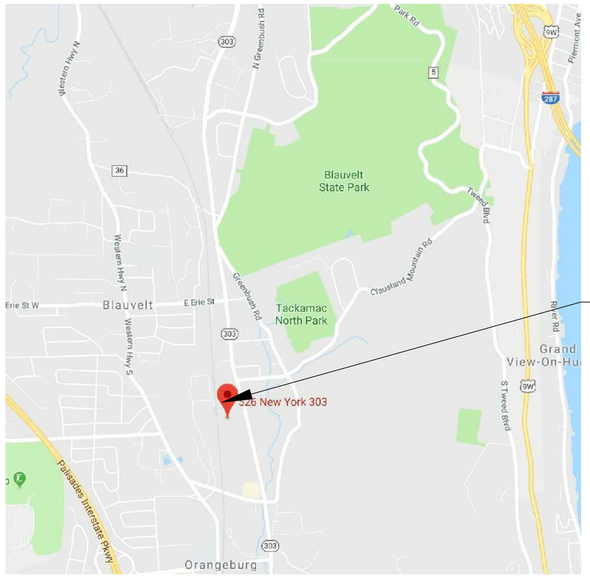
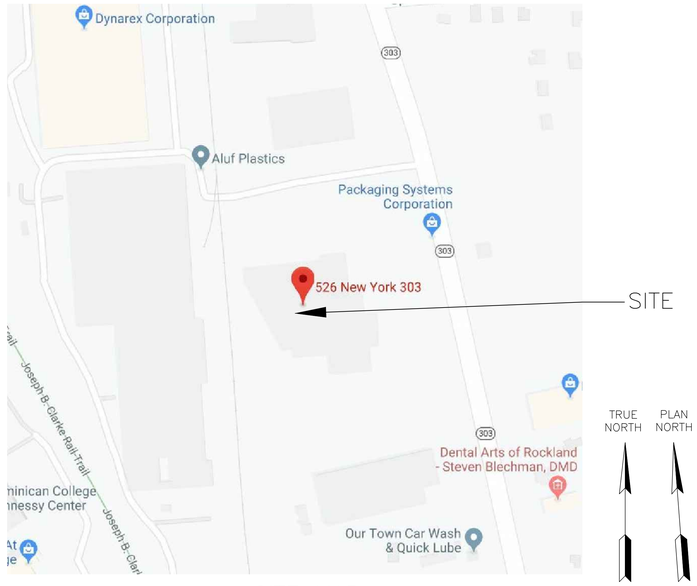
INSTRUMENTATION LABORATORY

LOCKER ROOM EXPANSION

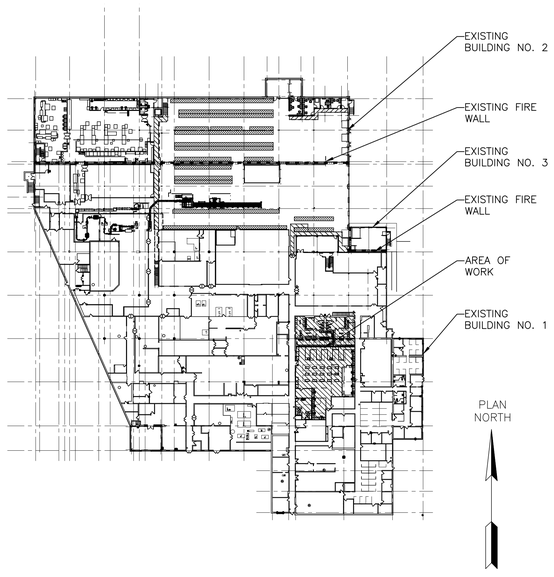
526 ROUTE 303 ORANGEBURG, NY 10962



VICINITY MAP
N.T.S.



SITE MAP
N.T.S.



KEY PLAN (FIRST FLOOR)
N.T.S.

LIST OF DRAWINGS

TITLE SHEETS
T00 VICINITY MAP, SITE MAP, KEY PLAN & LIST OF DRAWINGS
T01 CODE INFORMATION
T02 GENERAL NOTES, LEGENDS & ABBREVIATIONS
T11 FIRST FLOOR EGRESS & LIFE SAFETY PLAN
ARCHITECTURAL
AD00 GENERAL & TYPICAL DEMOLITION NOTES
AD11 FIRST FLOOR DEMOLITION PLAN
A11 FIRST FLOOR PLAN
A15 ROOF PLAN & DETAILS
A21 FIRST FLOOR REFLECTED CEILING PLAN & DETAILS
A60 DOOR SCHEDULE, TYPES & DETAILS
A71 FIRST FLOOR FURNITURE & EQUIPMENT PLAN
A72 CASEWORK ELEVATIONS
A73 CASEWORK ELEVATIONS
A74 CASEWORK ELEVATIONS & DETAILS
A75 ROOM FINISH SCHEDULE & PARTITION TYPES
MECHANICAL
M00 GENERAL NOTES, LEGEND, AND ABBREVIATIONS
M01 GENERAL DEMOLITION & CONSTRUCTION NOTES
MD11 FIRST FLOOR PLAN – DEMOLITION
M11 FIRST FLOOR PLAN – NEW WORK
M15 ROOF PLAN
M40 DETAILS
M50 AIR BALANCE DIAGRAM
M60 SCHEDULES
PLUMBING
P00 GENERAL NOTES, LEGEND, AND ABBREVIATIONS
PD11 FIRST FLOOR PLAN – DEMOLITION
P11 FIRST FLOOR PLAN
P40 DETAILS
P50 RISER DIAGRAMS
P60 SCHEDULES
FIRE PROTECTION
FP00 GENERAL NOTES, LEGEND, AND ABBREVIATIONS
FP11 FIRST FLOOR PLAN
FP40 DETAILS
ELECTRICAL
E00 GENERAL NOTES CONDUIT AND WIRE
E01 DEMOLITION NOTES ABBREV, AND SYMBOL LISTS
ED11 FIRST FLOOR DEMOLITION PLAN
ED12 FIRST FLOOR LIGHTING DEMO PLAN
E11 PARTIAL ELECTRICAL PLAN FIRST FLOOR
E15 ROOF PLAN
E21 FIRST FLOOR REFLECTED CEILING PLAN
E50 PANEL SCHEDULES

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

EI ARCHITECTURE ENGINEERING PLANNING
EI Associates
ARCHITECTS & ENGINEERS, PC
8 RIDGEDALE AVENUE•CEDAR KNOLLS NJ 07927•973.775.7777

JAMES P. HUNTER, AIA NY LICENSE NO. 043894-01

ARCHITECTURE

SCALE AS NOTED
DRAWN BY:
DESIGNED BY:
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
VICINITY MAP, SITE MAP, KEY PLAN & LIST OF DRAWINGS

EIA DRAWING NO.
T00

CLIENT DWG. NO.
— — — —

EIA PROJECT NO.
EG8577.03

(XX)

CODE INFORMATION

PROJECT NAME & LOCATION:

INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
526 ROUTE 303
ORANGEBURG, NY 10962

PROJECT SCOPE OF WORK:

THE PROJECT SCOPE OF WORK INCLUDES RENOVATIONS TO CONVERT A PORTION OF AN EXISTING LAB SPACE TO EXPAND EXISTING EMPLOYEE LOCKER ROOMS. THE PROPOSED WORK INCLUDES THE FOLLOWING:

- RENOVATIONS TO EXISTING LOCKER ROOMS AND R&D LAB SUITE
- HVAC WORK INCLUDING MODIFICATIONS TO EXISTING SYSTEMS.
- FIRE PROTECTION WORK INCLUDING MODIFICATIONS TO EXISTING SYSTEMS.
- FIRE ALARM WORK INCLUDING NEW MODIFICATIONS TO EXISTING SYSTEMS.
- PLUMBING WORK INCLUDING REMOVAL AND REPLACEMENT OF EXISTING LABORATORY FIXTURES.
- ELECTRICAL WORK INCLUDING NEW LIGHTING AND POWER.

OWNER/ APPLICANT:

INSTRUMENTATION LABORATORY
526 ROUTE 303
ORANGEBURG, NEW YORK 10962

REVIEWING AGENCY:

OFFICE OF BUILDING DEPARTMENT, TOWN OF ORANGEBURG
20 SOUTH GREENBUSH ROAD
ORANGEBURG, NY 10962

APPLICABLE CODES:

ALL WORK SHALL BE IN ACCORDANCE WITH THE 2020 NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE:

THE 2020 NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE INCORPORATES THE FOLLOWING PUBLICATIONS BY REFERENCE:

NEW YORK STATE BUILDING CODE 2020 EDITION (BCNYS 2020)
NEW YORK STATE FIRE CODE 2020 EDITION (FCNYS 2020)
NEW YORK STATE MECHANICAL CODE 2020 (MCNYS 2020)
NEW YORK STATE PLUMBING CODE 2020 (PCNYS 2020)
NEW YORK STATE FUEL GAS CODE 2020 (FGCNYS 2020)
NEW YORK STATE EXISTING BUILDING CODE 2020 EDITION (EBCNYS 2020)
    SECTION 603 AND CHAPTER 8–ALTERATIONS–LEVEL 2
NATIONAL ELECTRICAL CODE NFPA 70 2017 (NEC 2017)
NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE 2020 (ECCCNYS 2020)
    ASHRAE 90.1–2016 (AS ADOPTED BY SECTION C101.5 OF THE ECCCNYS 2020)
ICC 117.1 ACCESSIBLE AND USABLE BUILDINGS CODE 2009
2010 ADA STANDARDS

SEPARATION OF BUILDING AREAS

THE EXISTING FACILITY IS DIVIDED INTO THREE (3) SEPARATE BUILDINGS BY SINGLE FIRE WALLS IN ACCORDANCE WITH THE BCNYS SECTIONS 503 AND 706. THE AREA OF WORK OF THIS PROJECT IS LOCATED WITHIN EXISTING BUILDING NO. 1. THESE BUILDINGS ARE AS DELINEATED ON THE KEY PLAN ON SHEET T00.

USE GROUP CLASSIFICATIONS (FOR BUILDING NO.1):

NON–SEPARATED MIXED USES (BCNYS SECTION 508.3) AS FOLLOWS (EXISTING UNCHANGED):

B BUSINESS (BCNYS SECTION 304),
F–1 FACTORY INDUSTRIAL MODERATE–HAZARD (BCNYS SECTION 306.2), AND
S–1 STORAGE MODERATE–HAZARD (BCNYS SECTION 311.2)

CONSTRUCTION CLASSIFICATION (FOR BUILDING NO. 1):
BCNYS CODE TYPE IIB, UNPROTECTED, NON–COMBUSTIBLE (UNCHANGED)

BUILDING HEIGHT AND AREA CALCULATIONS (FOR BUILDING NO. 1):

BUILDING HEIGHT:

EXISTING HEIGHT = TWO STORIES, 27'–0"
PROPOSED HEIGHT = TWO STORIES, 27'–0" (NO CHANGE)

EXISTING BUILDING AREA (LARGEST FLOOR):

EXISTING BUILDING GROUND FLOOR AREA = 99,853 SF
PROPOSED BUILDING GROUND FLOOR AREA = 99,853 SF (NO CHANGE)

SCOPE OF WORK AREA AND VOLUME INFORMATION:

TOTAL SCOPE OF WORK AREA = 4,820 SF

TOTAL SCOPE OF WORK VOLUME = 4,820 SF X 9'–0" = 43,380 CF

FIRE–RESISTANCE RATING REQUIREMENTS (HOURS) (FOR BUILDING NO. 1)

A. TABLE 508.2: ACCESSORY OCCUPANCIES (HOURS) – NA

B. TABLE 509: INCIDENTAL ACCESSORY OCCUPANCIES (HOURS) – NA

C. TABLE 601: FIRE–RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS) (TYPE IIB CONSTRUCTION)

BUILDING ELEMENT	REQUIRED/PROVIDED
PRIMARY STRUCTURAL FRAME	0 HOURS (U.O.N.)
BEARING WALLS OR PARTITIONS	
EXTERIOR	NA
INTERIOR	0 HOURS
NONBEARING WALLS AND PARTITIONS (EXTERIOR)	(SEE PART D)
NONBEARING WALLS AND PARTITIONS (INTERIOR)	0 HOURS (U.O.N.)
FLOOR CONSTRUCTION AND SECONDARY MEMBERS	NA
ROOF CONSTRUCTION AND SECONDARY MEMBERS	0 HOURS

D. TABLE 602: FIRE–RESISTANCE RATING FOR EXTERIOR WALLS (HOURS) – NA

E. TABLE 706.4: FIRE WALL FIRE–RESISTANCE RATING (HOURS) – NA

F. TABLE 707.3.10: FIRE–AREA SEPARATION FIRE BARRIERS (HOURS) – NA

G. SECTION 709.3: SMOKE BARRIERS (HOURS) – NA

H. SECTION 713.4: SHAFT ENCLOSURES (HOURS) – NA

I. SECTION 913.2.1: FIRE PUMP ROOM SEPARATION (HOURS) – NA

J. TABLE 1020.1: CORRIDOR FIRE–RESISTANCE RATING (HOURS)

OCCUPANCY	REQUIRED/PROVIDED
F–1, S–1 AND B AREAS (SPRINKLERED)	0 HOURS

K. SECTION 1023.2: EXIT ENCLOSURES (HOURS) – NA

L. SECTION 3005.4: MACHINE ROOMS (HOURS) – NA

INTERIOR FINISHES:

ALL INTERIOR FINISHES SHALL COMPLY WITH REQUIREMENTS OF BCNYS CHAPTER 8 "INTERIOR FINISHES" AND TABLE 803.13.

FIRE PROTECTION:
BUILDING NO. 1 IS EQUIPPED WITH AN APPROVED AUTOMATIC SPRINKLER SYSTEM.

BUILDING NO. 1 IS EQUIPPED WITH A FIRE ALARM SYSTEM (SEE ELECTRICAL DRAWINGS).

CONTRACTOR SHALL PROVIDE CONSPICUOUS SIGNAGE LOCATING FIRE EXTINGUISHERS PER NFPA 10 CHAPTERS 1 THROUGH 6.6.

(SEE SHEET T11 FOR ADDITIONAL INFORMATION.)

MEANS OF EGRESS (ALSO SEE T11):

EGRESS OCCUPANT LOAD CALCULATIONS FOR WORK AREAS:

(AOL) ALLOWABLE OCCUPANT LOADS:
MAXIMUM FLOOR AREA ALLOWANCE PER OCCUPANT BCNYS 2020, TABLE 1004.5

MEN'S LOCKER AREAS	= 50 SF/OCC	= 709 SF/50	= 15 OCC ALLOWED
WOMEN'S LOCKER AREAS	= 50 SF/OCC	= 402 SF/50	= 9 OCC ALLOWED
R&D LAB AREA	= 150 SF/OCC	= 3,429 SF/150	= 23 OCC ALLOWED
LIBRARY	= 50 SF/OCC	= 277 SF/50	= 6 OCC ALLOWED

EGRESS DOOR CAPACITIES:
(CALCULATED PER BCNYS SECTION 1005.3.2)
36" DOORS – 32"/0.2" = 160 OCC/DOOR (SPRINKLERED)

BUILDING EGRESS AND OCCUPANT LOAD:

BUILDING OCCUPANT LOAD AND NUMBER OF BUILDING EXITS REMAIN UNCHANGED.

TRAVEL DISTANCE FOR SPACES WITH ONE EXIT (EBCNYS SECTION 805.4.1):
MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE ALLOWED: 75 FEET

PROPOSED MAXIMUM TRAVEL DISTANCE: 54'–0"

(SEE SHEET T11 FOR EGRESS AND LIFE SAFETY PLAN)

PLUMBING FIXTURE COUNT:

EXISTING BUILDING OCCUPANT LOAD AND NUMBER OF EXISTING PLUMBING FIXTURES REMAIN UNCHANGED.

BARRIER FREE REQUIREMENTS:
ALL DOORS AND DOOR HARDWARE SHALL COMPLY WITH SECTIONS 404.2.4, 404.2.6, 404.2.7, 404.2.8, 404.2.9 AND 404.2.10 OF THE ICC/ANSI A 117.1–2009 BARRIER FREE REQUIREMENTS OF THE ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES CODE FOR THE PHYSICALLY HANDICAPPED.

ENERGY EFFICIENCY:

SEE MECHANICAL DRAWINGS.

STRUCTURAL INTEGRITY:

STRUCTURAL BUILDING INTEGRITY IS UNCHANGED.

DESIGN LOADS:

THE DESIGN LOADS FOR THE BUILDING REMAIN UNCHANGED.

SEISMIC:

OCCUPANCY CATEGORY: II

SEISMIC RESPONSE COEFFICIENT: 0.0890

- IMPORTANCE FACTOR: 1.0
- SITE CLASS: D
- SPECTRAL RESPONSE ACCELERATION PARAMETERS
  - SS = 0.2745
  - S1 = 0.0724
  - SDS = 0.289
  - SD1 = 0.116
- SEISMIC DESIGN CATEGORY: B

MECHANICAL AND ELECTRICAL WORK IS EXEMPT FROM SEISMIC REQUIREMENTS.

SEISMIC IS NOT APPLICABLE FOR ARCHITECTURAL COMPONENTS BASED ON THE SCOPE OF WORK (NO PARAPETS).

SPECIAL INSPECTIONS:

SPECIAL INSPECTIONS ARE NOT APPLICABLE BASED ON PROJECT SCOPE OF WORK.

MARKING AND IDENTIFICATION (BCNYS 703.7):
PERMANENT IDENTIFICATION BY SIGN OR STENCILING NOT APPLICABLE BASED ON PROJECT SCOPE.

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

EI Associates
ARCHITECTURE ENGINEERING PLANNING
ARCHITECTS & ENGINEERS, PC
8 RIDGEDALE AVENUE•CEDAR KNOLLS NJ 07927•973.775.7777

JAMES P. HUNTER, AIA NY LICENSE NO. 043894–01 ARCHITECTURE

SCALE: AS NOTED	PROJECT: INSTRUMENTATION LABORATORY LOCKER ROOM EXPANSION, ORANGEBURG NEW YORK	EIA DRAWING NO.	T01
DRAWN BY: SFH 1APR21			
DESIGNED BY: SFH 1APR21			
CHECKED BY:			
APPROVED BY:	TITLE: CODE INFORMATION	CLIENT DWG. NO.	– – – – –
PROJECT MANAGER:		EIA PROJECT NO.	EG8577.03

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GENERAL NOTES:

1. ALL WORK PERFORMED SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AND REQUIREMENTS OF FEDERAL, STATE AND LOCAL GOVERNING AGENCIES HAVING JURISDICTION.

2. THE OWNER RESERVES THE RIGHT TO DESIGNATE THE ORDER IN WHICH THE CONTRACTOR SHALL PROCEED WITH ANY AND ALL PORTIONS OF THE WORK. WORK SHALL BE COORDINATED SO AS NOT TO INTERFERE WITH THE BUILDING OCCUPANTS AND ACTIVITIES. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE SHOWING HOW THE WORK WILL PROCEED DURING THE CONSTRUCTION PERIOD. THE CONSTRUCTION SCHEDULE SHALL INCLUDE ANY WORK REQUIRED TO BE PHASED. THIS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL BY THE OWNER AND THE OWNER'S REPRESENTATIVE.

3. THE CONTRACTOR AND THEIR TRADE SUBCONTRACTORS SHALL BE RESPONSIBLE FOR VISITING THE SITE AND FAMILIARIZING THEMSELVES WITH ALL EXISTING CONDITIONS PRIOR TO SUBMITTING THEIR BID.

4. THE CONTRACTOR SHALL COORDINATE ALL STAGING AREAS WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.

5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL WORK UNDER THIS CONTRACT TO ENSURE THE QUALITY AND TIMELY COMPLETION OF THE WORK / PROJECT. THE CONTRACTOR SHALL COORDINATE ALL AREAS OF WORK WITH OTHER TRADES INVOLVED WITH THE PROJECT.

6. GENERAL CONTRACTOR WILL OBTAIN AND PAY FOR ALL PERMITS AND PAY ALL FILING FEES.

7. THE CONTRACTOR SHALL PROPERLY PROTECT AND MAKE SAFE ADJACENT PROPERTY AS REQUIRED BY JOB CONDITIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ISOLATE ALL WORK AREAS AND CLEARLY DEFINE PATHS OF ACCESS TO THE WORK FOR THE WORKMEN IN ORDER TO INSURE MINIMIZATION OF DUST INFILTRATION TO OTHER AREAS OF THE BUILDING AND TO PREVENT DAMAGE TO FLOORS, WALLS AND CEILINGS OF PUBLIC AND/OR FREIGHT ACCESS AREAS. IF SUCH DAMAGE SHOULD OCCUR, CONTRACTOR SHALL CORRECT THE DAMAGE IMMEDIATELY AT THEIR OWN COST.

8. THE CONTRACTOR SHALL PROVIDE NOT LESS THAN ONE ORDINARY HAZARD FIRE EXTINGUISHER AT EACH STAIRWAY OR OTHER MEANS OF EGRESS ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE ACCUMULATED.

9. ALL PRECAUTIONS SHALL BE TAKEN TO PREVENT DIRT, NOISE, WATER AND DUST FROM ENTERING OTHER PARTS OF THE BUILDING DURING THE PROGRESS OF THE WORK.

10. EACH TRADE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE WORK SITE FREE FROM DEBRIS AND ACCUMULATED REFUSE, EACH TRADE SUBCONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR PROTECTING ALL AREAS FROM ENTRY BY UNAUTHORIZED PERSONS. SITE WILL BE LEFT BROOM CLEAN AT THE END OF EACH WORK DAY.

11. THE CONTRACTOR SHALL MAINTAIN FREE AND UNOBSTRUCTED ACCESS FROM WORK AREA AND ADJACENT SPACES TO THE OUTSIDE OF THE BUILDING AT ALL TIMES. IF THE PATHS OF EGRESS CANNOT BE MAINTAINED DURING CONSTRUCTION, THEN THE CONTRACTOR SHALL PROVIDE ALTERNATE MEANS OF EGRESS INCLUDING ERECTING BARRICADES, TEMPORARY SIGNS, ALTERNATE PATHS OF TRAVEL, ETC. IN ORDER TO MAINTAIN A SAFE WORK ENVIRONMENT FOR THE BUILDING OCCUPANTS AND VISITORS.

12. THE CONTRACTOR SHALL PROVIDE PROTECTION AT SIDEWALKS AND CURBS AROUND THE PREMISES SO THAT SAME MAY BE SAFELY USED BY THE PUBLIC AT ALL TIMES AND AS REQUIRED BY CODE AND ALL AGENCIES HAVING JURISDICTION.

13. THE CONTRACTOR SHALL PROVIDE BARRICADES AROUND WORK AREAS AS REQUIRED TO PREVENT BUILDING EMPLOYEES AND OTHER UNAUTHORIZED PERSONS FROM ENTERING THEREIN.

14. THE CONTRACTOR SHALL PROVIDE GUARDS, RAILS, BARRICADES, FENCES, SIDEWALK SHEDS, CATCH PLATFORMS, DECKING, NIGHT LIGHTING, AS REQUIRED BY CODE AND ALL AGENCIES HAVING JURISDICTION, AND AS REQUIRED TO PROVIDE ADEQUATE PROTECTION.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, DISTORTIONS, AND OFF ALIGNMENTS ACCORDING TO CODE AND STANDARDS OF GOOD CONSTRUCTION PRACTICE.

16. DRAWINGS SHALL NOT BE SCALED. USE DIMENSIONS ONLY. ALL DIMENSIONS AND CONDITIONS SHOWN AND ASSUMED ON THE DRAWINGS MUST BE VERIFIED AT THE SITE BY THE CONTRACTOR BEFORE ORDERING ANY MATERIAL OR START OF ANY WORK. WHERE DISCREPANCIES OCCUR AND/OR WHERE THERE ARE CONFLICTS OR OMISSIONS IN THE DRAWINGS, SPECIFICATIONS AND APPLICATIONS, CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY AND REFRAIN FROM STARTING AND COMPLETING SUCH WORK, OR DEPENDENT WORK, UNTIL DIRECTED BY THE OWNER'S REPRESENTATIVE TO PROCEED. NO CHANGE IN DRAWINGS OR SPECIFICATIONS IS PERMISSIBLE WITHOUT THE WRITTEN CONSENT OF THE OWNER'S REPRESENTATIVE. U.O.N. ALL DIMENSIONS ARE GIVEN TO THE FINISHED FACE OF THE STUD PARTITION OR MASONRY WALL. CLEAR AND MINIMUM DIMENSIONS ARE GIVEN TO FACE OF WALL OR FLOOR FINISHES.

17. DETAILS NOT SHOWN OR SPECIFIED HERE, BUT NECESSARY FOR PROPER AND ACCEPTABLE CONSTRUCTION, INSTALLATION OR OPERATION FOR ANY PART OF THE WORK SHALL BE INCLUDED IN THE WORK THE SAME AS IF HEREIN SPECIFIED OR INDICATED.

18. GENERAL CONTRACTOR SHALL PROVIDE AT LEAST ONE COPY OF EACH "T" SERIES DRAWING AND EACH DISCIPLINE'S "D" SERIES DRAWING TO THEIR SUBCONTRACTORS.

19. SUBCONTRACTORS SHALL SEE TITLE SHEETS (T) AND EACH DISCIPLINE'S DEMOLITION SHEETS (D) FOR ADDITIONAL INFORMATION.

20. SUBCONTRACTORS ARE RESPONSIBLE FOR OBTAINING FROM THE GENERAL CONTRACTOR ALL DRAWINGS AND SPECIFICATIONS PERTINENT TO THEIR SCOPE OF WORK TO PROPERLY BID AND CONSTRUCT THIS PROJECT.

21. SUBCONTRACTORS ARE RESPONSIBLE FOR REVIEWING ALL DRAWINGS FOR THIS PROJECT. A COMPLETE LIST OF DRAWINGS CAN BE FOUND ON SHEET T00.

22. THE INFORMATION SHOWN ON THE CONTRACT DRAWINGS IS BASED ON LIMITED EXISTING CONDITION BUILDING DRAWINGS, LIMITED FIELD SURVEY AND LIMITED VISUAL OBSERVATION. EACH TRADE SUBCONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING STRUCTURE/BUILDING INFORMATION IN FIELD PRIOR TO START OF THE CONTRACT WORK.

23. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

24. IF ANY HAZARDOUS MATERIALS ARE ENCOUNTERED, THE CONTRACTOR SHALL STOP WORK AND SHALL NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY.

25. THE CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING REQUIRED TO COMPLETE THE WORK OR TO MAKE ITS PARTS FIT TOGETHER PROPERLY WITHOUT COMPROMISING THE QUALITY OF THE WORK. MATERIALS USED FOR PATCHING & REPAIRING SHALL MATCH EXISTING MATERIALS, UNLESS NOTED OTHERWISE.

26. ALL EXISTING AND NEWLY CONSTRUCTED SURFACES SHALL BE PROTECTED FROM DEMOLITION/CONSTRUCTION ACTIVITIES. WHERE EXISTING FINISHES ARE CUT OR ALTERED, THEY SHALL BE MODIFIED IN SUCH A MANNER THAT AFTER ASSEMBLY THEY PROVIDE A COMPLETE CONTINUOUS FINISHED CONDITION.

27. IN GENERAL, NEW MATERIALS USED FOR REPAIR CONDITIONS SHALL MATCH SIMILAR ITEMS IN QUALITY, DETAIL, PROFILE AND FINISH AS THOSE ALREADY BUILT INTO THE WORK, UNLESS OTHERWISE NOTED.

28. THE CONTRACTOR SHALL LAY OUT THEIR OWN WORK AND SHALL COORDINATE WITH AND VERIFY ALL DIMENSIONS REQUIRED BY OTHER TRADE SUBCONTRACTORS.

29. ALL WORK SHALL BE INSTALLED SO THAT ALL PARTS REQUIRED ARE READILY ACCESSIBLE FOR INSPECTION, OPERATION, MAINTENANCE AND REPAIR.

30. THE WORDS "PROVIDE" OR "PROVIDE NEW" SHALL MEAN TO SUPPLY AND INSTALL NEW ITEM(S) AND/OR SYSTEM(S) AS INDICATED.

31. THE TERM "FINISH FLOOR" SHALL MEAN THE NORMAL FINISHED SURFACE OF THE FLOOR LEVEL.

32. THE CONTRACTOR SHALL PATCH AND REPAIR ALL SURFACES DUE TO, BUT NOT LIMITED TO, THE DEMOLITION. ALL PENETRATIONS SHALL BE SEALED, CAPPED AND LEVELED SMOOTH TO MATCH ADJACENT MATERIALS, UNLESS OTHERWISE NOTED.

33. WHERE MANUFACTURER'S NAMES AND PRODUCT NUMBERS ARE INDICATED ON THE DRAWINGS IT SHALL BE CONSTRUED TO MEAN THE ESTABLISHING OF QUALITY AND PERFORMANCE STANDARDS OF SUCH ITEMS. ALL PRODUCT SUBSTITUTIONS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE WITH A DEDUCT CHANGE ORDER FOR APPROVAL.

34. ALL PLUMBING, ELECTRICAL AND OTHER TRADE CONTRACT WORK REQUIRING THE USE OF LICENSED PERSONNEL SHALL BE PERFORMED BY LICENSED CONTRACTORS.

35. ALL INTERIOR WOOD BLOCKING SHALL BE CONSTRUCTED WITH FIRE RETARDANT TREATED AND PRESERVATIVE TREATED WOOD, UNLESS OTHERWISE NOTED.

36. CONTRACTOR SHALL FIELD EXAMINE ALL EXISTING BUILDING UTILITIES, WHICH ARE SHOWN ON DRAWINGS TO BE REUSED, SUCH AS PIPING, DUCTWORK, FLUE PIPES, ELECTRICAL CONNECTIONS, ETC. FOR CODE COMPLIANCE. CONTRACTOR SHALL REPAIR, REPLACE, OR PROVIDE NEW COMPONENTS AT ANY DAMAGED OR MISSING CODE REQUIRED COMPONENTS, INCLUDING BUT NOT LIMITED TO PIPE/DUCT SUPPORTS, FIRE DAMPERS, PIPING/DUCTWORK INSULATION, ETC. CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

37. IF THE CONTRACTOR VIOLATES OR IS NON-COMPLIANT WITH ANY CODES, LAWS, ORDINANCES OR REGULATIONS IN PERFORMING THE WORK, THEN THE CONTRACTOR SHALL, AT THEIR OWN EXPENSE, BEAR ALL PENALTIES AND COSTS AND SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND EI ASSOCIATES AGAINST ANY CLAIMS, DEMANDS, SUITS, DAMAGES, COSTS AND EXPENSES THAT MAY RESULT FROM SUCH VIOLATIONS.

38. EIA SHALL NOT BE RESPONSIBLE FOR AND SHALL NOT HAVE CONTROL OR CHARGE OF CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. EIA SHALL NOT BE RESPONSIBLE FOR CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THESE DESIGN DOCUMENTS OR FOR THE CONTRACTOR'S FAILURE TO PROVIDE SERVICES IN A PROFESSIONAL MANNER IN ACCORDANCE WITH STANDARDS OF GOOD PRACTICE. EIA SHALL NOT BE RESPONSIBLE FOR OR HAVE CHARGE OVER THE ACTS AND/OR OMISSIONS OF THE CONTRACTORS, SUBCONTRACTORS OR ANY OF THEIR AGENTS OR EMPLOYEES OR ANY PERSON PERFORMING THE WORK.

44. IN THE EVENT OF CONFLICTS OR INCONSISTENCIES WITHIN OR BETWEEN PARTS OF THE CONTRACT DOCUMENTS, OR BETWEEN THE CONTRACT DOCUMENTS AND APPLICABLE STANDARDS, CODES AND ORDINANCES, THE CONTRACTOR SHALL (1) PROVIDE THE BETTER QUALITY OR GREATER QUANTITY OF WORK, OR (2) COMPLY WITH THE MORE STRINGENT REQUIREMENT OR PROVIDE THE MORE EXPENSIVE METHOD, MATERIAL OR FINISH SYSTEM; EITHER OR BOTH IN ACCORDANCE WITH THE ARCHITECT'S INTERPRETATION.

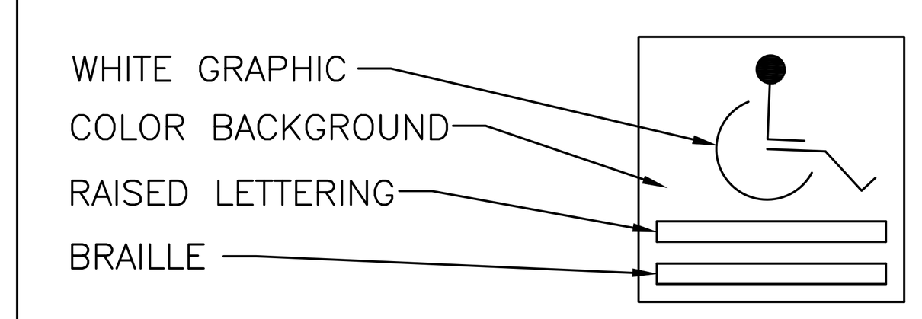
BARRIER FREE SIGNAGE SCHEDULE

GENERAL:
LOCATIONS: ACCESSIBILITY SIGNAGE SHALL BE PROVIDED BY OWNER WHERE EVER REQUIRED BY CODE.

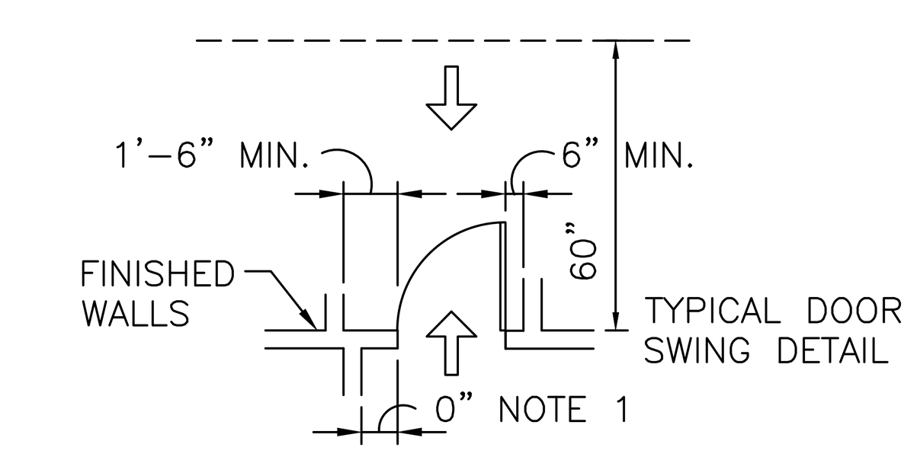
INTERIOR SIGNS: LOCATE ALONG SIDE OF THE DOOR ON THE LATCH SIDE AND SHALL BE MOUNTED 60 INCHES ABOVE FINISHED FLOOR TO THE CENTERLINE.

EXTERIOR SIGNS: LOCATE AT ENTRANCES AND WALKS TO DIRECT PEOPLE TO ACCESSIBLE ROUTES AND ENTRANCES. WALL MOUNT SIGNS SHALL BE MOUNTED 60" ABOVE FINISHED WALK LEVEL TO CENTER LINE OF SIGN.

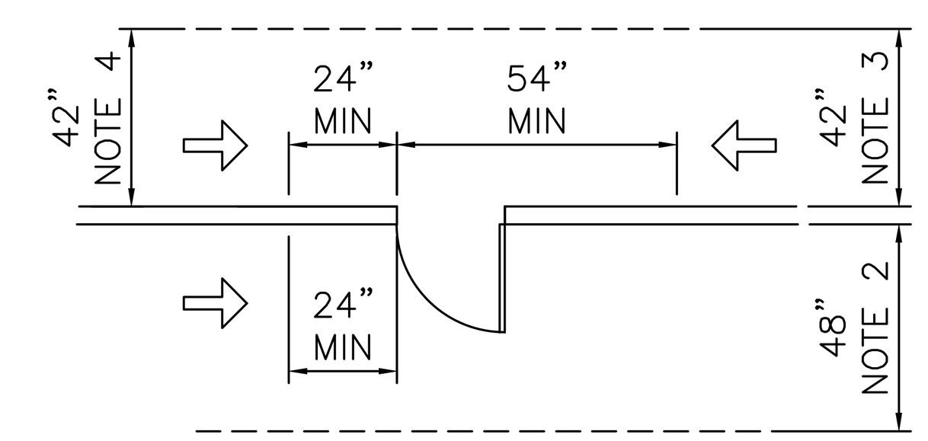
TYPICAL DESIGNATION FOR BARRIER FREE SIGNAGE LOCATION.



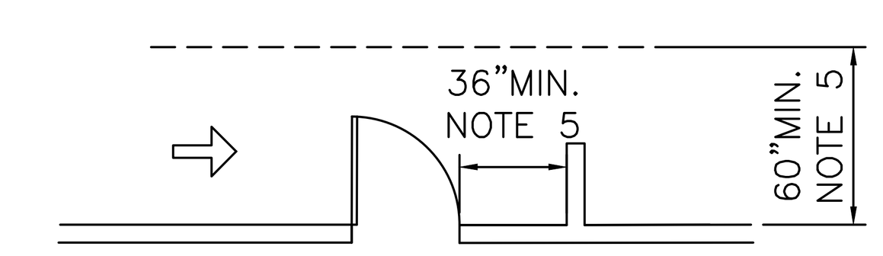
BARRIER FREE DOOR CLEARANCES



NOTE 1: 12" WHERE BOTH CLOSER AND LATCH ARE PROVIDED

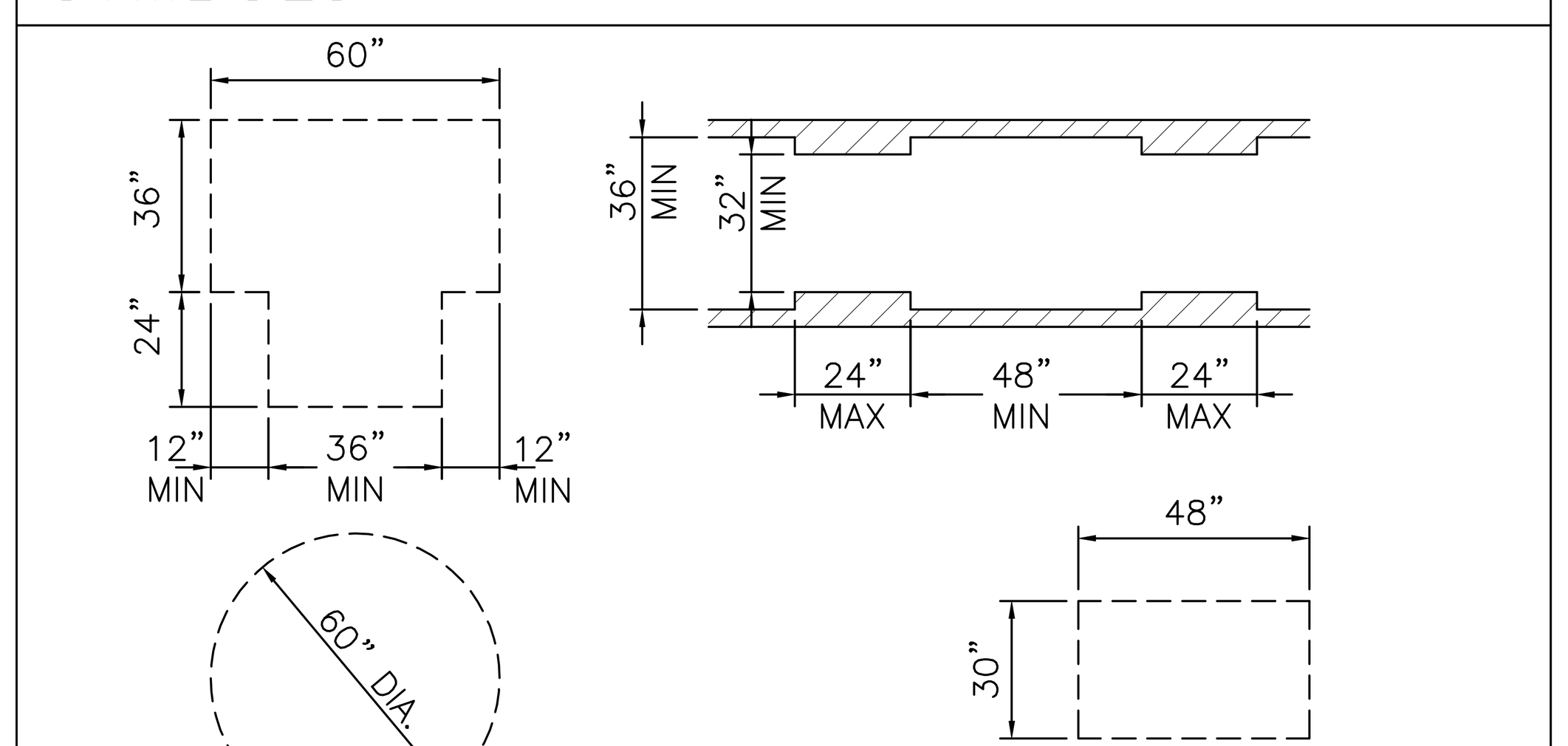


NOTE 2: 54" WHERE CLOSER IS PROVIDED
NOTE 3: 48" WHERE BOTH CLOSER AND LATCH ARE PROVIDED
NOTE 4: 48" WHERE CLOSER IS PROVIDED



NOTE 5: CLEARANCE @ DOOR LEVER MUST BE 42" MIN. WHERE HALL WIDTH IS < 60" BUT GREATER THAN 54". APPROACH DOES NOT MEET CLEARANCE REQUIREMENT IF HALL IS < THAN 54".

