

A:\2221 - City of Moore, New Restroom Facilities at Buck Thomas Park\04_CD\01_Drawing\CAD\2221_COVER.dwg

CITY OF MOORE

BUCK THOMAS PARK RESTROOM FACILITIES

1903 N.E. 12TH STREET

MOORE, OKLAHOMA 73160

CONSULTANT INFORMATION

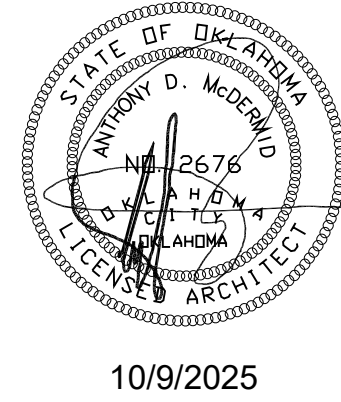
CLIENT	ARCHITECT
CITY OF MOORE WHITNEY WATHEN 301 N. BROADWAY MOORE, OKLAHOMA 73160 PHONE: 405.793.5200	TAP PROJECT ARCHITECT: ANTHONY MCDERMID SR. PROJECT MANGER: CHRIS TEEHEE 415 N BROADWAY OKLAHOMA CITY, OK 73102 PHONE: 405.232.8787
STRUCTURAL ENGINEER	MECHANICAL ENGINEER
EUDALEY ENGINEERS BRIAN BAKER 6656 N.W. 39TH EXPRESSWAY BETHANY, OKLAHOMA 73008 PHONE: 405.789.4433	GWIN ENGINEERING CONSULTANTS, LLC OWEN GWIN 342592 E. 880 ROAD CHANDLER, OKLAHOMA 74834 405.850.0205
ELECTRICAL ENGINEER	CIVIL ENGINEER
GWIN ENGINEERING CONSULTANTS, LLC FRANK REID 342592 E. 880 ROAD CHANDLER, OKLAHOMA 74834 405.850.0205	
LANDSCAPE ARCHITECT	OTHER
NOTES - Architectural plans were prepared by this Architect or under his direct supervision as a consultant to the owner. - All questions during pricing and construction shall be directed tothe architect who will direct the question to the appropriate design consultant.	

415 Broadway
Oklahoma City
Oklahoma 73102



V.405.232.8787
F.405.232.8810
www.taparchitecture.com

ARCHITECT'S SEAL



PROJECT

BUCK THOMAS
RESTROOM FACILITIES
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160



DRAWINGS FOR

- ☒ FOR CONSTRUCTION
- ☐ PRELIMINARY - NOT FOR CONSTRUCTION
- ☐ REVIEW SET
- ☐ BID SET

ISSUE DATE

10/9/2025

SHEET

COVER

PROJECT NUMBER

2221

All drawings and written materials herein constitute original work of TAParchitecture and may only be duplicated with their written consent.

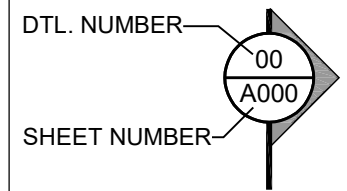
A:\2221 - City of Moore, New Restroom Facilities at Buck Thomas Park\04_CD\01_Drawing\CAD\2221_G110_INDEX.dwg

ABBREVIATIONS

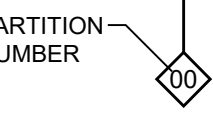
C	CENTER LINE	F.A.	FIRE ALARM	PED.	PEDESTAL
PL	PLATE	FAST.	FASTEN, FASTENER	PERF.	PERFORATE, PERFORATED
		F.B.	FACE BRICK	P.L.	PROPERTY LINE
A/C	AIR CONDITIONING	F.D.	FLOOR DRAIN	PLAM.	PLASTIC LAMINATE
ABV.	ABOVE	F.E.	FIRE EXTINGUISHER	PLYWD.	PLYWOOD
ACOUST.	ACOUSTICAL	F.E.C.	FIRE EXTINGUISHER CABINET	P.S.F.	POUNDS PER SQUARE FOOT
ACT	ACOUSTICAL CEILING TILE	F.F.	FINISHED FLOOR	P.S.I.	POUNDS PER SQUARE INCH
A.D.	AREA DRAIN	F.F.L.	FINISHED FLOOR LINE	PT.	POINT
ADD.	ADDENDUM	FIN.	FINISH, FINISHED	PVC	POLYVINYL CHLORIDE
ADJ.	ADJACENT	FLEX.	FLEXIBLE		
A.F.F.	ABOVE FINISHED FLOOR	FLR.	FLOOR, FLOORING	Q.T.	QUARRY TILE
ALT.	ALTERNATE	FLUR.	FLUORESCENT		
ALUM.	ALUMINUM	FN.	FENCE	R.	RISER
ARCH.	ARCHITECT, ARCHITECTURAL	FND.	FOUNDATION	R.A.	RETURN AIR
AUTO.	AUTOMATIC	F.O.B.	FACE OF BRICK	RAD.	RADIUS
		F.O.C.	FACE OF CONCRETE	R.B.	RUBBER BASE
BBD.	BULLETIN BOARD	F.O.F.	FACE OF FINISH	R.D.	ROOF DRAIN
BD.	BOARD	F.O.M.	FACE OF MASONRY	RE	REFER TO
BEL.	BELOW	F.O.S.	FACE OF STUDS	REFLECT.	REFLECTOR
BET.	BETWEEN	F.O.V.	FACE OF VENEER	REFR.	REFRIGERATOR
BIT.	BITUMINOUS	F.S.	FULL SIZE	REV.	REVISION, REVISIONS, REVISED
BLDG.	BUILDING	FT.	FOOT, FEET	RM	ROOM
BLK.	BLOCK	FTG.	FOOTING	R.O.	ROUGH OPENING
BLKG.	BLOCKING	FUR	FURRED, FURRING	R.O.W.	RIGHT OF WAY
B.M.	BENCH MARK	FUT.	FUTURE		
BRNG.	BEARING			S	SOUTH
B.S.	BOTH SIDES	GA.	GAGE, GAUGE	S.C.	SOLID CORE
BSMT.	BASEMENT	GALV.	GALVANIZED	SCHED.	SCHEDULE
BTM.	BOTTOM	G.C.	GENERAL CONTRACTOR	S.D.	STORM DRAIN
B.U.R.	BUILT UP ROOFING	GL.	GLASS, GLAZING	SECT.	SECTION
B.W.	BOTH WAYS	GYP. BD.	GYPSUM BOARD	SHT.	SHEET
				SIM.	SIMILAR
CAB.	CABINET	HARDBD.	HARDBOARD	S.J.	SAW JOINT
CEM.	CEMENT	H.B.	HOSE BIBB	S.P.	SOUND PROOF
CF	CUBIC FEET	H.C.	HOLLOW CORE	SPEC.	SPECIFICATION, SPECIFICATIONS
C.G.	CORNER GUARD	H.D.	HEAVY DUTY	SPK.	SPEAKER
CH. BD.	CHALK BOARD	HDW.	HARDWARE	SPL.	SPECIAL
C.I.	CAST IRON	H.M.	HOLLOW METAL	SQ.	SQUARE
CIR.	CIRCLE	HORIZ.	HORIZONTAL	S.S.	STAINLESS STEEL
CIRC.	CIRCUMFERENCE	HT.	HEIGHT	STD.	STANDARD
C.J.	CONTROL JOINT	HTG.	HEATING	STL.	STEEL
CL.	CLOSET	HVAC	HEATING / VENTILATING /	STOR.	STORAGE
CLG.	CEILING		AIR CONDITIONING	STRUCT.	STRUCTURE, STURACTURAL
CLG. HT.	CEILING HEIGHT	H.W.H.	HOT WATER HEATER	SUSP.	SUSPENDED
CLR.	CLEAR, CLEARANCE				
CMU	CONCRETE MASONRY UNIT	I.D.	INSIDE DIAMETER	T&G	TONGUE AND GROOVE
C.O.	CLEAN OUT	INCL.	INCLUDE, INCLUDED, INCLUDING	T.	TREAD
COL.	COLUMN	INSUL.	INSULATE, INSULATED, INSULATION	T.B.	TOWEL BAR
COMP.	COMPOSITION	INT.	INTERIOR	TEL.	TELEPHONE
CONC.	CONCRETE			TKBD.	TACKBOARD
CONST.	CONSTRUCTION	JAN.	JANITOR, JANITORS	TKS.	TACKSTRIP
CONT.	CONTINUOUS, CONTINUE	J.B.	JOIST BEARING	T.O.M.	TOP OF MASONRY
CONTR.	CONTRACT, CONTRACTOR	JT.	JOINT	T.O.S.	TOP OF SLAB
CORR.	CORRUGATED			T.O.W.	TOP OF WALL
CPT	CARPET, CARPETED	KIT.	KITCHEN	T.V.	TELEVISION
CS.	COUNTERSINK			TYP.	TYPICAL
C.T.	CERAMIC TILE	L	LENGTH	VCT	VINYL COMPOSITION TILE
CTR.	COUNTER	LAB.	LABORATORY	VERT.	VERTICAL
CY	CUBIC YARD	LAD.	LADDER	VIN.	VINYL
		LAM	LAMINATE, LAMINATED	V.J.	V-JOINT, V-JOINTED
D.	DRAIN	LAV.	LAVATORY		
DEMO	DEMOLISH, DEMOLITION	L.H.	LEFT HAND		
D.F.	DRINKING FOUNTAIN	L.L.	LIVE LOAD	W/	WITH
D.H.	DOUBLE HUNG	L.T.	LIGHT	W/O	WITHOUT
DIA.	DIAMETER	LW.	LIGHTWEIGHT	W	WEST
DIAG.	DIAGONAL	LWC.	LIGHTWEIGHT CONCRETE	W	WIDTH, WIDE
DIM.	DIMENSION			W.C.	WATER CLOSET
DIV.	DIVISION	MAS.	MASONRY	WD.	WOOD
D.L.	DEAD LOAD	MAX.	MAXIMUM	WIN.	WINDOW
DR.	DOOR	MDF	MEDIUM DENSITY FIBERBOARD		
D.S.	DOWNSPOUT	MECH.	MECHANICAL		
DTL.	DETAIL	MED.	MEDIUM	O.C.	ON CENTER
D.W.	DISHWAHER	M.H.	MANHOLE	O.D.	OUTSIDE DIAMETER
DWG.	DRAWING	MIN.	MINIMUM	O.H.	OVERHEAD
DWR.	DRAWER	MISC.	MISCELLANEOUS	OPG.	OPENING
		M.O.	MASONRY OPENING	OPP.	OPPOSITE
E	EAST	MOD.	MODULAR	OPH.	OPPOSITE HAND
EA.	EACH	MT.	MOUNT, MOUNTED, MOUNTING	OSB	ORIENTED STRAND BOARD
E.F.	EACH FACE	MTL.	METAL		
E.J.	EXPANSION JOINT	MULL.	MULLION	PED.	PEDESTAL
EL.	ELEVATION			PERF.	PERFORATE, PERFORATED
ELEC.	ELECTRIC, ELECTRICAL	N	NORTH		
ELEV.	ELEVATOR	NAT.	NATURAL		
EMERG.	EMERGENCY	NIC	NOT IN CONTRACT		
ENCL.	ENCLOSE, ENCLOSURE	NOM.	NOMINAL		
E.P.	ELECTRICAL PANELBOARD	N.R.	NOISE REDUCTION		
EQ.	EQUAL	N.R.C.	NOISE REDUCTION COEFFICIENT		
EQUIP.	EQUIPMENT	N.T.S.	NOT TO SCALE		
EST.	ESTIMATE			NOTE:	
E.W.C.	ELECTRIC WATER COOLER		OVERALL		THE ABOVE ABBREVIATIONS ARE STANDARD, AND ARE NOT INTENDED TO BE A LISTING OF ANY OR ALL ABBREVIATIONS FOR THIS PROJECT.
EXH.	EXHAUST				
EXIST.	EXISTING				
EXP.	EXPOSED				
EXT.	EXTERIOR				

DRAWING TAGS

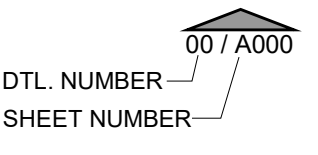
SECTION TAG:



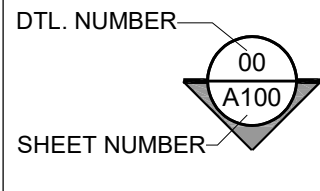
PARTITION TYPE:



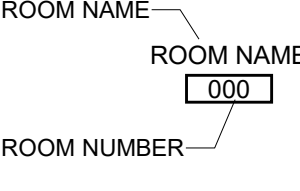
INTERIOR ELEV. TAG:



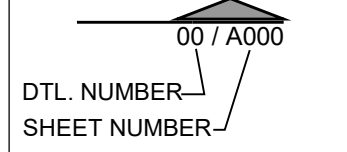
ELEVATION TAG:



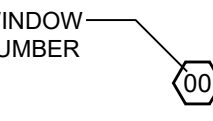
ROOM TAG:



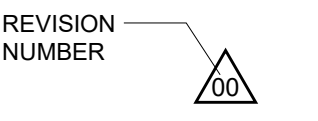
SECTION TAG:



WINDOW TYPE:



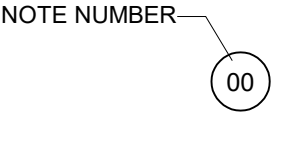
REVISION TAG:



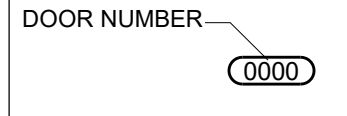
GRID TAG:



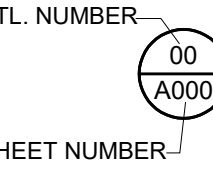
KEY NOTE:



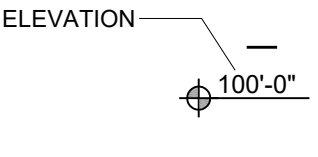
DOOR No:



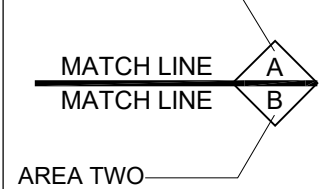
TAG NOTE:



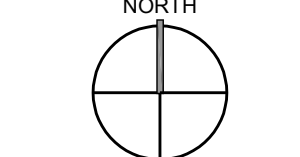
DATUM TAG:



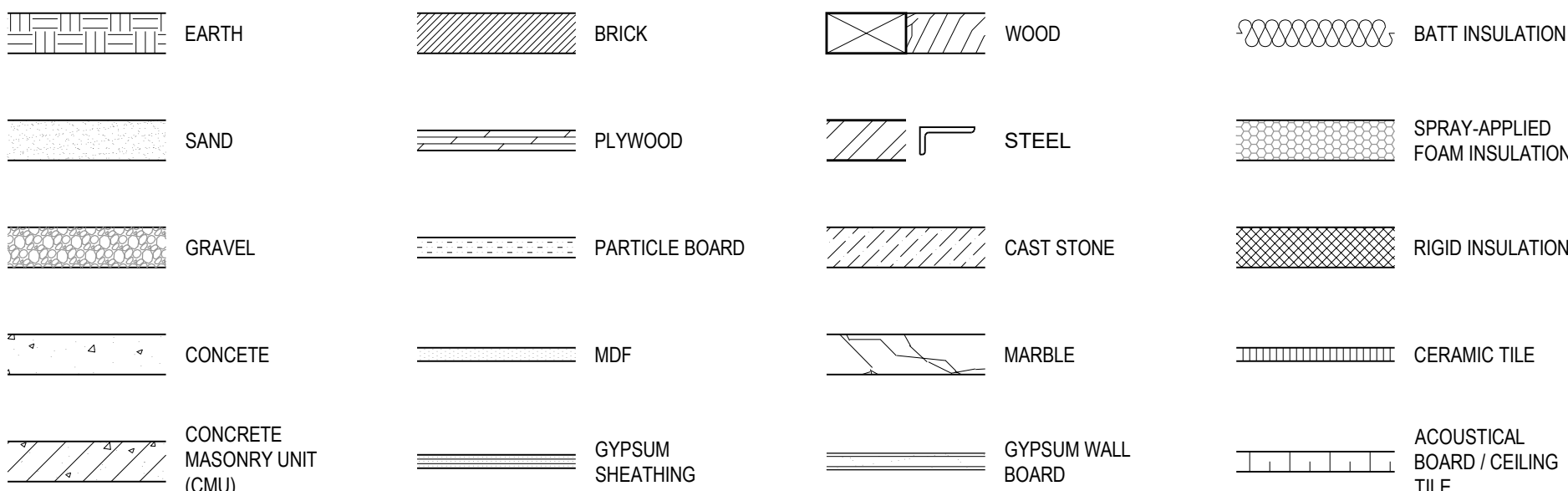
MATCH LINE:



NORTH ARROW:



MATERIAL LEGEND



NOTE:
THE ABOVE MATERIAL INDICATIONS ARE STANDARD, AND ARE NOT INTENDED TO BE A LISTING OF MATERIALS FOR THIS PROJECT.

GENERAL NOTES

- CONTRACTOR SHALL RECEIVE IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING ANY WORK THAT IS NOT CLEARLY DEFINED BY THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS UNLESS SPECIFICALLY, OR OTHERWISE INDICATED, OR WHERE APPLICABLE CODES OR REGULATIONS TAKE PRECEDENCE.
- ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES RULE, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY BEARING ON PERFORMANCE OF THE WORK. MECHANICAL, ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, LOCAL AND STATE JURISDICTIONS, ORDINANCES, AND APPLICABLE REGULATIONS.
- GENERAL CONTRACTOR SHALL SUPERVISE, AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES, FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT, INCLUDING CONTRACT AND COORDINATION WITH ALL AUTHORIZED OWNER REPRESENTATIVES.
- DETAILS ARE INTENDED TO SHOW THE END RESULT OF THE DESIGN AND PERFORMANCE, MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT EXISTING CONDITIONS. SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES AND SERVICES PRIOR TO PROCEEDING WITH THE WORK TO ENSURE PROPER COORDINATION, SEQUENCING AND INSTALLATION OF NEW WORK.
- PROVIDE FIRE SEALANT TO PERIMETER OF ALL PIPING, HVAC SLEEVING OR OTHER TYPE OF THRU-WALL PENETRATION.
- NOTIFY ARCHITECT IMMEDIATELY OF ANY UNFORESEEN CONDITIONS FOR DIRECTION BEFORE PROCEEDING WITH WORK.
- PAINT ALL EXPOSED SURFACES, EXCEPT WHERE ITEMS ARE SCHEDULED TO REMAIN NATURAL OR ARE OTHERWISE RESTRICTED BY LOCAL CODES, ORDINANCES OR AUTHORITIES HAVING JURISDICTION.
- GENERAL CONTRACTOR SHALL NOTIFY ARCHITECT TO CHECK BUILDING LAY-OUT PRIOR TO START OF CONSTRUCTION.
- AREA OF CLEAN-UP SHALL INCLUDE ALL DISTURBED EARTH.
- FINISH GRADE AT BUILDING PERIMETERS SHALL BE 6" BELOW FINISH FLOOR UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL PROTECT EXISTING PAVING AND WALKS THAT REMAIN AND REPAIR OR REPLACE ANY DAMAGE AS A RESULT OF THIS CONSTRUCTION.
- GENERAL CONTRACTOR SHALL PROVIDE ADDITIONAL CONCRETE REQUIRED BY MECHANICAL AND/OR ELECTRICAL.
- CONTRACTOR MAY STOCK PILE SOIL RETAINED FROM EXCAVATION FOR USE DURING CONSTRUCTION. TOP SOIL SHALL BE RETAINED IN A SEPERATE AREA FROM OTHER SOIL FOR USE IN FINISH GRADING. ANY SOIL STOCK PILED AND NOT REUSED FOR CONSTRUCTION SHALL BE DISTRIBUTED OVER THE SITE OR REMOVED FROM THE SITE AS DIRECTED BY OWNER.
- DEVELOP POSITIVE DRAINAGE AWAY FROM NEW AND EXISTING BUILDINGS.
- NOT USED
- PROVIDE SOLID BLOCKING PER SPECIFICATIONS FOR ALL WALL MOUNTED ACCESSORIES.

ALTERNATES

- THERE IS NO ALTERNATES FOR THIS PROJECT.

SHEET INDEX

COVER SHEET

GENERAL

G110	SHEET INDEX, SYMBOLS, ABBREVIATIONS, MATERIAL LEGEND, GENERAL NOTES
G111	ADA STANDARDS
G310	PARTITION TYPES

STRUCTURAL

S1	FOUNDATION PLAN, NOTES AND DETAILS
S2	ROOF FRAMING PLAN NOTES/DETAILS

ARCHITECTURAL

AD110	ENLARGED DEMOLITION SITE PLAN
A100	VICINITY SITE PLAN
A110	ARCHITECTURAL SITE PLAN
A220	DIMENSIONED FLOOR PLAN, ROOF PLAN, REFLECTED CEILING PLAN
A250	INTERIOR ELEVATION, FINISH SCHEDULE, AND HEAD, SILL, JAMB
A310	BUILDING ELEVATIONS
A510	BUILDING AND WALL SECTIONS

PLUMBING

P001	PLUMBING LEGENDS AND NOTES
P201	PLUMBING PLAN
P701	PLUMBING SPECIFICATIONS

MECHANICAL

M001	MECHANICAL LEGENDS AND NOTES
M201	MECHANICAL HVAC PLAN
M701	MECHANICAL SPECIFICATIONS

ELECTRICAL

E001	ELECTRICAL GENERAL
E201	ELECTRICAL PLAN SOUTH BUILDING
E202	ELECTRICAL PLAN NORTH BUILDING
E601	ELECTRICAL SCHEDULES
E701	ELECTRICAL SPECIFICATIONS

415 Broadway

Oklahoma City

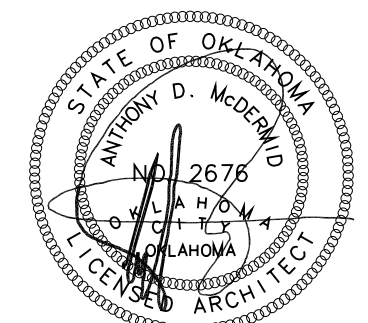
Oklahoma 73102



V.405.232.8787

www.tapokc.com

ARCHITECT'S SEAL



10/9/2025

PROJECT

BUCK THOMAS
RESTROOM FACILITIES
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160



ISSUES
REVISIONS

ISSUE DATE: 10/9/2025

SHEET
TITLE

SHEET INDEX

SHEET
NUMBER

G110

PROJECT
NUMBER

2221

All drawings and written materials herein constitute original work of TAParchitecture and may only be duplicated with their written consent.

[illegible]

DOOR CLEARANCES

The diagrams illustrate the required clearances for different door types:

- Hinged Door:** Shows a side view of a door opening into a room. The clear width is labeled 'X' and the clear depth is labeled 'Y'.
- Sliding Door:** Shows a side view of a door sliding along a track. The clear width is labeled 'X' and the clear depth is labeled 'Y'.
- Folding Door:** Shows a side view of a door folding back. The clear width is labeled 'X' and the clear depth is labeled 'Y'.

DOORS SWINGING (HINGE-SIDE APPROACHES)

- IF $X > 24"$ THEN $36"$ MIN**
- IF $Y = 60"$ THEN $36"$ MIN**
- IF $Y = 54"$ THEN $42"$ MIN**

SLIDING AND FOLDING DOORS (FRONT AND SIDE APPROACH)

- 60" MIN.** (Clearance for side approach)
- 48" MIN.** (Clearance for front approach)
- 18" MIN.** (Clearance for side approach)
- 12" MIN.** (Clearance for front approach)
- 30"** (Clearance for side approach)
- 42"** (Clearance for front approach)
- 22"** (Clearance for side approach)
- 54"** (Clearance for front approach)

RAMPS

The image contains several technical drawings for ramp safety features:

- CURB:** A side view of a ramp with a curb. It shows a 12" MIN. height for the curb on the landing, a 22" MAX. height for the ramp, and a 12" MIN. height for the curb on the other landing.
- WALL:** A side view of a ramp with a wall. It shows a 12" MIN. height for the wall on the landing, a 12" MIN. height for the wall on the other landing, and a 22" MAX. height for the ramp.
- VERTICAL GUARDRAIL:** A side view of a ramp with a vertical guardrail. It shows a 36" MIN. height for the guardrail on the landing, a 36" MIN. height for the guardrail on the other landing, and a 22" MAX. height for the ramp.
- HANDRAIL SECTIONS:** Two cross-sections of handrails. The first is for a circular handrail, showing a 36" MIN. height and a 4" TO 6 1/4" PERIMETER. The second is for a non-circular handrail, showing a 36" MIN. height and a 2 1/4" MAX. height.
- HAND RAIL CLEARANCE:** A cross-section showing a 1 1/2" MIN. clearance between the handrail and the ramp surface.

ACCESSIBLE PARKING STALL SIGNAGE

MOUNT SIGN WITH
(3) 1/4" DIA. BOLTS

RESERVED
PARKING

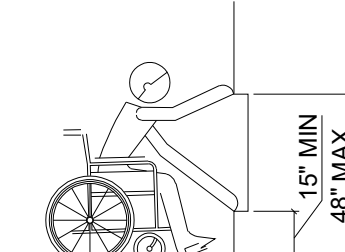
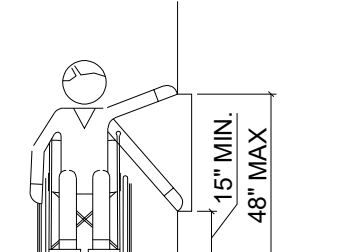
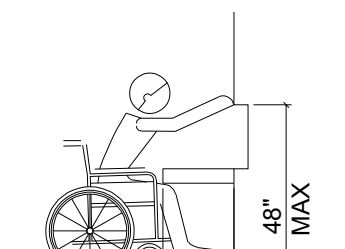
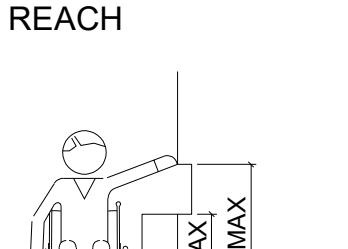
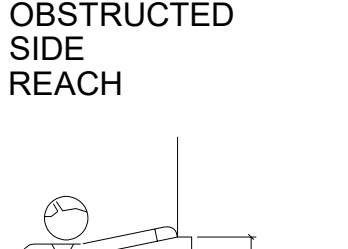
VAN ACCESSIBLE

2"x2" STL. PIPE W/
WELDED-CLOSURE
AT TOP (PAINTED)

TOP OF PAVEMENT
SIDEWALK OR FINISH
GRADE

Dimensions:
Sign height: 6'-0"
Post height above grade: 9'-0"
Total height: 15'-0"
Sign width: 4'-0"
Post diameter: 2"-0"

REACH RANGES

 UNOBSTRUCTED FORWARD REACH	 UNOBSTRUCTED SIDE REACH
 OBSTRUCTED HIGH FORWARD REACH	 OBSTRUCTED SIDE REACH
 OBSTRUCTED HIGH FORWARD REACH	 OBSTRUCTED SIDE REACH

[illegible]

10" DIAMETER
CONCRETE BASE

ACCESSIBLE SYMBOL PARKING STALL

4'-9"

1'-8 1/2"

3'-1 1/2"

1'-1 1/2"

1"

6"

1'-1"

1'-11 1/2"

1'-0"

2'-3"

1'-5"

4"

4"

1'-7"

3'-6"

5'-3"

1'-1"

2 1/2"

R9'-3"

SHADED
AREA
PAINTED
WHITE

PLUMBING ELEMENTS AND FACILITIES

DRINKING FOUNTAINS

WATER CLOSETS AND TOILET COMPARTMENT

NOTE: FLUSH CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC. HAND OPERATED FLUSH CONTROLS SHALL COMPLY WITH SECTION 309 ICC A117.1-2009. FLUSH CONTROLS SHALL BE LOCATED ON THE OPEN SIDE FOR THE WATER CLOSET.

DISPENSER LOCATION

FRONT PARTITION

ACCESSIBLE COMPARTMENT DOOR OPENINGS

SIDE WALL OR PARTITION

FLOOR MOUNTED WATER CLOSET

WALL HUNG WATER CLOSET ACCESSIBLE TOILET COMPARTMENTS

DOOR SHALL NOT SWING INTO THE COMPARTMENT REQUIRED MINIMUM AREA OF

HEIGHT OF URINALS

HEIGHT OF MIRROR OVER LAVATORIES

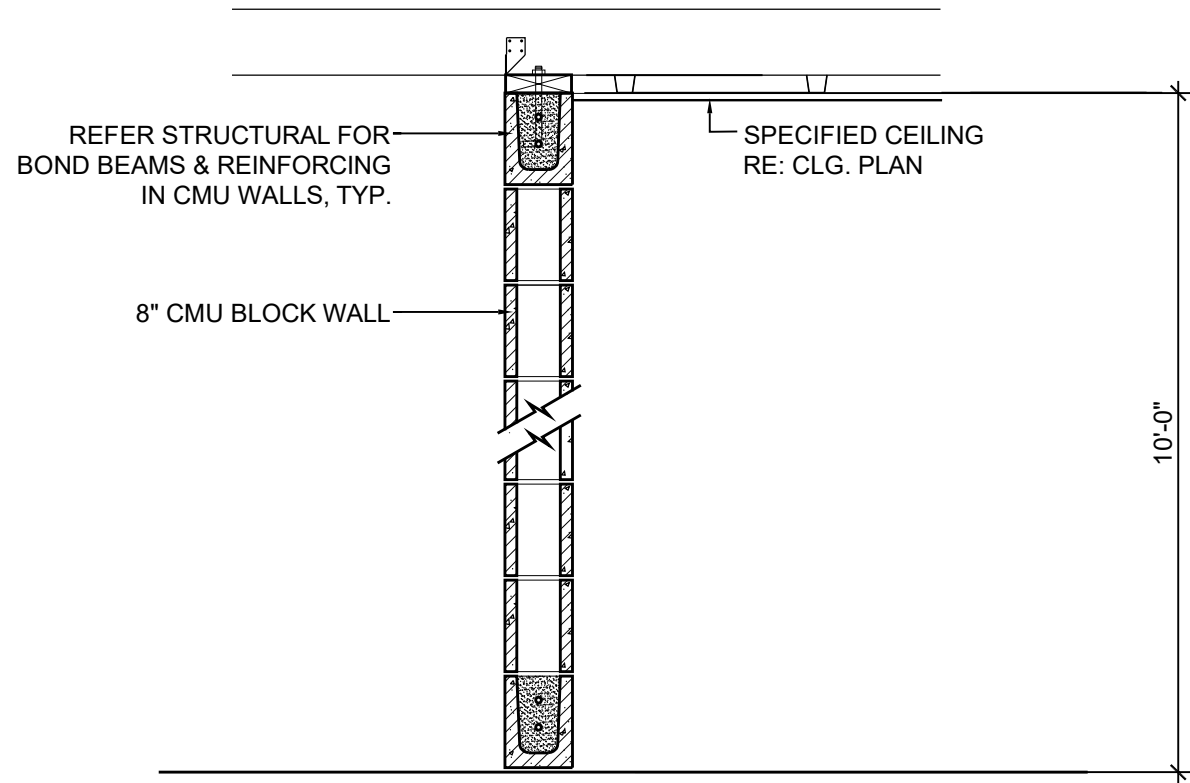
HEIGHT OF MIRROR

HEIGHT OF LAVATORIES AND SINKS

GRAB BARS

	0.5 INCH	2 INCHES	5 INCHES	6 INCHES	9 INCH	11 INCH
MAXIMUM REACH DEPTH	0.5 INCH	2 INCHES	5 INCHES	6 INCHES	9 INCH	11 INCH
MAXIMUM REACH HEIGHT	48 INCHES	46 INCHES	42 INCHES	40 INCHES	36 INCHES	34 INCHES

A:\2221 - City of Moore, New Restroom Facilities at Buck Thomas Park\04_CD\01_Drawing\CAD\2221_G310_PARTITION_TYPES.dwg



01

NON-RATED PARTITION

SCALE: 3/4" = 1'-0"

415 Broadway

Oklahoma City

Oklahoma 73102



V.405.232.8787

www.tapoka.com

ARCHITECT'S
SEAL



10/9/2025

PROJECT

BUCK THOMAS
RESTROOM FACILITIES
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160



ISSUES
REVISIONS

ISSUE DATE: 10/9/2025

SHEET
TITLE

PARTITION TYPES

SHEET
NUMBER

G310

PROJECT
NUMBER

2221

All drawings and written
materials herein constitute
original work of
TAParchitecture and may
only be duplicated with their
written consent.

FOUNDATION AND SLAB-ON-GRADE NOTES

- DESIGN FOUNDATION BEARING PRESSURE (NET): 1200 P.S.F.
- REINFORCEMENT SHALL BE PLACED 1 1/2" FROM TOP OF SLAB, UNLESS NOTED OTHERWISE.
- ALL EXISTING VEGETATION, TOPSOIL, AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM BENEATH THE AREA OF NEW FLOOR SLABS. THE SUBGRADE SHALL THEN BE SCARIFIED TO A MINIMUM DEPTH OF 9 INCHES AND THE MOISTURE CONTENT ADJUSTED TO OPTIMUM OR SLIGHTLY ABOVE OPTIMUM AND COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR DENSITY. IN ACCORDANCE WITH SPECIFICATION D-698, STANDARD PROCTOR PROCEDURE.
- ALL FILL MATERIAL SHALL BE A LOW VOLUME CHANGE MATERIAL HAVING A PLASTICITY INDEX OF LESS THAN 15%. FILL MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 9". EACH LIFT SHALL HAVE THE MOISTURE CONTENT ADJUSTED TO OPTIMUM OR SLIGHTLY ABOVE AND COMPACTED TO A MINIMUM OF 95% STANDARD DENSITY.

CONCRETE NOTES

- ALL CONCRETE WORK SHALL CONFORM TO THE A.C.I. STANDARD 318--(LATEST EDITION) "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
- UNLESS OTHERWISE NOTED, ALL CONCRETE MIXES SHALL BE OF EITHER LABORATORY TRIAL BATCH OR FIELD EXPERIENCE METHOD TO CONFORM TO A.C.I. 318. IF A SUITABLE RECORD OF STRENGTH TEST PERFORMANCE IS NOT AVAILABLE, PROPORTIONS SHALL BE SELECTED TO PRODUCE AN AVERAGE STRENGTH OF 1200 p.s.i. GREATER THAN THE REQUIRED 28-DAY STRENGTH. SUBMITTAL OF STRENGTH TEST RECORDS IS REQUIRED.
- MAXIMUM SLUMPS TO BE AS FOLLOWS (UNLESS NOTED OTHERWISE): FOOTINGS 6", FLOOR SLAB 4". (WATER REDUCING ADMIXTURES OR SUPER-PLASTICIZERS MAY BE USED TO INCREASE SLUMPS).
- PROVIDE 5% TO 7% ENTRAINED AIR FOR CONCRETE EXPOSED TO FREEZING AND THAWING CONDITIONS.
- ALL ANCHOR BOLTS SHALL CONFORM TO ASTM A307, UNLESS NOTED OTHERWISE.
- ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 P.S.I.

REINFORCING NOTES

- ALL REINFORCING SHALL CONFORM TO ASTM A-615 SPECIFICATIONS, GRADE 60.
- DETAILS AND FABRICATION SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF A.C.I. 315 DETAILING MANUAL.
- PROVIDE CORNER BARS AT EACH FACE OF ALL GRADE BEAMS AND WALLS. BARS TO BE SAME SIZE AND NUMBER AS HORIZONTAL REINFORCING.
- LAP BARS 32 DIAMETERS AT SPLICES WITH 12" MINIMUM (UNLESS NOTED OTHERWISE).
- REINFORCING IN SLABS ON GRADE SHALL BE SUPPORTED AT 3"-0" O.C. EACH WAY ON PRECAST BRIQUETTES OF SAME COMPRESSIVE STRENGTH AS FLOOR (PRECAST CONCRETE BRICKS ARE ACCEPTABLE).
- REINFORCING SHALL BE SUPPORTED AND SECURED TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT.
- REINFORCING MAY BE SPLICED ONLY AS SHOWN ON THE DRAWINGS, EXCEPT BARS LABELED CONTINUOUS MAY BE EXTENDED THRU SEVERAL SPANS AT CONTRACTOR'S OPTION.
- CONTINUOUS TOP AND BOTTOM BARS SHALL BE SPLICED AT MID-SPAN AND AT SUPPORTS, RESPECTIVELY.

WOOD TRUSS NOTES

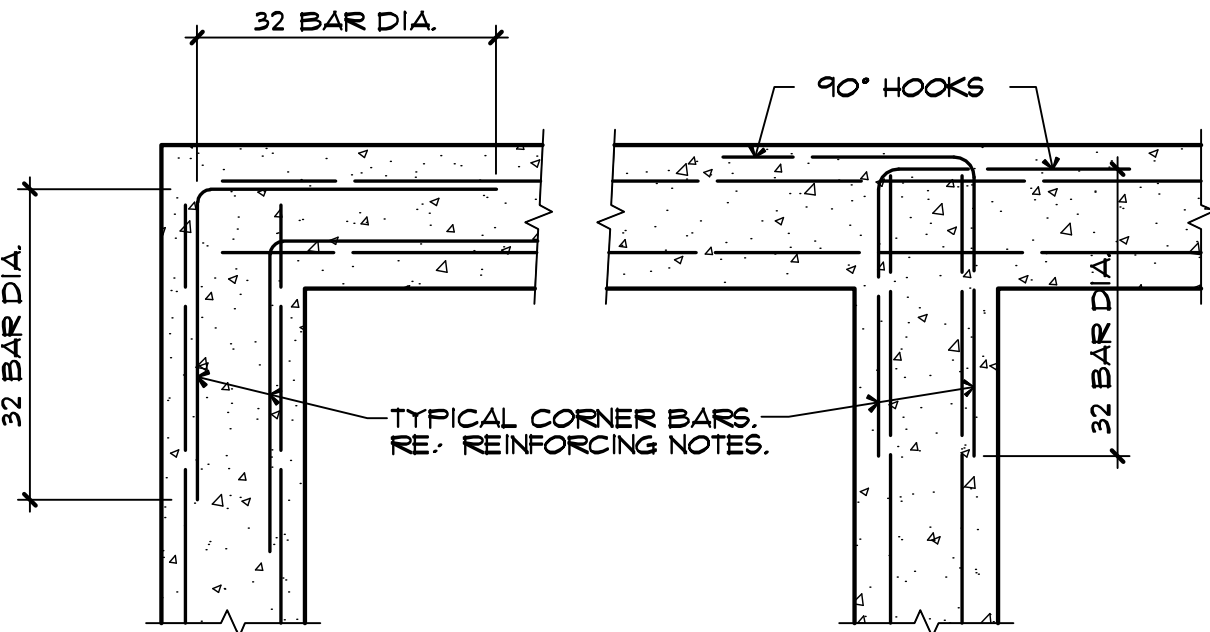
- WOOD TRUSSES TO BE FABRICATED BY AN EXPERIENCED MANUFACTURER THAT IS REGULARLY AND CONTINUOUSLY ENGAGED IN THE MANUFACTURING OF PRE-FABRICATED WOOD TRUSSES.
- TRUSS MANUFACTURER SHALL SUBMIT TRUSS DESIGNS FOR EACH TRUSS AND AN ERECTION PLAN WITH ALL TRUSSES CLEARLY MARKED. SHOP DRAWINGS SHALL BE PREPARED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF OKLAHOMA.
- TRUSS LOADING:
TOP CHORD-40 PLF LIVE LOAD, 30 PLF DEAD LOAD
BOTTOM CHORD-10 PLF DEAD LOAD

CONSTRUCTION NOTES

- CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS BEFORE SUBMISSION FOR COORDINATION AND ITEMS REQUIRING VERIFICATION. SUBMISSION SHALL INCLUDE A STAMP ON THE SHOP DRAWINGS WITH THE CONTRACTOR'S COMPANY NAME, NAME OF REVIEWER, AND DATE OF REVIEW BY THE CONTRACTOR.
- SPECIAL INSPECTIONS SHALL BE MADE DURING CONSTRUCTION AS REQUIRED BY THE LOCAL BUILDING CODE. THE OWNER OR THE OWNERS AGENT SHALL EMPLOY QUALIFIED INSPECTORS.

LOADING NOTES

- APPLICABLE BUILDING CODE: IBC 2018
- DESIGN WIND SPEED (3 SEC. GUST): 115 MPH
- SEISMIC PARAMETERS: Sds 15.8%, Sd1 7.3%
- ROOF LIVE LOAD: 20 p.s.f.
- FLOOR LIVE LOAD: ON GRADE



NOTE: REINFORCING SHOWN APPLIES TO TOP, BOTTOM & INTERMEDIATE BARS.

