIGHT SWITCH, 2 POLE, MTD 4'-0" A.F.F.
	LIGHT SWITCH, 3-WAY, MTD. 4'-0" A.F.F.
	LIGHT SWITCH, 4-WAY, MTD. 4'-0" A.F.F.
	LIGHT SWITCH WITH PILOT LIGHT, MTD. 4'-0" A.F.F.
	20 AMP DUPLEX RECEPTACLE MTD. HORIZ. 6" ABOVE COUNTER TOP UNLESS OTHERWISE SHOWN
	20 AMP DUPLEX RECEPTACLE MTD. 18" A.F.F., WITH #12 GROUND WIRE, GFCI INDICATES GROUND FAULT CIRCUIT INTERRUPTER, WP INDICATES WEATHERPROOF WHILE IN USE ENCLOSURE AND COVER
	SINGLE RECEPTACLE, RATINGS AS NOTED
	HP RATED TOGGLE SWITCH, 1 OR 2 POLES AS REQUIRED W/OVERLOADS
	NON-FUSED DISCONNECT SWITCH, SIZE AS NOTED
	COMBINATION DISCONNECT AND MOTOR STARTER, SIZE AS NOTED. FUSED TYPE SHOWN.
	FUSED DISCONNECT SWITCH, SIZE AS NOTED
	PUSHBUTTON STATION, NEMA 4X
	ELECTRICAL PANEL, SURFACE MOUNTED, 5'-6" TO TOP OF ENCLOSURE
	ELECTRICAL PANEL, RECESSED MOUNTED, 5'-6" TO TOP OF ENCLOSURE
	EQUIPMENT CABINET SIZE AS NOTED, RECESSED MOUNTED, 5'-6" TO TOP OF ENCLOSURE
	EQUIPMENT CABINET SIZE AS NOTED, SURFACE MOUNTED, 5'-6" TO TOP OF ENCLOSURE
	HOME RUN TO PANEL, RECEPTACLES AND EQUIPMENT SHALL HAVE GREEN GROUND WIRE. NUMBER OF ARROWS INDICATES NUMBER OF PHASE CONDUCTORS, OR AS SHOWN ON SCHEDULE

	BRANCH CIRCUIT WITH PHASE, NEUTRAL, SWITCHED PHASE AND EQUIPMENT GROUNDING CONDUCTORS
	TELEPHONE OR DATA OUTLET, SINGLE GANG BOX MTD. 18" A.F.F. WITH 3/4" C STUB TO ABOVE LAY-IN CEILING. "W" INDICATES 4'-6" MTD. HEIGHT FOR WALL PHONE.
	3/4" PLYWOOD, TELEPHONE BACKBOARD, SIZE AS NOTED, MTD. 5'-6" TO TOP
	JUNCTION BOX 42 CUBIC INCH MINIMUM CAPACITY
	FLOOR TELEPHONE OUTLET, CAST JUNCTION-BOX
	WALL TELEPHONE/DATA OUTLET
	DOOR SWITCH MOUNTED IN DOOR JAMB
	DOOR BUTTON WEATHER PROOF, 50" A.F.F.
	DOOR BUZZER MTD 7'-0" A.F.F.
	HANDHOLE OR MANHOLE, IDENTIFIER SHOWN, REFER TO HANDHOLE OR MANHOLE SCHEDULE FOR SIZE
	CIRCUIT BREAKER, TRIP RATING SHOWN, 3-POLE UNLESS NOTED
	FUSE, CURRENT LIMITING, RATING AS SHOWN
	TRANSFORMER, RATINGS AS SHOWN
	ELECTRIC MOTOR, HORSEPOWER SHOWN
	MOTOR STARTER, SIZE AS SHOWN OR REQUIRED. FVNR UNLESS NOTED
	HAND-OFF-AUTO STARTER CONTROLS
	VARIABLE FREQUENCY DRIVE
	DUCT BANK, IDENTIFIER SHOWN. REFER TO DUCT BANK SCHEDULE FOR SIZE AND CONFIGURATION.
	3/4" x 10' COPPER CLAD GROUND ROD
	SURGE ARRESTOR
	GENERATOR
	ATS
	WEATHERHEAD
	CABLE CONNECTION
	KIRK KEY INTERLOCK
	CLOSE TWO OUT OF THREE
	INTERCEPT CONDUIT. PULL NEW FEEDER THE ENTIRE LENGTH OF CIRCUIT.
	DUCT BANK CIRCUIT DESIGNATION SEE DUCT BANK CONDUIT AND CABLE SCHEDULE