BARRIER FREE TURNING SPACES & SYMBOLS



TYPICAL WHEELCHAIR CLEAR FLOOR SPACE

REFERENCE SYMBOL LEGEND

1 / A	EXISTING COLUMN GRID/COLUMN DESIGNATIONS
MECH. ROOM 120	ROOM NAME AND ROOM NUMBER DESIGNATIONS
101	DOOR NUMBER DESIGNATION – SEE DOOR AND FRAME SCHEDULES FOR DETAILS
	EXISTING WALL, PARTITION OR ITEM TO BE REMOVED
	EXISTING WALL, PARTITION OR ITEM TO REMAIN
	NEW METAL STUD PARTITION
X	PARTITION TYPE DESIGNATION
X	GLAZING DESIGNATION V = VISION PANEL
1 / A30	DETAIL DESIGNATION
A / A40	SECTION DESIGNATION
A B C D / A00	INTERIOR ELEVATION DESIGNATION A00 INDICATES DRAWING NUMBER
X	KEYED NOTE DESIGNATION
DX	KEYED DEMOLITION NOTE DESIGNATION
CX	CASEWORK NOTE DESIGNATION
LX	LOCKER ROOM KEYED NOTE DESIGNATION
FX	KEYED FURNISHING/EQUIPMENT NOTE DESIGNATION

DOOR SYMBOL LEGEND

101	NEW DOOR & FRAME
	EXISTING DOOR & FRAME TO REMAIN
	EXISTING DOOR & FRAME TO BE REMOVED

GLAZING SYMBOL LEGEND

X	NEW GLAZING & FRAME
	EXISTING GLAZING & FRAME TO REMAIN
	EXISTING GLAZING & FRAME TO BE REMOVED

ABBREVIATIONS

A/C	AIR CONDITIONING	CLR. OPG.	CLEAR OPENING	ENCL.	ENCLOSURE	H.B.	HOSE BIBB
ACOUS.	ACOUSTICAL	C.M.U.	CONCRETE MASONRY UNIT	ENGR.	ENGINEER(ING)	H.C.	HOLLOW CORE
A.D.	AREA DRAIN	CLOS.	CLOSET	ENTR.	ENTRANCE	H.P.	HIGH POINT
ADJ.	ADJUSTABLE	C.O.	CLEANOUT	EQ.	EQUAL	HD.	HEAD
A.F.F.	ABOVE FINISH FLOOR	COL.	COLUMN	EQUIP.	EQUIPMENT	HDWR.	HARDWARE
AGGR.	AGGREGATE	CONC.	CONCRETE	E.W.	EACH WAY	HDWD.	HARDWOOD
ALUM.	ALUMINUM	CONN.	CONNECT OR CONNECTION	E.W.C.	ELECTRIC WATER COOLER	HT.	HEIGHT
ALT.	ALTERNATE	CONST.	CONSTRUCTION	EXIST.	EXISTING	H.M.	HOLLOW METAL
A.P.	ACCESS PANEL	CONT.	CONTINUOUS	EXP. JT.	EXPANSION JOINT	HORIZ.	HORIZONTAL
APPROX.	APPROXIMATE	CONTR.	CONTRACTOR	EXT.	EXTERIOR	HTG.	HEATING
ARCH.	ARCHITECT OR ARCHITECTURAL	CORR.	CORRIDOR	F.A.	FIRE ALARM	HVAC	HEATING, VENTILATING & AIR CONDITIONING
AUTO.	AUTOMATIC	CORRUG.	CORRUGATED	F.A.I.	FRESH AIR INTAKE		
AVG.	AVERAGE	CPT.	CARPET	FD	FLOOR DRAIN	H.W.	HOT WATER
BCT.	BABY CHANGING TABLE	DEMO.	DEMOLITION	FDN.	FOUNDATION	H.W.S.	HANDWASH SINK
BD.	BOARD	C.W.	COLD WATER	F.E.	FIRE EXTINGUISHER	I.D.	INSIDE DIAMETER
BDRM.	BEDROOM	DEPT.	DEPARTMENT	F.FL.	FINISH FLOOR	I.F.	IN THE FIELD
BF	BARRIER FREE	D.F.	DRINKING FOUNTAIN	FIN.	FINISH(ED)	IN.	INCH(ES)
BITUM.	BITUMINOUS	DIA. OR ø	DIAMETER	FIXT.	FIXTURE	INCL.	INCLUDE OR INCLUDING
BLDG.	BUILDING	DIAG.	DIAGONAL	FL.	FLOOR	INFO.	INFORMATION
BLK.	BLOCKING	DIM.	DIMENSION	FLUOR.	FLUORESCENT	INSUL.	INSULATION
BM.	BEAM	DIV.	DIVISION	F.O.	FRAMED OPENING	INT.	INTERIOR
B.O.	BY OWNER	DN.	DOWN	FT.	FOOT OR FEET	INCAN.	INCANDESCENT
BOT.	BOTTOM	DR.	DOOR	FTG.	FOOTING	I.T.	INFORMATION TECHNOLOGY
BSMT.	BASEMENT	D.S.	DOWN SPOUT	FURN.	FURNITURE	JAN.	JANITOR
[	CHANNEL	D.S.P.	DRY STANDPIPE	FURR.	FURRING	J.B.	JUNCTION BOX
CAB.	CABINET	DWG.	DRAWING	FUT.	FUTURE	J.C.	JANITOR'S CLOSET
C.B.	CATCH BASIN	DWR.	DRAWER	F.WC.	FABRIC WALLCOVERING	JT.	JOINT
CEM.	CEMENT	EA.	EACH	GA.	GAUGE, GAGE	K.O.	KNOCKOUT
CHBD.	CHALKBOARD	E.D.	EQUIPMENT DRAIN	GALV.	GALVANIZED	L	ANGLE
C.J.	CONTROL JOINT	E.E.W.	EMERGENCY EYE WASH	G.B.	GRAB BAR	LAB.	LABORATORY
℄	CENTER LINE	EL.	ELEVATION	G.C.	GENERAL CONTRACTOR	LAC.	LACQUER
C.T.	CERAMIC TILE	ELEC.	ELECTRICAL	GL.	GLASS OR GLAZED	LAM.	LAMINATE
CLG.	CEILING	ELEV.	ELEVATOR	GND.	GROUND	LAV.	LAVATORY
		EMER.	EMERGENCY	GYP. BD.	GYPSUM BOARD		
				GWB	GYPSUM WALL BOARD		

L.L.	LIVE LOAD	PH.	PHONE	S.D.	SOAP DISPENSER	T.O.S.	TOP OF SLAB OR TOP OF STEEL
L.P.	LOW POINT	PL.	PLATE	SCHED.	SCHEDULE	T.O.C.	TOP OF CONCRETE
LTG.	LIGHTING	P.L.	PROPERTY LINE	SCL.	SELECTED	T.O.P.	TOP OF PAVEMENT
LVR.	LOUVER(S)	PL. LAM.	PLASTIC LAMINATE	SECT.	SECTION	T.O.S.	TOP OF STEEL
MAINT.	MAINTENANCE	PLYWD.	PLYWOOD	SHT.	SHEET	T.O.W.	TOP OF WALL
MATL.	MATERIAL	PR.	PAIR	SHWR.	SHOWER	T.P.H.	TOILET PAPER HOLDER
MAX.	MAXIMUM	PREFAB.	PREFABRICATED	SIM.	SIMILAR	TV	TELEVISION
MECH.	MECHANICAL	PROJ.	PROJECT	SPEC.	SPECIFICATION(S)	TYP.	TYPICAL
MEZZ.	MEZZANINE	PROD.	PRODUCTION	SPKR.	SPEAKER	U.L.	UNDERWRITERS LABORATORY
MFG.	MANUFACTURING	PROP.	PROPERTY	SQ.	SQUARE	UNFIN.	UNFINISH
MFR.	MANUFACTURER	PSF	POUNDS PER SQUARE FOOT	sf OR ф	SQUARE FEET	UTIL.	UTILITY
MGR.	MANAGER	PSI	POUND PER SQUARE INCH	S.S.	STAINLESS STEEL	UR.	URINAL
MH.	MANHOLE	PT.	POINT	STA.	STATION	U.O.N.	UNLESS OTHERWISE NOTED
MIN.	MINIMUM	P.T.	PRESSURE TREATED	S.T.C.	SOUND TRANSMISSION COEFFICIENT	V.B.	VAPOR BARRIER
MISC.	MISCELLANEOUS	PTD.	PAINTED	STD.	STANDARD	V.B.C.	VINYL BASE COVED
M.O.	MASONRY OPENING	PVC	POLYVINYL CHLORIDE	STL.	STEEL	V.B.S.	VINYL BASE STRAIGHT
MTD.	MOUNTED	Q.T.	QUARRY TILE	STOR.	STORAGE	V.C.T.	VINYL COMPOSITE TILE
MTL.	METAL	R.	RISER	STRUCT.	STRUCTURAL	VERT.	VERTICAL
MUL.	MULLION	R/A	RETURN AIR	SUSP.	SUSPEND(ED)	VEST.	VESTIBULE
N.I.C.	NOT IN CONTACT	RAD.	RADIUS	SV.	SERVICE SINK	V.I.F.	VERIFY IN FIELD
NO.	NUMBER	R.B.	RUBBER BASE	SYM.	SYMMETRICAL	VOL.	VOLUME
NOM.	NOMINAL	R.D.	ROOF DRAIN	SYS.	SYSTEM	V.WC.	VINYL WALLCOVERING
N/A	NOT APPLICABLE	REBAR.	REINFORCING BAR	T.	TREAD	W/	WITH
NS	NON-SPRINKLERED	REF.	REFERENCE	TAN.	TANGENT	W.C.	WATER CLOSET
N.T.S.	NOT TO SCALE	REFR.	REFRIGERATOR	T.B.	TOWEL BAR	WC.	WALLCOVERING
OA.	OVERALL	RFG.	ROOFING	T&B	TOP AND BOTTOM	WD.	WOOD
O.C.	ON CENTER	REINF.	REINFORCED OR REINFORCING	T.C.	TOP OF CURB	W.GL.	WIRE GLASS
O.D.	OUTSIDE DIAMETER	RESIL.	RESILIENT	T.D.	TRENCH DRAIN	W.H.	WATER HEATER
OFF.	OFFICE	REQD.	REQUIRED	TECH.	TECHNICAL	WLD.	WELDED
OPG.	OPENING	RM.	ROOM	TEL.	TELEPHONE	W/O	WITHOUT
OPP.	OPPOSITE	R.O.	ROUGH OPENING	TEMP.	TEMPERED	W.P.	WATERPROOF(ING)
OVHD.	OVERHEAD	REV.	REVISION	T&G	TONGUE AND GROOVE	WT.	WEIGHT
OZ.	OUNCE	SAN.	SANITARY	THK.	THICK(NESS)	W.W.F.	WELDED WIRE FABRIC
PART. BD.	PARTICLE BOARD	S.C.	SOLID CORE	THS.	THRESHOLD	YD.	YARD
PC.	PRECAST						

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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SCALE AS NOTED
DRAWN BY: SFH 5APR21
DESIGNED BY: SFH 5APR21
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

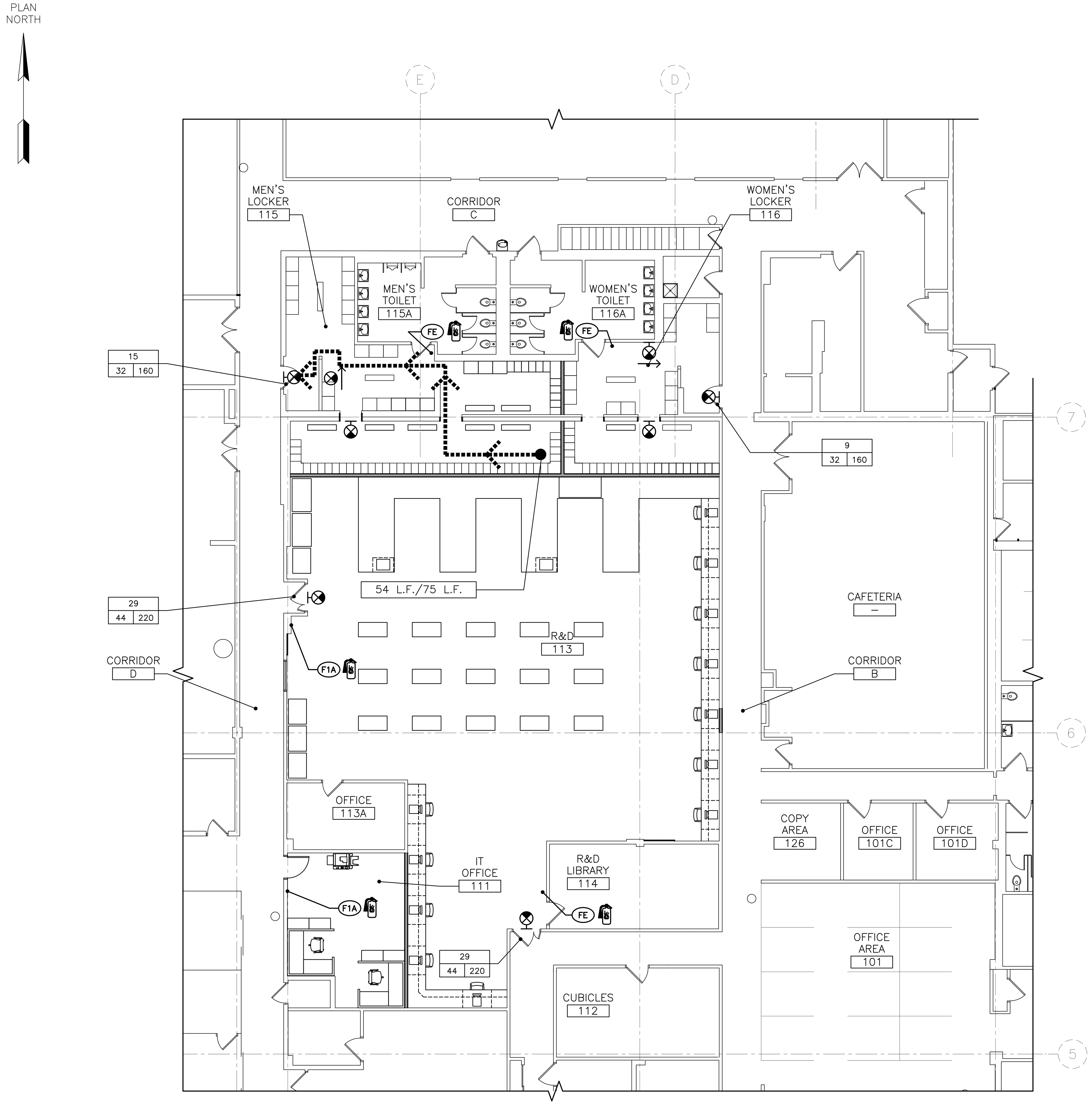
TITLE
GENERAL NOTES, LEGENDS & ABBREVIATIONS

EIA DRAWING NO.
T02

CLIENT DWG. NO.
– – – – –

EIA PROJECT NO.
EG8577.03

(XX)



FIRST FLOOR PLAN 1/T11
1/8"=1'-0"

GENERAL NOTES:

1. SEE T02 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #19, 20 & 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.

EGRESS LEGEND

SEE EGRESS NOTES THIS SHEET.

MAXIMUM COMMON PATH OF TRAVEL DISTANCE

XXX L.F./XXX L.F. — PROPOSED/ALLOWED MAX. TRAVEL DISTANCE IN LINEAR FEET.

EGRESS CAPACITIES AND OCCUPANT LOADS:

AOL: (MAXIMUM) ALLOWABLE OCCUPANT LOAD OF ROOM OR AREA BEING SERVED BY THE EXIT (SEE SHEET T01 FOR CALCULATIONS)

W: CLEAR WIDTH OF EXIT DOOR (IN INCHES)

EC: EGRESS CAPACITY OF EXIT DOOR, CALCULATED PER BCNYS SECTION 1005.2.3 (SEE SHEET T01 FOR CALCULATION)

EXIT SIGN LEGEND

SEE EXIT SIGN NOTES THIS SHEET

- CEILING MOUNTED EXIT SIGN
- WALL MOUNTED EXIT SIGN
- EXIT SIGN WITH DIRECTIONAL ARROW

GENERAL LEGEND

E – EXISTING
NO NOMENCLATURE – NEW

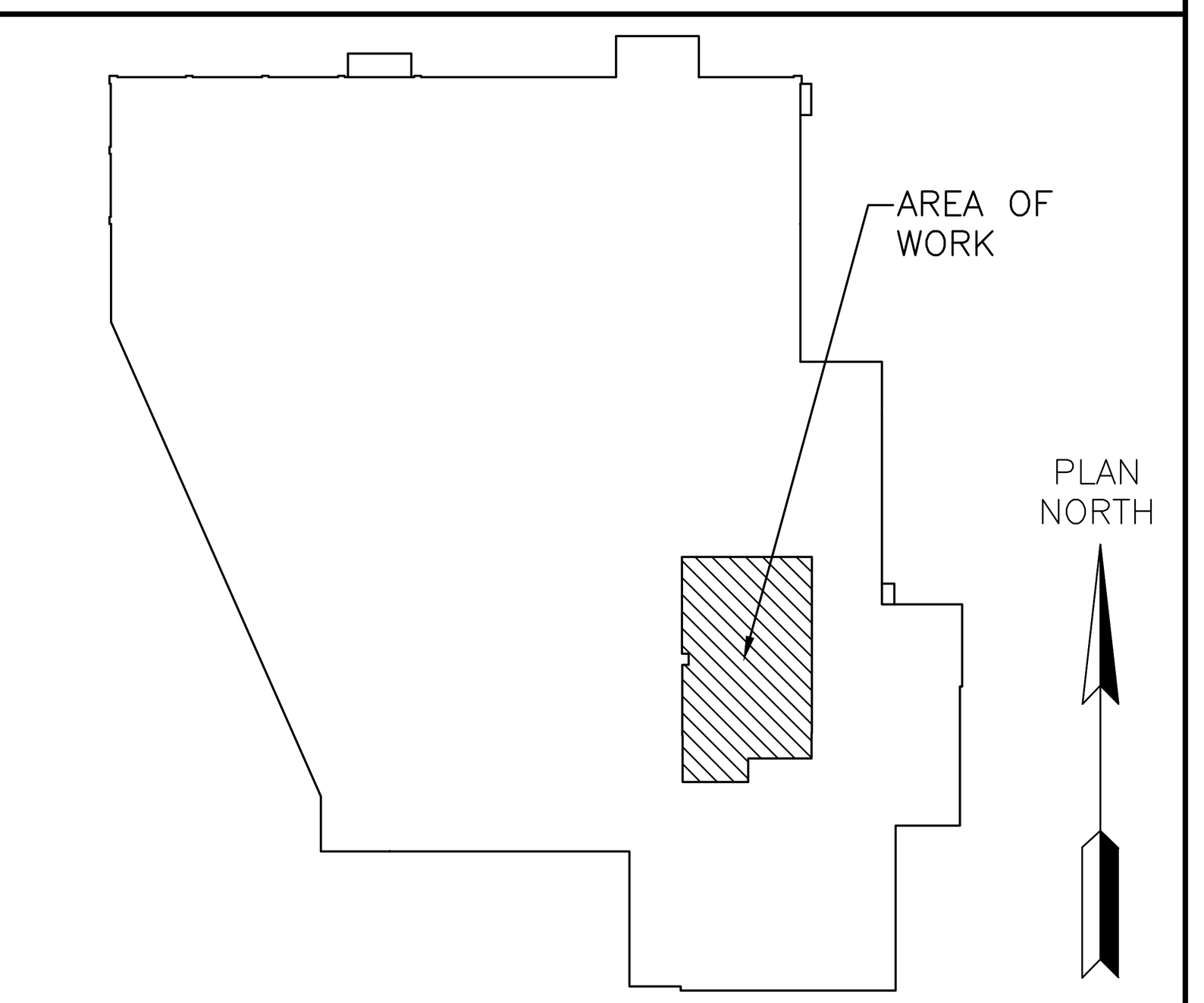
FIRE EXTINGUISHER LEGEND

SEE FIRE EXTINGUISHER NOTES THIS SHEET.

"#" LEGEND:
1 – ABC PORTABLE 10 LB. FIRE EXTINGUISHER

"X" LEGEND:
A – SURFACE MOUNTED EXTINGUISHER

"E" LEGEND:
E – EXISTING EXTINGUISHER TO REMAIN



KEY PLAN – FIRST FLOOR
NTS

EMERGENCY LIGHTING NOTES:

1. SEE ELECTRICAL DRAWINGS FOR INFORMATION REGARDING EMERGENCY LIGHTING (NOT SHOWN THIS PLAN).

EXIT SIGN NOTES:

1. REFER TO EXIT SIGN LEGEND FOR SYMBOL DESIGNATION.
2. U.O.N., ALL EXIT SIGNS SHALL BE WIRED TO THE EXISTING EXIT SIGN PANEL.
3. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL EXIT SIGN INFORMATION.

FIRE ALARM NOTES:

1. SEE ELECTRICAL DRAWINGS FOR FIRE ALARM INFORMATION (NOT SHOWN THIS PLAN).

EGRESS NOTES:

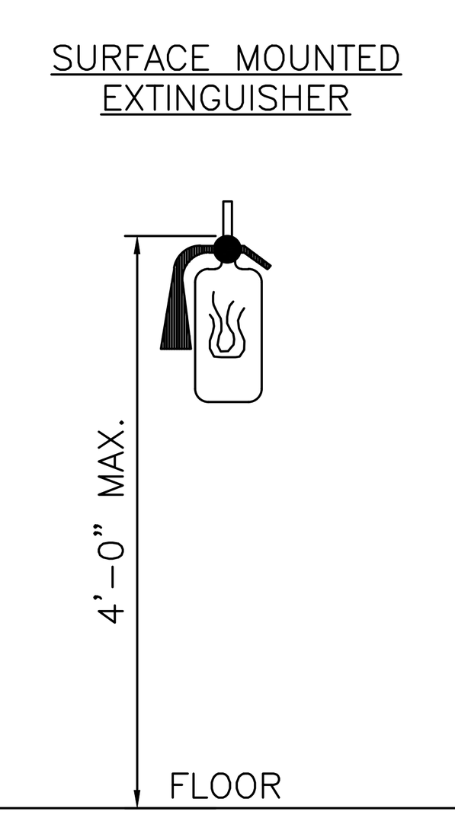
1. ALL EXISTING FIRE EXTINGUISHERS, EXIT SIGNS, EMERGENCY LIGHTS, FIRE PULLS AND EMERGENCY ALARM SYSTEMS COMPONENTS OUTSIDE THE WORK AREAS SHALL REMAIN.
2. SEE ELECTRICAL DRAWINGS FOR POWER REQUIREMENTS.

FIRE EXTINGUISHER SCHEDULE

MARK	NOMENCLATURE	MARK	MOUNTING PROVISIONS REQUIRED
F1	MULTI PURPOSE DRY CHEMICAL "ABC" TYPE, NOM. CAPACITY 10 LBS., STEEL CYLINDER W/ GAUGE	A	STEEL WALL BRACKET WITH WHITE BAKED ENAMEL FINISH

FIRE EXTINGUISHER NOTES:

1. CONTRACTOR SHALL MOUNT FIRE EXTINGUISHER PER DETAIL 2/T11.
2. CONTRACTOR SHALL PROVIDE CONSPICUOUS SIGNAGE LOCATING FIRE EXTINGUISHERS PER NFPA 10 SECTIONS 1-6.6 SIGNAGE REQUIREMENTS.
   A. DIRECTIONAL ARROWS: PROVIDE DIRECTIONAL ARROWS TO INDICATE THE LOCATION OF EXTINGUISHERS IN LARGE ROOMS AND IN LOCATIONS WHERE VISUAL OBSTRUCTIONS CANNOT BE COMPLETELY AVOIDED.
   B. CONSPICUOUS MARKINGS: THE LOCATION OF EXTINGUISHERS MOUNTED IN CABINETS OR WALL RECESSES WILL BE MADE CONSPICUOUS BY MARKING THE CABINET OR WALL RECESS IN A CONTRASTING COLOR WHICH WILL DISTINGUISH IT FROM THE NORMAL DECOR.
3. SEE FIRE EXTINGUISHER SCHEDULE & DETAIL #2 ON THIS SHEET FOR ADDITIONAL INFORMATION.
4. SEE FIRE EXTINGUISHER LEGEND FOR SYMBOL DESIGNATION.



NOTE: SEE FIRE EXTINGUISHER NOTES.

TYPICAL F. E. MOUNTING HEIGHTS 2/T11
NTS

0 4' 8' 16' 32'
1/8" = 1'-0"

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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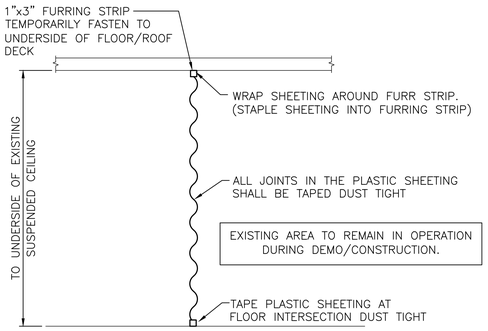
JAMES P. HUNTER, AIA NY LICENSE NO. 043894-01 ARCHITECTURE

SCALE: AS NOTED
PROJECT: INSTRUMENTATION LABORATORY LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK
TITLE: FIRST FLOOR EGRESS & LIFE SAFETY PLAN
EIA DRAWING NO. T11
CLIENT DWG. NO. – – – – –
EIA PROJECT NO. EG8577.03

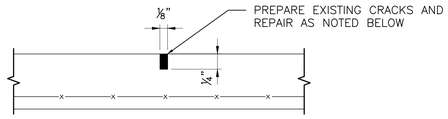


T1 TEMP FR PLASTIC PROTECTION

NTS

TEMPORARY PROTECTION NOTES:

1. THE CONTRACTOR SHALL PROVIDE TEMPORARY FR PLASTIC DUST PROTECTION WHERE INDICATED OR REQUIRED BEFORE THE START OF DEMOLITION AND ALTERATION WORK. CONTRACTOR SHALL REMOVE SAME WHEN DIRECTED BY OWNER'S REPRESENTATIVE, AS INDICATED ON THE PHASING PLAN OR OTHERWISE AT THE COMPLETION OF THE PROJECT.
2. THE TOP EDGE OF SHEETING SHALL BE WRAPPED SEVERAL TIMES AROUND A 1x3 FIRE RETARDANT WOOD FURRING STRIP AND FASTENED TO THE UNDERSIDE OF THE BUILDING ROOF DECK OR FLOOR DECK WITH APPROVED FASTENERS. THE BOTTOM EDGE OF THE SHEETING SHALL BE WRAPPED SEVERAL TIMES AROUND A 1"X3" FIRE RETARDANT TREATED WOOD FURRING STRIP PROVIDED AT THE FLOOR AS A BASE. (THE BASE SHALL NOT BE FASTENED TO THE FLOORING.) ALL PLASTIC SHEETING SHALL BE FIRE RETARDANT TYPE AS MANUFACTURED BY REBCO, GRIFFOLYN OR APPROVED EQUAL.
3. ALL JOINTS IN PLASTIC SHEETING INCLUDING INTERSECTION AT FLOOR, SHALL BE TAPED DUST TIGHT WITH 2" WIDE DUCT TAPE. CUT NEATLY AROUND EXISTING DUCTWORK, CONDUIT AND OTHER PENETRATIONS. THE COMPLETED DUST PROTECTION TEMPORARY PARTITION SHALL BE COMPLETELY DUSTPROOF. CONTRACTOR SHALL REPAIR TEMPORARY DUST PROTECTION AS REQUIRED TO MAINTAIN THE DUSTPROOF INTEGRITY.
4. ALL FINISHED SURFACES INCLUDING CEILING, SHALL BE PATCHED AND RESTORED TO MATCH EXISTING FINISH AFTER REMOVAL OF TEMPORARY PARTITIONS.



TYPICAL SLAB CRACK REPAIR DETAIL

NTS

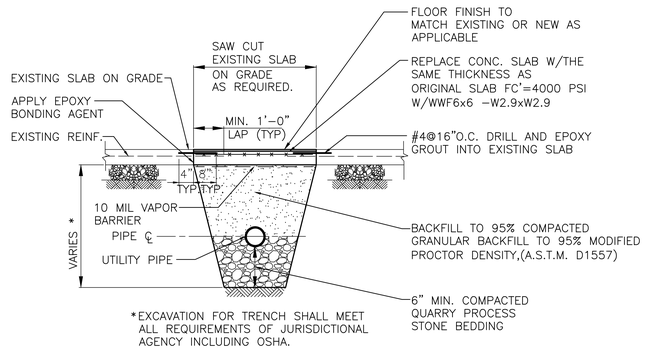
1 AD00

CRACKS LESS THAN 1/16" WIDE NOTES:

1. CLEAN EXISTING RANDOM CRACKS. REMOVE DIRT AND ALL LOOSE MATERIAL.
2. CRACKS LESS THAN 1/16" WIDE SHALL BE CLEANED AND SEALED OR CAULKED.

CRACK GREATER THAN 1/16" WIDE REPAIR NOTES:

1. CRACKS 1/16" WIDE OR GREATER SHALL BE REPAIRED.
2. PREPARE EXISTING CRACK BY SAW CUTTING EXISTING CONCRETE AT CRACK LOCATION WITH A ⅛" WIDE x ¼" DEEP CUT.
3. FILL CUT IN SLAB WITH A TWO COMPONENT, FLEXIBLE EPOXY JOINT FILLER. USE ONE OF THE FOLLOWING:
   - EUCO 700 BY EUCLID CHEMICAL CO.
   - SIKADUR 51 NS OR SL BY SIKA CORP.
   - EPOXY #200 BY CHARGAR CORP.
   - OR APPROVED EQUAL.
4. COORDINATE WITH OWNER'S REPRESENTATIVE THE EXTENT OF CRACK REPAIRS – SEE FLOOR REPAIR AND PREPARATION NOTES, SHEET A75.



*EXCAVATION FOR TRENCH SHALL MEET ALL REQUIREMENTS OF JURISDICTIONAL AGENCY INCLUDING OSHA.

TYP. UTILITY PIPE TRENCH/SLAB REPAIR DETAIL

N.T.S.

2 AD00

SLAB TRENCHING DETAIL NOTES:

1. CONTRACTOR SHALL IN–FILL EXISTING CONCRETE SLABS WHERE EVER SLABS ARE CUT OUT OR TRENCHED TO ACCOMMODATE DEMOLITION AND/OR NEW WORK. SEE PLUMBING, MECHANICAL, AND ELECTRICAL AND LOW VOLTAGE DRAWINGS (AS APPLICABLE) FOR ADDITIONAL INFORMATION.
2. CONTRACTOR SHALL INSTALL NEW PIPING AND/OR CONDUIT UNDER EXISTING SLABS PER THIS DETAIL SEE PLUMBING, MECHANICAL, AND ELECTRICAL AND LOW VOLTAGE DRAWINGS (AS APPLICABLE) FOR ADDITIONAL INFORMATION.

GENERAL NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #19, 20 & 21 ON SHEET T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.

TYPICAL DEMOLITION NOTES:

1. ALL EXISTING PARTITIONS TO REMAIN WITHIN THE WORK AREAS SHALL BE PATCHED AND REPAIRED AS REQUIRED TO RECEIVE NEW FINISHES WHERE SCHEDULED TO RECEIVE NEW FINISHES ON SHEET A75.
2. CONTRACTOR SHALL REMOVE ALL EXTRANEOUS FLOOR, CEILING & WALL MOUNTED ITEMS. COORDINATE EXTENT OF REMOVAL WITH OWNER'S REPRESENTATIVE.
3. WHERE EXISTING CARPET AND PADDING SHALL BE REMOVED, PATCH FLOOR AS REQUIRED TO RECEIVE NEW FLOORING. SEE A75 FOR EXTENT OF NEW FLOOR FINISH.
4. WHERE EXISTING VCT FLOORING SHALL BE REMOVED, PATCH FLOOR AS REQUIRED TO RECEIVE NEW FLOORING. SEE A75 FOR EXTENT OF NEW FLOOR FINISH.
5. CONTRACTOR SHALL REMOVE EXISTING WALL BASE AT ALL PARTITIONS IN SPACES WHERE EXISTING FLOORING IS BEING REMOVED OR WHERE NEW BASE SHALL BE PROVIDED. SEE A75 FOR EXTENT OF NEW FLOOR FINISH.
6. ALL CRACKS IN EXISTING FLOOR SLAB SHALL BE REPAIRED PER DETAIL 1/AD00.
9. ROOM NAMES/USES NOTED ON DEMOLITION PLAN ARE EXISTING/CURRENT USES. PROPOSED NAMES/USES ARE NOTED ON FLOOR PLAN.
10. PROVIDE LINTELS FOR ALL NEW OPENINGS CREATED IN EXISTING MASONRY WALLS & PARTITIONS PER SCHEDULES ON SHEET A60.

STRUCTURAL DEMOLITION NOTES:

1. CUT AND REMOVE EXISTING WALL CONSTRUCTION AS REQUIRED TO INSTALL LINTELS (SEE TYPICAL DEMOLITION NOTE 10 AND GENERAL DEMOLITION NOTE 15 THIS SHEET).
2. CUT EXISTING ROOF DECKING AND INSTALL NEW FRAMING WHERE REQUIRED FOR NEW DUCT PENETRATIONS – SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

ELECTRICAL DEMOLITION NOTES:

1. REMOVE ALL EXISTING OUTLETS AND RECEPTACLES AT EXISTING WALLS AND PARTITIONS TO BE REMOVED.
2. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL ELECTRICAL DEMOLITION WORK.

OTHER TRADE DEMOLITION NOTES:

1. WHERE APPLICABLE, SEE MECHANICAL, PLUMBING, FIRE–PROTECTION, AND FIRE–ALARM DRAWINGS FOR ADDITIONAL DEMOLITION WORK ASSOCIATED WITH THOSE TRADES.

GENERAL DEMOLITION NOTES

1. THE CONTRACTOR SHALL COMPLETE ALL DEMOLITION AS NOTED. THE CONTRACTOR SHALL VERIFY THE EXTENT & LOCATION OF THE SELECTIVE DEMOLITION AS SHOWN & AS REQUIRED. THE CONTRACTOR SHALL CAREFULLY IDENTIFY THE LIMITS OF DEMOLITION AND IDENTIFY ITEMS TO BE REMOVED & ITEMS TO BE LEFT IN PLACE INTACT.
2. DEMOLITION WORK SHALL BE PHASED TO ALLOW PROPER EGRESS IN CASE OF FIRE OR HAZARD.
3. THE CONTRACTOR SHALL MAINTAIN ALL EXITS ACCESSIBLE TO OTHER BUILDING OCCUPANTS DURING THE FULL EXTENT OF DEMOLITION.
4. THE BUILDING WILL REMAIN OPEN DURING DEMOLITION. PROVIDE PROTECTIVE MEASURES TO ASSURE THE SAFE PASSAGE TO ALL ACTIVE AREAS OF THE BUILDING. ENSURE THAT DEMOLITION ACTIVITIES DO NOT INTERFERE WITH THE BUILDING'S NORMAL OPERATIONS.
5. DEMOLITION WORK SHALL BE SEQUENCED IN ACCORDANCE WITH THE CONSTRUCTION MILESTONE SCHEDULE AND COORDINATED WITH THE CONSTRUCTION MANAGER AND THE OWNER'S REPRESENTATIVE.
6. THE CONTRACTOR SHALL COORDINATE ALL DEMOLITION WITH ALL TRADE SUBCONTRACTORS, LOW VOLTAGE VENDORS AND FURNITURE VENDORS.
7. THE CONTRACTOR AND ALL TRADE SUBCONTRACTORS SHALL INSPECT THE SITE AND DEMOLITION AREAS PRIOR TO BEGINNING WORK.
8. THE CONTRACTOR SHALL DOCUMENT THE CONDITION OF ALL AREAS OF WORK AS PART OF THE DEMOLITION PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER'S REPRESENTATIVE OF ANY POTENTIAL PROBLEMS THAT MAY INTERFERE WITH WORK PRIOR TO STARTING.
9. DURING AND AFTER THE DEMOLITION PHASE, THE CONTRACTOR AND ALL TRADE SUBCONTRACTORS SHALL PROTECT ALL AREAS OF EXISTING ADJACENT STRUCTURES AND PROTECT ALL EXISTING CONSTRUCTION FROM DAMAGE DURING DEMOLITION. THE CONTRACTOR SHALL PROMPTLY RESTORE DAMAGED ITEMS TO THEIR ORIGINAL CONDITION AT NO COST TO THE OWNER.
10. ALL DEMOLITION AREAS SHALL BE ISOLATED FROM REMAINING PORTIONS OF THE BUILDING WITH TEMPORARY DUSTPROOF AND/OR WEATHER PROOF PARTITIONS AND SHALL BE EXHAUSTED TO OBTAIN A NEGATIVE PRESSURE WITHIN THE SPACE TO PREVENT THE ACCUMULATION OF DUST AND POLLUTION INSIDE THE BUILDING. SEE TEMPORARY PARTITION TYPE T1 THIS DRAWING.
11. THE CONTRACTOR AND ALL TRADE SUBCONTRACTORS SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT TO PERFORM A COMPLETE JOB. THE CONTRACTOR SHALL SUBMIT A DEMOLITION PLAN TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK. THE PLAN SHALL INCLUDE A SCHEDULE OF DEMOLITION ACTIVITIES, DETAILED COORDINATION OF UTILITIES SHUTOFFS (IF REQUIRED), DRAWINGS OF PROPOSED DUST–PROOF AND/OR WEATHERPROOF PARTITIONS, LOCATION PLANS & DETAILS, AND MATERIAL STAGING AREAS.
12. THE CONTRACTOR SHALL CONSPICUOUSLY LOCATE SIGNAGE TO INDICATE THE LOCATION OF DEMOLITION AREAS. THE SIGNAGE WILL CONSIST OF 2" TALL BLACK LETTERING ON AN ORANGE BACKGROUND AND WILL READ AS FOLLOWS:
    "KEEP OUT–CONSTRUCTION AREA–CONTRACTOR EMPLOYEES ONLY"
13. THE CONTRACTOR AND EACH OF THEIR TRADE SUBCONTRACTORS SHALL DISPOSE OF ALL DEMOLITION DEBRIS IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL ORDINANCES. THE SITE SHALL BE SWEPT AND LEFT CLEAN OF ALL DEBRIS AT THE END OF EACH WORK DAY. THE CONTRACTOR SHALL COORDINATE THE LOCATION AND TRANSPORTATION ACTIVITIES OF DUMPSTERS AND CONTAINERS WITH THE OWNER'S REPRESENTATIVE.
14. THE CONTRACTOR SHALL MAINTAIN ALL UTILITIES IN SERVICE DURING DEMOLITION UNTIL SUCH TIME AS TEMPORARY SHUTOFFS ARE REQUIRED. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE 72 HOURS IN ADVANCE OF ANY SHUT–OFFS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR OBTAINING PERMITS, CERTIFICATES, ETC. FROM THE UTILITY COMPANY FOR ALL TEMPORARY SHUT–OFFS. UTILITY SERVICE SHALL BE RESTORED TO THE BUILDING AS SOON AS SAFELY POSSIBLE.
15. PRIOR TO REMOVING ANY MASONRY WALLS OR BEARING PARTITIONS, THE CONTRACTOR AND EACH OF THEIR TRADE SUBCONTRACTORS SHALL PROVIDE TEMPORARY SHORING AS REQUIRED. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY UNFORESEEN STRUCTURAL ELEMENTS.
16. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF BEAMS, LINTELS, ETC. IN WALLS PRIOR TO DEMOLITION.
17. WHERE EXISTING FLOOR ITEMS ARE REMOVED, THE CONTRACTOR SHALL FILL THE VOID WITH CONCRETE, UNLESS OTHERWISE NOTED. ALIGN TOP OF CONCRETE WITH TOP OF EXISTING SLAB.
18. WHERE EXISTING FLOORING IS REMOVED, THE SUBFLOOR SHALL BE REPAIRED AND PATCHED LEVEL TO THE ADJACENT AREAS.
19. ALL PARTITIONS SCHEDULED TO BE REMOVED SHALL BE COMPLETELY REMOVED BY THE CONTRACTOR UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PATCH EXISTING PARTITIONS TO REMAIN TO MATCH EXISTING ADJACENT CONSTRUCTION.
20. THE CONTRACTOR AND EACH OF THEIR TRADE SUBCONTRACTORS SHALL PROVIDE OPENINGS FOR ALL NEW PENETRATIONS AS REQUIRED THROUGH EXISTING PARTITIONS, FLOORS, AND CEILINGS (COORDINATE WITH ALL TRADES – PLUMBING, MECHANICAL, ELECTRICAL, ETC. AND CONTRACT DRAWINGS.)
21. THE CONTRACTOR AND EACH OF THEIR TRADE SUBCONTRACTORS SHALL COORDINATE ALL CEILING DEMOLITION WITH NEW REFLECTED CEILING PLAN. PATCH AND REPAIR EXISTING CEILINGS TO REMAIN AS REQUIRED DUE TO, BUT NOT LIMITED TO, DEMOLITION.
22. ALL ELECTRICAL DEMOLITION SHALL BE COMPLETED BY A LICENSED ELECTRICIAN.
23. ALL PLUMBING DEMOLITION SHALL BE COMPLETED BY A LICENSED PLUMBER INCLUDING CAPPING OF WATER AND WASTE PIPING.
24. THE CONTRACTOR SHALL SAWCUT EXISTING SLABS AS REQUIRED FOR ALL DEMOLITION AND NEW WORK AND SHALL COORDINATE WITH OTHER TRADE DRAWINGS (I.E. ELECTRICAL, MECHANICAL, PLUMBING, ETC.) FOR REQUIRED LAYOUT CUT LINES PRIOR TO THE START OF WORK. IN–FILL CUT/TRENCHED SLABS PER DETAIL 2/AD00.
25. EXISTING CONDUITS RUNNING THROUGH RENOVATED AREA(S) AND SERVING EXISTING EQUIPMENT LOCATED OUTSIDE THE RENOVATED AREA SHALL REMAIN OR (IF IN CONFLICT WITH NEW INSTALLATION WORK) SHALL BE REROUTED WITH NECESSARY RECONNECTIONS TO MAINTAIN ELECTRICAL CONTINUITY OF THE CIRCUITRY AND GROUNDING WIRING FOR SAID EQUIPMENT.
26. ALL "EXISTING TO REMAIN" OR "EXISTING TO BE RELOCATED" ITEMS SHALL BE PROTECTED.
27. RELOCATED EQUIPMENT, DEVICES, ETC. SHALL BE REMOVED AND REINSTALLED IN THEIR ENTIRETY, AND SHALL BE FULLY FUNCTIONAL AFTER RELOCATION IS COMPLETE.
28. WHERE EXISTING BUILT–IN FURNITURE, WALL–MOUNTED ITEMS, CASEWORK OR EQUIPMENT IS REMOVED, CONTRACTOR SHALL ASSUME THE WALLS BEHIND SAME AND FLOORS UNDER SAME ARE UNFINISHED AND SHALL PATCH AND PROVIDE FINISH WORK AT SAME TO MATCH FINISHES AT ADJACENT SURFACES.

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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PROJECT
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LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
GENERAL & TYPICAL DEMOLITION NOTES

EIA DRAWING NO.
AD00

CLIENT DWG. NO.
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EIA PROJECT NO.
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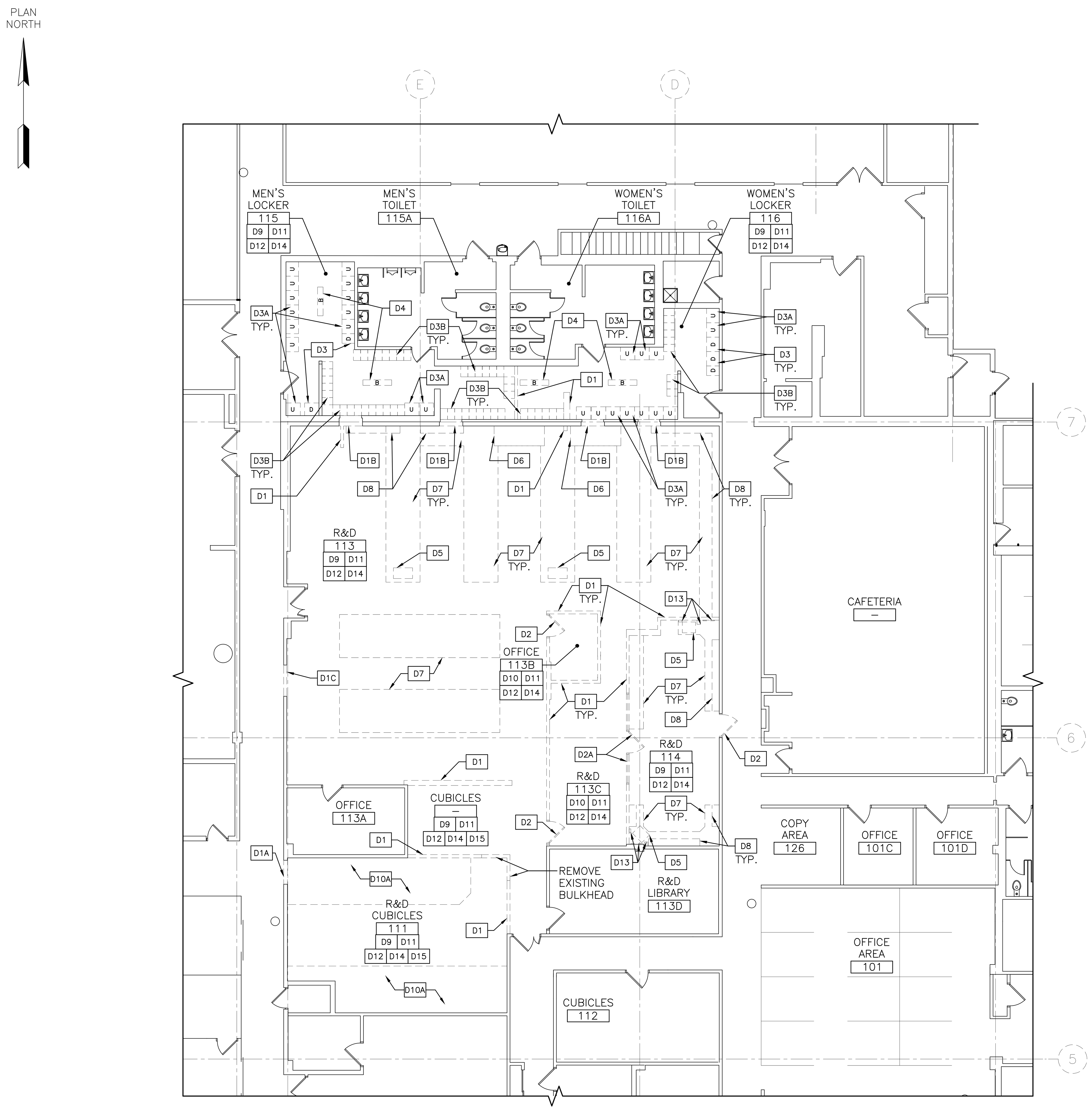


FIRST FLOOR DEMOLITION PLAN (1/AD11)
1/8"=1'-0"

KEYED DEMOLITION PLAN NOTES:

- D1 REMOVE EXISTING PARTITION IN ITS ENTIRETY, FULL HEIGHT U.O.N.
- D1A REMOVE PORTION OF EXISTING PARTITION TO THE EXTENT REQUIRED TO INSTALL NEW DOOR AND FRAME.
- D1B REMOVE PORTION OF EXISTING PARTITION TO THE EXTENT REQUIRED TO INSTALL NEW TRIMMED OPENING.
- D1C REMOVE PORTION OF EXISTING PARTITION TO THE EXTENT REQUIRED TO INSTALL NEW VISION PANEL AND FRAME.
- D2 REMOVE EXISTING DOOR, FRAME AND HARDWARE.
- D2A REMOVE EXISTING DOOR, TRANSOM, SIDELIGHTS, FRAME AND HARDWARE.
- D3 CAREFULLY REMOVE EXISTING DIRTY LAUNDRY BIN AND STORE IN LOCATION(S) AS DIRECTED BY OWNER. SEE LEGEND THIS SHEET FOR LOCKER UNIT TYPES.
- D3A CAREFULLY REMOVE ALL EXISTING UNIFORM LOCKER UNITS AND STORE IN LOCATION(S) AS DIRECTED BY OWNER. SEE LEGEND THIS SHEET FOR LOCKER UNIT TYPES.
- D3B CAREFULLY REMOVE ALL EXISTING EMPLOYEE LOCKER UNITS AND STORE IN LOCATION(S) AS DIRECTED BY OWNER. SEE LEGEND THIS SHEET FOR LOCKER UNIT TYPES.
- D4 CAREFULLY REMOVE EXISTING LOCKER ROOM BENCH AND STORE IN LOCATION AS DIRECTED BY OWNER.
- D5 DISCONNECT AND REMOVE EXISTING SINK IN ITS ENTIRETY. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- D6 DISCONNECT AND CAREFULLY REMOVE EXISTING FUME HOOD IN ITS ENTIRETY. STORE AS DIRECTED BY OWNER. (REINSTALL 1 HOOD AS SELECTED BY OWNER AT LOCATION SHOWN ON PLAN 1/A17).
- D7 REMOVE EXISTING BASE CABINETS AND COUNTERTOP IN THEIR ENTIRETY.
- D7A EXISTING BASE CABINETS AND COUNTERTOP TO REMAIN.
- D8 REMOVE EXISTING WALL MOUNTED CABINETS.
- D9 REMOVE EXISTING VCT FLOORING THROUGHOUT ROOM (NOT SHOWN), U.O.N..
- D10 REMOVE EXISTING CARPET FLOORING THROUGHOUT ROOM (NOT SHOWN).
- D10A REMOVE EXISTING CARPET FLOORING TO THE EXTENT INDICATED ON PLAN.
- D11 REMOVE EXISTING RESILIENT WALL BASE THROUGHOUT ROOM (NOT SHOWN).
- D12 REMOVE EXISTING SUSPENDED ACOUSTICAL CEILING THROUGHOUT ROOM, INCLUDING, BUT NOT NECESSARILY LIMITED TO, CEILING PANELS, GRID SYSTEM, ALL LIGHTING AND HVAC DIFFUSERS ETC (NOT SHOWN).
- D13 REMOVE EXISTING WALL MOUNTED DRYING RACK, PAPER TOWEL DISPENSER, SOAP DISPENSER AND ANY SIMILAR ITEMS AT SINK.
- D14 ALL EXISTING MISC. LOOSE FURNITURE AND EQUIPMENT WITHIN ROOM OR SPACE (NOT SHOWN), SHALL BE REMOVED BY OWNER, EXCEPT FOR CUBICLE FURNITURE WHERE APPLICABLE (SEE KEYED DEMOLITION NOTE #15 BELOW).
- D15 CAREFULLY REMOVE EXISTING CUBICLE FURNITURE (INCLUDING CHAIRS) AND STORE OR DISPOSE OF SAME AS DIRECTED OWNER. IF STORED OWNER SHALL DETERMINE LOCATION(S) FOR SAME.

GENERAL NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #19, 20 AND 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. SEE SHEET AD00 FOR GENERAL, TYPICAL, ELECTRICAL, STRUCTURAL AND OTHER TRADE DEMOLITION NOTES.

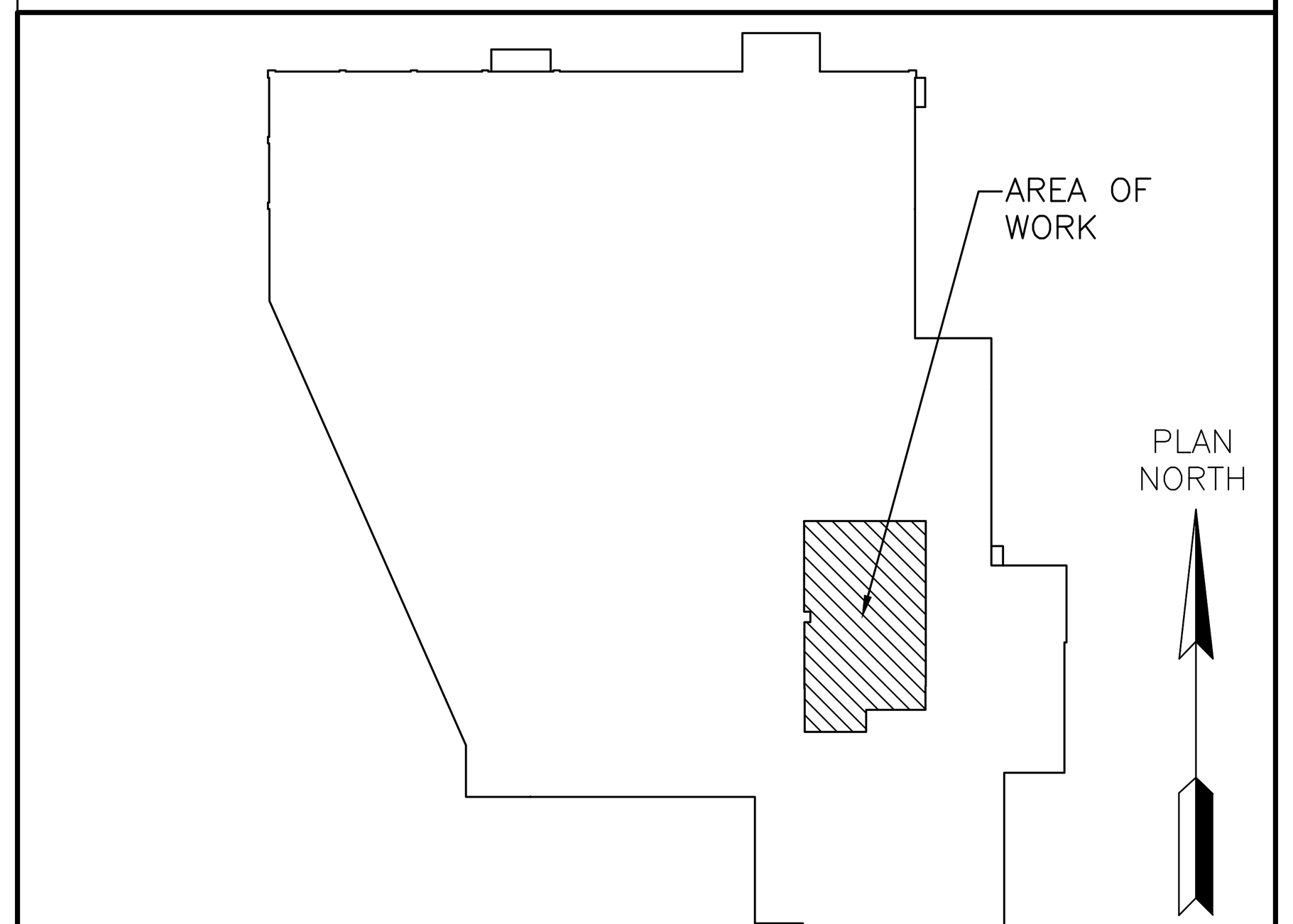
LOCKER ROOM EQUIPMENT DEMOLITION LEGEND:

NOTE: REFER TO LOCKER ROOM EQUIPMENT DEMOLITION NOTES AND KEYED DEMOLITION PLAN NOTES THIS SHEET FOR ADDITIONAL INFORMATION REGARDING THE ITEMS LISTED BELOW.