1 TYPICAL CORNER REINFORCING

SCALE: NONE

22034F01

CONCRETE MASONRY UNIT NOTES

- ALL CONCRETE MASONRY WORK SHALL CONFORM TO A.C.I. STANDARD 530, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES".
- ALL CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO ASTM C90 SPECIFICATIONS. ALL CMU SHALL BE LIGHTWEIGHT AGGREGATE WITH A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 2000 P.S.I. ON NET AREA (1000 P.S.I. ON GROSS AREA) AT 28 DAYS. MINIMUM PRISM STRENGTH SHALL BE F'm = 1500 P.S.I. AT 28 DAYS.
- ALL MORTAR FOR CMU SHALL BE TYPE S BY PROPORTION AND CONFORM TO ASTM C270. ALL GROUT (CONCRETE FILL) SHALL CONFORM TO ASTM C476. GROUT SHALL BE 2000 P.S.I. AT 28 DAYS WITH MAXIMUM AGGREGATE SIZE OF 3/8", UNLESS NOTED OTHERWISE. ALL CELLS/COURSES CONTAINING REINFORCING SHALL BE FILLED.
- PROVIDE CONCRETE FILLED BOND BEAM COURSES IN WALLS AT THE TOP, BOTTOM, BEARING LOCATIONS, TOP & BOTTOM OF WALL OPENINGS, AND AT EVERY SIXTH COURSE.
- PROVIDE CONCRETE FILLED VERTICAL CORES IN THE WALLS AT EACH END, EACH SIDE OF CONTROL JOINTS, EACH SIDE OF WALL OPENINGS, UNDER EACH CONCENTRATED LOAD, AND AT 4'-0" ON CENTER UNLESS OTHERWISE NOTED. PROVIDE STANDARD HOOK AT THE TOP OF ALL VERTICAL WALL REINFORCING. PROVIDE DOWELS INTO FOOTINGS TO MATCH VERTICAL WALL REINFORCING.
- REINFORCE BOND BEAMS AND FILLED VERTICAL CORES WITH REINFORCING BARS CONFORMING TO ASTM GRADE 60. LAP SPLICES FOR REINFORCEMENT SHALL BE 48 BAR DIA. MIN. UNLESS NOTED OTHERWISE. REBAR POSITIONERS SHALL BE USED TO PLACE BOND BEAM AND VERTICAL REINFORCING. STANDARD BAR SIZES SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE ON THE PLANS OR DETAILS:

WALL TYPE	BOND BEAMS	FILLED CORES
8" CMU	(2) #5	(1) #5

SPECIAL INSPECTION NOTES

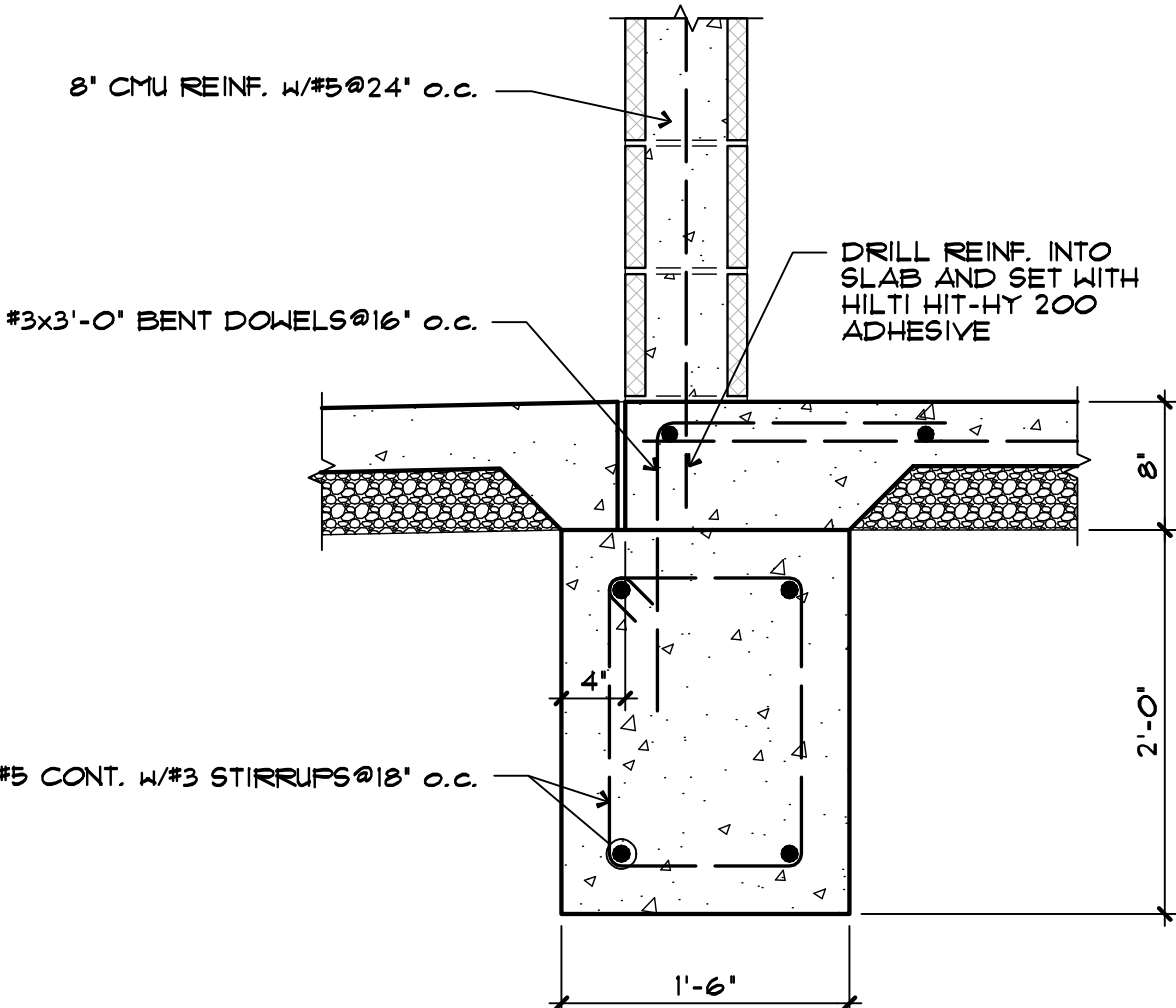
- SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 17 OF THE BUILDING CODE BY QUALIFIED PERSONNEL WORKING UNDER THE DIRECT SUPERVISION OF THE SPECIAL INSPECTOR.
- THE INSPECTORS AND TESTING AGENCIES SHALL BE ENGAGED BY THE OWNER OR THE OWNER'S AGENT, AND NOT BY THE CONTRACTOR OR SUBCONTRACTOR WHOSE WORK IS TO BE INSPECTED OR TESTED. ANY CONFLICT OF INTEREST MUST BE DISCLOSED TO THE BUILDING OFFICIAL, PRIOR TO COMMENCING WORK.
- THE SPECIAL INSPECTOR SHALL REPORT TO THE OWNER, ARCHITECT, ENGINEER, CONTRACTOR AND BUILDING OFFICIAL THE ACTIVITIES THAT WERE OBSERVED.
- APPARENT DEVIATIONS FROM THE REQUIREMENTS OF THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER OF RECORD (SER) IMMEDIATELY.
- SPECIAL INSPECTION REQUIREMENTS ARE IN ADDITION TO THE NORMAL MATERIAL TESTING FOR QUALITY ASSURANCE PERFORMED BY THE OWNER'S TESTING LABORATORIES AND CONTAINED IN THE SPECIFICATIONS. THE SPECIAL INSPECTION AND OWNERS TESTING PROGRAM ARE INTENDED TO COMPLEMENT ONE ANOTHER. THE SPECIAL INSPECTOR SHALL MAINTAIN RECORD COPIES OF ALL MATERIAL TEST REPORTS FOR THE STRUCTURAL PORTIONS OF THE PROJECT.
- THE FOLLOWING STRUCTURAL ITEMS REQUIRE SPECIAL INSPECTION:

- SOIL: THE SOIL ENGINEER IS TO VERIFY
- THE SITE CONDITIONS ARE THE SAME AS ASSUMED IN THE SOIL REPORT
 - EXCAVATION, PROOFROLLING AND FILL PAD CONSTRUCTION
 - THE SOIL IS COMPACTED TO SPECIFIED REQUIREMENTS
 - BEARING SURFACE MATERIAL FOR FOOTINGS

- CAST-IN-PLACE CONCRETE:
- REBAR INSTALLATION PRIOR TO CLOSING THE FORMS OR DELIVERY OF CONCRETE TO THE JOBSITE.
 - DURING TAKING OF TEST SPECIMENS
 - CONCRETE PLACEMENT AND CONSOLIDATION OF FOUNDATIONS AND SLABS
 - ANCHOR BOLTS EMBEDDED IN CONCRETE

- CMU WALLS:
- OBSERVE INITIAL LAYING OF BLOCKS FOR CONFORMANCE WITH ACCEPTABLE STANDARDS OF WORKMANSHIP.
 - OBSERVE PLACEMENT OF REINFORCING FOR REQUIRED SIZE AND SPACING.
 - VERIFY PROPER CLEAN OUT OF CELLS PRIOR TO GROUTING.
 - COMPLY WITH LEVEL 2 INSPECTION OF MASONRY CONST. (TABLE 1704.5.3)

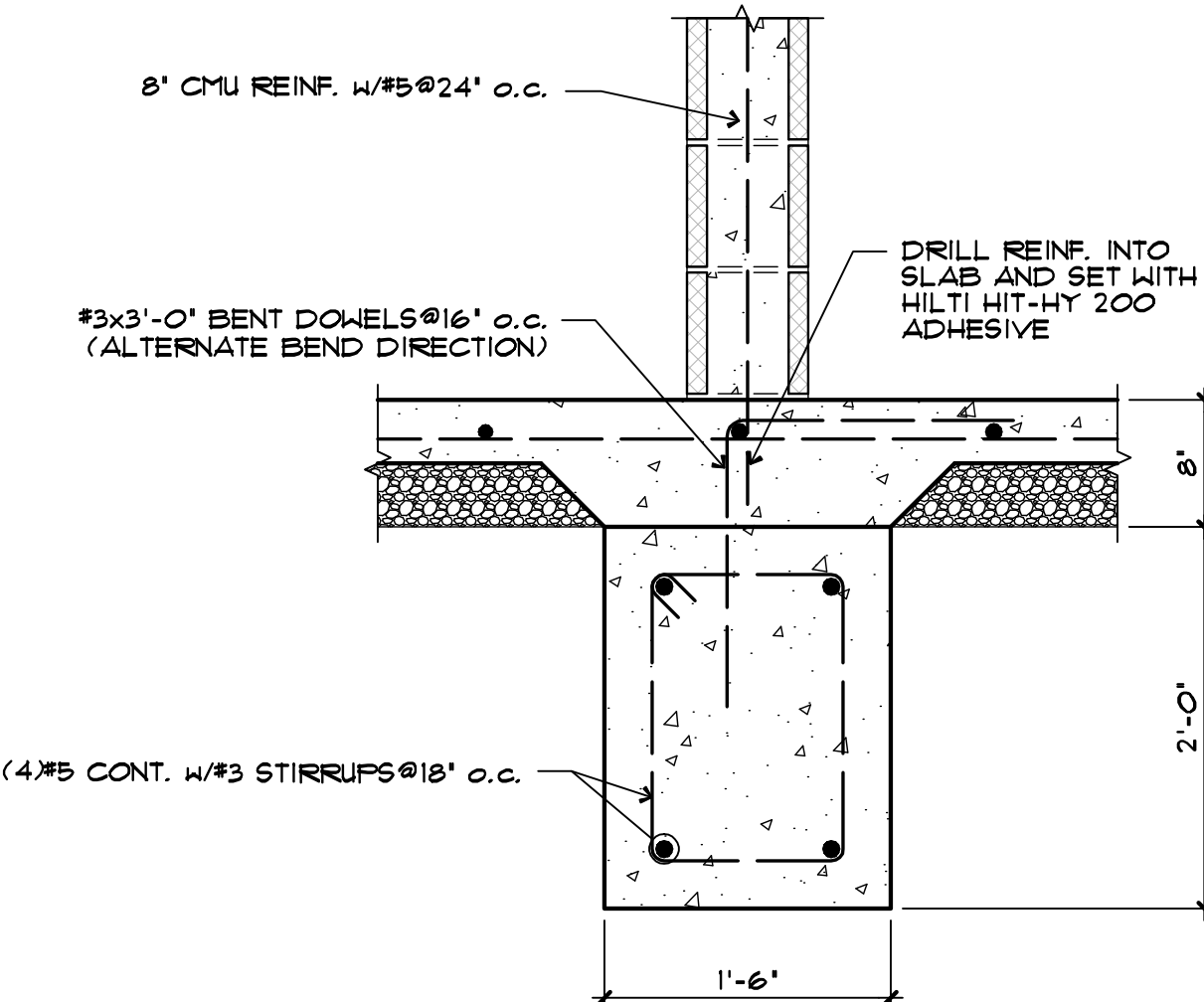
- THE SPECIAL INSPECTIONS LISTED ARE IN ADDITION TO THE CALLED INSPECTIONS REQUIRED BY THE BUILDING CODE. SPECIAL INSPECTION IS NOT A SUBSTITUTE FOR INSPECTION BY A CITY INSPECTOR.
- THE CONTRACTOR SHALL NOTIFY THE SPECIAL INSPECTOR OR INSPECTION AGENCY AT LEAST ONE WORKING DAY PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION.
- WORK REQUIRING SPECIAL INSPECTION THAT IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE CITY INSPECTOR IS SUBJECT TO REMOVAL OR EXPOSURE AT THE COST OF THE CONTRACTOR.



2 FOOTING SECTION

SCALE: 1"=1'-0"

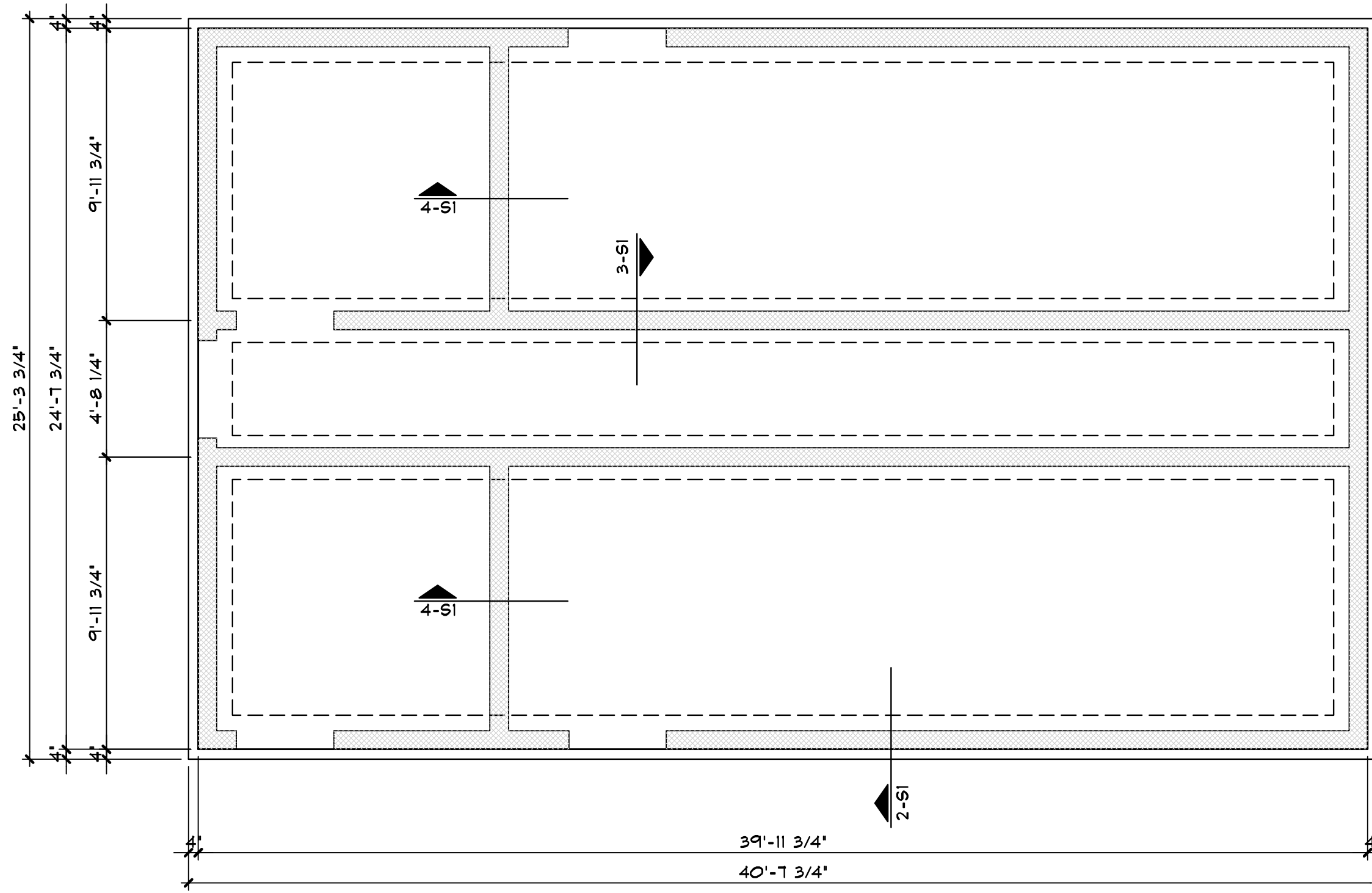
22034F02



3 FOOTING SECTION

SCALE: 1"=1'-0"

22034F03



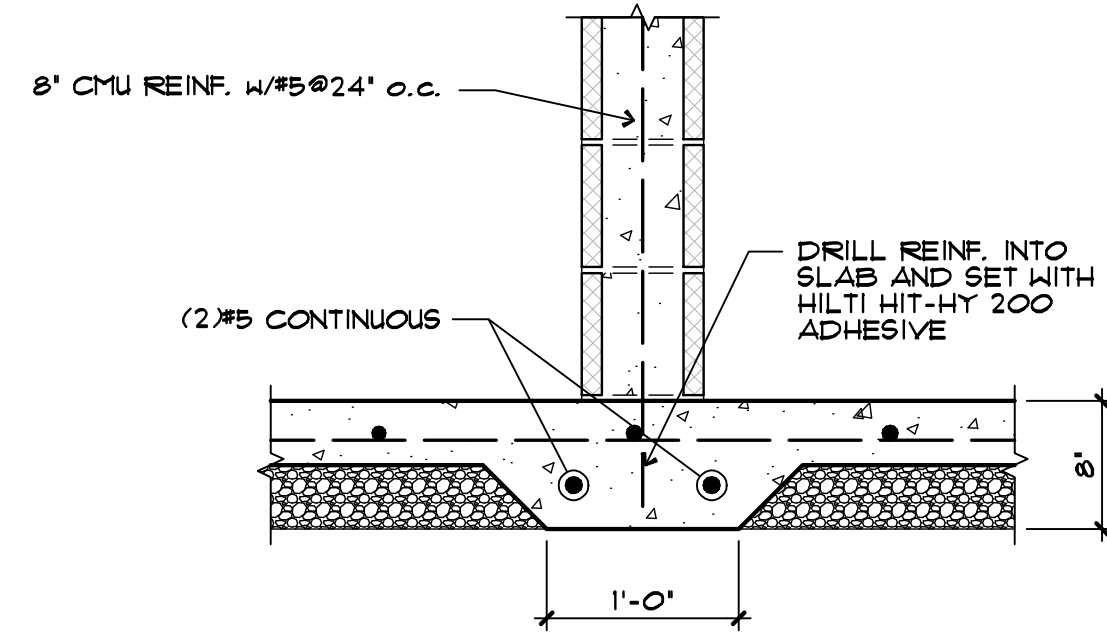
FOUNDATION PLAN

SCALE: 1/4"=1'-0"

22034F04

TYPICAL SLAB ON GRADE IS 4" CONCRETE REINF. W/#3@16" o.c. OVER 15 MIL VAPOR BARRIER OVER 4" GRAVEL BASE OVER FILL AS REQUIRED OVER PROPERLY COMPACTED SUBGRADE.

REFER TO ARCH/CIVIL FOR FINISHED FLOOR ELEVATIONS.



4 THICKENED SLAB

SCALE: 1"=1'-0"

22034F04

MARK EUDALEY
STRUCTURAL
ENGINEERS

6656 N.W. 39th Expressway
Bethany, OK 73008
PH: 405.789.4433 FAX: 405.788.4589
CA #69 WEE# 22034

415 Broadway

Oklahoma City

Oklahoma 73102



V.405.232.8787

F.405.232.8810

www.taparchitecture.com

SEAL



PROJECT

BUCK THOMAS PARK
RESTROOM FACILITIES
1803 NE 12TH STREET
MOORE, OK 73160



ISSUES

REVISIONS

PERMIT SET-10/9/2025

SHEET

TITLE

FOUNDATION PLAN
NOTES/DETAILS

SHEET

NUMBER

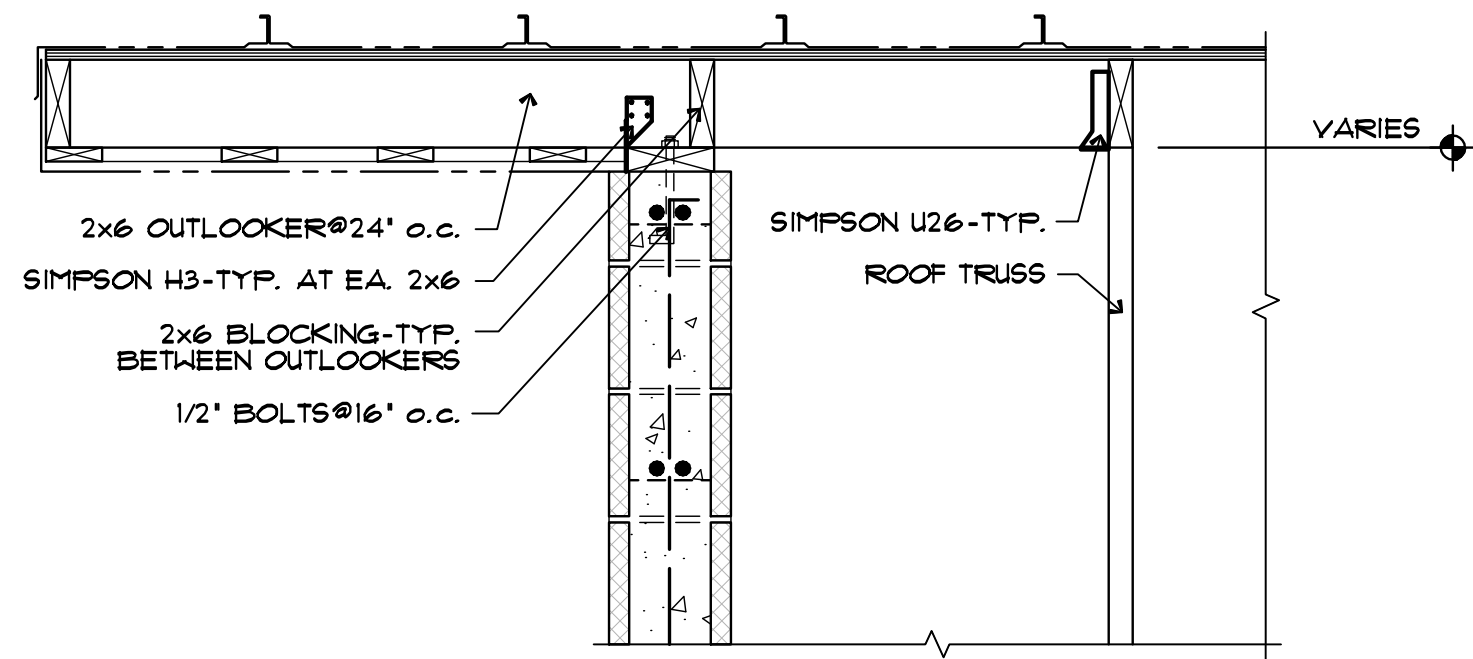
S1

PROJECT

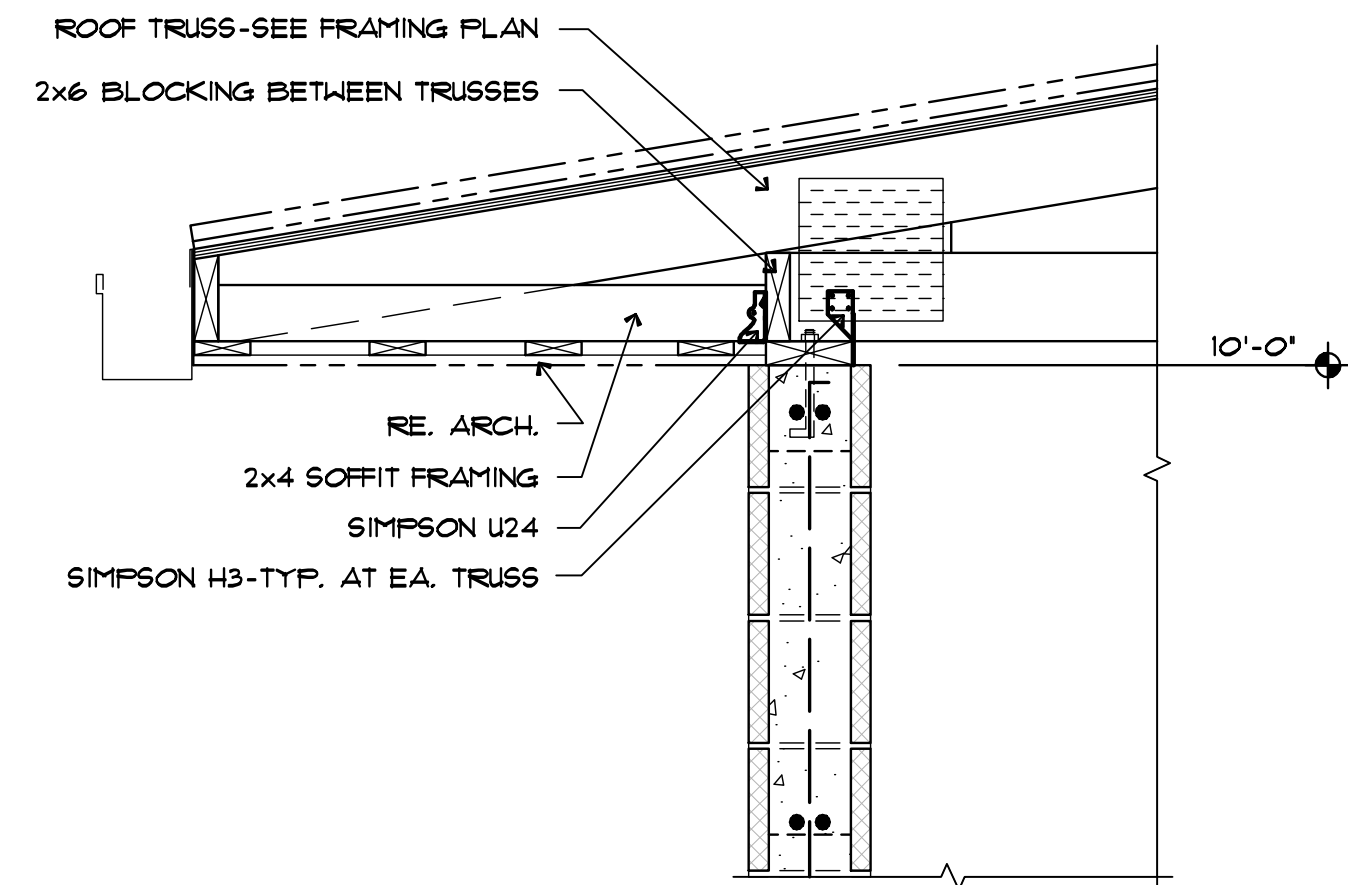
NUMBER

2221

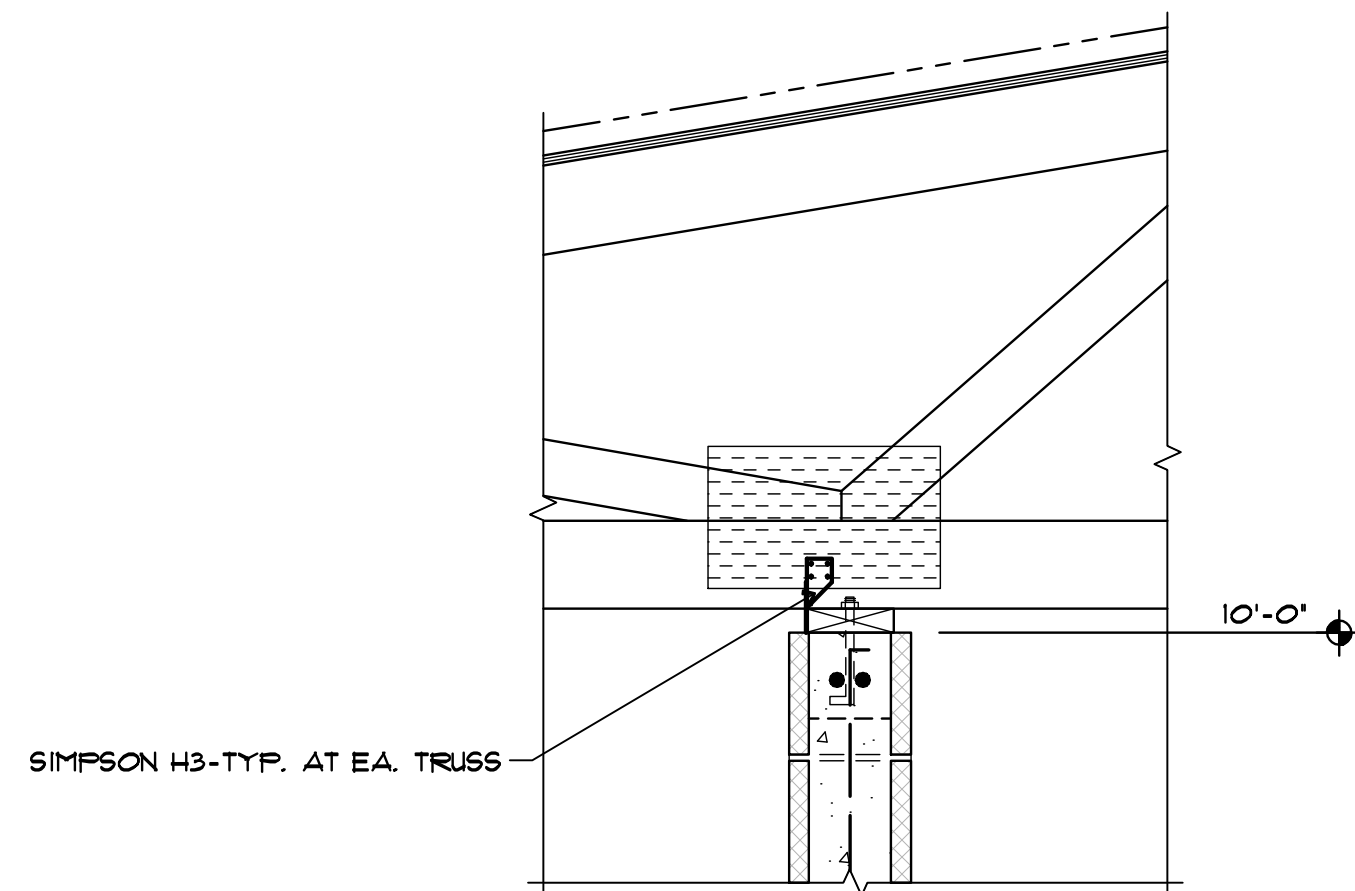
All drawings and written
materials herein constitute
original work of
TAPArchitecture and may
only be duplicated with their
written consent.



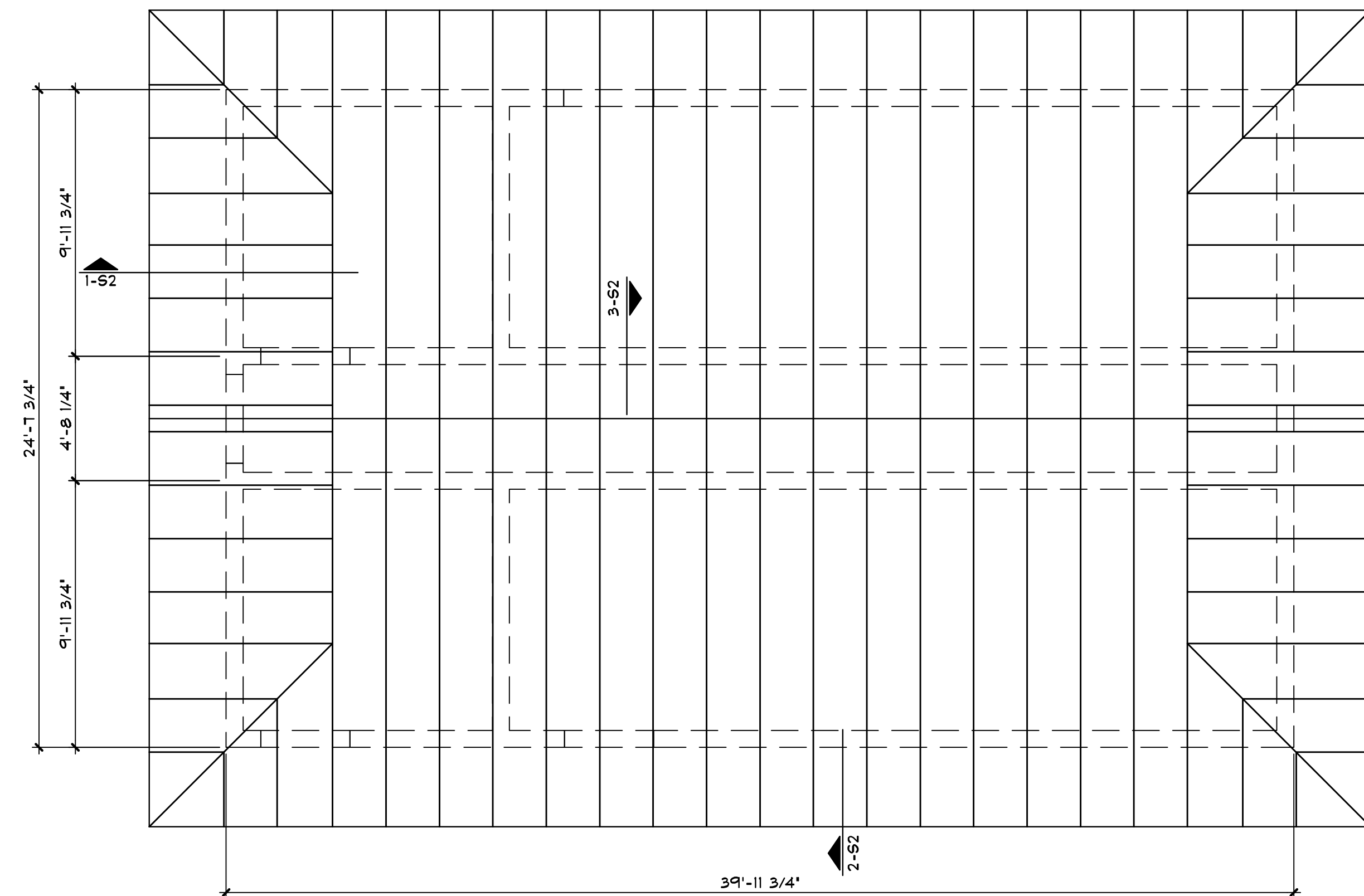
1 FRAMING SECTION
SCALE: 1"=1'-0"
22034FR01



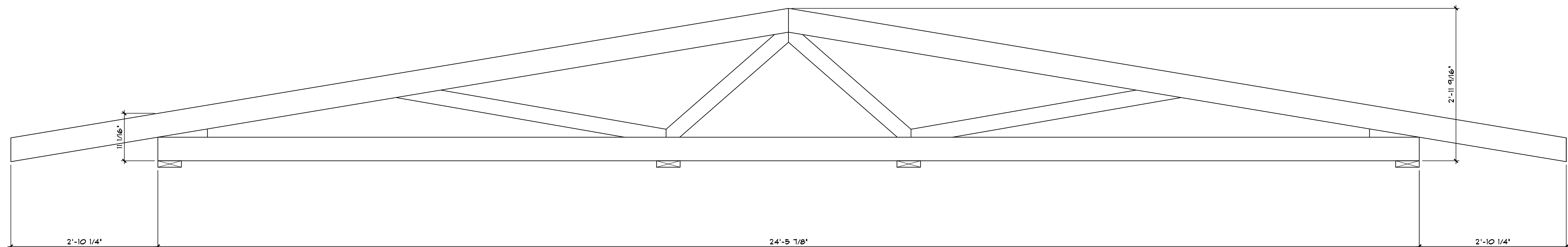
2 FRAMING SECTION
SCALE: 1"=1'-0"
22034FR02



3 FRAMING SECTION
SCALE: 1"=1'-0"
22034FR03



ROOF FRAMING PLAN
SCALE: 1/4"=1'-0"
22034RFP
TYPICAL ROOF DECK IS 5/8" STRUCTURAL GRADE PLYWOOD WITH SIMPSON CLIPS AT JOINTS BETWEEN TRUSSES.
TRUSSES SHALL BE SPACED AT 24' o.c.



