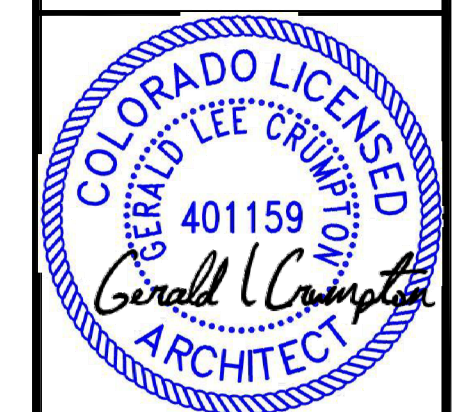


LINTON ELEMENTARY SCHOOL

EARLY CHILDHOOD RESTROOM PROJECTS



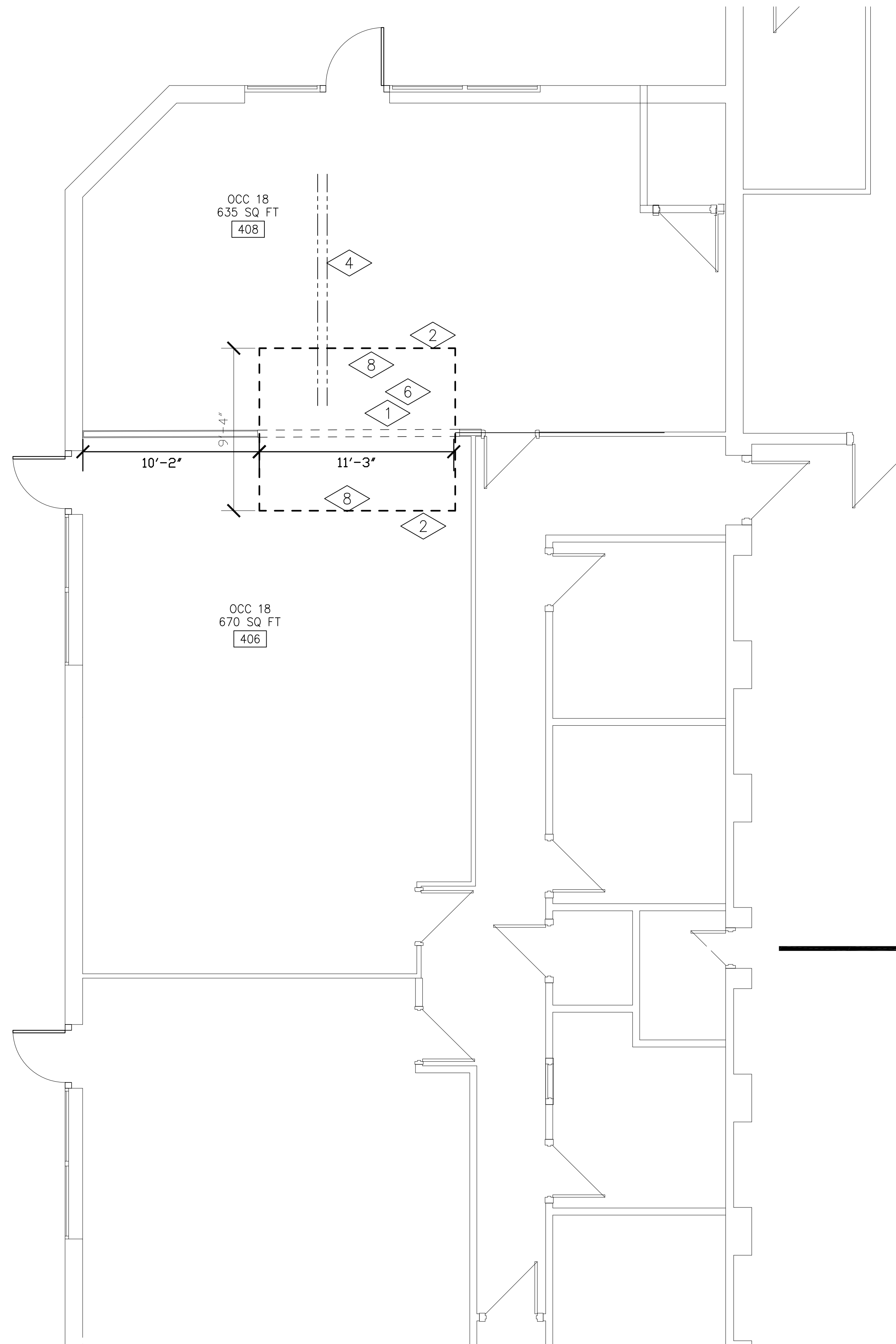
POUDRE SCHOOL DISTRICT
LINTON ELEMENTARY SCHOOL
4100 CARIBOU DRIVE
FORT COLLINS, CO 80525



No.	Revision	Date

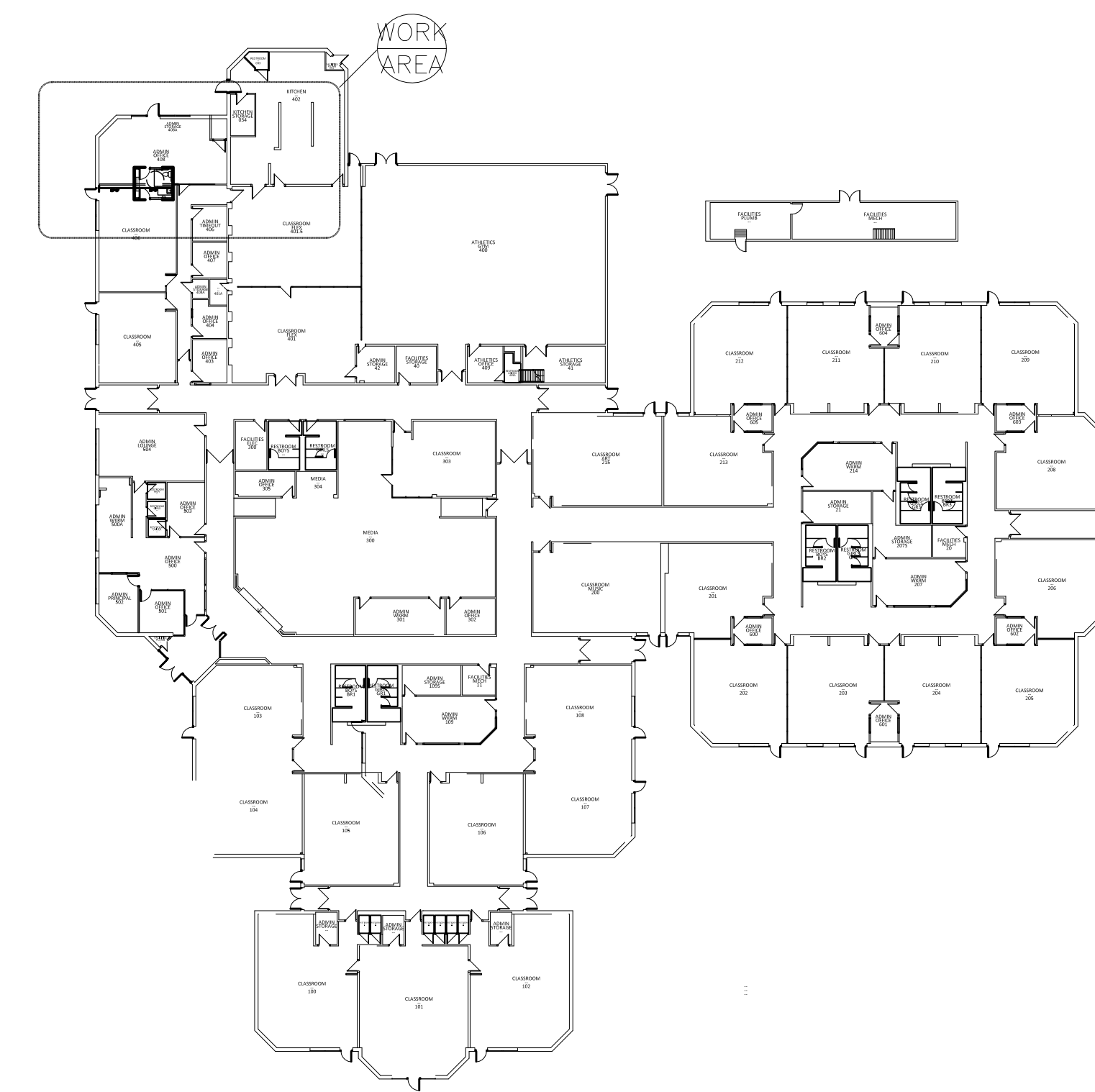
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COVER

Project
EC REST ROOMS
DD SET
Date
02/20/2020
Sheet
G000
Scale

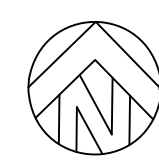


KEY DEMO NOTES:

- 1 WALL PARTITION, DEMO TO HARD SOFFIT
- 2 R&R SOFT CEILING TO ACCOMMODATE (N) WALLS
- 3 NOT USED
- 4 DEMO FLOOR FOR SANITARY DRAIN SEE P SHEETS
- 5 DEMO ELECTRICAL POWER/LIGHTS SEE E SHEETS
- 6 CUT ROOF DECK FOR EF/VENT PIPE REPAIR SEE G1/A301 & H1/A301, M SHEETS
- 7 NOT USED
- 8 DEMO CARPET FOR SALVAGE AND REUSE ELSEWHERE.
- 9 ADD (N) FIRE SPRINKLER HEAD TO INSIDE OF (N) TOILET ROOM, THIS IS DESIGN BUILD GC RESPONSIBILITY.

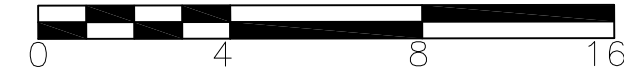


KEY PLAN
NTS



PARTIAL FLOOR PLAN

SCALE IN FEET



POUDRE SCHOOL DISTRICT
LINTON ELEMENTARY SCHOOL
4100 CARIBOU DRIVE
FORT COLLINS, CO 80525



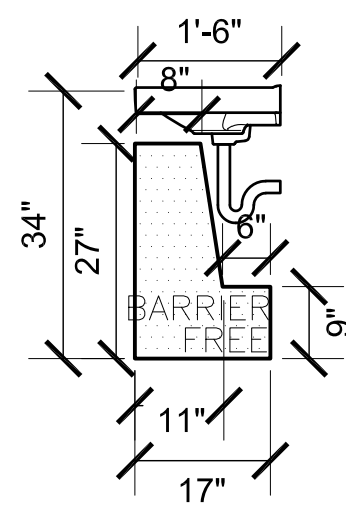
No.	Revision	Date

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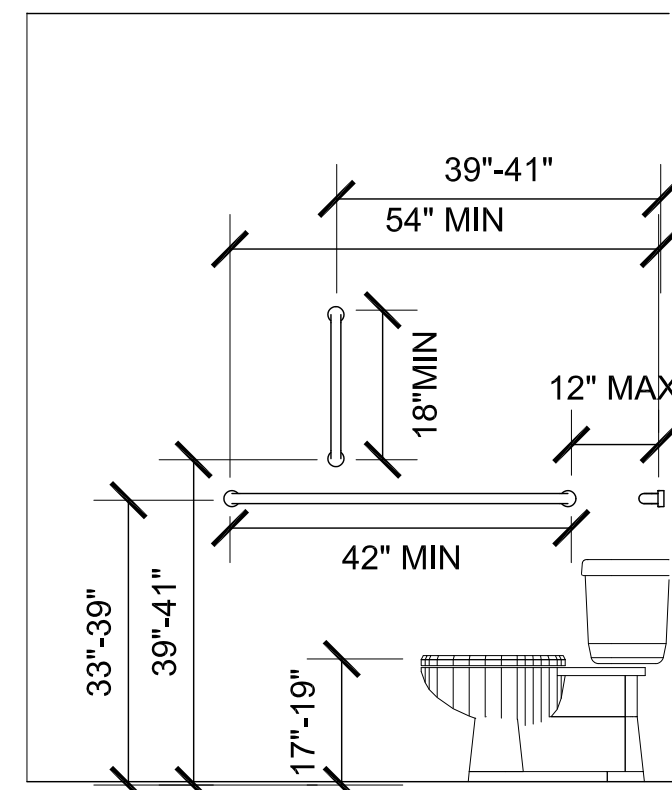
Project
EC REST ROOMS
DD SET

Date
02/20/2020
Sheet
AD101

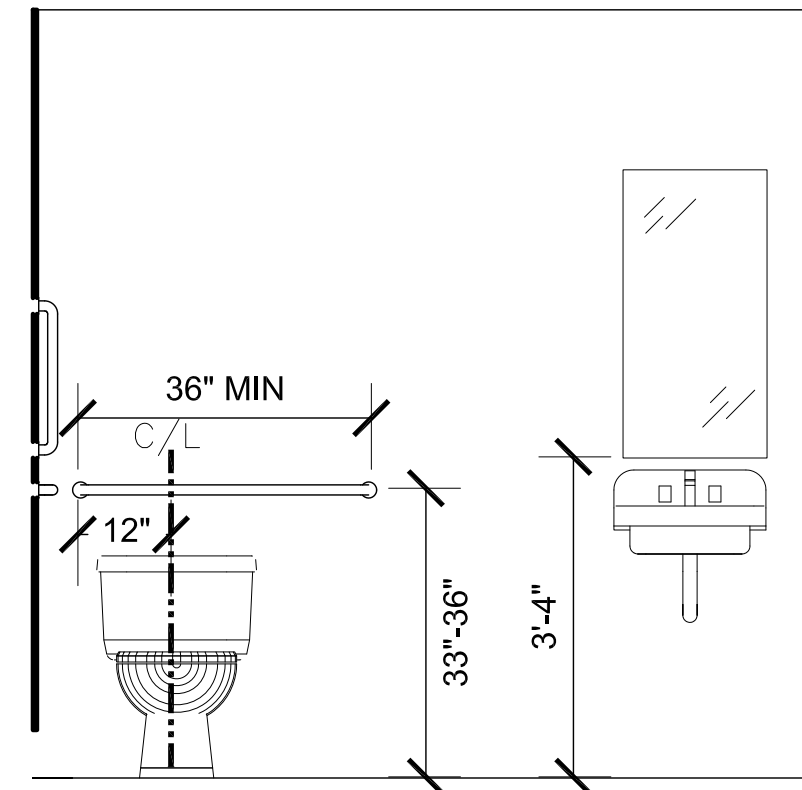
Scale
1/4"=1'-0"



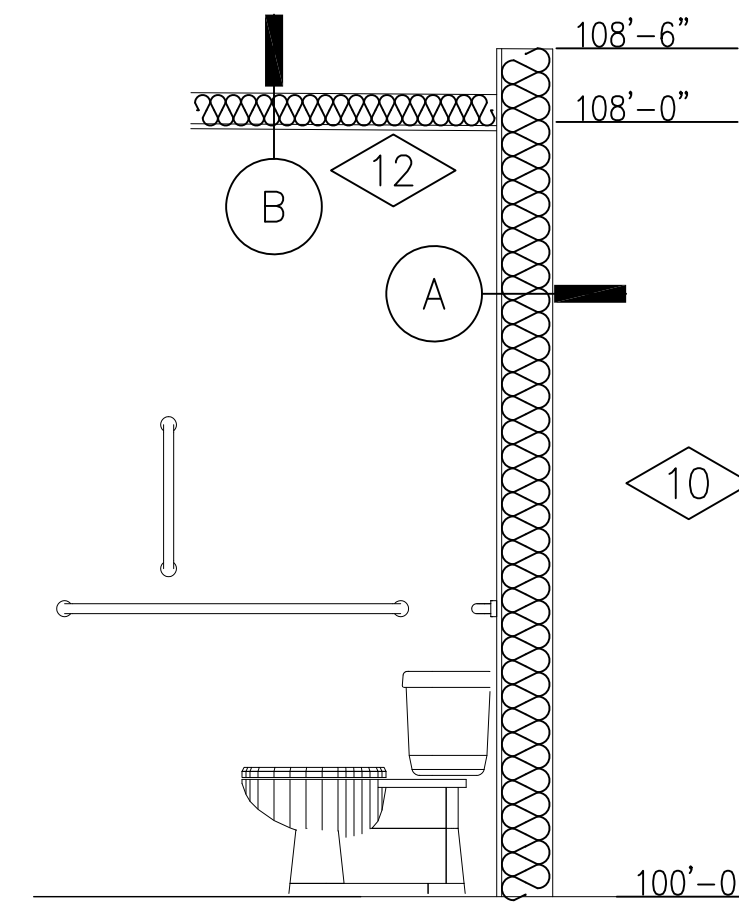
C WALL HUNG SINK SECTION
SCALE 1/2" = 1'-0"



2 WALL ELEVATION
SCALE 1/2" = 1'-0"



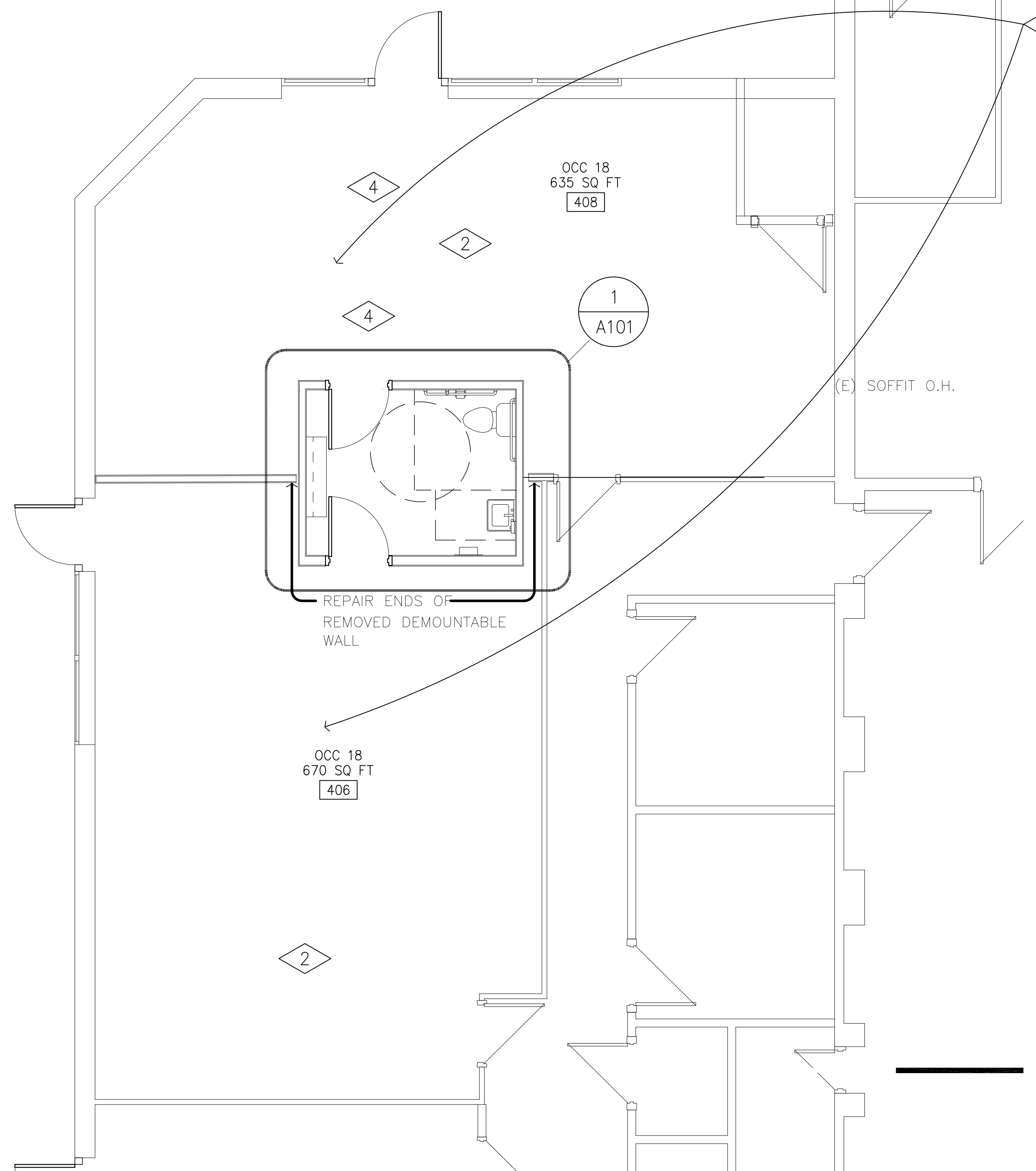
3 WALL ELEVATION
SCALE 1/2" = 1'-0"