**ABBREVIATIONS:**

P-LSI(G)	PROGRAMMABLE BREAKER MICROLOGIC OR EQUAL WITH ADJUSTMENTS LISTED: L = LONG-TIME S = SHORT TIME I = INSTANTANEOUS G = GROUND FAULT P = POWER METERING WITH ETHERNET CONNECTIVITY
MM	ENERGY REDUCING MAINTENANCE SWITCHING WITH LOCAL STATUS TO COMPLY WITH NEC 240.87
AVT	ABSENCE OF VOLTAGE TESTER (PANDUIT VERISAFE VS-AVT-C08-L10 OR APPROVED EQUAL)

**ABBREVIATIONS**

A	AMP	G	GROUND	PB	PUSH BUTTON
ACU	AIR CONDITIONING UNIT	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	PDSC	POWER DISTRIBUTION SERVICES CABINET
AFF	ABOVE FINISHED FLOOR	GND	GROUND	PEC	PHOTO ELECTRIC CELL
AHU	AIR HANDLER UNIT	GRS	GALVANIZED RIGID STEEL	PF	POWER FACTOR
AIC	AMPS INTERRUPTING CAPACITY	HOA	HAND-OFF-AUTO	PFR	POWER FAIL RELAY
AM	AMP-METER	HP	HORSEPOWER OR HEAT PUMP	PL	PILOT LIGHT
ANN	ANNUNCIATOR	HR	HOURLY	PMR	PHASE MONITOR RELAY
AP	AERIAL PRIMARY	JB	JUNCTION BOX	PNL	PANEL
AS	AERIAL SECONDARY	kVA	KILOVOLT-AMPERE	PTT	PUSH-TO-TEST
ATS	AUTOMATIC TRANSFER SWITCH	kVAR	KILOVOLT-AMPERE, REACTIVE	PVC	SCHEDULE 40 POLYVINYL CONDUIT
AUX	AUXILIARY	kW	KILOWATT	RECPT	RECEPTACLE
BFI	BLOWN FUSE INDICATOR	L	LINE (PHASE)	RM	ROOM
BKR	BREAKER	LA	LIGHTNING ARRESTOR	RVAT	REDUCED VOLTAGE AUTO-TRANSFORMER STARTER
C	CONDUIT	L.O.	LUGS ONLY	S	SECOND
CGRS	PVC COATED GALVANIZED RIGID STEEL	LSI	LONG-TIME, SHORT-TIME, INSTANTANEOUS TRIP UNIT	SA	SURGE ARRESTER
CKT	CIRCUIT	LV	LOW VOLTAGE	SDBC	SOFT DRAWN BARE COPPER
COM	COMMON	MCB	MAIN CIRCUIT BREAKER	SE	SERVICE ENTRANCE
CONT	CONTINUOUS	MCC	MOTOR CONTROL CENTER	SHT	SHEET
CP	CONTROL PANEL	MCP	MOTOR CIRCUIT PROTECTOR	SN	SOLID NEUTRAL
CPT	CONTROL POWER TRANSFORMER	MFR	MANUFACTURER	SS	STAINLESS STEEL
CR	CONTROL RELAY	MIN	MINIMUM	STA	STATION
CS	CORD SET	MLO	MAIN LUGS ONLY	SW	SWITCH
CU	COEFFICIENT OF UTILIZATION	MM	MAINTENANCE MODE	TC	TIME CLOCK
CU	CONDENSING UNIT	MS	MANUAL STARTER	TEL	TELEPHONE
DEB	DIRECT EARTH BURIED	MTD	MOUNTED	TD	TIME DELAY
EC	EMPTY OR EMBEDDED CONDUIT	MTS	MANUAL TRANSFER SWITCH	TDD	TIME DELAY ON DE-ENERGIZATION
EF	EXHAUST FAN	N	NEUTRAL	TDE	TIME DELAY ON ENERGIZATION
EG	EQUIPMENT GROUND	NFDS	NON-FUSED DISCONNECT SWITCH	TYP	TYPICAL
ECC	EQUIPMENT GROUND CONDUCTOR	NTS	NOT TO SCALE	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
EL	ELEVATION	OC	ON CENTER	UG	UNDER GROUND
EMT	ELECTRICAL METALLIC TUBING	OH	OVERHEAD	UH	UNIT HEATER
ETM	ELAPSED TIME METER	OL	OVERLOAD	UP	UNDERGROUND PRIMARY
FA	FIRE ALARM	OPGP	OFFICE PRINCIPAL GROUND POINT	US	UNDERGROUND SECONDARY
FAP	FIRE ALARM PANEL			VA	VOLT-AMP
FC	FAN COIL			VFD	VARIABLE FREQUENCY DRIVE
FLR	FLOOR			VM	VOLT-METER
FOC	FIBER OPTIC CABLE			W	WATT OR WIRE
FS	FLOAT SWITCH			WH	WEATHER HEAD
FT	FEET			WM	WATT METER
FVNR	FULL VOLTAGE NON-REVERSING STARTER			WP	WEATHERPROOF
FVR	FULL VOLTAGE REVERSING STARTER			W/	WITH
				XMFR	TRANSFORMER