4 ROOF TRUSS CONFIGURATION
SCALE: 1"=1'-0"
TRUSS-ELEV

MARK EUDALEY
STRUCTURAL
ENGINEERS
6656 N.W. 39th Expressway
Bethany, OK. 73008
PH: 405.789.4433 FAX: 405.789.4389
CA. #99 ME#22034

415 Broadway
Oklahoma City
Oklahoma 73102



V.405.232.8787
F.405.232.8810
www.taparchitecture.com

SEAL



PROJECT

**BUCK THOMAS PARK
RESTROOM FACILITIES**
1803 NE 12TH STREET
MOORE, OK 73160



ISSUES
REVISIONS
PERMIT SET-10/9/2025

SHEET
TITLE
ROOF FRAMING PLAN
NOTES/DETAILS

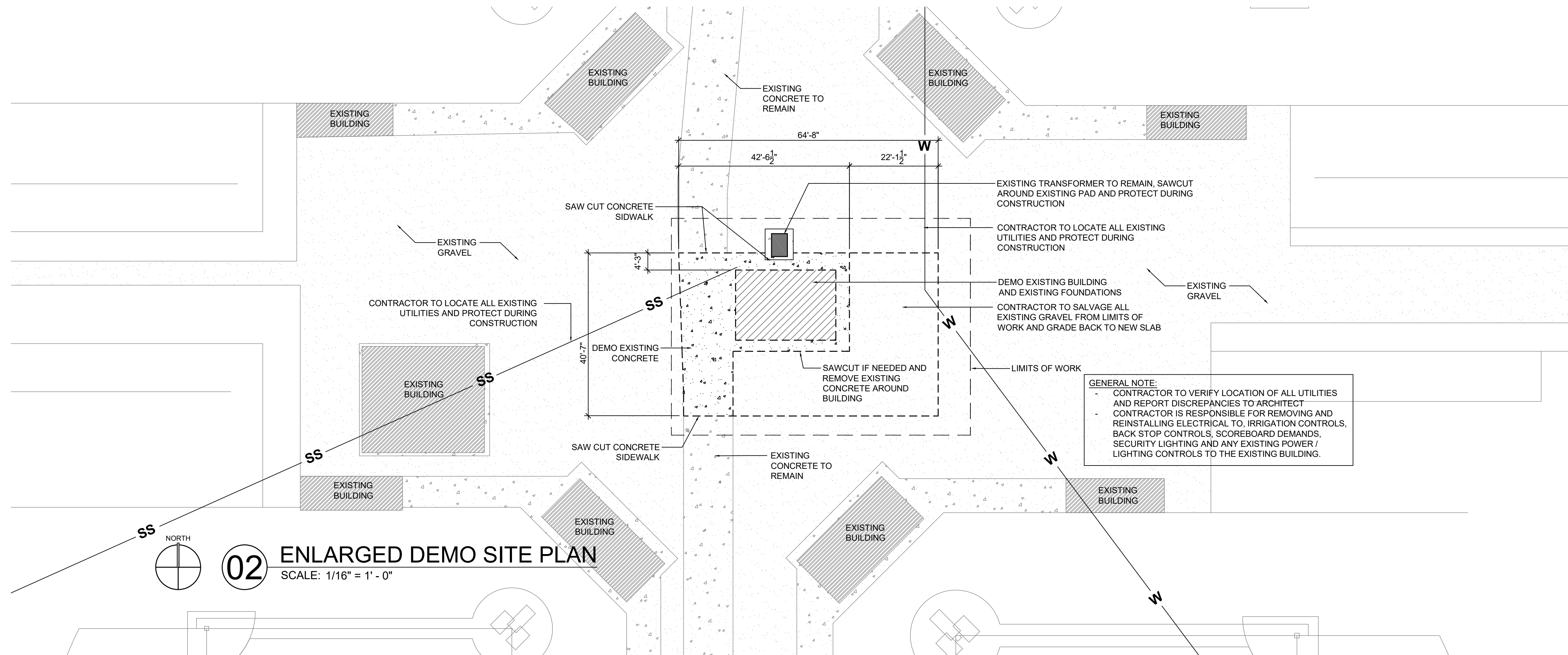
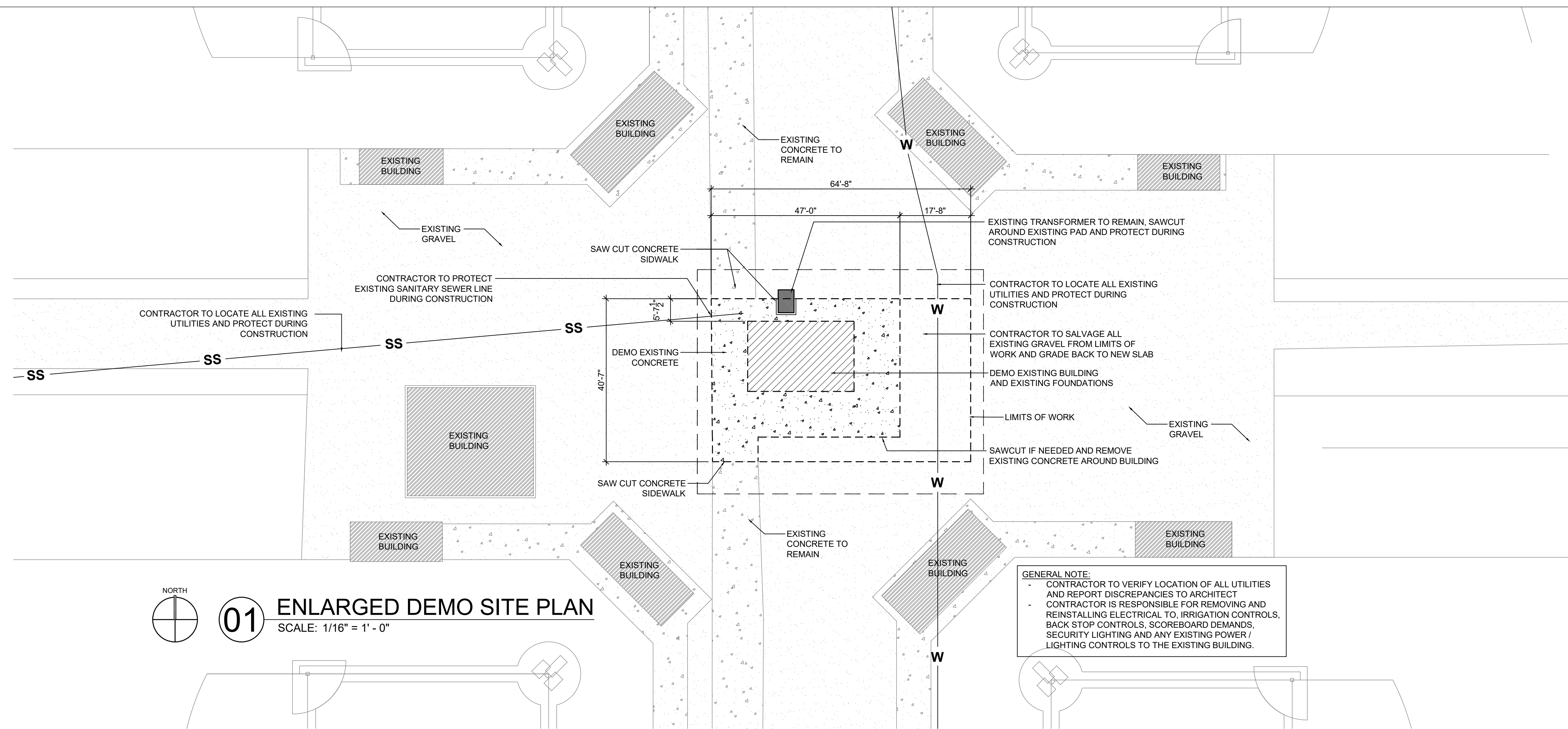
SHEET
NUMBER

S2

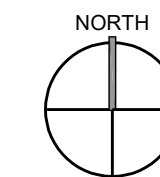
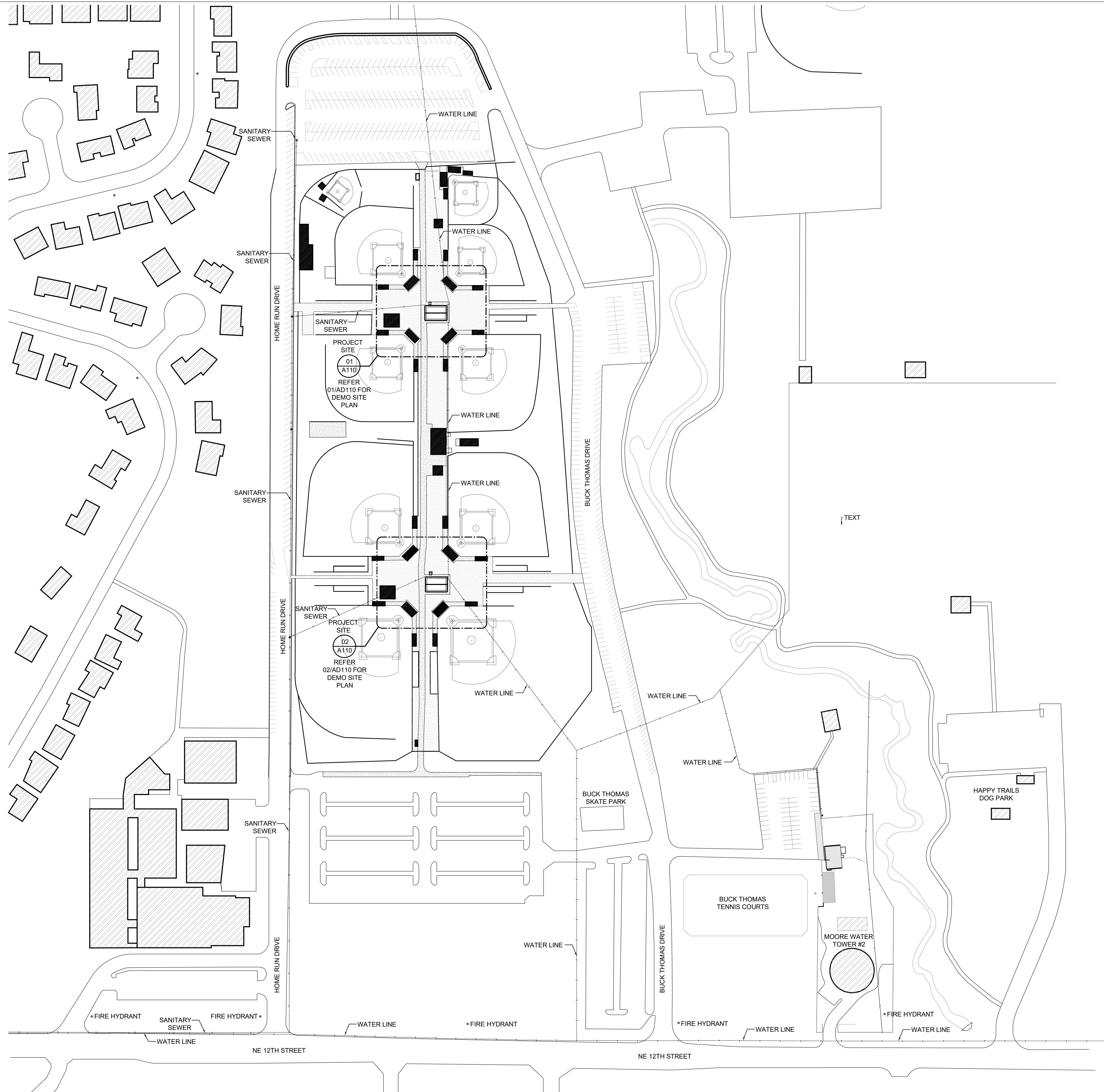
PROJECT
NUMBER

2221

All drawings and written
materials herein constitute
original work of
TAP Architecture and may
only be duplicated with their
written consent.



A:\2221 - City of Moore, New Restroom Facilities at Buck Thomas Park\04_CD\01_Drawing\CAD\2220_A100_VICINITY_PLAN.dwg



01 VICINITY SITE PLAN
SCALE: 1" = 100' - 0"

415 Broadway

Oklahoma City

Oklahoma 73102



V.405.232.8787

www.tapokc.com

ARCHITECT'S
SEAL



10/9/2025

PROJECT

**BUCK THOMAS
RESTROOM FACILITIES**
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160



ISSUES
REVISIONS

ISSUE DATE: 10/9/2025

SHEET
TITLE

VICINITY
SITE PLAN

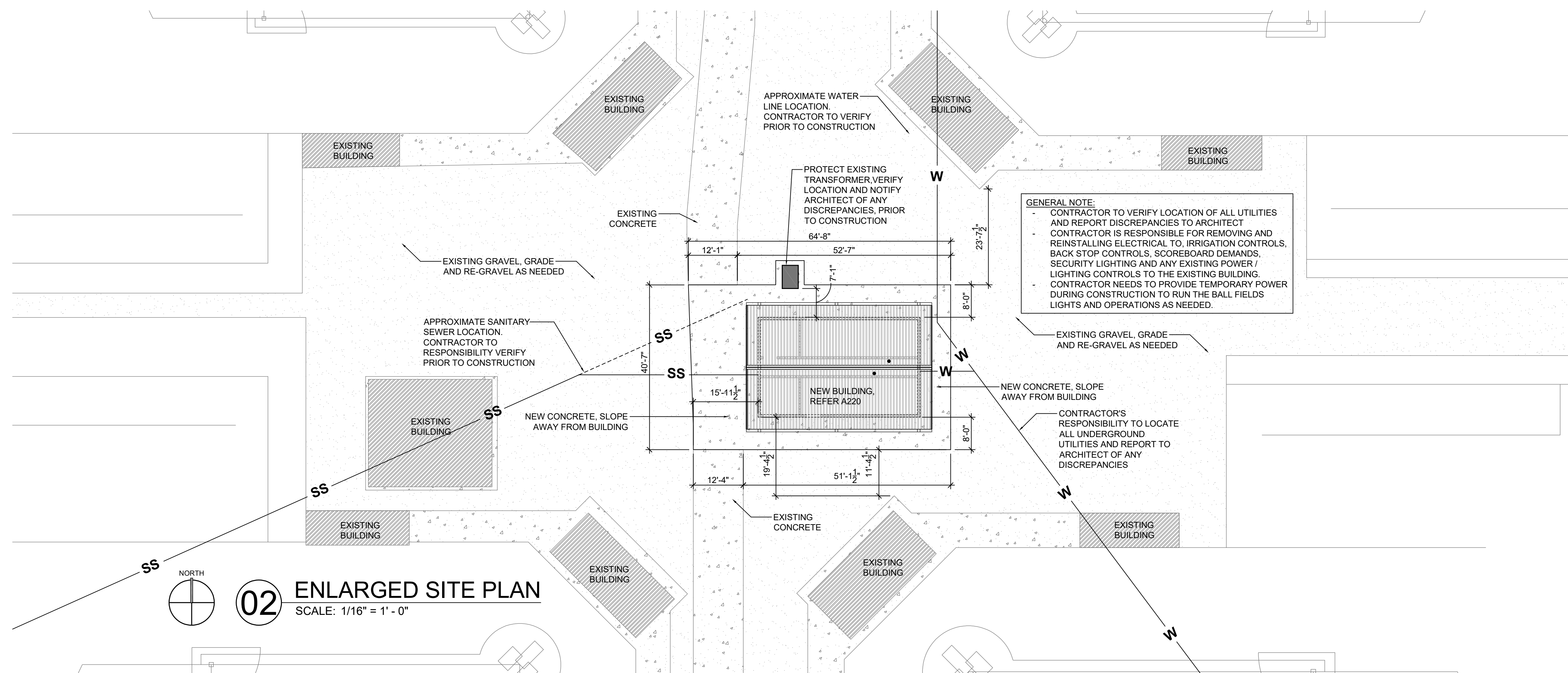
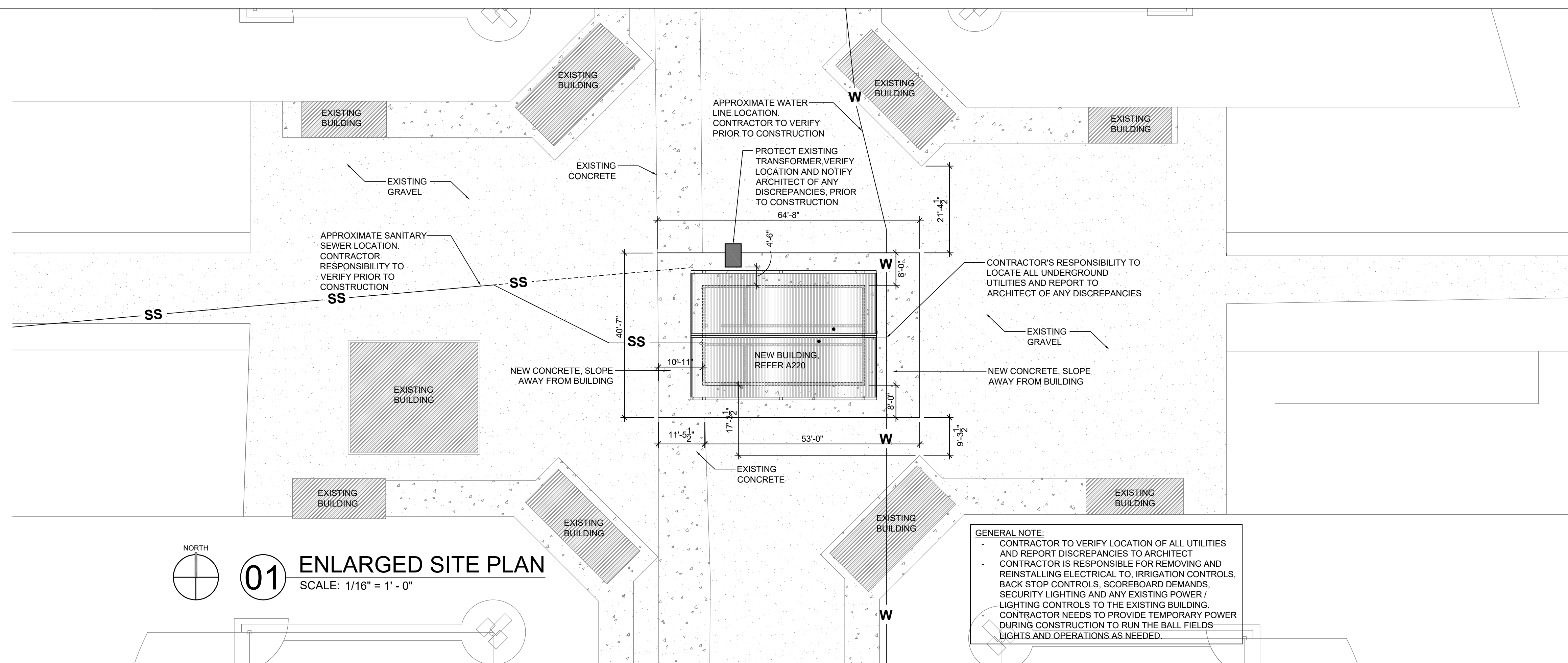
SHEET
NUMBER

A100

PROJECT
NUMBER

2221

All drawings and written
materials herein constitute
original work of
TAParchitecture and may
only be duplicated with their
written consent.



A:\2221 - City of Moore, New Restroom Facilities at Buck Thomas Park\04_CD\01_Drawing\CAD\2220_A110_SITE_PLAN.dwg

415 Broadway

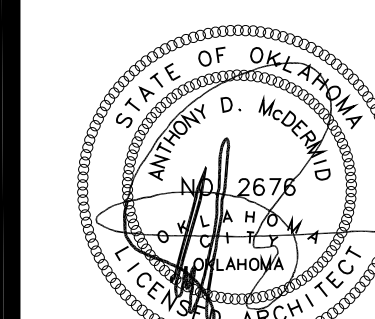
Oklahoma City

Oklahoma 73102



Y.405.232.8787

www.tapokc.com

ARCHITECT'S
SEAL

10/9/2025

PROJECT

**BUCK THOMAS
RESTROOM FACILITIES**
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160

ISSUES
REVISIONS

ISSUE DATE: 10/9/2025

SHEET
TITLE

ENLARGED SITE PLAN

SHEET
NUMBER

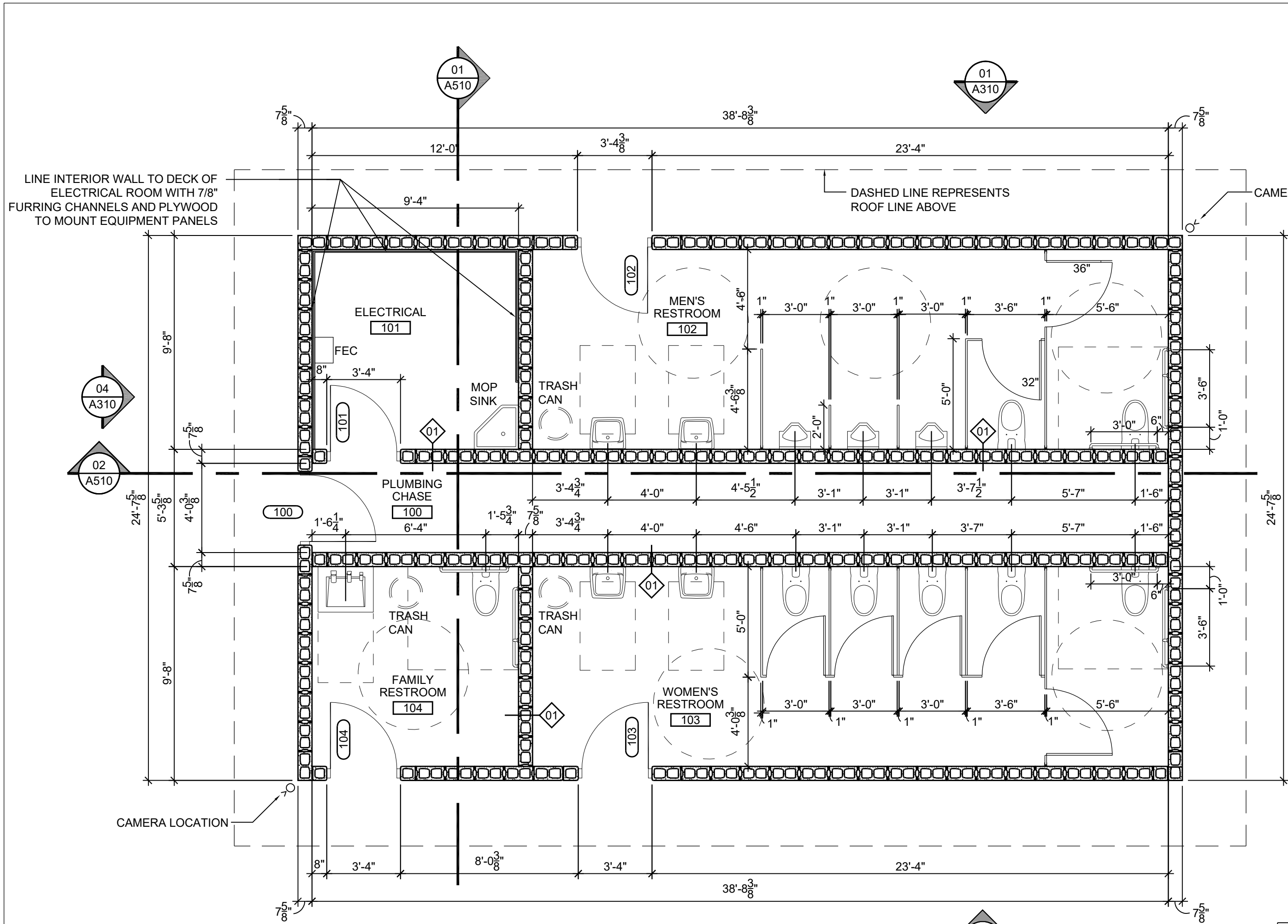
A110

PROJECT
NUMBER

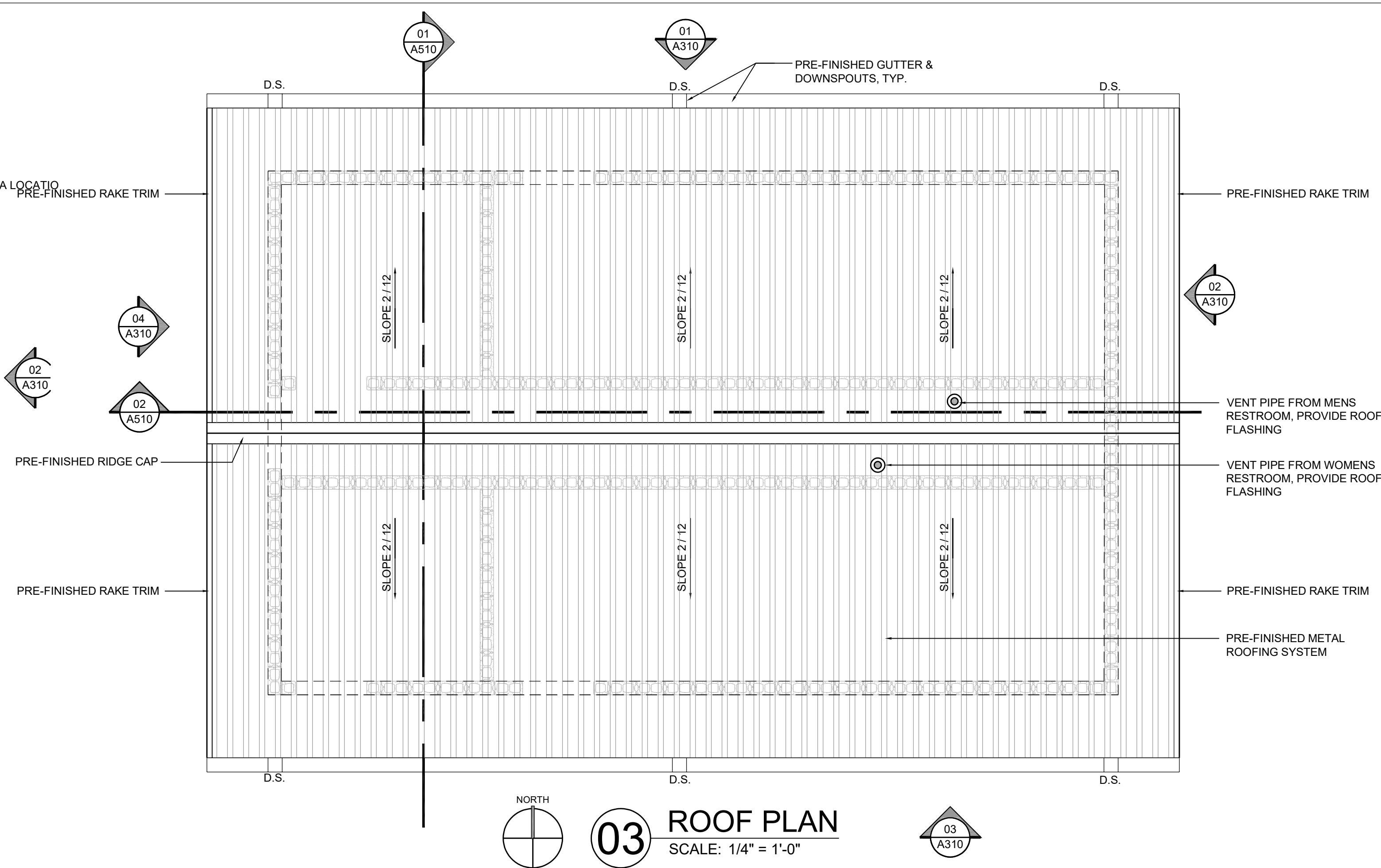
2221

All drawings and written materials herein constitute original work of TAParchitecture and may only be duplicated with their written consent.

A:\2221 - City of Moore, New Restroom Facilities at Buck Thomas Park\04_CD\01_Drawing\CAD\2220_A220_FLOOR PLAN.dwg



01 DIMENSIONED FLOOR PLAN
SCALE: 1/4" = 1'-0"



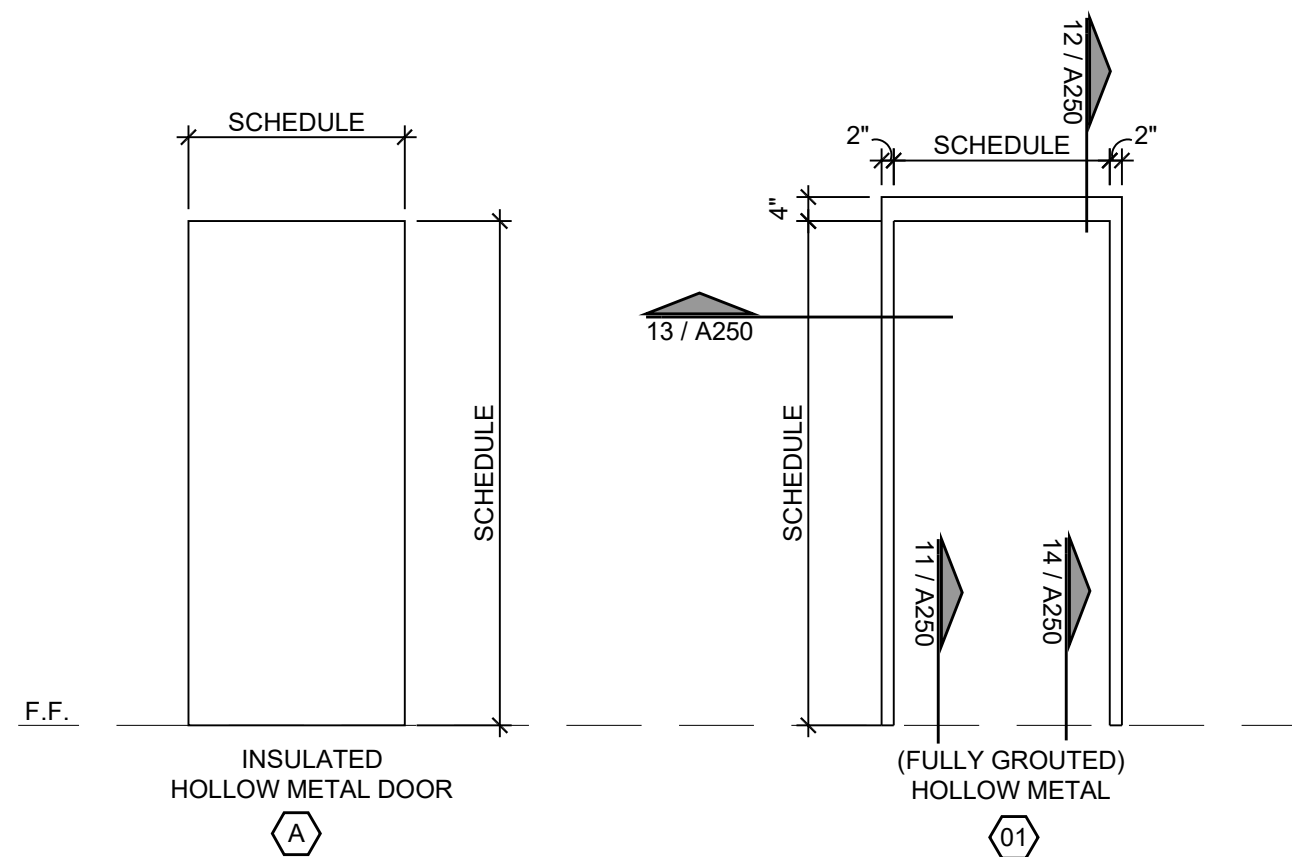
DOOR SCHEDULE

DOOR NO.	ROOM NAME	DOOR SIZE	DOOR TYPE	FRAME TYPE	HARD-WARE	RATING	DETAILS			REMARKS
							HEAD	JAMB	SILL	
100	PLUMBING CHASE	3'-0" X 7'-0"	A	01	1.0	-	12/A250	13/A250	11/A250	POWER TO FRAME / KEY CARD ACCESS
101	ELECTRICAL ROOM	3'-0" X 7'-0"	A	01	4.0	-	12/A250	13/A250	14/A250	POWER TO FRAME / KEY CARD ACCESS
102	MENS RESTROOM	3'-0" X 7'-0"	A	01	2.0	-	12/A250	13/A250	11/A250	POWER TO FRAME / AUTOMATIC LOCK SYSTEM
103	WOMENS RESTROOM	3'-0" X 7'-0"	A	01	2.0	-	12/A250	13/A250	11/A250	POWER TO FRAME / AUTOMATIC LOCK SYSTEM
104	FAMILY RESTROOM	3'-0" X 7'-0"	A	01	3.0	-	12/A250	13/A250	11/A250	POWER TO FRAME / AUTOMATIC LOCK SYSTEM

LIGHT FIXTURE SCHEDULE

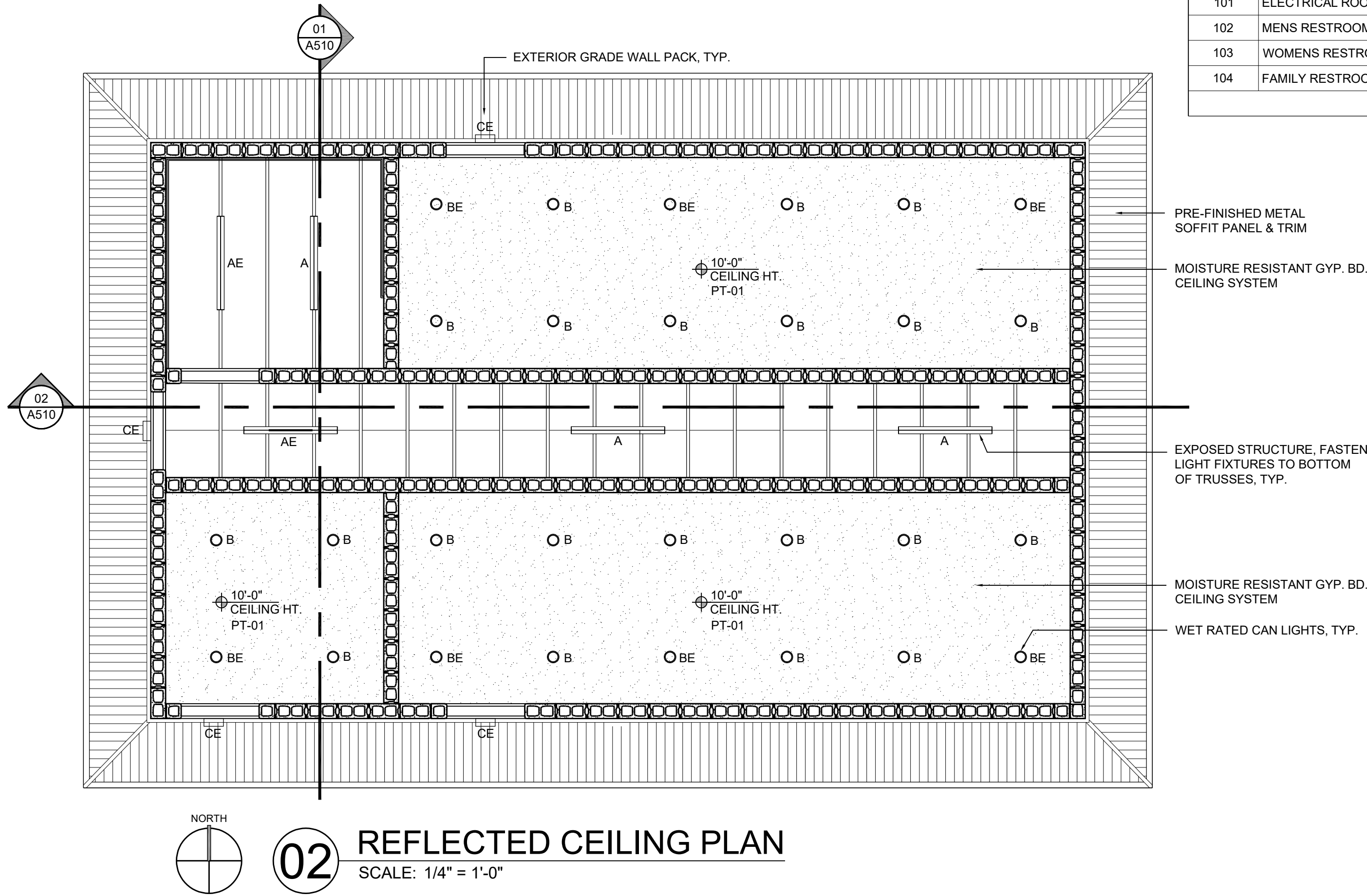
FIXTURE	DESCRIPTION	MANUFACTURER	SERIES	REMARKS
A	LINEAR FIXTURE	COLUMBIA	CSL8-LSCS 8	4' LONG FIXTURE MOUNTED TO WOOD TRUSSES
B	RECESSED CAN	CSL	ED5LNC-409050-30S	ROUND, 5" WHITE CAN LIGHT, WET LOCATION
C	WALL PACK	LSI	WPSLL LED 4L UNV 40 PCI-UNV BLK	EMERGENCY BACKUP FIXTURE SET UP

NOTE:
1. FIXTURES AE, BE, AND CE ARE ON EMERGENCY BATTERY BACKUP
2. ALL LIGHTS TO BE LED, TYP.



04 DOOR TYPE
SCALE: 3/8" = 1'-0"

05 FRAME TYPE
SCALE: 3/8" = 1'-0"



02 REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

415 Broadway

Oklahoma City

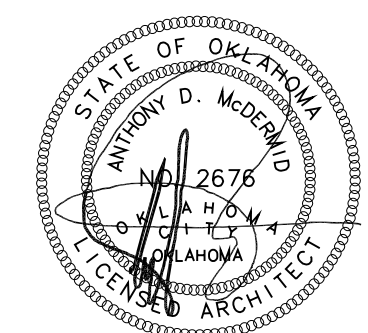
Oklahoma 73102



V.405.232.8787

www.tapokc.com

ARCHITECT'S SEAL



10/9/2025

PROJECT

**BUCK THOMAS
RESTROOM FACILITIES**
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160



ISSUES
REVISIONS

ISSUE DATE: 10/9/2025

SHEET
TITLE
**DIMENSIOND FLOOR
PLAN, ROOF PLAN,
& RCP**

SHEET
NUMBER

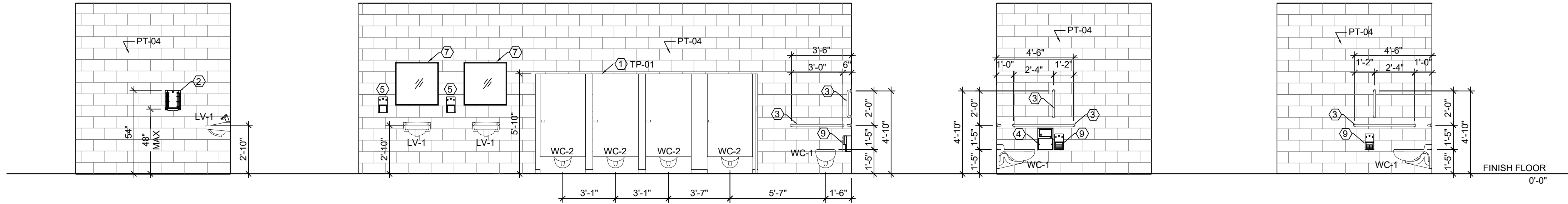
A220

PROJECT
NUMBER

2221

All drawings and written
materials herein constitute
original work of
TAParchitecture and may
only be duplicated with their
written consent.

A:\2221 - City of Moore, New Restroom Facilities at Buck Thomas Park\04_CD\01_Drawing\CAD\2220_A250_Interior Elevations and Finishes.dwg



01 INTERIOR ELEVATION
SCALE: 1/4" = 1' - 0"

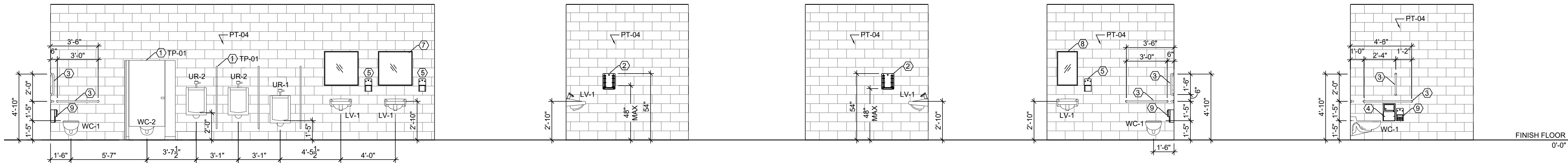
02 INTERIOR ELEVATION
SCALE: 1/4" = 1' - 0"

03 INTERIOR ELEVATION
SCALE: 1/4" = 1' - 0"

04 INTERIOR ELEVATION
SCALE: 1/4" = 1' - 0"

EQUIPMENT KEY	
①	HDPE PARTITIONS
②	HAND DRYERS RE: ELECTRICAL
③	GRAB BARS STAINLESS STEEL
④	SANITARY NAPKIN DISPOSAL
⑤	SOAP DISPENSER
⑥	ROBE HOOKS, MOUNTED AT 48" AFF (NOT APPLICABLE)
⑦	30"W X 30"H HIGH IMPACT LEXAN STAINLESS STEEL MIRROR
⑧	18"W X 30"H HIGH IMPACT LEXAN STAINLESS STEEL MIRROR
⑨	TOILET TISSUE DISPENSER

- NOTES:
- MIRRORS TO BE RATED FOR DURABILITY. GLAZING TO BE LEXAN DURA-MIRROR OR EQUIVALENT.
 - LOCATION AND DIMENSIONS OF ALL RESTROOM ACCESSORIES ARE TO BE VERIFIED BY CONTRACTOR AND MUST MEET ALL APPLICABLE CODES AND ADA REQUIREMENTS.
 - ALL PAPER PRODUCTS WILL BE FURNISHED BY THE CITY OF MOORE, BUT CONTRACTOR INSTALLED.
 - ELECTRIC HAND DRYERS WILL BE PROVIDED BY THE CONTRACTOR IN BID PACKAGE.