- U — EXISTING UNIFORM LOCKER UNIT TO BE REMOVED.
- D — EXISTING DIRTY LAUNDRY BIN TO BE REMOVED.
- EXISTING EMPLOYEE LOCKER UNIT TO BE REMOVED.
- B — EXISTING BENCH TO BE REMOVED.

LOCKER ROOM EQUIPMENT DEMOLITION NOTES:

1) CONTRACTOR TO DOCUMENT ANY DAMAGE TO EXISTING LOCKER ROOM EQUIPMENT AND NOTIFY OWNER OF SAME PRIOR TO REMOVING ANY EQUIPMENT.
2) ALL REMOVED LOCKER ROOM EQUIPMENT TO BE STORED ON SITE UNTIL REINSTALLED. COORDINATE WITH OWNER FOR STORAGE LOCATION(S).
3) ALL LOCKER ROOM EQUIPMENT TO BE REINSTALLED AT LOCATIONS INDICATED ON PLAN 1/A71 (UPON THE COMPLETION OF LOCKER ROOM RENOVATION WORK).



KEY PLAN – FIRST FLOOR
NTS

0 4' 8' 16' 32'
1/8" = 1'-0"

REV	REVISION DESCRIPTION	BY	DATE
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PROJECT MANAGER:

PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE: FIRST FLOOR DEMOLITION PLAN

EIA DRAWING NO.: AD11
CLIENT DWG. NO.: – – – –
EIA PROJECT NO.: EG8577.03

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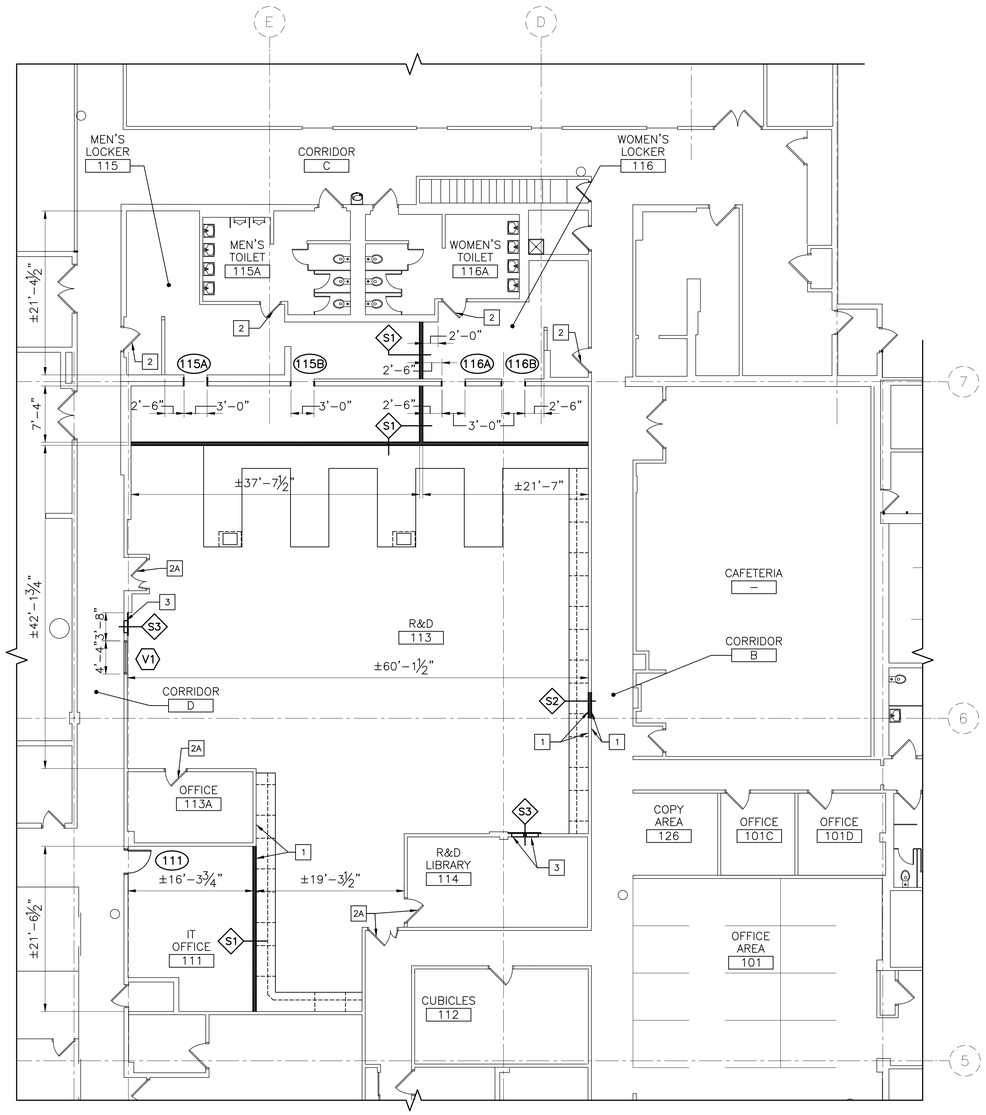
PLAN NORTH



FIRST FLOOR PLAN

1/8"=1'-0" (1 / A11)

GENERAL NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #19, 20 AND 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. SEE GENERAL NOTE #16 ON SHEET T02 FOR DIMENSION INFORMATION.
4. SEE SHEET A60 FOR DOOR SCHEDULE.
5. SEE SHEET A71 FOR FURNITURE AND EQUIPMENT PLAN.
6. SEE SHEET A75 FOR ROOM FINISH SCHEDULE.

FLOOR PLAN NOTES:

1. PATCH AND REPAIR ALL EXISTING PARTITIONS IN AREAS OF WORK AS REQUIRED FOR NEW FINISH. SEE FINISH SCHEDULE ON SHEET A75 FOR PROPOSED FINISH SELECTION.
2. IN ALL CASES WHERE EXISTING PARTITIONS ARE TO BE INFILLED DUE TO REMOVAL OF AN EXISTING DOOR, WINDOW, ETC. THEN, THE INFILL MATERIAL SHALL MATCH THE EXISTING PARTITION TYPE AND THE FACE OF THE PARTITION (ON BOTH FACES) SHALL ALIGN WITH THE FACE OF THE EXISTING PARTITION (ON BOTH FACES).
3. SEE PARTITION TYPE DETAILS & NOTES, SHEET A75, FOR PARTITION BRACING INFORMATION.
4. ALL WOOD BLOCKING SHALL BE CONSTRUCTED OF FIRE RETARDANT TREATED WOOD.

KEYED FLOOR PLAN NOTES:

[1] ALIGN FINISHED FACE OF NEW PARTITION WITH EXISTING AS SHOWN.

[2] REFINISH EXISTING DOOR AND FRAME AT LOCKER ROOM SIDE.

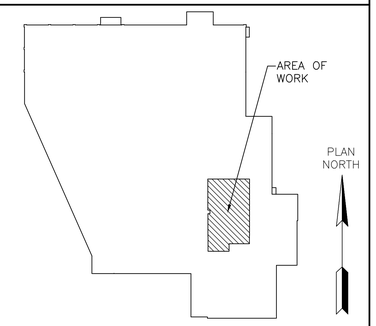
[2A] REFINISH EXISTING DOOR AND FRAME AT R&D SIDE.

[3] EXISTING ELECTRICAL PANEL RELOCATED. FURR OUT EXISTING PARTITION AT SAME PER TYPE S3 PARTITION IF/AS REQUIRED TO ACCOMMODATE THICKNESS OF PANEL.

0 6" 1' 2"
1½" = 1'-0"

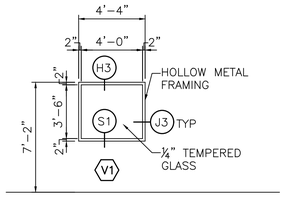
0 2' 4' 8' 16'
¼" = 1'-0"

0 4' 8' 16' 32'
⅛" = 1'-0"



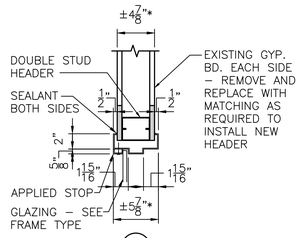
KEY PLAN – FIRST FLOOR

NTS



INTERIOR VISION PANEL TYPES

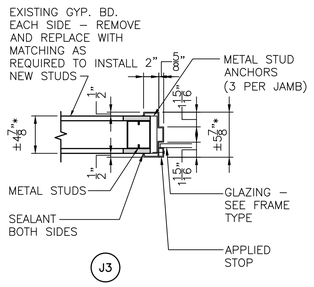
1/4" = 1'-0"



* VERIFY EXISTING PARTITION THICKNESS IN FIELD

VISION PANEL HEAD DETAIL

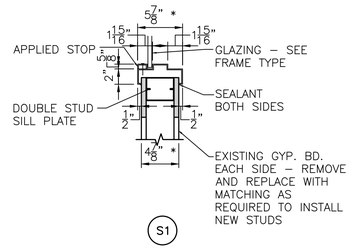
(SEE 1/A60) 1 1/2" = 1'-0"



* VERIFY EXISTING PARTITION THICKNESS IN FIELD

VISION PANEL JAMB DETAIL

(SEE 1/A60) 1 1/2" = 1'-0"



* VERIFY EXISTING PARTITION THICKNESS IN FIELD

VISION PANEL SILL DETAIL

1 1/2" = 1'-0"

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APPROVED BY:
PROJECT MANAGER:

PROJECT
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LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
FIRST FLOOR PLAN

EIA DRAWING NO.
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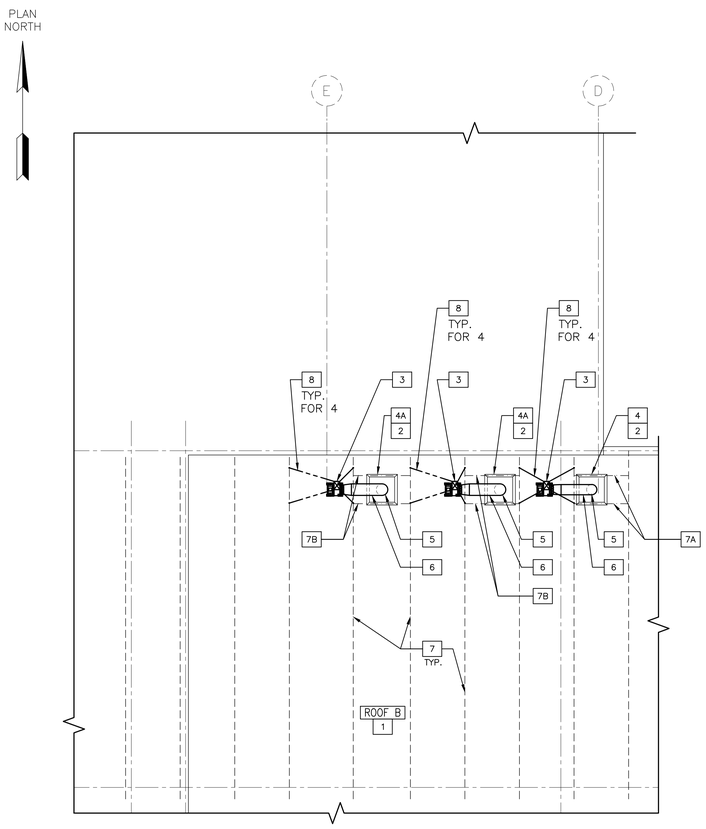
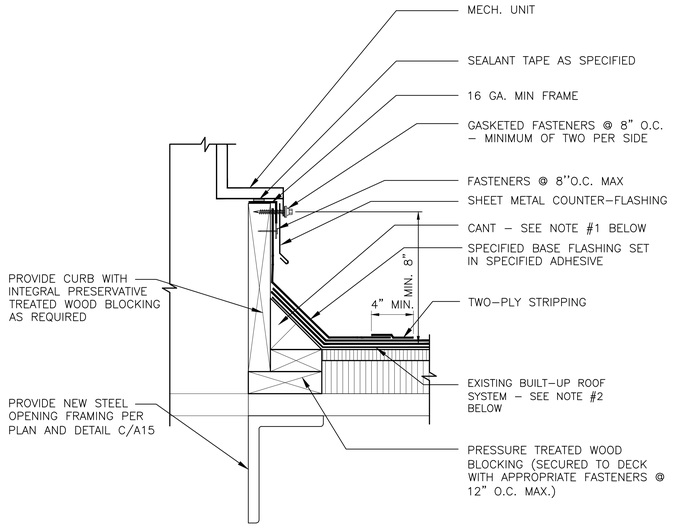


ROOF PLAN
1/8"=1'-0" (1 / A15)

ROOF DEMOLITION WORK NOTES:

1. REMOVE EXISTING EXHAUST FANS, DUCTS AND RAILS AS INDICATED ON MECHANICAL DEMOLITION PLAN (NOT SHOWN THIS PLAN).
2. REMOVE EXISTING DUCT OPENING FRAMING AS INDICATED IN KEYED ROOF PLAN NOTE #7B.
2. CUT EXISTING ROOF DECKING AS REQUIRED TO SUIT NEW DUCTS (SEE KEYED ROOF PLAN NOTE #5 AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION).

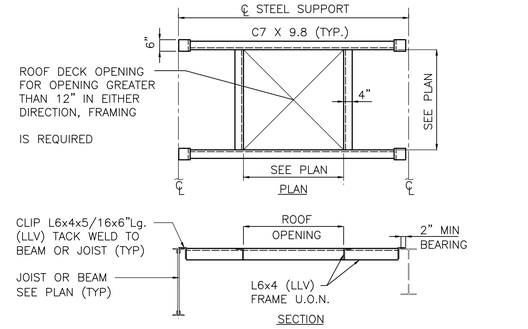


TYPICAL CURB DETAIL
NTS (A / A15)

NOTES:
1. NAIL CANT TO BLOCKING, 2 ROWS STAGGERED, EACH ROW 12" O.C.
2. REMOVE AND REPLACE EXISTING ROOFING SYSTEM (INCLUDING INSULATION) AS REQUIRED TO INSTALL NEW BLOCKING AND CURB. TIE NEW ROOFING INTO EXISTING PER ROOF MFR'S STANDARD TIE–IN DETAIL (NOT SHOWN).

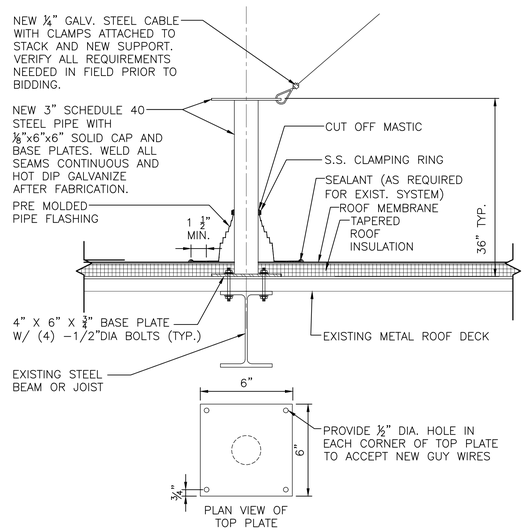
EQUIPMENT CURB DETAIL
NTS (B / A15)

NOTES:
1. NAIL CANT TO BLOCKING, 2 ROWS STAGGERED, EACH ROW 12" O.C.
2. REMOVE AND REPLACE EXISTING ROOFING SYSTEM (INCLUDING INSULATION) AS REQUIRED TO INSTALL NEW BLOCKING AND CURB. TIE NEW ROOFING INTO EXISTING PER ROOF MFR'S STANDARD TIE–IN DETAIL (NOT SHOWN).



TYP. FRAMING FOR ROOF OPENINGS AT METAL DECK ROOF
NTS (C / A15)

NOTES:
1. FOR OPENINGS UP TO 12" x 12" SIZE, FOR STACKS, CONDUITS PLUMBING, VENTS ETC. REINFORCE OPENING BY ADDING 16 GAGE PLATE ON TOP. PLATE SIZE SHALL BE MINIMUM OPENING SIZE + 8" ON ALL FOUR SIDES. FASTEN PLATE TO DECK AS PER SDI RECOMMENDATIONS.
2. AT EQUIPMENT LOCATION, REGARDLESS OF OPENING SIZE, PROVIDE STEEL FRAME AS SHOWN.



GUY WIRE DETAIL
NTS (D / A15)

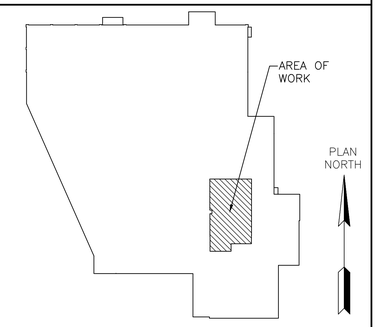
GENERAL NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL, DEMOLITION AND ROOFING NOTES AND ABBREVIATIONS.
2. SEE GENERAL NOTES #19, 20 AND 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. SEE SHEET T02 FOR GENERAL ROOFING NOTES.
4. SEE GENERAL ROOFING NOTE #14A THIS SHEET FOR ROOF WARRANTY INFORMATION.
5. REFER TO THE MECHANICAL ROOF PLAN DRAWINGS FOR ROOF RELATED WORK AT EQUIPMENT.

KEYED ROOF PLAN NOTES:

1. EXISTING BUILT–UP ROOFING SYSTEM TO REMAIN – MODIFY AS INDICATED TO ACCOMMODATE NEW WORK. NOTE: EXISTING ROOFS ARE UNDER WARRANTY – ALL WORK AT EXISTING ROOFS SHALL COMPLY WITH GENERAL ROOFING NOTE #14A THIS SHEET.
2. PROVIDE CRICKET (NOT SHOWN) AT HIGH SIDE OF NEW DUCT CURB – SEE GENERAL ROOF NOTE #10 THIS SHEET.
3. RAIL MOUNTED EXHAUST FAN – FLASH RAIL PER DETAIL B/A15. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
4. NEW DUCT CURB – FLASH PER DETAIL A/A15. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
4A. NEW DUCT CURB TO REPLACE EXISTING CURB AT SAME LOCATION (NOT SHOWN) – FLASH PER DETAIL A/A15. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
5. NEW (CURB MOUNTED) DUCT THROUGH ROOF CUT EXISTING ROOF DECK AS REQUIRED TO SUIT SAME – SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
6. HORIZONTAL DUCT – SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
7. EXISTING 28LH05 ROOF JOIST TO REMAIN (BELOW) – VIF.
7A. NEW STEEL OPENING FRAMING PER DETAIL C/A15.
7B. REPLACE EXISTING OPENING FRAMING (PER DETAIL C/A15) WHERE REQUIRED TO SUIT INCREASED DUCT PENETRATION SIZE (VIF).
8. NEW GUY WIRE – PROVIDE NEW STEEL PIPE AND FLASH PER DETAIL D/A15 – SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

0 4' 8' 16' 32'
⅛" = 1'–0"



KEY PLAN – FIRST FLOOR
NTS

GENERAL ROOFING NOTES

1. PROVIDE FLASHINGS AS INDICATED AND/OR REQUIRED FOR WATER TIGHT INSTALLATION. ALL FLASHING AND PENETRATIONS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE ROOFING MANUFACTURER'S INSTRUCTIONS AND DETAILS.
2. DETAILS SHOWN ARE TYPICAL DETAILS OF CONDITIONS THAT MAY BE ENCOUNTERED ON THIS PROJECT. HOWEVER THEY DO NOT NECESSARILY REPRESENT ALL CONDITIONS. SPECIAL OR ADDITIONAL DETAILS THAT MAY BE REQUIRED FOR A COMPLETE INSTALLATION SHALL BE PROVIDED BY THE CONTRACTOR WHETHER OR NOT SHOWN ON THE DRAWINGS. ALL TERMINATION DETAILS, CURBS, PIPE PENETRATIONS, AND SPECIAL DETAILS SHALL BE IN STRICT ACCORDANCE WITH THE ROOFING MANUFACTURER'S STANDARD DETAILS AND INSTRUCTIONS. SUBMIT SHOP DRAWINGS OF ALL DETAILS INCLUDING SPECIAL AND / OR ADDITIONAL DETAILS.
3. UNCOATED METAL AND PAINTED METAL FLASHINGS, FASTENERS AND ACCESSORIES, EXCEPT FOR 300–SERIES STAINLESS STEEL, SHALL NOT BE USED IN DIRECT CONTACT WITH TREATED WOOD. METAL PRODUCTS, EXCEPT STAINLESS STEEL, MAY BE USED IF SEPARATED FROM TREATED WOOD BY A SPACER OR BARRIER, SUCH AS SINGLE–PLY MEMBRANE OR SELF–ADHERED POLYMER–MODIFIED BITUMEN MEMBRANE MATERIAL.
4. NEW COUNTERFLASHINGS, SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. USE PREFABRICATED MITERED AND SEALED CORNER UNITS SUPPLIED BY THE COUNTERFLASHING MANUFACTURER..
5. ALL WORK AND DETAILS SHALL BE APPROVED AND GUARANTEED BY THE ROOFING MANUFACTURER WARRANTING THE SYSTEM. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING ALL ROOF DETAILS FOR APPROVAL BY BOTH THE OWNER'S REPRESENTATIVE AND THE ROOFING MANUFACTURER.
6. TERMINATION DETAILS, CURBS, PIPE PENETRATIONS, AND SPECIAL DETAILS SHALL BE IN STRICT ACCORDANCE WITH THE ROOFING SYSTEM MANUFACTURER'S STANDARD DETAILS AND INSTRUCTIONS.
7. EXISTING ELECTRICAL LINES SHALL BE RESET ON ROOF WITH SUPPORTS. CONTRACTOR SHALL PROVIDE ATTACHMENTS PER ROOFING MANUFACTURER'S REQUIREMENTS.
8. CONTRACTOR SHALL PROVIDE ALL NECESSARY WOOD BLOCKING AND NAILERS AT PERIMETER AND MISC. LOCATIONS AS INDICATED ON DRAWINGS. CONTRACTOR SHALL VERIFY AND COORDINATE WITH ROOF PLANS AND DETAILS. PROVIDE PRESERVATIVE TREATED WOOD BLOCKING AND NAILERS AT CONDITIONS INDICATED ON DETAILS ONLY.
9. ALL AREAS OF ROOFING SHALL PROVIDE POSITIVE DRAINAGE TO ALL DRAINS.
10. PROVIDE CRICKETS ON THE HIGH SIDE OF ROOF CURBS, EQUIPMENT, ETC. TO PROVIDE POSITIVE SLOPE TO DRAINS. (ALL CRICKETS SHALL HAVE A MINIMUM 1/4" PER FT. SLOPE U.O.N.
11. THE CONTRACTOR SHALL ENSURE THAT ALL ROOF OPENINGS REMAIN PROTECTED AND DRY THROUGHOUT THE CONSTRUCTION UNTIL PERMANENTLY COVERED.
12. THE CONTRACTOR SHALL PROTECT EXISTING BUILDING AND SITE FROM DAMAGE BY DEMOLITION OR NEW WORK THROUGHOUT THE COURSE OF CONSTRUCTION AND SHALL PROVIDE TEMPORARY PROTECTION AS REQUIRED AT EXISTING ROOF AREAS SCHEDULED TO REMAIN.
13. THE CONTRACTOR SHALL MAINTAIN THE ROOF OF THE BUILDING IN A WATERTIGHT CONDITION THROUGHOUT THE COURSE OF THE PROJECT. AT THE END OF EACH DAYS OPERATION THE CONTRACTOR SHALL INSPECT THE CURRENT CONDITIONS TO ASSURE THAT NO WATER DAMAGE WILL RESULT FROM THEIR WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATER DAMAGE INCURRED DURING CONSTRUCTION RESULTING FROM THEIR WORK.
14. WHERE CONTRACTOR'S WORK DISTURBS EXISTING ROOFS SCHEDULED TO REMAIN, THE CONTRACTOR SHALL, PRIOR TO BEGINNING ANY WORK, CONFIRM WITH THE OWNER'S REPRESENTATIVE IF THE EXISTING ROOF IS UNDER MANUFACTURER WARRANTY.
    A. IF THE EXISTING ROOF SYSTEM IS PRESENTLY UNDER MANUFACTURER'S WARRANTY, THEN ALL WORK SHALL BE PERFORMED BY AN INSTALLER CERTIFIED BY THE EXISTING ROOFING MANUFACTURER. ANY MODIFICATIONS TO THE EXISTING ROOFING SYSTEM SHALL BE PERFORMED AS PER THE ROOFING MANUFACTURER'S REQUIREMENTS AND SHALL MEET THE NECESSARY MANUFACTURER'S CRITERIA IN ORDER TO MAINTAIN THE PRESENT WARRANTY. CONTRACTOR SHALL PROVIDE ALL PROVISIONS NECESSARY FOR THE PROTECTION OF EXISTING EXPOSED SURFACES FROM PERIODS OF RAINFALL TO AVOID DAMAGE TO EXISTING STRUCTURE AND EXISTING / NEW ROOFING SURFACES IF RAINFALL SHALL OCCUR.
    B. IF THE EXISTING ROOF IS NOT UNDER MANUFACTURER'S WARRANTY, THEN ALL NEW ROOF WORK INCLUDING ALL NEW ROOF PENETRATIONS, CURBS, ROOF MOUNTED EQUIPMENT, WALKING PADS AND CRICKETS, SHALL BE PERFORMED TO PROTECT AND LIMIT DAMAGE TO THE EXISTING STRUCTURE AND ROOF. CONTRACTOR SHALL MAKE PROVISIONS (PROTECTION OF EXISTING EXPOSED SURFACES) FOR PERIODS OF RAINFALL DURING THE ROOFTOP INSTALLATION TO AVOID DAMAGES TO EXISTING STRUCTURE AND ROOFING SURFACES IF RAINFALL SHALL OCCUR.
15. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD, INCLUDING EXACT SIZES, LOCATIONS AND QUANTITIES OF ALL EXISTING EQUIPMENT AND PENETRATIONS.
16. ALL WORK SHALL BE PERFORMED BY A CONTRACTOR CERTIFIED BY THE ROOFING MANUFACTURER TO WORK ON THE SYSTEM.
17. THE CONTRACTOR SHALL NOT OVERLOAD ROOF. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING WHERE TO LOAD MATERIALS ONTO ROOF DURING CONSTRUCTION. MATERIALS SHALL BE EVENLY PLACED THRU–OUT THE WORK AREA SO AS NOT TO POINT LOAD THE STRUCTURE.
18. THE CONTRACTOR SHALL COORDINATE FINAL DIMENSIONS AND LOCATIONS FOR ALL NEW PREFAB ROOF TOP EQUIPMENT AND ROOF HATCH CURBS.
19. CONTRACTOR SHALL PROVIDE WALKWAY PADS OR CONT. WALKWAY ROLLS AROUND THE PERIMETER OF ALL NEW ROOF TOP UNITS.

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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SCALE	AS NOTED
DRAWN BY:	(CITY STAFF)
DESIGNED BY:	(CITY STAFF)
CHECKED BY:	
APPROVED BY:	
PROJECT MANAGER:	
PROJECT	INSTRUMENTATION LABORATORY LOCKER ROOM EXPANSION ORANGEBURG NEW YORK
TITLE	ROOF PLAN & DETAILS
EIA DRAWING NO.	A15
CLIENT DWG. NO.	– – – – –
EIA PROJECT NO.	EG8577.03

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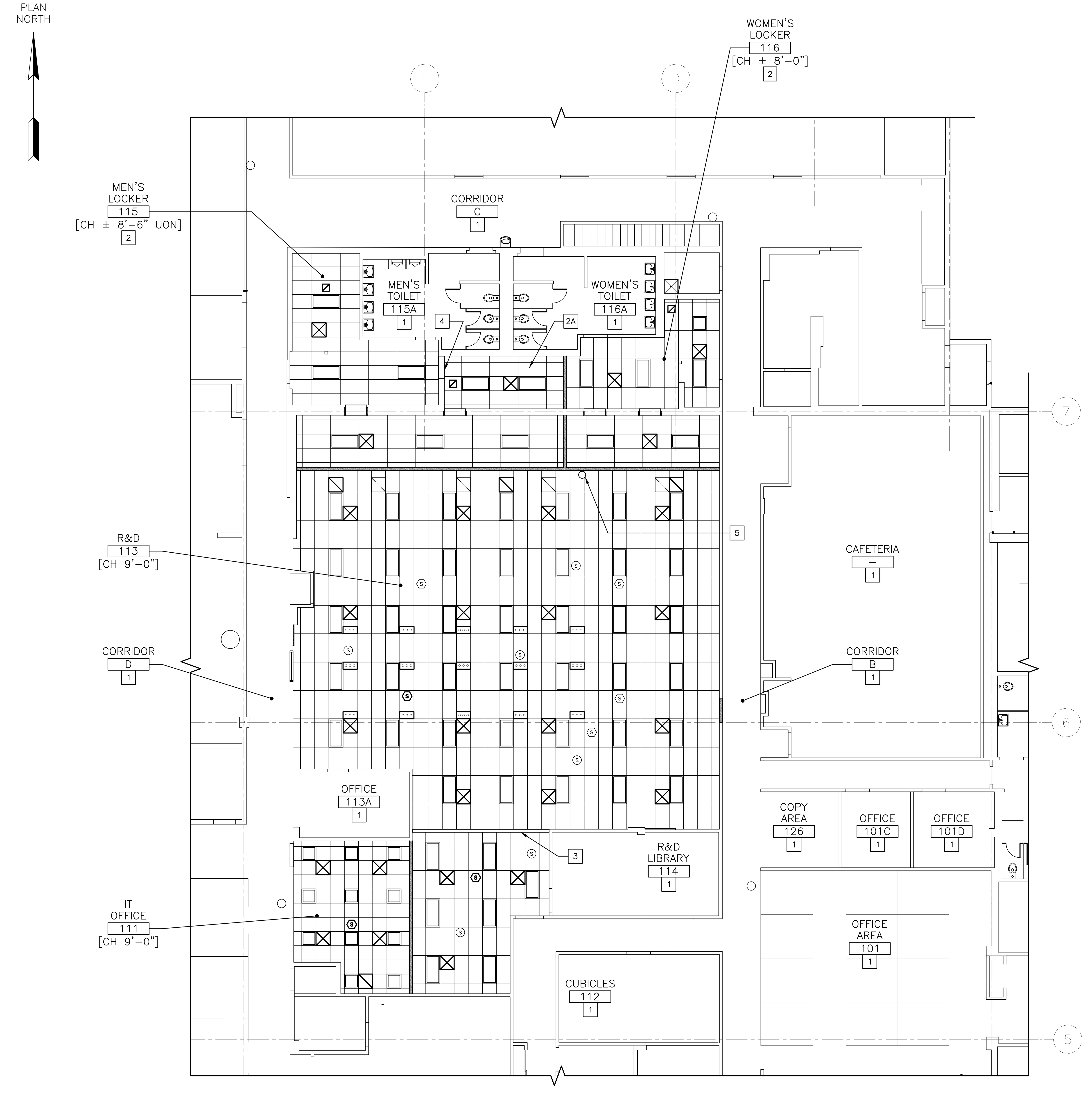
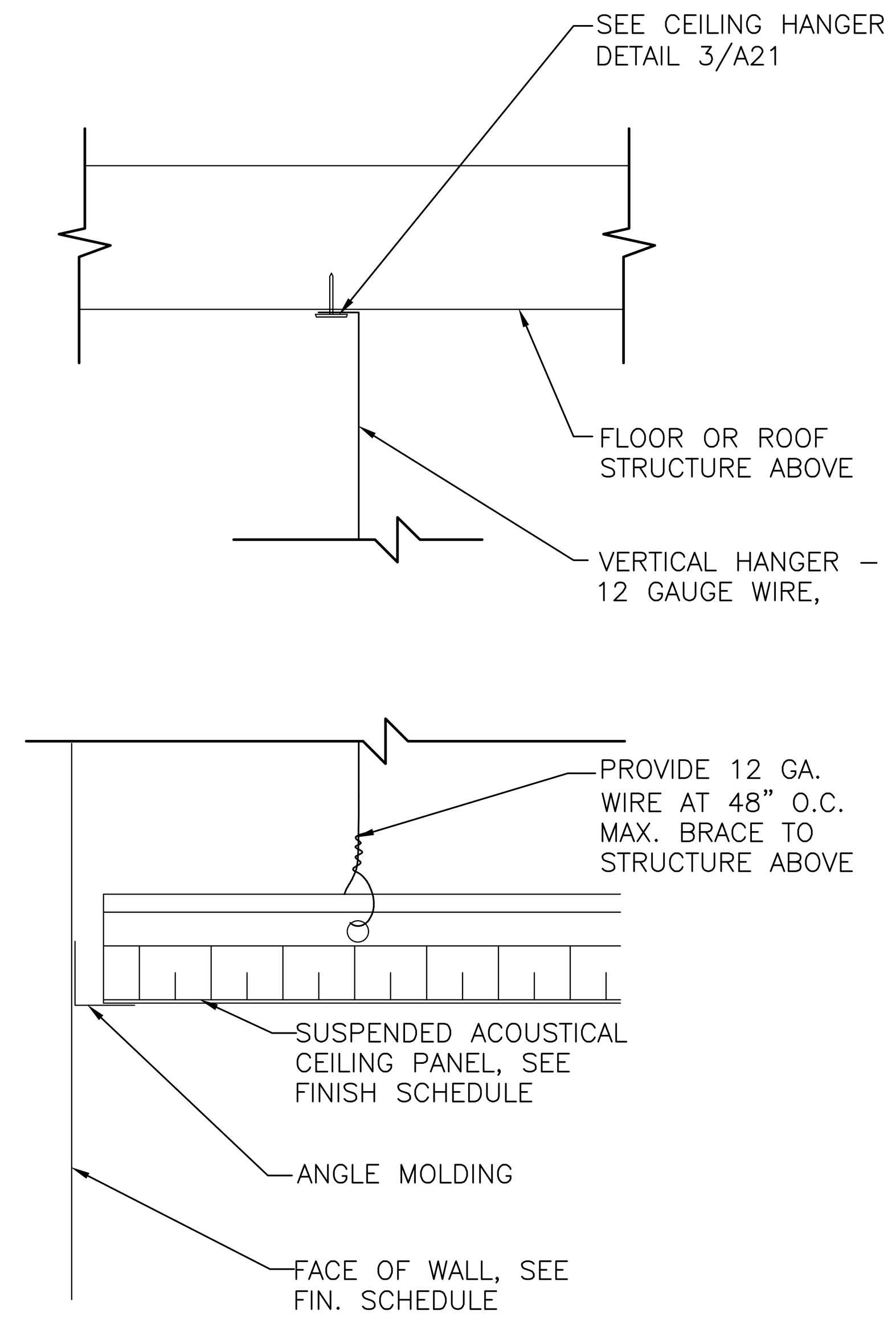
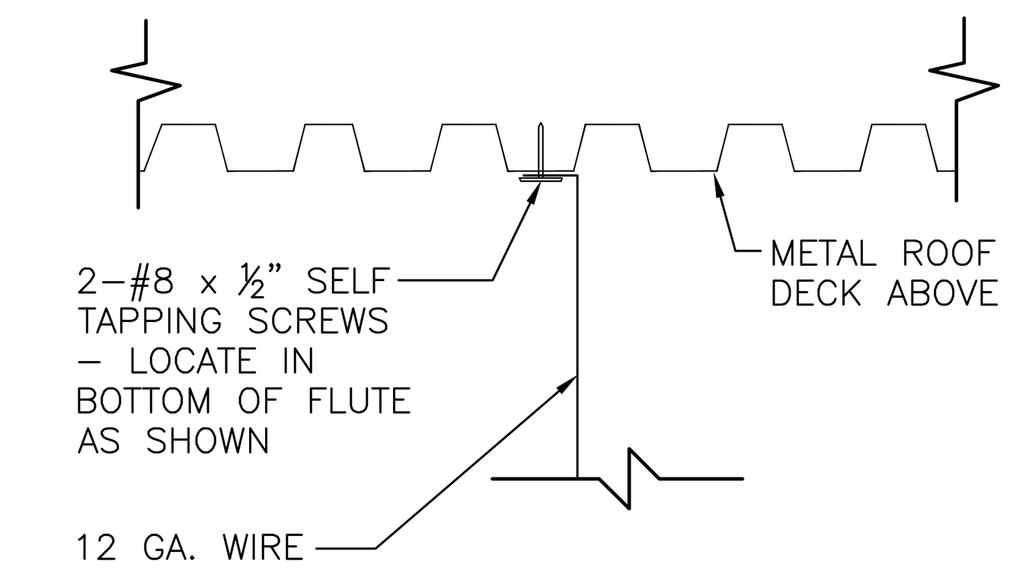


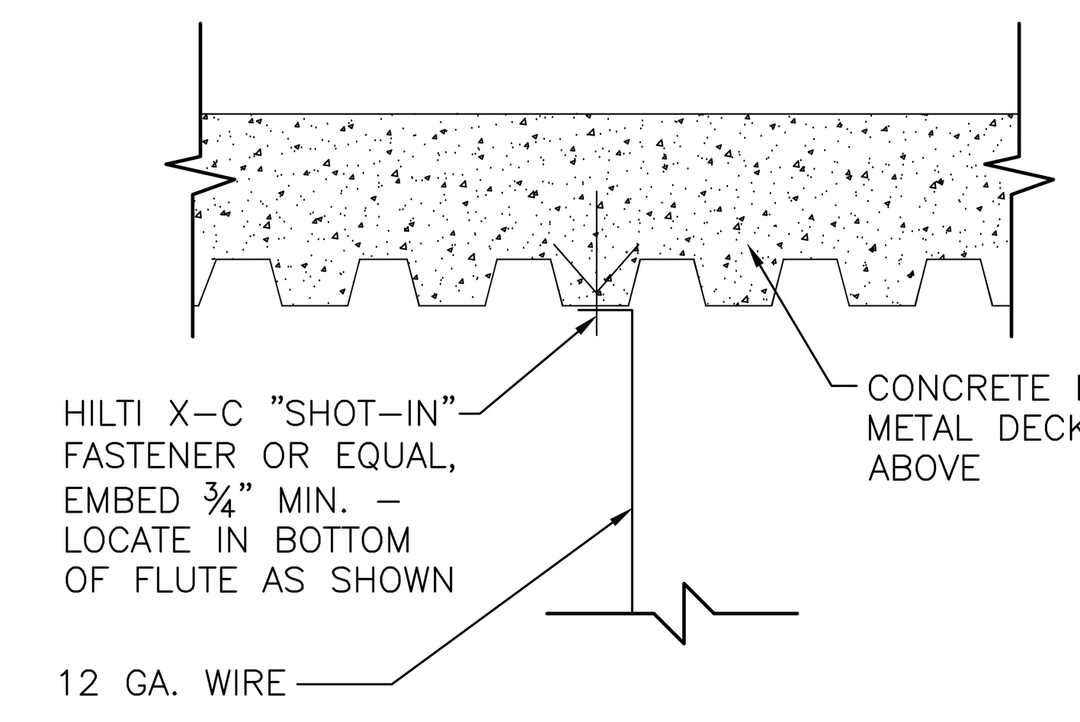
FIRST FLOOR REFLECTED CEILING PLAN 1/A21
1/8"=1'-0"



TYP. NON-SEISMIC CEILING DETAIL 2/A21
NTS



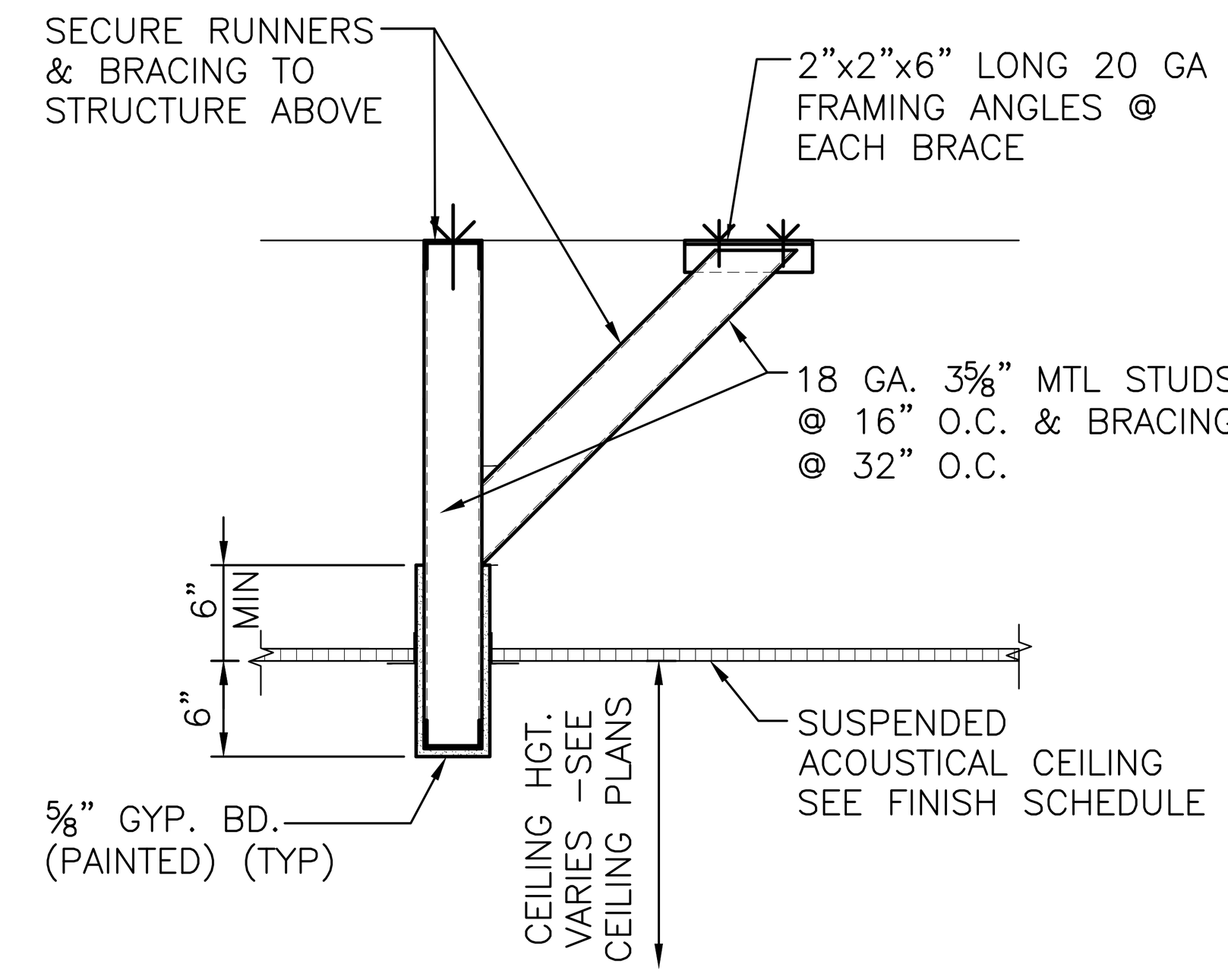
HANGERS @ METAL ROOF DECKS 3A/A21
NTS



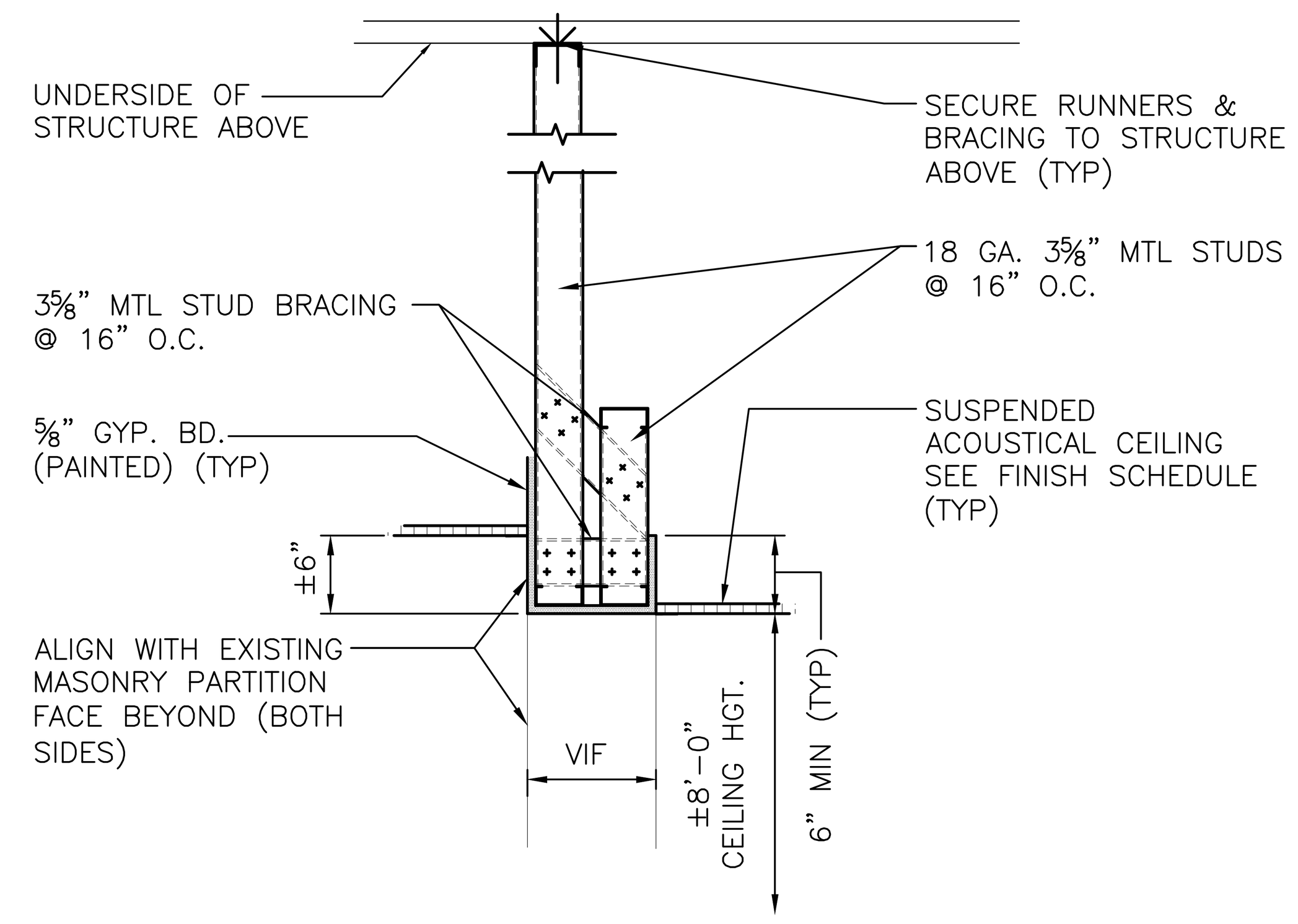
HANGERS @ COMPOSITE SLABS 3B/A21
NTS

TYP. CEILING HANGER DETAILS 3/A21
NTS

NOTES:
1. INSTALL HANGERS PER DETAILS 3A/A21 AND/OR 3B/A21 AS APPLICABLE, BASED ON FLOOR / ROOF STRUCTURE SYSTEM ABOVE CEILING.