**CONTROL SCHEMATIC LEGEND**

	WIRING WITHIN PANEL		LIMIT SWITCH CONTACT, NORMALLY OPEN
	WIRING TO FIELD DEVICE		LIMIT SWITCH CONTACT, NORMALLY CLOSED
	PUSHBUTTON SWITCH, NORMALLY OPEN		LIMIT SWITCH CONTACT, HELD OPEN
	PUSHBUTTON SWITCH, NORMALLY CLOSED		LIMIT SWITCH CONTACT, HELD CLOSED
	SELECTOR SWITCH, NUMBER OF POSITIONS AND CONTACTS AS SHOWN		RELAY COIL, "TR" INDICATES "TIMING RELAY"
	RELAY CONTACT, NORMALLY OPEN		PILOT LIGHT; "A" INDICATES "AMBER LENS," "G" INDICATES "GREEN LENS," "R" INDICATES "RED LENS"
	RELAY CONTACT, NORMALLY CLOSED		SOLENOID
	TIME DELAY CONTACT, CLOSE ON ENERGIZATION		ELAPSED TIME METER
	TIME DELAY CONTACT, OPEN ON ENERGIZATION		TERMINAL BLOCK
	TIME DELAY CONTACT, OPEN ON DE-ENERGIZATION		ELECTRICAL CONNECTION
	TIME DELAY CONTACT, CLOSE ON DE-ENERGIZATION		FUSE, AMPERE RATING AS SHOWN OR REQUIRED "BFI" INDICATES "BLOWN FUSE INDICATOR" TYPE
	LEVEL SWITCH		GROUND CONNECTION TO ENCLOSURE
	PRESSURE SWITCH		GROUND BAR

**GENERAL NOTES:**

- SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT BE UTILIZED ON THE PROJECT.