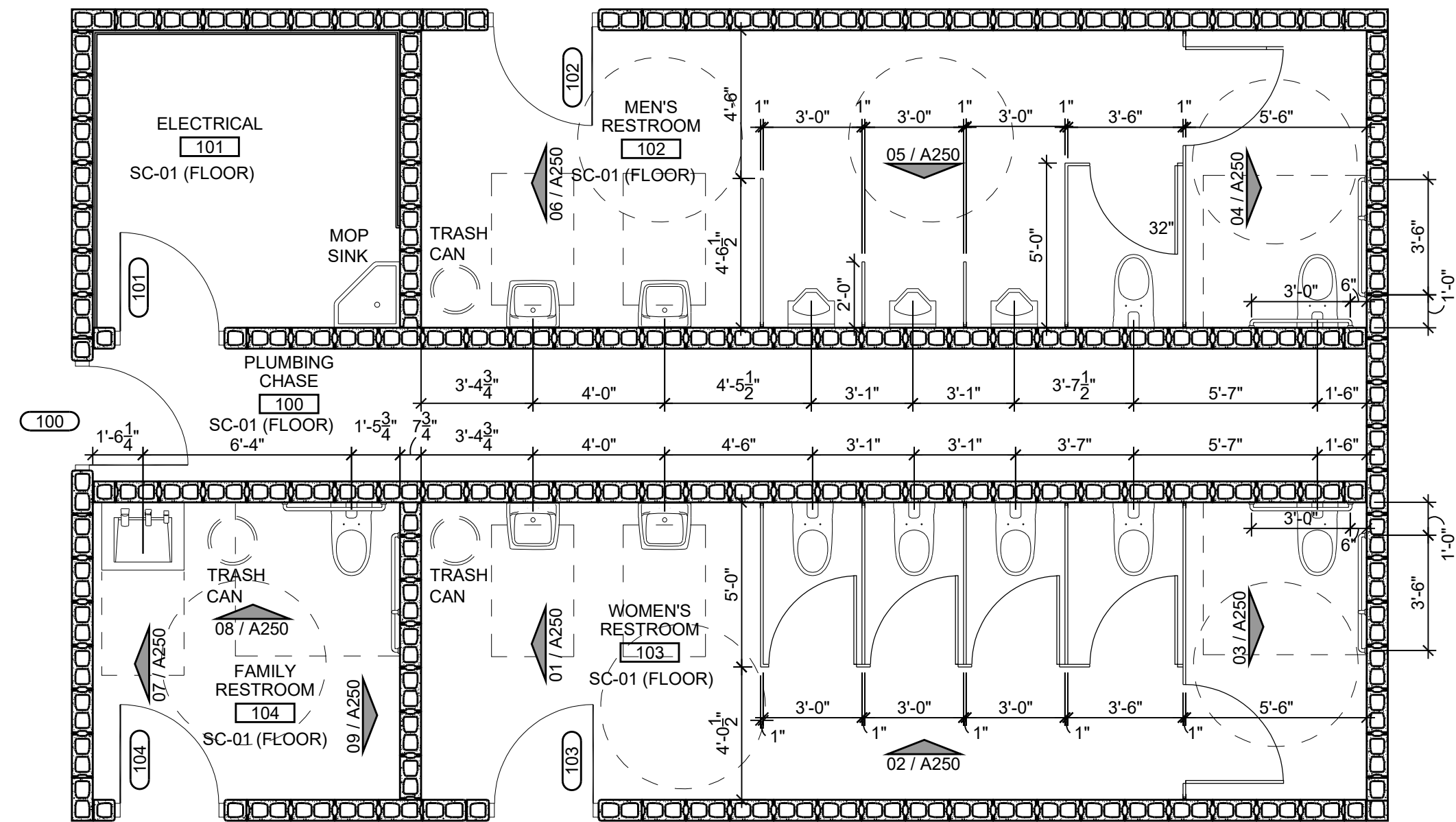
05 INTERIOR ELEVATION
SCALE: 1/4" = 1' - 0"

06 INTERIOR ELEVATION
SCALE: 1/4" = 1' - 0"

07 INTERIOR ELEVATION
SCALE: 1/4" = 1' - 0"

08 INTERIOR ELEVATION
SCALE: 1/4" = 1' - 0"

09 INTERIOR ELEVATION
SCALE: 1/4" = 1' - 0"



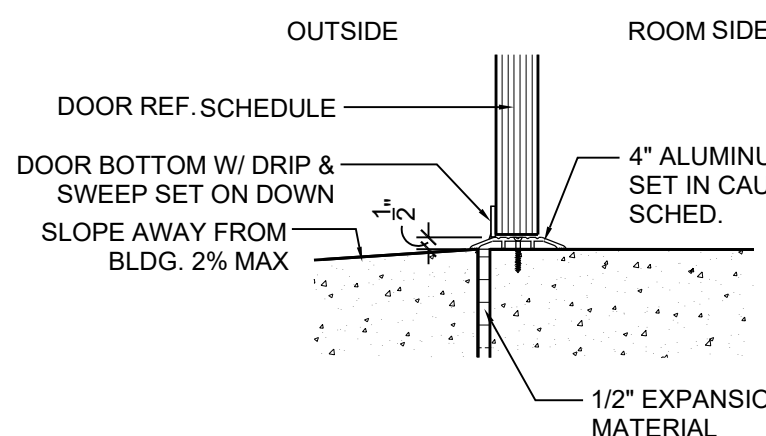
10 FLOOR PLAN
SCALE: 1/4" = 1' - 0"

MATERIAL/COLOR LEGEND

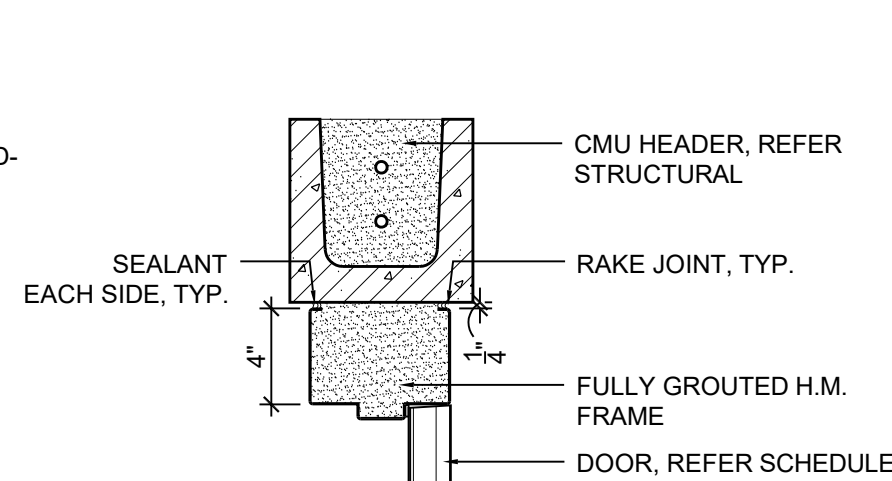
FLOOR				
MARK	PRODUCT	MANUFACTURER/ SUPPLIER	COLOR/MODEL #	NOTES
SC-01	SEALED CONCRETE	W.R. MEADOWS	N/A	LIQUI-HARD ULTRA
MISC.				
MARK	PRODUCT	MANUFACTURER/ SUPPLIER	COLOR/MODEL #	NOTES
TP-01	HPDE	HINY HIDERS	CHARCOAL GRAY - ORANGE PEEL FINISH	PROTECT DURING FINAL FINISHES STAGE
CEILING				
MARK	PRODUCT	MANUFACTURER/ SUPPLIER	COLOR/MODEL #	NOTES
PT-01	PAINT	SHERWIN WILLIAMS	SNOWBOUND SW7004	ON GYP. BOARD CEILINGS (MOISTURE CONTROL GYP. BD. - TYPICAL)
PT-02	PAINT	SHERWIN WILLIAMS	DOVETAIL SW7018	HOLLOW METAL DOOR FRAME COLOR (INTERIOR AND EXTERIOR SIDE)
PT-03	PAINT	SHERWIN WILLIAMS	REPOSE GRAY SW7017	HOLLOW METAL DOORS (INTERIOR AND EXTERIOR SIDE)
PT-04	PAINT	SHERWIN WILLIAMS	REPOSE GRAY SW7015	INTERIOR CMU WALLS OF PUBLIC SPACES

ROOM FINISH SCHEDULE

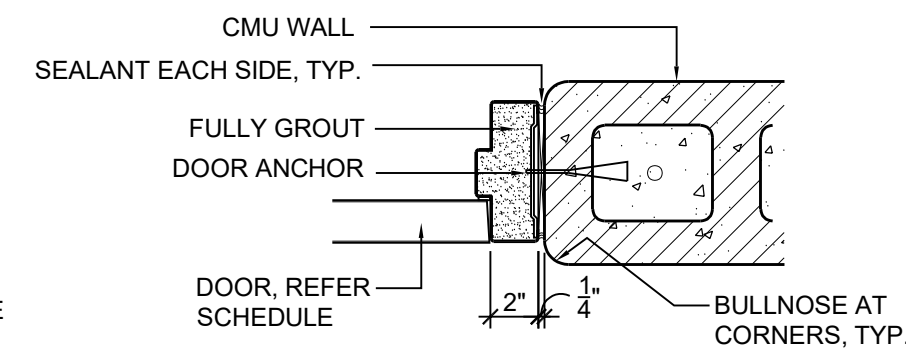
NO.	ROOM NAME	FLOOR	BASE	WALL				CEILING	REMARKS
				NORTH	EAST	SOUTH	WEST		
100	PLUMBING CHASE	SC-01	N/A	PT-04	PT-04	PT-04	PT-04	OPEN TO STRUCTURE	-
101	ELECTRICAL	SC-01	N/A	PT-04	PT-04	PT-04	PT-04	OPEN TO STRUCTURE	-
102	MEN'S RESTROOM	SC-01	N/A	PT-04	PT-04	PT-04	PT-04	PT-01	-
103	WOMEN'S RESTROOM	SC-01	N/A	PT-04	PT-04	PT-04	PT-04	PT-01	-
104	FAMILY RESTROOM	SC-01	N/A	PT-04	PT-04	PT-04	PT-04	PT-01	-



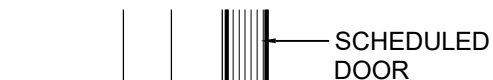
11 EXTERIOR SILL DETAIL
SCALE: 1-1/2" = 1'-0"



12 HEAD DETAIL
SCALE: 1-1/2" = 1'-0"



13 JAMB DETAIL
SCALE: 1-1/2" = 1'-0"



14 INTERIOR SILL DETAIL
SCALE: 1-1/2" = 1'-0"

415 Broadway

Oklahoma City

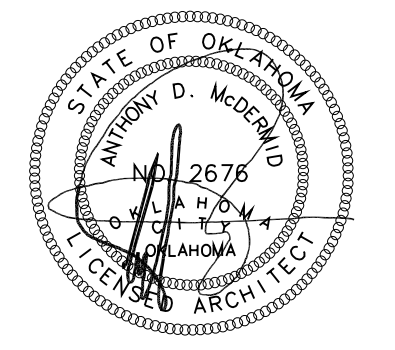
Oklahoma 73102



V.405.232.8787

www.tapokc.com

ARCHITECT'S SEAL



10/9/2025

PROJECT

BUCK THOMAS
RESTROOM FACILITIES
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160



ISSUES
REVISIONS

ISSUE DATE: 10/9/2025

SHEET
TITLE

INTERIOR ELEVATIONS,
FINISH SCHEDULE,
AND HEAD, SILL, JAMB

SHEET
NUMBER

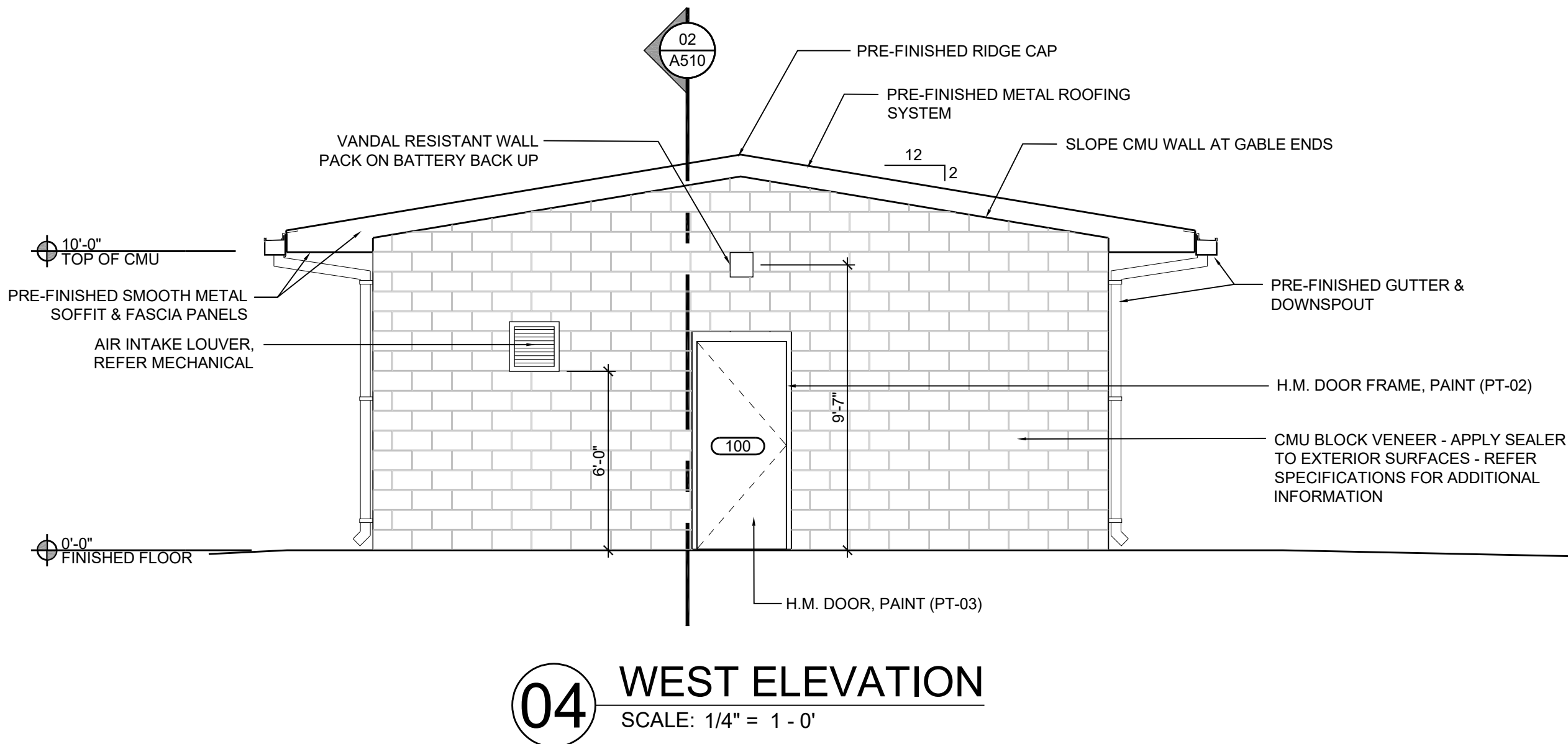
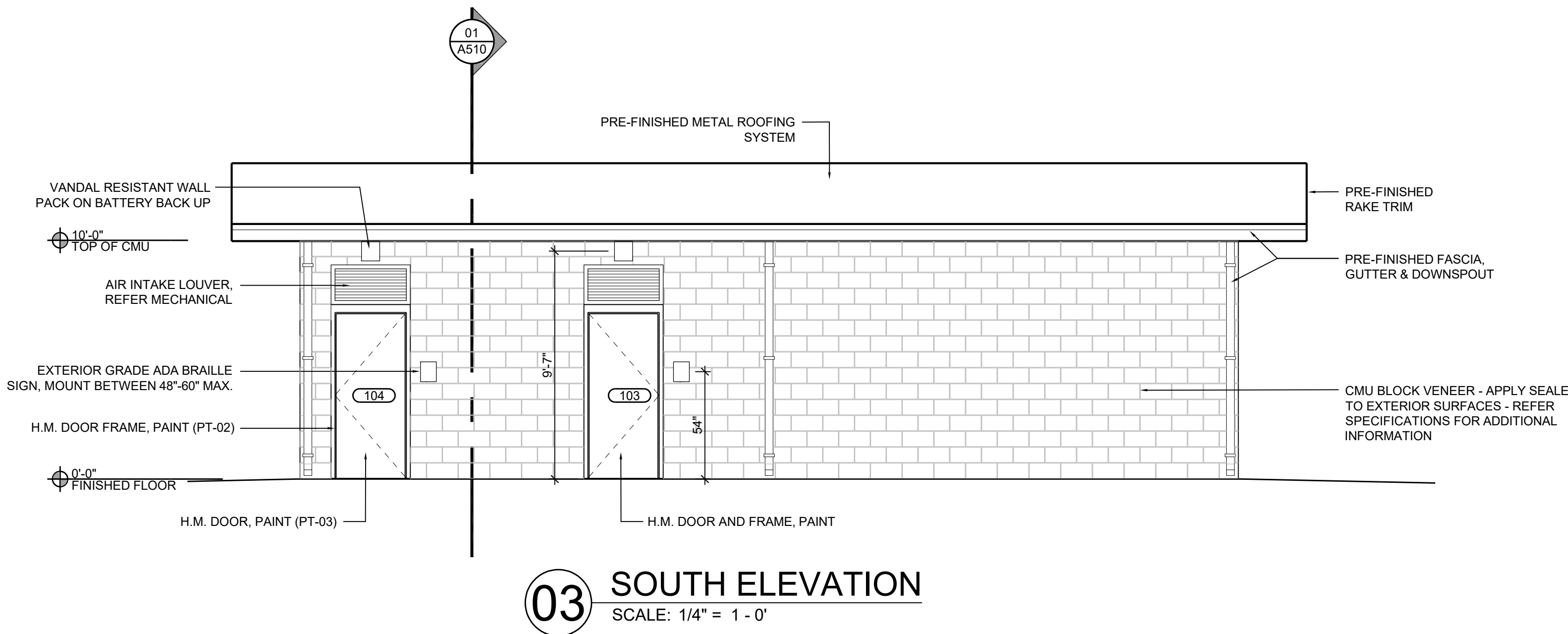
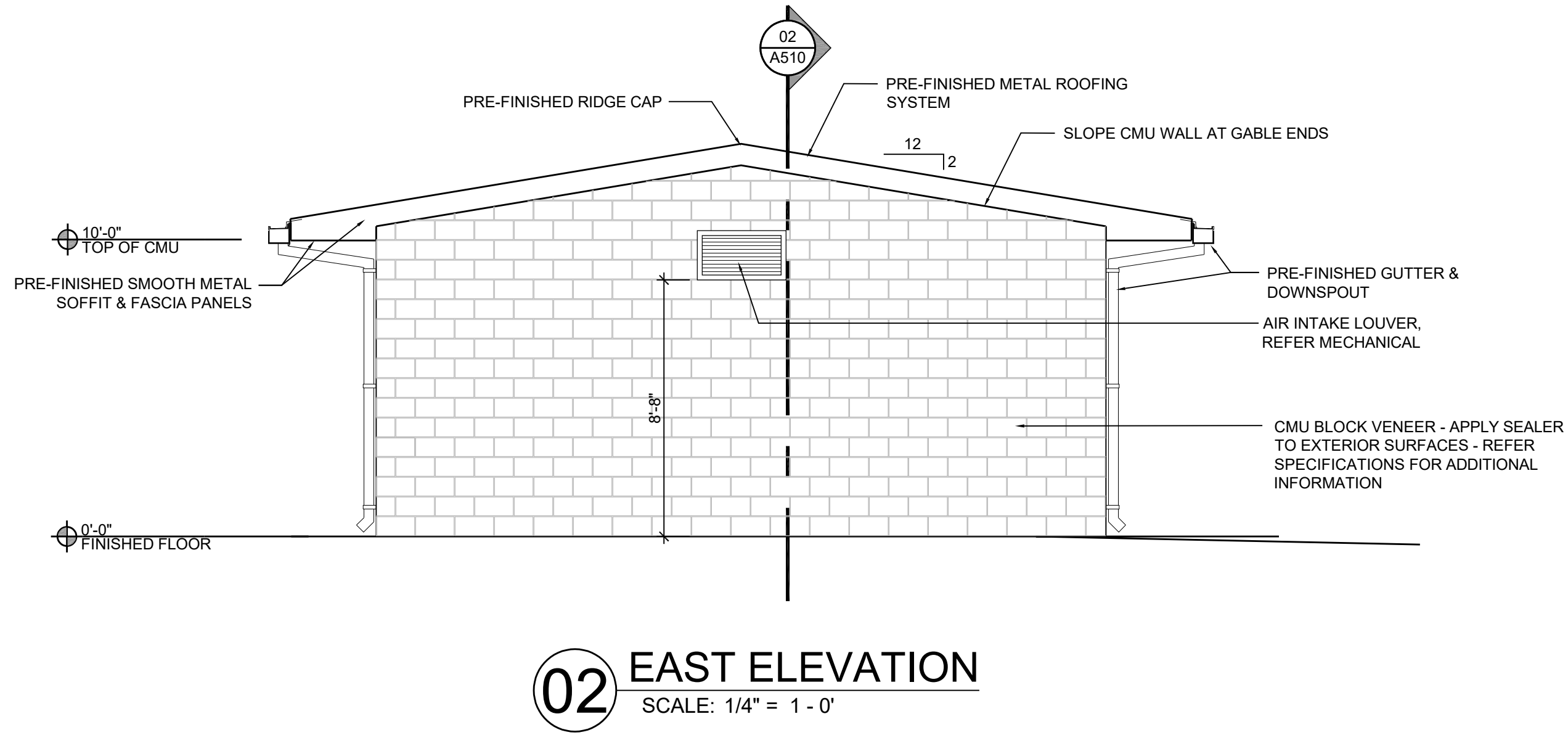
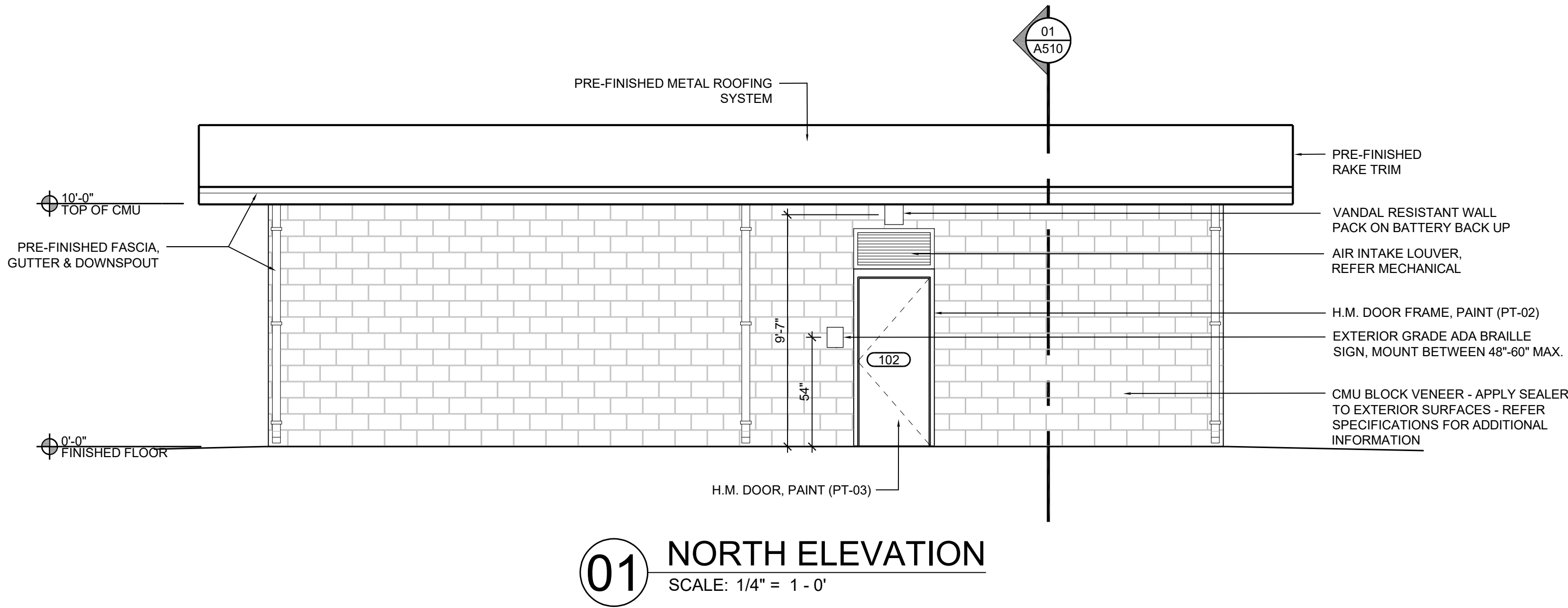
A250

PROJECT
NUMBER

2221

All drawings and written materials herein constitute original work of TAParchitecture and may not be duplicated with their written consent.

A:\2221 - City of Moore, New Restroom Facilities at Buck Thomas Park\04_CD\01_Drawing\CAD\2220_A310_ELEVATIONS.dwg



415 Broadway

Oklahoma City

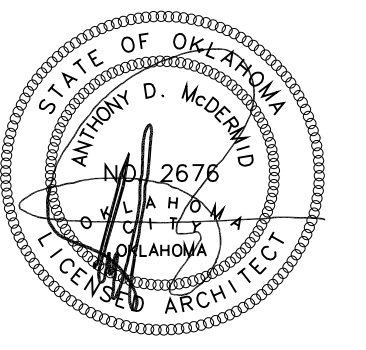
Oklahoma 73102



V.405.232.8787

www.tapokc.com

ARCHITECT'S SEAL



10/9/2025

PROJECT

BUCK THOMAS
RESTROOM FACILITIES
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160



ISSUES
REVISIONS

ISSUE DATE: 10/9/2025

SHEET
TITLE

BUILDING
ELEVATIONS

SHEET
NUMBER

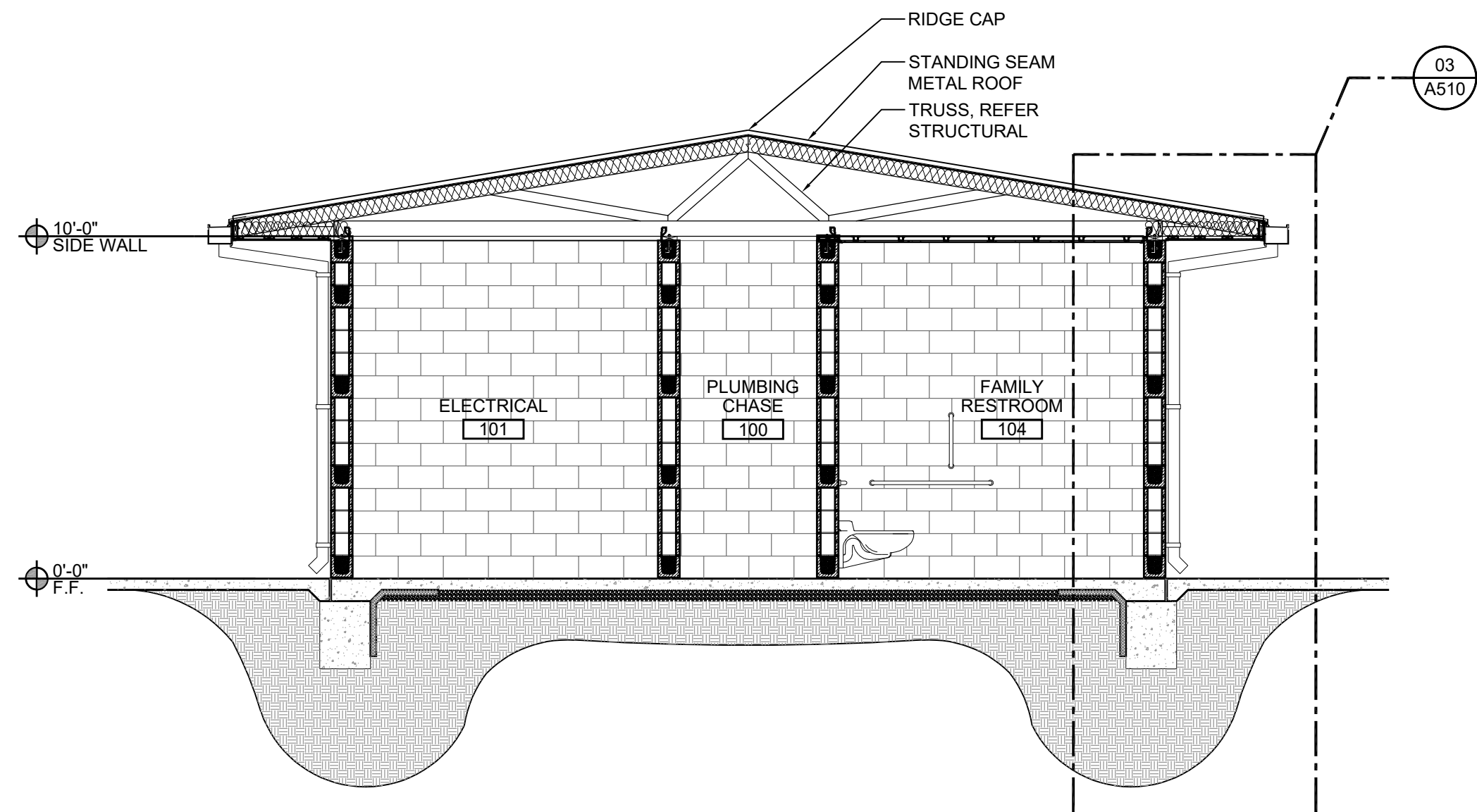
A310

PROJECT
NUMBER

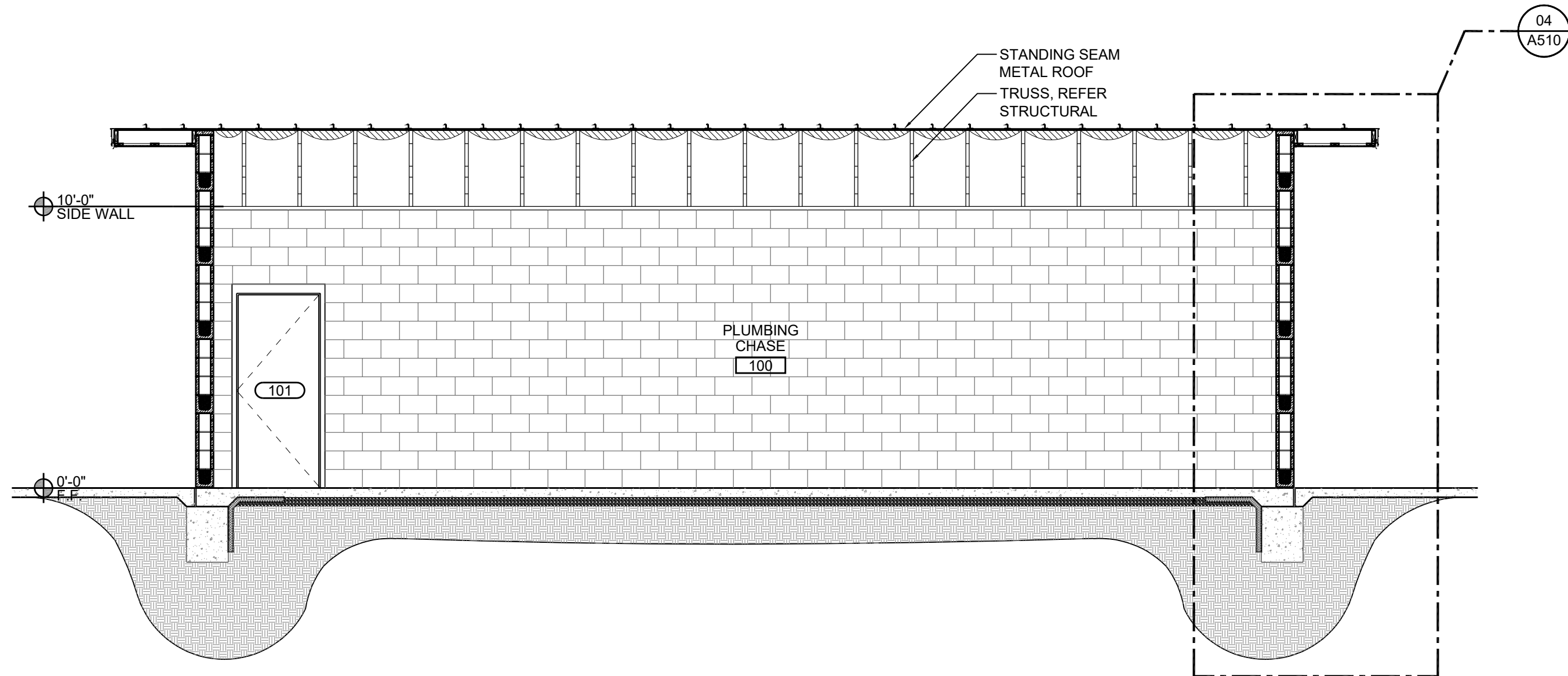
2221

All drawings and written materials herein constitute original work of TAParchitecture and may only be duplicated with their written consent.

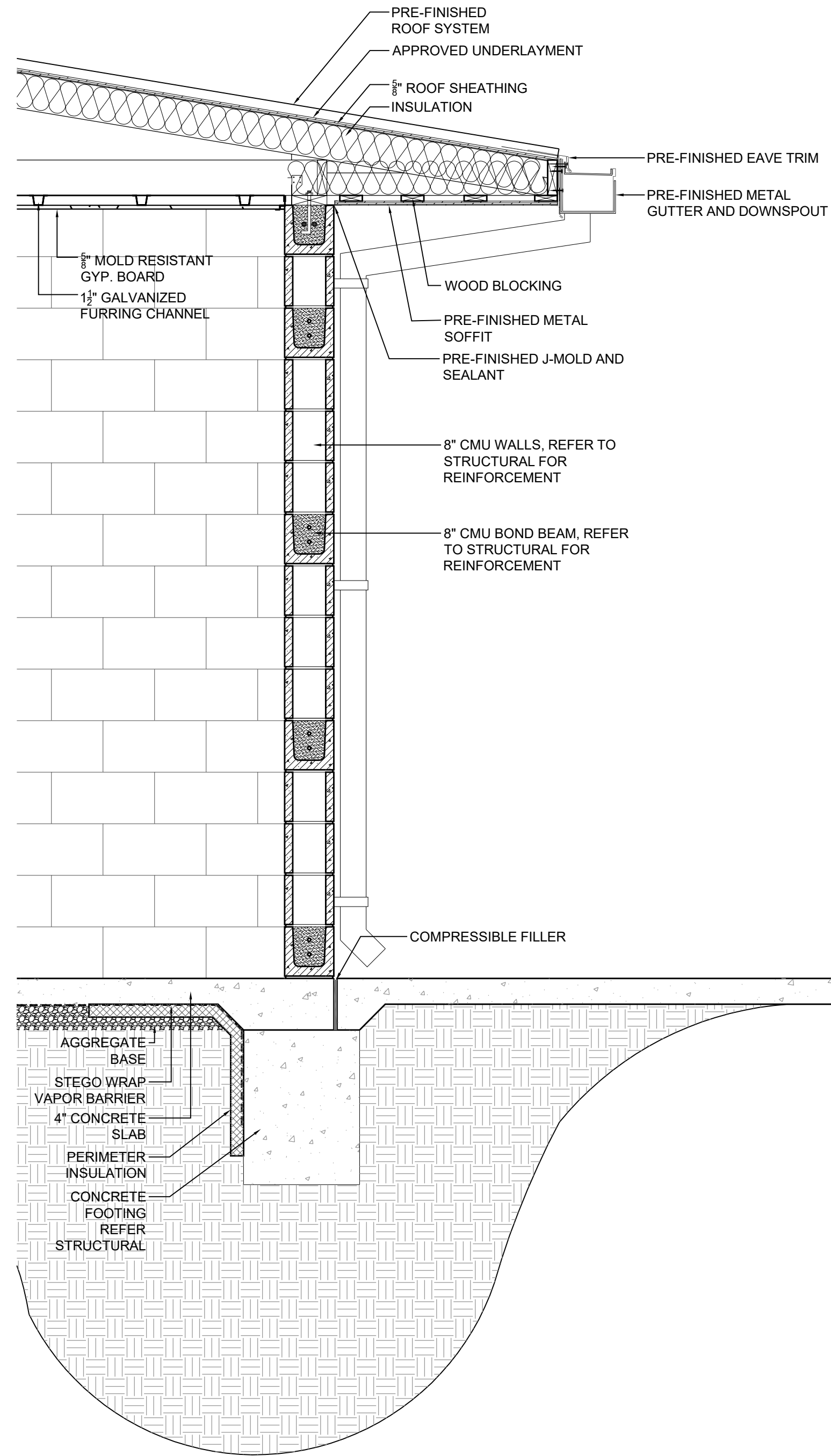
A:\2221 - City of Moore, New Restroom Facilities at Buck Thomas Park\04_CD\01_Drawing\CAD\2220_A510_BUILDING_SECTION.dwg



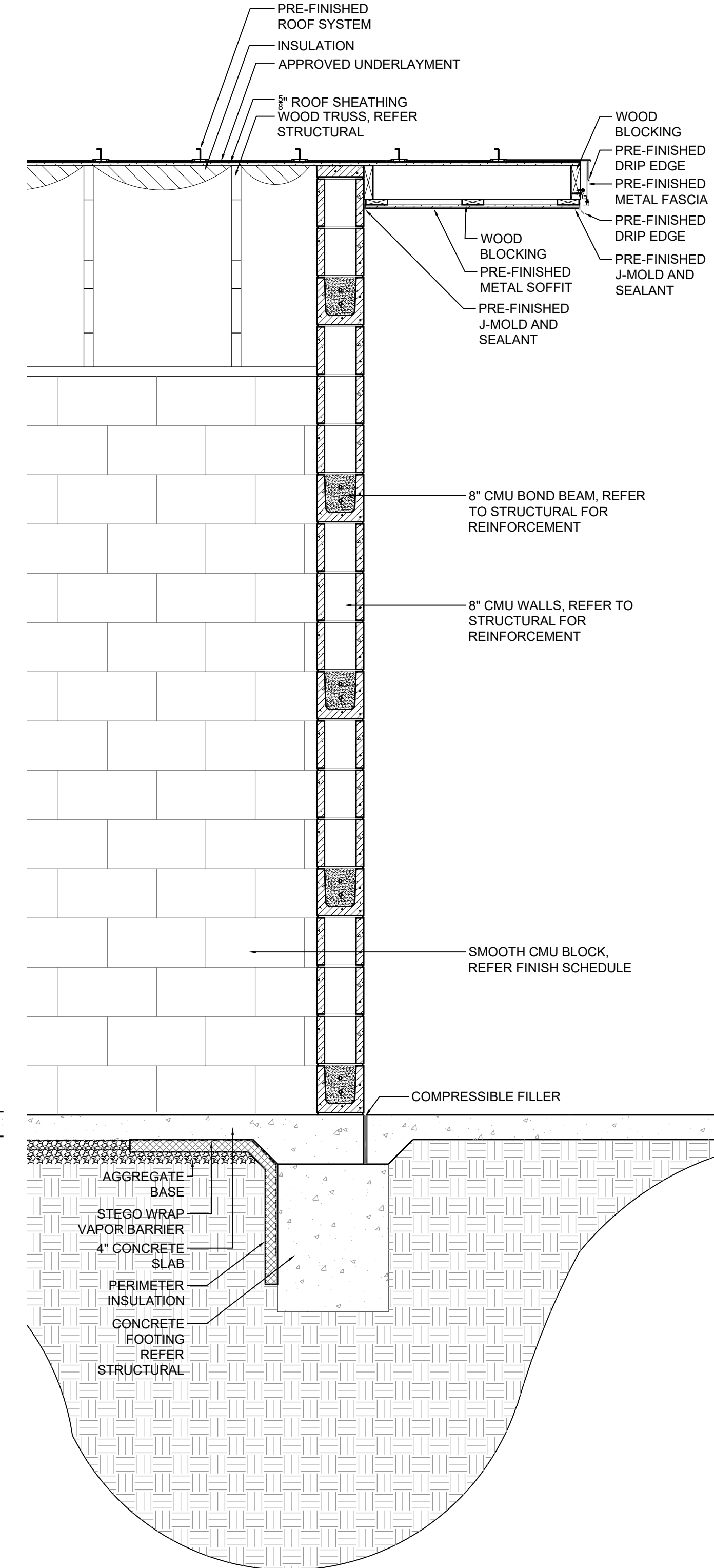
01 BUILDING SECTION
SCALE: 1/4" = 1'-0"



02 BUILDING SECTION
SCALE: 1/4" = 1'-0"



03 WALL SECTION
SCALE: 3/4" = 1'-0"



04 WALL SECTION
SCALE: 3/4" = 1'-0"

415 Broadway

Oklahoma City

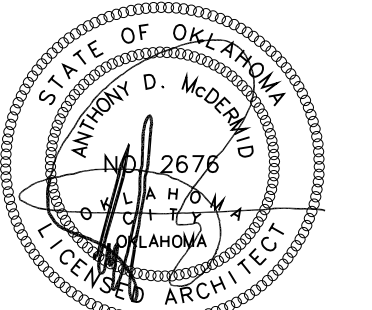
Oklahoma 73102



V.405.232.8787

www.tapokc.com

ARCHITECT'S SEAL



10/9/2025

PROJECT

**BUCK THOMAS
RESTROOM FACILITIES**
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160



ISSUES
REVISIONS

ISSUE DATE: 10/9/2025

SHEET
TITLE

**BUILDING
AND WALL
SECTIONS**

SHEET
NUMBER

A510

PROJECT
NUMBER

2221

All drawings and written materials herein constitute original work of TAParchitecture and may only be duplicated with their written consent.