BULKHEAD DETAIL 4/A21
1" = 1'-0"



BULKHEAD DETAIL 5/A21
1" = 1'-0"

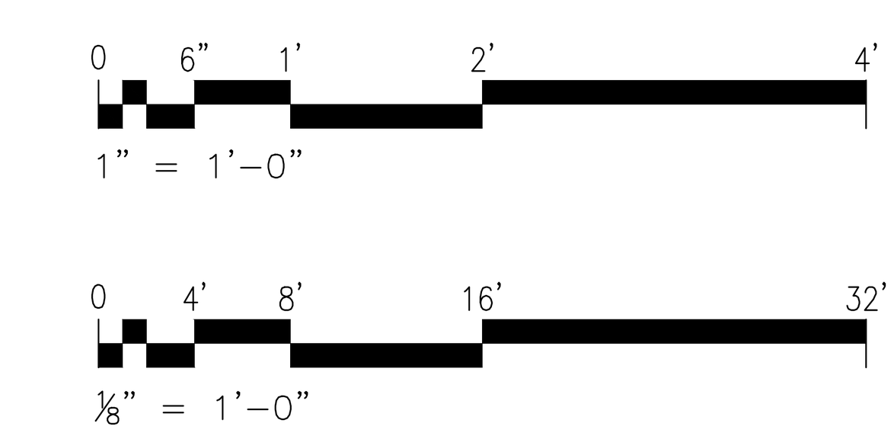
GENERAL NOTES:

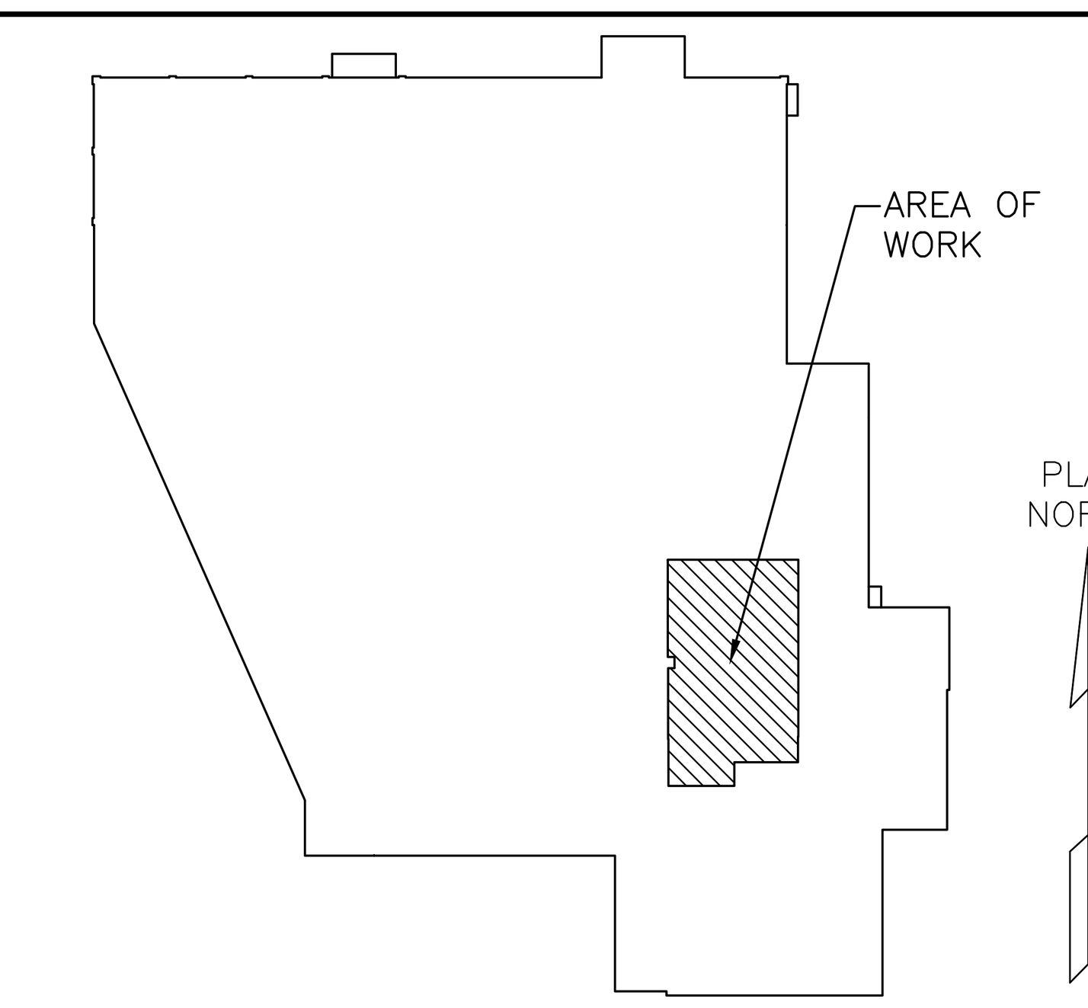
1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #19, 20 & 21 ON SHEET T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.

CEILING PLAN LEGEND

NOTE: LEGEND IS FOR REFERENCE ONLY. NOT ALL LEGEND ITEMS MAY BE USED IN THIS WORK SCOPE. SEE THESE DRAWINGS & SPECIFICATIONS FOR EXTENT OF SCOPE OF WORK.

- 2' X 4' SUSPENDED ACOUSTICAL CEILING SYSTEM. SEE FINISH SCHEDULE FOR DESCRIPTION OF TYPE.
- 2' X 2' SUSPENDED ACOUSTICAL CEILING SYSTEM. SEE FINISH SCHEDULE FOR DESCRIPTION OF TYPE
- 2' X 4' LIGHTING FIXTURE
- 2' X 2' LIGHTING FIXTURE
- DIFFUSER/CEILING REGISTER (SUPPLY AIR)
- GRILLE / CEILING REGISTER (RETURN AIR)
- CEILING MOUNTED SMOKE DETECTOR
- CEILING MOUNTED SPEAKER
- CEILING MOUNTED UTILITY PLATE





KEY PLAN – FIRST FLOOR
NTS

CEILING PLAN NOTES:

1. THE GRAPHIC SYMBOLS IN THE CEILING PLAN LEGEND ARE SHOWN ON THE ARCHITECTURAL PLANS FOR GRAPHICAL LOCATION COORDINATION ONLY. SEE MECHANICAL, FIRE PROTECTION AND ELECTRICAL DRAWINGS FOR SPECIFICS IN TERMS OF SIZE, TYPE, AND CAPACITY OF ALL MECHANICAL & ELECTRICAL EQUIPMENT.
2. ALL CEILINGS SHOWN ON REFLECTED CEILING PLANS ARE NEW U.O.N.. REFER TO DEMOLITION PLANS FOR REMOVAL OF EXISTING CEILINGS (NOT SHOWN ON THESE PLANS).
3. U.O.N., CENTER CEILING IN ROOM OR SPACE AS SHOWN.
4. SEE FINISH SCHEDULE SHEET A75 FOR CEILING SPECIFICATION.
5. INSTALL DEVICES TO ONE SIDE OR IN THE CENTER OF 2x4 CEILING PANELS AS DEPICTED ON THE REFLECTED CEILING PLAN.
6. CAREFULLY REMOVE AND REINSTALL EXISTING CEILINGS AND GRIDS TO REMAIN (NOT SHOWN) AS / WHERE REQUIRED TO ACCOMMODATE ABOVE CEILING WORK INDICATED ON MECH., ELECTRICAL AND FIRE-ALARM DRAWINGS.
7. INSTALL ALL CEILINGS IN ACCORDANCE WITH TYPICAL CEILING DETAILS THIS SHEET.

KEYED REFLECTED CEILING PLAN NOTES:

1 NO CEILING WORK IN EXISTING SPACE (EXISTING CEILING TO REMAIN (NOT SHOWN) OR OPEN TO EXISTING STRUCTURE ABOVE) (CONDITIONS VARY-VIF).

2 EXACT CEILING HEIGHT TO BE DETERMINED IN FIELD BASED ON ABOVE CEILING CONDITIONS (VIF).

2A CEILING HEIGHT TO BE ±8'-0" THIS PORTION OF ROOM.

3 BULKHEAD PER DETAIL 4/A21.

4 BULKHEAD PER DETAIL 5/A21.

5 DUCT FROM (RELOCATED) FUME HOOD. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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SCALE: AS NOTED
DRAWN BY:
DESIGNED BY:
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE: FIRST FLOOR REFLECTED CEILING PLAN & DETAILS

EIA DRAWING NO. A21
CLIENT DWG. NO. – – – – –
EIA PROJECT NO. E08577.03

DOOR SCHEDULE

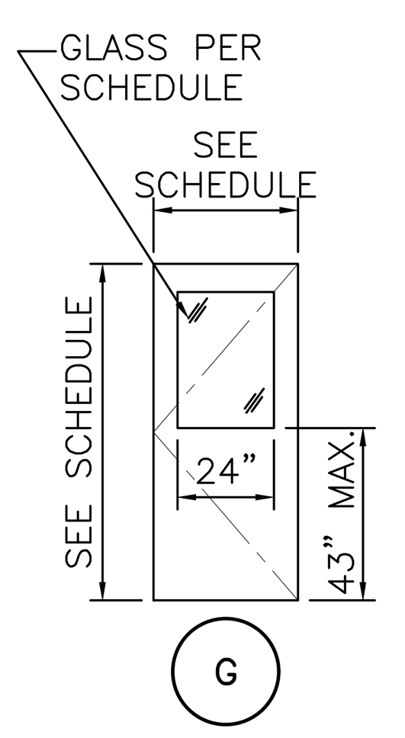
DOOR NUMBER	FROM ROOM:	TO ROOM:	DOOR DIMENSIONS (QTY) (W)x(H)x(THICKNESS)	DOOR				FRAME			FIRE RATING	DETAILS				REMARKS (SEE DOOR SCHEDULE NOTES, DOOR HARDWARE NOTES, DOOR SCHEDULE KEYED NOTES AND DOOR AND FRAME FINISH SCHEDULE)
				TYPE	MAT	FIN	GLASS TYPE	TYPE	MAT	FIN		SADDLE/ SILL	HEAD	JAMB	HDWR	
111	CORRIDOR D	IT OFFICE 111	(1) 3'–0" x 7'–0" x 1¾"	G	WD	ST1	¼" TEMPERED	1	HM	FP1	–	–	H1	J1	1	–
115A	MEN'S LOCKER	MEN'S LOCKER	(1) 3'–0" x 7'–0" *	*	–	–	–	–	–	–	–	–	H2	J2	–	* TRIMMED OPENING (NO DOOR)
115B	MEN'S LOCKER	MEN'S LOCKER	(1) 3'–0" x 7'–0" *	*	–	–	–	–	–	–	–	–	H2	J2 SIM	–	* TRIMMED OPENING (NO DOOR)
116A	WOMEN'S LOCKER	WOMEN'S LOCKER	(1) 3'–0" x 7'–0" *	*	–	–	–	–	–	–	–	–	H2	J2	–	* TRIMMED OPENING (NO DOOR)
116B	WOMEN'S LOCKER	WOMEN'S LOCKER	(1) 3'–0" x 7'–0" *	*	–	–	–	–	–	–	–	–	H2	J2	–	* TRIMMED OPENING (NO DOOR)

DOOR SCHEDULE ABBREVIATIONS:

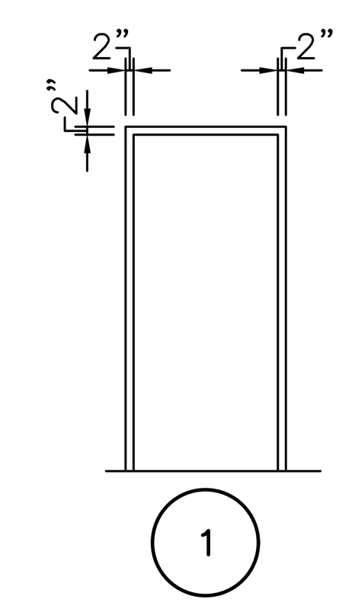
SEE DOOR FINISH SCHEDULE FOR ADDITIONAL ABBREVIATIONS.

QTY – QUANTITY
(W) – WIDTH
(H) – HEIGHT
MAT – MATERIAL
FIN – FINISH
HDWR – HARDWARE

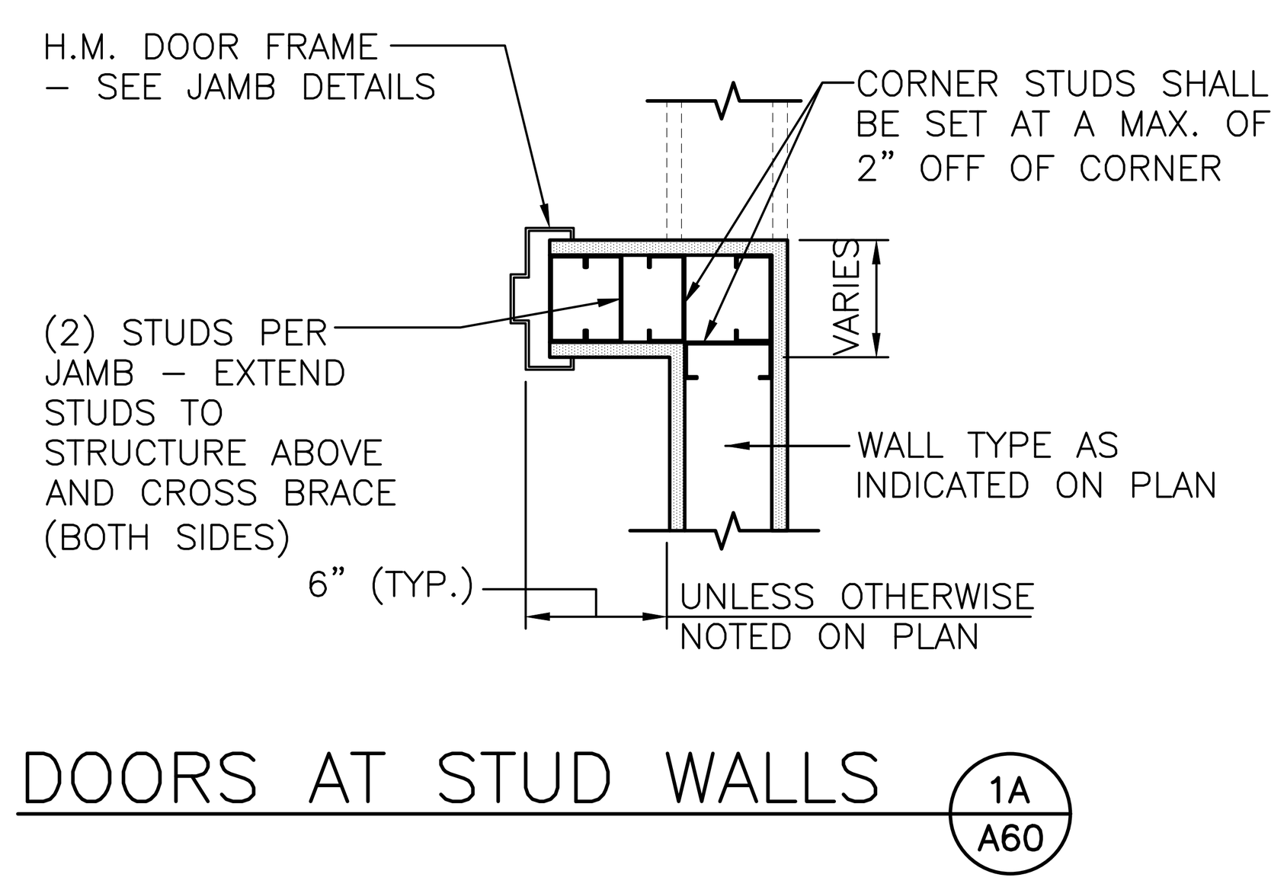
(–) – NO ITEM
HM – HOLLOW METAL
WD – WOOD
ST – STAIN
FP – FRAME PAINT
(*) – SEE REMARKS



DOOR TYPES
1/4" = 1'–0"

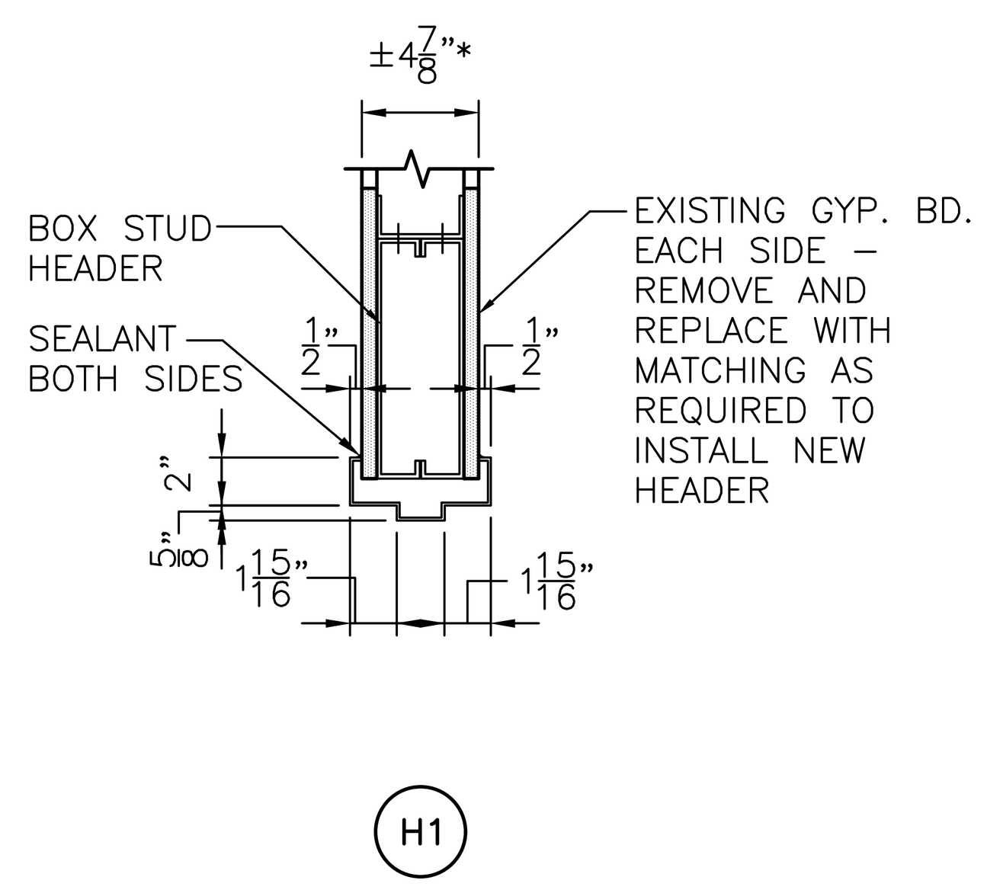


FRAME TYPES
1/4" = 1'–0"

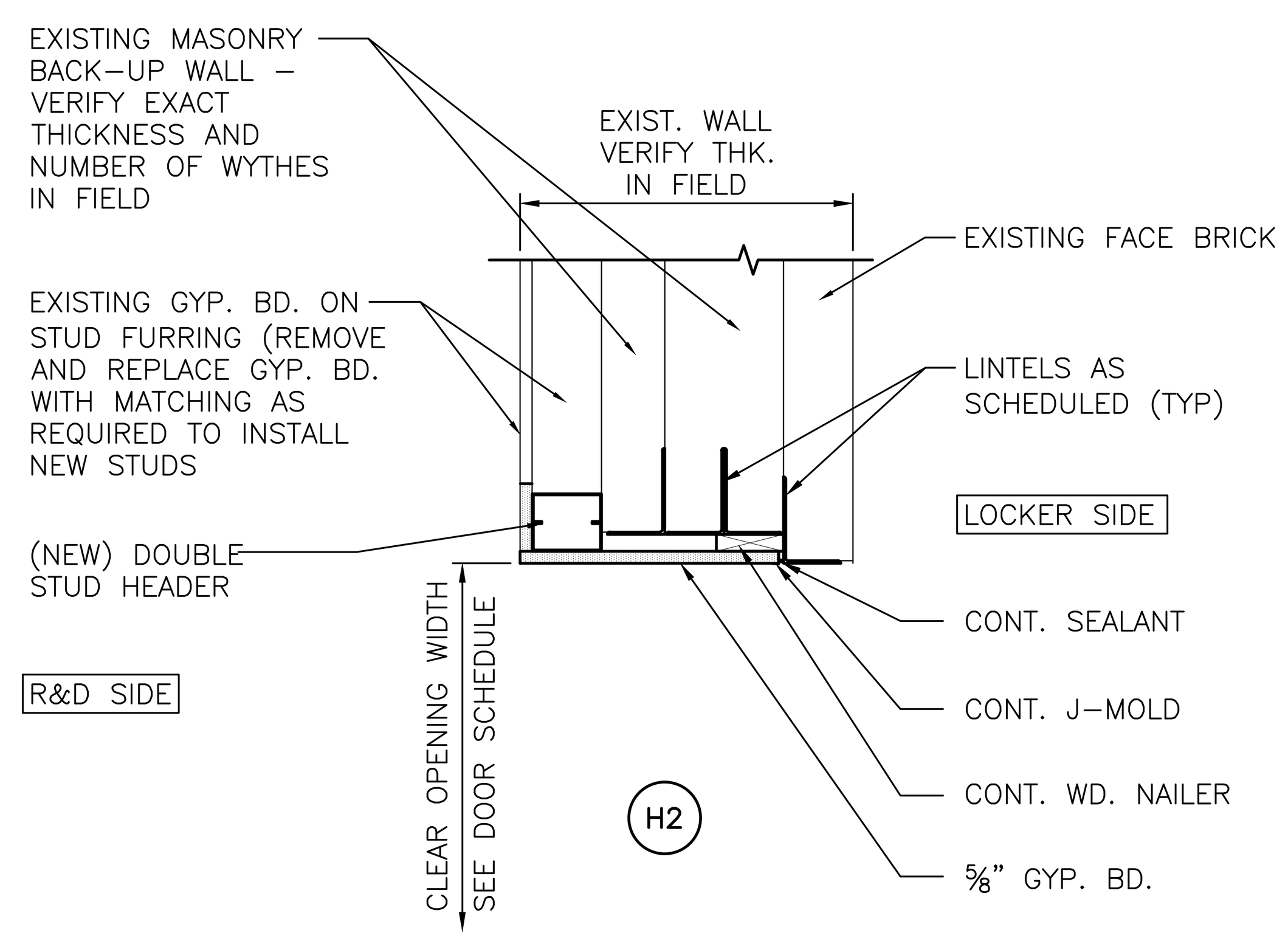


TYP. DOOR PLAN DETAIL 1/A60
1 1/2" = 1'–0"

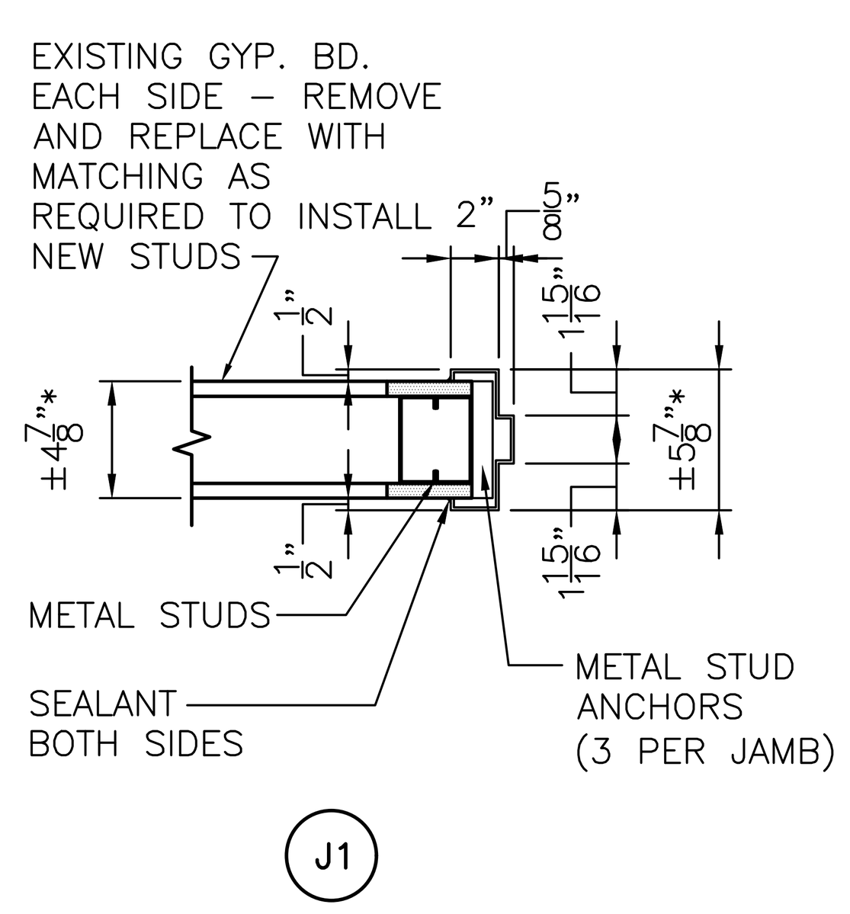
NOTE: SEE JAMB DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS



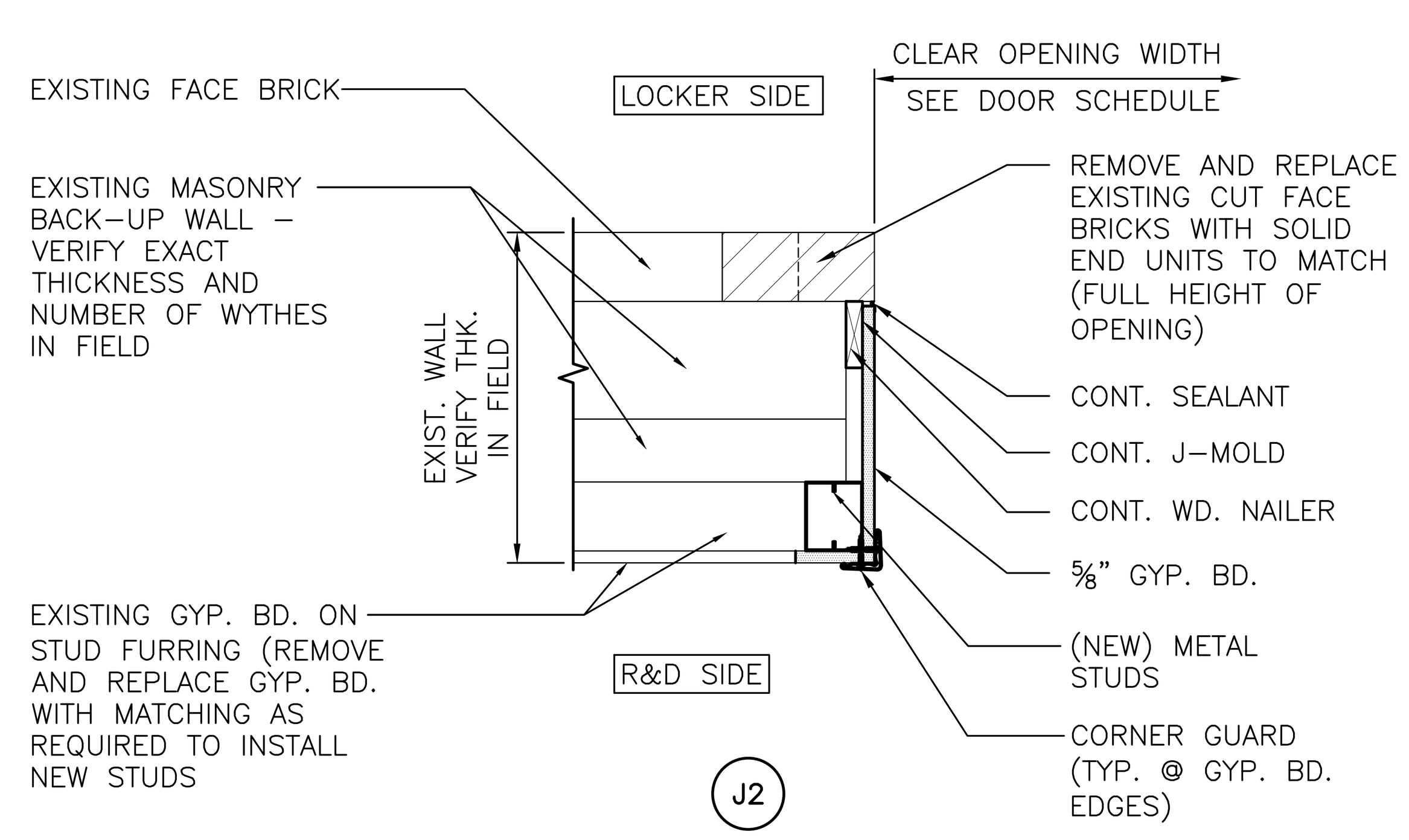
* VERIFY EXISTING PARTITION THICKNESS IN FIELD



DOOR HEAD DETAILS
(SEE 1/A60.2) 1 1/2" = 1'–0"



* VERIFY EXISTING PARTITION THICKNESS IN FIELD



DOOR JAMB DETAILS
(SEE 1/A60.2) 1 1/2" = 1'–0"

DOOR SCHEDULE NOTES:

1. CONTRACTOR SHALL CONFIRM WITH OWNER'S REPRESENTATIVE THE DOOR AND FRAME FINISHES/COLOR PRIOR TO ORDERING PRODUCT OR PAINTING/STAINING. (SEE DOOR FINISH SCHEDULE THIS SHEET)
2. EXISTING HM DOORS & FRAMES TO REMAIN SHALL BE PREPARED TO RECEIVE NEW FINISH WHERE INDICATED ON FLOOR PLAN. CONTRACTOR SHALL PREP AND PRIME DINGS OR RUSTED AREAS ON METAL SURFACES PRIOR TO PAINTING. CONTRACTOR SHALL DULL DOWN ANY EXISTING SHEEN BY SANDING PRIOR TO REPAINTING.
3. THE BOTTOM CLEARANCE FOR ALL INTERIOR DOORS SHALL BE ¾", UNLESS OTHERWISE NOTED.
4. SEE ROOM FINISH SCHEDULE A75 FOR ADDITIONAL PAINT FINISH INFORMATION.
5. EXISTING HM DOOR FRAMES TO REMAIN SHALL RECEIVE PAINT TO MATCH NEW HM FRAMES. EXISTING HM DOORS TO REMAIN SHALL RECEIVE PAINT TO MATCH NEW HM DOORS (SEE DOOR FINISH SCHEDULE THIS SHEET FOR FINISH).
6. SEE "TYPICAL DOOR PLAN DETAIL", DETAIL 1 THIS SHEET FOR ADDITIONAL REQUIREMENTS.
7. CONTRACTOR SHALL PROVIDE TRANSITION STRIP AT ALL DISSIMILAR FLOOR FINISHES EVEN WHERE A DOOR IS NOT PROVIDED. SEE SHEET A75 GENERAL FINISH NOTE #6.
8. COLOR OF TRANSITION STRIP SHALL MATCH COLOR OF BASE. SEE SHEET A75 ROOM FINISH NOTE #6.
9. EXISTING WOOD DOORS TO REMAIN SHALL BE PREPARED TO RECEIVE NEW FINISH WHERE INDICATED ON FLOOR PLAN. RE-STAIN OR RE-PAINT EXISTING DOOR SIMILAR TO NEW DOOR STAIN OR PAINT COLOR. SEE DOOR FINISH SCHEDULE THIS SHEET.

MISC. LINTEL NOTES:

1. ALL MASONRY OPENINGS FOR DUCT PENETRATIONS, UNFRAMED WALL OPENINGS ETC., SHALL HAVE STEEL, PRECAST CONCRETE OR MASONRY LINTELS.
2. PROVIDE LINTELS PER THE SCHEDULES BELOW FOR ALL OPENINGS WHERE LINTELS ARE NOT SPECIFIED ON STRUCTURAL DRAWINGS.

MISC. STEEL LINTEL SCHEDULE

LINTEL NO.	DIAGRAM	SIZE	DESCRIPTION
L–1 4" WALL	4	4" x 3½" x 5⁄16"	SPANS UP TO 4'–0"
	5	5" x 3½" x 5⁄16"	SPANS UP TO 6'–0"
	6	6" x 3½" x 5⁄16"	SPANS UP TO 7'–4"
L–2 6" WALL	5	5" x 5" x 5⁄16"	SPANS FROM 4'–0" TO 6'–0"
L–3 8" WALL	4	(2) 4" x 3½" x 5⁄16"	SPANS UP TO 4'–0"
	5	(2) 5" x 3½" x 5⁄16"	SPANS UP TO 6'–0"
	6	(2) 6" x 3½" x 5⁄16"	SPANS UP TO 7'–4"
L–4 12" WALL	4	(3) 4" x 3½" x 5⁄16"	SPANS UP TO 4'–0"
	5	(3) 5" x 3½" x 5⁄16"	SPANS UP TO 6'–0"
	6	(2) 6" x 4" x ½"	SPANS UP TO 6'–8"
	6	(3) 6" x 3½" x 5⁄16"	SPANS UP TO 7'–4"

STEEL LINTEL NOTES:

1. MINIMUM BEARING AT EACH END SHALL BE 8". FILL VOIDS SOLID UNDER LINTEL BEARING.

PRECAST CONC. LINTEL SCHEDULE

LINTEL NO.	DIAGRAM	SIZE & REINFORCING	DESCRIPTION	MIN. BEARING
L–6 6"WALL		6" X 8" (2)– #5 T&B	MAX. SPANS UP TO 4'–0"	8" EACH END
L–8 8"WALL		(2) 4" X 8" (1)– #5 T&B	MAX. SPANS UP TO 8'–0"	8" EACH END
L–8A 8"WALL		8" X 8" (2)– #5 T&B	MAX. SPANS UP TO 8'–0"	8" EACH END
L–9 12"WALL		(3) 4" X 12"(1)– #5 T&B	MAX. SPANS UP TO 8'–0"	8" EACH END
L–9A 12"WALL		8" X 12" (3)– #5 T&B	MAX. SPANS UP TO 10'–0"	12" EACH END

PRECAST LINTEL NOTES:

1. MINIMUM BEARING AT EACH END SHALL BE PER SCHEDULE ABOVE. FILL VOIDS SOLID UNDER LINTEL BEARING.
2. MIN. CONCRETE COMPRESSIVE STRENGTH @28 DAYS = 4,000 PSI.
3. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60.

GENERAL NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #19, 20 & 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. SEE SHEET A11 FOR INTERIOR VISION PANEL TYPES AND DETAILS.

REFERENCE SYMBOL LEGEND

X (Y) — DOOR TYPE DESIGNATION
X INDICATES DOOR TYPE (SEE DOOR TYPE DESIGNATIONS BELOW)
(Y) INDICATES NUMBER OF LEAFS IN OPENING FOR MULTIPLE LEAF CONFIGURATIONS

DOOR TYPE DESIGNATIONS:

G – HALF GLASS

DOOR HARDWARE NOTES:

1. THE OPENING FORCE AT ANY DOOR SHALL NOT EXCEED (5) FIVE POUNDS. THE SWING TO FULL OPEN FORCE SHALL NOT EXCEED 15 POUNDS.
2. FINISH AND STYLE SHALL MATCH EXISTING HARDWARE.
3. COORDINATE KEYING SYSTEM W/ OWNER'S REPRESENTATIVE.

GENERAL DOOR NOTES:

1. CAULK BOTH SIDES OF NEW DOOR JAMBS AND HEADS (TYPICAL).
2. PROVIDE ALL NECESSARY WOOD BLOCKING, SHIMS, FASTENERS, SEALANT, BACKER RODS AND INSULATION, ETC., AS INDICATED ON DRAWINGS, AS WELL AS ANY ADDITIONAL MATERIALS NECESSARY TO PROPERLY INSTALL DOORS.
3. ALL WOOD BLOCKING SHALL BE KILN-DRIED WOOD (SOUTHERN PINE OR DOUGLAS FIR), STRUCTURAL GRADE #2 OR BETTER.

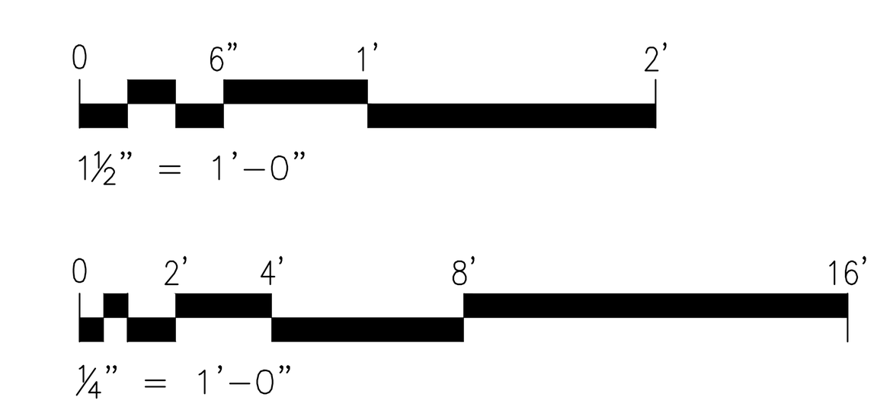
DOOR AND FRAME FINISH SCHEDULE

WOOD DOOR FINISH

WOOD DOOR STAIN SYSTEM (ST1)
SPECIES: PER SPEC'S
MFR: PER SPEC'S
COLOR: TO BE SELECTED FROM MFR'S STANDARD COLORS
SEALER: PER SPEC'S
TYPE: URETHANE
FINISH: THREE COATS SEALER OVER STAIN

HM FRAME FINISHES

HM FRAME PAINT SYSTEM (FP1)
MFR: PER SPEC'S
FINISH: PER SPEC'S
COLOR: TO BE SELECTED FROM MFR'S STANDARD COLORS
PRIMER: PER SPEC'S – TINT PRIMER TOWARD COATING COLOR
COATING: PER SPEC'S – TWO COATS OF COLOR OVER ONE COAT OF PRIMER



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ARCHITECTURE

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APPROVED BY:
PROJECT MANAGER:

PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE: DOOR SCHEDULE, TYPES & DETAILS

EIA DRAWING NO. A60
CLIENT DWG. NO. – – – – –
EIA PROJECT NO. EG8577.03

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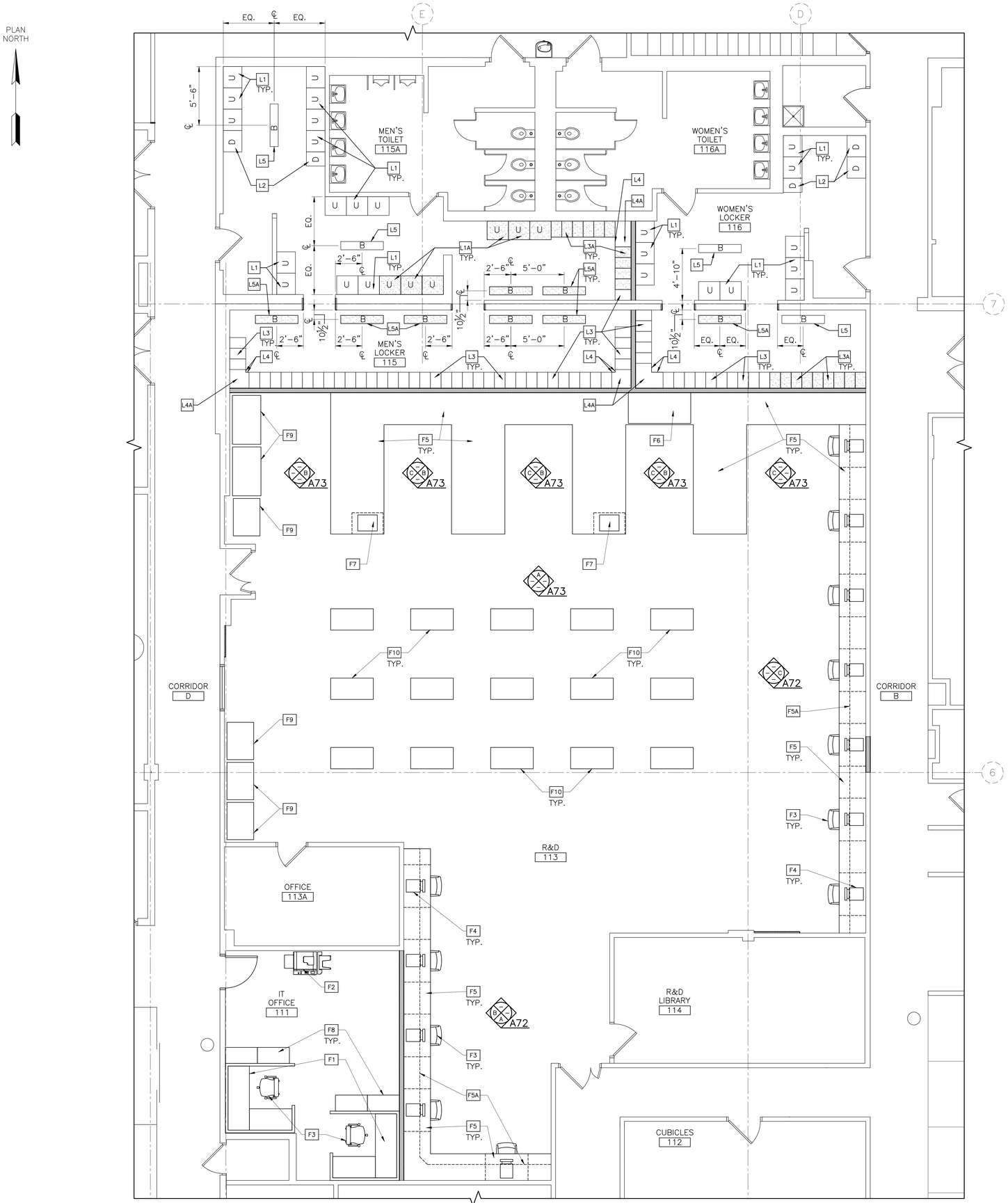


FIRST FLOOR FURNITURE & EQUIPMENT PLAN (1 / A71)
1/4"=1'-0"

LOCKER ROOM KEYED NOTES:

- L1 EXISTING UNIFORM LOCKERS TO BE REINSTALLED IN LOCATIONS SHOWN.
- L1A NEW UNIFORM LOCKERS BY OTHERS (N.I.C.).
- L2 EXISTING DIRTY LAUNDRY BIN TO BE REINSTALLED IN LOCATION SHOWN.
- L3 EXISTING (3 TIER) EMPLOYEE LOCKERS TO BE REINSTALLED IN LOCATIONS SHOWN.
- L3A NEW (3 TIER) EMPLOYEE LOCKERS TO MATCH EXISTING (BY CONTRACTOR).
- L4 PROVIDE METAL FILLER PANEL TO MATCH LOCKERS.
- L4A PROVIDE METAL TOP CLOSURE PIECE TO MATCH LOCKERS OVER VOID SPACE AT CORNER.
- L5 EXISTING BENCH TO BE REPAIRED, REFINISHED AND REINSTALLED IN LOCATION SHOWN.
- L5A NEW 9½"D X 48"L X 17"H WOOD BENCH WITH METAL PEDESTALS TO MATCH EXISTING (BY CONTRACTOR).

GENERAL FURNITURE AND EQUIPMENT KEYED NOTES:

- F1 CUBICLE FURNITURE BY OWNER (NIC).
- F2 COPIER MACHINE/ PRINTER BY OWNER (NIC).
- F3 CHAIRS BY OWNER (NIC).
- F4 COMPUTERS BY OWNER (NIC).
- F5 METAL CASEWORK AS INDICATED ON INTERIOR ELEVATIONS.
- F5A METAL WALL CABINETS ABOVE.
- F6 RELOCATED FUME HOOD.
- F7 LAB SINK PER PLUMBING DRAWINGS.
- F8 FILE CABINETS BY OWNER (NIC).
- F9 REFRIGERATOR OR FREEZER BY OWNER (NIC).
- F10 MOBILE EQUIPMENT CART BY OWNER (NIC).

GENERAL NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #19, 20 AND 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. SEE GENERAL NOTE #16 ON SHEET T02 FOR DIMENSION INFORMATION.
4. VERIFY ALL FINAL SIZES & LOCATIONS OF OWNER FURNISHED FURNITURE & EQUIPMENT PRIOR TO PERFORMING ANY RELATED ELECTRICAL OR OTHER WORK.

LOCKER ROOM EQUIPMENT LEGEND:

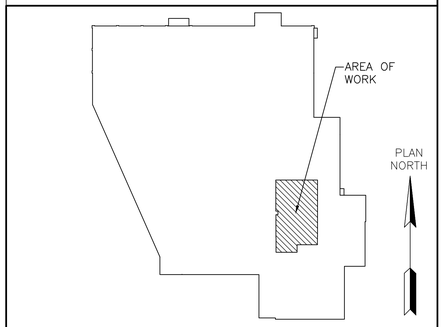
NOTE: REFER TO LOCKER ROOM EQUIPMENT AND KEYED NOTES THIS SHEET FOR ADDITIONAL INFORMATION REGARDING THE ITEMS LISTED BELOW.

- U EXISTING UNIFORM LOCKER UNIT REINSTALLED.
- U NEW UNIFORM LOCKER UNIT.
- D EXISTING DIRTY LAUNDRY BIN REINSTALLED.
- EXISTING EMPLOYEE LOCKER UNIT REINSTALLED.
- NEW EMPLOYEE LOCKER UNIT.
- B EXISTING BENCH REINSTALLED.
- B NEW BENCH.

LOCKER ROOM EQUIPMENT NOTES:

1) OWNER'S VENDOR TO FURNISH AND INSTALL NEW UNIFORM LOCKER UNITS (N.I.C.). CONTRACTOR SHALL COORDINATE WITH OWNER'S VENDOR AS REQUIRED. ALL OTHER NEW LOCKER ROOM EQUIPMENT TO BE FURNISHED AND INSTALLED BY CONTRACTOR.
2) REINSTALLATION OF ALL EXISTING EQUIPMENT TO BE PERFORMED BY CONTRACTOR.

0 2' 4' 8' 16'
¼" = 1'-0"



KEY PLAN – FIRST FLOOR
NTS

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

EI ARCHITECTURE ENGINEERING PLANNING
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JAMES P. HUNTER, AIA NY LICENSE NO. 043894-01

ARCHITECTURE

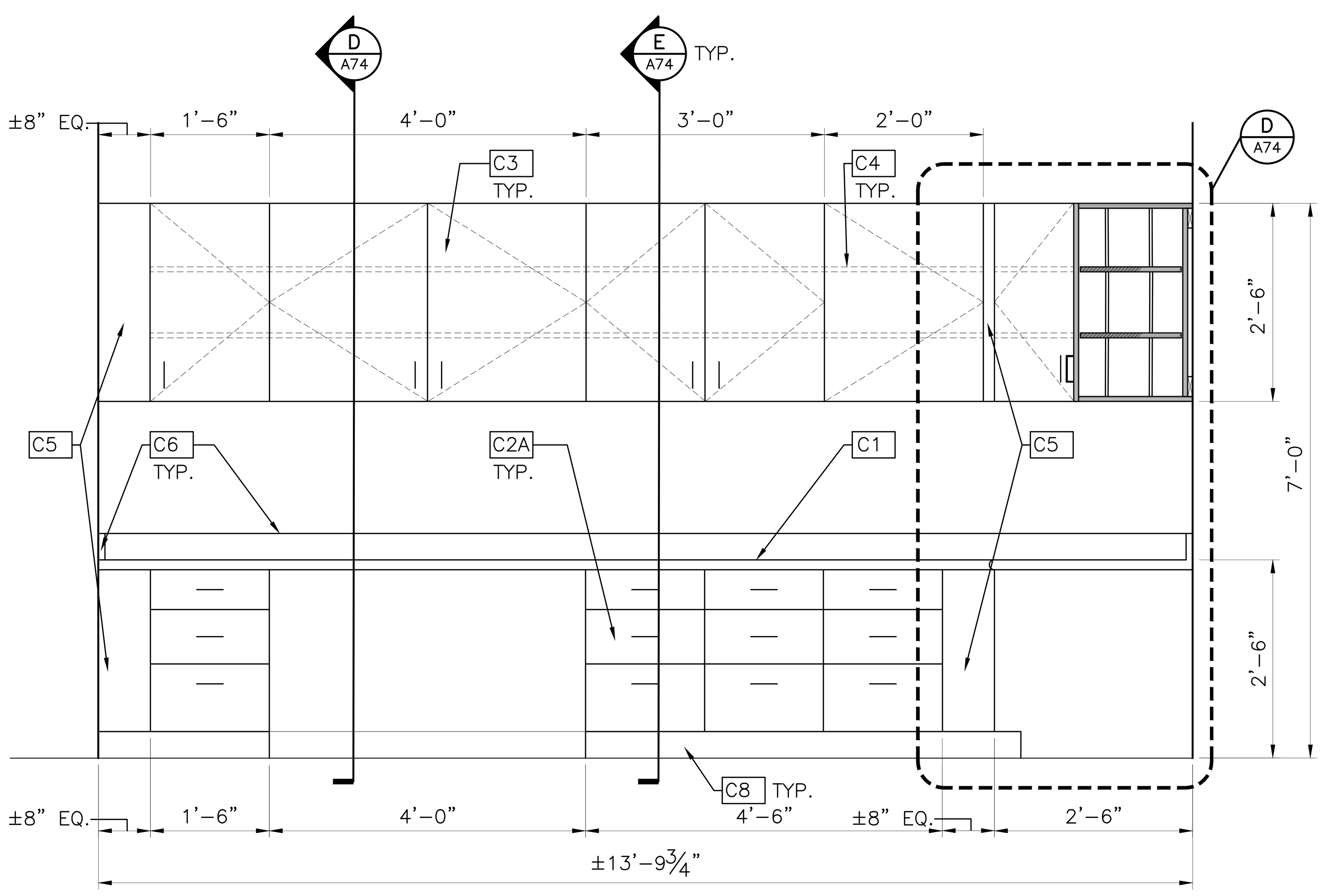
SCALE: AS NOTED
DRAWN BY: CITY TIMES
DESIGNED BY: CITY TIMES
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

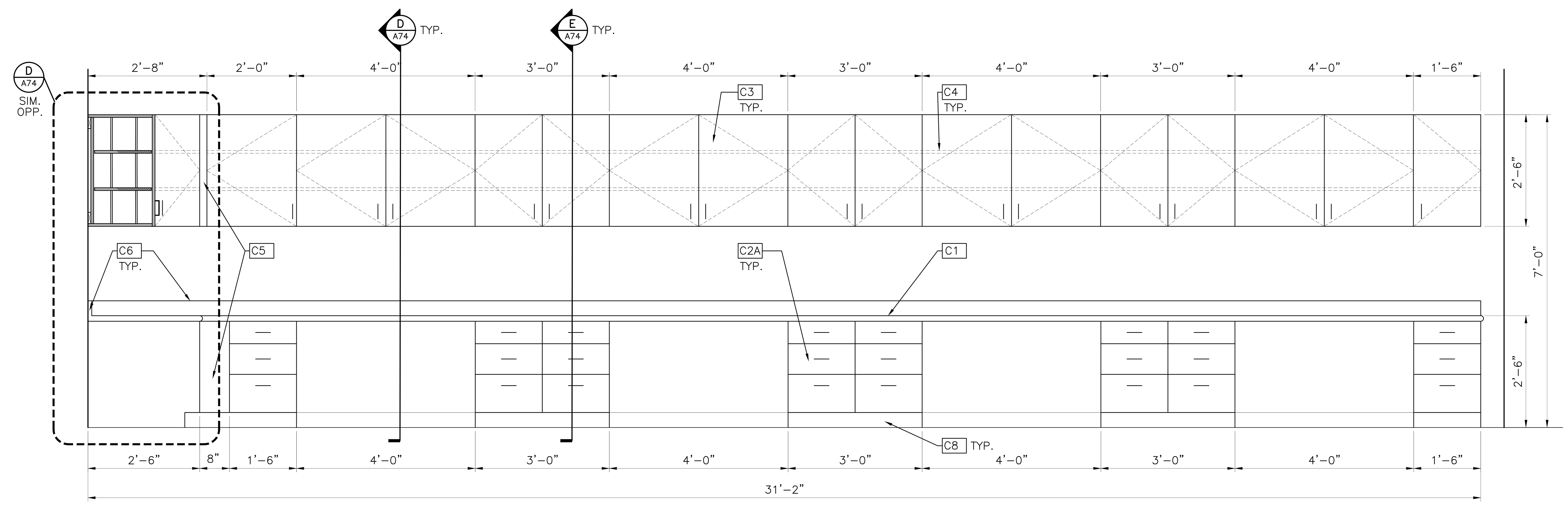
TITLE: FIRST FLOOR FURNITURE & EQUIPMENT PLAN

EIA DRAWING NO. A71
CLIENT DWG. NO. - - - - -
EIA PROJECT NO. EG8577.03

XX



SOUTH ELEVATION (A / A72)
3/4"=1'-0"



PARTIAL WEST ELEVATION (B / A72)
3/4"=1'-0"

EAST ELEVATION (C / A72)
3/4"=1'-0"

CASEWORK KEYED NOTES:

NOTE: THE FOLLOWING KEYED NOTES ARE TYPICAL TO THE PROJECT. SOME NOTES MAY NOT APPLY TO EVERY CABINETRY SHEET.