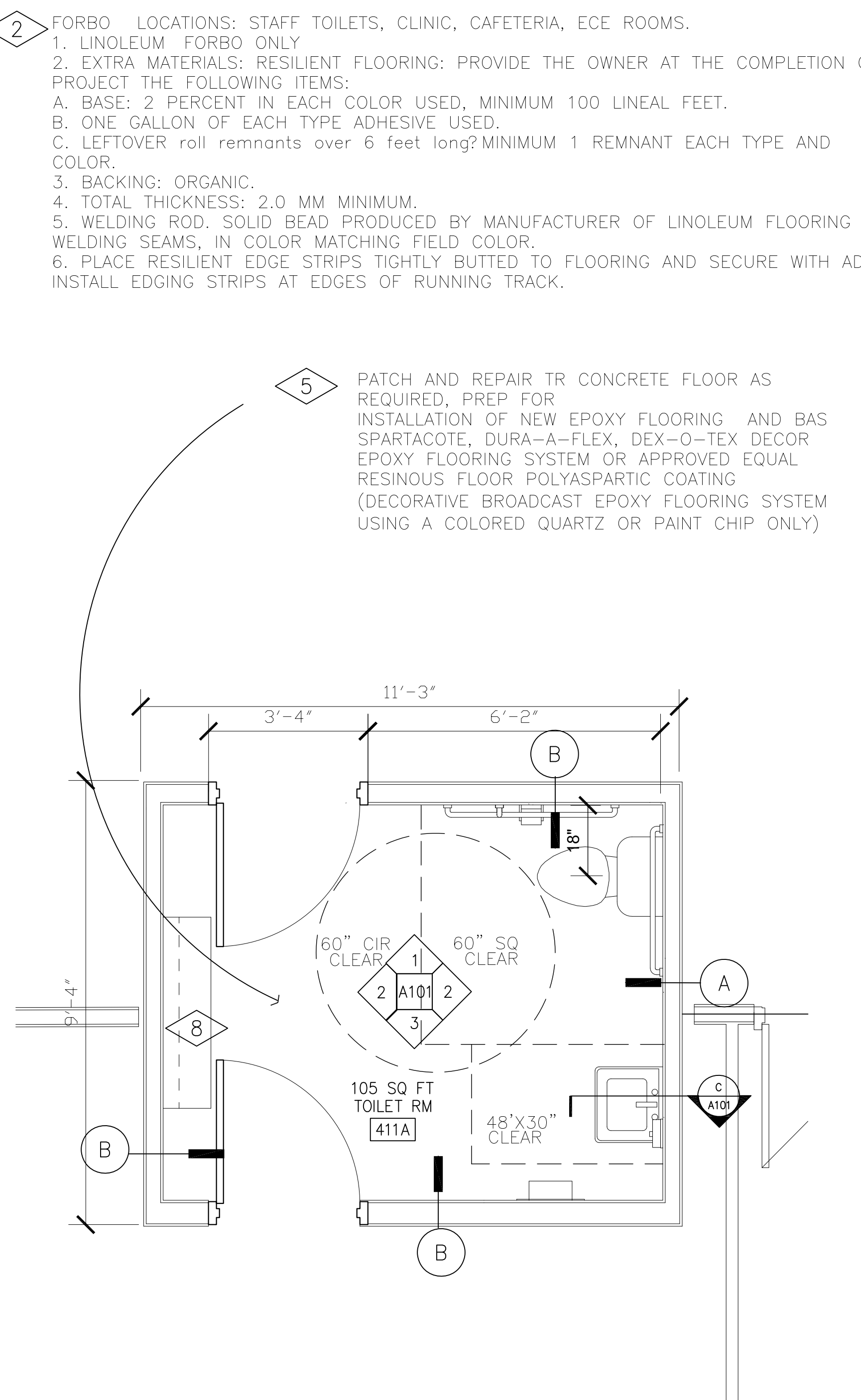
D WALL SECTION
SCALE 1/2" = 1'-0"

KEY NOTES:

- 1 NEW WALLS SEE B/A301
- 2 ROOMS 408 AND 406 NEW SHEET GOODS MANUFACTURER TBD
- 3 NEW HARD GYP CEILING INSULATE WITH SOUND ATTENUATION BATTS. SEE D/A101
- 4 PATCH CONCRETE
- 5 NEW POURED ACRYLIC FLOORS AND INTEGRAL 4" COVE BASE
- 6 MEETS ANSI 117.1/2009 305, 404, AND 606
- 7 RFP GLASBOARD SANITARY PANELS SEC 068316 ALTERNATE 2
4"x12" CERAMIC WALL TILES. DAL TILE, WALL COLOR ARTIC WHITE WHITE 0190, OCEAN BLUE 1049 BULL NOSE CAPS.
- 8 FOLDING DIAPER TABLE AND LOCKABLE STORAGE CABINETS



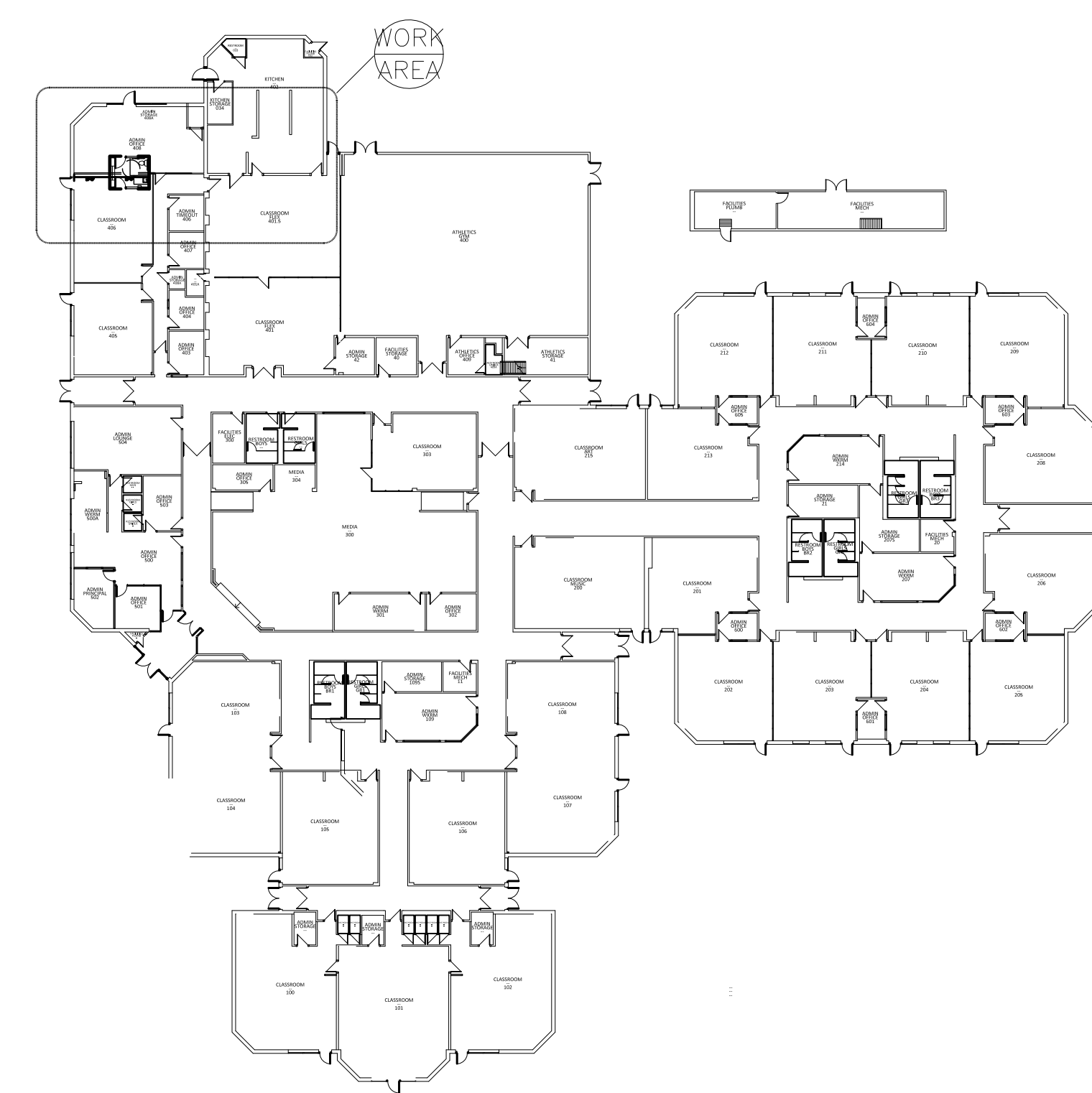
PARTIAL FLOOR PLAN
SCALE IN FEET



1 ENLARGED FLOOR PLAN
SCALE IN FEET

WALL TYPE PLUMBING ———— A ————
PLUMBING WALL ASSEMBLY: 7" NOMINAL WALL, 5/8"GYP, SOUND ATTENUATION INSULATION AND METAL 20 GA STUDS 16" OC. TAPE DRYWALL TO A LEVEL 4, PRIME AND PAINT. COLOR TBD.

WALL AND CEILING TYPE ———— B ————
WALL ASSEMBLY: 5" NOMINAL WALL, 5/8"GYP, SOUND ATTENUATION INSULATION AND METAL 20 GA STUDS 16" OC. TAPE DRYWALL TO A LEVEL 4, PRIME AND PAINT. COLOR TBD.
CEILING REQUIRES GYP ONE SIDE ONLY.



KEY PLAN
NTS

FORBO LOCATIONS: STAFF TOILETS, CLINIC, CAFETERIA, ECE ROOMS.
1. LINOLEUM FORBO ONLY
2. EXTRA MATERIALS: RESILIENT FLOORING: PROVIDE THE OWNER AT THE COMPLETION OF THE PROJECT THE FOLLOWING ITEMS:
A. BASE: 2 PERCENT IN EACH COLOR USED, MINIMUM 100 LINEAL FEET.
B. ONE GALLON OF EACH TYPE ADHESIVE USED.
C. LEFTOVER roll remnants over 6 feet long? MINIMUM 1 REMNANT EACH TYPE AND COLOR.
3. BACKING: ORGANIC.
4. TOTAL THICKNESS: 2.0 MM MINIMUM.
5. WELDING ROD. SOLID BEAD PRODUCED BY MANUFACTURER OF LINOLEUM FLOORING FOR HEAT WELDING SEAMS, IN COLOR MATCHING FIELD COLOR.
6. PLACE RESILIENT EDGE STRIPS TIGHTLY BUTTED TO FLOORING AND SECURE WITH ADHESIVE. INSTALL EDGING STRIPS AT EDGES OF RUNNING TRACK.

5 PATCH AND REPAIR TR CONCRETE FLOOR AS REQUIRED, PREP FOR INSTALLATION OF NEW EPOXY FLOORING AND BAS SPARTACOTE, DURA-A-FLEX, DEX-O-TEX DECOR EPOXY FLOORING SYSTEM OR APPROVED EQUAL RESINOUS FLOOR POLYASPARTIC COATING (DECORATIVE BROADCAST EPOXY FLOORING SYSTEM USING A COLORED QUARTZ OR PAINT CHIP ONLY)



POUDRE SCHOOL DISTRICT
LINTON ELEMENTARY SCHOOL
4100 CARIBOU DRIVE
FORT COLLINS, CO 80525



No.	Revision	Date

Sheet Title:
PLAN VIEW

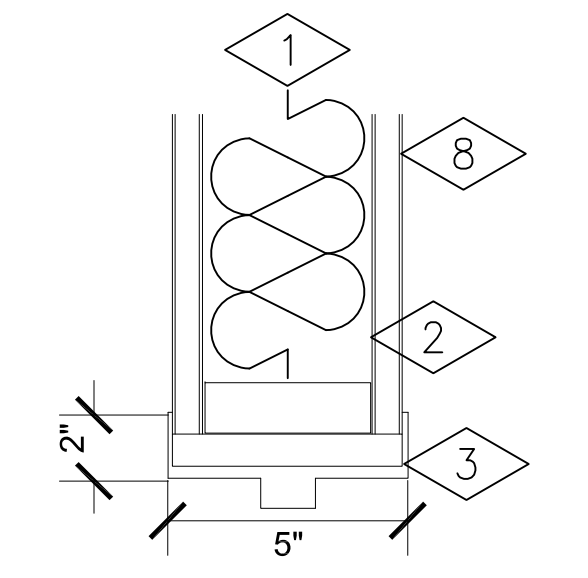
Project
EC REST ROOMS
DD SET
Date
02/20/2020
Sheet
A101

FINISH SCHEDULES

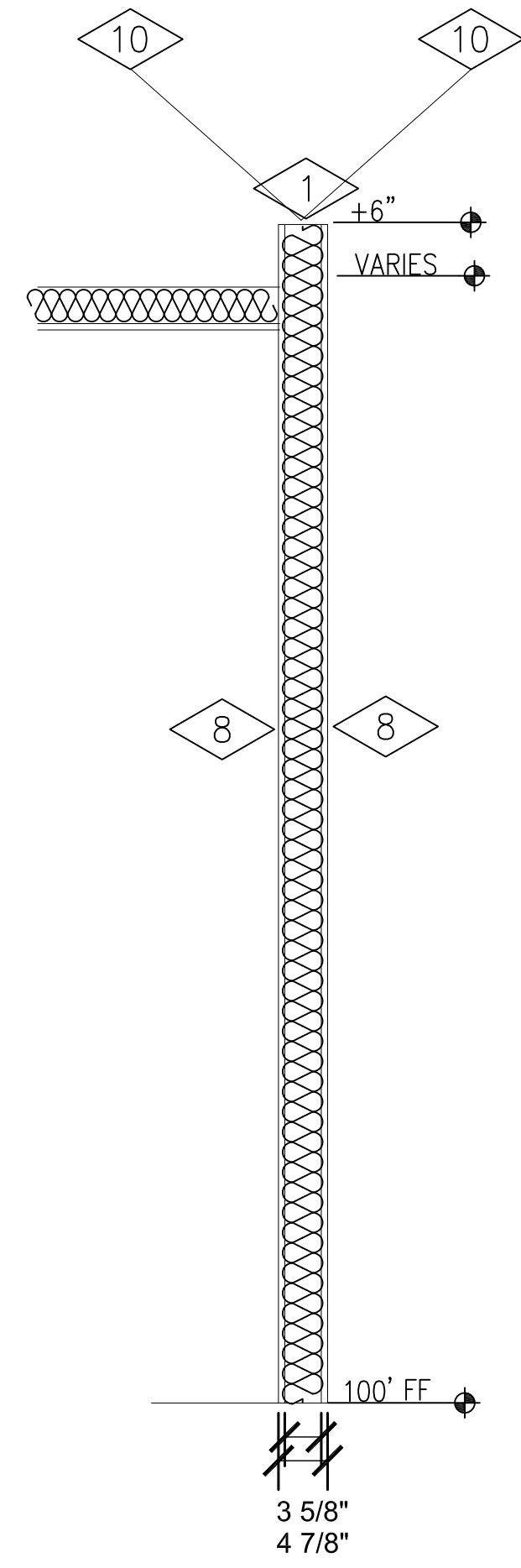
NUM.	ROOM NAME	DOOR TYPES							FRAME TYPES				DETAILS		REMARKS	
		TYPE	MAT'L	LABEL	HEIGHT	WIDTH	THICK	TYPE	MAT'L	LABEL	THROAT	TYPE				
408A	TOILET	NEW	WD	NR	7'-0"	3'-0"	1 3/4"	F1	HM	NR	5"			16 GA		NEW DOOR, FRAME AND HARDWARE
DOOR HARDWARE																
408A	TOILET	LOCK SET (1) EA PRIVACY LOCKSET ND40SRH O626, 6 PIN CORE			HINGES (3) EA HINGES SBBL US32D IVE			DOOR STOP (1) EA WALL STOP WS407 CCV US32D IVE			KICK PLATE (1) EA KICKPLATE 8400 10"x34" US32D IVE		SILENCERS (1) ONE SET			
WALL PAINT																
408A	TOILET	ONE COAT OF WHITE PRIMER DU-1507 PRO MAX, TWO COATS SEMI-GLOSS LAYTEX BASED DS1695 HEALTH KOTE OR APPROVED EQUAL														
FLOORING																
406	CR	FORBO 6' SHEET LINO XXXXX 670 SQ FT														
408	CR	FORBO 6' SHEET LINO XXXXX 635 SQ FT														