VALVE LEGEND	
	DOUBLE CHECK VALVE ASSEMBLY
	RPZ, 3" AND LARGER
	RPZ, 2" AND SMALLER
	GLOBE VALVE
	GATE VALVE
	BUTTERFLY VALVE
	BALL VALVE
	PLUG VALVE
	CHECK VALVE - SWING TYPE
	VACUUM BREAKER
	PRESSURE REDUCING VALVE
	GAS PRESSURE REGULATOR
	BALANCING VALVE
	ORIFICE VALVE
	SUPERVISED VALVE
	MOTOR OPERATED VALVE
	SOLENOID OPERATED VALVE
	TEMPERATURE / PRESSURE RELIEF VALVE
	ANGLE VALVE
	SAFETY RELIEF VALVE

PIPING LEGEND	
	PIPE DROP
	PIPE RISE
	PIPE DROP @ 45°
	BRANCH TEE, TOP CONNECTION
	BRANCH TEE, BOTTOM CONNECTION
	CAP ON END OF PIPE
	PLUGGED TEE
	UNION
	FLANGED UNION
	DIELECTRIC UNION
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	WYE STRAINER
	PIPE GUIDE
	PIPE BREAK
	FLOOR DRAIN, AREA DRAIN, FLOOR SINK
	P-TRAP
	VALVE IN RISE OR DROP
	PRESSURE GAUGE
	PRESSURE GAUGE WITH GAUGE COCK
	THERMOMETER WITH WELL
	THERMOMETER WELL
	AQUASTAT
	HOSE BIBB
	WALL HYDRANT
	VALVE IN YARD BOX
	METER (NATURAL GAS, CITY WATER)

LINETYPE LEGEND	
	EXISTING - TO BE REMOVED
	EXISTING - TO REMAIN
	EXISTING - TO REMAIN - BELOW FLOOR
	NEW
	NEW - BELOW FLOOR
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER SUPPLY
	DOMESTIC HOT WATER RETURN
	STORM
	VENT
	NATURAL GAS

PLUMBING ABBREVIATIONS	
AC	ACCESS COVER
AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
ATV	ATMOSPHERIC VENT
BFP	BACKFLOW PREVENTER
BFV	BUTTERFLY VALVE
BLDG	BUILDING
BLR	BOILER
BOP	BOTTOM OF PIPE
BT	BATHTUB
BTU	BRITISH THERMAL UNIT
BV	BALL VALVE
BWW	BACKWATER VALVE
C	CELSIUS (DEGREES)
CA	COMPRESSED AIR
CB	CATCH BASIN
CD	CONDENSATE DRAIN
CFM	CUBIC FOOT PER MINUTE
CI	CAST IRON
CKV	CHECK VALVE
CLG	CEILING
CO	CLEANOUT
COMB	COMBINATION
COP	CENTER OF PIPE
CPVC	CHLORINATED POLYVINYL CHLORIDE
CS	CUP SINK
CW	CITY WATER
DC	DOUBLE CHECK VALVE
DCW	DOMESTIC COLD WATER
DF	DRINKING FOUNTAIN
DFU	DRAINAGE FIXTURE UNIT
DHW-TEMP	DOMESTIC HOT WATER
DHWR-TEMP	DOMESTIC HOT WATER RETURN
DI	DEIONIZED WATER
DIA Ø	DIAMETER
DIWT	DEIONIZED WATER TANK
DR	DRAIN
DS	DOWNSPOUT
DT	DRAIN TILE
DTL	DETAIL
DWG	DRAWING
DWH	DOMESTIC WATER HEATER
DWR	DISHWASHER
DWS	DOMESTIC WATER SOFTENER
DWST	DOMESTIC WATER STORAGE TANK
DWV	DRAIN, WASTE & VENT
EA	EACH
ES	EMERGENCY SHOWER
ET	EXPANSION TANK
EEW	EMERGENCY EYE WASH
EEWS	EMERGENCY EYE WASH / SHOWER
EWC	ELECTRIC WATER COOLER
EX (F)	EXISTING
F	FAHRENHEIT (DEGREES)
FA	FLAME ARRESTOR
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN

PLUMBING ABBREVIATIONS	
FF	FINISHED FLOOR
FH	FLOOR HYDRANT
FP	FIRE PROTECTION
FC	FIRE SUPPRESSION CONTRACTOR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOOR SINK
FT	FLUSH TANK
FV	FLUSH VALVE
GAL	GALLON
GCO	GROUND CLEANOUT
GPD	GALLONS PER DAY
GPM	GALLONS PER MINUTE
GTC	GENERAL CONTRACTOR
GS	GALVANIZED STEEL
GW	GREYWATER
HB	HOSE BIBB
HD	HUB DRAIN
HP	HORSE POWER
HX	HEAT EXCHANGER
HYD	FIRE HYDRANT
ID.	INSIDE DIAMETER
IE	INVERT ELEVATION
IN	INCHES
INT	INTERCEPTOR (OIL, GREASE)
JP	JOCKEY PUMP
KEC	KITCHEN EQUIPMENT CONTRACTOR
LA	LABORATORY AIR
LAV	LAVATORY
LG	LABORATORY GAS
LP	LIQUID PROPANE
LT	LAUNDRY TRAY
LW	LABORATORY WASTE
LWV	LABORATORY WASTE VENT
MANUF	MANUFACTURER
M	METER (WATER, NATURAL GAS)
MA	MEDICAL AIR
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MH	MANHOLE
MHC	MANHOLE COVER
MIN	MINIMUM
MSB	MOP SERVICE BASIN
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
NIC	NOT IN CONTRACT
NG-PRESS	NATURAL GAS
NPT	NATIONAL PIPE THREAD
NPW	NON-POTABLE WATER
NTS	NOT TO SCALE
O.D.	OUTSIDE DIAMETER
OD	OVERFLOW DRAIN
P	PUMP
PH	POST HYDRANT
PI	PRESSURE INDICATOR
PR	PROPANE
PRV	PRESSURE REDUCING VALVE
PSIG	POUNDS PER SQUARE INCH GAUGE

PLUMBING ABBREVIATIONS	
PT	PLASTER TRAP
PTS	PNEUMATIC TUBE STATION
PVC	POLYVINYL CHLORIDE
PVDF	POLYVINYLIDENE FLUORIDE
PW	PROCESS WASTE
PWHS	PACKAGE WATER HEATER SYSTEM
RCP	RECIRCULATION PUMP
RD	ROOF DRAIN
RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
RV	RELIEF VALVE
SAN	SANITARY WASTE
SANV	SANITARY WASTE VENT
SC	SHOWER CONTROLLER
SCFM	STANDARD CUBIC FEET PER MINUTE
SCH	SCHEDULE
SD	SHOWER DRAIN
SDR	STANDARD DIMENSION RATIO
SES	SEWAGE EJECTOR SYSTEM
SG	SPECIALTY GAS
SH	SHOWER HEAD / MODULE
SHT	SHEET
SK	SINK
SOL	SOLENOID VALVE
SP	SUMP PUMP
SS	STAINLESS STEEL
SSD	SECONDARY STORM DRAIN
SSK	SERVICE SINK
SST	SECONDARY STORM
ST	STORM
STM	STEAM
SW	SOFT WATER
TD	TRENCH DRAIN
TDH	TOTAL DYNAMIC HEAD (IN FEET)
TI	TEMPERATURE INDICATOR
TK	TANK
TMV	THERMOSTATIC MIXING VALVE
TOP	TOP OF PIPE
TP	TRAP PRIMER
TW-TEMP	TEMPERED WATER
TWR-TEMP	TEMPERED WATER RETURN
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
UR	URINAL
V	VENT
VB	VACUUM BREAKER
VTR	VENT THRU ROOF
W /	WITH
WB	WALL BOX
WC	WATER CLOSET
WCO	WALL CLEANOUT
WF	WASH FOUNTAIN
WFU	WATER FIXTURE UNIT
WH	WALL HYDRANT
WHA	WATER HAMMER ARRESTOR
WWS	WELL WATER SUPPLY
YD	YARD DRAIN
YH	YARD HYDRANT

PROJECT GENERAL NOTES:

- A. *GENERAL NOTES* APPLY TO ALL DRAWINGS ISSUED FOR THIS PROJECT. "DRAWING NOTES" APPLY ONLY TO THE SHEETS ON WHICH THEY APPEAR. THE WORD "PROVIDE" MEANS "FURNISH AND INSTALL".
- B. THE LEGEND SHEET IS GENERAL IN NATURE AND NOT ALL ITEMS SHOWN APPLY TO THIS PROJECT.
- C. ALL WORK TO BE PERFORMED AND INSTALLED PER THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL CODES, LAWS, REGULATIONS, INSPECTION AGENCIES, UTILITY COMPANIES, AND ANY OTHER AUTHORITIES HAVING JURISDICTION. REFER TO ARCHITECTURAL DRAWINGS FOR FEDERAL ADA FIXTURE REQUIREMENTS (IF ANY).
- D. COORDINATE WORK WITH OTHER TRADES AND CONSTRUCTION MANAGER TO AVOID INTERFERENCES BEFORE BEGINNING WORK. DRAWINGS ARE DIAGRAMMATIC REPRESENTATIONS OF THE WORK. DO NOT SCALE THE DRAWINGS TO DETERMINE EXACT LOCATIONS, DISTANCES, OR SIZES; TAKE FIELD MEASUREMENTS TO MAKE THESE DETERMINATIONS.
- E. CONTRACTOR MUST AVOID SEVERANCE OR DAMAGE TO BURIED SERVICE LINES. SHOULD DAMAGE OCCUR, REPAIRS SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER.

PLUMBING GENERAL NOTES:

- A. COORDINATE THE EXACT LOCATIONS OF FLOOR DRAINS WITH THE APPLICABLE EQUIPMENT CONTRACTORS, FLOOR CONTRACTOR, AND GENERAL CONTRACTOR (IF APPLICABLE) OR ARCHITECT PRIOR TO BEGINNING WORK.
- B. FIELD COORDINATE SLEEVE LOCATIONS IN STRUCTURE.
- C. LOCATE AND ESTABLISH ALL INVERT ELEVATIONS IN THE FIELD.
- D. REFER TO PIPING SCHEMATICS, AND OTHER DETAILS FOR ARRANGEMENT OF PIPING AND FOR SIZES NOT SHOWN ON PLANS. IN ANY CASE WHERE A PIPE SIZE SHOWN ON A PLAN SHEET DIFFERS FROM THAT SHOWN IN A SCHEMATIC, SECTION, OR DETAIL, USE THE LARGER OF THE TWO SIZES SHOWN.
- E. INSTALL PIPING IN PIPE CHASES, ABOVE CEILINGS, AND IN STUD WALLS. INSTALL HORIZONTAL MAINS AND BRANCHES AS HIGH AS PRACTICAL. MAKE OFFSETS IN PIPING TO AVOID INTERFERENCE AND CONTACT WITH WORK OF OTHER TRADES WHETHER SHOWN ON DRAWINGS OR NOT. DO NOT INSTALL LIQUID CARRYING PIPING IN OUTSIDE WALLS OR IN ANY OTHER AREAS SUBJECT TO FREEZING TEMPERATURES.
- F. SLOPE ALL GRAVITY PIPING OF SIZES 3" DIAMETER AND LARGER AT 1/8"FT MINIMUM, AND SIZES 2 1/2" AND SMALLER AT 1/4"FT MINIMUM WHERE NOT OTHERWISE INDICATED.
- G. USE FITTINGS FOR ALL PIPE CHANGES IN DIRECTION AND SIZE AND BRANCH CONNECTIONS. EXTRUDED TEE CONNECTIONS AND BUSHINGS SHALL NOT BE USED.
- H. INSTALL VALVES IN ACCESSIBLE LOCATIONS AND IN SUCH A MANNER AS TO BE EASILY OPERABLE. PROVIDE ISOLATION VALVES ON ALL BRANCHES OFF MAIN PIPE.
- I. FOR ALL WATER SUPPLY PIPES, INSTALL MANUAL AIR VENTS AT HIGH POINTS AND DRAIN VALVES AT THE LOW POINTS OF THE PIPE. FOR EQUIPMENT WITH DRAINS, PROVIDE DRAIN PIPE FROM THE EQUIPMENT TO A FLOOR DRAIN OR MOP SINK.
- J. FURNISH ACCESS PANELS TO GENERAL CONTRACTOR FOR INSTALLATION IN WALLS OR CEILING. ACCESS PANELS ARE FOR ALL EQUIPMENT AND SPECIALTIES SUCH AS VALVES, WATER HAMMER ARRESTORS, OR OTHER DEVICES WHICH MAY REQUIRE ACCESS FOR MAINTENANCE OR OPERATION. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF THE ACCESS PANELS.
- K. INSTALL CLEANOUTS PER CODE.
- L. PROVIDE TRAP PRIMERS AND TYPE "K" COPPER PIPING TO ALL FLOOR DRAIN, FLOOR SINK, AND HUB DRAIN TRAPS, AND OTHER TRAPS REQUIRING PRIMING WHETHER SHOWN ON DRAWINGS OR NOT.



**Gwin Engineering
Consultants, LLC**
34202 E 860 Road, Chandler, OK 74834
Phone: (405) 850-0205
Email: sgwin@gwin-engineering.com
Oklahoma C.A.# 7460, Expires 6/30/2026

415 Broadway

Oklahoma City

Oklahoma 73102



V.405.232.8787

F.405.232.8810

www.taparchitecture.com

ARCHITECT'S
SEAL



PROJECT

BUCK THOMAS PARK
RESTROOM FACILITIES
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160

ISSUES
REVISIONS

Issue Date - 10.09.2025

SHEET
TITLE

PLUMBING
LEGENDS & NOTES

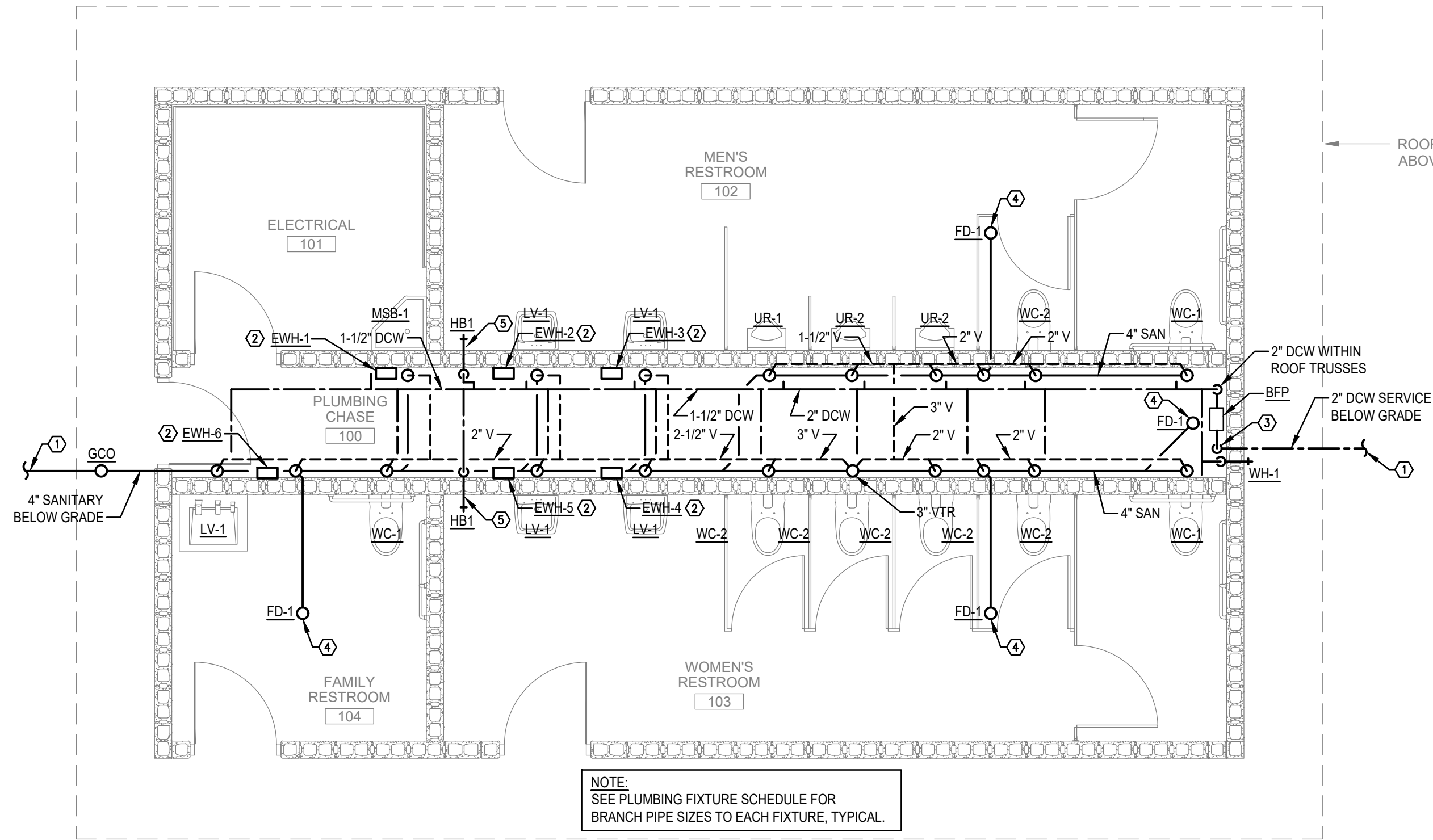
SHEET
NUMBER

P001

PROJECT
NUMBER

2221

All drawings and written materials herein constitute original work of TAParchitecture and may only be duplicated with their written consent.



DRAWING NOTES:

- SEE CIVIL DRAWINGS FOR CONTINUATION.
- TANKLESS ELECTRIC WATER HEATER (EWH-X) MOUNTED ON WALL WITHIN PLUMBING CHASE AT 18" AFF. SEE PLUMBING FIXTURE SCHEDULE ON THIS SHEET. BRANCH 1/2" DCW FROM DCW SERVING LAVATORY OR MOP SINK FIXTURE. PROVIDE ISOLATION BALL VALVE IN DCW LINE FOR WATER HEATER REMOVAL/SERVICING. INSTALL WATER HEATER PER 2016 IPC AND MANUFACTURER GUIDELINES.
- PROVIDE 2" DCW SHUT-OFF VALVE AT FLOOR. PROVIDE HOSE BIBB (HB-1) ABOVE SHUT-OFF VALVE AND IMMEDIATELY DOWNSTREAM OF BACKFLOW PREVENTER FOR DRAINING DOMESTIC WATER SYSTEM WITHIN THE BUILDING.
- ROUTE 1/2" DCW BELOW GRADE FROM AUTOMATIC TRAP PRIMER TO FLOOR DRAIN OR FLOOR SINK.
- MOUNT HOSE BIBB HB-1 AT 24" AFF FOR TOILET ROOM WASH-DOWN.

1 PLUMBING PLAN - NORTH & SOUTH BLDGS
SCALE: 1/4"=1'-0"

PLUMBING FIXTURE SCHEDULE					
NOTE: COORDINATE ALL FIXTURES WITH ARCHITECT & OWNER					
TAG	DESCRIPTION	MANUF.	MODEL	PIPING CONNECTIONS	NOTES
WC-1	WALL-MOUNTED 16GA 304 STAINLESS STEEL WATER CLOSET - ADA HEIGHT - 1.6 GPF	ACORN	2100	1" CW, 4" S, 2" V	2, 4, 6
	CONTOURED S.S. TOILET SEAT INTEGRAL TO WATER CLOSET FIXTURE				
	FLUSH VALVE - 1.6 GPF	SLOAN ROYAL	111		
WC-2	WALL-MOUNTED 16GA 304 STAINLESS STEEL WATER CLOSET - STANDARD HEIGHT - 1.6 GPF	ACORN	2100	1" CW, 4" S, 2" V	2, 4, 6
	CONTOURED S.S. TOILET SEAT INTEGRAL TO WATER CLOSET FIXTURE				
	FLUSH VALVE - 1.6 GPF	SLOAN ROYAL	111		
UR-1	WALL MOUNTED 16GA 304 STAINLESS STEEL URINAL - ADA HEIGHT - SEE ARCH	ACORN	R2158-T-1	3/4" CW, 3" S, 1-1/2" V	4, 6
	FLUSH VALVE - 0.5 GPF	SLOAN ROYAL	186-0.5		
UR-2	WALL MOUNTED 16GA 304 STAINLESS STEEL URINAL - STANDARD HEIGHT - SEE ARCH	ACORN	R2158-T-1	3/4" CW, 3" S, 1-1/2" V	4, 6
	FLUSH VALVE - 0.5 GPF	SLOAN ROYAL	186-0.5		
LV-1	LAVATORY - 18" WIDE WALL MOUNTED 14GA 304 STAINLESS STEEL ADA COMPLIANT	ACORN	1652FALRB	1/2" CW, 1/2" HW, 2" S, 1-1/4" V	1, 3, 4, 5, 6
	FAUCET - PUSH-BUTTON ACTIVATION PNEUMATIC OPERATION	INTEGRAL W/ FIXTURE			
MSB-1	MOP SERVICE BASIN - 24"x24"x10" JANITOR SINK	FIAT	TSB100	1/2" CW, 1/2" HW, 2" S, 1-1/4" V	10
	FAUCET - W/ VACUUM BREAKER SPOUT & HOSE THREAD OUTLET	CHICAGO	897-CP		
EWH-1	TANKLESS ELECTRIC WATER HEATER - WALL-MOUNTED W/ THERMOSTATIC CONTROL	EE MAX SERIES TWO	EX160T2	1/2" CW, 1/2" HW	11
	16 KW, 277V/1PH, 55 DEG F RISE, 2 GPM FLOW RESTRICTOR				
EWH-2,3,4,5,6	TANLESS ELECTRIC WATER HEATER W/ THERMOSTATIC CONTROL	EEMAX LAVADVANTAGE	SPEX3277T	1/2" CW, 1/2" HW	7, 11
	3 KW, 277V/1PH, 0.2 GPM ACTIVATION FLOW, 41 DEG RISE, 0.5 GPM FLOW RESTRICTOR				
FD-1	FLOOR DRAIN	OATEY TRUE SET	TP3138	1/2" TRAP PRIMER, 3" S, 1-1/2" V	
GCO	GRADE CLEANOUT	ZURN	Z-1400		
WH-1	NON-FREEZE WALL HYDRANT	ZURN	Z-1321	3/4" CW	
HB-1	HOSE BIBB W/ INTEGRAL VACUUM BREAKER & HANDLE KEY	WOODFORD	24C	3/4" CW	
BFP	2" REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTER	WATTS	MODEL 009	2" CW	9

NOTES:

- CHROME PLATED ANGLE SUPPLY WITH LOOSE KEY STOPS & CHROME PLATED ESCUTCHEON.
- BOLT CAPS WITH RETAINER CLIPS.
- PROVIDE CHROME PLATED STRAINER AND DRAIN TAILPIECE, AND 1-1/4" CHROME PLATED TUBULAR P-TRAP WITH CLEANOUT PLUG AND ESCUTCHEON.
- REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS.
- PROVIDE TRUEBRO 102 AND 105 TAILPIECE INSULATION KITS WHERE DHW AND/OR DRAIN TAILPIECE IS EXPOSED BELOW LAVATORY.
- PROVIDE WALL CARRIER. COORDINATE WITH WALL TYPE INDICATED ON ARCHITECTURAL DRAWINGS.
- PROVIDE WATER HEATER WITH ABS-UL 94 5VA RATED COVER, REPLACEABLE CARTRIDGE HEATING ELEMENT, AND MULTI-POSITION MOUNTING.
- PROVIDE WITH VANDAL PROOF STRAINER, VANDAL PROOF SECURED TOP (HALF GRATE) COMPLETE WITH VANDAL PROOF FASTENERS.
- PROVIDE DRAIN WITH AIR GAP FITTING PER MANUFACTURER RECOMMENDATIONS AND ROUTE DRAIN TO FLOOR DRAIN WITHIN THE ROOM.
- PROVIDE MOLDED STONE BASIN WITH S.S. STRAINER AND S.S. EDGE GUARD ON PERIMETER. S.S. WALL GUARD BETWEEN FAUCET & BASIN FOR THREE ADJACENT WALLS. 3/4" HOSE & WALL BRACKET.
- PROVIDE ASSE 1070 COMPLIANT MASTER MIXING VALVE FOR DHW TEMPERATURE CONTROL TO FIXTURES.

PLUMBING SPECIFICATIONS

PART 1 - GENERAL

A. INTENT

The intent of this section is to cover Basic Mechanical Requirements specifically applicable to plumbing.

B. GENERAL REQUIREMENTS

Visit the building site prior to bidding, examine all existing conditions, and verify all dimensions. No extras will be awarded after the contract is signed if conflicts or obstructions between new work and existing construction are not reported.

Work installed by this Contractor which interferes with or affects the existing structures shall be changed as directed and all costs incident to such changes shall be paid by this Contractor.

Any existing condition uncovered during the construction process which, by generally accepted construction practices, should be remedied, should be brought to the attention of the architect immediately and in writing.

Specific locations, mounting heights and overall dimensions of devices and fixtures are to be obtained from the architectural details when available and from site data.

All work of this contract shall be done neatly and proficiently and only by workers skilled in their particular craft.

Except where modified by specific notation to the contrary, it shall be understood that the indication and/or description of any item in the drawings, specifications, or both carries with it the instruction to furnish and install the item, regardless of whether or not this instruction is explicitly stated as part of the indication or description.

All work shall be done during normal working hours.

C. SCOPE OF WORK

Provide all materials, labor, equipment and services necessary for the installation of all systems as indicated on the drawings.

D. CONTRACT DRAWINGS

The contract drawings for the work are diagrammatic, intended to convey the scope of work and indicate the general arrangement and approximate location of equipment and piping, the contractor shall be responsible for checking and verifying all conditions and dimensions. Do not scale drawings.

Drawing Definitions: Where the term "provide" is used, this shall mean furnish and install, complete and ready for the intended use. "Furnish" means supply and deliver to the Project site, ready for unloading, unpacking, assembly, and installation. "Install" describes the operations at the Project site including the actual assembly, erection, anchoring, and all similar operations.

Provide any offsets, fittings, etc., necessary for the complete installation of all work of this contract. Provide any accessories required for the complete installation and operation of all systems.

Include all costs to make any alterations and offsets of materials, pipe, conduits, etc., and of equipment as necessary to avoid installation conflicts with existing work.

The drawings and specifications are complementary and any work and material required by the drawings and not mentioned in the specifications or vice versa, shall be executed as if same were both specified and shown.

Any questions or conflict between drawings and specifications, shall be referred to the Engineer.

The Engineer reserves the right to require any and or all Contractors to make minor changes in arrangements at no additional cost to the Owner.

E. CODES, STANDARDS AND TESTS

All systems and components shall be installed in accordance with all state, county and local codes and regulations.

All tests shall be performed in accordance with state, county, local, Owner's and engineer's requirements.

F. PERMITS

The Contractor is responsible for applying for all required permits and paying for all permit, inspection, licensing, and service fees to authorities having jurisdiction over the work. The Contractor is responsible for arranging for all inspection visits.

G. COORDINATION

Perform work under this contract in close harmony with other contractors so completed work shall present a neat and workmanlike installation. The mechanical contractor shall consult the plans of all other trades in all instances before installing his work so that their installations will not interfere with other disciplines. In the event of a conflict, this contractor shall report to the Owner's Representative at once and do no further work until a satisfactory arrangement is decided upon. Any work done, or equipment placed in position by this contractor, creating a conflict in violation hereof, shall be readjusted to the satisfaction of the Owner's Representative at the expense of the contractor. The decision of the Owner's Representative shall be final in regard to changes due to conflicting conditions.

H. SUBMITTALS

Submit to engineer/architect six (6) copies of certified shop drawings, descriptive data, diagrams and specifications on all specified materials and equipment for review in ample time before manufacturers are authorized to make shipment. The information submitted shall be prepared and arranged in a format which will permit easy identification and comparison by the engineer/architect of specified equipment. It shall be the responsibility of the Contractor to furnish any additional copies (showing architect/engineer stamp and comments) as necessary for suppliers and/or building officials.

The make, type and finish of all materials, equipment and apparatus shall be approved by the engineer/ architect in writing before the Contractor installs it. Any substitution for any specified equipment or material shall first be approved by the engineer/architect in writing.

Submit typewritten schedule showing all electrical characteristics and requirements for all electrically operated equipment. The schedule shall be used by the electrical Contractor from which he will prepare his work.

Shop drawings shall include, but are not limited to the following: make, model number, dimensions, electrical characteristics (rating). Shop drawings shall bear name of project and location.

Any changes to items specified must be submitted as a substitution with complete documentation of price differential and equipment details.

I. RECORD DRAWINGS

Contractor shall keep at least one set of colored corrected shop and design drawings at the site. Drawings shall be current, denoting approved modifications and installed departure.

All utilities which are installed below grade or concealed within walls shall be dimensionally located on the record drawings.

J. OWNER FURNISHED EQUIPMENT

All equipment that is furnished by the Owner is assigned to the Contractor that is designated to install the equipment as though the Contractor furnished the equipment itself. The Contractor is responsible for all aspects of the equipment including verifying the order, coordinating and accepting delivery, rigging, installation, start-up coordination, warranty repairs, collection and submittal of equipment manuals, and all other activities associated with the equipment unless specifically indicated otherwise. Refer to the pre-purchase specifications or order forms used by the Owner to select the equipment for any features included with each piece of equipment.

K. CUTTING AND PATCHING

This Contractor is responsible for any cutting, patching, painting, supports, and roofing as required to complete work indicated on drawings. Restoration shall be handled in a manner acceptable to the engineer/architect. All floor or fire wall penetrations are to be firestopped. Use Dow Corning 3-6548 silicone RTV foam or approved equal.

L. Repair adjacent construction and finishes in ceilings, walls, floors or partitions that have been damaged during demolition or created during extension of work. Repair all penetrations in fire rated ceilings, walls, floors or partitions to the original fire ratings using approved fire stop materials.

M. PREPARATION

Coordinate the installation of equipment with the schedules of other trades to prevent unnecessary delays in the total project.

N. EQUIPMENT VERIFICATION

Verify all equipment ratings, connections and locations with installing Contractor before installation.

This Contractor shall verify that all equipment furnished will properly fit in the space provided, that it will function properly, and that all parts of equipment requiring service are readily accessible.

O. CLEANING / DEBRIS REMOVAL

This Contractor shall remove from the premises all accumulation of dirt, debris, waste materials and rubbish caused by his employees or work, at least once a week, except that combustible materials shall be removed daily.

Clean equipment to remove foreign objects and markings. Touch up paint as required. The Contractor is responsible for any damages caused by work of his trade.

P. SUBSTITUTIONS

Certain makes of materials and equipment are specified and drawings are detailed according to this material. Contractor shall base his bid on furnishing and installing the specified make and model or the "equivalent" model of another of the specified manufacturers which meets all the qualifications of the specified items.

"Equivalent" materials and equipment are those of manufacturer which meet the same standards of performance, have equal or better materials of construction, and equal or better maintenance characteristics. All equivalents must fit the space provided in the building structure. Where the use of equivalents results in changes, this Contractor shall be responsible for such changes and any costs resulting from them.

If the Contractor intends to use equipment or materials not specified, he must receive written approval from the engineer/architect prior to the award of the contract. This prior approval only permits submittal of a particular manufacturer's equipment in general. The specified item to be used must again be submitted for final review as specified under "shop drawings."

Q. WARRANTY

This Contractor shall provide a written warranty of all work done under this contract for a period of one year from date of substantial completion. The Contractor shall, at his own expense, remedy any defects due to faulty materials and or workmanship and pay any damage to other work resulting from such defects and or the remedying thereof, which shall appear within the warranty period.

All materials shall be free of defects or errors which would result in poor application or cause defects in workmanship.

R. PROJECT CLOSEOUT

Furnish three final copies of installation and maintenance manuals, warranties, and other submittal data indicated for inclusion. Bind in 3-ring binders with tabs for each division or major piece of equipment. Include wiring diagrams, parts listings, and other manufacturer's information.

Submit a certificate of final inspection and approval. Submit release of liens for all subcontractors and suppliers. Submit record drawings

Final payment will not be approved until all closeout items are received.

S. REFERENCES

Where applicable, the following standards shall apply to materials, equipment, and workmanship provided to meet these specifications:

ASME Sec. 9 - Welding and Brazing Qualifications.

ASME B16.3 - Malleable Iron Threaded Fittings Class 150 and 300.

ASME B16.22 - Wrought Copper and Copper Alloy Solder Joint Pressure Fittings.

ASME B31.5 - Refrigeration Piping.

ASTM A53 - Pipe, Steel, Black and Hot-Dipped, Zinc Coated Welded and Seamless (GR. B - seamless).

ASTM A120 - Pipe, Steel, Black and Hot-Dipped Zinc Coated (Galvanized), Welded and Seamless, for Ordinary Uses.

AWS A5.8 - Brazing Filler Metal.

MSS SP58 - Pipe Hangers and Supports - Materials, Design and Manufacture.

MSS SP69 - Pipe Hangers and Supports - Selection and Application.

MSS SP89 - Pipe Hangers and Supports - Fabrication and Installation Practices.

AFBMA 9, 11 - Load Ratings and Fatigue Life for Ball and Roller Bearings.

IEEE 112 - Test Procedure for Polyphase Induction Motors.

NEMA MG1 - Motors and Generators.

NFPA 70 - National Electric Code.

ASTM E84 - Flame Spread/Smoke Developed Rating.

ASHRAE 15 - Safety Code for Mechanical Refrigeration.

NEMA 250 - Enclosure for Electrical Equipment.

UL 207 - Refrigerant Containing Components and Accessories.

PART 2 - PRODUCTS

A. EQUIPMENT

All equipment shall be as specified on the drawings and in the schedules. Provisions for substitutions are listed in Part 1.

B. IDENTIFICATION

All equipment shall be identified with laminated three-layer plastic engraved plastic nameplates with black letters on white background. nameplates will be mechanically fastened to the equipment. Glued application is not acceptable.

PIPE, FITTINGS AND VALVES

1. Domestic water piping -- 3" and smaller, above grade:

Copper Tubing: ASTM B88, Type L, hard drawn.

1. Fittings: ASME B16.18, cast brass, or ASME B16.22, solder wrought copper.

2. Joints: Solder, lead free, ASTM B32, 95-5 tin- antimony, or tin and silver, with melting range 430 to 535 degrees F.

3. Flanges: Bronze.

4. Dielectric Connections: Union with galvanized or plated steel threaded end, copper solder end, water impervious isolation barrier.

5. Unions: 150 PSIG bronze unions, solder joints

Bronze Ball Valve; Solder ends, up to and including 2 inches:

1. Manufacturers: Watts Series B6001-SS, Grinnell Fig. 3700SJ-6, Apollo 70-200 series, or Owner approved Equal.

2. Bronze, two piece body, stainless steel ball and stem, teflon seats and stuffing box ring, lever handle (extended above surface of insulation) solder ends.

3. Rated for 170 psi at 100 F.

Butterfly Valve; Lugged, to 12 inches.

1. Manufacturers: Grinnell Series 8000, Jamesbury 815 series, Demco NE-C, Nibco LD-2000, Keystone Fig. 222, Centerline, or Owner approved Equal.

2. Iron body, stainless steel or aluminum bronze disc, resilient EPDM replaceable seat for service temperature, lug ends, 10 position lever handle for 6 inch and smaller, handwheel and gear actuator with indicator for 8 inch and larger.

3. Rated for 170 psi dead-end water services.

2. Domestic water piping -- 3" and smaller, below grade:

Copper Tubing: ASTM B88, Type K, soft.

1. Fittings: ASME B16.18, cast brass, or ASME B16.22, solder wrought copper.

2. Joints: Solder, lead free, ASTM B32, 95-5 tin- antimony, or tin and silver, with melting range 430 to 535 degrees F.

3. Flanges: Bronze.

4. Dielectric Connections: Union with galvanized or plated steel threaded end, copper solder end, water impervious isolation barrier.

3. Sanitary vent, drain, condensate drain piping above or below grade:

PVC Pipe; ASTM D2729 or as acceptable to local codes

1. Fittings: PVC.

2. Joints: ASTM D2855, solvent weld with ASTM D2564 solvent cement.

PVC pipes may not be used in return air plenums.

4. Natural gas piping -- 2" and smaller, above grade, to 1/4 PSIG: Standard weight, Schedule 40, Type F, Grade B, screwed ends, black carbon steel pipe (ANSI/ASTM A53).

D. PLUMBING SPECIALTIES

1. Valves

All plumbing equipment to be provided with stop valves, escutcheon plate and all required supplies for proper operation of specific equipment.

2. Hub drains

Deep seal cast iron trap with inlet funnel. Josam Series 88560 or equal.

3. Clean outs

Interior finished floor areas: cast iron, two piece body with double drainage flange, weep holes, reversible clamping collar and adjustable nickel-bronze cover. Zurn, Josam, or equal.

4. Backflow preventers

Reduced pressure principle type, ANSI/ASSE 1013, bronze body, threaded connections.

5. Trap primers

Automatic trap primer with vacuum breaker. Zurn "Sani-Guard" Model Z-1022.

6. Vacuum breakers

Polished brass, float disc, rated 125 PSIG and 180 max temp (F), designed to prevent back-siphonage into potable water supply, full size orifice for maximum flow. Watts 288A or equal by ITT Hoffman, Taco.

7. Water hammer arrestors

Stainless steel construction, pre-charged stainless steel bellows, rated for max working pressure of 150 psi. J.R. Smith, Watts, Sioux Chief are acceptable manufacturers.

8. Floor drains

ANSI A112.21.1 lacquered cast iron two piece body with double drainage flange, weep holes, reversible clamping collar, and round, adjustable nickel-bronze strainer. acceptable manufacturers: Zurn, J.R. Smith, Wade.

9. Hose bibs

Bronze or brass with integral mounting flange, replaceable hexagonal disc, hose thread spout, chrome plated where exposed with handwheel in conformance with ANSI/ASSE 1011.

E. PIPING SLEEVES

Provide and set sleeves to accommodate all pipes passing through walls, floors and partitions.

Sleeves shall be constructed of 16 gauge galvanized sheet steel and shall be fabricated to allow 1" clearance between pipe or insulation and sleeve. Sleeves shall be installed to allow for 1/2" minimum extension on both sides of floor or wall.

Where sleeves pass through a fire rated wall, floor or partition they shall have the same fire rating as the construction in which they are installed.

F. PIPE HANGERS

1. Insulated piping

"Grinnell" Fig. 65, carbon steel, galvanized, adjustable, clevis type, oversized to allow for insulation.

2. Uninsulated piping

"Grinnell" Fig. 65, carbon steel, galvanized, adjustable, clevis type, direct to pipe.

3. Hanger rods

"Grinnell" Fig. 146, carbon steel, galvanized, threaded rods. Attach hangers to concrete ceiling or bottom centerline of concrete beam using expansion cases, "Grinnell" Fig. 117.

Support hangers from roof joists using beam clamps, "Grinnell" Fig. 292. Do not attach hangers to roof deck.

Support spacing as follows:

PIPE SIZE	MAXIMUM SPACING	ROD DIAMETER
1/2" TO 1-1/4"	8'-0"	3/8"
1-1/2" TO 2-1/2"	10'-0"	3/8"
3" TO 3-1/2"	12'-0"	1/2"

G. PIPE INSULATION

1. Domestic water piping.

"Johns-Manville" Micro-Lock 650 AP or equal, heavy density fiber glass pipe insulation with factory applied vapor barrier jacket. ASTM C547, "K" value at 0.24 at 75 degrees F, maximum moisture absorption at 0.2 percent by volume and flame spread/smoke developed rating of 25/50 or less.

All fittings and valves to be covered with loose fiberglass insulation and PVC plastic one piece molded covers. All fittings to be covered with mitered and glued insulation joints. All fittings to be covered with mitered and glued insulation joints.

2. Inserts and shields

Piping 3" and below: provide galvanized steel shield between hanger and pipe insulation.

Piping over 3": provide hydrous calcium silicate insulation or other high density material of same thickness as adjoining insulation. Insert to be minimum of 6" long.

3. Exterior insulation jackets

All piping installed outdoors to have aluminum metal jacket installed over insulation. Aluminum jacket to be .010" thick and shall be sealed and caulked weathertight at all seams. Fittings to be covered with aluminum factory fabricated jackets. Childers or approved equal.

5. Schedule

PIPING SYSTEM	PIPE SIZE	THICKNESS
DOMESTIC WATER PIPING (DCW, DHW, & DHWR)	ALL	1"

H. PIPE LABELING

Furnish and install pipe markers on all indoor piping systems using the ANSI a13.1 standard scheme for identification of piping systems. Markers shall be the vinyl pressure sensitive type as manufactured by "Seton" Nameplate Corporation. Overwrap ends of markers with matching color 1/2" wide tape (2" overlap). Locate markers at each change of pipe direction and at 50 ft. Maximum spacing.

PART 3 - EXECUTION

A. SCHEDULING OF WORK

Work is to be scheduled with Owner's representative and all other trades to accommodate occupancy dates and to expedite the timely completion of the project. Any utility outages or work which interferes with use of facility must be scheduled 24 hours in advance.

Coordinate the installation with all conditions and the work of other Contractors. The Contractor shall incur all costs for relocation of equipment conflicting with existing equipment or new work by other disciplines.

Trenching, saw cutting, coring, or other structural modifications shall not be performed without notification of the Owner and careful field verification by the Contractor to insure that no adverse effect to the building's structural integrity will occur.

B. PIPE TESTING AND CLEANING

All new domestic water piping shall be hydrostatically tested to 1-1/2 times the maximum working pressure and held for a period of not less than 2 hours.

All natural gas piping to be pneumatically tested and held for one hour or per standard of governing authority.

Tests shall be witnessed by the Owner's representative. Test results shall be submitted to engineer.

All potable water systems shall be sanitized in accordance with all state and local requirements.

Sanitary and vent piping shall be tested in accordance with state and local codes.

C. PIPING AND EQUIPMENT INSTALLATION

All piping shall be run parallel or perpendicular to building walls and framing system unless noted otherwise on the plans. All vertical runs shall be held against walls, columns, etc. as possible to permit making of pipe joints.

Provide isolation valves, easily accessible, for all major plumbing equipment, fixture groups, suites and/or tenant spaces.

Perform all cutting, patching and repairing required for the installation of the plumbing systems unless otherwise noted on the drawings.

All systems and equipment shall be installed in accordance with all state and local codes, ANSI B31.9 Building Service Piping and all additional standards as listed.

Install all equipment and products in accordance with manufacturer's recommendations.

Provide all sleeves, caulking and sealants as required for the installation of piping and equipment.

Provide inserts and shields on all piping 2 inch diameter and larger to protect insulation from being crushed by the piping weight. Insert to be heavy density insulating material, minimum 8 inch long. Shield to be galvanized steel, contoured to fit particular application and installed between the hanger and the insert.

Install each fixture with trap, easily removable for servicing and cleaning.

Provide chrome plated rigid or flexible supplies to plumbing fixtures including screwdriver stops, reducers, and escutcheons.

Seal fixtures to wall and floor surfaces with sealant, color to match fixture.

At completion, clean plumbing fixtures and equipment.

END OF SECTION



Gwin Engineering
Consultants, LLC
34202 E 860 Road, Chandler, OK 74834
Phone: (405) 850-0205
Email: gwin@gei-engineering.com
Oklahoma CA # 7649, Expires 6/30/2026

415 Broadway

Oklahoma City

Oklahoma 73102



V.405.232.8787

F.405.232.8810

www.taparchitecture.com

ARCHITECT'S
SEAL



PROJECT

BUCK THOMAS PARK
RESTROOM FACILITIES
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160

ISSUES
REVISIONS

Issue Date - 10.09.2025

SHEET
TITLE

PLUMBING
SPECIFICATIONS

SHEET
NUMBER

P701

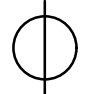
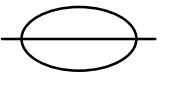
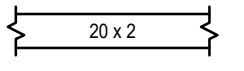
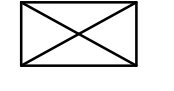
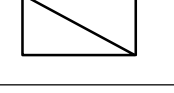
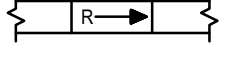
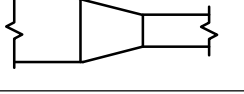
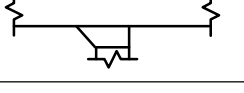
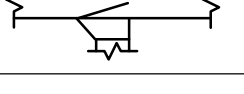
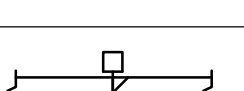
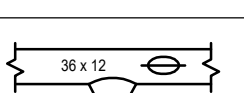
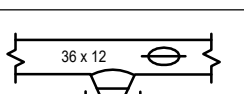
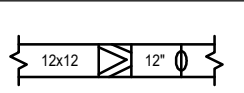
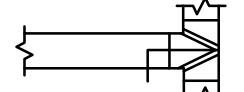
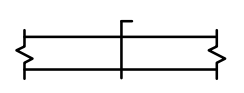
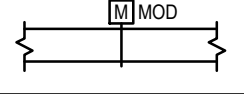
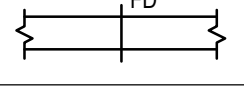
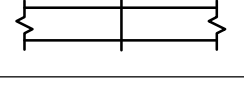
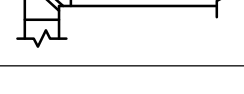
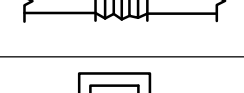
PROJECT
NUMBER

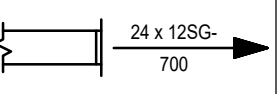
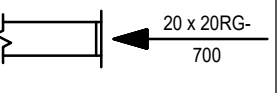
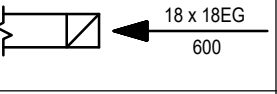
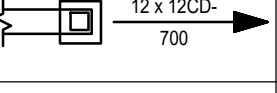
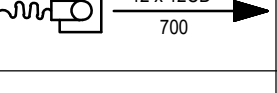
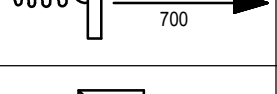
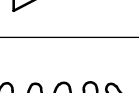
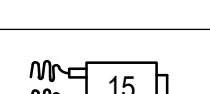
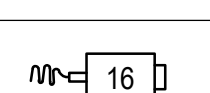
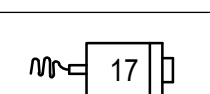
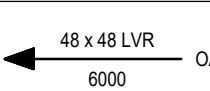
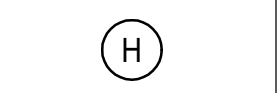
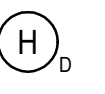
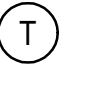
2221

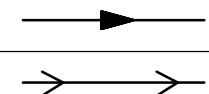
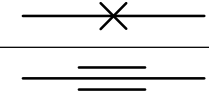
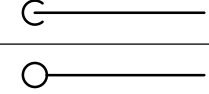
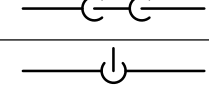
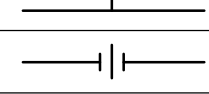
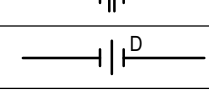
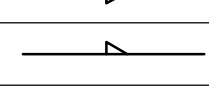
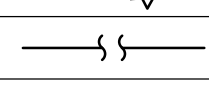
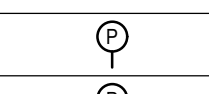
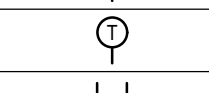
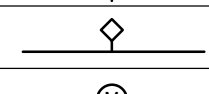
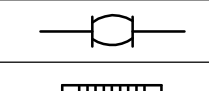
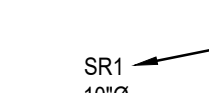
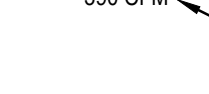
All drawings and written materials herein constitute original work of TAParchitecture and may only be duplicated with their written consent.