- C1 EPOXY RESIN COUNTERTOP.
- C2 METAL BASE CABINET.
- C2A METAL BASE CABINET WITH THREE DRAWERS AS SHOWN.
- C3 METAL WALL CABINET.
- C4 ADJUSTABLE SHELVING.
- C5 FILLER PANEL AS REQUIRED.
- C5A FULL END PANEL.
- C6 4" HIGH BACKSPLASH – MATERIAL TO MATCH COUNTERTOP.
- C7 SINK – SEE PLUMBING PLANS.
- C8 4" VINYL BASE.

TYPICAL CASEWORK NOTES:

1. ALL CASEWORK TO BE METAL LABORATORY CASEWORK.
2. PROVIDE LOCKS FOR ALL DRAWERS AND CABINETS.
3. ALL BACKSPLASHES TO BE FORMED CONTINUOUS WITH COUNTERTOPS.
4. PROVIDE ALL WOOD BLOCKING AND NAILERS AS REQUIRED TO MOUNT CABINETS IN ACCORDANCE WITH CABINET MANUFACTURER'S STANDARDS AND RECOMMENDATIONS.

GENERAL NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #19, 20 AND 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. SEE GENERAL NOTE #16 ON SHEET T02 FOR DIMENSION INFORMATION.
4. SEE SHEET A74 FOR TYPICAL CABINETRY DETAILS.

0 1' 2' 4'
¾" = 1'-0"

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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JAMES P. HUNTER, AIA NY LICENSE NO. 043894-01 — ARCHITECTURE

SCALE: AS NOTED
DRAWN BY:
DESIGNED BY:
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

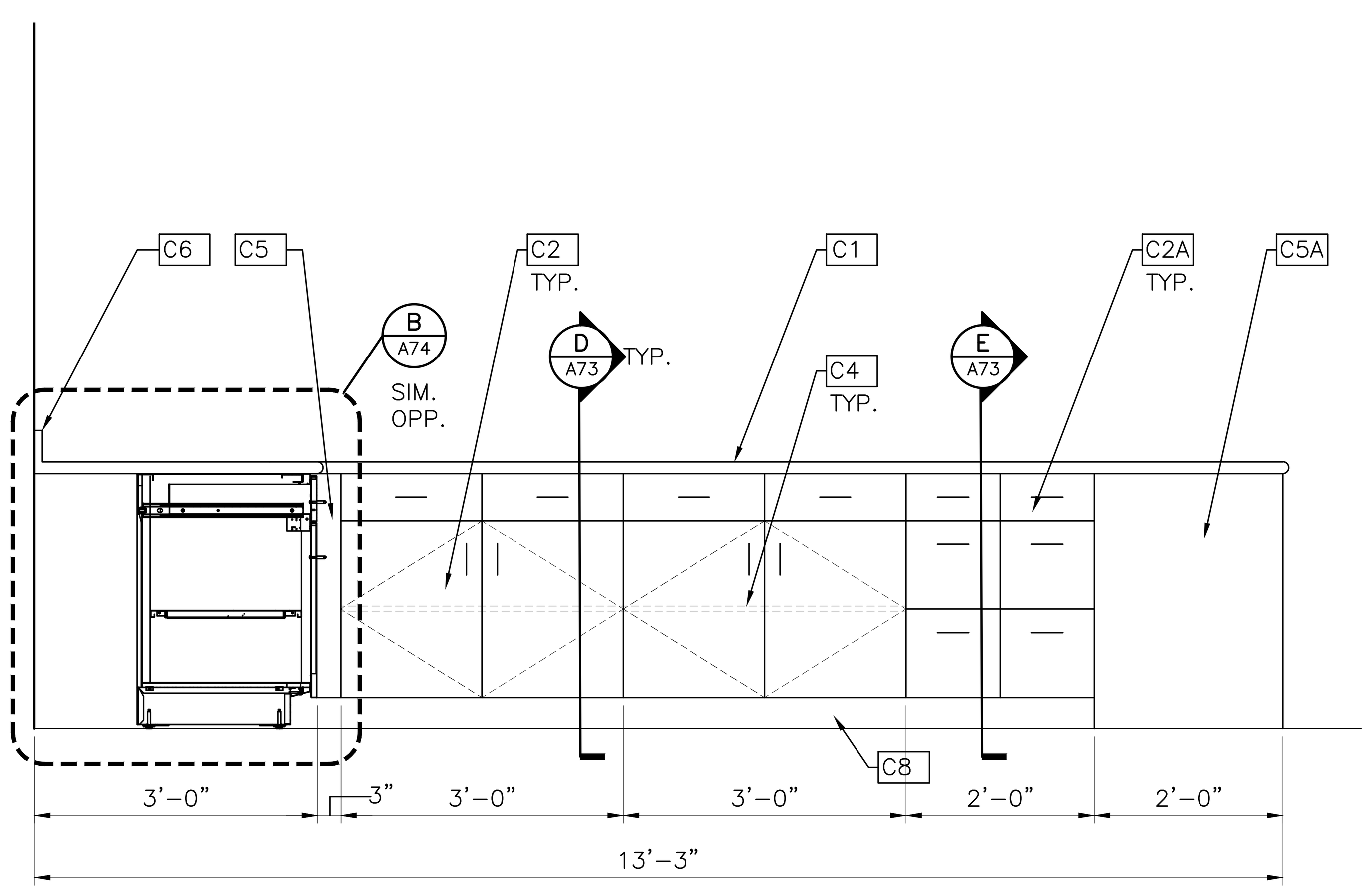
PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE: CASEWORK ELEVATIONS

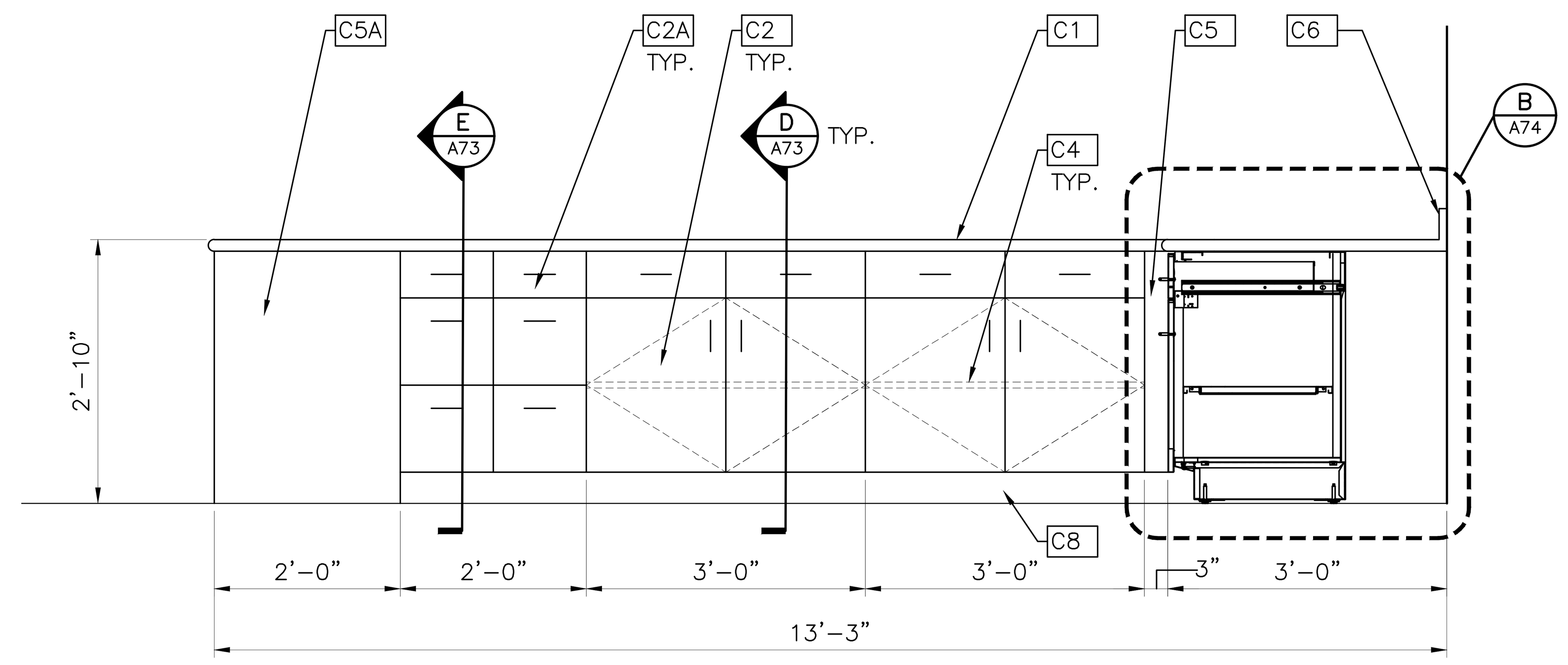
EIA DRAWING NO. A72
CLIENT DWG. NO. – – – –
EIA PROJECT NO. E08577.03

(XX)

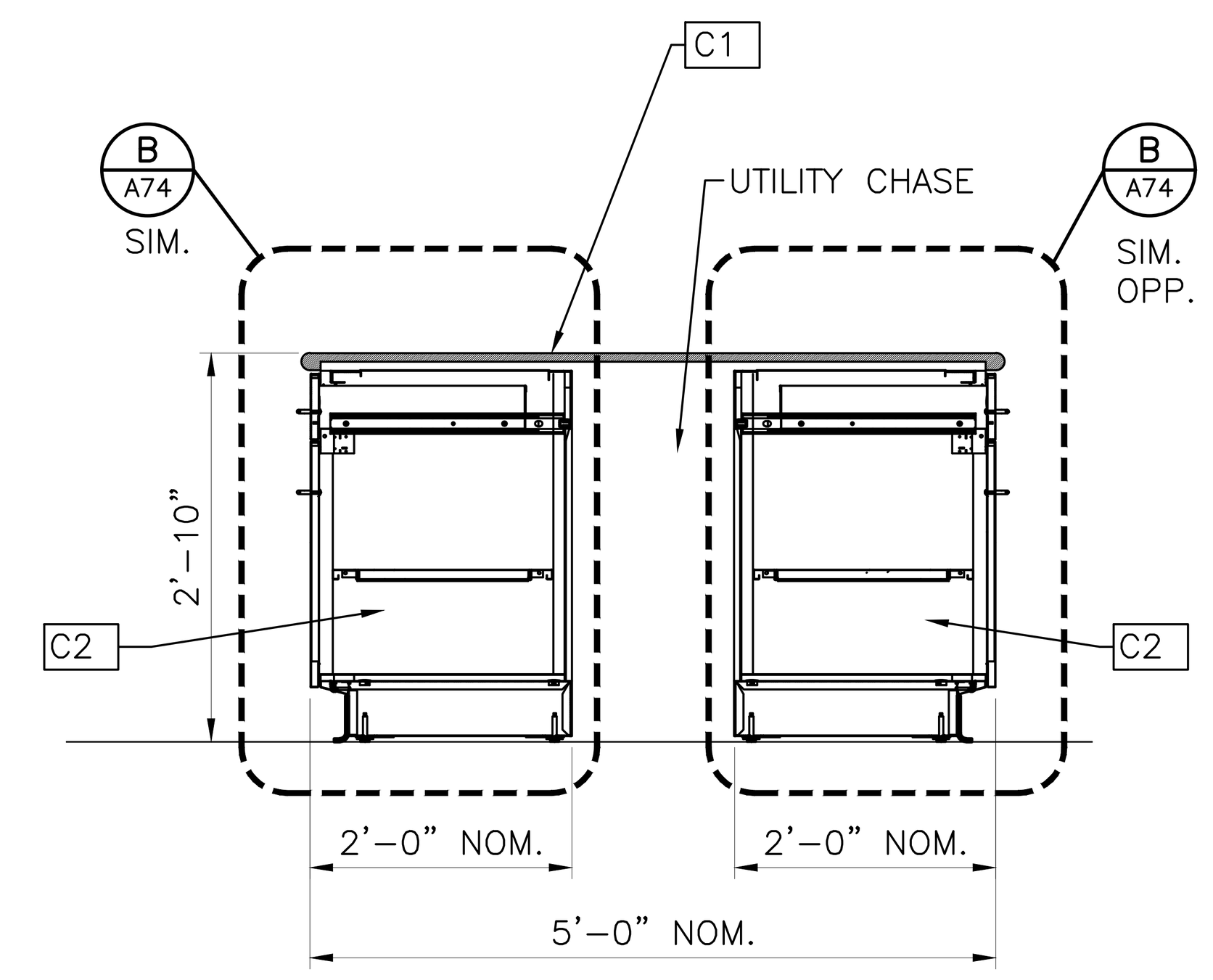
PARTIAL NORTH ELEVATION (A / A73)
3/4"=1'-0"



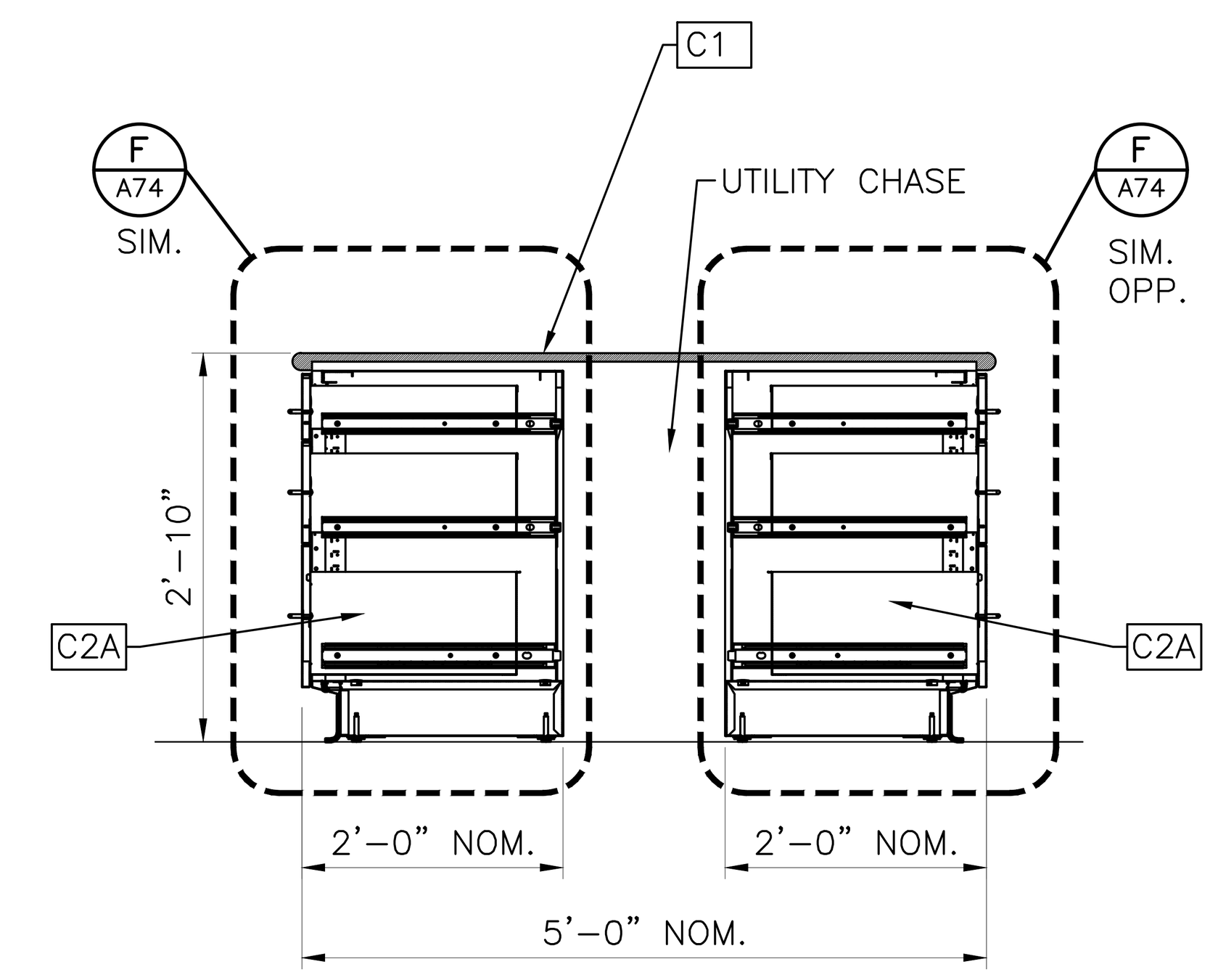
EAST PENINSULA ELEVATION (B / A73)
3/4"=1'-0"



WEST PENINSULA ELEVATION (C / A73)
3/4"=1'-0"



PENINSULA SECTION (D / A73)
3/4"=1'-0"



PENINSULA SECTION (E / A73)
3/4"=1'-0"

CASEWORK KEYED NOTES:

NOTE: THE FOLLOWING KEYED NOTES ARE TYPICAL TO THE PROJECT. SOME NOTES MAY NOT APPLY TO EVERY CABINETRY SHEET.

- C1 EPOXY RESIN COUNTERTOP.
- C2 METAL BASE CABINET.
- C2A METAL BASE CABINET WITH THREE DRAWERS AS SHOWN.
- C3 METAL WALL CABINET.
- C4 ADJUSTABLE SHELVING.
- C5 FILLER PANEL AS REQUIRED.
- C5A FULL END PANEL.
- C6 4" HIGH BACKSPLASH – MATERIAL TO MATCH COUNTERTOP.
- C7 SINK – SEE PLUMBING PLANS.
- C8 4" VINYL BASE.

TYPICAL CASEWORK NOTES:

1. ALL CASEWORK TO BE METAL LABORATORY CASEWORK.
2. PROVIDE LOCKS FOR ALL DRAWERS AND CABINETS.
3. ALL BACKSPLASHES TO BE FORMED CONTINUOUS WITH COUNTERTOPS.
4. PROVIDE ALL WOOD BLOCKING AND NAILERS AS REQUIRED TO MOUNT CABINETS IN ACCORDANCE WITH CABINET MANUFACTURER'S STANDARDS AND RECOMMENDATIONS.

GENERAL NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #19, 20 AND 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. SEE GENERAL NOTE #16 ON SHEET T02 FOR DIMENSION INFORMATION.
4. SEE SHEET A74 FOR TYPICAL CABINETRY DETAILS.

0 1' 2' 4'
¾" = 1'-0"

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JAMES P. HUNTER, AIA NY LICENSE NO. 043894-01 — ARCHITECTURE

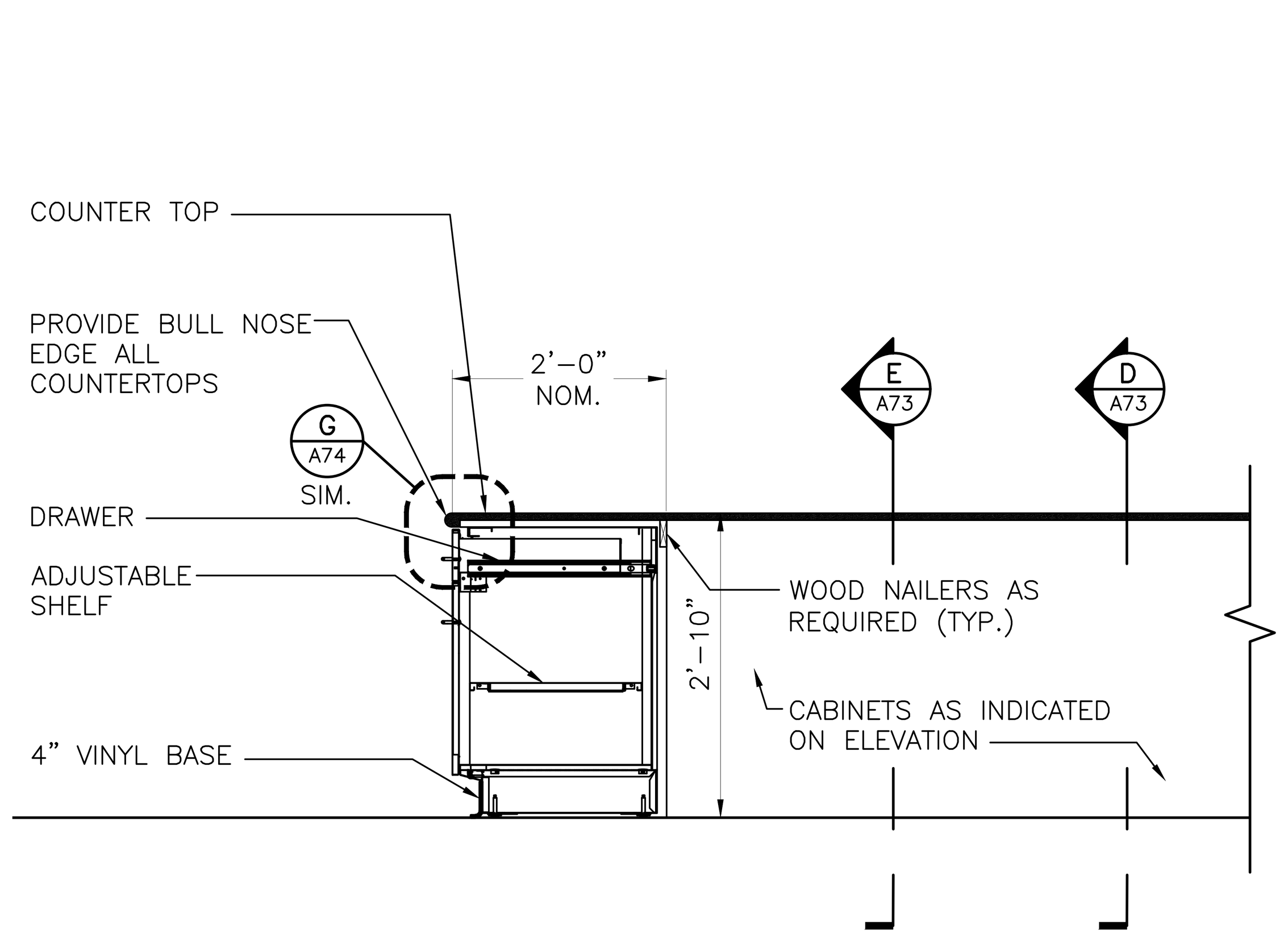
SCALE: AS NOTED
DRAWN BY: SCH
DESIGNED BY: SCH
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

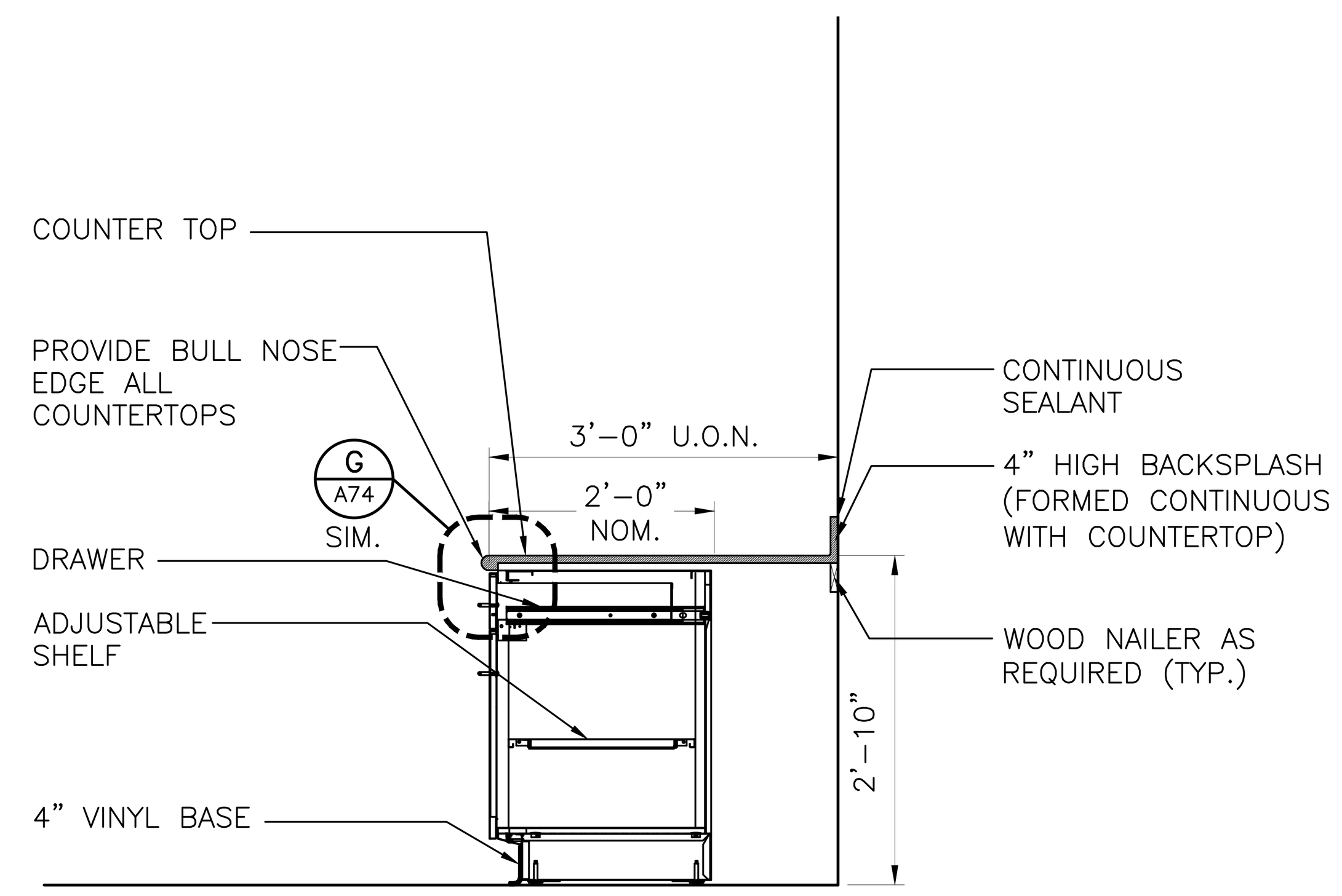
TITLE: CASEWORK ELEVATIONS

EIA DRAWING NO.: A73
CLIENT DWG. NO.: – – – – –
EIA PROJECT NO.: EG8577.03

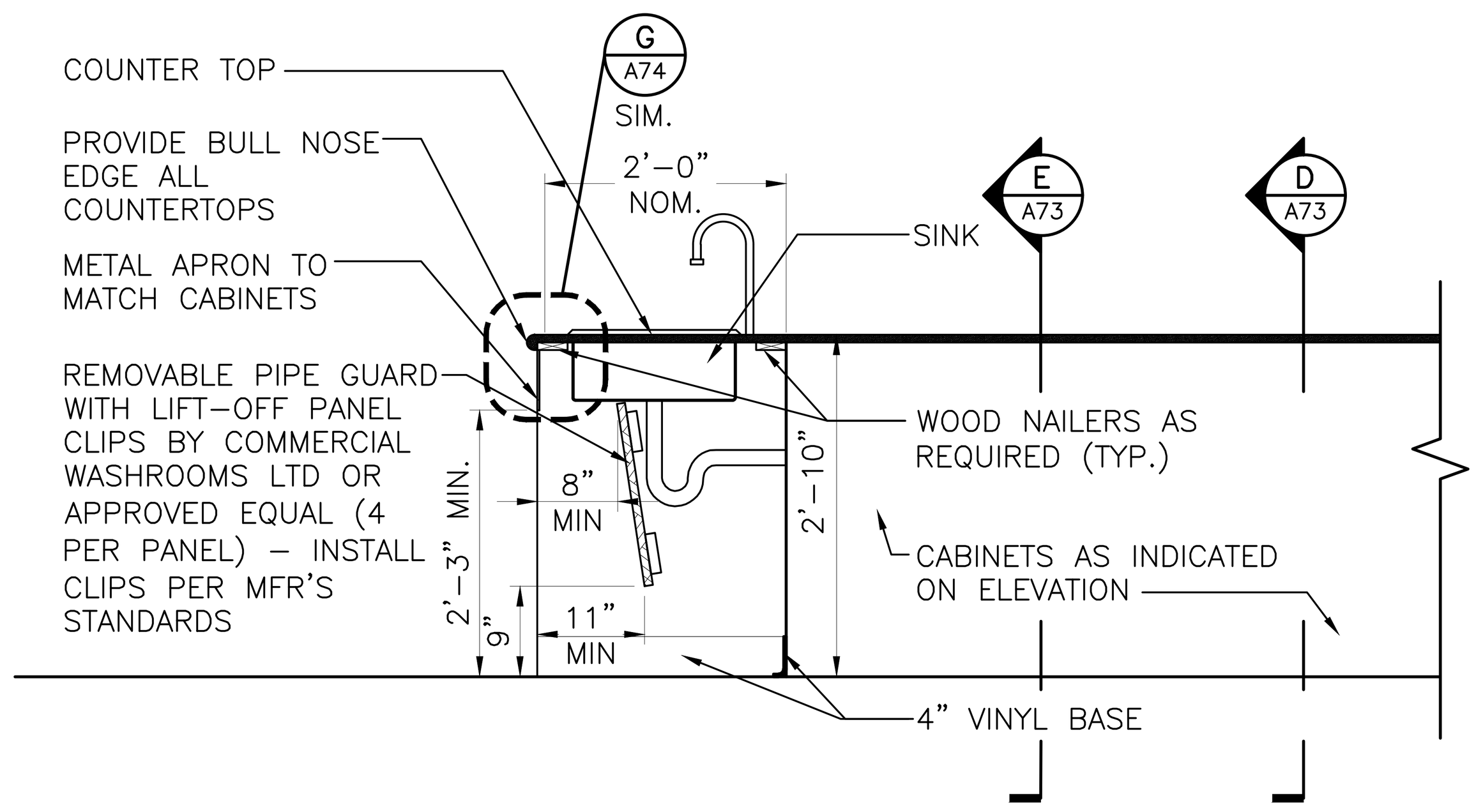
XX



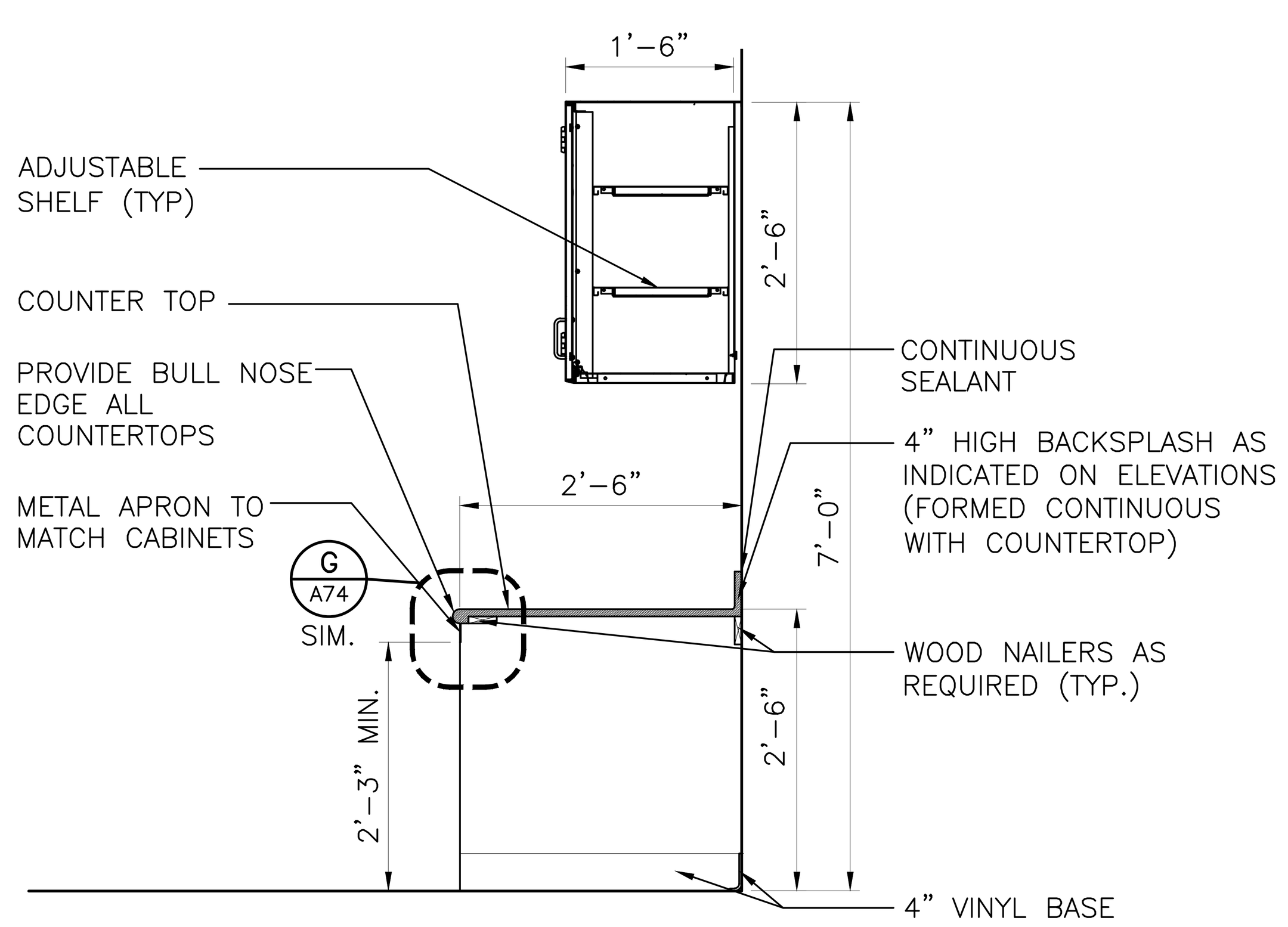
SECTION @ PENINSULA END (A / A74)
3/4"=1'-0"



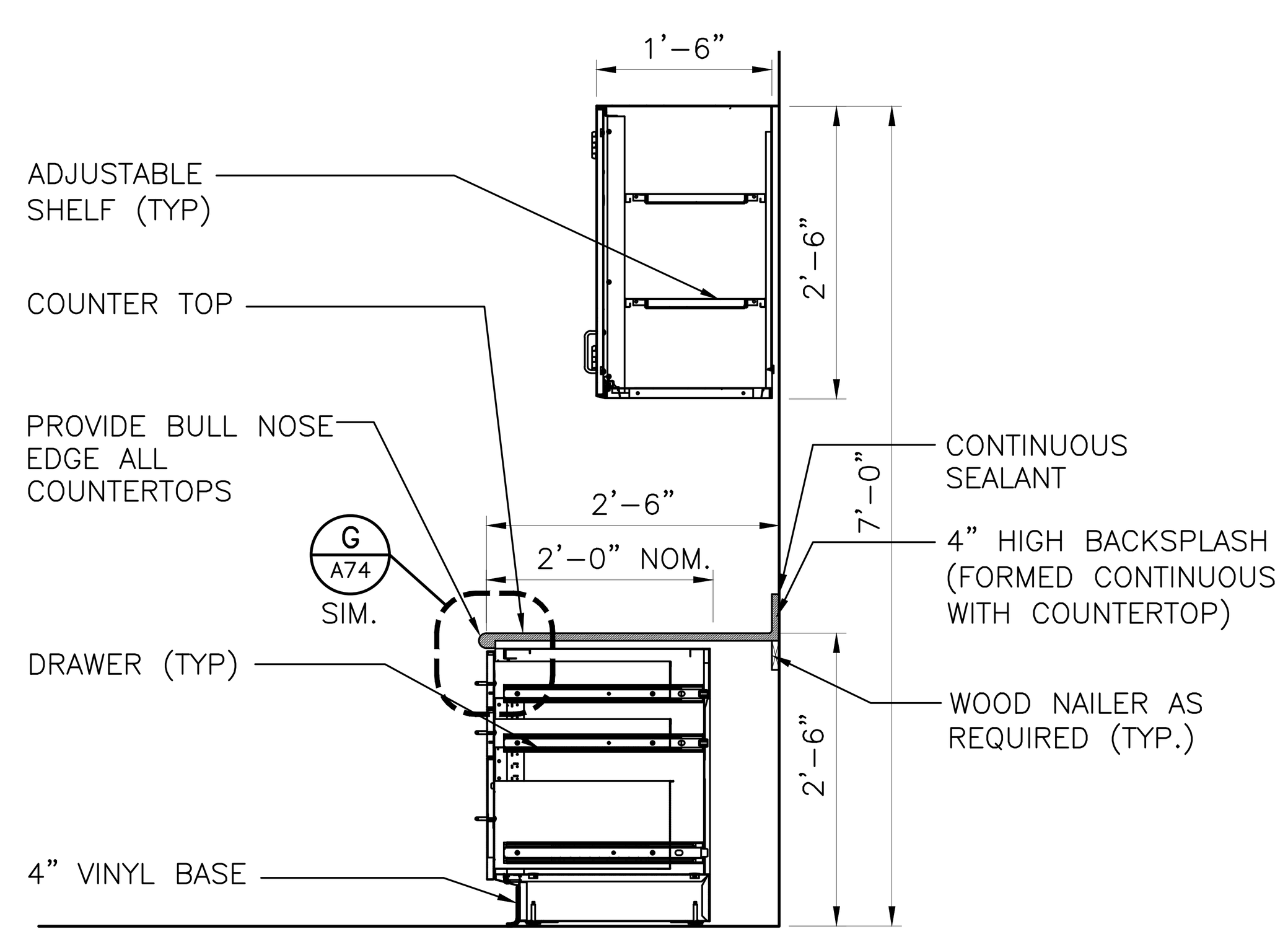
TYPICAL CABINET SECTION (B / A74)
3/4"=1'-0"



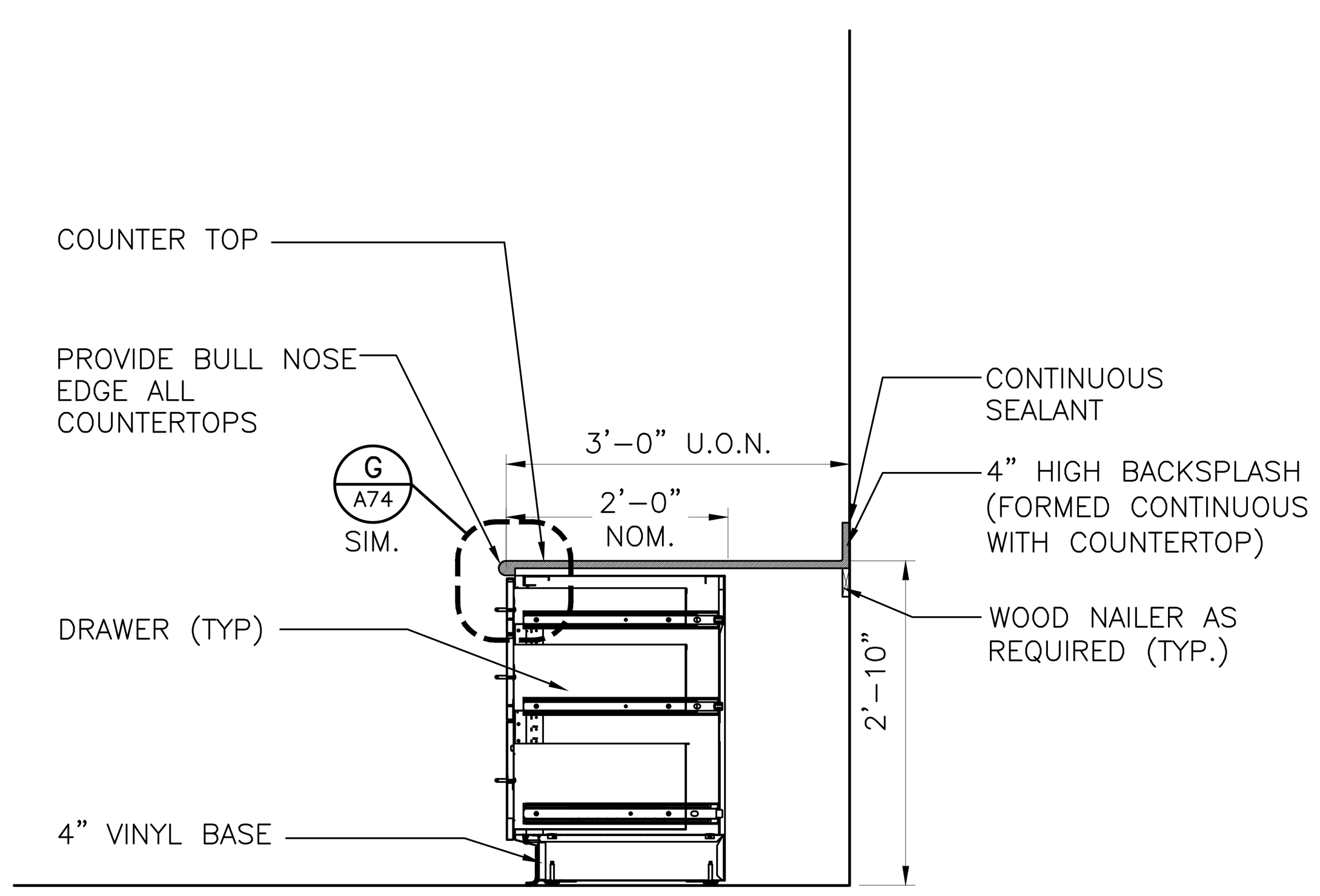
SECTION @ SINK (C / A74)
3/4"=1'-0"



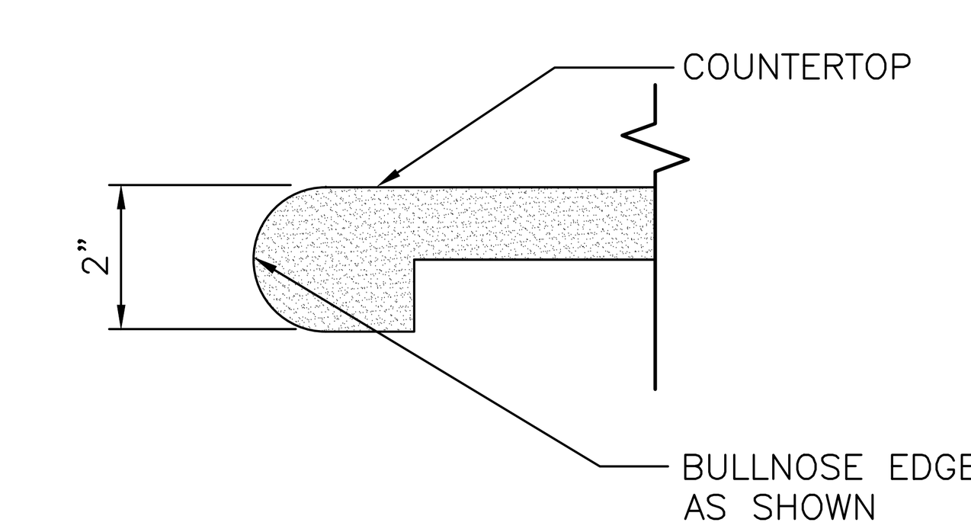
SECTION @ KNEE HOLES (D / A74)
3/4"=1'-0"



SECTION @ DRAWERS (E / A74)
3/4"=1'-0"



SECTION @ DRAWERS (F / A74)
3/4"=1'-0"



TYP. COUNTER EDGE DET. (G / A74)
6" = 1'-0"

CASEWORK KEYED NOTES:

NOTE: THE FOLLOWING KEYED NOTES ARE TYPICAL TO THE PROJECT. SOME NOTES MAY NOT APPLY TO EVERY CABINETRY SHEET.

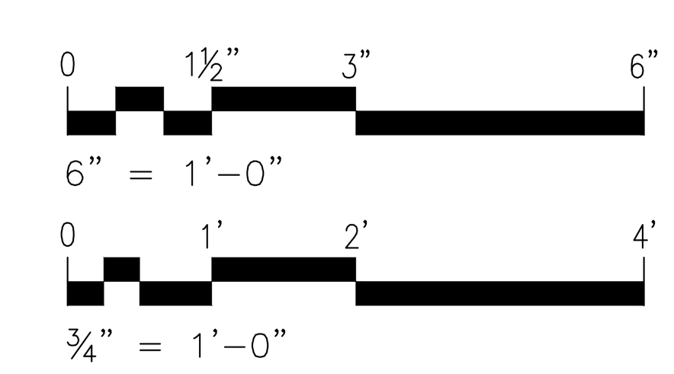
- C1 EPOXY RESIN COUNTERTOP.
- C2 METAL BASE CABINET.
- C2A METAL BASE CABINET WITH THREE DRAWERS AS SHOWN.
- C3 METAL WALL CABINET.
- C4 ADJUSTABLE SHELVING.
- C5 FILLER PANEL AS REQUIRED.
- C5A FULL END PANEL.
- C6 4" HIGH BACKSPLASH – MATERIAL TO MATCH COUNTERTOP.
- C7 SINK – SEE PLUMBING PLANS.
- C8 4" VINYL BASE.