KEYED NOTES

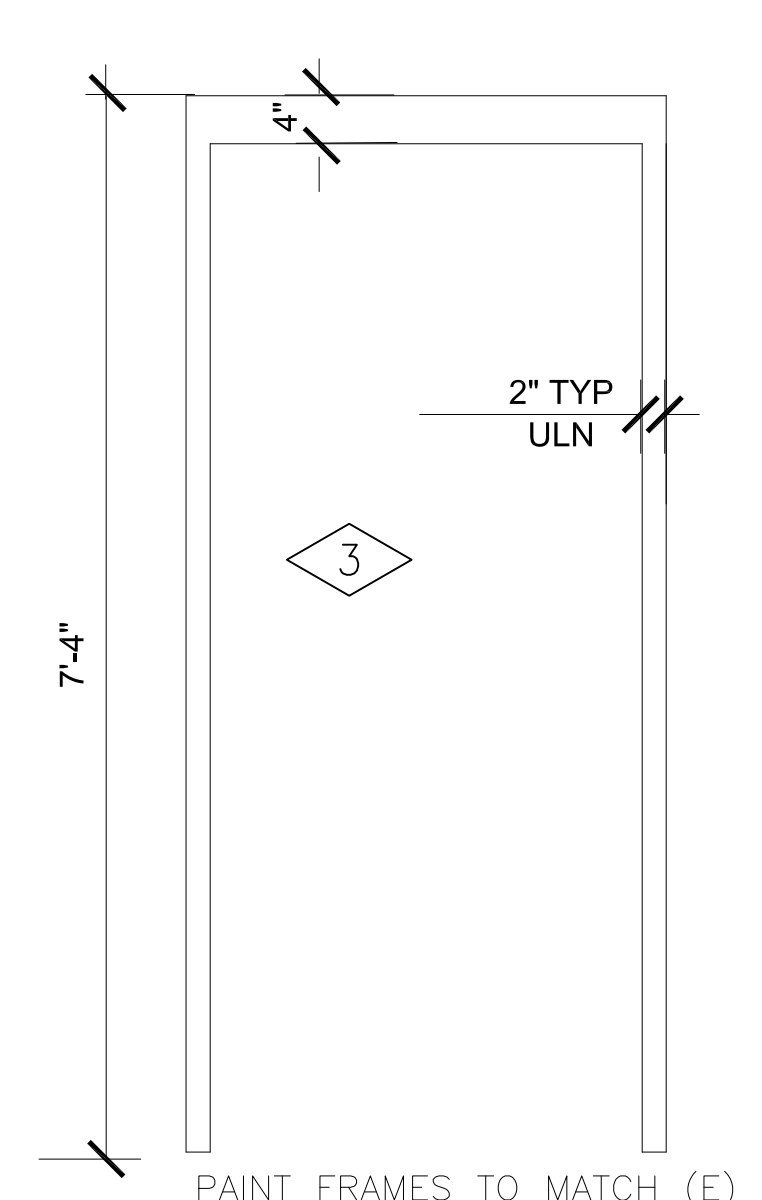
- 1 SOUND ATTENUATING INSULATION 3.5" . OWENS CORNING QUIETZONE
- 2 20 GA METAL STUD
- 3 HM FRAME 16 GA
- 4 PRIME AND PAINT (N) WOOD DOOR 1 3/4" THICK TO MATCH (E) FINISH VARIES PER SITE
- 5 PAINT TO MATCH EXISTING FRAME COLOR
- 6 PRIME AND PAINT NEW WORK AND WORK IMPACTED BY THE CONSTRUCTION.
- 7 RFP GLASBOARD SANITARY PANELS SEC 068316 OR ALTERNATE 1 4"x12" CERAMIC WALL TILES, DAL TILE, WALL COLOR ARTIC WHITE WHITE 0190, OCEAN BLUE 1049 BULL NOSE CAPS.
- 8 5/8" TYPE X GYP



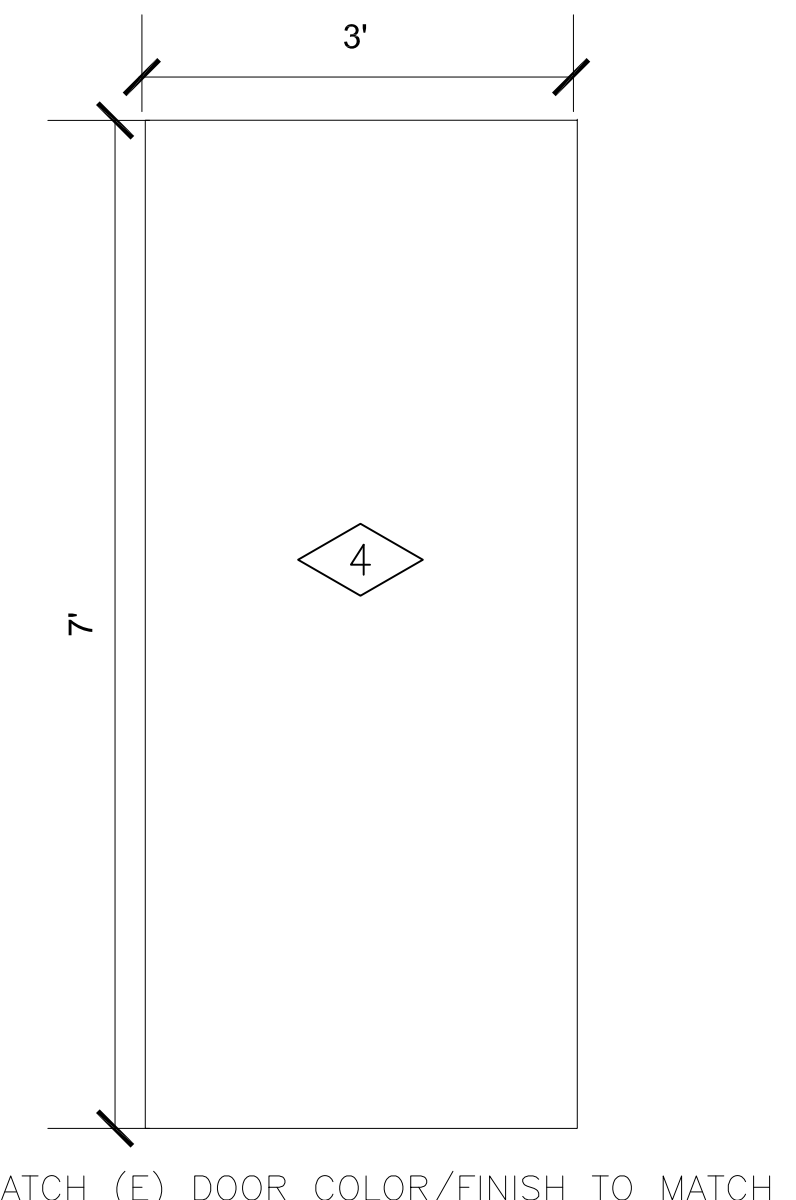
F1 JAMB PROFILE
SCALE 3" = 1'-0"



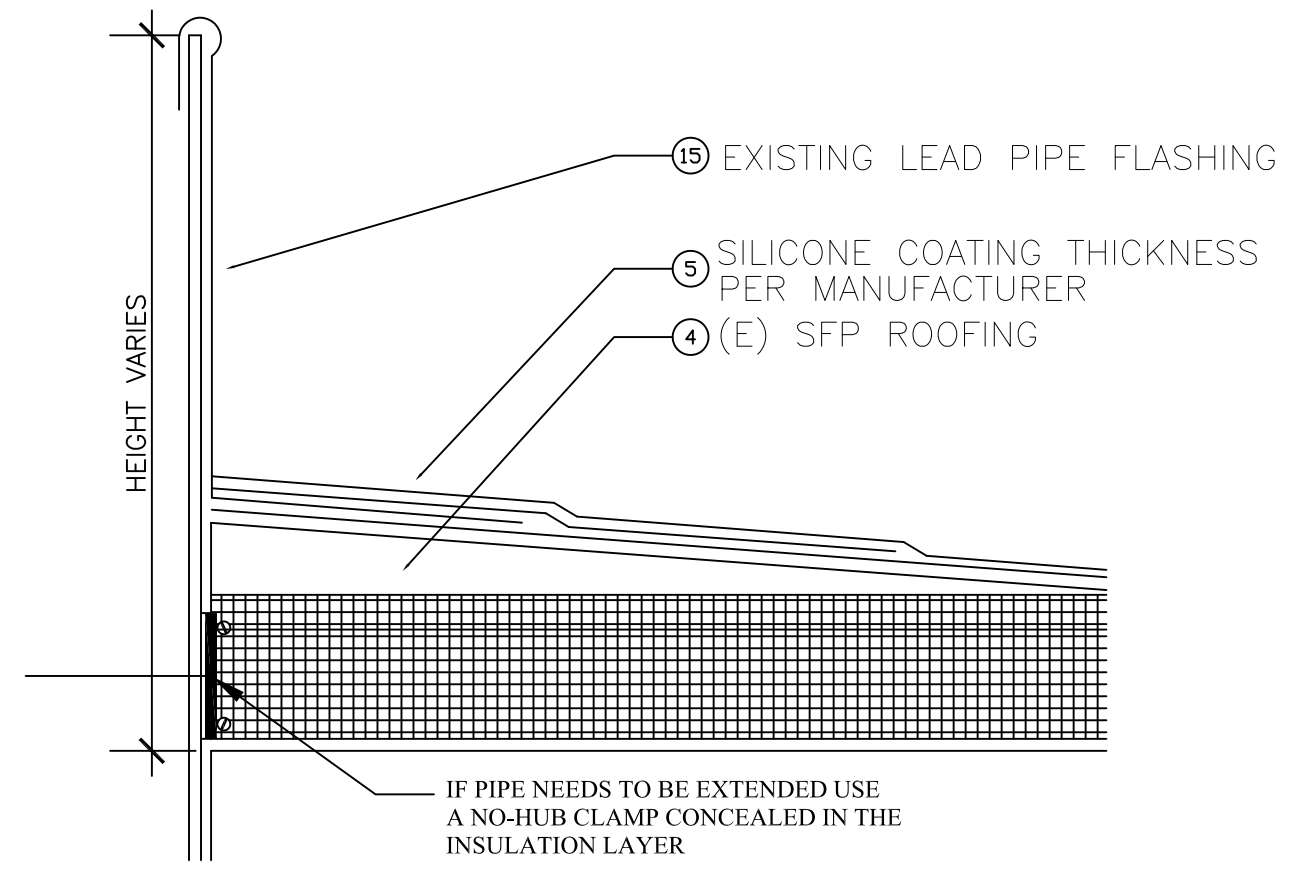
B NEW WALL/SECTION TYP
SCALE 3/4" = 1'-0"



F1 PAINT FRAMES TO MATCH (E)
SCALE 3/4" = 1'-0"

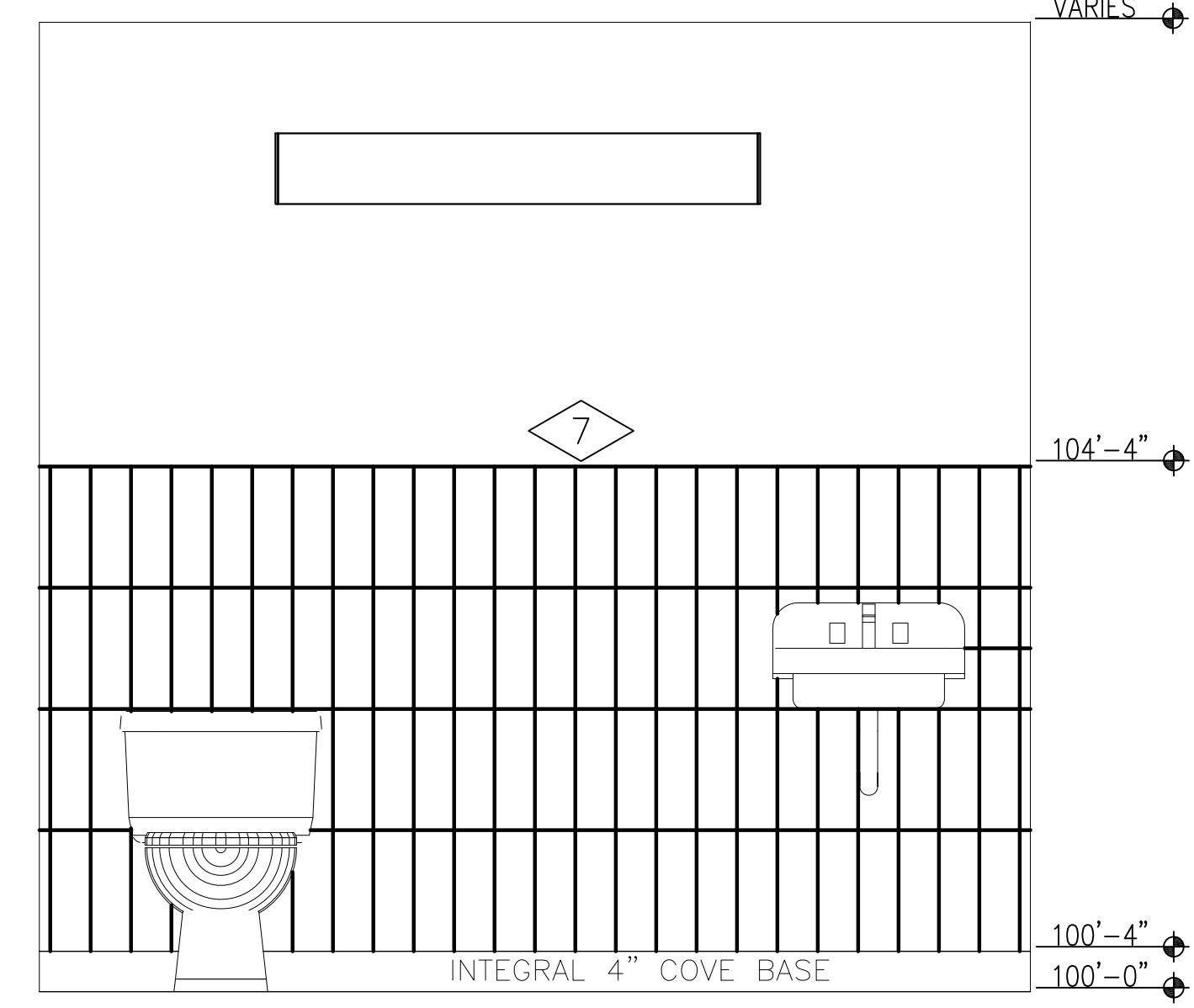


WD MATCH (E) DOOR COLOR/FINISH TO MATCH
SCALE 3/4" = 1'-0"



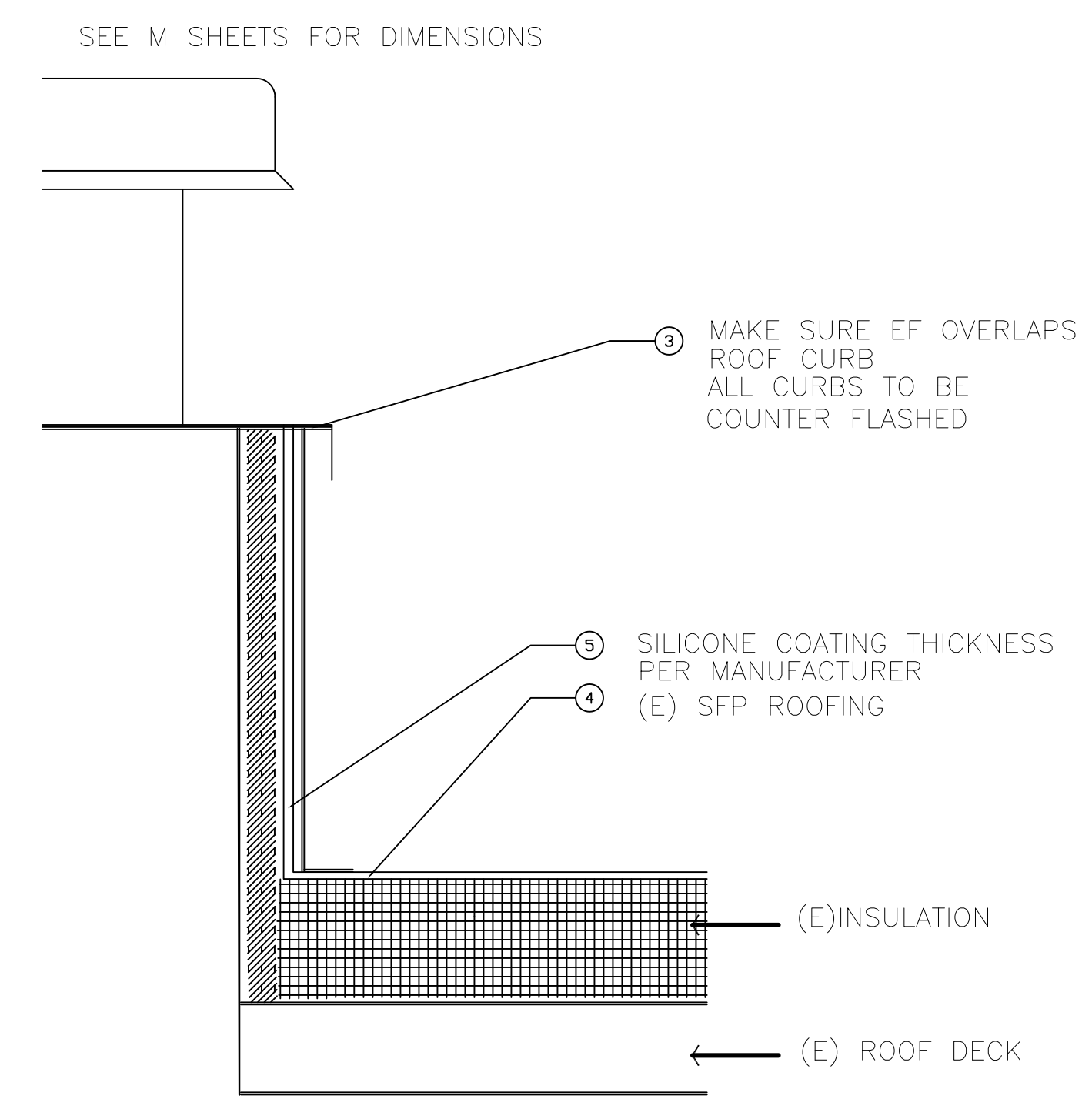
G1 SFP SOIL STACK SECTION DETAIL
SCALE 3" = 1'-0"

- 4) TAPERED EDGE SET IN HOT ASPHALT OR MECHANICALLY FASTENED.
- 5) 5 COURSE STRIPPING (PLASTIC CEMENT, FABRIC, PLASTIC CEMENT, FABRIC, PLASTIC CEMENT).
- 15) LEAD JACK, PRIME, SET IN PLASTIC CEMENT, STRIP IN WITH COTTON FABRIC AND PLASTIC CEMENT 5 COURSE STYLE.