MECHANICAL ABBREVIATIONS	
AAV	AUTOMATIC AIR VENT
ABD	AUTOMATIC BACKDRAFT DAMPER
AD	ACCESS DOOR
AFMS	AIR FLOW MEASURING STATION
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
AFF	ABOVE FINISHED FLOOR
ATU	AIR TERMINAL UNIT
BFV	BUTTERFLY VALVE
BLDG	BUILDING
BLR	BOILER
BOP	BOTTOM OF PIPE
BOS	BOTTOM OF STEEL
BP	BOOSTER PUMP (CITY WATER, FIRE WATER)
BTU	BRITISH THERMAL UNIT
BV	BALL VALVE
C	CELSIUS (DEGREES)
CA	COMPRESSED AIR
CD	CEILING DIFFUSER
CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
CP	CONDENSATE PUMP
CRU	CONDENSATE RETURN UNIT
CFM	CUBIC FOOT PER MINUTE
CKV	CHECK VALVE
COMB	COMBINATION
COP	CENTER OF PIPE
CPVC	CHLORINATED POLYVINYL CHLORIDE
CW	CITY WATER
DB	DRY BULB
DCW	DOMESTIC COLD WATER
DC	DOUBLE CHECK VALVE
DDC	DOUBLE DETECTOR CHECK VALVE
DI	DEIONIZED WATER
DIA Ø	DIAMETER
DR	DRAIN
DTL	DETAIL
DWG	DRAWING
EA	EACH
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
ERR	ENERGY RECOVERY RETURN
ERS	ENERGY RECOVERY SUPPLY
ET	EXPANSION TANK
EX (E)	EXISTING
F	FAHRENHEIT (DEGREES)
FA	FLAME ARRESTOR
FAD	FRESH AIR DAMPER
FC	FLEXIBLE CONNECTION
FD	FIRE DAMPER
FF	FINISHED FLOOR
FOB	FLAT ON BOTTOM
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FC	FIRE SUPPRESSION CONTRACTOR
FW	FACILITY WATER
GA	GAUGE
GAL	GALLON
GPD	GALLONS PER DAY
GPM	GALLONS PER MINUTE
GTC	GENERAL CONTRACTOR
GS	GALVANIZED STEEL
HDR	HEADER
HP	HORSE POWER

MECHANICAL ABBREVIATIONS	
HWR	HEATING HOT WATER RETURN
HWS	HEATING HOT WATER SUPPLY
HX	HEAT EXCHANGER
I.D.	INSIDE DIAMETER
IE	INVERT ELEVATION
IN	INCHES
MANUF	MANUFACTURER
MAX	MAXIMUM
MAV	MANUAL AIR VENT
MIN	MINIMUM
MOD	MOTORIZED DAMPER
MVD	MANUAL VOLUME DAMPER
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
NG-(PRESS)	NATURAL GAS
NG-HP	NATURAL GAS - HIGH PRESSURE
NG-IM	NATURAL GAS - INTERMEDIATE PRESSURE
NG-LP	NATURAL GAS - LOW PRESSURE
NG-MP	NATURAL GAS - MEDIUM PRESSURE
NIC	NOT IN CONTRACT
NPT	NATIONAL PIPE THREAD
NPW	NON-POTABLE WATER
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OBD	OPOSED BLADE DAMPER
O.D.	OUTSIDE DIAMETER
P	PUMP
PC	PLUMBING CONTRACTOR
PCR	PUMPED CONDENSATE RETURN
PI	PRESSURE INDICATOR
PR	PUMPED CONDENSATE RETURN
PRV	PRESSURE REDUCING VALVE
PSIG	POUNDS PER SQUARE INCH GAUGE
PVC	POLYVINYL CHLORIDE
PVDF	POLYVINYLIDENE FLUORIDE
RA	RETURN AIR
RAD	RETURN AIR DAMPER
RCP	RECIRCULATION PUMP
RG	RETURN AIR GRILL
RO	REVERSE OSMOSIS WATER
ROR	REVERSE OSMOSIS WATER RETURN
ROS	REVERSE OSMOSIS WATER SUPPLY
RTU	ROOF TOP UNIT
RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
RV	RELIEF VALVE
SA	SOUND ATTENUATOR
SCFM	STANDARD CUBIC FEET PER MINUTE
SCH	SCHEDULE
SD	SMOKE DAMPER
SD / FD	COMBINATION SMOKE DAMPER / FIRE DAMPER
SHT	SHEET
SOL	SOLENOID VALVE
SS	STAINLESS STEEL
SV	SAFETY VALVE
SW	SOFT WATER
TI	TEMPERATURE INDICATOR
TK	TANK
TOP	TOP OF PIPE
TYP	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VB	VACUUM BREAKER
V.D.	VOLUME DAMPER
W /	WITH
WB	WET BULB

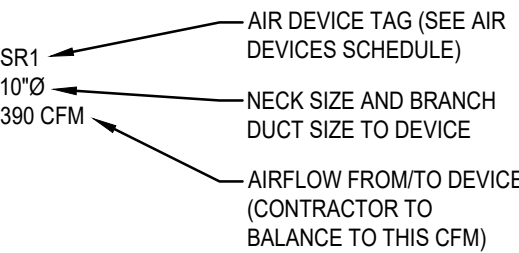
DUCT LEGEND	
	ROUND DUCTWORK
	FLAT OVAL DUCTWORK
	DUCT (FIRST DIMENSION IS SIDE SHOWN)
	SOUND ATTENUATING DUCTWORK
	SUPPLY DUCT SECTION
	RETURN, EXHAUST, OR OUTSIDE AIR DUCT SECTION
	INCLINE RISE (R) OR DROP (D); ARROW IN DIRECTION OF AIR FLOW
	TRANSITION
	45° BRANCH
	45° BRANCH TAKEOFF WITH EXTRACTOR
	45° BRANCH TAKEOFF WITH SPLITTER
	RADIUS BRANCH
	RADIUS BRANCH TAKEOFF WITH SPLITTER
	AIR FLOW MEASURING STATION IN DUCTWORK
	DUCT MOUNTED STEAM OR HOT WATER HEATING COIL
	DUCT MOUNTED STEAM HUMIDIFIER
	FLAT OVAL DUCTWORK WITH CONICAL TAP AND FLAT OVAL OR ROUND BRANCH DUCT
	FLAT OVAL DUCTWORK WITH CONICAL TAP AND CAPPED FLAT OVAL OR ROUND BRANCH DUCT
	TRANSITION FROM RECTANGULAR TO ROUND DUCTWORK
	DUCTWORK TEE WITH ADJUSTABLE SPLITTER DAMPER AND VANED ELBOWS
	MANUAL VOLUME DAMPER
	MOTOR OPERATED DAMPER
	FIRE DAMPER
	SMOKE DAMPER
	TURNING VANES
	FLEXIBLE CONNECTION - DUCTWORK
	DUCT CAP

AIR DEVICE LEGEND	
	SIDEWALL SUPPLY GRILLE WITH SIZE, TYPE & CFM
	SIDEWALL RETURN GRILLE WITH SIZE, TYPE & CFM
	CEILING EXHAUST GRILLE WITH SIZE, TYPE & CFM
	RIGID DUCT & CEILING SUPPLY DIFFUSER WITH SIZE, TYPE & CFM
	FLEX. DUCT & CEILING SUPPLY DIFFUSER WITH SIZE, TYPE & CFM
	FLEXIBLE DUCT & LINEAR DIFFUSER WITH LENGTH, TYPE & CFM (TYPE SUFFIX DENOTES NO. OF SLOTS)
	EXHAUST GRILLE
	TRANSFER GRILLE
	2 SQUARE FOOT OPENING IN WALL ABOVE CEILING
	FLEXIBLE DUCT
	DUAL DUCT MIXING BOX (15, SEE BOX SCHEDULE)
	SINGLE DUCT BOX (16, SEE BOX SCHEDULE)
	SINGLE DUCT BOX WITH REHEAT (17, SEE BOX SCHEDULE)
	LOUVER WITH SIZE, SECTION & CFM
	HUMIDISTAT
	DUCT HUMIDISTAT
	THERMOSTAT
	THERMOSTAT - ASPIRATING
	THERMOSTAT - NIGHT
	THERMOSTAT - RECESSED OR DIFFUSER MOUNTED
	THERMOMETER
	DOOR LOUVER WITH 2 SQUARE FEET FREE AREA

PIPING LEGEND	
	DIRECTION OF FLOW
	DIRECTION OF SLOPE
	PIPE ANCHOR
	PIPE GUIDE
	PIPE DROP
	PIPE RISE
	PIPE DROP @ 45°
	BRANCH TEE, TOP CONNECTION
	BRANCH TEE, BOTTOM CONNECTION
	CAP ON END OF PIPE
	PLUGGED TEE
	UNION
	FLANGED UNION
	DIELECTRIC UNION
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	WYE STRAINER WITH VALVED BLOWOFF
	PIPE BREAK
	VALVE IN RISE OR DROP
	PRESSURE GAUGE
	PRESSURE GAUGE WITH GAUGE COCK
	THERMOMETER WITH WELL
	THERMOMETER WELL
	AQUASTAT
	METER (NATURAL GAS, CITY WATER)
	FLEXIBLE CONNECTOR - NEOPRENE TYPE
	FLEXIBLE CONNECTOR - BELLOWS TYPE
	STEAM TRAP

MISCELLANEOUS SYMBOLS	
	KEYED DRAWING NOTES
	POINT OF CONNECTION / REMOVAL
	ELEVATION MARKER
	DETAIL INDICATOR
	SECTION INDICATOR

AIR DEVICES TAG DESCRIPTION:



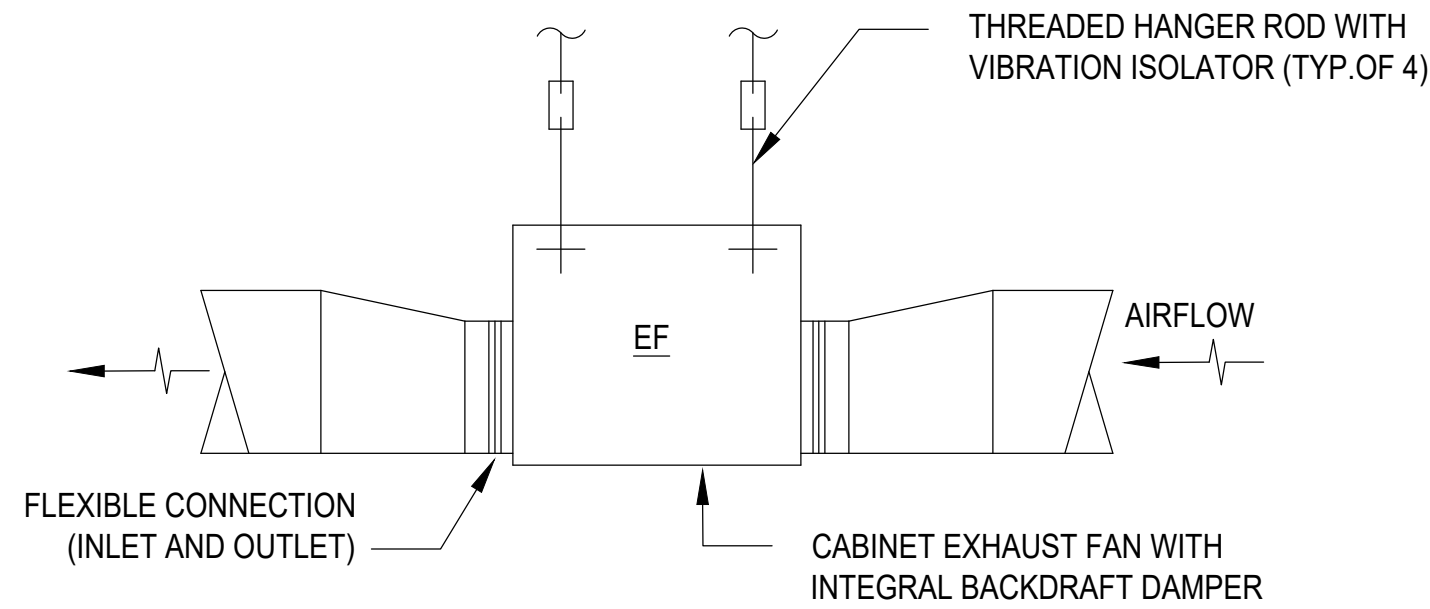
PROJECT GENERAL NOTES:

- A. "GENERAL NOTES" APPLY TO ALL DRAWINGS ISSUED FOR THIS PROJECT. "DRAWING NOTES" APPLY ONLY TO THE SHEETS ON WHICH THEY APPEAR. THE WORD "PROVIDE" MEANS "FURNISH AND INSTALL".
- B. ALL WORK TO BE PERFORMED AND INSTALLED PER THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL CODES, LAWS, REGULATIONS, INSPECTION AGENCIES, UTILITY COMPANIES, AND ANY OTHER AUTHORITIES HAVING JURISDICTION. REFER TO ARCHITECTURAL DRAWINGS FOR FEDERAL ADA FUTURE REQUIREMENTS (IF ANY).
- C. COORDINATE WITH WORK OF OTHER TRADES AND CONSTRUCTION MANAGER TO AVOID INTERFERENCES BEFORE BEGINNING WORK.

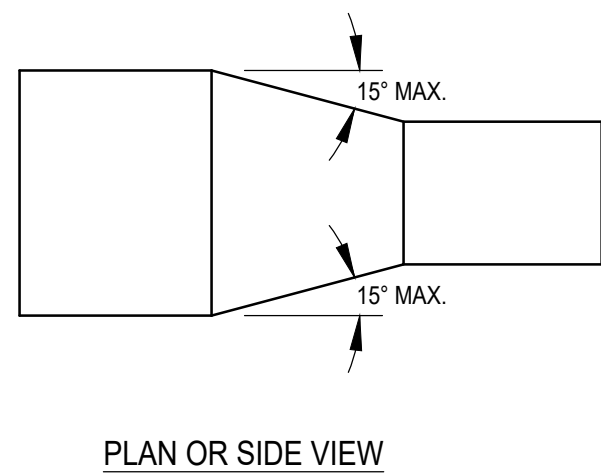
MECHANICAL GENERAL NOTES:

- A. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
- B. CONTRACT DOCUMENT DRAWINGS FOR MECHANICAL WORK ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID IN ORDER TO VERIFY EXISTING CONDITIONS THAT MAY IMPEDE THE WORK TO BE PERFORMED IN THIS CONTRACT. NOT ALL EXISTING CONDITIONS ARE SHOWN ON THESE PLANS, AND CONTRACT CHANGE ORDERS WILL NOT BE ALLOWED TO RESOLVE CONFLICTS WITH EXISTING PIPING, DUCTS, CONDUIT, LIGHTING, EQUIPMENT, ETC.
- C. INSTALL ALL MECHANICAL EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND STANDARDS.
- D. NOT ALL EXISTING EQUIPMENT OR CONDITIONS ARE INDICATED ON THESE PLANS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING EQUIPMENT, DUCTWORK, CONDUIT, LIGHTING, AND PIPING BEFORE BIDDING THIS WORK.
- E. COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH ELECTRICAL WORK SHOWN ON OTHER CONTRACT DOCUMENT DRAWINGS.
- F. WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER SHALL BE USED.
- G. CLOSELY FOLLOW MANUFACTURER RECOMMENDATIONS FOR EQUIPMENT AND SYSTEM INSTALLATION. COORDINATE ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. COORDINATE AND PROVIDE ALL DUCT AND PIPING TRANSITIONS REQUIRED FOR FINAL EQUIPMENT CONNECTIONS. FIELD VERIFY AND COORDINATE ALL DUCT AND PIPING DIMENSIONS BEFORE FABRICATION.
- H. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND SHALL HAVE THE APPROVAL OF THE ENGINEER BEFORE BEING INSTALLED. DO NOT SCALE DRAWINGS.
- I. ALL MISCELLANEOUS HARDWARE AND SUPPORTS REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN DETAILS FOR PIPING, DUCTWORK, AND EQUIPMENT (UNLESS NOTED OTHERWISE) SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
- J. ALL EQUIPMENT, PIPING, DUCTWORK, ETC. SHALL BE SUPPORTED AS DETAILED, SPECIFIED, AND REQUIRED TO PROVIDE A VIBRATION-FREE INSTALLATION.
- K. CERTAIN ITEMS SUCH AS RISES AND DROPS IN DUCTWORK, ACCESS DOORS, VOLUME DAMPERS, ETC. ARE INDICATED ON THE CONTRACT DOCUMENT DRAWINGS FOR CLARITY FOR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. ALL DUCTWORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS, INCLUDING DIVIDED DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- L. ALL DUCTWORK DIMENSIONS, AS SHOWN ON THE DRAWINGS, ARE INTERNAL CLEAR DIMENSIONS AND DUCT SIZE SHALL BE INCREASED TO COMPENSATE FOR DUCT LINING THICKNESS.
- M. PROVIDE ALL 90 DEGREE SQUARE ELBOWS WITH SINGLE THICKNESS TURNING VANES PER SMACNA GUIDELINES UNLESS INDICATED OTHERWISE. PROVIDE ACCESS DOORS UPSTREAM OF ALL ELBOWS WITH TURNING VANES.
- N. ALL DUCTWORK SHALL BE FABRICATED AND SUPPORTED IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS. ALL RIGID DUCTWORK SHALL BE GALVANIZED STEEL (ASTM A525 AND ASTM A527), LOCK-FORMING QUALITY HAVING A G90 ZINC COATING IN CONFORMANCE WITH ASTM A90. INSULATE ALL SUPPLY & RETURN AIR DUCTS CONCEALED ABOVE THE CEILING WITH 1-1/2" 1.5 LB/CF FIBERGLASS WITH FSK JACKET. EXHAUST DUCTWORK AND EXPOSED DUCTWORK SHALL BE UNINSULATED.
- O. PROVIDE WEATHERPROOFING AT ALL EXTERIOR WALL AND ROOF PENETRATIONS.

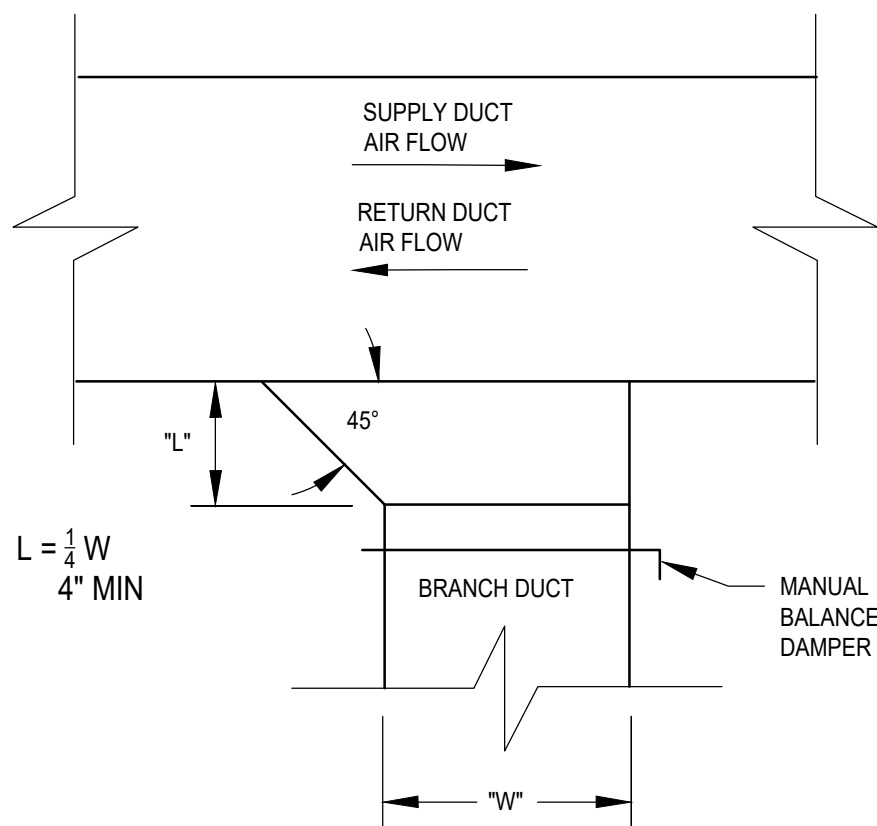




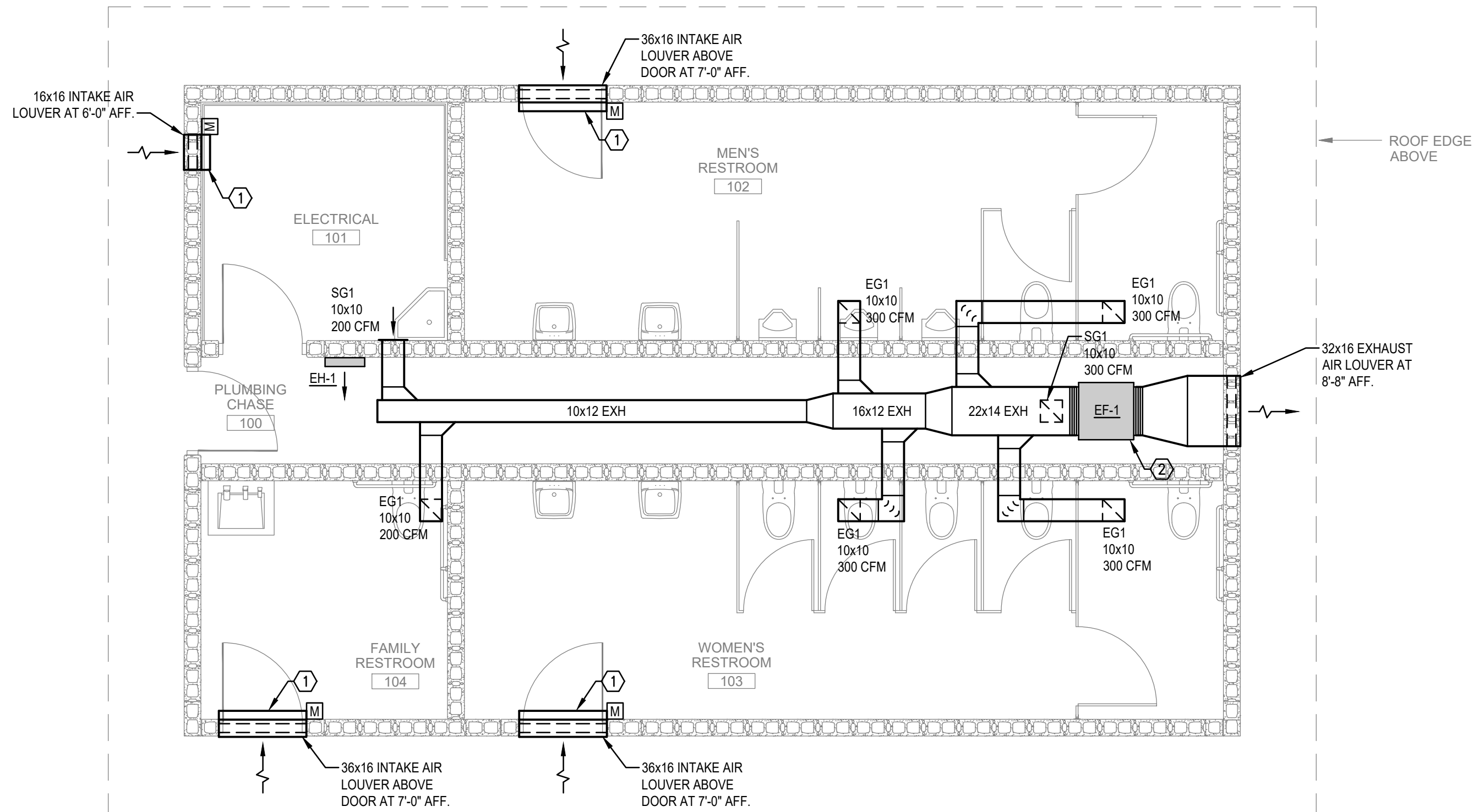
2 TYPICAL IN-LINE EXHAUST FAN DETAIL
SCALE: NTS



3 TYPICAL DUCT TRANSITION DETAIL
SCALE: NTS



4 TYPICAL RECTANGULAR BRANCH DUCT DETAIL
SCALE: NTS



1 MECHANICAL HVAC PLAN - NORTH & SOUTH BLDGS
SCALE: 1/4"=1'-0"

FAN SCHEDULE												
FAN NO.	SERVICE	DESCRIPTION	LOCATION	DRIVE	NORMAL OPERATION				MOTOR HP	VOLT/PH/Hz	MAKE & MODEL	NOTES
					CFM	S.P	RPM	BHP				
EF-1	GENERAL & TOILET EXHAUST	IN-LINE SQUARE CENTRIFUGAL	PLUMBING CHASE 100	DIRECT - VFD	1900	0.5	979	0.311	1/2	460V/3PH/60Hz	COOK MODEL SQN-D (165SQN11D)	1, 2, 3, 4

- NOTES:
1. PROVIDE FACTORY INTEGRAL DISCONNECT SWITCH, FACTORY VFD FOR BALANCING, TEFC MOTOR, AND BOTTOM MAINTENANCE ACCESS.
 2. PROVIDE INTEGRAL BACKDRAFT DAMPER AT DISCHARGE.
 3. INTERLOCK FAN WITH CONTROL DAMPERS AT AIR INTAKE LOUVERS TO OPEN WHEN FAN IS OPERATING. PROVIDE ALL REQUIRED RELAYS.
 4. FAN SHALL BE CONTROLLED BY USER ADJUSTABLE PROGRAMMABLE TIMECLOCK.

AIR DEVICES							
ITEM #	DESIGNATION	TYPE	FACE SIZE (IN)	BORDER TYPE	BASIS OF DESIGN		NOTES
					MANU	MODEL #	
1	SG1	SIDEWALL EXHAUST GRILLE	VARIES	SURFACE	TITUS	350RL	1, 2, 3
2	EG1	EGGCRATE CEILING EXHAUST GRILLE	10x10	VARIES	TITUS	50F	1, 2, 3, 4, 5

- NOTES:
1. PROVIDE SUBMITALS FOR REVIEW AND APPROVAL BEFORE PROCEEDING WITH NEW WORK.
 2. REFER TO ARCHITECTURAL DRAWINGS FOR FINAL COORDINATION OF BORDER TYPE.
 3. PROVIDE BALANCING DAMPER IN BRANCH DUCTWORK OF DIFFUSER/REGISTER OR PROVIDE BALANCING DAMPER ACCESSORY WITHIN DEVICE NECK.
 4. WHERE DEVICE IS MOUNTED IN HARD CEILINGS, PROVIDE MODEL TRM PLASTER FRAME ACCESSORY.
 5. PROVIDE 12" HIGH SHEET METAL PLENUM BEHIND GRILLE FOR DUCT CONNECTION. PAINT INSIDE OF PLENUM FLAT BLACK.

ELECTRIC HEATERS							
MARK	LOCATION	TYPE	TYPE	ELEC		BASIS OF DESIGN	NOTES
				KW	V/PH/Hz		
EH-1	PLUMBING CHASE 100	WALL-MOUNTED	ELEC	4.0	277V/1PH/60Hz	TRANE UHWA SERIES 50	1, 2, 3

- NOTES:
1. PROVIDE UNIT-MOUNTED INTEGRAL TAMPER PROOF THERMOSTAT AND INTEGRAL UNIT-MOUNTED CIRCUIT BREAKER DISCONNECT.
 2. TEMPERATURE SETPOINT AT 60 DEG F (ADJUSTABLE)
 3. PROVIDE SURFACE MOUNTED WALL BOX.

DRAWING NOTES:

1. DRAINABLE BLADE EXTERIOR WALL LOUVER WITH MOTORIZED CONTROL DAMPER ON INSIDE FACE. RUSKIN MODEL ELF375DX OR EQUIVALENT WITH RUSKIN IL35 INSULATED CONTROL DAMPER (24V ACTUATORS). DAMPER SHALL OPEN WHEN EXHAUST FAN EF-1 IS RUNNING. MECHANICAL CONTRACTOR SHALL PROVIDE LOW VOLTAGE CONTROLS FOR EXHAUST FAN AND INTAKE AIR CONTROL DAMPERS.
2. IN-LINE EXHAUST FAN MOUNTED BELOW BOTTOM OF STRUCTURAL TRUSSES, SUSPENDED FROM STRUCTURE. SEE DETAIL 2/M201 AND EQUIPMENT SCHEDULE ON THIS SHEET. PROVIDE ALL CODE-REQUIRED AND MANUFACTURER CLEARANCES.

MECHANICAL SPECIFICATIONS

PART 1 - GENERAL

A. INTENT

The intent of this section is to cover Basic Mechanical Requirements specifically applicable to Mechanical sections, including HVAC and plumbing.

B. GENERAL REQUIREMENTS

Visit the building site prior to bidding, examine all existing conditions, and verify all dimensions. No extras will be awarded after the contract is signed if conflicts or obstructions between new work and existing construction are not reported.

Work installed by this Contractor which interferes with or affects the existing structures shall be changed as directed and all costs incident to such changes shall be paid by this Contractor.

Any existing condition uncovered during the construction process which, by generally accepted construction practices, should be remedied, should be brought to the attention of the architect immediately and in writing.

Specific locations, mounting heights and overall dimensions of devices and fixtures are to be obtained from the architectural details when available and from site data.

All work of this contract shall be done neatly and proficiently and only by workers skilled in their particular craft.

Except where modified by specific notation to the contrary, it shall be understood that the indication and/or description of any item in the drawings, specifications, or both carries with it the instruction to furnish and install the item, regardless of whether or not this instruction is explicitly stated as part of the indication or description.

All work shall be done during normal working hours.

C. SCOPE OF WORK

Provide all materials, labor, equipment and services necessary for the installation of all systems as indicated on the drawings.

D. CONTRACT DRAWINGS

The contract drawings for the work are diagrammatic, intended to convey the scope of work and indicate the general arrangement and approximate location of equipment and piping, the contractor shall be responsible for checking and verifying all conditions and dimensions. Do not scale drawings.

Drawing Definitions: Where the term "provide" is used, this shall mean furnish and install, complete and ready for the intended use. "Furnish" means supply and deliver to the Project site, ready for unloading, unpacking, assembly, and installation. "Install" describes the operations at the Project site including the actual assembly, erection, anchoring, and all similar operations.

Provide any offsets, fittings, etc., necessary for the complete installation of all work of this contract. Provide any accessories required for the complete installation and operation of all systems.

Include all costs to make any alterations and offsets of materials, pipe, conduits, etc., and of equipment as necessary to avoid installation conflicts with existing work.

The drawings and specifications are complementary and any work and material required by the drawings and not mentioned in the specifications or vice versa, shall be executed as if same were both specified and shown.

Any questions or conflict between drawings and specifications, shall be referred to the Engineer.

The Engineer reserves the right to require any and or all Contractors to make minor changes in arrangements at no additional cost to the Owner.

E. CODES, STANDARDS AND TESTS

All systems and components shall be installed in accordance with all state, county and local codes and regulations.

All tests shall be performed in accordance with state, county, local, Owner's and engineer's requirements.

F. PERMITS

The Contractor is responsible for applying for all required permits and paying for all permit, inspection, licensing, and service fees to authorities having jurisdiction over the work. The Contractor is responsible for arranging for all inspection visits.

G. COORDINATION

Perform work under this contract in close harmony with other contractors so completed work shall present a neat and workmanlike installation. The mechanical contractor shall consult the plans of all other trades in all instances before installing his work so that their installations will not interfere with other disciplines. In the event of a conflict, this contractor shall report to the Owner's Representative at once and do no further work until a satisfactory arrangement is decided upon. Any work done, or equipment placed in position by this contractor, creating a conflict in violation hereof, shall be readjusted to the satisfaction of the Owner's Representative at the expense of the contractor. The decision of the Owner's Representative shall be final in regard to changes due to conflicting conditions.

H. SUBMITTALS

Submit to engineer/architect six (6) copies of certified shop drawings, descriptive data, diagrams and specifications on all specified materials and equipment for review in ample time before manufacturers are authorized to make shipment. The information submitted shall be prepared and arranged in a format which will permit easy identification and comparison by the engineer/architect of specified equipment. It shall be the responsibility of the Contractor to furnish any additional copies (showing architect/engineer stamp and comments) as necessary for suppliers and/or building officials.

The make, type and finish of all materials, equipment and apparatus shall be approved by the engineer/ architect in writing before the Contractor installs it. Any substitution for any specified equipment or material shall first be approved by the engineer/architect in writing.

Submit typewritten schedule showing all electrical characteristics and requirements for all electrically operated equipment. The schedule shall be used by the electrical Contractor from which he will prepare his work.

Shop drawings shall include, but are not limited to the following: make, model number, dimensions, electrical characteristics (rating). Shop drawings shall bear name of project and location.

Any changes to items specified must be submitted as a substitution with complete documentation of price differential and equipment details.

I. RECORD DRAWINGS

Contractor shall keep at least one set of colored corrected shop and design drawings at the site. Drawings shall be current, denoting approved modifications and installed departure.

All utilities which are installed below grade or concealed within walls shall be dimensionally located on the record drawings.

J. OWNER FURNISHED EQUIPMENT

All equipment that is furnished by the Owner is assigned to the Contractor that is designated to install the equipment as though the Contractor furnished the equipment itself. The Contractor is responsible for all aspects of the equipment including verifying the order, coordinating and accepting delivery, rigging, installation, start-up coordination, warranty repairs, collection and submittal of equipment manuals, and all other activities associated with the equipment unless specifically indicated otherwise. Refer to the pre-purchase specifications or order forms used by the Owner to select the equipment for any features included with each piece of equipment.

K. CUTTING AND PATCHING

This Contractor is responsible for any cutting, patching, painting, supports, and roofing as required to complete work indicated on drawings. Restoration shall be handled in a manner acceptable to the engineer/architect. All floor or fire wall penetrations are to be firestopped. Use Dow Corning 3-6548 silicone RTV foam or approved equal.

Repair adjacent construction and finishes in ceilings, walls, floors or partitions that have been damaged during demolition or created during extension of work. Repair all penetrations in fire rated ceilings, walls, floors or partitions to the original fire ratings using approved fire stop materials.

L. PREPARATION

Coordinate the installation of equipment with the schedules of other trades to prevent unnecessary delays in the total project.

M. EQUIPMENT VERIFICATION

Verify all equipment ratings, connections and locations with installing Contractor before installation.

This Contractor shall verify that all equipment furnished will properly fit in the space provided, that it will function properly, and that all parts of equipment requiring service are readily accessible.

N. CLEANING / DEBRIS REMOVAL

This Contractor shall remove from the premises all accumulation of dirt, debris, waste materials and rubbish caused by his employees or work, at least once a week, except that combustible materials shall be removed daily.

Clean equipment to remove foreign objects and markings. Touch up paint as required. The Contractor is responsible for any damages caused by work of his trade.

O. SUBSTITUTIONS

Certain makes of materials and equipment are specified and drawings are detailed according to this material. Contractor shall base his bid on furnishing and installing the specified make and model or the "equivalent" model of another of the specified manufacturers which meets all the qualifications of the specified items.

"Equivalent" materials and equipment are those of manufacturer which meet the same standards of performance, have equal or better materials of construction, and equal or better maintenance characteristics. All equivalents must fit the space provided in the building structure. Where the use of equivalents results in changes, this Contractor shall be responsible for such changes and any costs resulting from them.

If the Contractor intends to use equipment or materials not specified, he must receive written approval from the engineer/architect prior to the award of the contract. This prior approval only permits submittal of a particular manufacturer's equipment in general. The specified item to be used must again be submitted for final review as specified under "shop drawings."

P. DEMOLITION

Maintain service to other parts of the building during demolition.

Coordinate all demolition work with the new work of all other trades.

Patch all holes in floors and ceiling resulting from the demolition which will not be used for the new work with the material to match the existing finish and fire rating.

Turn over to the Owner all removed equipment that the Owner wishes to keep. Properly dispose of all remaining equipment according to all regulatory agency requirements.

All changes or code corrections that are required to existing mechanical work not noted on the contract documents must be submitted to the engineer for approval, prior to commencing work.

Q. PROTECTION OF BUILDING COMPONENTS

Provide protection from damage of any kind to the existing facility during all phases of this project.

R. CONTRACTOR USE OF PREMISES

Limit use of premises to allow Owner and tenant occupancy, work by others and Owner, and normal conditions to be maintained in the occupied spaces during normal business hours.

S. WARRANTY

This Contractor shall provide a written warranty of all work done under this contract for a period of one year from date of substantial completion. The Contractor shall, at his own expense, remedy any defects due to faulty materials and or workmanship and pay any damage to other work resulting from such defects and or the remedying thereof, which shall appear within the warranty period.

All materials shall be free of defects or errors which would result in poor application or cause defects in workmanship.

T. PROJECT CLOSEOUT

Furnish three final copies of installation and maintenance manuals, warranties, and other submittal data indicated for inclusion. Bind in 3-ring binders with tabs for each division or major piece of equipment. Include wiring diagrams, parts listings, and other manufacturer's information.

Submit a certificate of final inspection and approval. Submit release of liens for all subcontractors and suppliers. Submit record drawings

Final payment will not be approved until all closeout items are received.

U. REFERENCES

Where applicable, the following standards shall apply to materials, equipment, and workmanship provided to meet these specifications:

- ASME Sec. 9 - Welding and Brazing Qualifications.
- ASME B16.3 - Malleable Iron Threaded Fittings Class 150 and 300.
- ASME B16.22 - Wrought Copper and Copper Alloy Solder Joint Pressure Fittings.
- ASME B31.5 - Refrigeration Piping.
- ASTM A53 - Pipe, Steel, Black and Hot-Dipped, Zinc Coated Welded and Seamless (GR. B - seamless).
- ASTM A120 - Pipe, Steel, Black and Hot-Dipped Zinc Coated (Galvanized), Welded and Seamless, for Ordinary Uses.
- AWS A5.8 - Brazing Filler Metal.
- MSS SP58 - Pipe Hangers and Supports - Materials, Design and Manufacture.
- MSS SP69 - Pipe Hangers and Supports - Selection and Application.
- MSS SP89 - Pipe Hangers and Supports - Fabrication and Installation Practices.
- AFBMA 9, 11 - Load Ratings and Fatigue Life for Ball and Roller Bearings.
- IEEE 112 - Test Procedure for Polyphase Induction Motors.
- NEMA MG1 - Motors and Generators.
- NFPA 70 - National Electric Code.
- ASTM E84 - Flame Spread/Smoke Developed Rating.
- ARI 270 - Sound Rating of Outdoor Unitary Equipment.
- ARI 365 - Commercial and Industrial Unitary Air Conditioning Condensing Units.
- ASHRAE 14 - Methods for Testing and Rating Positive Displacement Condensing Units.
- ASHRAE 15 - Safety Code for Mechanical Refrigeration.
- NEMA 250 - Enclosure for Electrical Equipment.
- UL 207 - Refrigerant Containing Components and Accessories.
- AMCA 210 - Laboratory Methods for Testing Fans for Rating Purposes.
- AMCA 300 - Test Code for Sound Rating Air Moving Devices.
- AMCA 500 - Test Method for Louvers, Dampers, and Shutters.
- ARI 410 - Forced Circulation Air-Cooling and Heating Coils.
- ARI 430 - Central Station Air Handling Units.
- SMACNA - HVAC Duct Construction Standards - Metal and Flexible.
- UL 900 - Test Performance of Air Filter Units.

UL 705 - Power Ventilators.

ARI 650 - Air Outlets and Inlets.

ASHRAE 70 - Method of Testing for Rating the Air Flow Performance of Outlets and Inlets.

NFPA 90A - Installation of Air Conditioning and Ventilation Systems.

PART 2 - PRODUCTS

A. EQUIPMENT

All equipment shall be as specified on the drawings and in the schedules. Provisions for substitutions are listed in Part 1.

B. IDENTIFICATION

All equipment shall be identified with laminated three-layer plastic engraved plastic nameplates with black letters on white background. nameplates will be mechanically fastened to the equipment. Glued application is not acceptable.