TYPICAL CASEWORK NOTES:

1. ALL CASEWORK TO BE METAL LABORATORY CASEWORK.
2. PROVIDE LOCKS FOR ALL DRAWERS AND CABINETS.
3. ALL BACKSPLASHES TO BE FORMED CONTINUOUS WITH COUNTERTOPS.
4. PROVIDE ALL WOOD BLOCKING AND NAILERS AS REQUIRED TO MOUNT CABINETS IN ACCORDANCE WITH CABINET MANUFACTURER'S STANDARDS AND RECOMMENDATIONS.

GENERAL NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #19, 20 AND 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. SEE GENERAL NOTE #16 ON SHEET T02 FOR DIMENSION INFORMATION.
4. SEE SHEET A74 FOR TYPICAL CABINETRY DETAILS.



REV	REVISION DESCRIPTION	BY	DATE
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JAMES P. HUNTER, AIA NY LICENSE NO. 043894-01 ARCHITECTURE

SCALE: AS NOTED
DRAWN BY:
DESIGNED BY:
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE: CASEWORK ELEVATIONS & DETAILS

EIA DRAWING NO. A74
CLIENT DWG. NO. - - - - -
EIA PROJECT NO. EG8577.03

XX

ROOM FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR	WALL BASE	NORTH WALL	EAST WALL	SOUTH WALL	WEST WALL	CEILING TYPE	REMARKS (SEE FIN. SCHED. NOTES & ABBREVIATIONS) (SEE REMARKS BELOW)
111	IT OFFICE	CPT1	VB2	P1	P1	P1	P1	ACP1	
113	R&D LAB	VCT1	VB1	P1	P1	P1	P1	ACP2	
115	MEN'S LOCKER	VCT1	VB1	P1	P1	P1	P1	ACP2	
116	WOMEN'S LOCKER	VCT1	VB1	P1	P1	P1	P1	ACP2	
B	CORRIDOR B	EXIST	VB1*	–	–	–	P1*	EXIST	* 1 2

FINISH SCHEDULE ABBREVIATIONS:

EXIST = EXISTING TO REMAIN
(–) = NO SURFACE FOR FINISHES TO BE APPLIED
(*) = SEE REMARKS SECTION OF THE SCHEDULE

ROOM FINISH SCHEDULE KEYED NOTES:

1. PROVIDE NEW WALL BASE (TO MATCH EXISTING – VIF) AT NEW PARTITION ONLY.
2. PROVIDE NEW WALL FINISH (TO MATCH EXISTING – VIF) AT NEW PARTITION ONLY.

FINISH SCHEDULE DESCRIPTIONS

FLOORING

CARPET (CPT1)
MFR: PER SPECIFICATIONS
TYPE: MODULAR TILE
COLLECTION: PER SPECIFICATIONS
COLOR: TO BE SELECTED BY OWNER
SIZE: 24" X 24"
INSTALL: MONOLITHIC

VINYL COMPOSITION TILES (VCT1)
NOTE: ARMSTRONG
TYPE: COMMERCIAL FLOORING
COLLECTION: STANDARD EXCELON
STYLE: IMPERIAL TEXTURE
COLOR: TO BE SELECTED BY OWNER
SIZE: 12" X 12" X ⅛"
INSTALL: DIRECTION TO BE SELECTED BY OWNER
COLORS: OWNER TO SELECT (3) COLORS FROM MANUFACTURER'S STANDARD COLORS

BASE

RESILIENT BASE – FIELD (VB1)
MFR: ROPPE
TYPE: TRADITIONAL WALL BASE
COLLECTION: STANDARD TOE
STYLE: COVE EDGE
COLOR: TO BE SELECTED BY OWNER
SIZE: 4" HIGH
INSTALL: SCORE BACK AT CORNERS
NOTE: TV ⅛" THICK THERMOPLASTIC VINYL (.08" IS NOT ACCEPTABLE)
NOTE: OWNER TO SELECT UP TO (2) COLORS FROM MFR'S STANDARD COLORS
NOTE: INSIDE AND OUTSIDE CORNERS TO BE JOB FORMED PER BASE MFR'S INSTALLATION INSTRUCTIONS

RESILIENT BASE – FIELD (VB2)
MFR: ROPPE
TYPE: TRADITIONAL WALL BASE
COLLECTION: STANDARD TOE
STYLE: STRAIGHT
COLOR: TO BE SELECTED BY OWNER
SIZE: 4" HIGH
INSTALL: SCORE BACK AT CORNERS
NOTE: TV ⅛" THICK THERMOPLASTIC VINYL (.08" IS NOT ACCEPTABLE)
NOTE: INSIDE AND OUTSIDE CORNERS TO BE JOB FORMED PER BASE MFR'S INSTALLATION INSTRUCTIONS

WALLS

PAINT SYSTEMS (P1) (WALLS)
MFR: PER SPECIFICATIONS
TYPE: VARIES – SEE SPECIFICATIONS
COLLECTION: PER SPECIFICATIONS
SHEEN: PER SPECIFICATIONS
COLOR: TO BE SELECTED BY OWNER
PRIMER: PER SPEC'S
INSTALL: TWO COATS OF COLOR OVER ONE COAT OF PRIMER. TINT PRIMER TOWARD FINISH COLOR ABOVE
NOTE: OWNER TO SELECT (4) COLORS FROM MANUFACTURER'S STANDARD COLORS

CEILINGS

SUSPENDED CEILING SYSTEM (ACP1)
MFR: USG
ACOUSTICAL CEILING PANELS
COLLECTION: GENERAL APPLICATION
STYLE: TEGULAR #86785
COLOR: WHITE
SIZE: 24" X 24" X 3/4"
EDGE: SLT
PERFORMANCE: CLASS A, 0–25 (ASTM E–84)

SUSPENDED CEILING GRID
MFR: USG
COLLECTION: DONN BRAND DX/DXL
STYLE: 15/16" SYSTEM
STYLF: WHITE

SUSPENDED CEILING SYSTEM (ACP2)
MFR: USG
ACOUSTICAL CEILING PANELS
COLLECTION: GENERAL APPLICATION
STYLE: LAY–IN #88185
COLOR: WHITE
SIZE: 24" x 48" x 3/4"
EDGE: SQUARE
PERFORMANCE: CLASS A, 0–25 (ASTM E–84)

SUSPENDED CEILING GRID
MFR: USG
COLLECTION: DONN BRAND DX/DXL
STYLE: 15/16" SYSTEM
COLOR: WHITE

GENERAL NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #19, 20 AND 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.

ROOM FINISH NOTES:

1. CONTRACTOR SHALL CONFIRM FINAL PRODUCT SELECTIONS W/ OWNER REPRESENTATIVE FOR FINISHES/COLORS NOTED HERE PRIOR TO ORDERING OR INSTALLING PRODUCT.
2. SEE DOOR SCHEDULE ON A60 FOR HOLLOW METAL DOOR FRAME FINISH INFORMATION AND FOR WOOD DOOR FINISH INFORMATION.
3. PAINT GYP. BOARD SOFFITS AND BULKHEADS WHITE TO MATCH ACOUSTICAL CEILING PANELS.
4. SEE A72 SERIES DRAWINGS FOR CABINETRY FINISH INFORMATION.
5. ALL EXISTING FINISHES TO REMAIN IN WORK AREAS SHALL BE CLEANED AND PATCHED FOR A LIKE NEW APPEARANCE.
6. CONTRACTOR SHALL PROVIDE A TRANSITION AT ALL DISSIMILAR FLOOR FINISHES WHERE A DOOR IS NOT PROVIDED. TRANSITION MATERIAL SHALL MATCH THE MORE EXPENSIVE FLOOR FINISH OF THE TWO DISSIMILAR FLOOR FINISHES. (i.e. VINYL AT VCT FLOOR, CERAMIC AT CT FLOORS, ETC.) TRANSITION COLOR SHALL MATCH COLOR OF BASE.
7. EXISTING DOORS AND FRAMES WITHIN WORK AREA SHALL BE PREPARED TO RECEIVE NEW FINISH. DINGS OR RUSTED AREAS OF METAL SURFACE SHALL BE PREPPED AND PRIMED PRIOR TO PAINTING. SEE PLAN 1/A11 FOR DOORS AND FRAMES TO BE BE REFINISHED AND SEE A60 FOR DOOR AND FRAME FINISH INFORMATION.
8. CONTRACTOR SHALL SUPPLY AND STORE AS DIRECTED BY OWNER'S REPRESENTATIVE 5% OVER STOCK OF EACH FLOORING, BASE, WALL, AND CEILING MATERIAL.
9. SEE FLOOR REPAIR AND PREPARATION NOTES THIS SHEET FOR REPAIR AND PREPARATION REQUIREMENTS AT EXISTING CONCRETE SLABS.

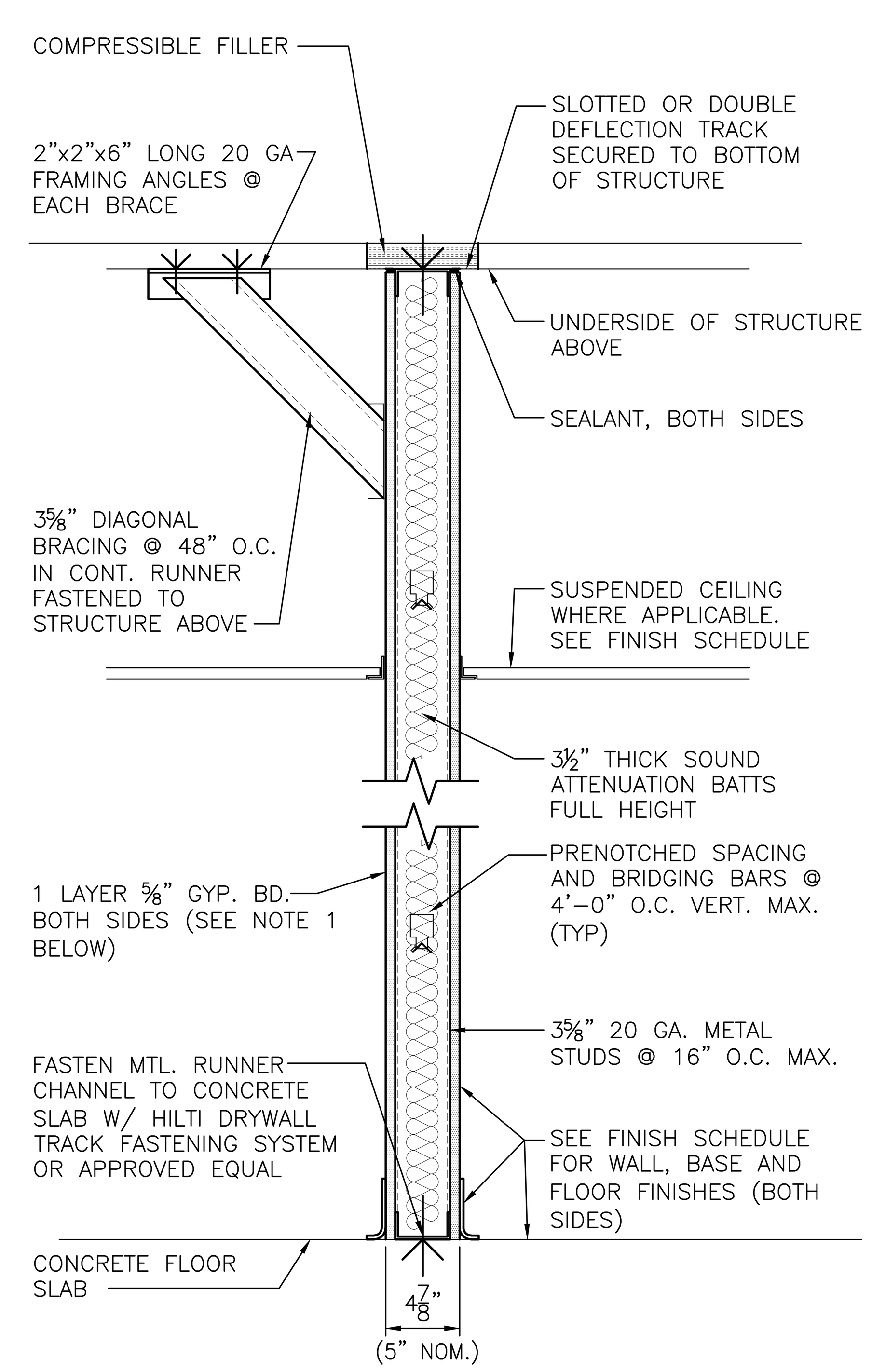
ROOM FINISH SCHEDULE NOTES:

1. SEE FINISH SCHEDULE DESCRIPTIONS & FINISH SCHEDULE ABBREVIATIONS ON THIS SHEET FOR DESCRIPTIONS OF THE ABBREVIATIONS ON THE ROOM FINISH SCHEDULE.
2. PROVIDE BASE AT ALL NEW PARTITIONS.
3. PAINT EXISTING WALLS PER ROOM FINISH SCHEDULE.

FLOOR REPAIR AND PREPARATION NOTES:

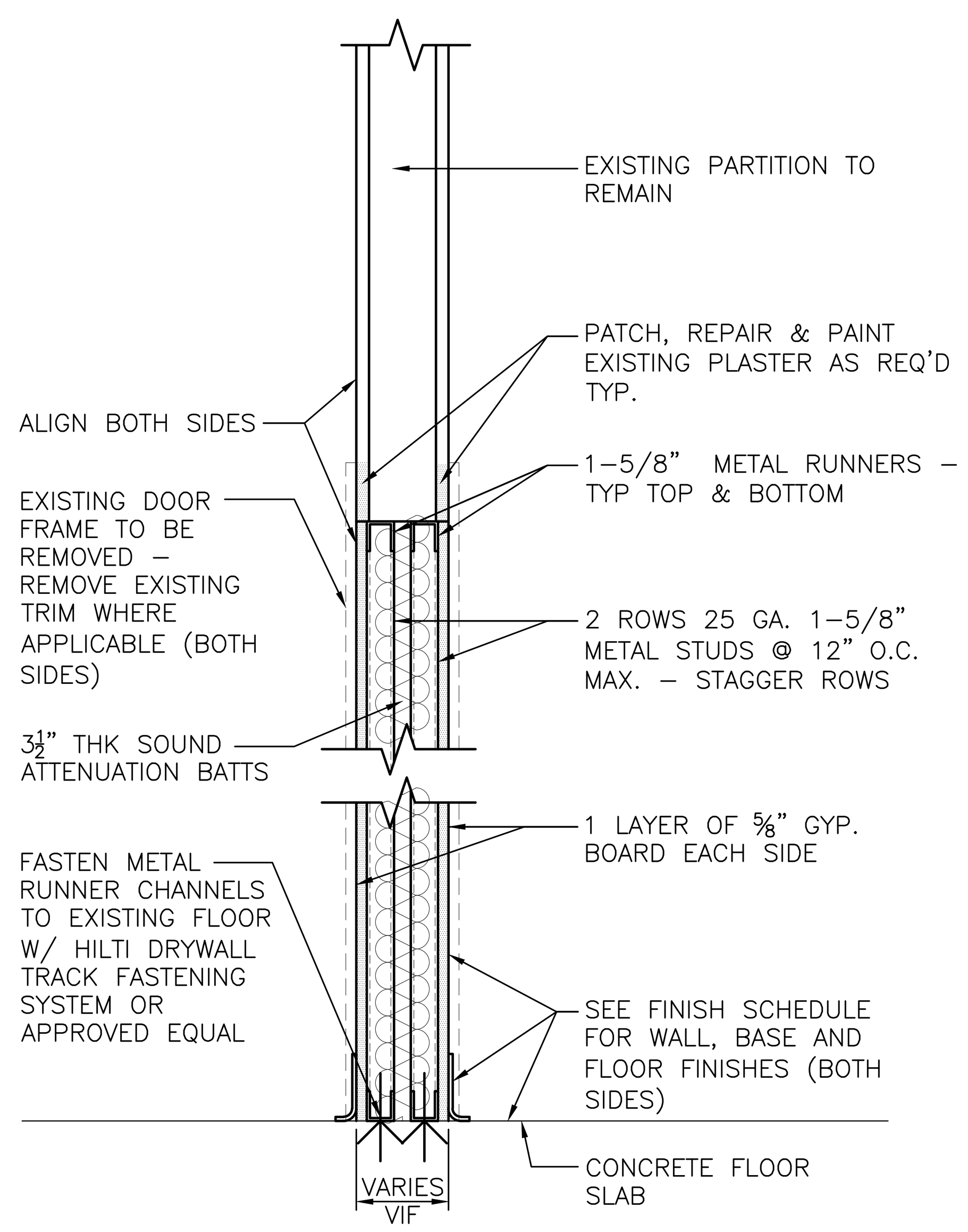
A. CONCRETE SLABS

1. IN ROOMS OR SPACES WHERE NEW FLOOR FINISHES, SEALERS OR COATINGS ARE SCHEDULED TO BE INSTALLED OVER EXISTING CONCRETE SLABS, REPAIR CRACKS PER DETAIL 1/AD00.
2. WHERE SPACES INDICATED IN PARAGRAPH 1 ABOVE ARE READILY ACCESSIBLE FOR INSPECTION DURING BIDDING, CONTRACTOR SHALL INCLUDE ALL COSTS FOR CRACK REPAIR FOR SUCH SPACES IN THEIR BASE BID.
3. WHERE SPACES INDICATED IN PARAGRAPH 1 ABOVE ARE NOT READILY ACCESSIBLE FOR INSPECTION DURING BIDDING, CONTRACTOR SHALL REVIEW EXTENT OF REQUIRED CRACK REPAIR IN FIELD WITH OWNER OR ARCHITECT AFTER SLABS ARE EXPOSED. CONTRACTOR SHALL THEN PERFORM CRACK REPAIR TO EXTENT APPROVED BY OWNER UNDER SPECIFIED ALLOWANCE AND/OR CHANGE ORDER AS APPLICABLE.

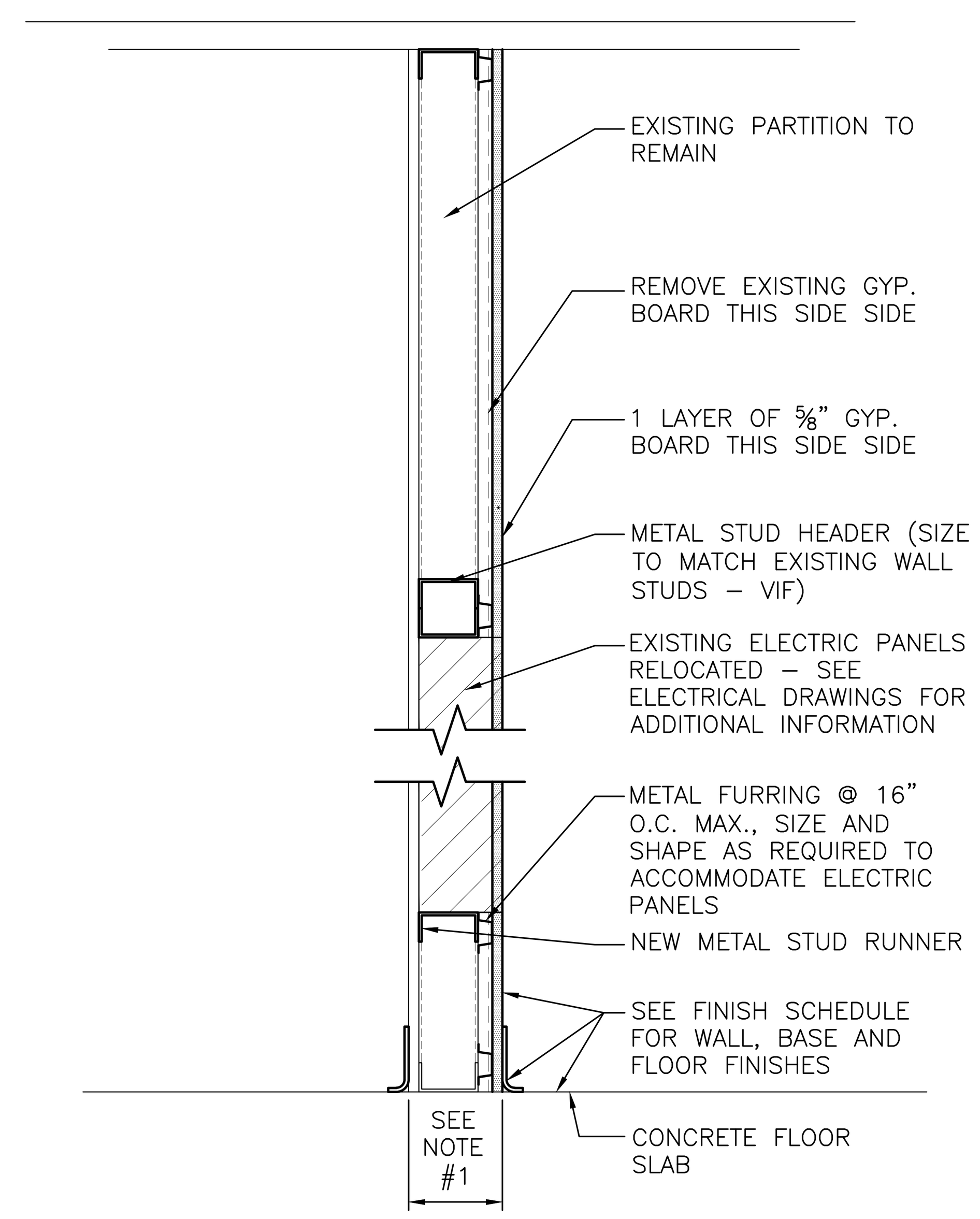


S1 NON RATED STUD PARTITION
STC 51 — NTS

NOTES:
1. SEE GYPSUM BOARD NOTES THIS SHEET FOR LOCATIONS REQUIRING WATER RESISTANT GYPSUM BOARD.



S2 NON RATED STUD PARTITION
STC 51 — NTS



S3 NON RATED STUD PARTITION
STC 51 — NTS

NOTES:
1. TOTAL NEW THICKNESS OF PARTITION TO BE AS REQUIRED TO ACCOMMODATE RELOCATED ELECTRICAL PANELS.

PARTITION NOTES:

1. SEE GYPSUM BOARD NOTES, THIS SHEET, FOR LOCATIONS REQUIRING MOISTURE/MOLD RESISTANT GYPSUM BOARD.
2. AT STUD WALLS, USE 12 GA. BACKING PLATES AT WALL MOUNTED ITEMS, SUCH AS A/V BACK BOXES AND OTHER VENDOR PROVIDED WALL MOUNTED ITEMS. COORDINATE WITH VENDOR.
3. PARTITION THICKNESS ON PARTITION TYPES INDICATED ARE MINIMUM. WHERE PARTITIONS ALIGN WITH EXISTING PARTITIONS, THEN THE THICKNESS OF THE NEW PARTITION MAY VARY FROM THE PARTITION TYPE IN ORDER FOR THE FACE OF THE NEW AND EXISTING PARTITIONS TO ALIGN. SEE FLOOR PLAN NOTE #2 ON DRAWING A11.
4. A 1" MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN COLUMNS AND ENCLOSURE IN ALL INSTANCES.
5. INSTALL NEW WALLS, PARTITIONS, ENCLOSURES, ETC. TIGHT TO ADJOINING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO BEAMS, JOISTS, ETC.
6. ALL METAL STUDS TO BE 20 GAUGE U.O.N.
7. INSTALL BRIDGING IN METAL STUD WALLS IN ACCORDANCE WITH SPECIFICATIONS AND STUD MANUFACTURER'S REQUIREMENTS.

GYPSUM BOARD NOTES:

1. ALL GYPSUM BOARD INSTALLED IN LOCKER ROOMS SHALL BE MOISTURE/MOLD RESISTANT GYPSUM BOARD.
2. ALL GYPSUM BOARD SHALL BE TAPED, SPACKLED (MINIMUM 3 COATS) AND SANDED.

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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SCALE: AS NOTED
PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG — NEW YORK
EIA DRAWING NO.: A75
DRAWN BY / DESIGNED BY / CHECKED BY / APPROVED BY / PROJECT MANAGER:
TITLE: ROOM FINISH SCHEDULE & PARTITION TYPES
CLIENT DWG. NO.: – – – –
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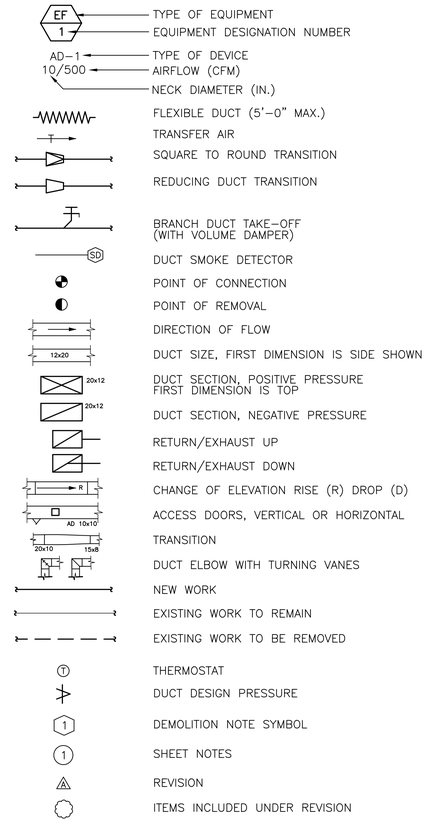

GENERAL NOTES:

1. SCOPE OF WORK:

WORK INCLUDED UNDER THIS SECTION IS SUBJECT TO THE CONTRACT AGREEMENT, GENERAL CONDITIONS, AND CONTRACT DRAWINGS. PROVIDE ALL MATERIAL, LABOR, SUPERVISION, EQUIPMENT AND APPURTENANCES REQUIRED TO COMPLETE WORK AS SPECIFIED ON CONTRACT DRAWINGS, INCLUDING BUT NOT LIMITED TO:

* RETAIN THE SERVICES OF A CERTIFIED BALANCING CONTRACTOR AND OBTAIN AIR FLOW MEASUREMENTS FOR SUPPLY, RETURN AND EXHAUST SYSTEMS IN PROPOSED AREAS OF WORK. TEST RESULTS WILL BE USED TO VERIFY THE OPERATION OF EXISTING SYSTEMS FOR FINAL BALANCING.
* DEMOLISH AND REMOVE EXISTING CEILING IN LOCKER ROOM AND R&D LABOROTORY AREAS AND REDISTRIBUTE AIR TO ACCOMMODATE NEW ROOM LAYOUT.
* DEMOLISH TWO (2) EXISTING LABOROTORY FUME HOODS AND ASSOCIATED EXHAUST FANS, COMPRESSED AIR, ETC. LOCATED IN R&D LABOROTORIES. TURN OVER TO FACILITY MANAGEMENT FOR STORAGE AND FUTURE REUSE/REINSTALLATION.
* PROVIDE NEW SUPPLY GRILLS, EXHAUST GRILLS AND RETURN GRILLS TO ACCOMMODATE NEW CEILING LAYOUTS. PROVDE AN ALLOWANCE FOR NEW SHEETMETAL BRANCH DUCTWORK, FLEX DUCT, DAMPERS, INSULATION, ETC, AS REQUIRED FOR A COMPLETE INSTALLATION.
* UPON INSTALLATION ALL SYSTEMS SHALL BE REBALANCED TO THE AIR FLOWS INDICATED ON THE PLANS.
* ALL MATERIAL AND WORKMANSHIP SHALL BE OF THE BEST QUALITY AND SHALL BE INSTALLED IN ACCORDANCE WITH THE BEST PERFORMANCE OF THE TRADE.

2. PERMITS AND FEES:

THE CONTRACTOR SHALL FILE ALL NECESSARY DRAWINGS, SECURE AND PAY ALL FEES FOR PERMITS, LICENSES, INSPECTIONS AND ROYALTIES WITH FEDERAL, STATE, COUNTY AND LOCAL AUTHORITIES HAVING JURISDICTION OVER THIS WORK AS WELL AS WITH INSURANCE AND LOCAL UTILITY COMPANIES IF THEIR APPROVAL IS REQUIRED. THE CONTRACTOR SHALL DELIVER ALL PERMITS, APPROVALS, AND CERTIFICATES OF INSPECTION FOR HIS WORK TO THE OWNER'S REPRESENTATIVE, WITHOUT ADDITIONAL COST, BEFORE REQUESTING FINAL PAYMENT FOR THE WORK.

3. DRAWINGS, SURVEYS AND MEASUREMENTS:

CONTRACT DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. THEY DO NOT INDICATE ALL OFFSETS, BENDS, ACCESS PANELS AND SIMILAR ITEMS WHICH MAY BE REQUIRED. THEY ARE NOT TO BE SCALED. THE ENGINEERING DRAWINGS AND DETAILS SHALL BE EXAMINED FOR EXACT LOCATION OF FIXTURES AND EQUIPMENT. WHERE THEY ARE NOT DEFINITELY LOCATED, THIS INFORMATION SHALL BE OBTAINED FROM THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYING OUT WORK AND CHECK DRAWINGS OF OTHER TRADES TO VERIFY CLEARANCE IN SPACES IN WHICH WORK WILL BE INSTALLED, AND TO COORDINATE LOCATION OF ALL DUCTWORK, PIPING, EQUIPMENT AND OTHER MECHANICAL ITEMS TO AVOID INTERFERENCE WITH THE WORK OF OTHER TRADES. THE CONTRACTOR SHALL INVESTIGATE STRUCTURAL CONDITIONS, ARCHITECTURAL FINISHES, CEILING HEIGHTS, AND ALL EXISTING CONDITIONS AFFECTING HIS WORK AND PROVIDE ALL NECESSARY OFFSETS, TRANSITIONS, FITTINGS, ACCESS PANELS AND SIMILAR ACCESSORIES THAT MAY BE REQUIRED. MAINTAIN MAXIMUM CLEARANCES, WITH AT LEAST 7–FT HEADROOM AND 3 FT WALKWAYS, AT ALL POINTS. WHERE CLEARANCES, HEADROOM OR WALKWAYS APPEAR INADEQUATE, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH INSTALLATION.

IF DIRECTED BY OWNER'S REPRESENTATIVE, THE CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN THE LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF OTHER TRADES OR FOR PROPER EXECUTION OF THE WORK.

UNDER NO CIRCUMSTANCES SHALL THE MECHANICAL WORK OBSTRUCT THE CODE–REQUIRED ACCESS SPACE FOR ELECTRICAL PANELS AND DEVICES.

THE CONTRACTOR SHALL BASE ALL MEASUREMENTS, BOTH HORIZONTAL AND VERTICAL, FROM ESTABLISHED BENCHMARKS. ALL WORK SHALL AGREE WITH THESE ESTABLISHED LINES AND LEVELS. VERIFY ALL MEASUREMENTS AT SITE AND CHECK THE CORRECTNESS OF THESE MEASUREMENTS AS RELATED TO THE WORK.

SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCY BETWEEN ACTUAL MEASUREMENTS AND THOSE INDICATED ON THE DRAWINGS THAT PREVENTS FOLLOWING THE CONTRACT DRAWINGS AND SPECIFICATIONS, HE SHALL NOTIFY THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH FURTHER WORK.

THE CONTRACTOR SHALL IMMEDIATELY AND BEFORE PROCEEDING WITH THE WORK NOTIFY THE ENGINEER, IN WRITING, IF ANY INCONSISTENCY IS FOUND BETWEEN THE SPECIFICATIONS AND THE DRAWINGS. THE OWNER'S REPRESENTATIVE WILL RESOLVE ALL INCONSISTENCIES AND ADVISE THE CONTRACTOR TO PROCEED WITH THE WORK ACCORDINGLY.

WHERE CONSTRUCTION IN EXISTING FACILITIES IS INVOLVED, THE CONTRACTOR SHALL SURVEY EXISTING FACILITIES TO CONFIRM ALL EXISTING CONDITIONS AND DIMENSIONS, WHETHER INDICATED ON THE DRAWINGS OR NOT. BEFORE ORDERING ANY MATERIAL OR DOING ANY WORK, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS IN THE FIELD AND HE SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF THESE MEASUREMENTS. THE FINAL LOCATION OF ALL DUCTWORK, PIPING AND EQUIPMENT SHALL BE FIELD VERIFIED BY THE CONTRACTOR TO AVOID ALL INTERFERENCES.

UNLESS SPECIFICALLY OTHERWISE NOTED, THIS CONTRACTOR SHALL DO ALL CUTTING AND PATCHING NECESSARY FOR THE INSTALLATION OF HIS WORK. ALL PATCHING SHALL MATCH EXISTING ADJACENT SURFACES.

NO EXTRA COMPENSATION WILL BE ALLOWED ON ACCOUNT OF ANY DIFFERENCES BETWEEN ACTUAL DIMENSIONS AND THOSE INDICATED ON THE DRAWINGS, OR FOR ANY EXISTING CONDITIONS OR OBSTRUCTIONS NOT INDICATED ON DRAWINGS. ANY DIFFERENCES THAT MAY BE FOUND SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR CONSIDERATION BEFORE PROCEEDING WITH THE WORK.

4. CUTTING, PATCHING AND PENETRATIONS:

THE CONTRACTOR SHALL FURNISH ALL INFORMATION BY DRAWINGS OR IN WRITING, FOR THE SIZE AND LOCATION OF ALL REQUIRED OPENINGS, CHASES OR OTHER PROVISIONS FOR HIS WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUBMIT SUCH INFORMATION TO THE OWNER'S REPRESENTATIVE AND THE GENERAL CONTRACTOR IN AMPLE TIME FOR SUCH PROVISIONS TO BE MADE. CUTTING AND PATCHING IN EXISTING CONSTRUCTION SHALL BE DONE BY THIS CONTRACTOR. ALL PATCHING SHALL BE DONE WITH APPROVED MATERIALS AND SHALL MATCH EXISTING ADJACENT SURFACES. PIPING AND DUCTWORK PENETRATIONS THROUGH WALLS, FLOORS AND CEILINGS SHALL BE SEALED BY THE CONTRACTOR. THE TYPE OF SEAL USED SHALL BE COORDINATED WITH THE TYPE OF CONSTRUCTION BEING PENETRATED, I.E. FIRE–RATED, SMOKE–RATED, COMBINATION SMOKE–FIRE RATED, OR NON–RATED PARTITION. CONTRACTOR SHALL PROVIDE FIRE STOPS FOR ALL PIPING AND DUCTWORK PENETRATIONS WITH UL RATED ASSEMBLIES, USING APPLICABLE U.S.G THERMOFIBER SMOKE AND FIRE LIFE SAFETY INSULATION SYSTEMS OR APPROVED EQUAL.

5. MISCELLANEOUS STEEL, SUPPORTS AND ACCESSORIES:

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY LUMBER, STEEL ANGLES, CHANNELS, PLATES, PIPE, RODS, NUT, BOLTS, ETC., AS SHOWN ON PLANS, AS SPECIFIED, OR AS MAY BE REQUIRED FOR A COMPLETE AND PROPERLY SUPPORTED INSTALLATION OF DUCTWORK AND EQUIPMENT. ALL EQUIPMENT PADS INDICATED ON THE DRAWINGS SHALL BE PROVIDED BY THIS CONTRACTOR UNLESS NOTED OTHERWISE. CONTRACTOR SHALL CONFIRM EXACT STRUCTURAL REQUIREMENTS FOR THE MOUNTING OF ALL EQUIPMENT AND DUCTWORK. ALL MOUNTING AND SUPPORT DETAILS INDICATED ON MECHANICAL DRAWINGS ARE INTENDED TO CONVEY A GENERAL MEANS OF SUPPORT, NOT THE SPECIFIC DETAILS. SUBMIT SHOP DRAWING DETAILS FOR APPROVAL OF MECHANICAL AND STRUCTURAL ENGINEER(S), ALSO SEE SPECIFICATIONS.

6. APPROVALS AND REQUIRED SHOP DRAWINGS:

CONTRACTOR SHALL SUBMIT FOR APPROVAL DETAILED SHOP DRAWINGS, COMPLETELY COORDINATED WITH ALL OTHER TRADES, OF ALL EQUIPMENT, MATERIALS, INSTALLATION AND SUPPORT DETAILS REQUIRED. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL FOUR (4) COPIES SHOP DRAWINGS, ENGINEERING DATA AND CATALOG INFORMATION PRIOR TO ORDERING, FOR ALL MECHANICAL EQUIPMENT AND MATERIALS TO BE ORDERED.

* THESE SHOP DRAWINGS SHALL INCLUDE PERFORMANCE DATA FOR VAV BOXES AND AIR DEVICES, PLUS THE FOLLOWING CONSTRUCTION OR INSTALLATION DRAWINGS, DIAGRAMS AND DETAILS:
* AUTOMATIC TEMPERATURE CONTROLS, INCLUDING ELECTRIC WIRING DIAGRAMS AND DESCRIPTION OF EACH FUNCTION.
* LAYOUTS SHOWING LOCATION AND SIZE OF ALL OPENINGS IN FLOORS, WALLS, ROOFS AND CEILINGS.
* DETAILS OF SUPPLEMENTARY STRUCTURAL STEEL SUPPORTS, HANGERS AND EQUIPMENT PADS. SHOP DRAWINGS AND WIRING DIAGRAMS MUST BE SUBMITTED FOR ALL EQUIPMENT BEFORE PURCHASING EVEN IF CONTRACTOR INTENDS TO SUBMIT SPECIFIED EQUIPMENT OR LAYOUTS SHOWN ON DRAWINGS. WHERE SHOP DRAWINGS OR SUBMITTED SPECIFICATIONS DEVIATE SIGNIFICANTLY FROM THE CONTRACT DRAWINGS OR SPECIFICATIONS, THE POINTS OF DIFFERENCE SHALL BE CLEARLY NOTED. THE CONTRACTOR SHALL MAKE ALL CORRECTIONS REQUIRED FOR SHOP DRAWINGS AND RESUBMIT BEFORE FINAL APPROVAL CAN BE GIVEN. TAG NUMBERS, DRAWINGS AND SPECIFICATION REFERENCES SHALL BE NOTED ON ALL SUBMISSIONS. WHERE MULTIPLE SELECTIONS OR OPTIONS ARE SHOWN ON A SUBMITTAL, THE CONTRACTOR SHALL MARK ALL THOSE THAT APPLY. FAILURE TO COMPLY WITH THESE INSTRUCTIONS WILL BE SUFFICIENT REASON TO RETURN ANY SUBMITTALS TO THE CONTRACTOR WITHOUT APPROVAL.

7. SUBSTITUTIONS:

WHERE THE CONTRACTOR PROPOSES TO USE AN ITEM OF EQUIPMENT OTHER THAN THAT SPECIFIED OR DETAILED ON THE CONTRACT DRAWINGS, WHICH REQUIRES ANY REDESIGN OF THE STRUCTURE, PARTITIONS, FOUNDATIONS, PIPING, WIRING OR ANY OTHER PART OF THE MECHANICAL OR ARCHITECTURAL LAYOUT, ALL SUCH REDESIGN, AND ALL NEW DRAWINGS AND DETAILING REQUIRED, SHALL BE PREPARED BY THE CONTRACTOR AT HIS OWN EXPENSE AND APPROVED BY THE OWNER'S REPRESENTATIVE. ANY AND ALL COSTS OF REVISIONS SHALL BE BORNE BY THE CONTRACTOR. WHERE SUCH APPROVED SUBSTITUTIONS REQUIRE A DIFFERENT QUANTITY OR ARRANGEMENT OF THE PIPING SYSTEM, WIRING, CONDUIT, OR EQUIPMENT FROM THAT SPECIFIED OR INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SUCH PIPING CHANGES, STRUCTURAL SUPPORTS, INSULATION, CONTROLLERS, MOTORS, MOTOR STARTERS, ELECTRICAL WIRING AND CONDUIT, AND ANY OTHER EQUIPMENT OR APPURTENANCES REQUIRED BY THE SYSTEM, AT NO ADDITIONAL COST TO THE OWNER.

8. RECORD DRAWINGS:

RECORD DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AND SHALL INDICATE IN RED LINE THE ACTUAL INSTALLED LOCATION OF ALL EQUIPMENT, PIPING, VALVES, ACCESS DOORS AND ALL TAGGED ITEMS. UPON COMPLETION OF THE MECHANICAL INSTALLATION, THE CONTRACTOR SHALL CAREFULLY TRANSFER THE AS–BUILT DATA TO NEW, CLEAN PRINTS OF THE MECHANICAL DRAWINGS. ALL CONCEALED AND BURIED WORK SHALL BE LOCATED BY DIMENSIONS AND THE RESULTING DRAWINGS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL AS PART OF THE FINAL ACCEPTANCE OF THE INSTALLATION.

9. MECHANICAL REFERENCE SYMBOLS:

STANDARD GRAPHIC SYMBOLS ARE IN ACCORDANCE WITH ASHRAE 2017 FUNDAMENTALS HANDBOOK – CHAPTER 38, UNLESS NOTED OTHERWISE ON CONTRACT DRAWINGS.

10. CODES, LAWS AND ORDINANCES:

ALL WORK PERFORMED UNDER THIS SECTION SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE 2020 MECHANICAL CODE OF NEW YORK STATE, AS WELL AS THE LATEST EDITION OF ALL FEDERAL, STATE AND LOCAL CODES, LAWS, ORDINANCES, RULES AND REGULATIONS OF ALL PUBLIC AUTHORITIES HAVING JURISDICTION OVER THIS WORK. ANY OWNER'S INSURANCE COMPANY RECOMMENDATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK IS HEREBY INCORPORATED INTO AND MADE PART OF THIS SPECIFICATION. ALL MATERIAL AND EQUIPMENT FOR THE ELECTRICAL PORTIONS OF THE MECHANICAL SYSTEMS SHALL BEAR THE APPROVAL LABEL OR SHALL BE LISTED BY THE UNDERWRITER'S LABORATORIES (UL). EVERY SAFETY PROVISION SHALL BE OBSERVED AS REQUIRED BY APPLICABLE BUILDING, LABOR AND HEALTH CODES, ORDINANCES, RULES AND REGULATIONS, AS WELL AS BY OSHA STANDARDS, WHICHEVER IS MOST STRINGENT. CONTRACTOR SHALL COMPLY WITH ALL LOCAL UTILITY COMPANY'S REQUIREMENTS AS WELL AS ANY SPECIFIC OWNER'S REGULATIONS RELATING TO THIS WORK. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL COMPLY WITH ALL APPLICABLE ENVIRONMENTAL REGULATIONS AND OSHA REQUIREMENTS. THE BIDDERS SHALL INFORM THE ENGINEER OF ALL DISCREPANCIES THAT HE OBSERVES BETWEEN THESE CODES, LAWS, ORDINANCES AND REGULATIONS AND THE SPECIFICATIONS AND DRAWINGS PERTAINING TO THIS WORK, IN WRITING, IN HIS BID. THE BIDDER SHALL INCLUDE IN HIS BID PRICE ANY LABOR, MATERIALS, SERVICES, APPARATUS AND DRAWINGS NECESSARY TO COMPLY WITH THESE CODES, LAWS, ORDINANCES, AND REGULATIONS IF HEREIN SPECIFIED OR SHOWN.

11. COORDINATION WITH OTHER TRADES:

THE CONTRACTOR SHALL GIVE FULL COOPERATION TO OTHER TRADES AND SHALL FURNISH ANY INFORMATION NECESSARY TO PERMIT THE WORK OF ALL TRADES TO BE INSTALLED SATISFACTORILY AND WITH THE LEAST POSSIBLE INTERFERENCE OR DELAY. WHERE THE WORK OF THIS CONTRACTOR WILL BE INSTALLED CLOSE TO OR WILL INTERFERE WITH THE WORK OF OTHER TRADES, HE SHALL ASSIST IN WORKING OUT SPACE CONDITIONS TO MAKE A SATISFACTORY ADJUSTMENT. IF SO DIRECTED BY THE OWNER'S REPRESENTATIVE, THE CONTRACTOR SHALL PREPARE COMPOSITE WORKING DRAWINGS, PLANS AND SECTIONS, AT A SUITABLE SCALE NOT LESS THAN 1/4" = 1'–0", CLEARLY SHOWING HOW HIS WORK IS TO BE INSTALLED IN RELATION TO THE WORK OF OTHER TRADES. IF THE CONTRACTOR INSTALLS HIS WORK BEFORE COORDINATING WITH OTHER TRADES, HE SHALL MAKE THE NECESSARY CHANGES IN HIS WORK TO CORRECT THE CONDITION WITHOUT EXTRA CHARGE. THE CONTRACTOR SHALL FURNISH TO THE OTHER TRADES, AS REQUIRED, ALL NECESSARY TEMPLATES, PATTERNS, SETTING PLANS AND SHOP DETAILS FOR THE PROPER INSTALLATION OF THE WORK AND FOR THE PURPOSE OF COORDINATING ADJACENT WORK. ALL WORK SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER TO AVOID UNDUE DISRUPTION TO THE OCCUPANCY AND OPERATION OF THE EXISTING FACILITIES. ANY DISRUPTION OR INTERRUPTION OF PRIMARY SERVICES SHALL BE PERFORMED ONLY AT TIME AS DIRECTED AND APPROVED BY THE ENGINEER.

12. ACCESSIBILITY:

THE CONTRACTOR SHALL USE THE EXISTING CHASES, DOUBLE PARTITIONS, HUNG CEILING SPACES FOR PIPING INSTALLATION. COORDINATE NEW WORK WITH ALL OTHER TRADES AND PROVIDE SUFFICIENT ACCESSIBILITY TO ALL NEW AND EXISTING DUCTWORK AND MECHANICAL EQUIPMENT. HE SHALL COOPERATE WITH THE GENERAL CONTRACTOR AND ALL OTHER CONTRACTORS WHOSE WORK IS IN THE SAME SPACE, AND SHALL ADVISE THE GENERAL CONTRACTOR OF HIS REQUIREMENTS. SUCH SPACES AND CLEARANCES SHALL, HOWEVER, BE KEPT TO THE MINIMUM SIZE REQUIRED. CONTRACTOR SHALL LOCATE ALL EQUIPMENT THAT MUST BE SERVICED, OPERATED OR MAINTAINED IN FULLY ACCESSIBLE POSITIONS. IF REQUIRED FOR BETTER ACCESSIBILITY, FURNISH ACCESS DOORS FOR THIS PURPOSE. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ALLOW FOR BETTER ACCESSIBILITY, AND ANY CHANGE SHALL BE APPROVED.

13. DEMOLITION AND SALVAGE:

THE CONTRACTOR SHALL IDENTIFY THE EQUIPMENT AND PIPING TO BE REMOVED AND MARK THEM ACCORDINGLY. THE CONTRACTOR SHALL DISCONNECT AND REMOVE ONLY THE EQUIPMENT, MATERIALS, FIXTURES AND CONNECTIONS NO LONGER REQUIRED AS SHOWN ON THE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE SITE PRIOR TO BIDDING TO DETERMINE THE EXTENT OF THE WORK. UNLESS OTHER WISE INDICATED OR DIRECTED, ALL MATERIALS AND EQUIPMENT REMOVED SHALL BECOME THE CONTRACTOR'S PROPERTY AS APPROVED BY THE OWNER AND SHALL BE IMMEDIATELY REMOVED FORM THE PREMISES.

14. PROTECTION OF WORK:

THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE ALL OF HIS WORK, MATERIAL AND EQUIPMENT FROM DAMAGE DURING THE CONSTRUCTION PERIOD. ALL OPENINGS FOR DUCTWORK OR EQUIPMENT SHALL BE SECURELY CLOSED AND SEALED TO PREVENT ANY OBJECTS, DEBRIS OR RAIN FROM ENTERING. ALL INSULATION MATERIAL SHALL BE KEPT DRY AT ALL TIMES. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE THAT IS DUE TO FAILURE TO PROPERLY PROTECT PIPE, DUCT AND EQUIPMENT OPENINGS DURING CONSTRUCTION AND THE GUARANTEE PERIOD. AFTER COMPLETION OF WORK, AND PERIODICALLY DURING CONSTRUCTION.

15. CLEANUP:

THE CONTRACTOR SHALL CLEAN ALL AREAS OF DEBRIS AND RUBBISH, WHICH HAVE BEEN LEFT BY HIMSELF OR HIS SUBCONTRACTORS. THE CONTRACTOR SHALL IMMEDIATELY REMOVE WATER PRESENT IN ANY AREA, DUE TO LEAKING FITTINGS, BROKEN PIPE, ETC., CAUSED BY DEFECTIVE MATERIALS OR IMPROPER INSTALLATION. INTERNAL AND EXTERNAL AREAS OF ALL EQUIPMENT MUST BE CLEANED OF ALL CONSTRUCTION DUST AND DEBRIS PRIOR TO FINAL INSPECTION. ALL SCRATCHES ON PAINTED SURFACES SHALL BE TOUCHED UP TO MATCH.