3 TYP WALL ELEVATIONS(4)
SCALE 3/4" = 1'-0"

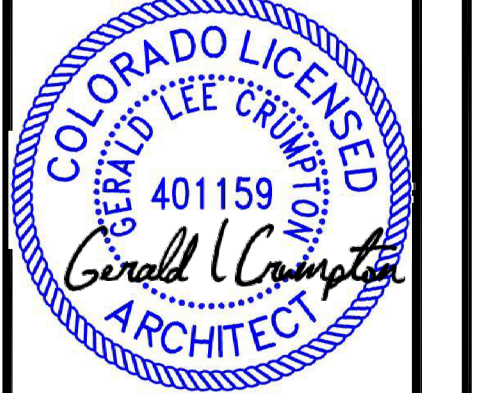
CONTRACTOR TO COORDINATE AND VERIFY ROOF PENETRATION OCCURS IN THE FLAT PORTION OF THE ROOF



H1 EF SFP ROOF DETAIL
SCALE 3" = 1'-0"



POUDRE SCHOOL DISTRICT
LINTON ELEMENTARY SCHOOL
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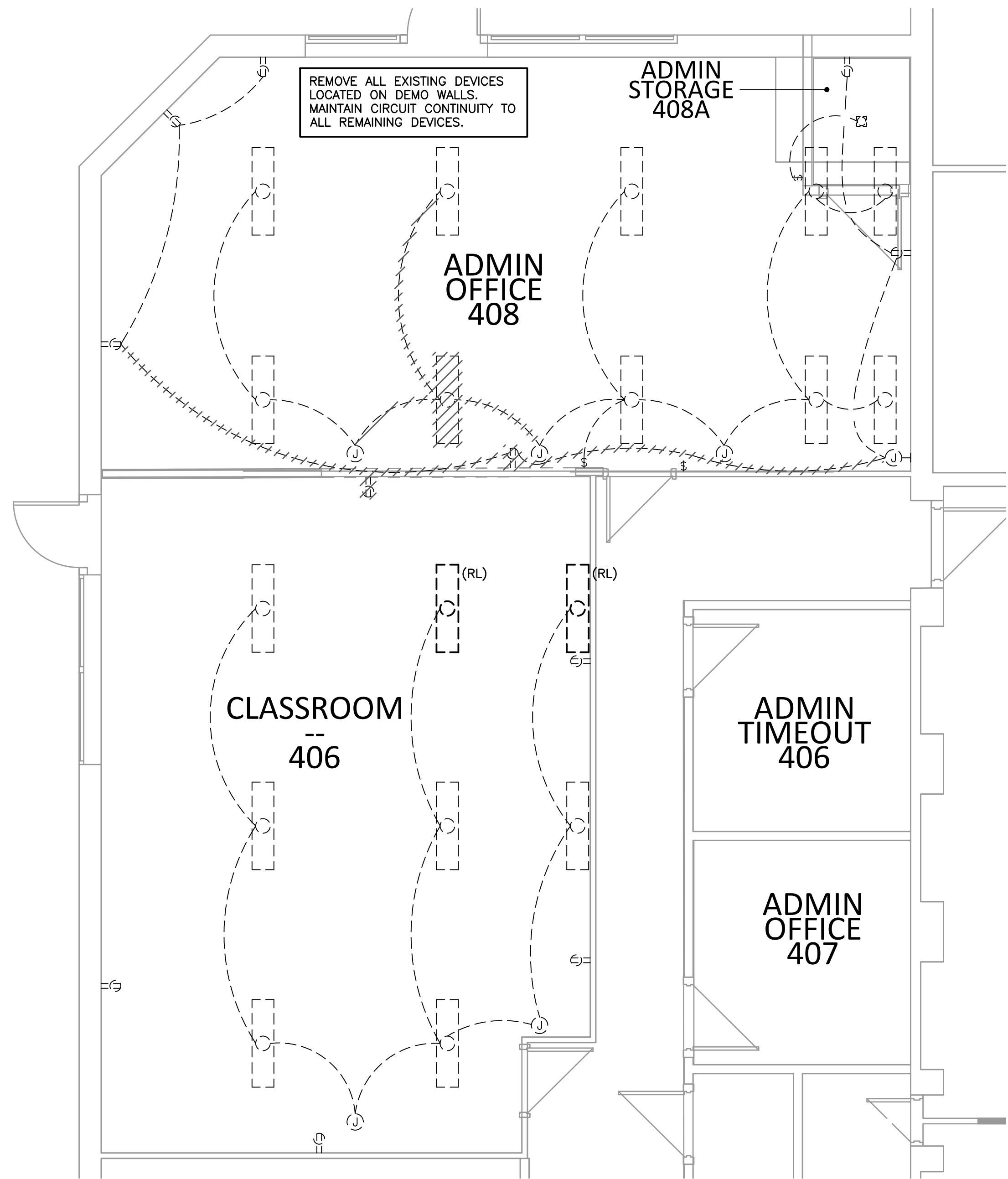


No.	Revision	Date

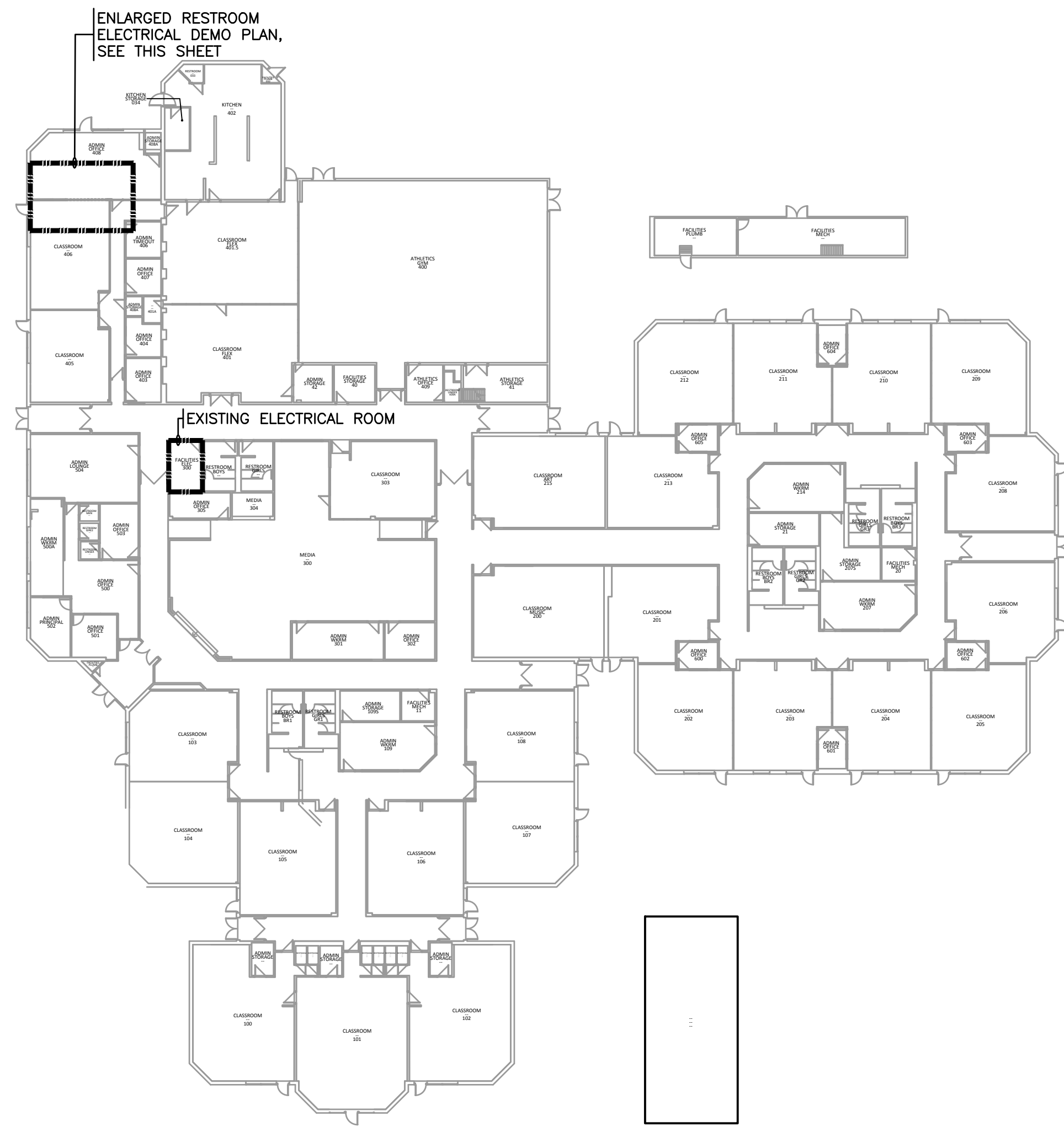
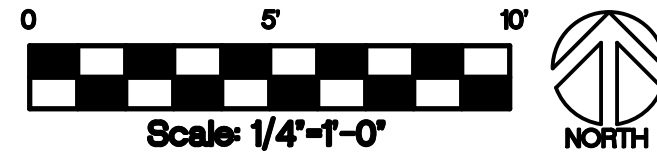
Sheet Title:
SCHEDULES
DETAILS

Project
EC REST ROOMS
DD SET
Date 02/20/2020
Sheet A301
Scale VARIES

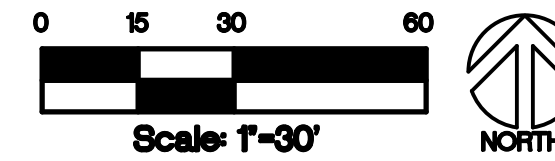
LOAD SUMMARY - LOAD REMOVED		
EXISTING LOAD REMOVED	QTY	TOTAL
LIGHTING		
2-LAMP SURFACE WRAP	1	65 WATTS
RECEPTACLES		
406 & 408	2	360 WATTS
TOTAL LOAD REMOVED		425 WATTS



ENLARGED RESTROOM ELECTRICAL DEMO PLAN



OVERALL PLAN



POUDRE SCHOOL DISTRICT
LINTON ELEMENTARY SCHOOL
4100 CARIBOU DRIVE
FORT COLLINS, CO 80525



No. Revision Date

Sheet Title:
ELECTRICAL DEMO PLANS

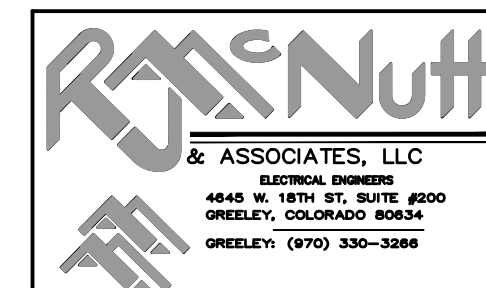
Project
EC REST ROOMS

CONSTRUCTION SET

Date
03/02/2020

Scale
AS NOTED

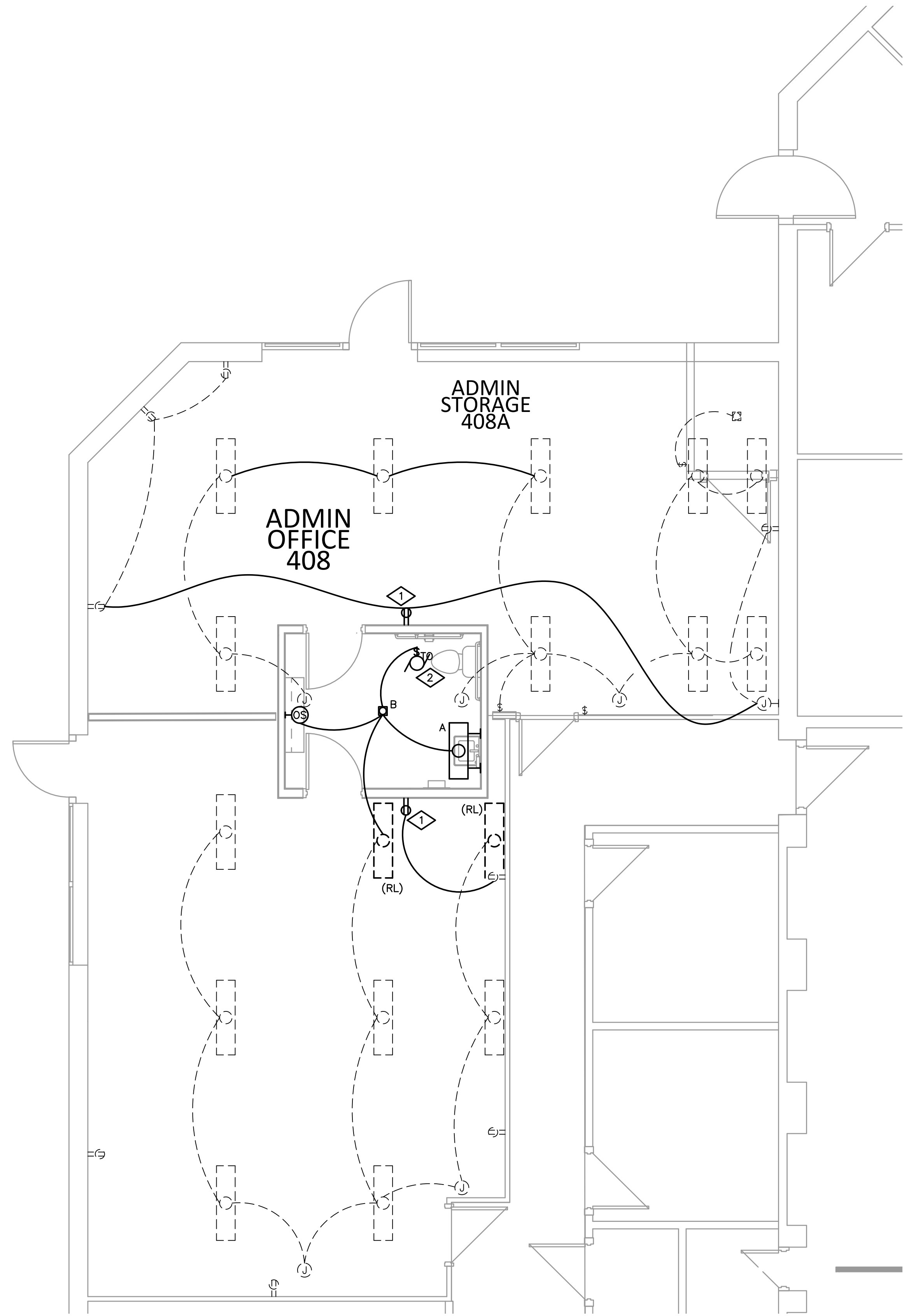
Sheet
ED101



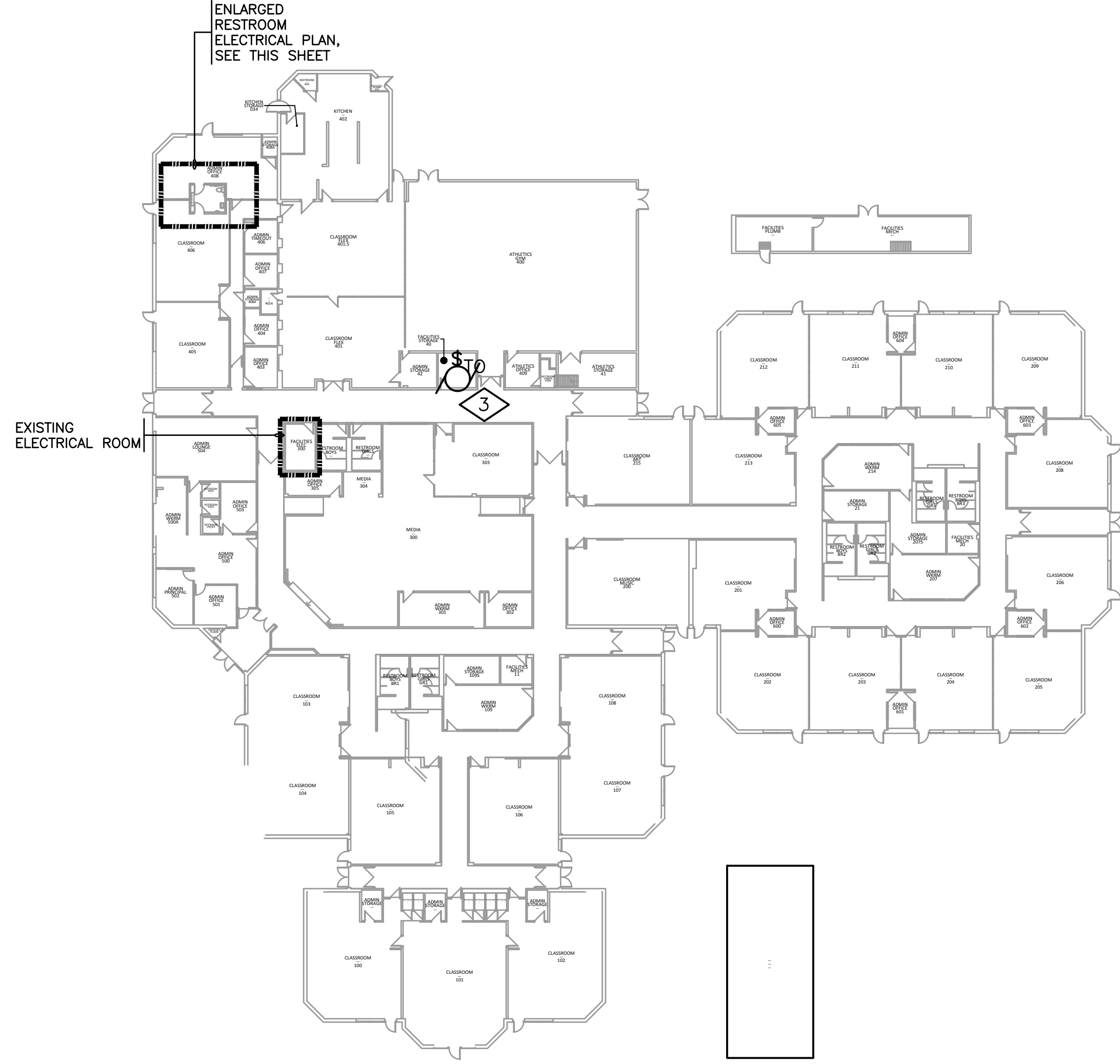
LOAD SUMMARY - LOAD ADDED			
NEW LOAD ADDED	QTY	LOAD (WATTS)	
LIGHTING			
TYPE 'A'			29 WATTS
TYPE 'B'			14 WATTS
TOTAL LIGHTING			43 WATTS
RECEPTACLE			
ROOM 406 & 408	2	180	360 WATTS
EXHAUST FAN	1	12	12 WATTS
CIRCULATION PUMP	1	65	65 WATTS
TOTAL LOAD ADDED			480 WATTS

LOAD SUMMARY - Linton ES	
MAX DEMAND PER XCEL @125% PER NEC	83.00 kW
LOAD ADDED THIS PROJECT	0.480 kW
LOAD REMOVED THIS PROJECT	0.425 kW
NEW TOTAL LOAD @ 90% POWER FACTOR @ 208V 3PH	115.34 kVA
	320 AMPS

- FLAG NOTES - THIS SHEET ONLY
- 1. CONNECT NEW RECEPTACLE TO SAME CIRCUIT EXISTING RECEPTACLE WAS REMOVED FROM.
 - 2. EXHAUST FAN, 120V, 12W. COORDINATE CONTROLS WITH MECHANICAL.
 - 3. CIRCULATION PUMP, 1/35 HP, 120V, 0.54A. COORDINATE CONTROLS WITH MECHANICAL. CIRCUIT VIA EXISTING GAS WATER HEATER CIRCUIT.