REVISION	BY	DATE
ADDENDUM #1	TJR	2/14/2025

BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

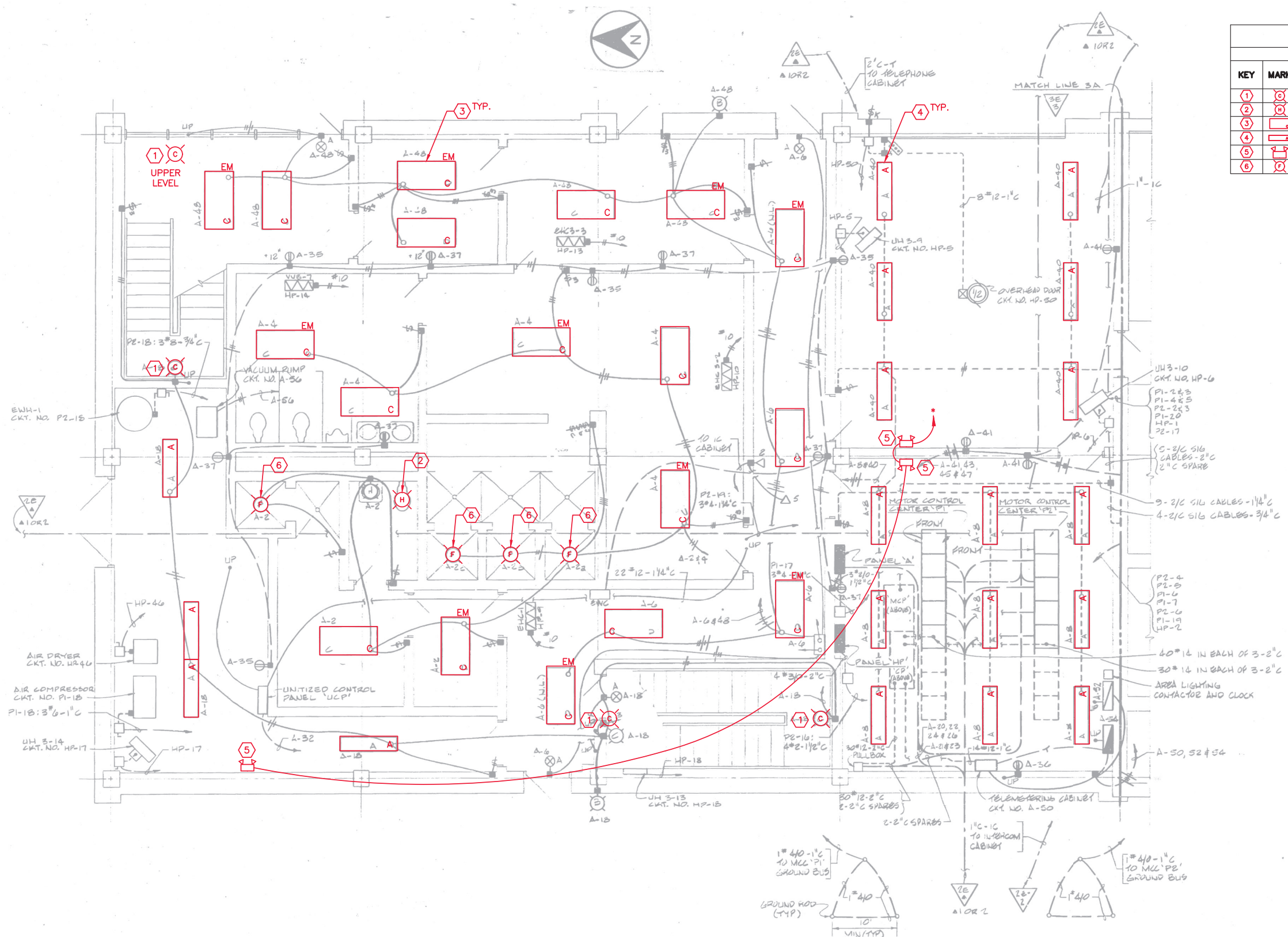
**ELECTRICAL LEGEND**

WATER POLLUTION CONTROL  
CAPITAL EQUIPMENT REPLACEMENTS  
RMUA PROJECT WPC 25-2

CITY OF TULSA, OKLAHOMA  
METROPOLITAN UTILITY AUTHORITY  
WATER AND SEWER DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:			
PLAN SCALE: AS SHOWN	DRAWN	CD	APPROVED:
	DESIGNED	BB	
	SURVEY		
PROFILE SCALE:	PROJ. MGR.		
HORIZONTAL:	LEAD ENGR.		
	FIELD MGR.	TJR	
VERTICAL:			
FILE:	DRAWING:		DATE: 2025
ATLAS PAGE NO: ---			SHEET E1 OF 3 SHEETS





LIGHT FIXTURE SCHEDULE				
KEY	MARK	MANUFACTURER	CATALOG #	VOLTAGE
1	⊗	GLOBALUX	RWS-17-120-MCT-BN	120-277
2	⊗	GLOBALUX	RVL-24-18-MV-830-BN	120-277
3	⊗	COLUMBIA	CBT24-LSCS-(ELL10) WHERE NOTED "EM"	120-277
4	⊗	COLUMBIA	CSL4-LSCS	120-277
5	⊗	DUALLITE	DYN6	120-277
6	⊗	DUALLITE	REPLACE WITH LED EQUAL	120-277

- KEYED NOTES:**
- 1-4 REPLACE EXISTING FIXTURE WITH NOTED FIXTURE IN SCHEDULE. FIELD VERIFY VOLTAGE AND CONTROL PRIOR TO WORK, RECONNECT TO EXISTING CIRCUIT. FIELD VERIFY REQUIREMENT FOR PHOTOCELL CONTROL AND MATCH EXISTING.
  - 5 FURNISH AND INSTALL (3#12)3/4"C TO NEAREST 120 VOLT UNSWITCHED CIRCUIT.