16. GENERAL COMPLETION, MATERIALS AND RESPONSIBILITY

ALL MATERIALS, APPARATUS, AND EQUIPMENT REQUIRED FOR THIS WORK, EXCEPT AS EXPRESSLY SPECIFIED OTHERWISE, SHALL BE NEW, OF FIRST CLASS QUALITY, AND SHALL BE FURNISHED, DELIVERED, ERECTED AND CONNECTED AND FINISHED IN EVERY DETAIL, AND SHALL BE SELECTED AND ARRANGED AS TO FIT PROPERLY INTO THE BUILDING SPACES. WHERE NO SPECIFIC KIND OR QUALITY OF MATERIAL IS GIVEN, A FIRST CLASS STANDARD ARTICLE, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE FURNISHED. THE CONTRACTOR SHALL FURNISH THE SERVICES OF AN EXPERIENCED SUPERINTENDENT, WHO SHALL BE IN CONSTANT CHARGE OF THE INSTALLATION AND ALL SKILLED WORKMEN, HELPERS AND LABOR REQUIRED TO UNLOAD, TRANSFER, ERECT, CONNECT, ADJUST, START, OPERATE AND TEST EACH ITEM. ALL EQUIPMENT AND MATERIAL SHALL BE INSTALLED WITH THE APPROVAL OF THE ENGINEER, IN ACCORDANCE WITH THE WRITTEN RECOMMENDATIONS OF THE MANUFACTURERS. THIS INCLUDES THE PERFORMANCE OF SUCH TESTS THAT THE MANUFACTURER RECOMMENDS.

17. GUARANTEE AND SERVICE:

THE ENTIRE INSTALLATION SHALL BE GUARANTEED AND SERVICED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE INSTALLATION BY OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL, DURING THE PERIOD OF THE GUARANTEE, REPLACE OR REPAIR AT HIS OWN EXPENSE, EVERY PIECE OF EQUIPMENT OR MATERIAL THAT IS FOUND TO BE DEFECTIVE. THE REPLACEMENT OR REPAIRS SHALL BE DONE AS SOON AS NOTIFIED. THE CONTRACTOR SHALL ALSO REPAIR ALL DAMAGE TO SURROUNDING WORK CAUSED BY FAILURE, REPAIRS, OR REPLACEMENT OF THE DEFECTIVE EQUIPMENT OR MATERIAL.

18. DEMONSTRATION AND OPERATING INSTRUCTIONS:

THE CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF A PORTFOLIO CONTAINING THE COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS FOR ALL SYSTEMS, AS–BUILT DRAWINGS, EQUIPMENT CUTS, MAKE/MODEL OF FITTINGS AND FIXTURES, NAME, ADDRESS AND TELEPHONE NUMBER OF MANUFACTURERS AND THEIR LOCAL SERVICE REPRESENTATIVES, COPIES OF GUARANTEES, AND REPLACEMENT PARTS LISTS. THE CONTRACTOR SHALL FURNISH THE SERVICE OF A COMPETENT PERSON THOROUGHLY FAMILIAR WITH THE OPERATION OF THE INSTALLED SYSTEM TO INSTRUCT THE OWNER'S PERSONNEL IN THE PROPER OPERATION, MAINTENANCE, AND CONTROL OF ALL SYSTEMS.

19. AUTOMATIC TEMPERATURE CONTROLS:

– THE ATC CONTRACTOR SHALL PROVIDE A NEW WEB BASED NETWORK AND UPGRADE THE EXISTING SYSTEM CONTROLLERS TO INTEGRATE THE EXISTING SYSTEM.

– THE BUILDING MANAGEMENT SYSTEM SHALL BE ACCESSIBLE VIA THE LOCAL AND REMOTE TCP/IP NETWORK CONNECTION.

– THE ATC CONTRACTOR SHALL PROVIDE ALL NEW CUSTOMIZED 3–D WEB–BASED GRAPHICS ON A SINGLE WEB BASED GRAPHIC USER INTERFACE. INCORPORATE ALL OF THE NEW DDC CONTROLLERS INTO ONE SEAMLESS AND COMPLETELY FUNCTIONAL SYSTEM.

– THE ATC CONTRACTOR SHALL PROVIDE NEW BACNET NETWORK COMMUNICATIONS WIRING AND INTEGRATION. THE HONEYWELL WEBS–8000 BUILDING MANAGEMENT SYSTEM SHALL INTEGRATE ALL OF THE DDC CONTROLLERS INTO ONE SEAMLESS AND COMPLETELY FUNCTIONAL SYSTEM.

20. TESTING, ADJUSTING AND BALANCING:

THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO SET THE MINIMUM OUTSIDE AIR REQUIREMENTS OF NEW AND EXISTING MECHANICAL EQUIPMENT AS PER NEW AND/OR EXISTING SETPOINTS. COORDINATE ALL OUTSIDE AIR REQUIREMENTS WITH EXISTING EQUIPMENT AND MODIFY AIRFLOWS ACCORDINGLY.

THE MECHANICAL CONTRACTOR SHALL INCLUDE AS PART OF THE BALANCING, THE SERVICES OF A FACTORY AUTHORIZED SERVICE TECHNICIAN TO MAKE REQUIRED ADJUSTMENTS SO THAT THE INSTALLED EQUIPMENT CAN DELIVER THE AIR FLOW RATE AS INDICATED ON THE CONTRACT DOCUMENT AND/OR THE SEQUENCE OF OPERATION.

ABBREVIATIONS:

ø	DIAMETER
°C	DEGREES CELSIUS
°F	DEGREES FAHRENHEIT
P	DELTA PRESSURE
AC	AIR CONDITION
ACCU	AIR COOLED CONDENSING UNIT
AC/HR	AIR CHANGES PER HOUR
AD	AIR DEVICE
AFF	ABOVE FINISH FLOOR
AMB	AMBIENT
AMPS	AMPERES
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AR	AIR REGISTER
ARR	ARRANGEMENT
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR–CONDITIONING ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATC	AUTOMATIC TEMPERATURE CONTROLS
db	DECIBELS
dBA	DECIBELS ADJUSTED
BDD	BACK DRAFT DAMPER
BHP	BRAKE HORSEPOWER
BI	BACKWARD INCLINED
BMS	BUILDING MANAGEMENT SYSTEM
BOD	BOTTOM OF DUCT
BTU	BRITISH THERMAL UNIT
CAP	CAPACITY
CAV	CONSTANT AIR VOLUME
CFM	CUBIC FEET PER MINUTE
COMPR	COMPRESSOR
CONST	CONSTRUCTION
CONT	CONTINUED
CU.FT.	CUBIC FEET
CV	CONSTANT VOLUME
D	DEPTH
DB	DRY BULB
DIA	DIAMETER
DISCH	DISCHARGE
DDC	DIRECT DIGITAL CONTROL
DN	DOWN
DWG	DRAWING
DX	DIRECT EXPANSION
(E)	EXISTING TO REMAIN
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EFF	EFFICIENCY
EQ	EQUAL
ESP	EXTERNAL STATIC PRESSURE
EXT	EXTERNAL
°F	DEGREES FAHRENHEIT
FD	FIRE DAMPER
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE
FLR	FLOOR
FPM	FEET PER MINUTE
FT	FEET
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
H	HEPA
HAZ	HAZARDOUS
HVAC	HEATING, VENTILATION & AIR CONDITIONING
HC	HEATING COIL
HT	HEIGHT
HZ	HERTZ
IEER	INTEGRATED ENERGY EFFICIENCY RATIO
IMC	INTERNATIONAL MECHANICAL CODE
IN	INCH
INWG	INCHES OF WATER GAUGE
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LWA	LEVEL WEIGHTED AVERAGE
MAT	MATERIAL
MAX	MAXIMUM
MBH	THOUSAND BTU/HOUR
MCA	MINIMUM CIRCUIT AMPS
MFR	MANUFACTURER
MHP	MOTOR HORSEPOWER
MIN	MINIMUM
MOCP	MAXIMUM OVERCURRENT PROTECTION
NA	NOT APPLICABLE
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
NC	NOISE CRITERIA
NEG	NEGATIVE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NIC	NOT IN CONTRACT
No.	NUMBER
NOM.	NOMINAL
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
O.C.	ON CENTER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PD	PRESSURE DROP
PH	PHASE
POS	POSITIVE
PREP	PREPARATION
PRESS	PRESSURE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
QTY	QUANTITY
(R)	DEMOLISH AND REMOVE
RA	RETURN AIR
REF	REFRIGERANT
REQ	REQUIRED
RG	RETURN GRILLE
RH	RELATIVE HUMIDITY
RLA	RELIEF AIR
RPM	REVOLUTIONS PER MINUTE
RTU	ROOFTOP UNIT
SA	SUPPLY AIR
SENS	SENSIBLE
SF	SUPPLY FAN
SP	STATIC PRESSURE
SQ.FT.	SQUARE FOOT; SQUARE FEET
STD	STANDARD
TEMP	TEMPERATURE
TOT.	TOTAL
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UL	UNDERWRITER'S LABORATORY
V	VOLTS
VDC	VOLTS – DIRECT CURRENT
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
V.I.F.	VERIFY IN FIELD
WB	WET BULB
WMS	WIRE MESH SCREEN
WT	WEIGHT

LEGEND:

TYPE OF EQUIPMENT
EQUIPMENT DESIGNATION NUMBER
TYPE OF DEVICE
AIRFLOW (CFM)
NECK DIAMETER (IN.)
FLEXIBLE DUCT (5'–0" MAX.)
TRANSFER AIR
SQUARE TO ROUND TRANSITION
REDUCING DUCT TRANSITION
BRANCH DUCT TAKE–OFF (WITH VOLUME DAMPER)
DUCT SMOKE DETECTOR
POINT OF CONNECTION
POINT OF REMOVAL
DIRECTION OF FLOW
DUCT SIZE, FIRST DIMENSION IS SIDE SHOWN
DUCT SECTION, POSITIVE PRESSURE FIRST DIMENSION IS TOP
DUCT SECTION, NEGATIVE PRESSURE
RETURN/EXHAUST UP
RETURN/EXHAUST DOWN
CHANGE OF ELEVATION RISE (R) DROP (D)
ACCESS DOORS, VERTICAL OR HORIZONTAL
TRANSITION
DUCT ELBOW WITH TURNING VANES
NEW WORK
EXISTING WORK TO REMAIN
EXISTING WORK TO BE REMOVED
THERMOSTAT
DUCT DESIGN PRESSURE
DEMOLITION NOTE SYMBOL
SHEET NOTES
REVISION
ITEMS INCLUDED UNDER REVISION

PROJECT COORDINATION NOTES:

1. SEE DWG. T02 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #19, 20 AND 21 ON DWG. T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. SEE DWG. T01 FOR LOCATION OF FIRE RATED ASSEMBLIES.

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

EI
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PROFESSIONAL ENGINEER
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MECHANICAL

SCALE
AS NOTED
DRAWN BY: PBC 25MAY21
DESIGNED BY: JCM 25MAY21
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
GENERAL NOTES, LEGEND, AND ABBREVIATIONS

EIA DRAWING NO.
M00

CLIENT DWG. NO.
– – – – –

EIA PROJECT NO.
EG8577.03

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GENERAL MECHANICAL NOTES:

1. THE PURPOSE OF THESE DRAWINGS IS TO INDICATE THE SCOPE OF THE NEW MECHANICAL WORK IN THIS AREA. ALL NEW WORK SHALL BE COORDINATED WITH ACTUAL FIELD CONDITIONS ENCOUNTERED.
2. THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT AND MATERIALS FOR COMPLETE REMOVAL AND RELOCATION FOR THIS PROJECT.
3. ALL WORK SHALL CONFORM TO CODES AND THE REQUIREMENTS OF FEDERAL, STATE, AND LOCAL REGULATORY AGENCIES HAVING JURISDICTION.
4. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH GOOD TRADE PRACTICE AND IN ACCORDANCE WITH APPLICABLE MANUFACTURER'S RECOMMENDATIONS.
5. THE CONTRACTOR SHALL VISIT THE SITE TO UNDERSTAND THE GENERAL NATURE AND COMPLEXITY OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONDITIONS AFFECTING THE WORK. IF THERE ARE ANY DISCREPANCIES OR QUESTIONS, THE CONTRACTOR SHALL BRING IT TO THE ENGINEER'S ATTENTION PRIOR TO BID AWARD.
6. WORK TO BE DONE SHALL BE INCLUSIVE. ANY WORK NOT SPECIFICALLY CALLED OR SHOWN FOR, BUT REASONABLY IMPLIED, INCLUDING CUTTING, PATCHING, PAINTING, RESTORATION OF EXISTING SURFACES TO REMAIN, AND REPAIR OF DAMAGES CAUSED DURING CONSTRUCTION SHALL BE PROVIDED BY THE CONTRACTOR.
7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL WORK WITH SUBCONTRACTORS DURING CONSTRUCTION.
8. EXISTING HVAC EQUIPMENT THAT INTERFERES WITH NEW ARRANGEMENT SHALL BE REMOVED, RE-INSTALLED, RELOCATED, RE-ROUTED, EXTENDED OR ABANDONED, AS REQUIRED, TO SUIT NEW ARRANGEMENT.
9. SHOULD REMOVAL, RELOCATION, OR REROUTING OF ANOTHER TRADES WORK BE REQUIRED TO ACCOMMODATE HVAC WORK, THE HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR THAT WORK AND SHALL PAY ALL REQUIRED COSTS. WORK SHALL BE PERFORMED BY MECHANICS SKILLED IN THE PARTICULAR TRADE INVOLVED.
10. EXISTING EQUIPMENT, BUILDING AREA OR SURFACES DAMAGED SHALL BE REPLACED OR RESTORED TO ITS ORIGINAL CONDITION.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL STRUCTURAL ELEMENTS.
12. THE WORD "PROVIDE" MEANS TO FURNISH AND INSTALL.
13. (E) DESIGNATES EXISTING EQUIPMENT AND DEVICES THAT SHALL REMAIN.
14. GENERAL CONTRACTOR TO PROVIDE ALL NECESSARY SHORING AND BRACING SO AS NOT TO UNDERMINE EXISTING STRUCTURE. TAKE ALL NECESSARY MEASURES TO PREVENT COLLAPSE OF WALLS, SLABS, ETC.
15. EACH CONTRACTOR IS TO TAKE ALL NECESSARY MEASURES TO PREVENT DAMAGE TO ANY ADJACENT PROPERTY, PERSONS.
16. EACH CONTRACTOR IS TO COORDINATE ALL INDICATED DEMOLITION WITH NEW CONSTRUCTION TO ENSURE PROPER LOCATION AND DIMENSIONS OF DEMOLISHED AREAS.
17. DURING DEMOLITION AND REMOVAL, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT, IN WRITING, OF ANY UNEXPECTED OR UNUSUAL CONDITIONS.
18. CUTTING SHALL BE PERFORMED BY HAND OR SMALL POWER TOOLS; HOLES AND SLOTS CUT NEAT AND TO SIZE REQUIRED, WITH MINIMUM DISTURBANCE OF ADJACENT WORK; CUT HOLES IN CONCRETE FOR PIPES AND CONDUIT WITH CORE DRILLS OF PROPER SIZES. OPENINGS SHALL BE COVERED TEMPORARILY WHEN NOT IN USE AND PATCHED AS SOON AS WORK IS INSTALLED.
19. REPAIR AND PAINT ALL SURFACES DAMAGED BY DEMOLITION OR INSTALLATION OF NEW WORK TO MATCH ADJACENT AREAS.
20. REPAINTING OF AFFECTED AREAS OR SURFACES SHALL MATCH COLOR AND TEXTURE OF EXISTING PAINTED SURFACES, UNLESS OTHERWISE INDICATED.
21. FILL IN ALL HOLES IN EXISTING TILE, GLAZED BLOCK WALLS, OR TERRAZZO FLOORING RESULTING FROM EXISTING EQUIPMENT REMOVAL WITH EPOXY PUTTY – A+B EPOXY PUTTY BY REZOLIN, LLC. OR EQUAL– SMOOTH AND PAINT TO MATCH EXISTING FINISH.
22. REINSTALL ACOUSTICAL CEILING TILES AND GRID SYSTEM MEMBERS TO MATCH AREAS NOT REMOVED DURING DEMOLITION. REUSE STORED TILES AND GRID SYSTEM AS MUCH AS POSSIBLE. PROVIDE NEW MEMBERS WHEREVER NECESSARY TO MATCH EXISTING.
23. ALL EXPOSED PIPING SHALL BE PROVIDED WITH PVC JACKET OVER INSULATION.
24. ALL THERMOSTATS LOCATED IN CLASSROOMS AND ANY PUBLIC AREA SHALL BE PROVIDED WITH PROTECTIVE COVER GUARD.
25. THE CONTRACTOR SHALL PROVIDE ALL ADDITIONAL LABOR AND MATERIALS TO PROPERLY BALANCE ALL MOTORS AND FANS IN RTU'S AS REQUIRED TO BALANCE FANS TO AIR FLOW RATES SHOWN ON CONTRACT DOCUMENTS.
26. THE CONTRACTOR SHALL FIELD VERIFY EXISTING VOLTAGES AND PHASES OF ALL EQUIPMENT TO BE REPLACED THAT WILL BE REUSING EXISTING CIRCUITS PRIOR TO PROVIDING EQUIPMENT SUBMITTALS, RELEASE FOR FABRICATION AND PURCHASING OF EQUIPMENT. IF NEW EQUIPMENT IS PURCHASED PRIOR TO CONFIRMING EXISTING CIRCUIT VOLTAGES AND PHASES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ANY ADDITIONAL COSTS AND EXPENSES ASSOCIATED WITH NEW CIRCUITING AND/OR PURCHASE OF NEW EQUIPMENT.
27. THE CONTRACTOR SHALL COORDINATE AND INSTALL ALL NEW ROOF TOP EQUIPMENT WITH EXISTING AND NEW STRUCTURAL MEMBERS. SEE STRUCTURAL DRAWINGS AND ACTUAL FIELD CONDITIONS. PROVIDE ALL ADDITIONAL REQUIRED STRUCTURAL SUPPORTS, HARDWARE AND ASSOCIATED APPURTENANCES.
28. THE CONTRACTOR SHALL PROVIDE ISOLATION BETWEEN ALL DISSIMILAR METALS AND MATERIALS.
29. VERIFY ALL EXISTING PIPE SIZES WHERE NEW PIPES ARE TO BE RECONNECTED TO EXISTING PRIOR TO CONSTRUCTION AND PROVIDE NEW PIPES OF SIZES TO MATCH EXISTING.
30. PROVIDE ISOLATION VALVES AT ALL TAKE OFFS FROM MAINS ON HEATING HOT WATER PIPING.
31. PROVIDE ISOLATION VALVES FOR PIPING AT ALL NEW EQUIPMENT. ISOLATION VALVES SHALL BE SAME SIZE AS LINE SERVED. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
32. COORDINATE ALL EQUIPMENT AND CONTROLS WITH THE ATC CONTRACTOR.
33. ALL NEW THERMOSTATS AND SPACE TEMPERATURE SENSORS SHALL BE MOUNTED IN ACCORDNACE WITH ADA HEIGHT REQUIREMENTS.
34. MOTORS FOR FANS EQUAL TO OR GREATER THAN 1/12 HP AND LESS THAN 1 HP SHALL BE ELECTRONICALLY–COMMUTATED MOTORS OR HAVE A MINIMUM EFFICIENCY OF 70%. THESE MOTORS SHALL ALSO BE SPEED ADJUSTABLE FOR EITHER BALANCING OR REMOTE CONTROL.

GENERAL DEMOLITION NOTES:

1. THE PURPOSE OF THESE DRAWINGS IS TO INDICATE THE SCOPE OF THE MECHANICAL DEMOLITION WORK TO PERMIT THE INSTALLATION OF NEW WORK. COORDINATE DEMOLITION WORK WITH BOTH NEW WORK AND THE ACTUAL FIELD CONDITIONS ENCOUNTERED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SITE REMOVAL OF THOSE MATERIALS NOT INTENDED FOR REUSE AND FOR PROPER DISPOSAL OF MATERIALS.
3. THE CONTRACTOR SHALL REMOVE ALL EXISTING HEATING HOT WATER PIPING, VALVES, AND CONTROLS, AND ASSOCIATED APPURTENANCES AS INDICATED ON PLANS OR AS REQUIRED TO FACILITATE WORK. THIS INCLUDES ALL HWS AND HWR PIPING EXPOSED AND ABOVE CEILINGS.
4. EXISTING EQUIPMENT AND MATERIALS NOT DESIRED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM THE SITE. EQUIPMENT AND MATERIALS DESIRED BY THE OWNER SHALL BE DELIVERED BY THE CONTRACTOR TO THE LOCATION DESIGNATED BY THE OWNER.
5. EXISTING MECHANICAL WORK THAT IS TO REMAIN WHEN EXISTING STRUCTURE ON WHICH IT IS INSTALLED IS TO BE MODIFIED OR REMOVED SHALL BE PROPERLY SUPPORTED INPLACE UNTIL WORK OF ALL TRADES IS COMPLETE. REINSTALL THE HVAC WORK ON NEW STRUCTURE, AS REQUIRED.
6. PATCH EXISTING FINISHED SURFACES AND BUILDING COMPONENTS USING NEW MATERIALS MATCHING EXISTING MATERIALS IN LOCATIONS WHERE EXISTING EQUIPMENT WAS REMOVED, OR REMOVED AND REPLACED WITH NEW EQUIPMENT WHICH HAS DIFFERENT DIMENSIONS THAN THE REMOVED EQUIPMENT.
7. CONTRACTOR SHALL VERIFY AND IDENTIFY THE EXISTING PIPING SERVICES BEFORE REMOVAL TO AVOID REMOVAL OF ANY PIPING SERVICES REQUIRED TO REMAIN.
8. THE PIPING & DUCTWORK SHOWN ARE DIAGRAMMATIC ONLY, ADDITIONAL PIPING AND PIPING DEVICES (I.E. VALVES, ELBOWS ETC.) NOT SHOWN ON THE DRAWINGS EXIST AND SHALL BE REMOVED AT NO ADDITIONAL COST TO THE OWNER.
9. NO SYSTEM, NATURAL GAS (SHOWN ON PLUMBING DRAWINGS), WATER OR ELECTRICAL SHALL BE SHUTDOWN WITHOUT PRIOR REVIEW WITH THE OWNERS PROJECT MANAGER TO CONFIRM THAT AREAS TO REMAIN IN OPERATION CAN BE AFFECTED BY A SHUTDOWN. SUFFICIENT ADVANCE NOTICE MUST BE GIVEN TO THE OWNERS PROJECT MANAGER INDICATING WHEN THE PROPOSED SHUTDOWN WILL OCCUR, AND FOR HOW LONG A PERIOD OF TIME. INTENT OF ANY SHUTDOWN NOTIFICATION MUST BE GIVEN 72 HOURS PRIOR TO SHUTDOWN.
10. EXISTING CEILINGS ARE LAY-IN TYPE UNLESS OTHERWISE NOTED. REMOVE AS REQUIRED TO COMPLETE WORK. REINSTALL TILES AFTER WORK HAS BEEN COMPLETED. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
11. ALL EXISTING DOORS WITH TRANSFER AIR GRILLES SHALL REMAIN UNLESS OTHERWISE NOTED.
12. (E) DESIGNATES EXISTING EQUIPMENT AND DEVICES THAT SHALL REMAIN.
13. (R) DESIGNATES EXISTING EQUIPMENT AND DEVICES THAT SHALL BE DEMOLISHED AND REMOVED.
14. ALL CONTROLS DEMOLITION SHALL BE CAREFULLY COORDINATED WITH THE ATC CONTRACTOR.

CONSTRUCTION DEMOLITION NOTES:

1. REMOVE AND STORE FOR FUTURE USE ANY ACOUSTICAL CEILING TILES AND GRID SYSTEM MEMBERS WHEREVER NECESSARY IN ORDER TO FACILITATE INSTALLATION OF NEW EQUIPMENT. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION FOR CEILING WORK.
2. REMOVE ANY LOOSE OR DAMAGED PAINT OR, IF NECESSARY, PLASTER LOCATED BEHIND ANY EXISTING RADIATORS OR OTHER EQUIPMENT BEING REMOVED. PATCH AND PAINT TO MATCH EXISTING ADJACENT WALL SURFACES.
3. REMOVE ANY LOOSE OR DAMAGED FLOOR TILES LOCATED BELOW OR ADJACENT TO EQUIPMENT BEING REMOVED. PATCH WITH VINYL TILES TO MATCH EXISTING FLOOR.
4. REMOVE AND DISCARD ALL EXISTING BLOCKING USED TO SUPPORT EXISTING EQUIPMENT WHICH WILL NO LONGER BE REQUIRED FOR THE NEW EQUIPMENT BEING INSTALLED.

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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MECHANICAL

SCALE: AS NOTED
DRAWN BY: (CHECKED)
DESIGNED BY: (CHECKED)
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

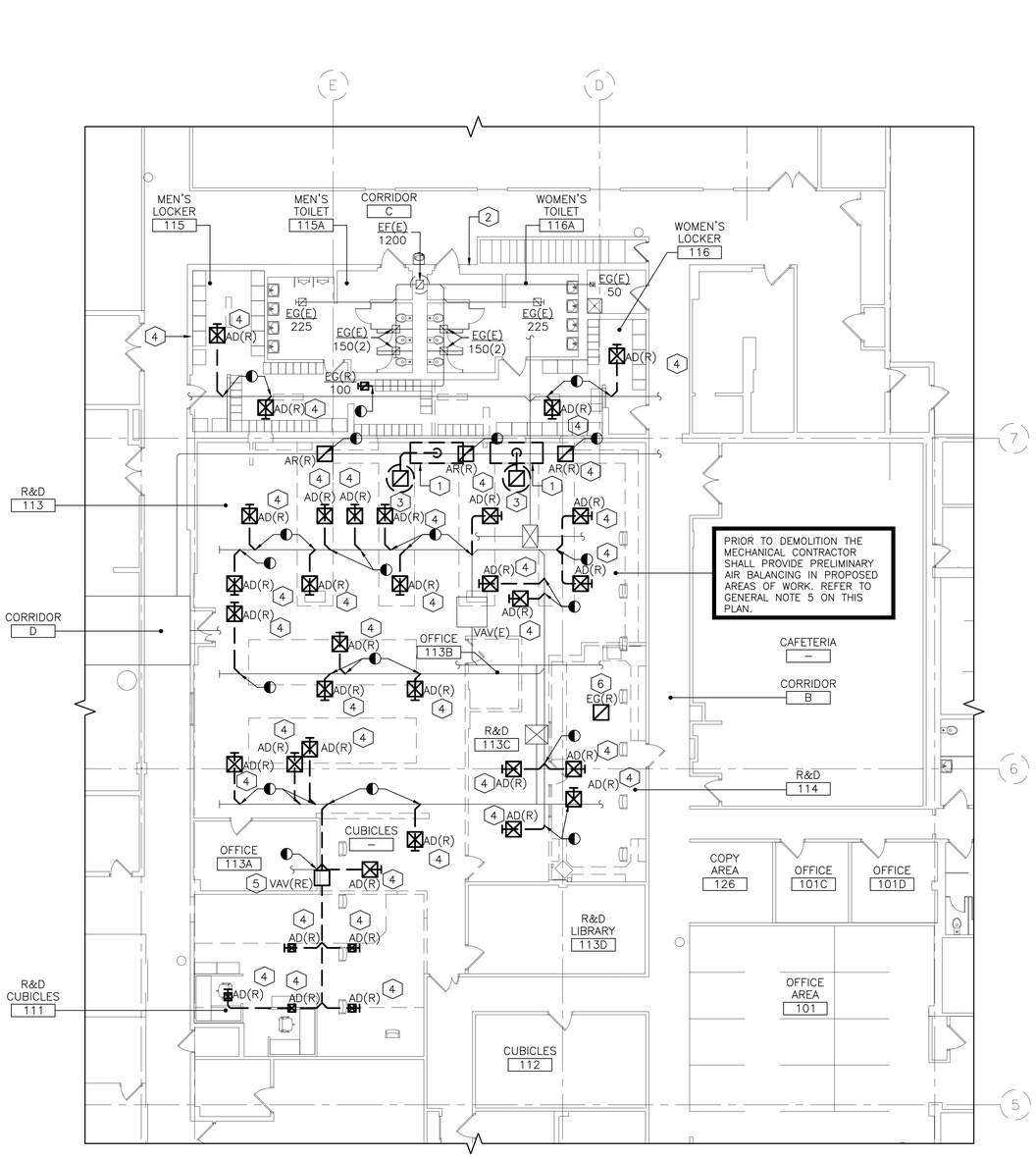
TITLE
GENERAL DEMOLITION & CONSTRUCTION NOTES

EIA DRAWING NO.
M01

CLIENT DWG. NO.
– – – – –

EIA PROJECT NO.
EG8577.03

(XX)



FIRST FLOOR DEMOLITION PLAN (1 / MD11)
1/8"=1'-0"

GENERAL NOTES:

1. SEE M00 SERIES DWGS FOR GENERAL NOTES, ABBREVIATIONS, & LEGEND.
2. EVERYTHING PRESENTED ON THIS PLAN IS EXISTING UNLESS OTHERWISE INDICATED.
3. THE EXISTING BUILDING WILL REMAIN FULLY OCCUPIED AND FUNCTIONAL THROUGHOUT THE DEMOLITION AND CONSTRUCTION PHASE OF THE PROJECT. COORDINATE ALL DEMOLITION WORK AND PHASING WITH OWNER. ALL WORK SHALL BE DONE DURING NORMAL BUISNESS HOURS. ANY WORK REQUIRING THE SHUT-DOWN OF SPECIFIC AREAS FOR EXTENDED PERIODS AND/OR WORK DONE DURING NON-BUISNESS HOURS SHALL BE COORDINATED WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO THE COMMENCMENT OF WORK AND INCLUDED IN THE BID DOCUMENTS AS AN OVERTIME LINE ITEM.
4. USE OF THE BUILDING ELEVATORS AND COORDIRS FOR THE REMOVAL/HANDLING OF EQUIPMENT SHALL BE AT THE DIRECTION OF FACILITY MANAGEMENT AND COORDINATED ACCORDINGLY.
5. PRIOR TO DEMOLITION THE MECHANICAL CONTRACTOR SHALL RETAIN THE SERVICES OF A CERTIFIED BALANCING CONTRACTOR TO TAKE AIRFLOW MEASUREMENTS OF EXISTING SUPPLY, RETURN AND EXHAUST SYSTEMS CURRENTLY SERVING THE LOCKER ROOMS 115, 116, TOILETS 115A, 116A, R&D LAB 113 AND SURROUNDING WORK AREAS. AIRFLOW MEASUREMENTS SHALL BE SUBMITTED IN REPORT FORMAT TO THE ENGINEER OF RECORD IN AN EFFORT TO VERIFY THE EXISTING BUILDING PERFORMANCE AND FOR FUTURE BALANCING DATA.
   NOTE: IN THE CASE THAT EXISTING AIR FLOW QUANTITIES DO NOT MEET THE REQUIRED AIR FLOW RATE AND/OR THERE IS AN INDICATION ANTIQUATED AND/OR DEFECTIVE EQUIPMENT THE BALANCING CONTRACTOR SHALL INDICATE ALL DEFICIENCIES IN THE REPORT FOR REVIEW BY THE ENGINEER AND OWNER. EQUIPMENT SHALL BE REPAIRED/REPLACED AS REQUIRED PENDING ENGINEERS/OWNERS RECOMMENDATIONS AND APPROVAL.
6. PRIOR TO STARTING DEMOLITION WORK PROTECT ALL EXISTING FURNITURE, FLOOR AND WALL FINISHES, OFFICE EQUIPMENT, ETC. WITH FIRE RETARDENT PLASTIC SHEETING, MASONITE AND DROP CLOTHS. CONTRACTOR SHALL PROVIDE ALL MATERIALS, TEMPORARY BARRIERS AND VENTILATION FANS AS TO MAINTAIN A CLEAN AND SAFE WORK ENVIRONMENT.
7. THE CONTRACTOR SHALL MAINTAIN SHALL EGRESS PATHS THROUGHOUT CONSTRUCTION.
8. CONTRACTOR SHALL REMOVE EXISTING CEILING TILES TO ALLOW FOR THE DEMOLITION OF EXISTING DIFFUSERS AND FLEX DUCT AS WELL AS ANY WORK INVOLVED WITH THE CLEANING OF THE EXISTING DUCTWORK AND MODIFICATION OF BRANCH DUCTS TO ACCOMMODATE NEW DAMPER INSTALLATION. TILES SHALL BE STORED IN A SAFE PLACE FOR REINSTALLATION AFTER NEW WORK HAS BEEN COMPLETED AND INSPECTED. REPAIR ANY DAMAGED CEILING GRID AND REPLACE DAMAGED CEILING TILES IN KIND AS REQUIRED TO ACCOMMODATE DIFFUSER REPLACEMENT. REFER TO DRAWING M11 FOR NEW WORK IN THIS AREA.

DEMOLITION NOTES:

1. EXISTING FUME HOOD, CONTROLS, EXHAUST FANS, AND ALL ASSOCIATED DUCTWORK AND APPURTENANCES TO BE REMOVED. CONTRACTOR SHALL TURN OVER EXISTING FUME HOODS TO OWNER FOR STORAGE AND REUSE. PATCH AND REPAIR EXISTING SURFACES TO MATCH ADJACENT SURFACES. SEE M11 FOR REINSTALLED FUME HOOD.

   NOTE: MECHANICAL CONTRACTOR SHALL COORDINATE THE REMOVAL OF ALL PLUMBING FIXTURES, COMPRESSED, AIR, DEIONIZED WATER AND/OR ACID WASTE PIPING WITH PLUMBER. REFER TO PLUMBING PLANS FOR DETAIL.

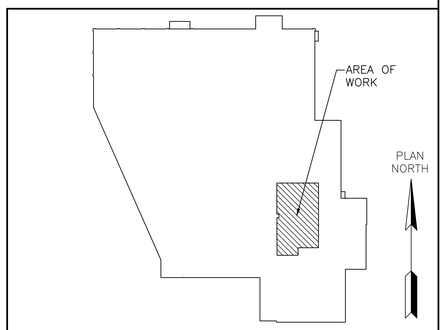
2. MECHANICAL CONTRQACTOR TO REBALANCE EXISTING EXHAUST GRILLS IN THESE AREAS TO ACCOMMODATE NEW LAYOUT. SEE NEW WORK PLAN FOR DETAIL.

3. EXISTING FUME HOOD EXHAUST FANS LOCATED ON ROOF TO BE REMOVED AND DISCARDED. CONTRACTOR SHALL TEMPORARILY CAP AND WATERPROOF EXISTING ROOF CURBS FOR MODIFICATION. COORDINATE DISCONNECT OF POWER WITH ELECTRICAL CONTRACTOR. SEE DRAWING M11 AND M15 FOR NEW CEILING AND ASSOCIATED ROOF WORK IN THIS AREA.

4. DISCONNECT AND REMOVE EXISTING 24X24 AND 12X12 LAY-IN TYPE DIFFUSERS AND ASSOCIATED FLEX DUCT BACK TO MAIN/BRANCH CONNECTION. CLEAN EXISTING DUCTWORK AND PREP ASSOCIATED BRANCH DUCT FOR THE INSTALLATION OF NEW MANUAL BALANCING DAMPERS. REFER TO DRAWING M11 FOR NEW WORK IN THIS AREA (TYPICAL AS SHOWN).

5. REMOVE AND RELOCATE EXISTING VAV TO NEW LOCATION SHOWN ON DWG M11.

6. REMOVE AND CAP EXISTING EXHAUST GRILLE AND DUCT.



KEY PLAN – FIRST FLOOR
NTS

0 4' 8' 16' 32'
1/8" = 1'-0"

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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MECHANICAL

SCALE: AS NOTED
DRAWN BY: DOC. CONTROL
DESIGNED BY: DOC. CONTROL
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
FIRST FLOOR PLAN – DEMOLITION

EIA DRAWING NO.
MD11
CLIENT DWG. NO.
- - - - -
EIA PROJECT NO.
EG8577.03

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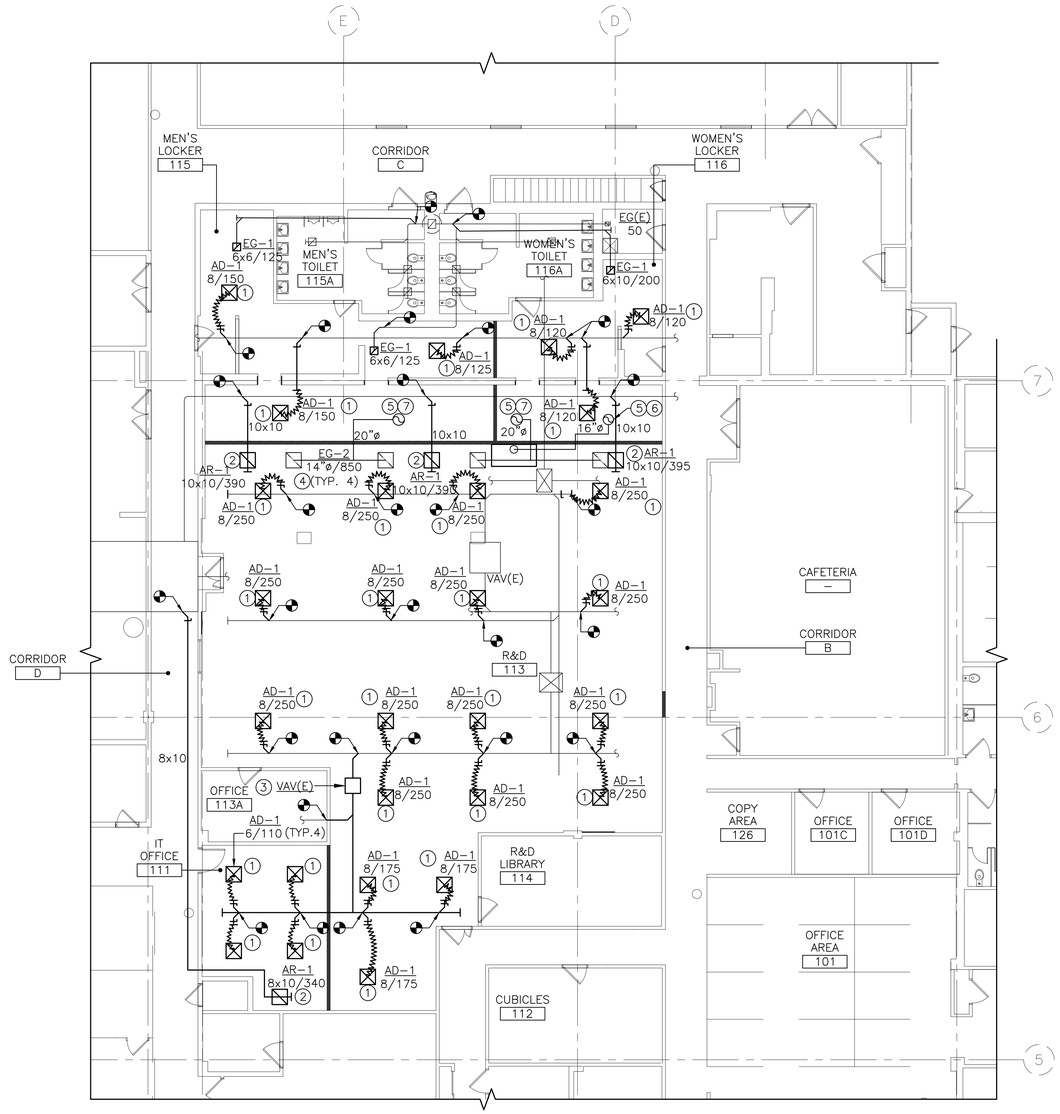
PLAN NORTH



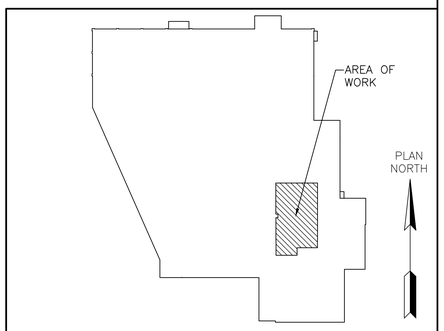
FIRST FLOOR PLAN – NEW WORK (1 / M11)
1/8"=1'-0"

GENERAL NOTES:

1. SEE M00 SERIES DWGS FOR GENERAL NOTES, ABBREVIATIONS, & LEGEND.
2. SEE M40 SERIES DWGS FOR DETAILS.
3. SEE M60 SERIES DRAWINGS FOR EQUIPMENT SCHEDULES.
4. IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO SURVEY THE EXISTING CONDITIONS AND VERIFY ALL DUCTWORK SIZES, DIFFUSER QUANTITIES, LOCATIONS, AND NECK CONNECTIONS AS WELL AS THE EXISTENCE OF VOLUME DAMPERS PRIOR TO PURCHASE OF MATERIALS OR FABRICATION OF DUCTWORK.
5. THE EXISTING BUILDING WILL REMAIN FULLY OCCUPIED AND FUNCTIONAL THROUGHOUT THE DEMOLITION AND CONSTRUCTION PHASE OF THE PROJECT. COORDINATE ALL NEW WORK AND PHASING WITH OWNER. ALL WORK SHALL BE DONE DURING NORMAL BUISNESS HOURS. ANY WORK REQUIRING THE SHUT–DOWN OF SPECIFIC AREAS FOR EXTENDED PERIODS AND/OR WORK DONE DURING NON–BUSINESS HOURS SHALL BE COORDINATED WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO THE COMMENCEMENT OF WORK AND INCLUDED IN THE BID DOCUMENTS AS AN OVERTIME LINE ITEM.
6. USE OF THE BUILDING ELEVATORS AND COORIDORS FOR THE REMOVAL/HANDLING OF EQUIPMENT SHALL BE AT THE DIRECTION OF FACILITY MANAGEMENT AND COORDINATED ACCORDINGLY.
7. PRIOR TO STARTING NEW WORK PROTECT ALL EXISTING FURNITURE, FLOOR AND WALL FINISHES, OFFICE EQUIPMENT, ETC. WITH FIRE RETARDENT PLASTIC SHEETING, MASONITE AND DROP CLOTHS. CONTRACTOR SHALL PROVIDE ALL MATERIALS, TEMPORARY BARRIERS AND VENTILATION FANS AS TO MAINTAIN A CLEAN AND SAFE WORK ENVIRONMENT.
8. CONTRACTOR SHALL PROVIDE AN ALLOWANCE FOR THE MATERIALS AND LABOR ASSOCIATED WITH REPAIR OF ANY AREAS DAMAGED DURING CONSTRUCTION AND/OR THE REPLACEMENT OF ANY DAMAGED CEILING GRID OR CEILING TILES.
9. CONTRACTOR SHALL PROVIDE FOR A MINIMUM OF 10'–0" OF NEW BRANCH DUCTWORK W/ HANGERS AND FITTINGS, A MANUAL DAMPER AND 5'–0" OF FLEX DUCT FOR EACH DIFFUSER BEING REPLACED.
10. ALL NEW BRANCH DUCTWORK SHALL BE SEALED AND INSULATED BACK TO THE MAIN WITH A FOIL FACED FIBERGLASS INSULATION TO MATCH EXISTING CONDITIONS (TYPICAL FOR ALL).
11. CONTRACTOR SHALL PROVIDE FOR THE MATERIALS AND LABOR ASSOCIATED WITH THE INSTALLATION OF AN ADDITIONAL 5 DIFFUSERS PER FLOOR AND ALL ASSOCIATED DUCTWORK, HANGERS, DAMPERS, INSULATION, ETC. IN THE CASE THAT EXISTING CONSTRUCTION CONDITIONS DEVIATE FROM THE DESIGN DOCUMENTS.
12. UPON FINAL DIFFUSER INSTALLATION THE ENTIRE SYSTEM SHALL BE REBALANCED BY A CERTIFIED BALANCING CONTRACTOR TO MATCH THE AIRFLOW RATES INDICATED ON THE PLANS AND SCHEDULES. THE BALANCING REPORT SHALL INCLUDE THE MAXIMUM AND MINIMUM AIR FLOW RATES FOR THE SUPPLY, RETURN AND EXHAUST. A FINAL COPY OF THE REPORT SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL.
13. MECHANICAL CONTRACTOR SHALL COORDINATE FINAL DIFFUSER LOCATIONS AND FUME HOOD DUCT PENETRATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN AND SPRINKLER SHOP DRAWINGS PRIOR TO BID/CONSTRUCTION AS TO PROVIDE A UNIFORM LAYOUT.

SHEET NOTES:

1. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL NEW 24x24 LAY–IN DIFFUSERS WITH ADDITIONAL BRANCH DUCTWORK AND BALANCING DAMPER AS PER GENERAL NOTES 8&9 ON THIS PLAN. REFER TO M60 FOR DIFFUSER TYPE/FINISH (TYPICAL).
2. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL NEW 24X24 LAY–IN RETURN AIR GRILLES FOR PLENUM RETURNS. IN THE CASE THAT RETURN AIR DIFFUSERS ARE HARD DUCTED THE MECHANICAL CONTRACTOR SHALL PROVIDE FOR 20'–0" OF 12"ø BRANCH DUCTWORK OR EQUIVALENT RECTANGULAR SIZE TO CONNECT TO EXISTING MAINS. REFER TO M40 FOR DIFFUSER TYPE/FINISH (TYPICAL).
3. REINSTALL EXISTING VAV IN LOCATION SHOWN. PROVIDE TRANSITION FITTINGS AND MODIFY EXISTING DUCTWORK AS REQUIRED TO ACCOMMODATE INSTALLATION.
4. PROVIDE NEW EXHAUST GRILLE OF SIZE AND CAPACITIES SCHEDULED ALONG WITH ASSOCIATED DUCTWORK UP TO NEW EXHAUST FANS ON ROOF.
5. COORDINATE THE INSTALLATION OF NEW EXHAUST DUCTWORK AND GRILLS WITH ARCHITECTURAL REFLECTED CEILING PLAN AND MODIFY LAYOUT AS REQUIRED FOR A UNIFORM LAYOUY.
6. 16ø DUCT UP THRU ROOF. COORDINATE EXACT SIZE AND LOCATION OF ROOF PENETRATION WITH STRUCTURAL PLANS AND ROOFING CONTRACTOR PRIOR TO CONSTRUCTION.
7. 20ø DUCT UP THRU ROOF. COORDINATE EXACT SIZE AND LOCATION OF ROOF PENETRATION WITH STRUCTURAL PLANS AND ROOFING CONTRACTOR PRIOR TO CONSTRUCTION.