ENLARGED RESTROOM ELECTRICAL PLAN
 Scale: 1/4"=1'-0" NORTH



OVERALL PLAN
 Scale: 1"=30' NORTH



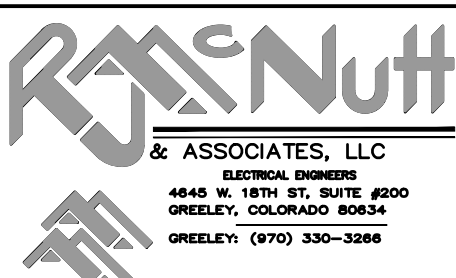
POUDRE SCHOOL DISTRICT
 LINTON ELEMENTARY SCHOOL
 4100 CARIBOU DRIVE
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No.	Revision	Date

Sheet Title:
ELECTRICAL PLANS

Project
EC REST ROOMS
 CONSTRUCTION SET
 Date: 03/02/2020 Sheet: E101
 Scale: AS NOTED



PLUMBING GENERAL NOTES AND SPECIFICATIONS:

- ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL AND STATE CODES INCLUDING BUT NOT LIMITED TO THE 2015 INTERNATIONAL BUILDING, FIRE, MECHANICAL, PLUMBING, FUEL GAS, AND ENERGY CONSERVATION CODES (IBC, IFB, IMC, IPC, IFGC, IECC) WITH LOCAL AMENDMENTS.
- CONTRACTOR AND SUB-CONTRACTORS SHALL PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT TO COMPLETE ALL WORK SHOWN ON PLANS, CALLED FOR IN SPECIFICATIONS, OR REASONABLY IMPLIED FOR A COMPLETE INSTALLATION.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON DRAWINGS WITH ACTUAL FIELD CONDITIONS. COORDINATE DRAWINGS WITH ACTUAL FIELD CONDITIONS. COORDINATE WORK LAYOUTS AND LOCATIONS OF OPENINGS THROUGH FLOORS, WALLS, CEILINGS AND ROOFS WITH DRAWINGS OR OTHER REQUIREMENTS. VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO FABRICATION OR CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
- PLUMBING DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY INDICATE REQUIRED OFFSETS, FITTINGS, ETC. DO NOT SCALE DRAWINGS, USE DIMENSIONS ONLY. ALL DIMENSIONS/LAYOUTS SHOWN ARE APPROXIMATE, FIELD VERIFY ALL WORK PRIOR TO ORDERING MATERIALS OR INSTALLING WORK
- KEEP SITE AND BUILDING ACCESSIBLE AND SAFE TO CONTRACTOR'S PERSONNEL, OWNER'S EMPLOYEES AND PUBLIC AT ALL TIMES. CONTRACTOR SHALL ENSURE SAFETY OF PERSONNEL AND PUBLIC DURING ALL WORK AND COMPLY WITH ALL APPLICABLE REGULATIONS AND ORDINANCES PERTAINING TO SAFETY OF PERSONS AND PROPERTY.
- INSTALL ALL WORK IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS, ANCHORING ALL COMPONENTS PLUMB, LEVEL, SQUARE, AND FIRMLY INTO PLACE IN FIRST CLASS MANNER AND WORKMANSHIP ACCORDING TO STANDARD CONSTRUCTION PRINCIPLES & AS APPROVED BY ENGINEER.
- THROUGHOUT THE WORK, CAULK AND SEAL ALL JOINTS REQUIRED TO PROVIDE A POSITIVE BARRIER AGAINST THE PASSAGE OF AIR AND MOISTURE.
- PROTECT EXISTING OR ADJACENT SITE IMPROVEMENTS, EXISTING FLOOR, WALL, CEILING AND ROOF FINISHES, FURNISHINGS AND EQUIPMENT TO REMAIN DURING CONSTRUCTION, REPLACE OR REPAIR ANY DAMAGED IMPROVEMENTS, MATERIALS, FINISHES, FURNISHINGS OR EQUIPMENT TO SATISFACTION OF ARCHITECT/ENGINEER.
- REPLACE OR REPAIR ANY DAMAGED SURFACES, FILL AND PATCH HOLES, ETC., TO MATCH ADJACENT SURFACES AFTER ALL ALTERATIONS AND OTHER WORK IS COMPLETED, TO SATISFACTION OF ARCHITECT/ENGINEER.
- PRIOR TO THE DEMOLITION OF ANY EXISTING EQUIPMENT, COORDINATE WITH THE OWNER TO DETERMINE WHAT EQUIPMENT THEY MAY WANT TO KEEP. ANY EQUIPMENT NOT WANTED BY THE OWNER SHALL BECOME THE PROPERTY OF THE GENERAL CONTRACTOR AND SUBCONTRACTORS AND SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF IN A LAWFUL MANNER.
- THE ENGINEER HAS ENDEAVORED TO LOCATE AND IDENTIFY THE PLUMBING EQUIPMENT AND PIPING IN THE SCOPE OF WORK INCLUDING IDENTIFYING SIZES. HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BID. THE CONTRACTOR SHALL INCLUDE IN THEIR BID ADDITIONAL MINOR MECHANICAL WORK THAT MAY NOT BE SHOWN IN ORDER TO PROVIDE A COMPLETE AND WORKING SYSTEM.
- ASBESTOS MAY BE ENCOUNTERED DURING MECHANICAL WORK INCLUDING BUT NOT LIMITED TO PIPE INSULATION. IF THE CONTRACTOR DURING CONSTRUCTION ENCOUNTERS WHAT IS BELIEVED TO BE ASBESTOS CONTAINING MATERIALS, NOTIFY THE ENGINEER IMMEDIATELY.
- WHERE THE CEILING SPACE IS TO BE USED AS A RETURN AIR PLENUM, THE MECHANICAL CONTRACTOR SHALL VERIFY WITH OTHER TRADES TO ENSURE THAT ALL MATERIALS ARE NON-COMBUSTIBLE AND HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 - REFER TO MECHANICAL PLANS.
- COORDINATE WITH THE G.C. TO PROVIDE ACCESS PANELS AS REQUIRED TO ACCESS VALVES, PLUMBING ACCESSORIES, ETC. REQUIRED FOR THE PROPER MAINTENANCE OF THE PLUMBING SYSTEMS.
- COORDINATE WITH G.C. TO PATCH ROOFING, ROOF DECK, AND FLASHINGS AS REQ'D WITH NEW MATERIALS AND FLASHINGS FOR ALL NEW ROOF PENETRATIONS.
- DO NOT RUN PIPES ABOVE ELECTRICAL PANELS OR EQUIPMENT. COORDINATE WITH THE E.C. FOR LOCATIONS PRIOR TO THE START OF WORK.
- SEE THE PLUMBING FIXTURE CONNECTION SCHEDULE FOR MINIMUM PIPE SIZES TO THE FIXTURES. PROVIDE AN INCREASER/REDUCER AS REQUIRED AT THE FIXTURE CONNECTION.
- DOMESTIC WATER PIPING SHALL BE TYPE 'L' COPPER ASTM B88 WITH ASME B16.18 CAST COPPER OR ASME B16.22 WROUGHT COPPER FITTINGS, JOINTS SHALL BE MADE WITH LEAD-FREE SOLDER.
- PIPING INSULATION SHALL BE INSTALLED BY A QUALIFIED INSULATION CONTRACTOR WITH A MINIMUM OF 3-YEARS DOCUMENTED EXPERIENCE. INSULATION WORK SHALL BE COMPLETE WITH ALL EDGES SEALED, PER INDUSTRY STANDARDS, AND TO THE SATISFACTION OF THE ENGINEER. SEE THE FOLLOWING PARAGRAPHS FOR INSULATION REQUIREMENTS.
- COPPER DOMESTIC WATER PIPES SHALL BE INSULATED WITH FIBERGLASS PIPE INSULATION JACKETED WITH A REINFORCED VAPOR RETARDER FACING WITH A FACTORY LONGITUDINAL ACRYLIC ADHESIVE CLOSURE SYSTEM. OVERSIZE HANGERS FOR INSULATION SO NO PENETRATION OF THE VAPOR BARRIER OCCURS. PROVIDE INSERTS AND SADDLES AS REQUIRED TO PREVENT INSULATION DAMAGE FROM SUPPORTS. JOHNS MANVILLE MICRO-LOK OR EQUAL BY KNAUF OR OWENS CORNING.
 - DOMESTIC COLD WATER: 0.5" THICK (PIPES 1/2" AND SMALLER), 1" THICK (PIPES 1/2" AND LARGER)
 - DOMESTIC HOT WATER: 1" THICK (PIPES 1/2" AND SMALLER), 1 1/2" THICK (PIPES 1/2" TO 4")
 - DOMESTIC HOT WATER RECIRC: 1" THICK (ALL SIZES).
- PROVIDE AND INSTALL PIPE HANGERS IN ACCORDANCE WITH MSS SP-58. PIPE HANGERS SHALL HAVE A GALVANIZED INSULATION SADDLE (1/2" AND SMALLER) OR PIPE INSERT (2" AND LARGER) TO PROTECT INSULATION.
- WASTE & VENT PIPING (EXCEPT IN RETURN AIR PLENUM-RE: MECHANICAL):
 - SOLID CORE SCHEDULE 40 PVC, ASTM D2665. FITTINGS SHALL BE ASTM D2665. JOINTS SHALL BE ASTM D2855 SOLVENT WELD WITH ASTM D2564 SOLVENT CEMENT. CELLULAR CORE IS NOT ACCEPTABLE.
 - USE PURPLE PVC PRIMER. CLEAR PRIMER NOT ACCEPTABLE.
- WASTE AND VENT PIPING (IN RETURN AIR PLENUM-RE: MECHANICAL):
 - CAST IRON PIPE, CISPI 301, HUB-LESS, SERVICE WEIGHT, FITTINGS SHALL BE CAST IRON, CISPI 301. JOINTS SHALL BE CISPI 310, NEOPRENE GASKETS AND STAINLESS STEEL CLAMP-AND-SHIELD ASSEMBLIES.

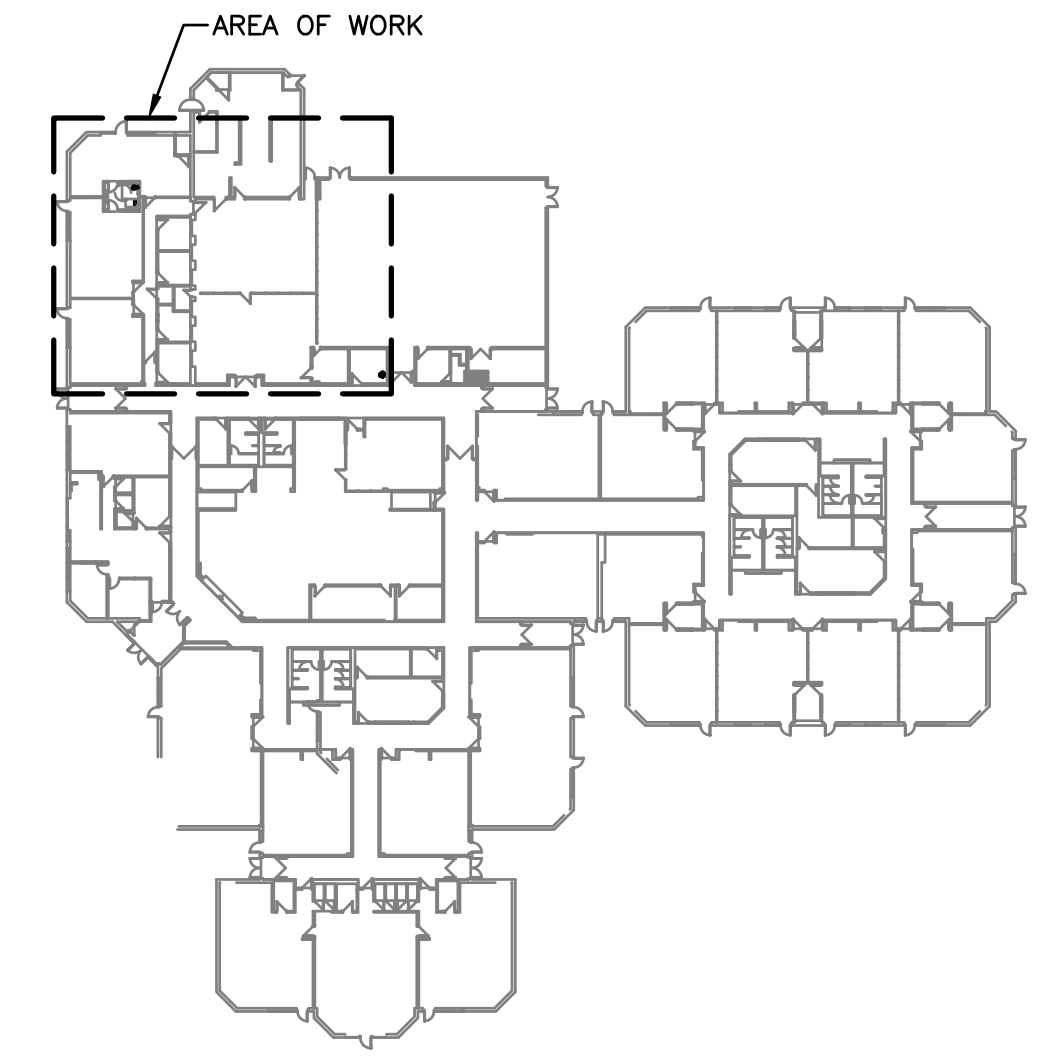
- DOMESTIC WATER PIPING MAY NOT BE INSTALLED IN ANY EXTERIOR WALLS.
- ACCEPTABLE VALVE MANUFACTURERS: APOLLO VALVE, CRANE VALVE, HAMMOND VALVE, MILWAUKEE VALVE COMPANY, NIBCO, STOCKHAM VALVES AND FITTINGS OR PRIOR APPROVED EQUAL.
- ALL VALVES USED ON DOMESTIC WATER SYSTEMS SHALL BE LEAD FREE AND NSF RATED.
- BALL VALVES 2" AND SMALLER: NSF 61 COMPLIANT, MSS SP110, 600 PSI WOG, TWO PIECE BRONZE BODY, CHROME PLATED BRASS BALL, FULL PORT, TEFLON SEATS, BLOW-OUT PROOF STEM, SOLDER OR THREADED ENDS, EXTENDED LEVER HANDLE AS REQUIRED FOR OPERATION WITH PIPING INSULATION.
- MANUAL BALANCING VALVES: NSF 61 COMPLIANT, 400 PSI AT 250F, BALL TYPE VALVE WITH CALIBRATED NAMEPLATE AND MEMORY STOP. LEAD-FREE BRASS BODY WITH THREADED ENDS, DIFFERENTIAL PRESSURE READOUT PORTS WITH INTERNAL CHECK VALVES. STAINLESS STEEL BALL, TEFLON SEAT RINGS, AND EPDM O-RING. 1/4" TAPPED DRAIN/PURGE PORT.
- HORIZONTAL SWING CHECK VALVES 2" AND SMALLER: NSF 61 COMPLIANT, MSS SP 80, CLASS 125, BRONZE BODY AND CAP, Y-PATTERN, BRONZE REGRINDING DISC, SOLDER OR THREADED ENDS.
- SPRING LOADED CHECK VALVES 2" AND SMALLER: NSF 61 COMPLIANT, MSS SP 80, CLASS 125, BRONZE BODY, IN-LINE SPRING LIFT CHECK, SILENT CLOSING, BUNA-N DISC, INTEGRAL SEAT, SOLDER OR THREADED ENDS.
- PROVIDE BALL VALVES ON ALL BRANCH WATER LINES WHETHER SHOWN ON THE PLANS OR NOT.
- REFERENCE ARCHITECTURAL PLANS FOR EXACT FIXTURE LOCATIONS. EXAMINE ROUGH-IN FOR WATER AND WASTE PIPING. USE MANUFACTURER'S ROUGH-IN DIMENSIONS. ADJUST EXISTING AS REQUIRED. REFER TO THE ARCHITECTURAL PLANS FOR EXACT FIXTURE LOCATION DIMENSIONS.
- OFFSET FLANGES AND CROSS FITTINGS ARE NOT PERMITTED.
- INSTALL PLUMBING FIXTURES LEVEL AND PLUMB. SEAL AROUND FIXTURES TO WALL OR FLOOR WITH SEALANT TO MATCH FIXTURE. CLEAN ALL FIXTURES BEFORE TURNING OVER TO THE OWNER.
- PROVIDE A QUARTER TURN STOP ON THE WATER SUPPLY TO EACH PLUMBING FIXTURE. INSTALL STOPS SO THAT THEY ARE EASILY ACCESSIBLE. ALL SUPPLIES AFTER THE STOPS TO BE RIGID CHROME PLATED.
- ALL PIPE PENETRATIONS THROUGH THE FLOORS AND WALLS SHALL BE SLEEVED WITH GALVANIZED STEEL. SLEEVES SHALL BE LARGE ENOUGH TO ALLOW FOR INSULATION TO BE CONTINUOUS THROUGH THE SLEEVE. SEAL AROUND SLEEVES AND PROVIDE CHROME PLATED ESCUTCHEONS IN FINISHED SPACES.
- WHERE PIPES PENETRATE A FIRE RATED ASSEMBLY PACK THE VOID WITH BACKING MATERIAL AND SEAL WITH UL LISTED FIRE CAULK TO MEET THE FIRE RATING OF ASSEMBLY PENETRATED. REFER TO ARCHITECTURAL PLANS FOR LOCATIONS AND TYPES OF FIRE RATED ASSEMBLIES.
- INSTALL TRAP AND VENT ON THE DRAIN OUTLET OF EACH FIXTURE TO BE DIRECTLY CONNECTED TO THE SANITARY SEWER SYSTEM. EXPOSED P-TRAPS LOCATED UNDER SINKS TO BE 17 GA. CHROME WITH CLEANOUT.
- WALL CLEANOUTS IN FINISHED AREAS SHALL BE LINE TYPE WITH ROUND STAINLESS STEEL ACCESS COVER SECURED WITH MACHINE SCREWS.
- FLOOR AND GRADE CLEANOUTS IN FINISHED AREAS SHALL BE LINE TYPE, CAST IRON BODY WITH ADJUSTABLE RISER, NO-HUB OUTLET. CAST IRON FRAME AND GRATE COVER AND INTERNAL PLUG.
- PLUMBING VENTS THROUGH THE ROOF SHALL BE 3" MINIMUM. WHERE THE CONNECTING PIPE IS SMALLER, THE PIPE SHALL TRANSITION A MINIMUM OF 12" BELOW THE ROOF STRUCTURE AND THEN EXTEND THROUGH THE ROOF AS A 3" PIPE.
- COORDINATE EXACT LOCATION OF EQUIPMENT AND ROUTES TO AND FROM EQUIPMENT WITH STRUCTURE AND CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR OFFSETS OF PIPING TO AVOID CONFLICTS. NOT ALL OFFSETS, FITTINGS, EXTENSIONS SHOWN THAT MAY BE REQUIRED DURING CONSTRUCTION
- LABEL ALL DOMESTIC WATER, WASTE, VENT, AND GAS PIPES WITH NAMES AND FLOW ARROWS. LABELS SHALL BE NOT MORE THAN 10'-0" APART AND SHALL BE LOCATED AT ALL ACCESS LOCATION TO CONCEALED SPACES. EXTERIOR GAS PIPING TO HAVE STENCIL PAINT LABELS AND FLOW ARROWS.
- TEST ALL WATER, WASTE, AND VENT PIPING IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE AND PER THE LOCAL AUTHORITY HAVING JURISDICTION. ALL TESTS, INSPECTIONS, AND PIPE FLUSHING TO BE WITNESSED BY THE PSD PLUMBING DEPARTMENT.
- ALL DOMESTIC HOT WATER RECIRCULATION SYSTEMS SHALL BE BALANCED TO THE QUANTITIES SHOWN. THE BALANCING FIRM SHALL EITHER BE AABC OR NEBB CERTIFIED AND SHALL SUBMIT A BALANCE REPORT TO THE ENGINEER FOR REVIEW.
- THE PLUMBING CONTRACTOR SHALL PROVIDE PRODUCT DATA SUBMITTALS FOR ALL THE PLUMBING EQUIPMENT SCHEDULED, PLUMBING FIXTURES, PIPING, PIPE INSULATION, AND VALVES. ALL EQUIPMENT SUBMITTALS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL PROVIDE THE OWNER WITH (1) FULL SIZE SET OF THE AS-BUILT PLUMBING DRAWINGS WHICH SHALL SHOW THE ACTUAL LOCATIONS OF PIPES, VALVES, FIXTURES, AND ACCESSORIES OR ANY OTHER DEVIATIONS FROM THE DESIGN DRAWINGS.
- THE CONTRACTOR SHALL PROVIDE THE OWNER WITH (1) COPY OF ALL OPERATIONAL AND MAINTENANCE (O&M) MANUALS FOR EACH PIECE OF EQUIPMENT. THE MANUAL SHALL INCLUDE: THE CONTRACTOR'S CONTACT INFORMATION, THE MANUFACTURER'S PUBLISHED O&M INSTRUCTIONS, THE APPROVED SUBMITTAL DRAWINGS, AND THE FINAL APPROVED TEST AND BALANCE REPORT. COMBINE ALL THE MANUALS IN A 3-RING BINDER INDEXED FOR EACH PIECE OF EQUIPMENT. ALSO PROVIDE THE OWNER A CD WITH THE ENTIRE O&M MANUAL IN PDF FORMAT.
- THE CONTRACTOR SHALL PROVIDE OWNER TRAINING ON THE OPERATION AND MAINTENANCE OF THE PLUMBING EQUIPMENT.