**ADDITIVE ALTERNATE #2**

REVISION	BY	DATE
ADDENDUM #1	TJR	2/14/2025

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**DRAWING 203.800  
ELECTRICAL OPERATIONS BLDG LIGHTING**

WATER POLLUTION CONTROL  
CAPITAL EQUIPMENT REPLACEMENTS  
RMUA PROJECT WPC 25-2

CITY OF TULSA, OKLAHOMA  
TULSA METROPOLITAN UTILITY AUTHORITY  
WATER AND SEWER DEPARTMENT

PLANS AND ESTIMATES PREPARED BY: **HOLLOWAY, UPDIKE + BELLEN, Inc.**  
2001 N. WILLOW AVE., BROKEN ARROW, OKLAHOMA 74002  
(918)291-0777, FAX (918)291-0764

PLAN SCALE:	DRAWN	CD	APPROVED:
AS SHOWN	DESIGNED	BB	
	SURVEY		
PROFILE SCALE:	PROJ. MGR.		
	LEAD ENGR.		
HORIZONTAL:	FIELD MGR.	TJR	
VERTICAL:			
FILE:	DRAWING:	DATE:	2025
ATLAS PAGE NO: ---			SHEET E2 OF 3 SHEETS

**1 OPERATIONS BUILDING LIGHTING REPLACEMENT**  
E2 SCALE: NONE



FURNISH AND INSTALL NEW SINGLE OFFICE MINI SPLIT HVAC UNIT WITH 4" FRESH AIR CONNECTION  
 INTERIOR UNIT: SAMSUNG AC012BNNDCH/AA  
 OUTDOOR UNIT: SAMSUNG AC012BXADCH/AA  
 COORDINATE FINAL PLACEMENT WITH OWNERS REPRESENTATIVE

FURNISH AND INSTALL NEW SWITCHED CIRCUIT FOR (2) LIGHTS IN THIS AREA

FURNISH AND INSTALL WP/GFCI RECEPTACLE ON EXTERIOR WALL

FURNISH AND INSTALL (1) NEW RECEPTACLE BELOW COUNTER FOR DISH WASHER

(3#10)3/4"