C. DUCTWORK

All ductwork shall be fabricated and installed to SMACNA "HVAC Duct Construction Standards, Metal and Flexible", first edition, 1985, (2" positive or negative construction, seal class "B").

Fiberglass ductboard is not acceptable.

D. DUCTWORK ACCESSORIES

1. Air inlets and outlets

Titus, Anemostat, Price or approved equal.

2. Flexible ducts

Class 1, helical wound steel with vinyl coating meeting UL Standard 181 and NFPA 90A for flexible ducts. Factory insulate with 1.5" insulation with vapor barrier maximum of 5' straight length (no bends). Genflex, Durodyne, Thermoaflex or equal.

3. Flexible connectors

Neoprene coated fabric mechanical fastened to sheet metal connections. Install minimum 6" long. Durodyne or equal.

4. Fire Dampers

Fire dampers shall be curtain type dampers of galvanized steel with interlocking blades with blades out of airstream. Dampers shall be fabricated in accordance with NFPA 90A and bear the UL 555 label. See drawings and schedules for sizes and accessories. Ruskin or equal.

5. Access Doors

Access doors shall be fabricated in accordance with SMACNA standards and shall be insulated where installed in lined ductwork. Durodyne, Ventfabrics or equal.

6. Spin-in collars

Spin-in collars shall be factory fabricated sheet metal construction with spin-in type connection and manual volume damper. Durodyne or equal.

7. Duct-mounted smoke detectors are to be provided and wired by E.C. Installed by HVAC contractor.

E. DUCTWORK INSULATION

1. Duct Wrap

Flexible, glass duct insulation shall have a "K" value of 0.29 at 75 degrees F 1.0 lb/cu ft density and FSK vapor barrier jacket. Manville, Owens Corning or equal.

2. Duct Liner

Flexible, glass duct liner shall have a "K" value of 0.28 at 75 degrees F, 1.5 lb/cu ft density of maximum 4000 f/min air velocity. Manville, Owens Corning or equal.

Liner shall be adhered to the duct per SMACNA standards utilizing adhesive and mechanical liner fasteners.

3. Schedule

Ductwork	Thickness	Type	Finish
Supply & Return Air Ducts	1-1/2"	Wrap	FSK
Exhaust Ducts Downstream Of Exhaust Fan	1-1/2"	Wrap	FSK
Outside Air Intake Ducts	1-1/2"	Wrap	FSK
Supply air ducts that are exposed within the room they serve shall be uninsulated.			

F. TEMPERATURE CONTROLS

Provide all necessary components including programmable thermostats, wiring and devices to provide complete control of the HVAC equipment.

G. EXHAUST FANS

Acceptable manufacturers: Cook, Greenheck, or Penn;

Product requirements:

- 1. Performance ratings: conform to AMCA 210 and bear the AMCA certified rating seal.
- 2. Sound ratings: AMCA 301, tested to AMCA 300, and bear AMCA certified sound rating seal.
- 3. Fabrication: conform to AMCA 99.
- 4. UL compliance: UL listed and labeled, designed, manufactured, and tested in accordance with UL 705.

Fan unit: v-belt or direct driven as indicated, inline fan, galvanized steel housing; resilient mounted motor.

Electrical characteristics and components: wiring terminations: Provide terminal lugs to match branch circuit conductor quantities, sizes, and materials indicated. Enclose terminal lugs in terminal box sized to NFPA 70.

Disconnect switch: factory wired, non-fusible, in housing for thermal overload protected motor.

Backdraft damper: gravity actuated, aluminum multiple blade construction, felt edged with nylon bearings.

Shaft: cast iron or steel, dynamically balanced, bored to fit shafts and keyed; variable and adjustable pitch motor sheave selected so required rpm is obtained with shafts set at mid-position; fan shaft with self aligning pre-lubricated ball bearings.

PART 3 - EXECUTION

A. SCHEDULING OF WORK

Work is to be scheduled with Owner's representative and all other trades to accommodate occupancy dates and to expedite the timely completion of the project. Any utility outages or work which interferes with use of facility must be scheduled 24 hours in advance.

Coordinate the installation with all conditions and the work of other Contractors. The Contractor shall incur all costs for relocation of equipment conflicting with existing equipment or new work by other disciplines.

Trenching, saw cutting, coring, or other structural modifications shall not be performed without notification of the Owner and careful field verification by the Contractor to insure that no adverse effect to the building's structural integrity will occur.

Ceiling mounted sprinkler, lighting, and electrical requirements take precedence over ceiling mounted mechanical requirements. See reflected ceiling plans for ceiling grid and lighting layout for coordination of final diffuser locations.

B. DUCT TESTING AND CLEANING

Clean duct system and force air at high velocity through duct to remove accumulated dust.

C. DUCTWORK AND EQUIPMENT INSTALLATION

Perform all cutting, patching and repairing required for the installation of the mechanical systems unless otherwise noted on the drawings.

All systems and equipment shall be installed in accordance with all state and local codes, ANSI B31.9 Building Service Piping and all additional standards as listed.

Install all equipment and products in accordance with manufacturer's recommendations.

Limit flex duct runs to a maximum of five feet. Elbows must have a minimum bending radius equal to 1.5 times the flex duct diameter. If a tighter radius is required, use hard duct.

Provide hand dampers in duct take-offs to all supply diffusers, exhaust grilles, and registers, regardless of whether shown on drawings or specified as part of the diffuser, grille or register. Install dampers a minimum of two duct widths from duct take-off.

Install ducts and all accessories in accordance with SMACNA HVAC Duct Construction Standards - Metal and Flexible, 1995.

Provide all sleeves, caulking and sealants as required for the installation of ductwork and equipment.

Provide duct access door at each fire damper, locate such that fire dampers can be re-set easily. For fire dampers in floors, provide duct access door just above the floor penetration.

END OF SECTION

415 Broadway

Oklahoma City

Oklahoma 73102



V.405.232.8787

F.405.232.8810

www.taparchitecture.com

ARCHITECT'S SEAL



PROJECT

BUCK THOMAS PARK
RESTROOM FACILITIES
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160

ISSUES
REVISIONS

Issue Date - 10.09.2025

SHEET
TITLE

MECHANICAL
SPECIFICATIONS

SHEET
NUMBER

M701

PROJECT
NUMBER

2221

All drawings and written materials herein constitute original work of TAParchitecture and may only be duplicated with their written consent.



Gwin Engineering
Consultants, LLC
142012 E 48th Street, Chandler, OK 74834
Phone: (405) 850-0205
Email: ogwin@gwin-engineering.com
Oklahoma C.A. # 7649, Expires 6/30/2026

LIGHTING CONTROL SYMBOLS	
	SINGLE POLE WALL SWITCH
	THREE WAY WALL SWITCH
	SINGLE POLE WALL SWITCH WITH OCCUPANCY SENSOR
	THREE WAY WALL SWITCH WITH OCCUPANCY SENSOR
	SINGLE POLE LIGHT SWITCH WITH PILOT LIGHT
	DIMMER SWITCH
	OCCUPANCY SENSOR / AMBIENT SENSOR, CEILING MOUNT
	SINGLE FUNCTION DIGITAL SWITCH
	MULTI- FUNCTION DIGITAL SWITCH

NOTE: NOT ALL SYMBOLS MAY BE USED

LIGHTING FIXTURE SYMBOLS	
	LIGHT FIXTURE TYPE
	2' X 4' RECESSED LIGHT FIXTURE
	2' X 4' RECESSED LIGHT FIXTURE, WITH EMERGENCY BACK-UP POWER
	RECESSED LED DOWNLIGHT FIXTURE
	RECESSED LED DOWNLIGHT FIXTURE, WITH EMERGENCY BACK-UP POWER
	4' SURFACE MOUNT LED LIGHT FIXTURE
	4' SURFACE MOUNT LED LIGHT FIXTURE, WITH EMERGENCY BACK-UP POWER
	2' X 4' HIGH BAY LED LIGHT FIXTURE
	2' X 4' HIGH BAY LED LIGHT FIXTURE, WITH EMERGENCY BACK-UP POWER
	SURFACE MOUNT LED UNDER-CANOPY FIXTURE
	SURFACE MOUNT LED UNDER-CANOPY FIXTURE, WITH EMERGENCY BACK-UP POWER
	WALL MOUNTED LED FIXTURE
	WALL MOUNTED LED FIXTURE, WITH EMERGENCY BACK-UP POWER
	POLE MOUNTED LIGHT FIXTURE
	EMERGENCY POWER INVERTER

NOTE: NOT ALL SYMBOLS MAY BE USED

WIRE SIZING TABLE					
RUN LENGTH		CIRCUIT BREAKER SIZE			
120V	277V	20A	30A	40A	50A
000-100'	000-200'	#12	#10	#8	#6
101-150'	201-300'	#10	#8	#6	#6
151-200'	301-450'	#8	#6	#4	#4

GENERAL NOTES (APPLIES TO ALL ELECTRICAL DRAWINGS):

- A. EC SHALL BE RESPONSIBLE TO INSTALL A SWITCH BOX AND 3/4" CONDUIT TO ABOVE THE CEILING IN EACH ROOM FOR TEMPERATURE CONTROL THERMOSTAT, AND CO2 SENSORS. REFER TO THE MECHANICAL DRAWINGS FOR LOCATIONS OF THESE DEVICES.
- B. EC MAY COMBINE MULTIPLE CIRCUITS INTO HOME RUNS. NO MORE THAN 3 CIRCUITS SHALL BE IN EACH HOME RUN CONDUIT, AND THE WIRE MUST BE DERATED IN ACCORDANCE WITH NEC. THESE CIRCUITS SHALL BE REQUIRED TO BE ON SEPARATE PHASES (A,B,C).
- C. EC SHALL DERATE WIRE IN LONG RUNS ACCORDING TO THE WIRE SIZING TABLE.
- D. WHERE ELECTRICAL LOAD ON A CIRCUIT IS OVER 20 AMPERES, EACH CIRCUIT SHALL BE RUN IN A SEPARATE CONDUIT TO THE PANELBOARD.
- E. WHERE A TV OUTLET IS INDICATED ON THE DRAWINGS, BOTH THE TV OUTLET AND THE ASSOCIATED RECEPTACLES SHALL BE MOUNTED AT 88" AFF, UNLESS SPECIFIED OTHERWISE.
- F. ALL VAV BOXES, EXHAUST FANS, MOTORS, MISC. HVAC EQUIPMENT, APPLIANCES, ETC. INDICATED ON THESE DRAWINGS SHALL HAVE A MOTOR RATED SWITCH LOCATED NEAR THE MOTOR FOR SERVICING. PROVIDE DISCONNECTING MEANS AS REQUIRED BY THE NEC.
- G. EMERGENCY CIRCUITS SHALL BE INSTALLED IN A SEPARATE CONDUIT SYSTEM.
- H. ALL PANELBOARDS SHALL BE INSTALLED 72" AFF TO THE TOP OF THE PANEL. PROVIDE 10% SPARE CONDUITS (MINIMUM OF 4) TO ABOVE THE CEILING FOR FUTURE.
- I. ALL DATA OUTLETS REQUIRE A MINIMUM OF 1" CONDUIT STUB TO ABOVE CEILING. PROVIDE A 3-1/2" DEEP BOX MINIMUM FOR ALL DATA OUTLETS.
- J. HEIGHT DIMENSIONS SHOWN ON THIS PLAN ARE MEASURED FROM THE BOTTOM OF THE DEVICE. HORIZONTAL DIMENSIONS ARE MEASURED TO THE CENTER OF THE DEVICE OR GROUP OF DEVICES WHICH THE DIMENSION PERTAINS TO.
- K. FOR LIGHT FIXTURE MOUNTING DETAILS, SEE LUMINAIRE SCHEDULE.
- L. ITALICS NEXT TO LIGHTING CIRCUITS AND DEVICES INDICATE LIGHTING CONTROL PANEL CONNECTIONS. RUN CIRCUIT TO APPROPRIATE LIGHTING CONTROL PANEL.

POWER SYMBOLS	
	JUNCTION BOX
	SIMPLEX RECEPTACLE, 18" AFF (UNLESS OTHERWISE NOTED)
	DUPLEX RECEPTACLE, 18" AFF (UNLESS OTHERWISE NOTED)
	DOUBLE DUPLEX (QUAD) RECEPTACLE, 18" AFF (UNLESS OTHERWISE NOTED)
	DUPLEX RECEPTACLE, CEILING MOUNTED
	DUPLEX RECEPTACLE, FLOOR MOUNTED
	DUPLEX RECEPTACLE, 6" ON CENTER ABOVE COUNTER
	SPECIAL OR DEDICATED RECEPTACLE, VOLTAGE AND AMPS AS NOTED, 18" AFF (UNLESS OTHERWISE NOTED)
	GFCI RECEPTACLE, 18" AFF (UNLESS OTHERWISE NOTED)
	WEATHERPROOF RECEPTACLE, 18" AFF (UNLESS OTHERWISE NOTED)
	PLUGMOLD, LENGTH AS NOTED, 18" AFF (UNLESS OTHERWISE NOTED)
	MOTOR STARTED RATED SWITCH
	DISCONNECT SWITCH, NON-FUSED
	DISCONNECT SWITCH, FUSED AS NOTED
	480/277V 3-PHASE, 4-WIRE DISTRIBUTION PANEL
	480/277V 3-PHASE, 4-WIRE LIGHTING/POWER PANEL
	208/120V 3-PHASE, 4-WIRE LIGHTING/POWER PANEL
	120/240V 1-PHASE, 3-WIRE LIGHTING/POWER PANEL
	MOTOR, CHARACTERISTIC AS NOTED
	PUSHBUTTON STATION
	POWER SUPPLY, ELECTRIC FLUSH VALVE / FAUCET
	THERMOSTAT
	COMBINATION MOTOR STARTER DISCONNECT SWITCH
	PULL-BOX
	VARIABLE FREQUENCY DRIVE WITH DISCONNECT

NOTE: NOT ALL SYMBOLS MAY BE USED

COMMUNICATIONS SYMBOLS	
	DATA OUTLET, VERIFY MOUNTING HEIGHT WITH OWNER
	TELEPHONE OUTLET, VERIFY MOUNTING HEIGHT WITH OWNER
	COMBINATION TELEPHONE / DATA OUTLET, VERIFY MOUNTING HEIGHT WITH OWNER
	WIRELESS ACCESS POINT

NOTE: NOT ALL SYMBOLS MAY BE USED

WIRING METHODS							
APPLICATION	RACEWAYS	OUTLET BOXES	CONDUIT BODIES	ENCLOSURES	FASTENERS	SUPPORTS	INSULATION
EXTERIOR - UNDERGROUND DIRECT BURIAL	POLYVINYL	-	-	-	-	-	XHHN
EXTERIOR - EXPOSED	CHLORIDE SCH40 INTERMEDIATE	GALVANIZED MALLEABLE IRON	GALVANIZED MALLEABLE IRON	NEMA 3R	GALVANIZED	GALVANIZED	XHHN
INTERIOR - UNDERSLAB ON GRADE	METAL CONDUIT	-	-	-	-	-	XHHN
INTERIOR - CONCEALED CMU WALLS	POLYVINYL	-	-	-	-	-	XHHN
INTERIOR - EXPOSED	CHLORIDE SCH40 ELECTRICAL METALLIC TUBING	SHEET METAL	-	NEMA 1	ZINC PLATED	ZINC PLATED	THHN/THWN
INTERIOR - EXPOSED	ELECTRICAL METALLIC TUBING	SHEET METAL	CAST ALUMINUM	NEMA 1	ZINC PLATED	ZINC PLATED	THHN/THWN
CONNECTION TO MOTORIZED EQUIPMENT	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT	-	-	-	-	-	THHN/THWN
INTERIOR - EXPOSED (SUBJECT TO ABUSE)	RIGID METAL CONDUIT	SHEET METAL	CAST ALUMINUM	NEMA 1	ZINC PLATED	ZINC PLATED	THHN/THWN

NOTES:

- 1" MINIMUM CONDUIT UNDERGROUND DIRECT BURIAL, 3/4" MINIMUM ALL OTHER INSTALLATIONS.
- DO NOT ROUTE CONDUIT UNDERSLAB, UNLESS INDICATED ON DRAWINGS.
- 6' MAXIMUM LENGTH ON ALL CONNECTIONS TO MOTORIZED EQUIPMENT.
- ON EXTERIOR INSTALLATIONS, CONDUIT SHALL ENTER FROM THE BOTTOM WHERE PRACTICAL, AND WATERTIGHT HUBS SHALL BE USED FOR CONDUIT CONNECTIONS.

EXIT/EMERGENCY LIGHTING FIXTURE SYMBOLS	
	EXIT LIGHT FIXTURE - CEILING MOUNTED, SEE PLAN FOR DETAILS
	EXIT LIGHT FIXTURE - WALL MOUNTED, SEE PLAN FOR DETAILS
	EMERGENCY/EXIT LIGHT COMBO FIXTURE - WALL MOUNTED, SEE PLAN FOR DETAILS
	EXIT LIGHT FIXTURE - WALL MOUNTED, DOUBLE SIDED, SEE PLAN FOR DETAILS
	EXIT LIGHT FIXTURE - CEILING MOUNTED, DOUBLE SIDED, SEE PLAN FOR DETAILS
	EMERGENCY LIGHT FIXTURE, MAIN UNIT - WALL / CEILING MOUNTED
	EMERGENCY LIGHT FIXTURE, REMOTE UNIT - WALL / CEILING MOUNTED

NOTE: NOT ALL SYMBOLS MAY BE USED

ABBREVIATIONS	
A	AMPERES
AC	ABOVE COUNTER, 6" UNLESS OTHERWISE NOTED
AF	AMP FRAME
AFCI	ARCING FAULT CIRCUIT INTERRUPTER
AFF	ABOVE FINISHED FLOOR
AIC	SYMMETRICAL AMPS INTERRUPTING CAPACITY
AS	AMPERE SWITCH
AT	TRIP AMPERES
C	CONDUIT
EMT	ELECTRICAL METALLIC TUBING
EG	EQUIPMENT GROUND
FCU	FAN COIL UNIT
GFI	GROUND FAULT INTERRUPTER
G	GROUND
HP	HORSEPOWER
KVA	KILOVOLT AMPERES
MB	MAIN CIRCUIT BREAKER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NESC	NATIONAL ELECTRICAL SAFETY CODE
NL	NIGHT LIGHT
O.C.	ON CENTER
P	POLE
p.c.	PARTIAL CIRCUIT
PH	PHASE
RECPT	RECEPTACLE
REF.	REFERENCE
THD	TOTAL HARMONIC DISTORTION
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
V	VOLTS
VA	VOLT AMPERES
W	WATTS
Z	IMPEDANCE
%	PERCENT

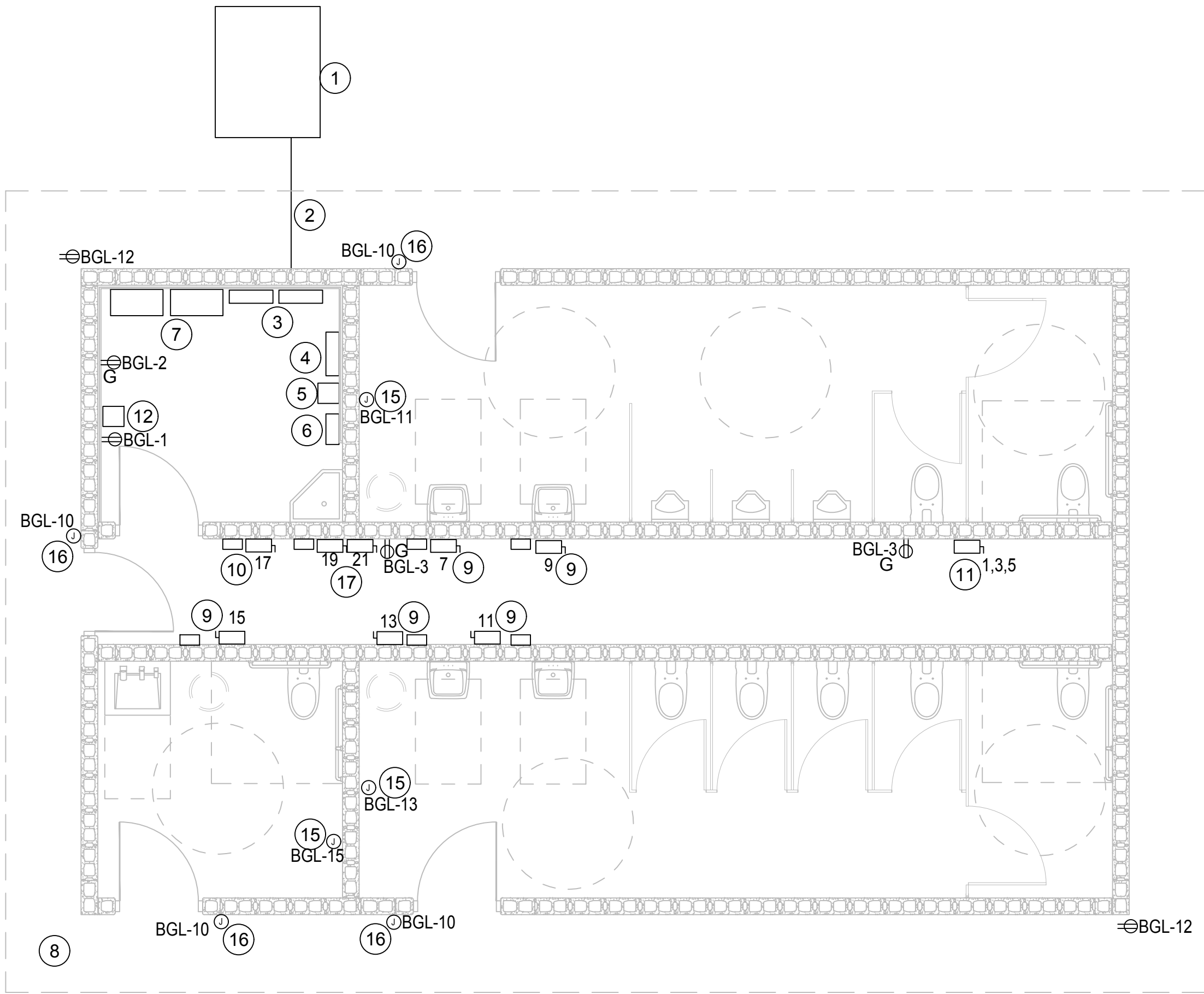
NOTE: NOT ALL ABBREVIATIONS MAY BE USED

FIRE ALARM SYMBOLS	
	FIRE ALARM - DUCT DETECTOR
	FIRE ALARM - HEAT DETECTOR
	FIRE ALARM - MANUAL PULL STATION
	FIRE ALARM - PHOTO SMOKE DETECTOR
	FIRE ALARM - STROBE
	FIRE ALARM - SPEAKER STROBE
	FIRE ALARM - VALVE TAMPER SWITCH



ELECTRICAL DEMOLITION NOTES

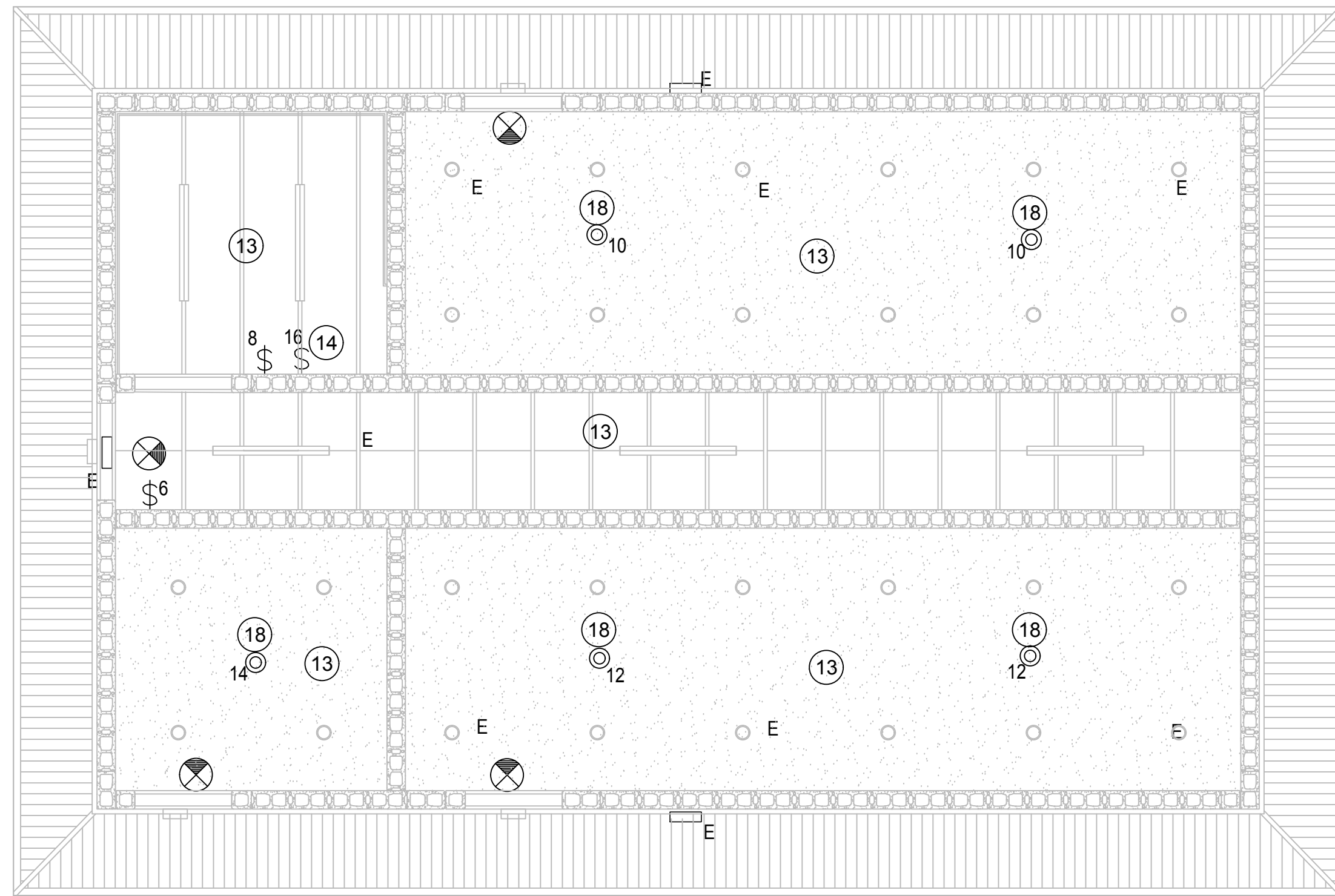
- A. IN THE ABSENCE OF RECORD DRAWINGS FOR THE EXISTING, TO-BE-DEMOLISHED SERVICE BUILDING, PRIOR TO OR DURING DEMOLITION, THE ELECTRICAL CONTRACTOR SHALL LOCATE AND RECORD THE ROUTE AND SIZES OF THE EXISTING UNDERGROUND ELECTRICAL WIRING, MOST OF WHICH IS TO BE RECONNECTED TO THE NEW BUILDING. THE CONTRACTOR SHALL DETERMINE AND RECORD THE INTERCONNECTION OF THE EXISTING ELECTRICAL AND LIGHTING CONTROL PANELS FOR THE SUBSEQUENT RECONNECTIONS.
- B. LOCATE SERVICE CONDUCTORS AND RACEWAY TO EXISTING OG&E TRANSFORMER. DISCONNECT AT SERVICE ENTRANCE EQUIPMENT, PULL WIRES BACK TO TRANSFORMER AND PRESERVE IF POSSIBLE FOR REUSE. CUT AND CAP THE RACEWAY CLEAR OF THE CONSTRUCTION AREA TO PRESERVE FOR REUSE. COORDINATE WITH OG&E FOR OUTAGE AND ACCESS.
- C. LOCATE OUTGOING BURIED WIRING CIRCUITS FROM EXISTING BUILDING LIGHTING CONTROL AND BREAKER PANELS. EXCAVATE THEM OUTSIDE OF THE CONSTRUCTION AREA AND PRESERVE THEM FOR RECONNECTION IN THE NEW BUILDING.
- D. DISCONNECT AND PRESERVE THE EXISTING ELECTRICAL AND LIGHTING CONTROL PANELS AND STEP-DOWN TRANSFORMER FOR REUSE IN THE NEW BUILDING.
- E. MAKE A NOTE OF THE WIRING CONFIGURATION AND DISCONNECT, REMOVE AND PRESERVE THE EXISTING ROUTER/WIFI ACCESS POINT, ANTENNA AND INTERCONNECTING WIRING FOR REINSTALLATION IN THE NEW BUILDING.
- F. REMOVE AND PRESERVE FOR REUSE THE SPRINKLER CONTROL. IDENTIFY WIRING/RACEWAYS OUT TO THE FIELD AND DEMO BACK TO OUTSIDE OF THE CONSTRUCTION AREA, FOR LATER RECONNECTION.
- G. THE CONTRACTOR SHOULD BE PREPARED TO PROVIDE TEMPORARY POWER AND CONNECTIONS EITHER FOR CONSTRUCTION SERVICES OR TO MAINTAIN FACILITIES ON AN AS-NEEDED BASIS THROUGHOUT THE DEMOLITION.



1 S. RESTROOM ELECT PLAN
SCALE: 1/4"=1'-0"

DRAWING GENERAL NOTES

- A. UNLESS NOTED OTHERWISE (UNO), CIRCUITS ARE 20A, 2 #12AWG, #12 E.G. IN 3/4" MINIMUM EMT, ALL WIRES COPPER & THHN/TWWN.
- B. CONNECT ALL MECHANICAL EQUIPMENT TO ITS DISCONNECT WITH FLEXIBLE NM CONDUIT, SIZE AND WIRING TO MATCH FEEDER.
- C. UNO, UNDERGROUND ELECTRICAL RACEWAYS TO BE SCHEDULE 40 PVC.
- D. UNO, ALL RECEPTACLES MOUNTED AT 18" AFF.
- E. SUPPLY ALL OUTDOOR GFI RECEPTACLES WITH "IN SERVICE" COVERS.
- F. ALL DEVICES FED FROM PANEL "BG", CIRCUIT INDICATED BY EACH ONE, UNLESS NOTED OTHERWISE.
- G. THE CONTRACTOR SHOULD BE PREPARED TO PROVIDE TEMPORARY POWER AND CONNECTIONS EITHER FOR CONSTRUCTION SERVICES OR TO MAINTAIN FACILITIES ON AN AS-NEEDED BASIS THROUGHOUT THE PROJECT.



2 S. RESTROOM LIGHTING PLAN
SCALE: 1/4"=1'-0"

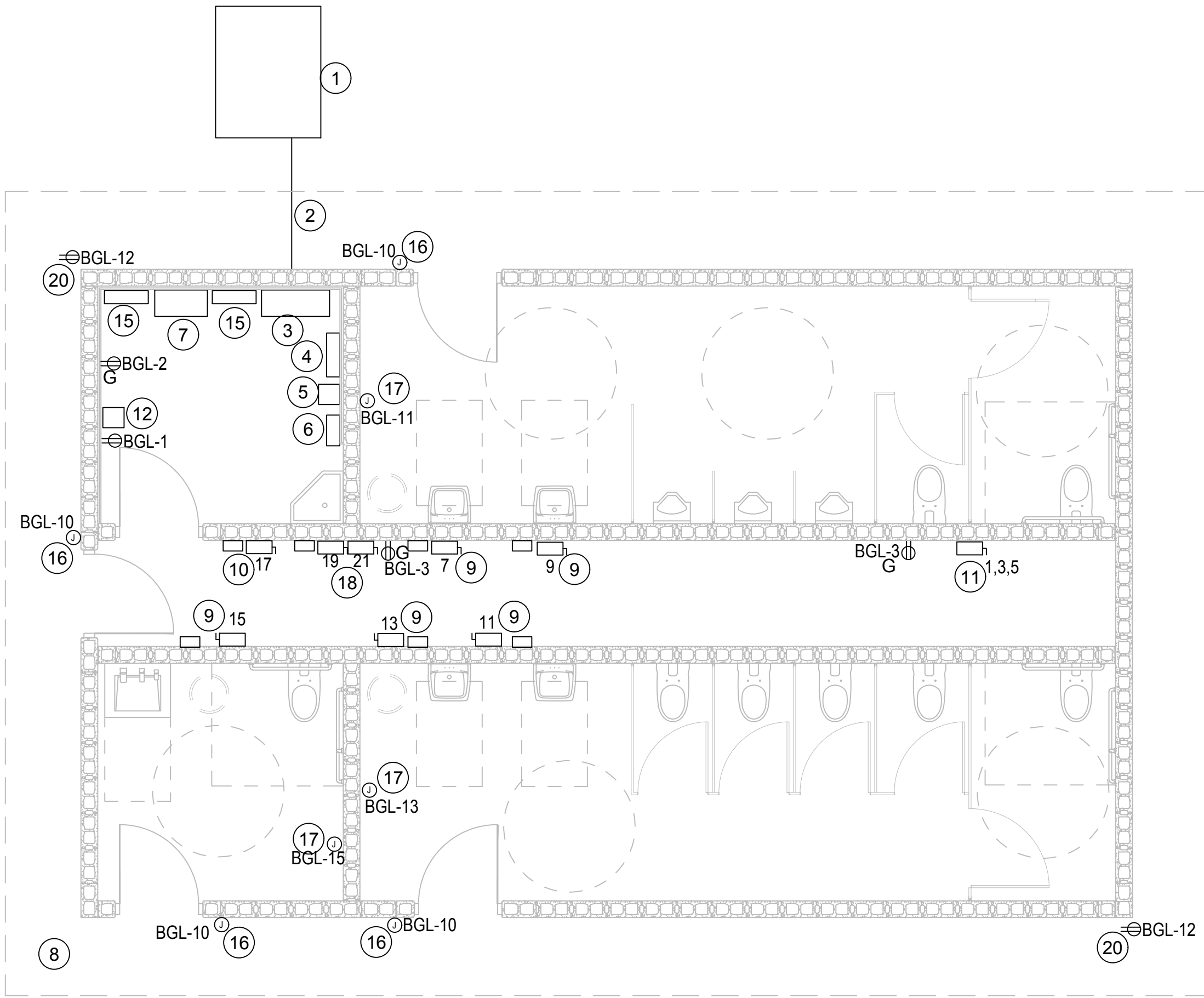
KEYED NOTES

1. EXISTING OG&E TRANSFORMER.
2. UNDERGROUND SERVICE CONDUCTORS AND RACEWAY PRESERVED FROM DEMOLITION. EXTEND AS REQUIRED TO NEW LOCATION OF EXISTING SERVICE PANELS, MINIMUM WIRE SIZE 4-#3 AWG. INSTALL ADDITIONAL SERVICE CONDUCTORS TO NEW BUILDING SERVICES PANEL BG, WIRE SIZE 4-#3 AWG. COORDINATE SERVICE CONDUCTOR ARRANGEMENT WITH OG&E.
3. 100A 480/277V SERVICE ENTRANCE PANELS #1 AND #2 SUPPLYING LIGHTING CONTROL PANELS, PRESERVED FROM DEMO. RECONNECT EACH TO OG&E TRANSFORMER AS SEPARATE SERVICES. INSTALL 10', 5/8" DIAMETER COPPER COATED STEEL GROUNDING ELECTRODE AND CONNECT IT TO THE SERVICE ENTRANCE PANEL GROUND AND THE BUILDING METAL WATER PIPE MAIN WITH #8 AWG COPPER GROUNDING ELECTRODE CONDUCTOR. LABEL PER NEC AS SERVICE DISCONNECTS 1 OF 3 AND 2 OF 3.
4. NEW BUILDING SERVICES PANEL "BG", 100A MAIN BREAKER 480/277V, 42KAIC, 30 SPACE. CONNECT AND GROUND AS SEPARATE SERVICE AS PER THE EXISTING PANELS #1 AND #2. LABEL PER NEC AS SERVICE DISCONNECT 3 OF 3.
5. 480-120/240V TRANSFORMER T-1 PRESERVED FROM DEMOLITION. RESUPPLY FROM TWO POLE 30A BREAKER IN PANEL BG WITH 2-#10AWG, #8 GROUND. GROUND SECONDARY NEUTRAL TO PANEL BG SYSTEM GROUND.
6. NEW 120/240V 100A LOAD CENTER "BGL" WITH 60A MAIN BREAKER, SUPPLIED WITH 3-#6 AWG, #10 E.G. FROM TRANSFORMER T-1.
7. LIGHTING CONTROL PANELS PRESERVED FROM DEMOLITION, RECONNECT TO SERVICE ENTRANCE PANELS #1 AND #2.
8. FIELD LIGHTING CIRCUITS/RACEWAYS AND SPRINKLER WIRING IDENTIFIED AND PRESERVED FROM DEMOLITION. USING "QUARZITE" TYPE OF IN-GRADE PULL BOXES IF REQUIRED, EXTEND TO NEW LOCATION OF LIGHTING AND SPRINKLER CONTROL PANELS, MATCHING EXISTING RACEWAY AND WIRING SIZES, OR AS REQUIRED BY NEC.
9. SINGLE POLE, 20A, 277V DISCONNECTING MEANS FOR POINT-OF-USE ELECTRIC WATER HEATER EWH, SUPPLY FROM PANEL BG AND CONNECT TO HEATER. COORDINATE LOCATION WITH MECHANICAL/PLUMBING SHEETS.
10. SINGLE POLE, 20A, 277V DISCONNECTING MEANS FOR ELECTRIC SPACE HEATER EH-1, SUPPLY FROM PANEL BG AND CONNECT TO HEATER. COORDINATE LOCATION WITH MECHANICAL/PLUMBING SHEETS.
11. THREE POLE, 20A, 480V DISCONNECTING MEANS FOR EXHAUST FAN EF-1, SUPPLY FROM PANEL BG AND CONNECT TO FAN. COORDINATE LOCATION WITH MECHANICAL/PLUMBING SHEETS.
12. ROUTER/WIFI EQUIPMENT AND RACK PRESERVED FROM DEMOLITION. REINSTALL ANTENNAS IN SAME RELATIVE LOCATION AS IN EXISTING BUILDING AND RECONNECT COAX AND DATA WIRING, EXTENDING OR REPLACING AS REQUIRED.
13. LIGHTING CONTROLLED BY SWITCH SHOWN IN THE SPACE, ALL CIRCUITS FROM PANEL BG, CIRCUIT NUMBER BY SWITCH. SEE ARCH SHEET A220 FOR FIXTURE SCHEDULE. RUN UNSWITCHED HOT TO FIXTURES DESIGNATED EMERGENCY ("E" NEXT TO FIXTURE SYMBOL).
14. EXTERIOR LIGHTING SWITCH.
15. J-BOX AND CIRCUIT FOR HAND DRYERS. MATCH RATING, VOLTAGE TO SUPPLIED UNITS.
16. FOR ELECTRONIC ENTRY SYSTEM, J-BOX WITH CONDUIT FOR DATA INTO CEILING VOID, AND POWER FROM CIRCUIT SHOWN.
17. TWO, SINGLE POLE, 30A, 277V DISCONNECTING MEANS EACH WITH A 277V, #10 AWG CIRCUIT FOR POINT-OF-USE DUAL ELEMENT ELECTRIC WATER HEATER EWH-1, SUPPLY FROM PANEL BG AND CONNECT TO HEATER. COORDINATE LOCATION WITH MECHANICAL/PLUMBING SHEETS.
18. DUAL TECH CEILING MOUNTED OCCUPANCY SENSOR. IF MORE THAN ONE IN A SPACE, DETECTION BY ANY WILL TURN ON LIGHTS.
19. POWER IN SOFFIT FOR SECURITY CAMERA.