SHEET INDEX:

P001	PLUMBING NOTES & LEGEND
P101	PLUMBING PLANS
P301	PLUMBING SCHEDULES & DETAILS

PLUMBING LEGEND		ABBREVIATIONS	
	EXISTING PIPE	AAV	AIR ADMITTANCE VALVE
	PIPE DEMOLITION	AFF	ABOVE FINISHED FLOOR
	DOMESTIC COLD WATER	BLW	BELOW
	DOMESTIC HOT WATER	CLG	CEILING
	DOMESTIC HOT WATER	DCW	DOMESTIC COLD WATER
	DOMESTIC HOT WATER	DHW	DOMESTIC HOT WATER
	DOMESTIC HOT WATER	DHWC	DOMESTIC HOT WATER CIRCULATION
	DOWN	DHW	DOMESTIC WATER HEATER
	WASTE PIPE (DASHED BELOW GROUND)	DN	DOWN
	WASTE PIPE (SOLID ABOVE GROUND)	(E)	EXISTING
	VENT PIPE	EC	ELECTRICAL CONTRACTOR
	BALL VALVE, PRESSURE REDUCING VALVE	FCO	FLOOR CLEANOUT
	CONTROL VALVE, CHECK VALVE	FDC	FIRE DEPARTMENT CONNECTION
	UNION OR FLANGE, REDUCER/INCREASER	FD	FLOOR DRAIN
	PIPE ELBOW UP, PIPE ELBOW DOWN	FS	FLOOR SINK
	TEE UP, TEE DOWN	FSS	FIRE SPRINKLER CONTRACTOR
	POINT OF CONNECTION	GCO	GRADE CLEANOUT
	LIMIT OF DEMOLITION	IFGC	INTERNATIONAL FUEL GAS CODE
		IMC	INTERNATIONAL MECHANICAL CODE
		IPC	INTERNATIONAL PLUMBING CODE
		LAV	LAVATORY
		(N)	NEW
		NC	NORMALLY CLOSED
		POC	POINT OF CONNECTION
		(REL)	RELOCATED
		SL	SEA LEVEL
		TYP	TYPICAL
		VTR	VENT THROUGH ROOF
		W/	WITH
		W/O	WITHOUT
		WC	WATER CLOSET

- BID ALTERNATE NOTES:**
- BASE BID: DOMESTIC HOT WATER RECIRCULATION PUMP TO BE CONTROLLED BY PUMP MANUFACTURER PROVIDED 7-DAY PROGRAMMABLE TIME CLOCK AND AQUASTAT TO MEET THE SEQUENCE OF OPERATION, SHEET P301.
 - BID ALTERNATE #3:
 - DOMESTIC HOT WATER RECIRCULATION PUMP TO BE CONTROLLED BY THE BUILDING DDC SYSTEM IN LIEU OF THE STAND-ALONE TIME CLOCK AND AQUASTAT.
 - EXISTING BUILDING DDC SYSTEM IS A SPYDER. APPROVED VENDOR IS BUILDING TECHNOLOGY SYSTEMS (BTS).



KEY PLAN
SCALE: NONE

DESIGNPOINT ENGINEERING

POUDRE SCHOOL DISTRICT
LINTON ELEMENTARY SCHOOL
4100 CARIBOU DRIVE
FORT COLLINS, CO 80525

NOT VALID UNLESS SIGNED & DATED

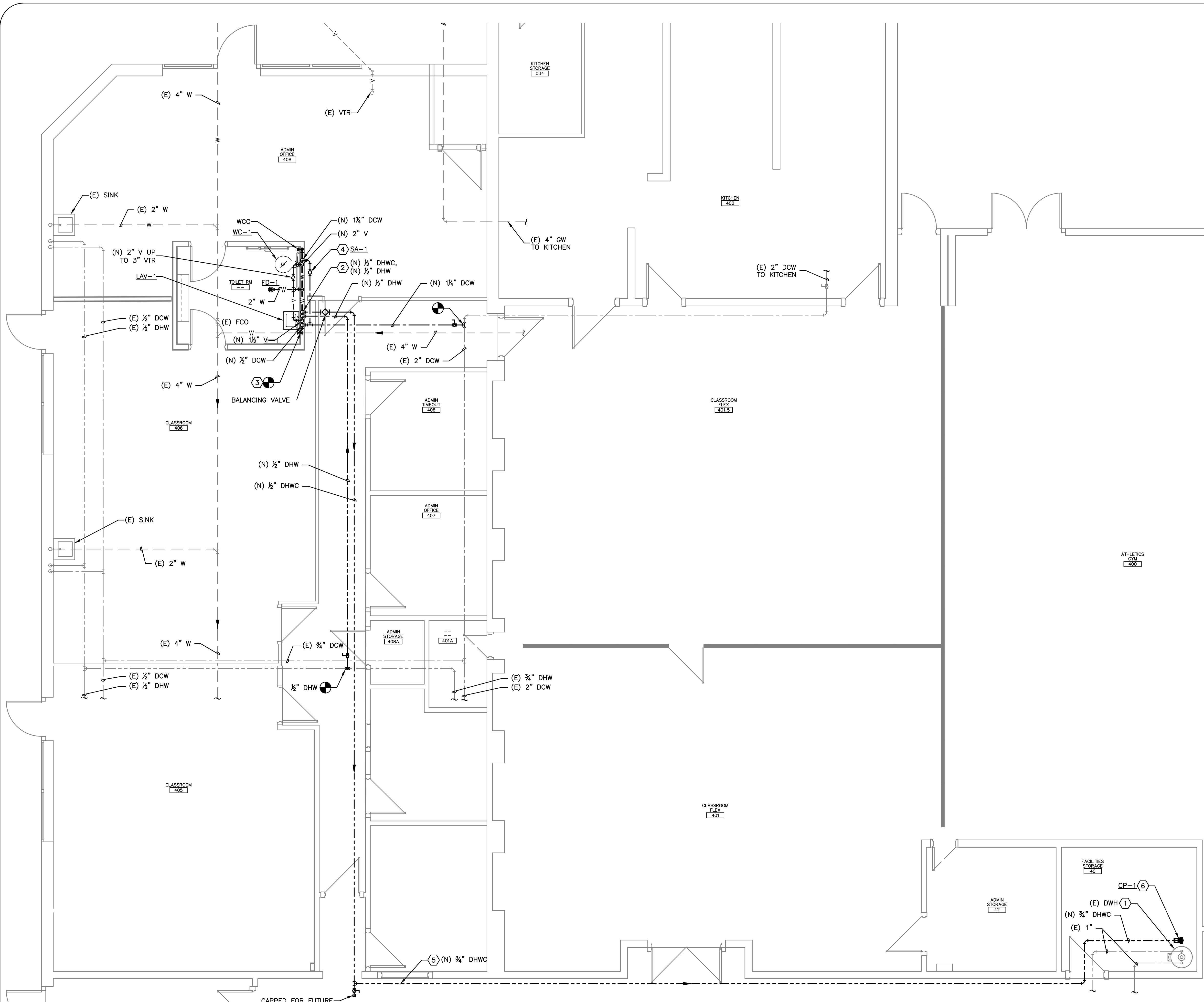
No.	Revision	Date

Sheet Title:
PLUMBING NOTES & LEGEND

Project:
EC REST ROOMS

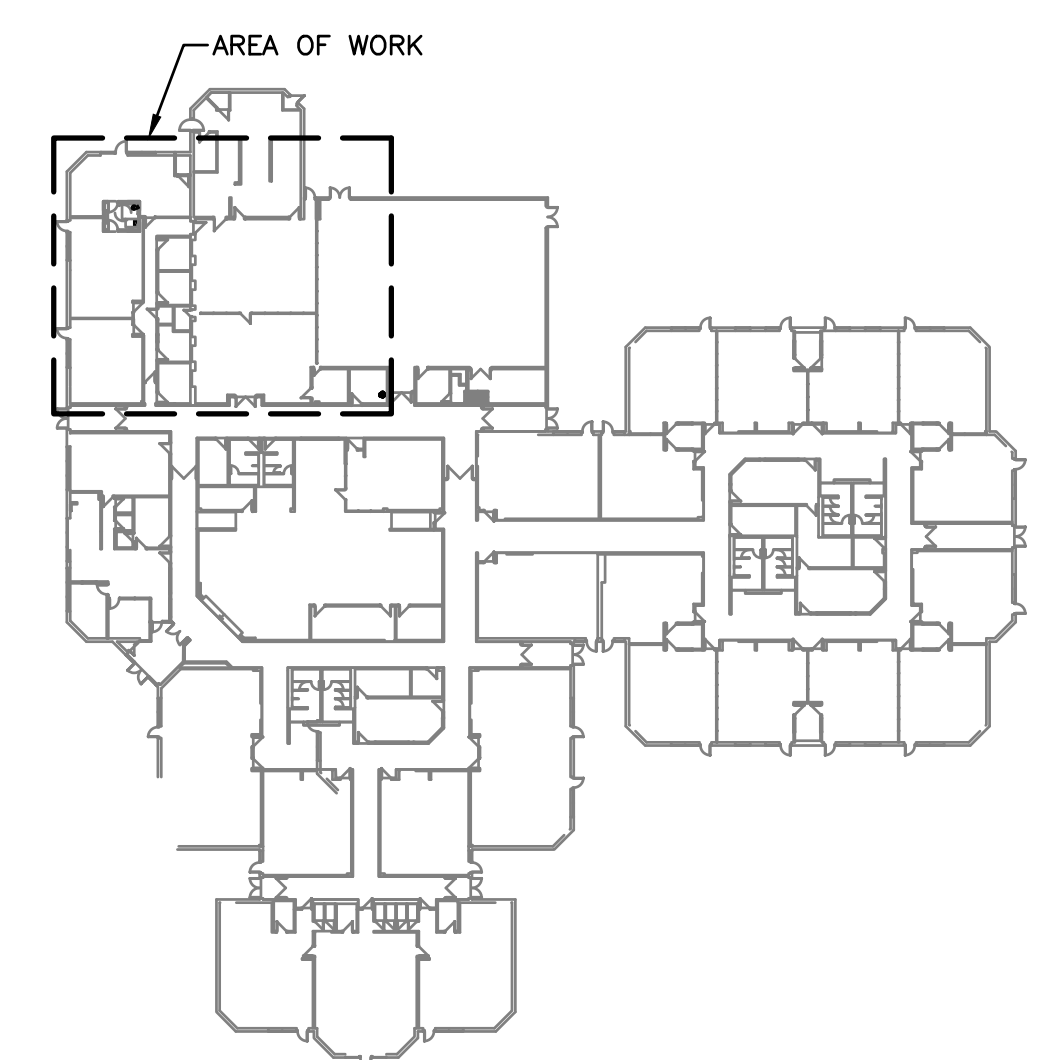
CONSTRUCTION SET

Date: 5/2/2020	Sheet P001
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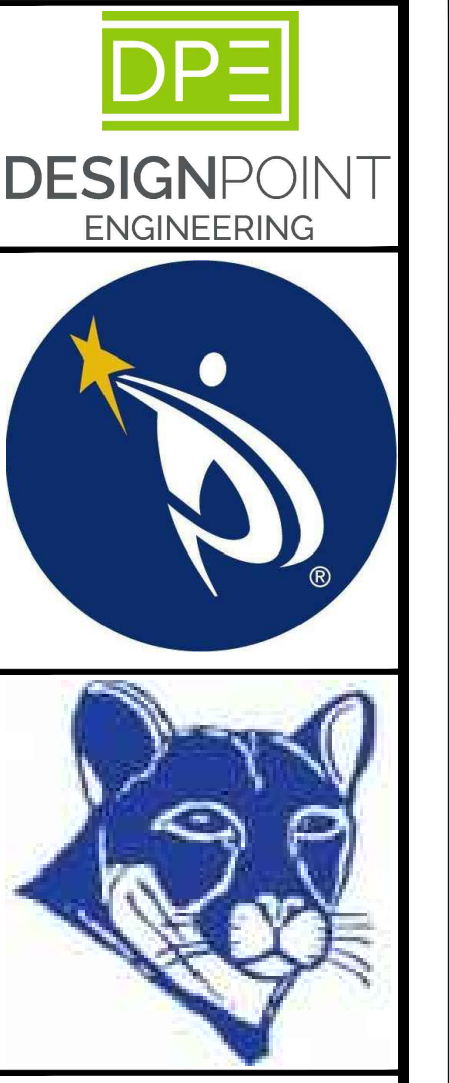
FLAG NOTES:

- EXISTING PLUMBING WORK TO REMAIN AS IS.
- EXTEND DHWC PIPE DOWN TO CONNECT TO DHW PIPE WITHIN 24" OF THE LAVATORY FIXTURE CONNECTION PER THE 2018 IECC.
- CONNECT TO EXISTING 4" W BELOW THE FLOOR IN THIS AREA. CONTRACTOR TO FIELD VERIFY LOCATION AND INVERT ELEVATION PRIOR TO THE START OF WORK. COORDINATE W/ G.C. FOR FLOOR CUTTING AND PATCHING.
- INSTALL SHOCK ABSORBER WITH SHUTOFF VALVE FOR FUTURE MAINTENANCE. INSTALL IN PLUMBING WALL, SHOWN OFFSET FOR CLARITY. COORDINATE W/ THE G.C. TO PROVIDE A PAINTED ACCESS PANEL IN THE WALL ABOVE THE TILE, RE: ARCHITECTURAL COLOR BY ARCHITECT.
- ROUTE NEW 3/4" DHWC PIPE BACK TO EXISTING DOMESTIC WATER HEATER.
- NEW DOMESTIC HOT WATER CIRCULATOR PUMP. SEE DOMESTIC WATER HEATER DETAIL, SHEET P301.

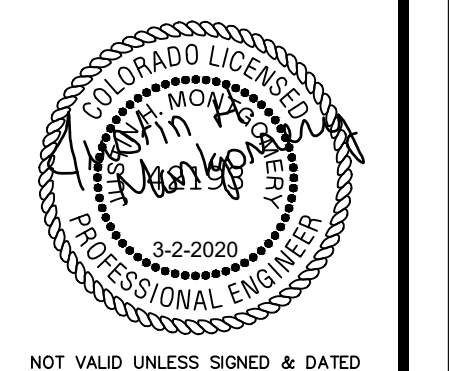


PLUMBING REMODEL PLAN
 SCALE: 1/4" = 1'-0"
 4' 0' 4' 8'

KEY PLAN
 SCALE: NONE



POUDRE SCHOOL DISTRICT
 LINTON ELEMENTARY SCHOOL
 4100 CARIBOU DRIVE
 FORT COLLINS, CO 80525



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No.	Revision	Date

Sheet Title:
PLUMBING PLAN

Project
EC REST ROOMS
 CONSTRUCTION SET
 Date: 5/2/2020 Sheet: P101
 Scale:

PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE INFORMATION			FAUCET OR FLUSH VALVE INFORMATION			PIPE RUNOUT SIZES				REMARKS
	MAKE	MODEL	DESCRIPTION	MAKE	MODEL	DESCRIPTION	DCW	DHW	W	V	
FD-1	ZURN	Z415B	EPOXY COATED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, REVERSIBLE CLAMPING COLLAR WITH PRIMARY AND SECONDARY WEEPHOLES, ADJUSTABLE 5" ROUND HEEL PROOF NICKEL BRONZE STRAINER, AND NO-HUB OUTLET.	--	--	--	--	--	2"	1½"	4
LAV-1	AMERICAN STANDARD	LUCERNE #0355.012	WALL HUNG LAVATORY SINK, WHITE VITREOUS CHINA WITH SELF-DRAINING DECK AREA, 5" BACKSPLASH, AND FRONT OVERFLOW. 4" CENTER SET FAUCET HOLES. PROVIDE WITH PERFORATED STRAINER AND CHROME-PLATED BRASS 1-1/4" OFFSET TAILPIECE. ADA COMPLIANT.	CHICAGO	802-VE2805ABCP	HEAVY DUTY CAST BRASS DECK FAUCET WITH 4" CENTERS, CHROME FINISH, TWO QUARTER-TURN LEVER HANDLES, AND 0.5 GPM NON-AERATING SPRAY OUTLET. ADA COMPLIANT.	½"	½"	2"	1½"	1-3
SA-1	ZURN	SHOKTROL Z1700-200	TYPE 304 STAINLESS STEEL WATER HAMMER ARRESTOR WITH STAINLESS STEEL NESTING BELLOWS AND THREADED PIPE CONNECTION. PDI SIZE B. ASSE 1010.	--	--	--	¾"	--	--	--	NONE
TMV-1	LEONARD	170A-LF	ASSE 1070 LISTED THERMOSTATIC MIXING VALVE. 0.25 GPM MIN. INTEGRAL INLET FILTER WASHERS AND CHECK VALVES. LEAD FREE. PROVIDE WITH COLD WATER BYPASS AND MOUNTING BRACKET. SET OUTLET TEMP. TO 110° F.	--	--	--	½"	½"	--	--	NONE
WC-1	AMERICAN STANDARD	MADERA #3043.001	FLOOR MOUNTED FLUSHOMETER WATER CLOSET W/ ELONGATED BOWL. 1½" TOP SPUD. WHITE VITREOUS CHINA. 16½" BOWL HEIGHT. 1.28 GPF. PROVIDE WITH OPEN FRONT SOLID PLASTIC SEAT.	SLOAN	ROYAL 111-1.28	EXPOSED MANUAL FLUSHOMETER VALVE FOR TOP SPUD WATER CLOSET. POLISHED CHROME FINISH. 1.28 GPF. ADA COMPLIANT. LOCATE HANDLE TO THE OPEN SIDE OF THE ROOM.	1½"	--	4"	2"	NONE

NOTES:

1.) PROVIDE WITH UNDER SINK PIPE INSULATION, TRUEBRO LAV GUARD 2. 2.) PROVIDE WITH THERMOSTATIC MIXING VALVE TMV-1. 3.) PROVIDE WITH FLOOR MOUNTED CONCEALED ARM CARRIER 4.) PROVIDE WITH ASSE 1072 TRAP SEAL PROTECTION DEVICE

ACCEPTABLE MANUFACTURERS:

LAVATORY & WATER CLOSET - KOHLER OR AMERICAN STANDARD, FLOOR DRAIN & WATER HAMMER ARRESTOR - JOSAM, JR SMITH, WATTS, OR ZURN, THERMOSTATIC MIXING VALVE - LEONARD, WATTS, OR ZURN