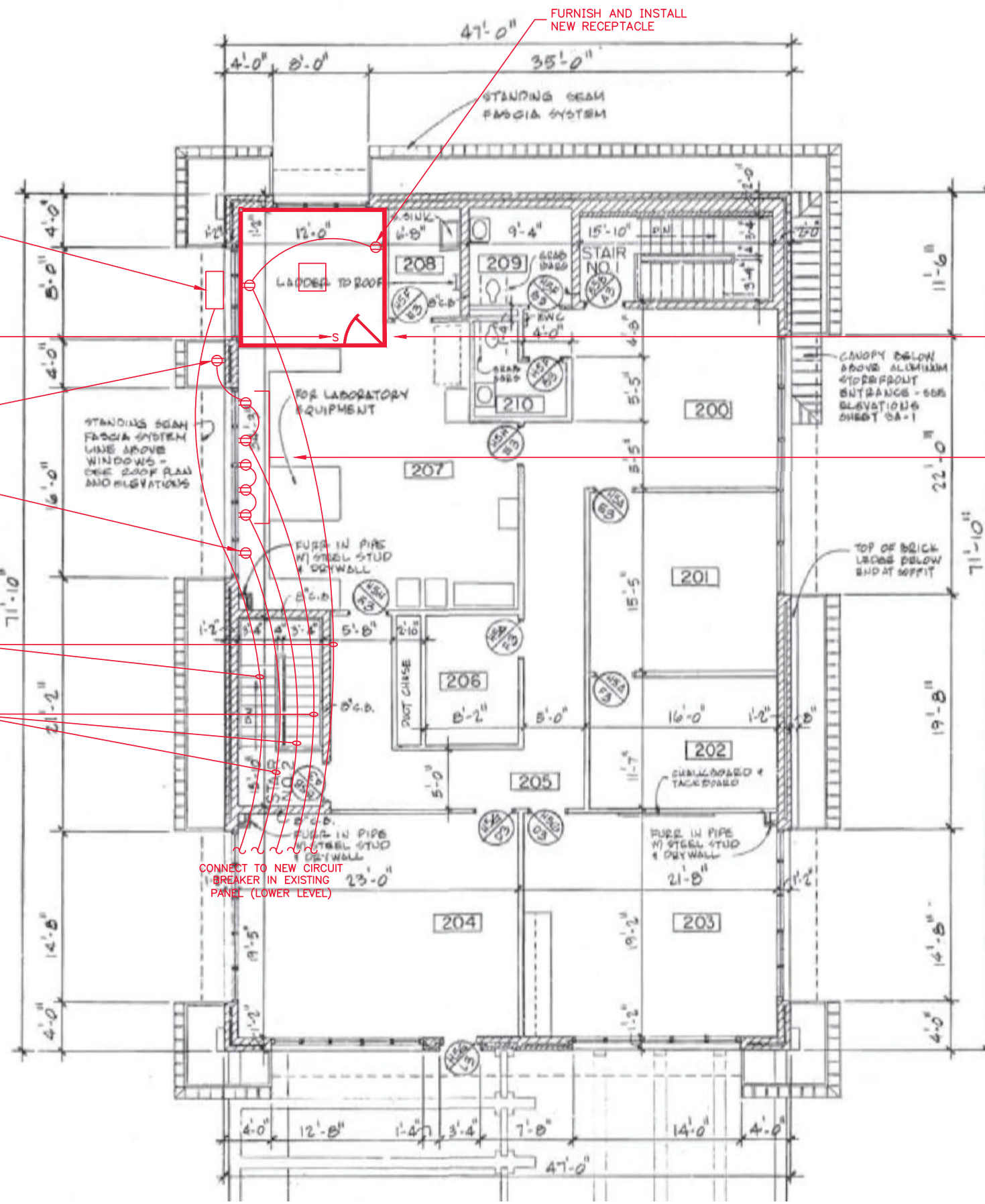
(3#12)3/4"

CONNECT TO NEW CIRCUIT BREAKER IN EXISTING PANEL (LOWER LEVEL)

FURNISH AND INSTALL NEW RECEPTACLE

RELOCATE ALL LIGHT FIXTURES THAT IMPEDE CONSTRUCTION OF NEW WALL, MAINTAIN 2 LIGHT FIXTURES INSIDE NEW OFFICE SPACE

FURNISH AND INSTALL (5) 4 GANG RECEPTACLE ALONG WALL INSTALL ABOVE COUNTERTOPS. ROUTE NEW CONDUITS BELOW COUNTERTOPS AS REQUIRED



REVISION	BY	DATE
ADDENDUM #1	TJR	2/14/2025

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**REFERENCE ORIGINAL SA 83-1 RECORD DRAWINGS FOR ADDITIONAL DETAILS & INFORMATION**

**203.200.A.1 OPERATIONS LABORATORY & OPERATIONS ROOM REMODEL ELECTRICAL & MECHANICAL PLAN**

WATER POLLUTION CONTROL  
 CAPITAL EQUIPMENT REPLACEMENTS  
 RMUA PROJECT WPC 25-2

CITY OF TULSA, OKLAHOMA  
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PLAN SCALE: AS SHOWN	DRAWN	CD	APPROVED:
	DESIGNED	BB	
	SURVEY		
PROFILE SCALE:	PROJ. MGR.		
HORIZONTAL:	LEAD ENGR.		
	FIELD MGR.	TJR	
VERTICAL:			
FILE:	DRAWING:	DATE: 2025	DESIGN ENGINEERING MANAGER
ATLAS PAGE NO: ---			SHEET E3 OF 3 SHEETS



**3** PLAN @ OPERATIONS BUILDING (SECOND FLOOR)  
**E3** SCALE: 3/16" = 1'-0"