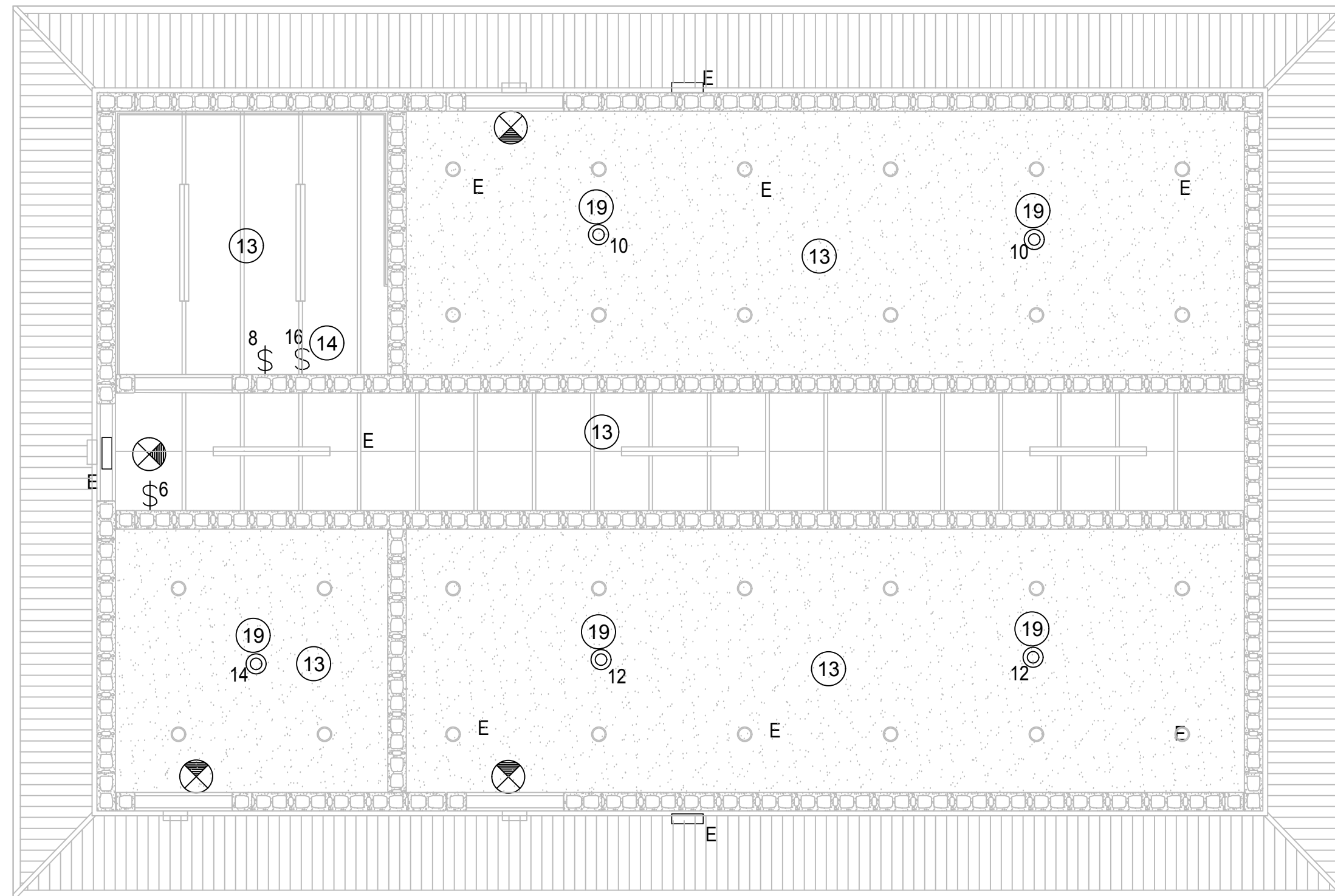
ELECTRICAL DEMOLITION NOTES

- A. IN THE ABSENCE OF RECORD DRAWINGS FOR THE EXISTING, TO-BE-DEMOLISHED SERVICE BUILDING, PRIOR TO OR DURING DEMOLITION, THE ELECTRICAL CONTRACTOR SHALL LOCATE AND RECORD THE ROUTE AND SIZES OF THE EXISTING UNDERGROUND ELECTRICAL WIRING, MOST OF WHICH IS TO BE RECONNECTED TO THE NEW BUILDING. THE CONTRACTOR SHALL DETERMINE AND RECORD THE INTERCONNECTION OF THE EXISTING ELECTRICAL AND LIGHTING CONTROL PANELS FOR THE SUBSEQUENT RECONNECTIONS.
- B. LOCATE SERVICE CONDUCTORS AND RACEWAY TO EXISTING OG&E TRANSFORMER. DISCONNECT AT SERVICE ENTRANCE EQUIPMENT, PULL WIRES BACK TO TRANSFORMER AND PRESERVE IF POSSIBLE FOR REUSE. CUT AND CAP THE RACEWAY CLEAR OF THE CONSTRUCTION AREA TO PRESERVE FOR REUSE. COORDINATE WITH OG&E FOR OUTAGE AND ACCESS.
- C. LOCATE OUTGOING BURIED WIRING CIRCUITS FROM EXISTING BUILDING LIGHTING CONTROL AND BREAKER PANELS. EXCAVATE THEM OUTSIDE OF THE CONSTRUCTION AREA AND PRESERVE THEM FOR RECONNECTION IN THE NEW BUILDING.
- D. DISCONNECT AND PRESERVE THE EXISTING ELECTRICAL AND LIGHTING CONTROL PANELS AND STEP-DOWN TRANSFORMER FOR REUSE IN THE NEW BUILDING.
- E. MAKE A NOTE OF THE WIRING CONFIGURATION AND DISCONNECT, REMOVE AND PRESERVE THE EXISTING ROUTER/WIFI ACCESS POINT, ANTENNA AND INTERCONNECTING WIRING FOR REINSTALLATION IN THE NEW BUILDING.
- F. REMOVE AND PRESERVE FOR REUSE THE SPRINKLER CONTROL. IDENTIFY WIRING/RACEWAYS OUT TO THE FIELD AND DEMO BACK TO OUTSIDE OF THE CONSTRUCTION AREA, FOR LATER RECONNECTION.
- G. THE CONTRACTOR SHOULD BE PREPARED TO PROVIDE TEMPORARY POWER AND CONNECTIONS EITHER FOR CONSTRUCTION SERVICES OR TO MAINTAIN FACILITIES ON AN AS-NEEDED BASIS THROUGHOUT THE DEMOLITION.



1 N. RESTROOM ELECT PLAN
SCALE: 1/4"=1'-0"

- A. UNLESS NOTED OTHERWISE (UNO), CIRCUITS ARE 20A, 2 #12AWG, #12 E.G. IN 3/4" MINIMUM EMT, ALL WIRES COPPER & THHN/TWVN.
- B. CONNECT ALL MECHANICAL EQUIPMENT TO ITS DISCONNECT WITH FLEXIBLE NM CONDUIT, SIZE AND WIRING TO MATCH FEEDER.
- C. UNO, UNDERGROUND ELECTRICAL RACEWAYS TO BE SCHEDULE 40 PVC.
- D. UNO, ALL RECEPTACLES MOUNTED AT 18" AFF.
- E. SUPPLY ALL OUTDOOR GFI RECEPTACLES WITH "IN SERVICE" COVERS.
- F. ALL DEVICES FED FROM PANEL "BG", CIRCUIT INDICATED BY EACH ONE, UNLESS NOTED OTHERWISE.
- G. THE CONTRACTOR SHOULD BE PREPARED TO PROVIDE TEMPORARY POWER AND CONNECTIONS EITHER FOR CONSTRUCTION SERVICES OR TO MAINTAIN FACILITIES ON AN AS-NEEDED BASIS THROUGHOUT THE PROJECT.



2 N. RESTROOM LIGHTING PLAN
SCALE: 1/4"=1'-0"

KEYED NOTES

- EXISTING OG&E TRANSFORMER.
- UNDERGROUND SERVICE CONDUCTORS AND RACEWAY PRESERVED FROM DEMOLITION. EXTEND AS REQUIRED TO NEW LOCATION OF EXISTING SERVICE PANEL MDP-2, MINIMUM WIRE SIZE 2 SETS, 4-600 KCMIL. COORDINATE SERVICE CONDUCTOR ARRANGEMENT WITH OG&E.
- 800A 480/277V SERVICE ENTRANCE PANEL MDP-2 SUPPLYING PANELS P3 & P4. PRESERVED FROM DEMO. RECONNECT TO OG&E TRANSFORMER. INSTALL 10', 5/8" DIAMETER COPPER COATED STEEL GROUNDING ELECTRODE AND CONNECT IT TO THE SERVICE ENTRANCE PANEL GROUND AND THE BUILDING METAL WATER PIPE MAIN WITH #3/0 AWG COPPER GROUNDING ELECTRODE CONDUCTOR. LABEL EACH BRANCH CIRCUIT BREAKER AS SERVICE DISCONNECT PER THE NEC.
- NEW BUILDING SERVICES PANEL "BG", 100A MAIN BREAKER 480/277V, 42KAIC, 30 SPACE, FEED FROM NEW 100A CIRCUIT BREAKER IN MDP-2 WITH 4-#3 AWG, #8 E.G.
- 480-120/240V TRANSFORMER T-1 PRESERVED FROM DEMOLITION. RESUPPLY FROM TWO POLE 30A BREAKER IN PANEL BG WITH 2-#10AWG, #8 GROUND. GROUND SECONDARY NEUTRAL TO PANEL BG SYSTEM GROUND.
- NEW 120/240V 100A LOAD CENTER "BGL" WITH 60A MAIN BREAKER, SUPPLIED WITH 3-#6 AWG, #10 E.G. FROM TRANSFORMER T-1. RECONNECT ANY 120V CIRCUITS THAT WERE IDENTIFIED PRIOR TO DEMOLITION.
- LIGHTING CONTROL PANEL PRESERVED FROM DEMOLITION, RECONNECT TO THE SAME BREAKERS IN PANELS P3 AND P4.
- FIELD LIGHTING CIRCUITS/RACEWAYS AND SPRINKLER WIRING IDENTIFIED AND PRESERVED FROM DEMOLITION. USING "QUARZITE" TYPE OF IN-GRADE PULL BOXES IF REQUIRED, EXTEND TO NEW LOCATION OF LIGHTING AND SPRINKLER CONTROL PANELS, MATCHING EXISTING RACEWAY AND WIRING SIZES, OR AS REQUIRED BY NEC.
- SINGLE POLE, 20A, 277V DISCONNECTING MEANS FOR POINT-OF-USE ELECTRIC WATER HEATER EWH, SUPPLY FROM PANEL BG AND CONNECT TO HEATER. COORDINATE LOCATION WITH MECHANICAL/PLUMBING SHEETS.
- SINGLE POLE, 20A, 277V DISCONNECTING MEANS FOR ELECTRIC SPACE HEATER EH-1, SUPPLY FROM PANEL BG AND CONNECT TO HEATER. COORDINATE LOCATION WITH MECHANICAL/PLUMBING SHEETS.
- THREE POLE, 20A, 480V DISCONNECTING MEANS FOR EXHAUST FAN EF-1, SUPPLY FROM PANEL BG AND CONNECT TO FAN. COORDINATE LOCATION WITH MECHANICAL/PLUMBING SHEETS.
- ROUTER/WIFI EQUIPMENT AND RACK PRESERVED FROM DEMOLITION. REINSTALL ANTENNAS IN SAME RELATIVE LOCATION AS IN EXISTING BUILDING AND RECONNECT COAX AND DATA WIRING, EXTENDING OR REPLACING AS REQUIRED.
- LIGHTING CONTROLLED BY SWITCH OR OCCUPANCY SENSOR SHOWN IN THE SPACE, ALL CIRCUITS FROM PANEL BG, CIRCUIT NUMBER BY SWITCH. SEE ARCH SHEET A220 FOR FIXTURE SCHEDULE. RUN UNSWITCHED HOT TO FIXTURES DESIGNATED EMERGENCY ("E" NEXT TO FIXTURE SYMBOL).
- EXTERIOR LIGHTING SWITCH.
- PANELS P3 AND P4 PRESERVED FROM DEMO. RECONNECT EACH TO THE ORIGINAL 200A CIRCUIT BREAKERS IN MDP-2 WITH 4-#3/0 AWG, #6 E.G.
- FOR ELECTRONIC ENTRY SYSTEM, J-BOX WITH CONDUIT FOR DATA INTO CEILING VOID, AND POWER FROM CIRCUIT SHOWN.
- J-BOX AND CIRCUIT FOR HAND DRYERS. MATCH RATING, VOLTAGE TO SUPPLIED UNITS.
- TWO, SINGLE POLE, 30A, 277V DISCONNECTING MEANS EACH WITH A 277V, #10 AWG CIRCUIT FOR POINT-OF-USE DUAL ELEMENT ELECTRIC WATER HEATER EWH-1, SUPPLY FROM PANEL BG AND CONNECT TO HEATER. COORDINATE LOCATION WITH MECHANICAL/PLUMBING SHEETS.
- DUAL TECH CEILING MOUNTED OCCUPANCY SENSOR. IF MORE THAN ONE IN A SPACE, DETECTION BY ANY WILL TURN ON LIGHTS.
- POWER IN SOFFIT FOR SECURITY CAMERA.

415 Broadway

Oklahoma City

Oklahoma 73102



V.405.232.8787

F.405.232.8810

www.taparchitecture.com

ARCHITECT'S SEAL



PROJECT

BUCK THOMAS PARK
RESTROOM FACILITIES
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160

ISSUES
REVISIONS

Issue Date - 10.10.2025

SHEET
TITLE

ELECTRICAL
PLAN N. BLDG

SHEET
NUMBER

E202

PROJECT
NUMBER

2221

All drawings and written materials herein constitute original work of TAP architecture and may only be duplicated with their written consent.



Gwin Engineering
Consultants, LLC
342202 E 800 West, Chandler, OK 74804
Phone: (405) 850-0205
Email: ogwin@gwin-engineering.com
Oklahoma CA # 7848, Expires 09/30/2026

PANELBOARD SCHEDULE

*	LOAD SUMMARY	CL	DF	DEMAND LOAD			
				A	B	C	TOTAL
L	Lighting	2	1.3	1.2	0.6	0.6	2.4
R	Convenience Recept						
H	Heating						
C	Cooling						
A	HVAC	1	0.9	0.3	0.3	0.3	0.8
P	Process						
O	Other Continuous	41	1	16.9	16.9	7.0	40.7
N	Other Noncontinuous						
Total		44		18.3	17.8	8	43.9

BG	
PANELBOARD DESIGNATION	
VOLTAGE	277/480
PHASING	3PH., 4W.
SYSTEM	NORMAL
BUS SIZE	100 AMP
MAINS	100 AMP MCB
ENCLOSURE	NEMA 1
MOUNTING/FEED	SURFACE/TOP

	DESCRIPTION	*	CB	KVA	A	B	C	KVA	CB	DESCRIPTION	*
1	EXHAUST FAN EF-1	A	20A-3P	0.3	3.165			2.9	30A-2P	TRANSFORMER T-1	O 2
3		A		0.3		3.1647		2.9			O 4
5		A		0.3			0.4247	0.1	20A-1P	LIGHTING ROOM 100	L 6
7	WATER HEATER EWH-2	O	20A-1P	3.0	3.8			0.8	20A-1P	LIGHTING ROOM 101	L 8
9	WATER HEATER EWH-3	O	20A-1P	3.0		3.36		0.36	20A-1P	LIGHTING ROOM 102	L 10
11	WATER HEATER EWH-4	O	20A-1P	3.0			3.36	0.36	20A-1P	LIGHTING ROOM 103	L 12
13	WATER HEATER EWH-5	O	20A-1P	3.0	3.12			0.12	20A-1P	LIGHTING ROOM 104	L 14
15	WATER HEATER EWH-6	O	20A-1P	3.0		3.15		0.15	20A-1P	EXTERIOR LIGHTS	L 16
17	SPACE HEATER EH-1	O	20A-1P	4.0			4		20A-1P	SPARE	18
19	WATER HEATER EWH-1/1	O	30A-1P	8.0	8				20A-1P	SPARE	20
21	WATER HEATER EWH-1/2	O	30A-1P	8.0		8			20A-1P	SPARE	22
23											24
25											26
27											28
29											30
Total Connected Load				18.08	17.675	7.7847					

1 PANEL BG (NORTH & SOUTH) SCHEDULE

PANELBOARD SCHEDULE

*	LOAD SUMMARY	CL	DF	DEMAND LOAD			
				A	C	TOTAL	
L	Lighting						
R	Convenience Recept	0.5	1	0.2	0.4	0.5	
H	Heating						
C	Cooling						
A	HVAC						
P	Process						
O	Other Continuous	9.9	1	4.3	5.6	9.9	
N	Other Noncontinuous						
Total		10		4.5	6.0	10.4	

BGL	
PANELBOARD DESIGNATION	
VOLTAGE	120/240V
PHASING	1PH., 3W.
SYSTEM	NORMAL
BUS SIZE	100 AMP
MAINS	60 AMP
ENCLOSURE	NEMA 1
MOUNTING/FEED	FLUSH/TOP

	DESCRIPTION	*	CB	KVA	A		C	KVA	CB	DESCRIPTION	*
1	ROUTER RECPT	O	20A-1P	0.18	0.36			0.18	20A-1P	GFCI ROOM 101	R 2
3	GFCI ROOM 100	R	20A-1P	0.36			0.86	0.50	20A-1P	MUSCO LIGHTING PANEL CONTROL*	O 4
5	FIELD 7 SCOREBOARD*	O	20A-1P	1.00	2			1.00	20A-1P	FIELD 10 SCOREBOARD*	O 6
7	FIELD 9 SCOREBOARD*	O	20A-1P	1.00			2	1.00	20A-1P	FIELD 8 SCOREBOARD*	O 8
9	SPRINKLER CONTROL*	O	20A-1P	0.50	0.6			0.10	20A-1P	DOOR ACCESS CONTROL	O 10
11	HAND DRYER	O	20A-1P	1.50			1.6	0.10	20A-1P	SECURITY CAMERA	O 12
13	HAND DRYER	O	20A-1P	1.50	1.5				20A-1P	SPARE	14
15	HAND DRYER	O	20A-1P	1.50			1.5		20A-1P	SPARE	16
17											18
19											20
21											22
23											24
Total Connected Load					4.46		5.96				

2 PANEL BGL (SOUTH*) SCHEDULE

KEYED NOTES

1. DESCRIPTIONS MARKED * ARE TAKEN FROM THE ORIGINAL LEGEND IN THE EXISTING 120/240V PANEL IN THE SOUTH BUILDING, AND MUST BE FIELD VERIFIED. THE SAME PANEL IN THE EXISTING NORTH BUILDING DOES NOT HAVE A LEGIBLE LEGEND - AGAIN, FIELD VERIFICATION OF THE CIRCUITS THAT REQUIRE TO BE RECONNECTED TO THE NEW "BGL" PANEL MUST BE CARRIED OUT PRIOR TO DEMOLITION.



PART 1 - GENERAL

A. INTENT

The intent of this section is to cover Basic Electrical Requirements specifically applicable to Electrical Work.

B. GENERAL REQUIREMENTS

Visit the building site prior to bidding, examine all existing conditions, and verify all dimensions. No extras will be awarded after the contract is signed if conflicts or obstructions between new work and existing construction are not reported.

Work installed by this Contractor which interferes with or affects the existing structures shall be changed as directed and all costs incident to such changes shall be paid by this Contractor.

Any existing condition uncovered during the construction process which, by generally accepted construction practices, should be remedied, should be brought to the attention of the architect immediately and in writing.

Specific locations, mounting heights and overall dimensions of devices and fixtures are to be obtained from the architectural details when available and from site data.

All work of this contract shall be done neatly and proficiently and only by workers skilled in their particular craft.

Except where modified by specific notation to the contrary, it shall be understood that the indication and/or description of any item in the drawings, specifications, or both carries with it the instruction to furnish and install the item, regardless of whether or not this instruction is explicitly stated as part of the indication or description.

All work shall be done during normal working hours.

C. SCOPE OF WORK

Provide all materials, labor, equipment and services necessary for the installation of all systems as indicated on the drawings.

D. CONTRACT DRAWINGS

The contract drawings for the work are diagrammatic, intended to convey the scope of work and indicate the general arrangement and approximate location of equipment and wiring, the Contractor shall be responsible for checking and verifying all conditions and dimensions. Do not scale drawings.

Drawing Definitions: Where the term "provide" is used, this shall mean furnish and install, complete and ready for the intended use. "Furnish" means supply and deliver to the Project site, ready for unloading, unpacking, assembly, and installation. "Install" describes the operations at the Project site including the actual assembly, erection, anchoring, and all similar operations.

Provide any fittings, etc., necessary for the complete installation of all work of this contract. Provide any accessories required for the complete installation and operation of all systems.

Include all costs to make any alterations and offsets of conduits, etc., and of equipment as necessary to avoid installation conflicts with existing work.

The drawings and specifications are complementary and any work and material required by the drawings and not mentioned in the specifications or vice versa, shall be executed as if same were both specified and shown.

Any questions or conflict between drawings and specifications, shall be referred to the Engineer.

The Engineer reserves the right to require any and or all Contractors to make minor changes in arrangements at no additional cost to the Owner.

E. CODES, STANDARDS AND TESTS

The latest edition of the National Electric Code shall be the minimum requirement for all work. All electrical materials used in this work and all workmanship and tests performed therein, unless specifically stated otherwise, shall conform to the latest rules, regulations and specifications for the Nation Board of Fire Underwriters, local and state codes, authorities having jurisdiction and local utility company. Examine the drawings and specifications for compliance with prevailing codes, regulations and ordinances and base bid and work accordingly. Any minor discrepancy between these drawings / specifications and codes, laws, ordinances, rules and regulations shall be corrected by the Contractor as required. Major discrepancies shall immediately be brought to the attention of the architect, prior to installation.

All tests shall be performed in accordance with state, county, local, Owner's and engineer's requirements.

F. PERMITS

The Contractor is responsible for applying for all required permits and paying for all permits, inspection, licensing, and service fees to Authorities having jurisdiction over the work. The Contractor is responsible for arranging for all inspection visits.

G. COORDINATION

Perform work under this contract in close harmony with other contractors so completed work shall present a neat and workmanlike installation. The electrical Contractor shall consult the plans of all other trades in all instances before installing his work so that their installations will not interfere with other disciplines. In the event of a conflict, the Contractor shall report to the Owner's representative at once and do no further work until a satisfactory arrangement is decided upon. Any work done, or equipment placed in position by the Contractor, creating a conflict in violation hereof, shall be readjusted to the satisfaction of the Owner's representative at the expense of the Contractor. The decision of the Owner's representative shall be final in regard to changes due to conflicting conditions.

H. SUBMITTALS

Submit to engineer/architect six (6) copies of certified shop Drawings, descriptive data, diagrams and specifications on all Specified materials and equipment for review in ample time before manufacturers are authorized to make shipment. The information submitted shall be prepared and arranged in a format which will permit easy identification and comparison by the engineer / architect of specified equipment. It shall be the responsibility of the Contractor to furnish any additional copies (showing architect / engineer stamp and comments) as necessary for suppliers and/or building officials.

The make, type and finish of all materials, equipment and apparatus shall be approved by the engineer/architect in writing before the Contractor installs it. Any substitution for any specified Equipment or material shall first be approved by the engineer / architect in writing.

Items to be submitted include the following:
Panelboards and Circuit Breakers
Disconnect Switches
Wiring Devices
Light Fixtures
Motor Starters and Control Devices

Shop drawings shall include, but are not limited to the following: make, model number, dimensions, electrical characteristics (rating). Shop drawings shall bear name of project and location.

Any changes to items specified must be submitted as a substitution with complete documentation of price differential and equipment details.

I. RECORD DRAWINGS

Contractor shall keep at least one set of colored corrected shop and design drawings at the site. Drawings shall be current, denoting approved modifications and installed departure.

All utilities which are installed below grade or concealed within walls shall be dimensionally located on the record drawings.

J. OWNER FURNISHED EQUIPMENT

All equipment that is furnished by the Owner is assigned to the Contractor that is designated to install the equipment as though the Contractor furnished the equipment itself. The Contractor is responsible for all aspects of the equipment including verifying the order, coordinating and accepting delivery, rigging, installation, start-up coordination, warranty repairs, collection and submittal of equipment manuals, and all other activities associated with the equipment unless specifically indicated otherwise. Refer to the pre-purchase specifications or order forms used by the Owner to select the equipment for any features included with each piece of equipment

K. CUTTING AND PATCHING

This Contractor is responsible for any cutting, patching, painting, supports, and roofing as required to complete work indicated on drawings. Restoration shall be handled in a manner acceptable to the engineer/architect. All floor or fire wall penetrations are to be firestopped. Use Dow Corning 3-6548 silicone RTV foam or approved equal.

Repair adjacent construction and finishes in ceilings, walls, floors or partitions that have been damaged during demolition or created during extension of work. Repair all penetrations in fire rated ceilings, walls, floors or partitions to the original fire ratings using approved fire stop materials.

L. PREPARATION

Coordinate the installation of equipment with the schedules of other trades to prevent unnecessary delays in the total project.

M. EQUIPMENT VERIFICATION

Verify all equipment ratings, connections and locations with installing Contractor before installation.

This Contractor shall verify that all equipment furnished will properly fit in the space provided, that it will function properly, and that all parts of equipment requiring service are readily accessible.

N. CLEANING / DEBRIS REMOVAL

This Contractor shall remove from the premises all accumulation of dirt, debris, waste materials and rubbish caused by his employees or work, at least once a week, except that combustible materials shall be removed daily.

Clean equipment to remove foreign objects and markings. Touch up paint as required. The Contractor is responsible for any damages caused by work of his trade.

O. SUBSTITUTIONS

Certain makes of materials and equipment are specified and drawings are detailed according to this material. Contractor shall base his bid on furnishing and installing the specified make and model or the "equivalent" model of another of the specified manufacturers which meets all the qualifications of the specified items.

"Equivalent" materials and equipment are those of manufacturer which meet the same standards of performance, have equal or better materials of construction, and equal or better maintenance characteristics. All equivalents must fit the space provided in the building structure. Where the use of equivalents results in changes, this Contractor shall be responsible for such changes and any costs resulting from them.

If the Contractor intends to use equipment or materials not specified, he must receive written approval from the engineer/architect prior to the award of the contract. This prior approval only permits submittal of a particular manufacturer's equipment in general. The specified item to be used must again be submitted for final review as specified under "shop drawings."

P. DEMOLITION

Maintain service to other parts of the building during demolition.

Coordinate all demolition work with the new work of all other trades.

Patch all holes in floors and ceiling resulting from the demolition which will not be used for the new work with the material to match the existing finish and fire rating.

Turn over to the Owner all removed equipment that the Owner wishes to keep. Properly dispose of all remaining equipment according to all regulatory agency requirements.

The Contractor shall disconnect and remove all existing light fixtures, receptacles, and other electrical equipment, in areas of construction unless otherwise noted on drawings. All equipment and fixtures not reused shall be disposed of by Contractor as directed by Owner or his representative.

Remove all existing conduit and wire not to remain in use to the first junction box above ceiling.

Disconnect and remove all branch circuit wiring from existing circuit breakers feeding electrical devices which are removed. Maintain continuity of all existing circuits that are to remain.

All changes or code corrections that are required to existing electrical work not noted on the contract documents must be submitted to the engineer for approval, prior to commencing work.

Q. PROTECTION OF BUILDING COMPONENTS

Provide protection from damage of any kind to the existing roof and paved surfaces during all phases of this project.

R. CONTRACTOR USE OF PREMISES

Limit use of premises to allow Owner and tenant occupancy, work by others and Owner, and comfort conditions to be maintained in the occupied spaces during normal business hours.

S. WARRANTY

This Contractor shall provide a written warranty of all work done under this contract for a period of one year from date of substantial completion. The Contractor shall, at his own expense, remedy any defects due to faulty materials and or workmanship and pay any damage to other work resulting from such defects and or the remedying thereof, which shall appear within the warranty period.

All materials shall be free of defects or errors which would result in poor application or cause defects in workmanship.

T. PROJECT CLOSEOUT

Furnish three final copies of installation and maintenance manuals, warranties, and other submittal data indicated for inclusion. Bind in 3-ring binders with tabs for each division or major piece of equipment. Include wiring diagrams, parts listings, and other manufacturer's information.

Submit a certificate of final inspection and approval. Submit release of liens for all subcontractors and suppliers. Submit record drawings

Final payment will not be approved until all closeout items are received.

PART 2 - PRODUCTS

A. EQUIPMENT

All equipment shall be as specified on the drawings and in the schedules. Provisions for substitutions are listed in Part 1.

B. IDENTIFICATION

All equipment shall be identified with laminated three-layer plastic engraved nameplates mechanically fastened to the equipment except contact-type permanent adhesive where screws cannot or should not penetrate substrate. Glued application is not acceptable. Identify and permanently and neatly type all circuits on panelboard directory. Hand written directories are not acceptable.

All raceways shall be identified with manufacturer's standard self-adhesive vinyl tape no less than three mils thick by two inches wide. Where applicable, install on all concealed raceways at connection to junction boxes, pull boxes, equipment and wall / floor penetrations. Unless otherwise indicated or required by governing regulations, provide orange tape with black letters.

All current carrying conductors smaller than #10 AWG and grounded conductors smaller than #8 AWG shall be identified with colored insulation. For larger sizes, provide field-applied conductor color, self-adhesive colored vinyl tape, three mils thick by one inch wide. Heat-shrink markers shall be white polyolefin sleeves, text applied with compatible printer, or marker tapes shall be vinyl or vinyl-cloth, self-adhesive wrap-around type, with preprinted letters and numbers. For existing systems, match existing color codes. If existing color codes are not apparent, or unmarked, use the following color codes:

480/277V System - Brown (Phase A), Orange (Phase B), Yellow (Phase C)
208/120V System - Black (Phase A), Red (Phase B), Blue (Phase C)
240/120V System - Black (Line 1), Red (Line 2)
Neutral Conductor - White
Ground Conductor - Green
Control Conductor, 120V - Red
Control Conductor, Neutral - White
Control Conductor, 24V - Blue
Control Conductor, External Source - Yellow

C. GROUNDING

Properly ground all motors, transformers, equipment, conduits, switchgear, etc. in compliance with the latest edition of the NEC, article 250 and as indicated on drawings.

All wiring for grounding purpose shall be copper as required for type and sizes indicated on drawings and shall be stranded conductors.

Building electrode ground rods shall be 10 feet long x 3/4 inch diameter (minimum dimensions). Ground rods shall be copper clad steel. Maximum resistance for the electrode system is 25 ohms. All ground rods shall be tested with proper test equipment for rod to earth resistance before connecting ground wire.

Equipment grounding conductor: provide separate, insulated conductor within each feeder and branch circuit raceway. Terminate each end on suitable lug, bus, or bushing.

Metal raceways may not be used for equipment grounding.

Provide exothermic type weld connections at all connections to building steel and buried ground rods. All gas lines and water pipes shall be grounded. Ground rods in test wells shall have bronze mechanical (bolted) connections to the grounding grid.

Ground all light fixtures by installing a separated green wire in any flexible conduit between outlet box and fixture.

D. ELECTRICAL RACEWAYS

Interior conduit shall conform to National Electric Code (NEC.) And be of sufficient size and installed so that the required number of conductors can be inserted or removed without injury to, or excessive strain upon, the insulation. The minimum conduit size shall be 3/4 inch unless otherwise noted.

Rigid steel conduit shall be used for all conduit runs installed in concrete slabs, in all poured concrete construction and all applications inside building requiring 2 inches or larger in size. Conduit shall be supported at intervals not-to-exceed 7 feet for 3/4 inch conduit, 8 feet intervals for conduit 1 inch to and including 2 inches, and 10 feet for conduits 2-1/2 inches or larger.

Electrical metallic tubing (thin wall) may be used for switch legs (except in poured concrete walls) and branch circuits in partitions, above ceilings, and where conduit run is exposed. Conduit shall be supported at intervals not-to-exceed 7 feet for 3/4 inch conduit, 8 feet intervals for conduit 1 inch to and including 1-1/2 inch. EMT larger than 1-1/2 inch will not be permitted.

Flexible metallic conduit shall be used between outlet boxes in hung or furred ceilings and recessed lighting fixtures. Flexible conduit shall not exceed 6 feet in length, except for recessed incandescent fixtures, length shall be 12 feet.

Liquid tight flexible metallic conduit shall be used for final connections to all motors, transformers and equipment subject to vibration.

Provide conduit expansion fittings where conduit crosses a building expansion joint and in all straight conduit runs 200 feet or longer.

Provide conduit sealing fitting on conduit runs passing through the building exterior walls or roof. Conduit seal shall be installed on the warm side of penetration within six inches of conduit passage or as close to passage point as conditions will allow

E. CONDUCTORS, WIRE AND CONNECTORS

All conductors shall be new, NEC grade copper and free from defects. building wires shall be type THHN or THWN for dry locations and type THHW or THWN for wet or dry location (90 degrees C. Dry) (75 degrees C. Wet) except as otherwise noted on the drawings.

Fixture wire conforming to NEC requirements shall be used in all lighting fixtures and from lighting fixture to first junction or outlet box.

In general, conductors smaller than #12 AWG will be permitted only for communication, signal, or control circuits. Wire #10 AWG and smaller shall be solid or stranded conductors. Wire #8 AWG and larger shall be stranded. stranded conductors smaller than #8 AWG may be used only if "Sta-con" or equal compression lugs are used for all terminations.

Color coding is required for all service, feeder, branch, control, and signaling circuit conductors. Insulation color for neutrals shall be white for 120 volt circuits. Equipment grounding conductors shall be green.

Use no wire smaller than #12 AWG, rated at 600 volts, for power and lighting circuits and no smaller than #14 AWG for control wiring.

F. OUTLET BOXES AND FITTINGS

Outlet boxes shall be NEC gauge steel, galvanized, of ample size to accommodate wire, switches, receptacles, or other devices mounted in the box without crowding. Use gang boxes

where more than one device is to be installed at the same location.

Outlet boxes for lighting fixtures shall have 3/8 inch fixture stud where required. Ceiling outlet boxes shall be 4 inches octagonal, 2-1/8 inches deep for furred plaster and exposed work and 3 inches deep for concrete work. All boxes for concrete work shall be of type especially designed for installation in concrete.

Outlet boxes for switches, receptacles, telephone, or other devices recessed in walls shall be 4 inch square boxes with extension rings and plaster covers where required to bring box flush with wall. Use of cover plate as tension of rigidity device will not be permitted.

Provide outlet box accessories as required for each installation, including mounting brackets, wallboard hangers, extension rings, fixture studs, cable clamps, and metal straps for supporting outlet boxes, compatible with outlet boxes being used and meeting requirements of individual wiring situations. Junction and pull boxes shall be of NEC gauge steel, galvanized, and of sufficient size to accommodate the conductors served without crowding. Boxes shall be equipped with screwed or hinged covers as conditions warrant. Pull boxes located in floors shall be flush with finished floor, and of cast wrought iron, aluminum, or bronze with gasketed, waterproof cover. Conduit entrances shall be threaded.

Provide corrosion resistant cast metal weatherproof outdoor wiring boxes, of the type, shape, and size required for each application, with threaded conduit ends, cast metal face plate with spring-hinge waterproof cap, suitably configured for each application, including face plate gasket and corrosion proof fasteners.

G. WIRING DEVICES

Duplex receptacles shall be Heavy Duty Specification Grade 20 amp, 125 volt, 3 wire grounding type. Provide smooth ivory thermoplastic cover plate and matching screws. Approved manufacturers: Hubbell, Arrow-Hart, Bryant, Leviton, or Slater equal; with Hubbell p8 or equal cover plate.

Ground fault circuit interrupter receptacles shall be duplex, 20 amp, 125 volt, 3 wire grounding type. Provide smooth ivory thermoplastic cover plate and matching screws. Approved manufacturers: Hubbell, Bryant, Leviton, or Slater equal; with Hubbell P8 or equal cover plate.

Wall switches shall be 20 amp, 120-277 volt, quiet, high capacity, toggle type. Single pole switches - approved manufacturers are Hubbell, Slater, Arrow-Hart, Bryant, Leviton. Three way switches - approved manufacturers: Hubbell, Bryant, Leviton or Slater.

Wall plates for switches, telephone outlets and other special outlets shall match the wall plates previously specified with the receptacles. All plates in each room shall match unless otherwise approved by the Owner's Representative. Approved products: Hubbell, Bryant, Leviton, or Slater.

Disconnect switches shall be heavy duty, single throw disconnect switches. Enclosure shall be NEMA 1 indoor and NEMA 3R (raintight) where they are required to be weatherproof. The ampere rating, fusible or non-fusible and voltage characteristics shall be as indicated on drawings. Square 'D', Siemens or Eaton

H. PANELBOARDS

Furnish and install panelboards as shown on the drawings. Panelboards shall be dead front equipped with copper bus and thermal magnetic molded case circuit breakers, of frame and trip ratings as shown on the panelboard schedules. Panelboards shall be manufactured in accordance with the latest NEMA standards and shall be listed by UL and bear the UL label. All panelboards shall be of one manufacturer. Where required, panel boards shall be suitable for use as Service Entrance given compliance with NEC.

Panelboards main bus, main lugs, and/or main breaker shall be rated as noted on panelboard schedules. Current density shall be in accordance with UL requirements. Bus mounting for circuit breakers shall be bolted connections and accommodate any combination of circuit breaker units without further modifications. The complete panelboards, including main circuit breaker, bus and lugs, branch circuit breakers, and connection shall be properly designed and UL listed to withstand the effect of the available required short circuit current.

All panelboards shall be mounted in code gauge galvanized steel cabinets, with door in door cover having metal directory frame, and flush lock all keyed alike. Finish in manufacturer's standard gray enamel. Each door shall be equipped with a latch and lock. Furnish two keys with each lock.

Basis of Design: Distribution Panels - Square 'D' QMB, Branch Circuit - Square 'D' 'NF' or 'NOOD'. Equals by Siemens or Eaton.

I. TRANSFORMERS

Provide 60 hertz, dry type, air cooled, two-winding insulated transformers with rating as indicated on the Drawings.

Transformers larger than 15kVA shall incorporate a UL recognized Class 220 insulation system; with a 150° C maximum coil rise and a maximum case rise. Copper windings with (2) 2-1/2% AN and (4) 2-1/2% BN taps.

Manufacturers: Square D, Eaton or Siemens

J. SAFETY SWITCHES / DISCONNECTS

Furnish and install safety switches and disconnects as shown on the drawings. Equipment shall be safety type, quick make, quick break, externally operated, heavy duty type. Enclosures shall be NEMA 1 or NEMA 3R as required. Sizing shall be for load unless indicated larger on the drawings.

K. LIGHTING FIXTURES

Provide lighting fixtures of the size, type, and rating indicated on the drawings complete with, but not necessarily limited to, lamps, lampholders, reflectors, ballasts, starters, wiring, and mounting hardware.

Furnish and install all necessary mounting hardware and supporting channel as required to support fixtures from building structure.

Furnish and install concrete pole bases as indicated on contract drawings.

L. COMMUNICATIONS CONDUIT SYSTEM

Communication outlets shall be empty conduit with single or double gang outlets. Conduit to be stub up to 8 inches above finished ceiling and include pull string. Cover plates shall be provided by data/communications system Contractor.

M. FIRE ALARM SYSTEM

Fire alarm control panel shall be modular construction with flush wall-mounted enclosure. Provide power supply adequate to serve all initiating, signaling and remote devices, and capable of operating system in standby mode for 24 hours followed by alarm mode for 15 minutes. If installed to supplement an existing system, the new system shall be same manufacturer as owner's existing system.

Ceiling mounted smoke detectors shall be in accordance with NFPA 72, photo-electric type with adjustable sensitivity, plug-in base, auxiliary relay contact, and visual indication of detector actuation, suitable for mounting on a 4 inch outlet box.

Duct mounted smoke detector shall be in accordance with NFPA 72, photo-electric type with auxiliary SPDT relay contact, key-operated "Normal-reset-test" switch, duct sampling tubes extending width of duct, and visual indication of detector actuation, in duct mounted housing.

Alarm lights shall be in accordance with NFPA 72 and ADA, strobe lamp and flasher with red lettered "FIRE" on white lens.

Alarm horn shall be in accordance with NFPA 72 and ADA, flush type alarm horn with a sound rating of 87 dB at 10'-0", or as noted on the drawings.

Manual pull stations shall be in accordance with NFPA 72, and shall be red, double action type.

PART 3 - EXECUTION

A. SCHEDULING OF WORK

Work is to be scheduled with Owner's representative and all other trades to accommodate occupancy dates and to expedite the timely completion of the project. Any utility outages or work which interferes with use of facility must be scheduled 24 hours in advance.

Coordinate the installation with all conditions and the work of other Contractors. The Contractor shall incur all costs for relocation of equipment conflicting with existing equipment or new work by other disciplines.

Trenching, saw cutting, coring, or other structural modifications shall not be performed without notification of the Owner and careful field verification by the Contractor to insure that no adverse effect to the building's structural integrity will occur.

Ceiling mounted sprinkler, lighting, and electrical requirements take precedence over ceiling mounted mechanical requirements. See reflected ceiling plans for ceiling grid and lighting layout for coordination of final diffuser locations.

B. TESTING

Testing of all wiring, devices, lighting and equipment is to be conducted to ensure the electrical continuity of all connections, and to demonstrate compliance with all requirements of drawings and specifications. Clean all luminaries and relamp with new any lamps used during construction for lighting. Testing shall be witnessed by Owner's representative.

C. INSTALLATION

Install all equipment and products in accordance with manufacturer's published instructions and recommendations.

Provide dual element, time delay RK5 fuses on all motors and disconnects as required whether indicated on drawings or not.

D. ELECTRICAL RACEWAYS

Conduit run exposed shall run parallel or perpendicular to walls, ceilings, or principal framing members. It is required that all conduit be installed to reflect neat, careful workmanship throughout the job. Do not install conduit which has been crushed, damaged, or deformed in any way. Install conduit in such a manner as to ensure against trouble from collection of trapped condensate, all runs of conduit shall be free of such traps wherever possible.

Conduits shall be installed a minimum of 12 inches from steam or hot water piping in parallel runs, at least 6 inches from cross runs and at least 3 inches from cold water piping. Conduits shall not be secured to other piping or other piping supports.

The full number of threads must project beyond knockout in boxes and cabinets to allow the bushing to butt up tight against the end of the conduit.

All conduit hangers and supports shall be rigidly fastened to the building structure. No conduit shall be supported from ductwork, piping, or ceiling grid systems.

Provide fire seals wherever conduit penetrates fire walls or rated floor slabs.

E. CONDUCTORS, WIRE AND CONNECTORS

Conduits shall be continuous from outlet to outlet, no splices shall be permitted except at outlets. All electrical connections shall be made in accordance with NEC.

END OF SECTION

415 Broadway

Oklahoma City

Oklahoma 73102



V.405.232.8787

F.405.232.8810

www.taparchitecture.com

ARCHITECT'S SEAL



PROJECT

BUCK THOMAS PARK
RESTROOM FACILITIES
1903 NE 12TH STREET
MOORE, OKLAHOMA 73160

ISSUES
REVISIONS

Issue Date - 10.10.2025

SHEET
TITLE

ELECTRICAL
SPECIFICATIONS

SHEET
NUMBER

E701

PROJECT
NUMBER

2221

All drawings and written materials herein constitute original work of TAP architecture and may only be duplicated with their written consent.



Gwin Engineering
Consultants, LLC
JACOB E. GWIN, President, Oklahoma City, OK 74104
Phone: (405) 850-0205
Email: gwin@gwin-engineering.com
Oklahoma, CA # 7160, Expires 6/30/2026