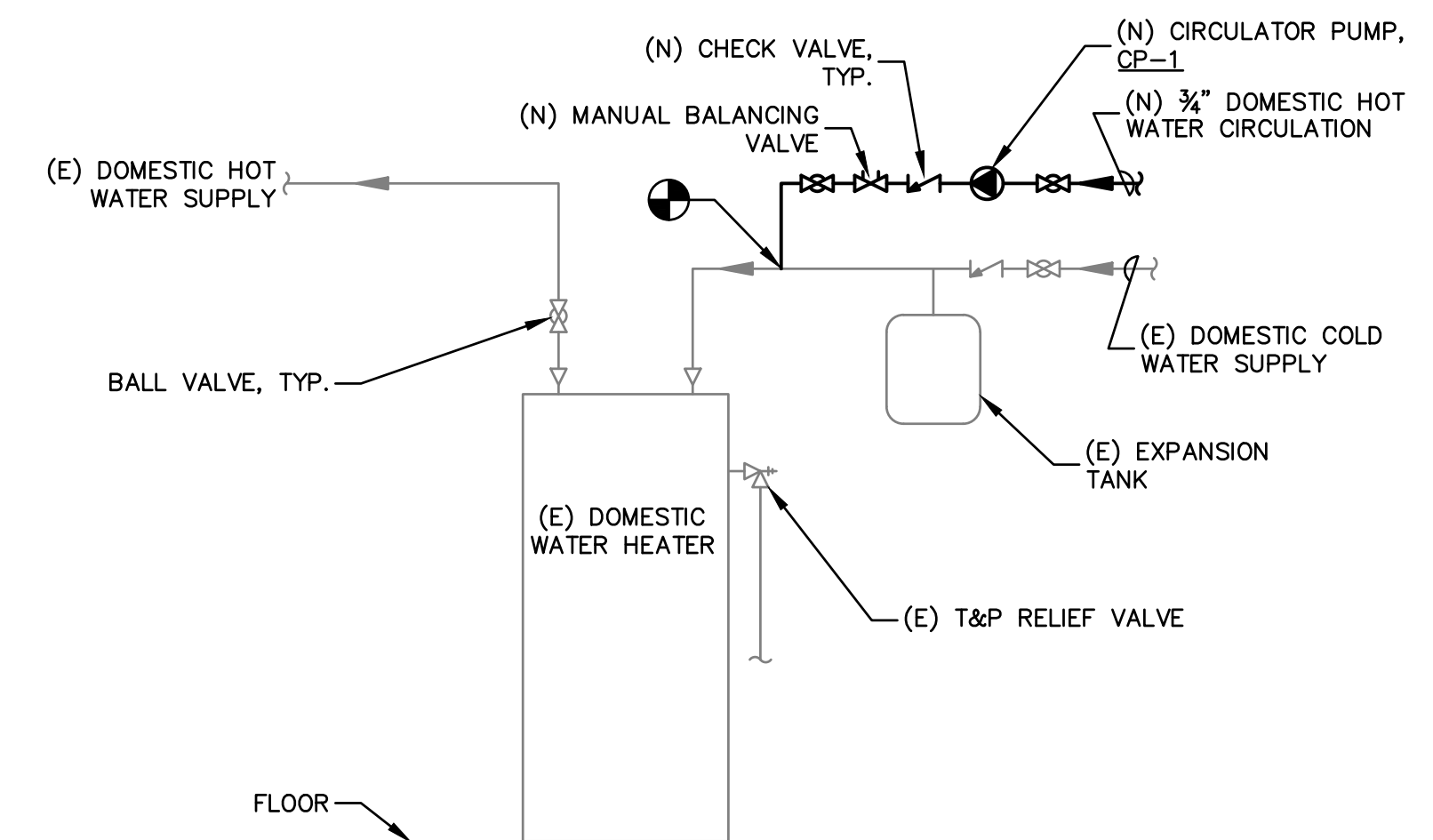
DOMESTIC HOT WATER CIRCULATION PUMP SCHEDULE

TAG	MAKE & MODEL	FLOW (GPM)	HEAD (FT)	TYPE	VOLTAGE	AMPS	HP	BODY	IMPELLER	CONN.	REMARKS
CP-1	TACO #005-SF	4	7	WET ROTOR	115/60/1	0.54	1/35	STAINLESS STEEL	NON-METALLIC	¾"	1-4

1.) UL LISTED 2.) TACO #563-2 AQUASTAT KIT (BASE BID ONLY) 3.) TACO #265-3 7-DAY PROGRAMMABLE DIGITAL TIMER (BASE BID ONLY) 4.) OR EQUAL BY GRUNDFOS

DOMESTIC HOT WATER CIRCULATION PUMP SEQUENCE OF OPERATION

- 1.) OCCUPIED MODE:
 - A. WHEN THE DIGITAL TIMER IS IN OCCUPIED MODE THE CIRCULATOR PUMP SHALL BE ENABLED.
 - B. IF THE AQUASTAT DETECTS A TEMPERATURE BELOW 95°F, THEN THE PUMP SHALL BE ON.
 - C. IF THE AQUASTAT DETECTS A TEMPERATURE GREATER THAN OR EQUAL TO 115° F, THEN THE PUMP SHALL BE OFF.
- 2.) UNOCCUPIED MODE:
 - A. WHEN THE DIGITAL TIMER IS IN UNOCCUPIED MODE, THE CIRCULATOR PUMP SHALL BE OFF.

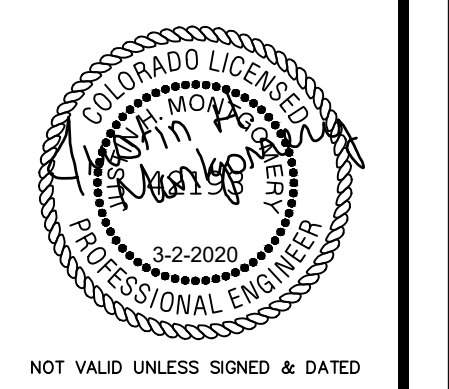


DOMESTIC WATER HEATER DETAIL

SCALE: NONE



POUDRE SCHOOL DISTRICT
 LINTON ELEMENTARY SCHOOL
 4100 CARIBOU DRIVE
 FORT COLLINS, CO 80525



No.	Revision	Date

Sheet Title:
PLUMBING SCHEDULES & DETAILS

Project:
EC REST ROOMS
 CONSTRUCTION SET
 Date: 5/2/2020
 Sheet: P301
 Scale:

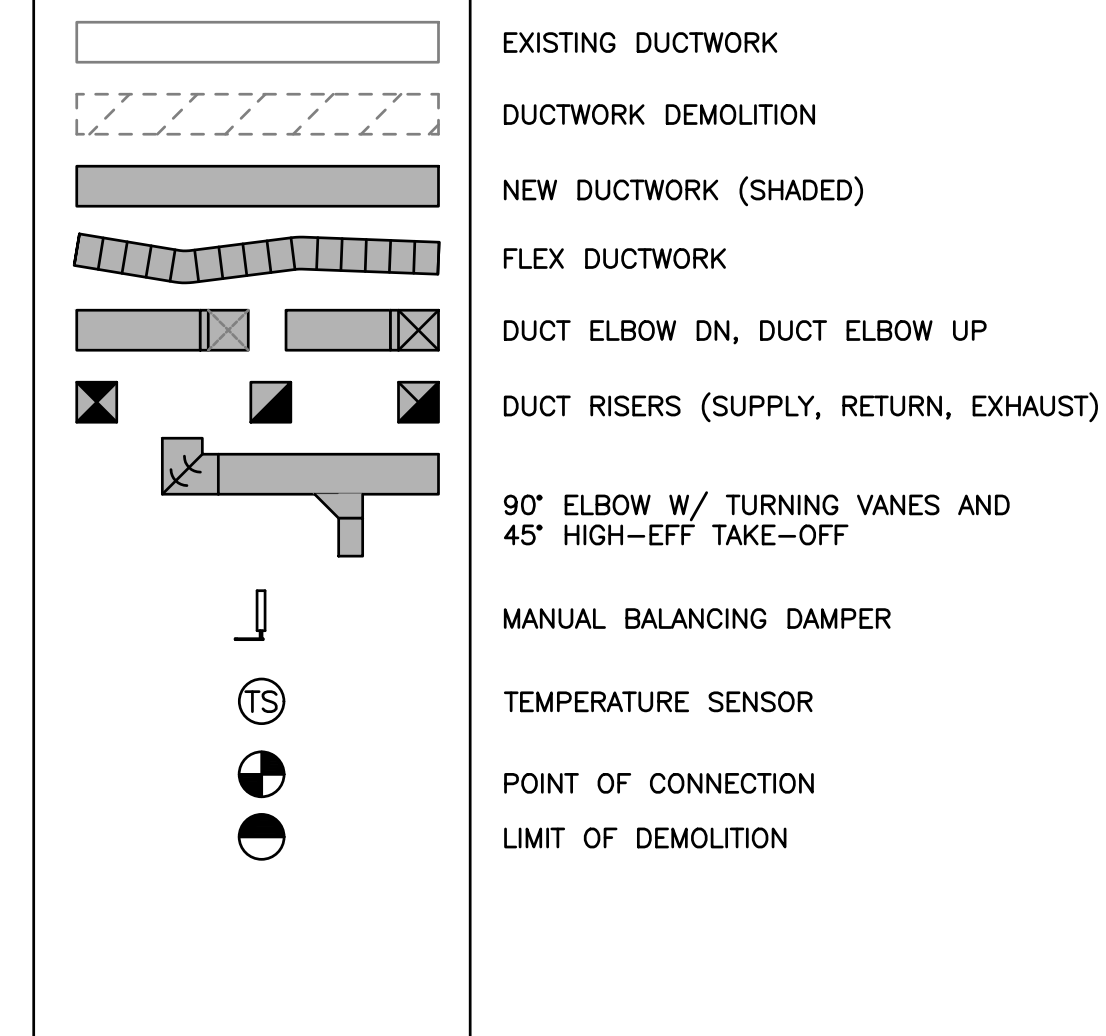
MECHANICAL GENERAL NOTES AND SPECIFICATIONS:

- ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL AND STATE CODES INCLUDING BUT NOT LIMITED TO THE 2015 INTERNATIONAL BUILDING, FIRE, MECHANICAL, PLUMBING, FUEL GAS, AND ENERGY CONSERVATION CODES (IBC, IFB, IMC, IPC, IFGC, IECC) WITH LOCAL AMENDMENTS.
- CONTRACTOR AND SUB-CONTRACTORS SHALL PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT TO COMPLETE ALL WORK SHOWN ON PLANS, CALLED FOR IN SPECIFICATIONS, OR REASONABLY IMPLIED FOR A COMPLETE INSTALLATION.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON DRAWINGS WITH ACTUAL FIELD CONDITIONS. COORDINATE DRAWINGS WITH ACTUAL FIELD CONDITIONS. COORDINATE WORK LAYOUTS AND LOCATIONS OF OPENINGS THROUGH FLOORS, WALLS, CEILINGS AND ROOFS WITH DRAWINGS OR OTHER REQUIREMENTS. VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO FABRICATION OR CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
- MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DO NOT SCALE DRAWINGS, USE DIMENSIONS ONLY. ALL DIMENSIONS/LAYOUTS SHOWN ARE APPROXIMATE, FIELD VERIFY ALL WORK PRIOR TO ORDERING MATERIALS OR INSTALLING WORK
- KEEP SITE AND BUILDING ACCESSIBLE AND SAFE TO CONTRACTOR'S PERSONNEL, OWNER'S EMPLOYEES AND PUBLIC AT ALL TIMES. CONTRACTOR SHALL ENSURE SAFETY OF PERSONNEL, OWNER AND PUBLIC DURING ALL WORK AND COMPLY WITH ALL APPLICABLE REGULATIONS AND ORDINANCES PERTAINING TO SAFETY OF PERSONS AND PROPERTY.
- INSTALL ALL WORK IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS, ANCHORING ALL COMPONENTS PLUMB, LEVEL, SQUARE, AND FIRMLY INTO PLACE IN FIRST CLASS MANNER AND WORKMANSHIP ACCORDING TO STANDARD CONSTRUCTION PRINCIPLES & AS APPROVED BY ENGINEER.
- THROUGHOUT THE WORK, CAULK AND SEAL ALL JOINTS AS REQUIRED TO PROVIDE A POSITIVE BARRIER AGAINST THE PASSAGE OF AIR AND MOISTURE.
- PROTECT EXISTING OR ADJACENT SITE IMPROVEMENTS, EXISTING FLOOR, WALL, CEILING AND ROOF FINISHES, FURNISHINGS AND EQUIPMENT TO REMAIN DURING CONSTRUCTION. REPLACE OR REPAIR ANY DAMAGED IMPROVEMENTS, MATERIALS, FINISHES, FURNISHINGS OR EQUIPMENT TO SATISFACTION OF ARCHITECT/ENGINEER. [Edit as required per project. Typically only for remodels or additions]
- REPLACE OR REPAIR ANY DAMAGED SURFACES, FILL AND PATCH HOLES, ETC., TO MATCH ADJACENT SURFACES AFTER ALL ALTERATIONS AND OTHER WORK IS COMPLETED, TO SATISFACTION OF ARCHITECT/ENGINEER.
- PRIOR TO THE DEMOLITION OF ANY EXISTING EQUIPMENT, COORDINATE WITH THE OWNER TO DETERMINE WHAT EQUIPMENT THEY MAY WANT TO KEEP. ANY EQUIPMENT NOT WANTED BY THE OWNER SHALL BECOME THE PROPERTY OF THE GENERAL CONTRACTOR AND SUBCONTRACTORS AND SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF IN A LAWFUL MANNER.
- CONTRACTOR MUST COORDINATE THE WORK SO AS NOT TO EXTENSIVELY DISRUPT OWNERS OCCUPANCY OF ADJACENT AREAS AS APPROVED BY OWNER.
- THE ENGINEER HAS ENDEAVORED TO LOCATE AND IDENTIFY THE MECHANICAL EQUIPMENT AND PIPING IN THE SCOPE OF WORK INCLUDING IDENTIFYING SIZES. HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BID. THE CONTRACTOR SHALL INCLUDE IN THEIR BID ADDITIONAL MINOR MECHANICAL WORK THAT MAY NOT BE SHOWN IN ORDER TO PROVIDE A COMPLETE AND WORKING SYSTEM.
- ASBESTOS MAY BE ENCOUNTERED DURING MECHANICAL WORK INCLUDING BUT NOT LIMITED TO PIPE INSULATION. IF THE CONTRACTOR DURING CONSTRUCTION ENCOUNTERS WHAT IS BELIEVED TO BE ASBESTOS CONTAINING MATERIALS, NOTIFY THE ENGINEER IMMEDIATELY.
- WHERE THE CEILING SPACE IS TO BE USED AS A RETURN AIR PLENUM, THE MECHANICAL CONTRACTOR SHALL VERIFY WITH OTHER TRADES TO ENSURE THAT ALL MATERIALS ARE NON-COMBUSTIBLE AND HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50.
- COORDINATE WITH THE G.C. TO PROVIDE ACCESS PANELS AS REQUIRED TO ACCESS VALVES, DAMPERS, CONTROL DEVICES, ETC. REQUIRED FOR THE PROPER MAINTENANCE OF THE MECHANICAL SYSTEMS.
- COORDINATE WITH G.C. TO PATCH ROOFING, ROOF DECK, AND FLASHINGS AS REQ'D WITH NEW MATERIALS AND FLASHINGS FOR ALL NEW ROOF PENETRATIONS.
- PATCH OPENINGS IN DUCTS WHICH ARE TO REMAIN ACTIVE AND HAVE HAD SECTION REMOVED. ALSO REPAIR DUCT INSULATION SO THAT IT IS CONTINUOUS.
- DO NOT RUN DUCTWORK ABOVE ELECTRICAL PANELS OR EQUIPMENT. COORDINATE WITH THE E.C. FOR LOCATIONS PRIOR TO THE START OF WORK.
- THERMOSTATS, TEMPERATURE SENSORS, SWITCHES, OR OTHER CONTROL DEVICES SHALL BE MOUNTED AT 48" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.
- PROVIDE PLASTIC LAMINATED EQUIPMENT LABELS FOR THE NEW EQUIPMENT. LABEL ALL THE THERMOSTATS, SWITCHES, MOTOR STARTERS, ETC. INDICATING WHICH SYSTEM THEY CONTROL.
- ALL DUCTWORK SHALL BE 24 GAUGE GALVANIZED SHEET METAL MINIMUM. WORK SHALL BE IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS, LATEST EDITION. ALL DUCTWORK SHALL BE 2 IN WG PRESSURE CLASS MINIMUM.
- ALL DUCTWORK JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS, SHALL BE SEALED WITH WELDS, GASKETS, OR MASTIC ADHESIVE. MASTICS SHALL BE LISTED IN ACCORDANCE WITH UL 181A.
- FLEXIBLE DUCTWORK SHALL BE INSULATED AND SHALL BE TESTED IN ACCORDANCE WITH UL 181 LISTED. FLEXIBLE DUCTWORK SHALL NOT EXCEED 6'-0" IN LENGTH. PROVIDE WRAPPED RIGID ROUND DUCTWORK FOR TAKEOFFS IN EXCESS OF 6'-0".
- DUCTWORK DIMENSIONS LISTED ON THE DRAWINGS ARE CLEAR, INSIDE DIMENSIONS. WHERE DUCT LINER IS SPECIFIED, INCREASE THE OUTSIDE SHEET METAL DIMENSIONS TO PROVIDE THE CLEAR INSIDE DIMENSIONS SPECIFIED.
- ALL BRANCH DUCT TAKEOFFS SHALL BE 45° HIGH-EFF. TYPE AND SHALL HAVE A HEAVY DUTY MANUAL BALANCING DAMPER WITH MINIMUM 1/4" ROD AND LOCKING INDICATING QUADRANT. ACCEPTABLE MANUFACTURERS INCLUDE GREENHECK, POTTORFF, AND RUSKIN. LIGHT-DUTY DAMPERS THAT ARE INTEGRAL TO TAKE-OFF FITTINGS ARE NOT ACCEPTABLE.
- DUCTWORK INSULATION SHALL BE INSTALLED BY A QUALIFIED INSULATION CONTRACTOR WITH A MINIMUM OF 3-YEARS DOCUMENTED EXPERIENCE. INSULATION WORK SHALL BE COMPLETE WITH ALL EDGES SEALED, PER INDUSTRY STANDARDS, AND TO THE SATISFACTION OF THE ENGINEER.
- ALL CONCEALED ROUND SUPPLY, RETURN, OR OUTSIDE AIR DUCTS SHALL BE INSULATED WITH DUCT WRAP FIBERGLASS INSULATION WITH FSK VAPOR BARRIER FACING. JOHNS MANVILLE MICROLITE XG OR EQUAL BY KNAUF OR OWENS CORNING.
• IN A CONDITIONED SPACE: 1.5" THICK (R-4.5)
- PROVIDE FLEXIBLE DUCT CONNECTIONS TO THE SUPPLY AND RETURN OF ALL MOTOR DRIVEN EQUIPMENT.
- PROVIDE DUCT TRANSITIONS AS REQUIRED TO CONNECT THE DUCTS TO THE EQUIPMENT CONNECTIONS.
- ELBOWS SHALL HAVE A MINIMUM RADIUS OF 1-1/2 TIMES CENTERLINE DUCT WIDTH. WHERE RECTANGULAR ELBOWS ARE USED, PROVIDE TURNING VANES.
- PROVIDE DUCT TRANSITIONS AS REQUIRED TO CONNECT THE DUCTS TO THE EQUIPMENT CONNECTIONS. INCREASE DUCT SIZES GRADUALLY, NOT EXCEEDING 15° DIVERGENCE WHEREVER POSSIBLE; MAXIMUM 30° DIVERGENCE UPSTREAM OF EQUIPMENT AND 45° CONVERGENCE DOWNSTREAM.
- ALL PENETRATIONS THROUGH THE FLOORS AND WALLS SHALL BE SLEEVED WITH GALVANIZED STEEL. SLEEVES SHALL BE LARGE ENOUGH TO ALLOW FOR INSULATION TO BE CONTINUOUS THROUGH THE SLEEVE. APPLY SEALANT TO BOTH SIDES OF PENETRATION TO COMPLETELY FILL ANNULAR SPACE.
- WHERE DUCTS PENETRATE A FIRE RATED ASSEMBLY PACK THE VOID WITH BACKING MATERIAL AND SEAL WITH UL LISTED FIRE CAULK TO MEET THE FIRE RATING OF ASSEMBLY PENETRATED. REFER TO ARCHITECTURAL PLANS FOR LOCATIONS AND TYPES OF FIRE RATED ASSEMBLIES.
- ALL AIR SYSTEMS SHALL BE BALANCED TO THE QUANTITIES SHOWN. THE BALANCING FIRM SHALL EITHER BE AABC OR NEBB CERTIFIED AND SHALL SUBMIT A BALANCE REPORT TO THE ENGINEER FOR REVIEW.
- THE MECHANICAL CONTRACTOR SHALL PROVIDE PRODUCT DATA FOR ALL THE MECHANICAL EQUIPMENT SCHEDULED, BALANCING DAMPERS, CONTROLS, DAMPERS, AND DUCT INSULATION. SUBMITTALS SHALL BE IN ELECTRONIC PDF FORMAT AND SENT VIA EMAIL TO THE ENGINEER. IF THE CONTRACTOR WANTS TO USE A MANUFACTURER NOT LISTED, THEY SHALL PROVIDE DOCUMENTATION TO THE ENGINEER FOR APPROVAL. ALL EQUIPMENT SUBMITTALS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL PROVIDE THE OWNER WITH (1) COPY OF ALL OPERATIONAL AND MAINTENANCE (O&M) MANUALS FOR EACH PIECE OF MECHANICAL EQUIPMENT. THE MANUAL SHALL INCLUDE: THE CONTRACTOR'S CONTACT INFORMATION, THE MANUFACTURER'S PUBLISHED O&M INSTRUCTIONS, THE APPROVED SUBMITTAL DRAWINGS, AND THE FINAL APPROVED TEST & BALANCE REPORT. COMBINE ALL THE MANUALS IN A 3-RING BINDER INDEXED FOR EACH PIECE OF EQUIPMENT. ALSO PROVIDE THE OWNER A CD WITH THE ENTIRE O&M MANUAL IN PDF FORMAT.
- THE CONTRACTOR SHALL PROVIDE THE OWNER WITH (1) FULL SIZE SET OF THE AS-BUILT MECHANICAL DRAWINGS WHICH SHALL SHOW THE ACTUAL LOCATIONS OF DUCTWORK, DAMPERS, GRDS, OR ANY OTHER DEVIATIONS FROM THE DESIGN DRAWINGS.
- THE CONTRACTOR SHALL PROVIDE OWNER TRAINING ON THE OPERATION AND MAINTENANCE OF THE MECHANICAL EQUIPMENT INCLUDING CONTROLS. PROVIDE NEW FILTERS IN THE EQUIPMENT AT THE END OF THE PROJECT.

SHEET INDEX:

M001	MECHANICAL NOTES, LEGENDS, & SCHEDULES
M101	MECHANICAL PLANS

MECHANICAL LEGEND



ABBREVIATIONS

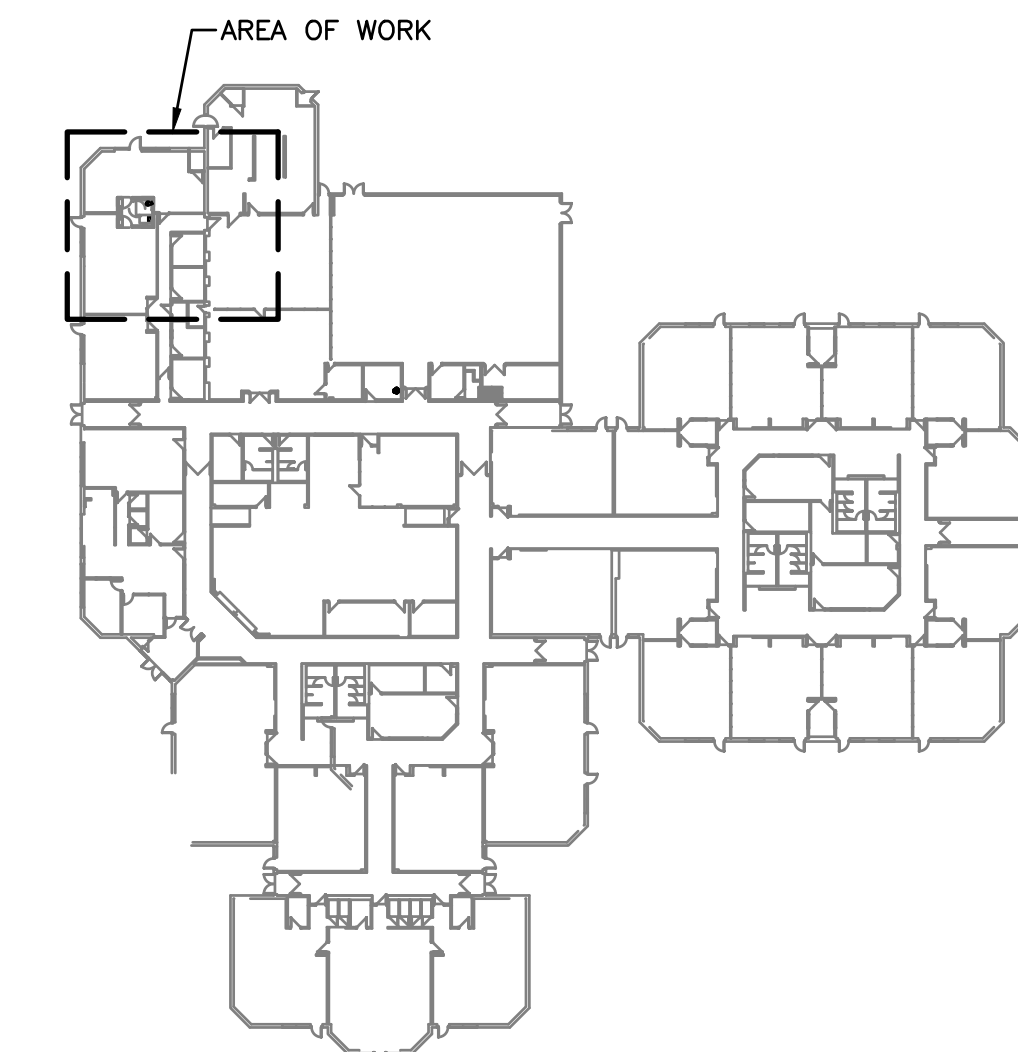
AFF	ABOVE FINISHED FLOOR
BLW	BELOW
CD	CEILING DIFFUSER
CLG	CEILING
DN	DOWN
(E)	EXISTING
EA	EXHAUST AIR
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
IFGC	INTERNATIONAL FUEL GAS CODE
IMC	INTERNATIONAL MECHANICAL CODE
IPC	INTERNATIONAL PLUMBING CODE
(N)	NEW
OBD	OPPOSED BLADE DAMPER
OA	OUTSIDE AIR
POC	POINT OF CONNECTION
RA	RETURN AIR
(REL)	RELOCATED
RG	RETURN GRILLE
SA	SUPPLY AIR
SD	SIDEWALL DIFFUSER
TA	TRANSFER AIR
TAB	TEST & BALANCE CONTRACTOR
TSTAT	THERMOSTAT
TYP	TYPICAL
W/	WITH
W/O	WITHOUT

EXHAUST FAN SCHEDULE

TAG	MAKE & MODEL	CFM	SP (IN WC)	DD/BD	FRPM	VOLTAGE	WATTS	WEIGHT (LBS)	SPEED CONTROL	CONTROL	REMARKS
EF-1	GREENHECK SP-A110	100	0.125	DD	925	115/60/1	12	26	YES	A	ALL
1.) UL-507 LISTED 2.) MOTOR WITH THERMAL OVERLOADS 3.) INTEGRAL BACKDRAFT DAMPER 4.) ISOLATION KIT 5.) ROUND DUCT CONNECTOR 6.) CURB CAP W/ 18" TALL ROOF CURB AND BIRD SCREEN 7.) OR EQUAL BY LOREN COOK OR TWIN CITY FAN											
A.) <u>BASE BID</u> : ON WITH LIGHTS, COORDINATE W/ E.C. FOR WIRING <u>BID ALTERNATE #3</u> : EXHAUST FAN TO BE CONTROLLED BY THE EXISTING BAS. SEE BID ALTERNATE SUMMARY, SHEET M001.											

BID ALTERNATE NOTES:

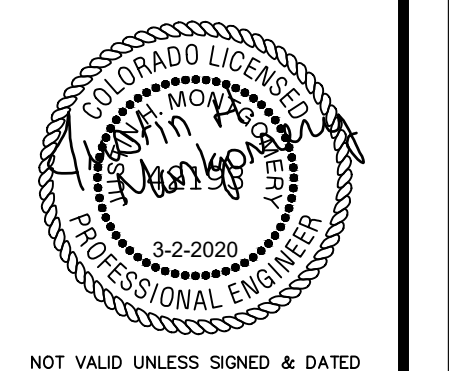
- A. BASE BID: NEW RESTROOM EXHAUST FAN TO BE CONTROLLED ON WITH THE LIGHTS.
- B. BID ALTERNATE #3:
- NEW RESTROOM EXHAUST FAN TO BE CONTROLLED BY THE BUILDING DDC SYSTEM IN LIEU OF THE STAND-ALONE SWITCHES.
 - EXISTING BUILDING DDC SYSTEM IS A SPYDER. APPROVED VENDOR IS BUILDING TECHNOLOGY SYSTEMS (BTS).



KEY PLAN
SCALE: NONE



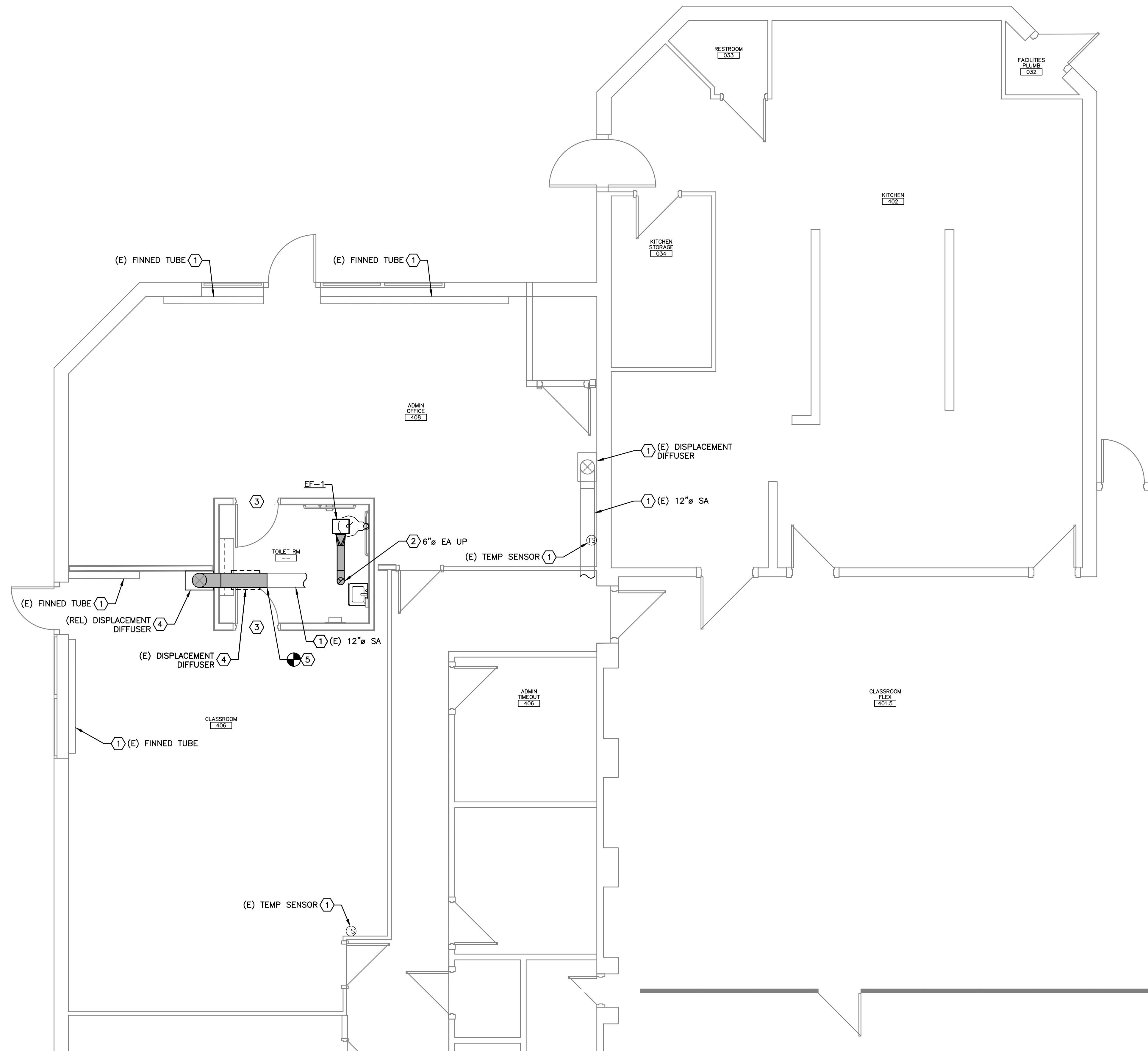
POUDRE SCHOOL DISTRICT
LINTON ELEMENTARY SCHOOL
4100 CARIBOU DRIVE
FORT COLLINS, CO 80525



No.	Revision	Date

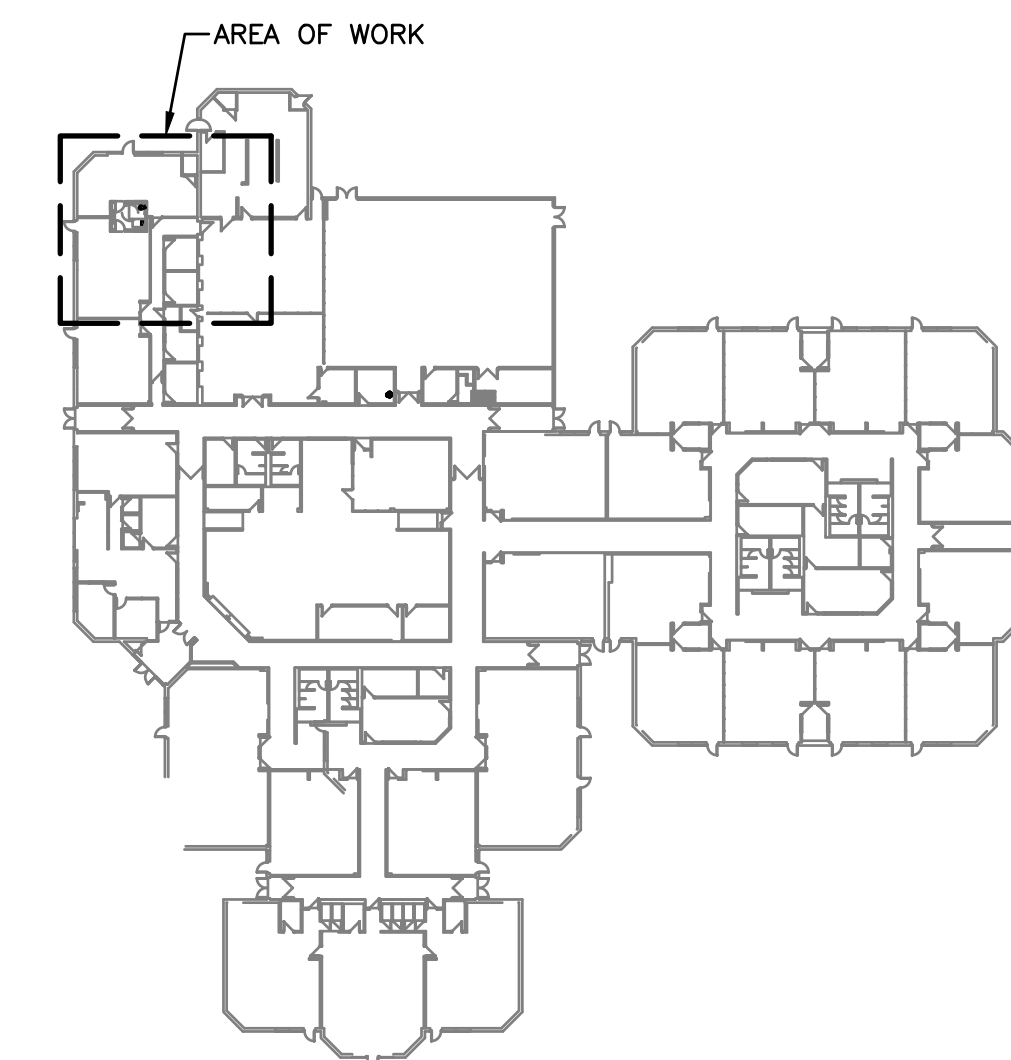
Sheet Title:
MECHANICAL NOTES, LEGEND, & SCHEDULES

Project EC REST ROOMS	
CONSTRUCTION SET	
Date 3/2/2020	Sheet M001
Scale	



FLAG NOTES:

1. EXISTING MECHANICAL WORK TO REMAIN AS IS.
2. EA DUCT UP THRU ROOF TO NEW CURB CAP MOUNTED ON A ROOF CURB. COORDINATE W/ G.C. FOR NEW ROOF PENETRATION.
3. COORDINATE W/ G.C. FOR A 3/4" DOOR UNDERCUT.
4. REMOVE AND RELOCATE EXISTING DISPLACEMENT DIFFUSER, PLENUM BOX, BALANCING DAMPER AND SUPPLY DUCT AS INDICATED ON THE PLANS. REBALANCE TO 250 CFM.
5. EXTEND THE EXISTING SUPPLY DUCT ABOVE THE EXISTING CEILING. RECONNECT TO EXISTING SUPPLY DUCT AND TO RELOCATED DIFFUSER.



KEY PLAN
SCALE: NONE



POUDRE SCHOOL DISTRICT
LINTON ELEMENTARY SCHOOL
4100 CARIBOU DRIVE
FORT COLLINS, CO 80525



NOT VALID UNLESS SIGNED & DATED

No.	Revision	Date

Sheet Title:
MECHANICAL PLAN

Project:
EC REST ROOMS

CONSTRUCTION SET

Date 5/2/2020	Sheet M101
Scale	