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MECHANICAL

SCALE: AS NOTED
DRAWN BY:
DESIGNED BY:
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:
FOR COMMENT

PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE: FIRST FLOOR PLAN – NEW WORK

EIA DRAWING NO.: M11
CLIENT DWG. NO.: – – – – –
EIA PROJECT NO.: EG8577.03

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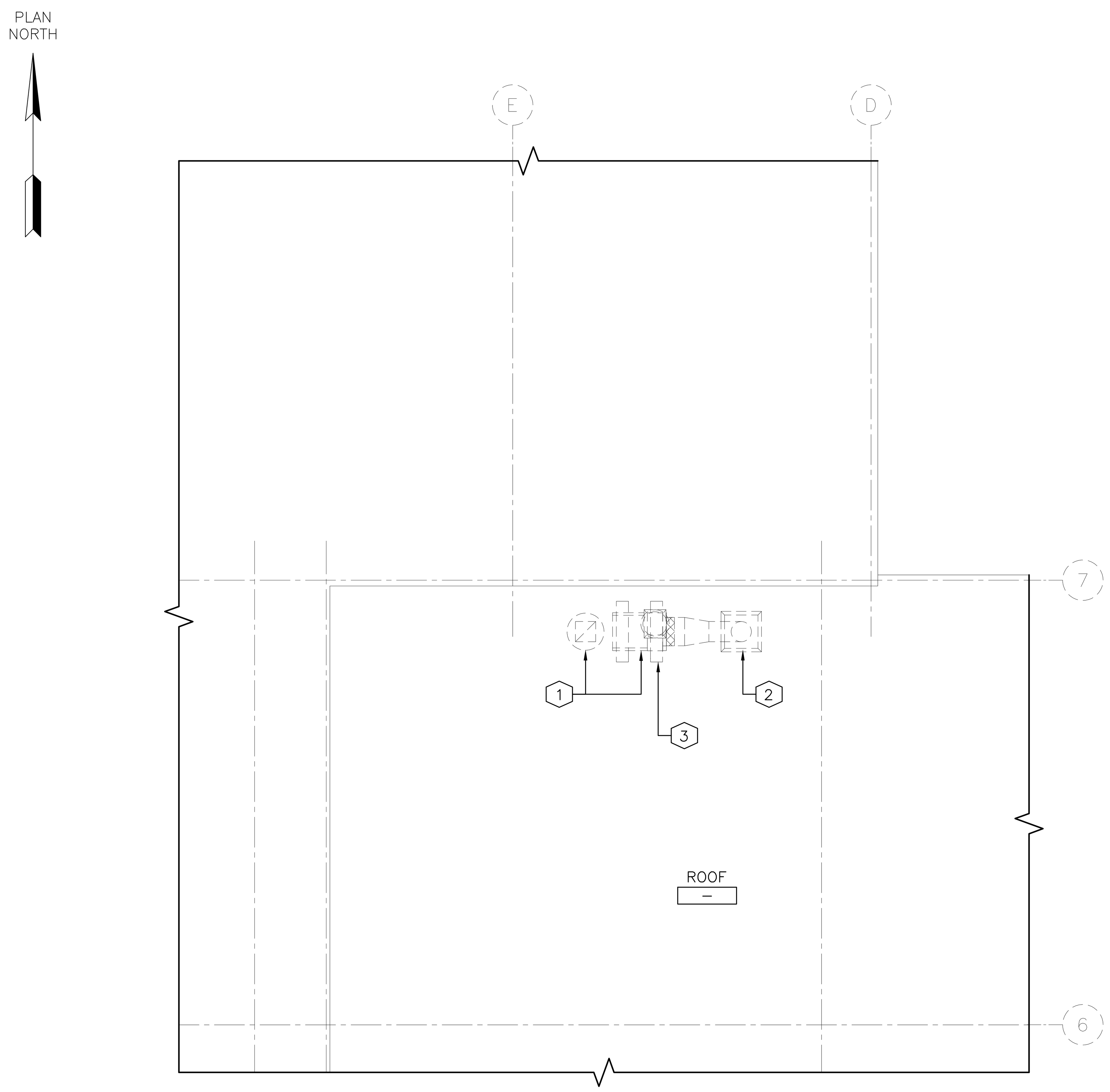
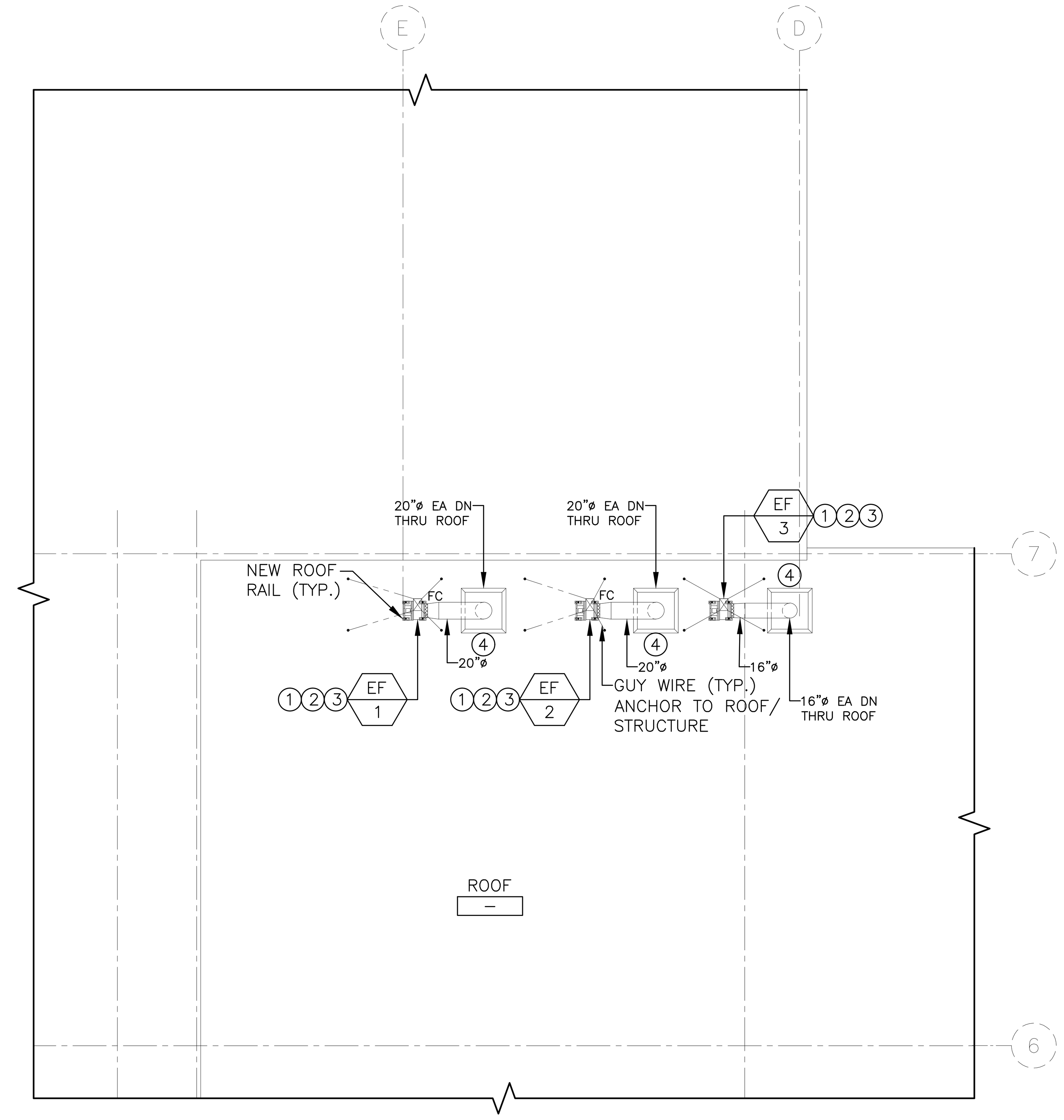


PARTIAL ROOF AREA – DEMOLIOTION PLAN (1/M15)
1/8"=1'-0"



PARTIAL ROOF AREA – NEW WORK PLAN (2/M15)
1/8"=1'-0"

GENERAL NOTES:

1. SEE M00 SERIES DWGS FOR GENERAL NOTES, ABBREVIATIONS, & LEGEND.
2. SEE M40 SERIES DWGS FOR DETAILS.
3. SEE M60 SERIES DWGS FOR EQUIPMENT SCHEDULES.
4. SEE A15 DWG FOR ROOF EQUIPMENT INSTALLATION DETAILS.

DEMOLITION NOTES:

(1) DEMOLISH AND REMOVE EXISTING EXHAUST FANS AND ASSOCIATED DUCTWORK. EXISTING CURB TO BE TEMPORARILY CAPPED AND WATERPROOFED FOR THE INSTALLATION ON NEW ROOF CURB.

(2) EXISTING DUCTWORK AND ASSOCIATED DUCT SUPPORTS TO BE REMOVED. EXISTING ROOF SURFACE SHALL BE PREPPED AND PATCHED AS REQUIRED FOR THE INSTALLATION OF NEW EQUIPMENT RAILS. COORDINATE ROOF WORK WITH ARCHITECT AND ROOFING CONTRACTOR.

(3) DEMOLISH AND REMOVE EXISTING EQUIPMENT RAILS. PREP AND PATCH ROOFING SURFACE TO ACCOMMODATE NEW WORK. SEE NEW WORK PLAN ON THIS DRAWING FOR PROPOSED LAYOUT.

SHEET NOTES:

(1) THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR, BUT NOT LIMITED TO THE FOLLOWING:
   A. RIGGING OF ON-SITE EQUIPMENT.
   B. COORDINATION WITH THE UNIT VENDOR FOR FIELD PRE-START CHECKS AND INSPECTIONS.
   C. THE CONTRACTOR AND EQUIPMENT VENDOR SHALL CHECK EQUIPMENT DELIVERED TO THE JOB SITE AND ISSUE REPORT TO THE OWNER AND MANUFACTURER FOR ANY CHANGES REQUIRED WITHIN ONE WEEK AFTER EQUIPMENT IS RECEIVED.

   IF SUCH REPORT IS NOT ISSUED WITHIN ONE WEEK, IT SHALL BE ASSUMED NO DISCREPANCIES, SHORTAGES, OR LACK OF DATA HAS BEEN FOUND.

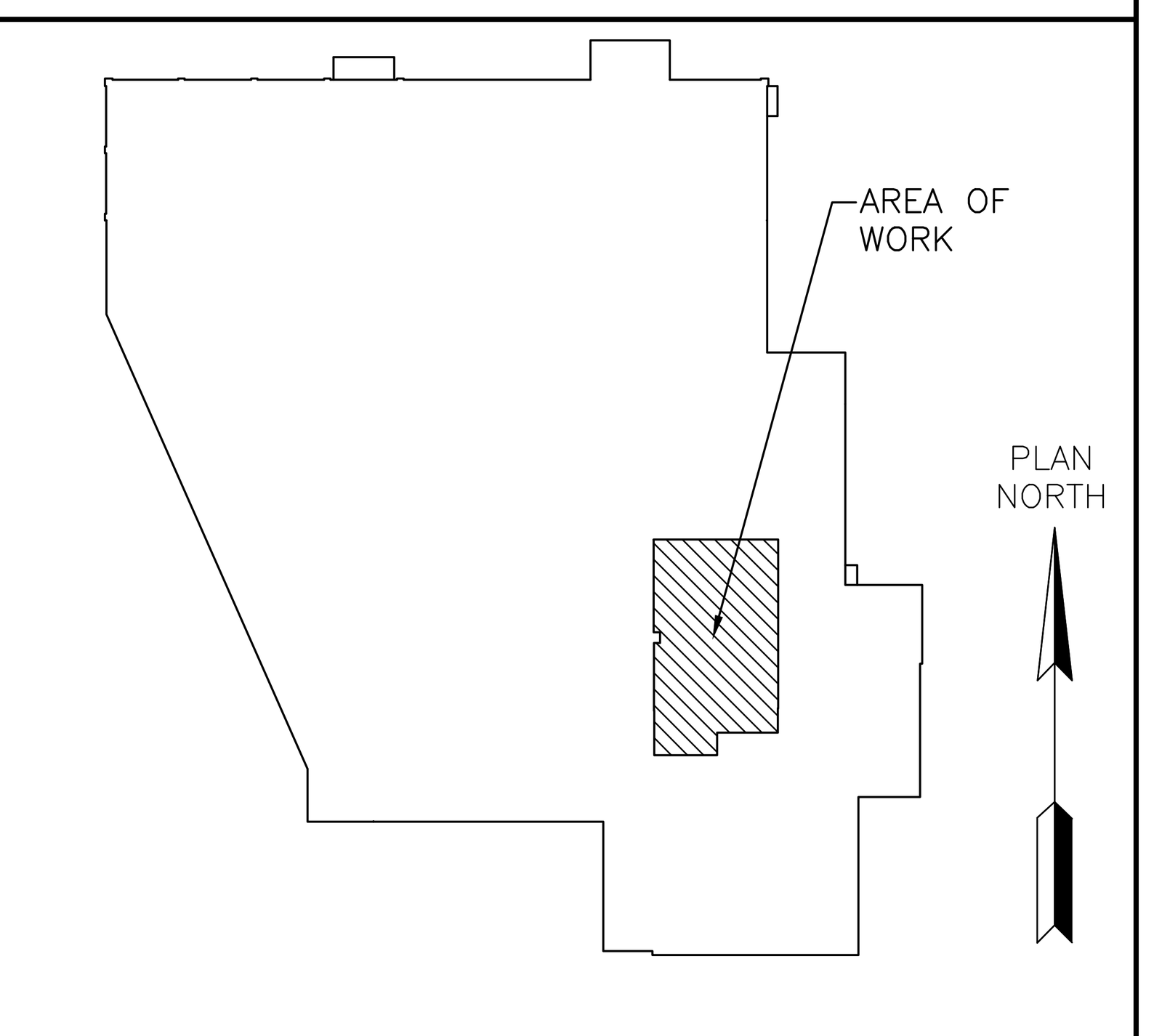
   HANDLING OF NEW ROOFTOP MECHANICAL EQUIPMENT ON-SITE, INCLUDING DELIVERY, OFF-LOADING AND STORAGE TO BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.

(2) PROVIDE NEW EXHAUST FAN OF SIZE AND CAPACITIES SCHEDULED. ALL NEW EXHAUST DUCTS SHALL BE SEALED AND INSULATED FROM EQUIPMENT CONNECTIONS TO ROOF PENETRATION. PROVIDE TRANSITION FITTINGS AS REQUIRED TO ACCOMMODATE NEW INSTALLATION. COORDINATE ALL POWER AND CONTROL WIRING WITH ELECTRICIAN AND CONTROLS CONTRACTOR PRIOR TO BID/CONSTRUCTION.

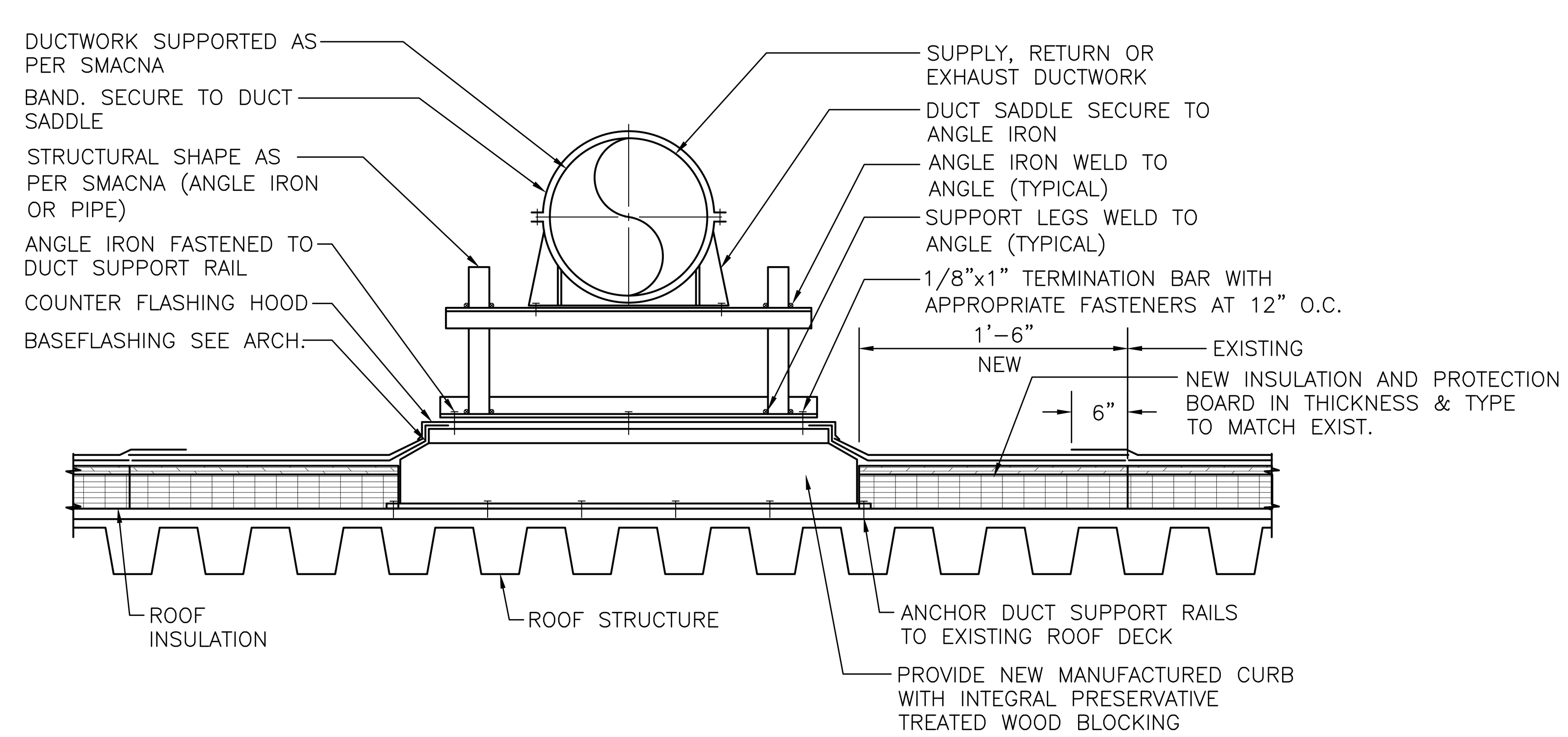
(3) NEW EXHAUST FANS TO BE INSTALLED ON A 18" EQUIPMENT RAILS W/ 1" NEOPRENE VIBRATION ISOLATION PADS TO BE INSTALLED BETWEEN THE EQUIPMENT RAILS AND FAN. ALL EQUIPMENT SHALL BE SECURELY FASTENED TO THE RAILS AND RAILS SECURELY FASTENED TO THE STRUCTURE USING GALV. STEEL FASTENERS. COORDINATE FINAL INSTALLATION DETAIL WITH STRUCTURAL PLANS, ARCHITECTURAL PLANS AND ROOFING CONTRACTOR PRIOR TO INSTALLATION.

(4) PROVIDE ROOF OPENING AND NEW 30"X30" PREFABRICATED AND INSULATED CURB ASSEMBLY WITH FLASHING COLLAR TO ACCOMMODATE NEW DUCT PENETRATIONS. ROOF CURB SHALL BE SIMILAR TO THOSE MANUFACTURED BY PATE INDUSTRIES OR THYBAR COORPORATION. COORDINATE INSTALLATION WITH EXISTING STRUCTURAL MEMBERS, ARCHITECTURAL DETAILS AND ROOFING CONTRACTOR PRIOR TO CONSTRUCTION.

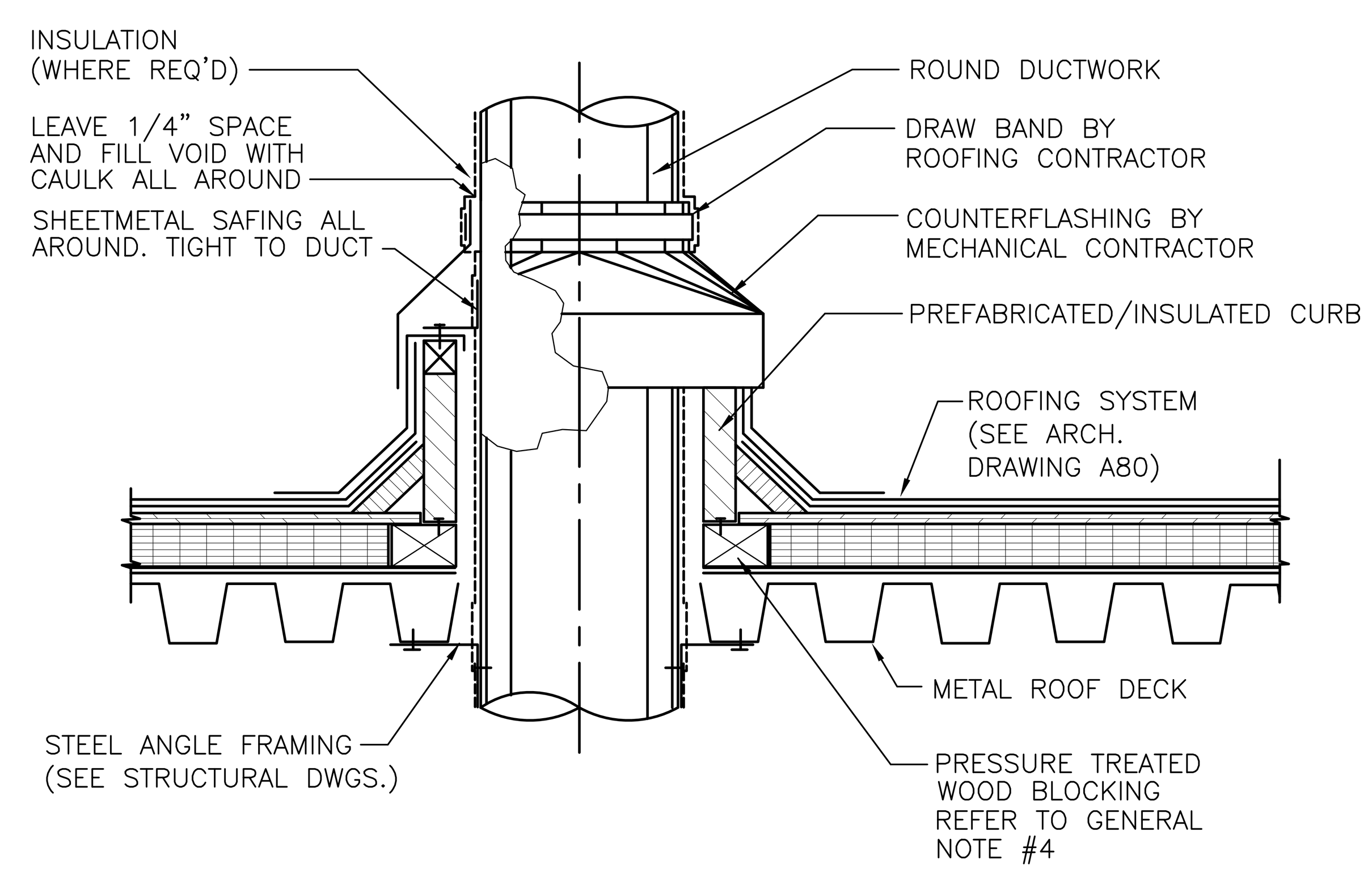
0 4' 8' 16' 32'
1/8" = 1'-0"



KEY PLAN – FIRST FLOOR
NTS



ROUND DUCT SUPPORT ON ROOF DETAIL (3/M15)
NTS



NOTES:

1. ALL ROOF CURBS SHALL BE SUPPLIED AND INSTALLED/FLASHED BY THE ROOFING CONTRACTOR UNLESS OTHERWISE. COORDINATE INSTALLATION WITH MECHANICAL CONTRACTOR AND EXISTING STRUCTURAL MEMBERS.
2. THE ROOFING CONTRACTOR SHALL FLASH ALL ROOFING CURBS AS TO MAINTAIN ROOF INTEGRITY AND ALL EXISTING WARRANTIES.
3. ALL WOOD BLOCKING/NAILERS SHALL BE SUPPLIED AND INSTALLED BY THE ROOFING CONTRACTOR.
4. FOR WOOD BLOCKING INFORMATION REFER TO ROOF DETAILS AND COORDINATE WITH ARCHICTURAL PLAN A15.
5. MODIFY EXISTING AND/OR PROVIDE NEW ROOF OPENINGS AS AS REQUIRED FOR INSTALLATION OF NEW ROOF CURBS. COORDINATE INSTALLATION WITH ALL OTHER TRADES PRIOR TO CONSTRUCTION.

ROUND DUCT THROUGH ROOF PENETRATION DETAIL (4/M15)
NTS

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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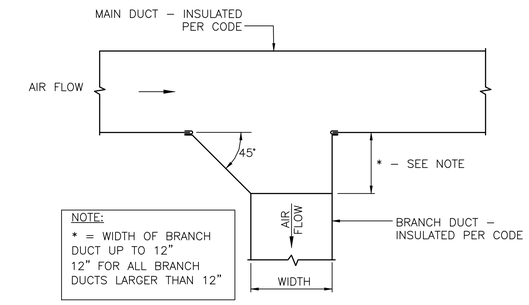
GAETANO P. CIPRIANO, P.E. PROFESSIONAL ENGINEER LICENSE NO. NY 064215-1
MECHANICAL

SCALE: AS NOTED
DRAWN BY:
DESIGNED BY:
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

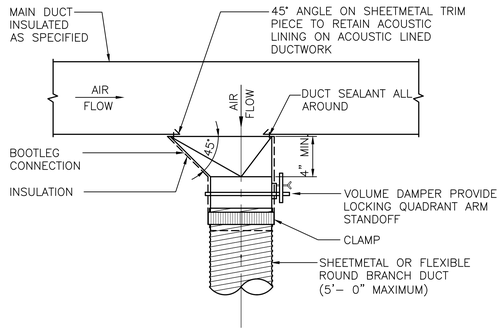
TITLE: ROOF PLAN

EIA DRAWING NO.: M15
CLIENT DWG. NO.: – – – –
EIA PROJECT NO.: E08577.03



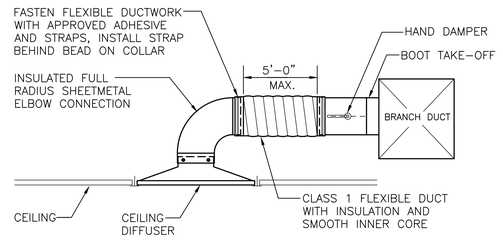
DETAIL – RECTANGULAR BRANCH DUCT TAKE–OFF –MAX +2" WG/2500 FPM DETAIL

NTS (1 / M40)



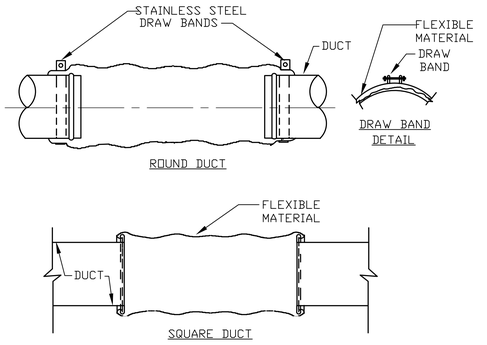
BOOTLEG BRANCH DUCT TAKE–OFF DETAIL

NTS (2 / M40)



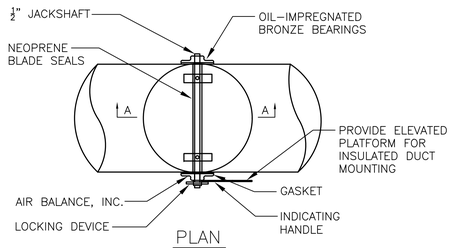
FLEXIBLE CONNECTION AT SUPPLY AIR DIFFUSER DETAIL

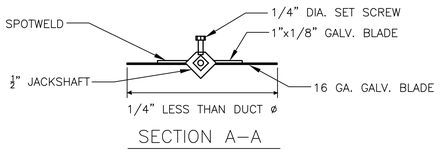
NTS (3 / M40)



FLEXIBLE DUCT EQUIPMENT CONNECTOR DETAIL

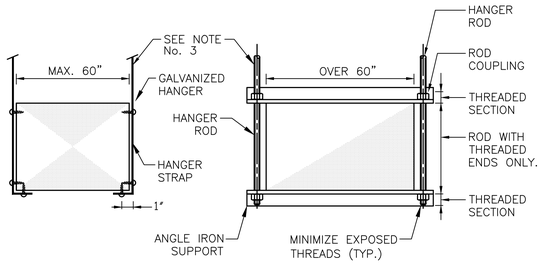
NTS (4 / M40)





ROUND VOLUME DAMPER LOW PRESSURE DETAIL

NTS (5 / M40)

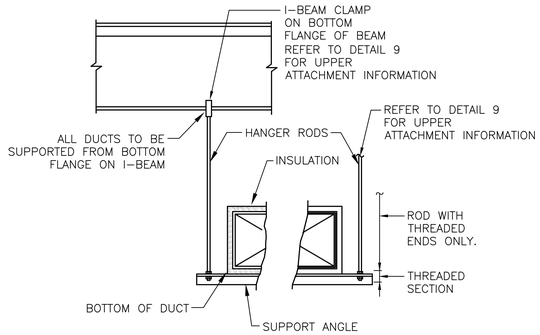


NOTES:

1. ON DUCTS OVER 48" WIDE, BOTTOM SHALL BE BRACED BY ANGLE. FOR CROSS SECTION AREA MORE THAN 8 SQ FT, DUCT SHALL BE BRACED BY ANGLES ON ALL FOUR SIDES.
2. CUTTING AND PATCHING SHALL BE LIMITED TO A MINIMUM AS REQUIRED FOR PROPER INSTALLATION.
3. STRAP AND ROD SIZES SHALL COMPLY WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARD METAL AND FLEXIBLE", TABLE 5–1 (RECTANGULAR) TABLE 5–2 (ROUND DUCT).
4. HANGER AND SUPPORTS SHALL COMPLY WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS – METAL/FLEXIBLE CHAPTER 5, HANGER AND SUPPORTS.

DUCT HANGER SUPPORT DETAIL

NTS (6 / M40)

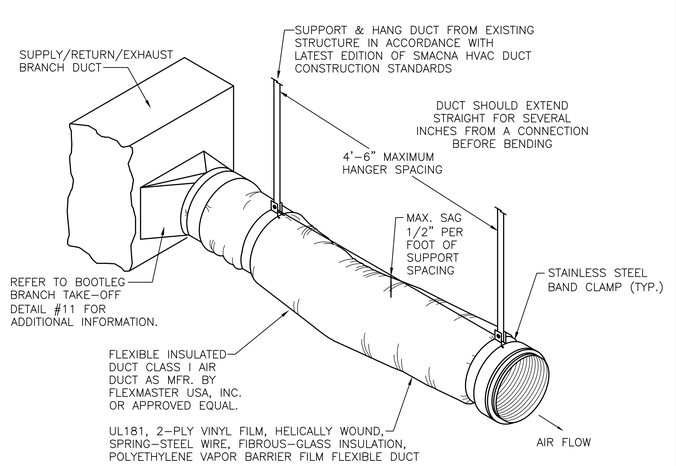


NOTES:

1. STRAP AND ROD SIZES SHALL COMPLY WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARD METAL AND FLEXIBLE", TABLE 5–1 (RECTANGULAR) TABLE 5–2 (ROUND DUCT).
2. HANGER AND SUPPORTS SHALL COMPLY WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS – METAL/FLEXIBLE CHAPTER 5, HANGER AND SUPPORTS.

DUCT SUPPORT DETAIL

NTS (7 / M40)

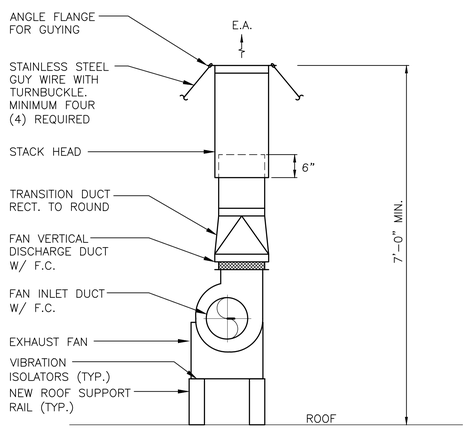


FLEXIBLE DUCT SUPPORT DETAIL

NTS (9 / M40)

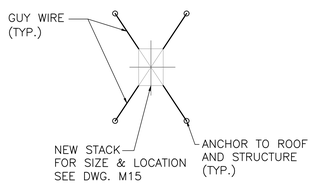
NOTES:

1. REFER TO DIV. 23 MECHANICAL SPECIFICATIONS FOR ADDITIONAL INFORMATION.



EF DISCHARGE STACK DETAIL

NTS (9 / M40)

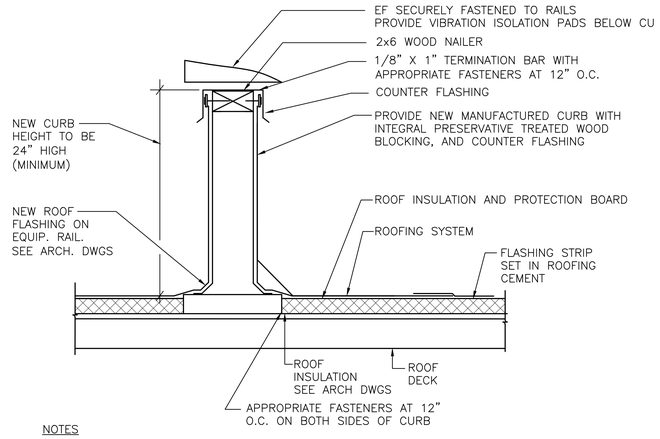


NOTES:

1. LOCATION OF GUY ANCHORS TO BE DETERMINED BY MECHANICAL CONTRACTOR IN FIELD.
2. MECHANICAL CONTRACTOR TO SUBMIT LOCATION AND SHOP DETAILS FOR APPROVAL.

GUY WIRE SUPPORTS FOR STACK – PLAN DETAIL

NTS (10 / M40)



NOTES

1. 14 GA GALVANIZED STEEL EQUIPMENT SUPPORT/RAIL, CONTINUOUS WELDED CORNER SEAMS, PRESSURE TESTED NAILER, LAG SCREWS.
2. REFER TO ROOF PLAN ON DRAWING M15 FOR ADDITIONAL INFORMATION ON EQUIPMENT RAILS.
3. DETAIL FOR NEW EXHAUST FANS.

ROOF MOUNTED EQUIPMENT SUPPORT DETAIL

NTS (11 / M40)

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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GAETANO P. CIPRIANO, P.E. PROFESSIONAL ENGINEER LICENSE NO. NY 064215–1

MECHANICAL

SCALE	AS NOTED
DRAWN BY:	
DESIGNED BY:	
CHECKED BY:	
APPROVED BY:	
PROJECT MANAGER:	

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
DETAILS

EIA DRAWING NO.
M40

CLIENT DWG. NO.
– – – –

EIA PROJECT NO.
EG8577.03

(XX)

PLAN NORTH

MENS TOILET 115A	
TYPE	CFM
SA	0
EA	350
EA(P)	0
I	350
X	0
TEMP	72±5
RH	<60

WOMENS TOILET 116A	
TYPE	CFM
SA	0
EA	350
EA(P)	0
I	350
X	0
TEMP	72±5
RH	<60

MENS LOCKER 115	
TYPE	CFM
SA	425
EA	250
EA(P)	0
I	75
X	250
TEMP	72±5
RH	<60

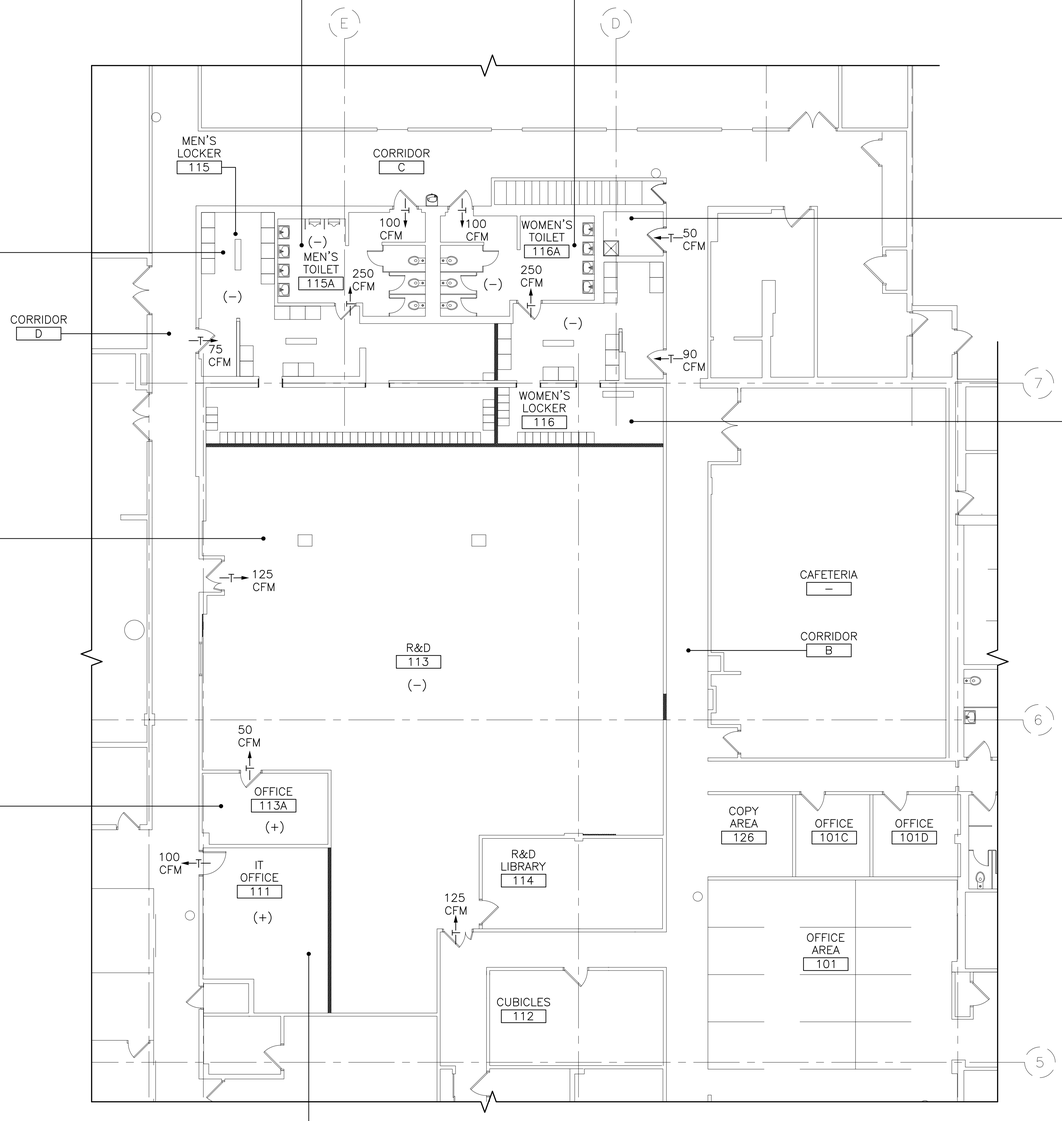
JANITOR'S CLOSET	
TYPE	CFM
SA	0
EA	50
EA(P)	0
I	50
X	0
TEMP	72±5
RH	<60

WOMEN'S LOCKER 116	
TYPE	CFM
SA	360
EA	200
EA(P)	0
I	90
X	250
TEMP	72±5
RH	<60

R&D LAB 113	
TYPE	CFM
SA	4275
RA	1175
EA	3400
EA(P)	0
I	300
X	0
TEMP	72±5
RH	<60

OFFICE 113A	
TYPE	CFM
SA	50
EA	0
EA(P)	0
I	0
X	50
TEMP	72±5
RH	<60

IT OFFICE 111	
TYPE	CFM
SA	440
RA	340
EA	0
EA(P)	0
I	0
X	100
TEMP	72±5
RH	<60



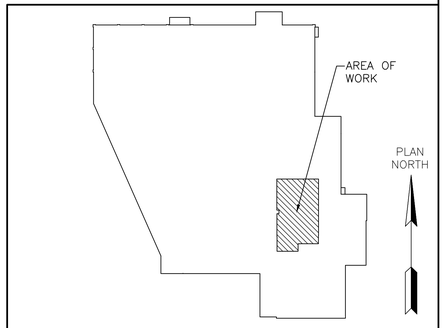
AIR BALANCING DIAGRAM – FIRST FLOOR

NTS

1 / M50

PRESSURIZATION LEGEND

(+) POSITIVELY PRESSURIZED
(–) NEGATIVELY PRESSURIZED
(N) NEUTRAL



KEY PLAN – FIRST FLOOR

NTS

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

EI ARCHITECTURE ENGINEERING PLANNING

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GAETANO P. CIPRIANO, P.E. PROFESSIONAL ENGINEER LICENSE NO. NY 064215–1

MECHANICAL

SCALE: AS NOTED
DRAWN BY: DOC. CONTROL
DESIGNED BY: DOC. CONTROL
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
AIR BALANCE DIAGRAM

EIA DRAWING NO.
M50

CLIENT DWG. NO.
– – – – –

EIA PROJECT NO.
EG8577.03

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VENTILATION SCHEDULE

SPACE	ROOM TYPE	PEOPLE OUTDOOR AIR		AREA OUTDOOR AIR		BREATHING ZONE OUTDOOR AIRFLOW (CFM) Vbz=Rp*Pz+Az*Ra	(CFM) Voz	DESIGN OA (CFM)
		PEOPLE Pz	RATE (CFM/PERSON) Rp	AREA (SQFT) Az	RATE (CFM/SQFT) Ra			
MEN'S LOCKER ROOM 115	LOCKER/DRESSING ROOM	0	0	–	0	–	–	–
WOMEN'S LOCKER ROOM 116	LOCKER/DRESSING ROOM	0	0	–	0	–	–	–
R&D LABORATORY 113	SCIENCE LABORATORY	83	10	3267	0.18	1422	1777	1800
IT OFFICE 111	OFFICE	2	5	320	0.06	30	37.5	45

VENTILATION SCHEDULE NOTES:

1. OUTDOOR AIR IS BEING PROVIDED PER SECTION 403 OF THE 2020 MECHANICAL CODE OF NEW YORK STATE.

EXHAUST VENTILATION SCHEDULE

SPACE	ROOM TYPE	AREA OUTDOOR AIR		REQUIRED EXHAUST (CFM)	DESIGN EA (CFM)
		AREA (SQFT) Az	RATE (CFM/SQFT) Ra		
MEN'S LOCKER ROOM 115	LOCKER/DRESSING ROOM	714	0.25	179	250
WOMEN'S LOCKER ROOM 116	LOCKER/DRESSING ROOM	412	0.25	103	200
R&D LABORATORY 113	SCIENCE LABORATORY	3267	1.00	3267	3400
MENS TOILET 115A	PUBLIC TOILET	232	70/FIXTURE	350	350
WOMENS TOILET 116A	PUBLIC TOILET	238	70/FIXTURE	210	350

NOTES:

1. MECHANICAL EXHAUST FOR ALL OTHER SPACES IS PROVIDED IN ACCORDANCE WITH 403 OF THE 2020 MECHANICAL CODE OF NEW YORK STATE.
2. MECHANICAL CONTRACTOR TO REBALANCE EXISTING SYSTEMS TO PROVIDE DESIGN FLOW RATES. PROVIDE BALANCING DAMPERS ON ALL NEW BRANCH DUCTWORK.

FAN SCHEDULE

(FURNISHED AND INSTALLED BY CONTRACTOR)

TAG	SERVICE	MFR.	MODEL	QTY.	LOCATION	(CFM)	FAN (RPM)	DRIVE	FAN TYPE	CLASS (I, II, III, IV)	ESP (INWG)	MOTOR (HP)	VOLTS/PH/HZ	OP. WT. (LBS)	INLET (dBA)	OUTLET (dBA)	REMARKS
EF–1&2	R&D 113	GREENHECK	FJI–12–BI–X	2	ROOF	1700	2,074	DIRECT	UTILITY SET	I	1.20	1.0	208/3/60	219	68	74	1–3
EF–3	FUME HOOD	GREENHECK	FJI–10–BI–X	1	ROOF	1200	2,454	DIRECT	UTILITY SET	I	1.10	1.0	208/3/60	244	91	96	1–3

REMARKS:

1. PROVIDE VFD CONTROL.
2. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
3. PROVIDE ROOF MOUNTED FLAT BLADE CENTRIFUGAL BLOWER COMPLETE WITH EQUIPMENT SUPPORTS ROOF RAILS, SPRING ISOLATORS, NEMA 3R PREWIRED DISCONNECT SWITCH, PHENOLIC EPOXY POWDER (LIGHT GRAY), ALUMINUM ACCESS DOOR–BOLT. EF–1 AND 2 SHALL BE OPERATED ON A TIME CLOCK CONTROLLER WITH A MANUAL SWITCH OVERIDE.

VARIABLE FREQUENCY CONTROLLER SCHEDULE

(FURNISHED AND INSTALLED BY CONTRACTOR)

TAG	UNIT	SERVICE	MOTOR DATA		VFD DATA				COMPONENTS												
			HP	V/PH	EFF.	MIN. OUTPUT AMPS	V/PH	MODEL	ENCLOSURE	HARMONIC PERFORMANCE	VOLTAGE RANGE	REACTOR IMPEDANCE (MIN)	VFD SHORT CIRCUIT RATING	DRIVE ISOLATION FUSES	BYPASS	EMI / RMI FILTERS	BMS INTERFACE	EQUIPMENT	BASIS OF DESIGN	REMARKS
VFD–1,2,3	–	EF–1,2,3	2	208/3	98%	4.1	208/3	DANFOSS FC102	3R	6 PULSE W/ DC SWINGING CHOKES	+30% TO –35%	5%	65,000 AMPS	Y	2 CONTRATOR W/ SERVICE SWITCH	IEC 61800–3	BACNET VFD AND BYPASS	–	DANFOSS	1–9

REMARKS:

1. VFD SHALL SEISMICALLY CERTIFIED (IVC 2006 ASC–7–05 / ICC AC–156).
2. PROVIDE MOTOR CURRENT SENSING FOR BYPASS CIRCUIT (INDICATE ON BMS NETWORK).
3. PROVIDE INTEGRAL TIME CLOCK.
4. PROVIDE SENSING FOR "WELDED CONTACTOR" (INDICATE ON BMS NETWORK).
5. PROVIDE SENSING FOR SINGLE PHASE CONDITION IN BYPASS MODE (INDICATE ON BACNET).
6. VFD SHALL HAVE AT LEAST THE NOTED MINIMUM OUTPUT AMPS, USE HIGHER HP RATING IF REQUIRED.
7. VFD SHALL HAVE MINIMUM OF 65KAIC RATING.
8. COORDINATE THE LOCATION OF VFD'S WITH ELECTRICAL CONTRACTOR AND BUILDING MANAGEMENT PRIOR TO INSTTALLATION.
9. PROVIDE NEMA 3R ENCLOSURE FOR OUTDOOR USE.

DIFFUSER/GRILLES/REGISTER SCHEDULE

(FURNISHED AND INSTALLED BY CONTRACTOR)

TAG	MFR.	MODEL	TYPE	SYSTEM	AIRFLOW (CFM)	MATERIAL	SIZE (IN.)	NECK SIZE	REMARKS
AD–1	PRICE	ASPD	PLAQUE	SUPPLY	SEE DWG	ALUM	24x24	SEE DWG	1–3
AD–2	PRICE	ASPD	PLAQUE	SUPPLY	SEE DWG	ALUM	12x12	SEE DWG	1–3
AR–1	PRICE	80	EGGCRATE	RETURN	SEE DWG	ALUM	24x24	SEE DWG	1–3
EG–1	PRICE	600	LOUVERED	EXHAUST	SEE DWG	ALUM	12x12	SEE DWG	1–3
EG–2	PRICE	600	LOUVERED	EXHAUST	SEE DWG	ALUM	24x24	SEE DWG	1–3

REMARKS:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS FOR AIR DEVICES.
2. ALL DIFFUSERS, GRILLES, GRATES, AND FRAMES SHALL BE WHITE. COORDINATE MOUNTING, FRAME, AND BOARDERS WITH CEILING SPECIFIED ON THE ARCHITECTURAL DRAWINGS.
3. PROVIDE DIFFUSERS AND GRILLES WITH NECK SIZE SHOWN ON THE MECHANICAL PLANS. PROVIDE BACK PAN AND ROUND OR SQUARE NECK ADAPTERS AS NECESSART TO ACCOMMODATE CONNECTIONS TO FLEX OR HARD DUCTS.

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

EI ARCHITECTURE ENGINEERING PLANNING

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GAETANO P. CIPRIANO, P.E. PROFESSIONAL ENGINEER LICENSE NO. NY 064215–1

MECHANICAL

SCALE: AS NOTED

DRAWN BY: PBC 25MAY21

DESIGNED BY: JCM 25MAY21

CHECKED BY:

APPROVED BY:

PROJECT MANAGER:

PROJECT: INSTRUMENTATION LABORATORY

LOCKER ROOM EXPANSION

ORANGEBURG NEW YORK

TITLE: SCHEDULES

EIA DRAWING NO. M60

CLIENT DWG. NO. – – – – –

EIA PROJECT NO. EG8577.03

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GENERAL NOTES

1. FURNISH AND INSTALL ALL ITEMS OF WORK AND SPECIFICATIONS SHOWN ON DRAWINGS IN COMPLIANCE WITH 2020 PLUMBING CODE OF NYS.

2. PLUMBING TRADE CONTRACTOR SHALL PROVIDE MATERIAL, EQUIPMENT, FIXTURES AND ACCESSORIES FOR THE COMPLETION OF THE WORK, TO MAKE THE SYSTEM READY FOR NORMAL AND PROPER OPERATION. CONTRACTOR SHALL ALSO INCLUDE ALL WORK OR MATERIALS NOT DIRECTLY SHOWN ON THE DRAWINGS OR IN THE SPECIFICATION BUT NECESSARY FOR THE PROPER OPERATION OF THE SYSTEM.

3. ALL WORK SHALL BE PERFORMED TO THE SATISFACTION OF THE ARCHITECT, ENGINEER, OWNER AND AGENCIES HAVING JURISDICTION.

4. PERMITS AND FEES: THE CONTRACTOR WILL OBTAIN ALL PERMITS AND ARRANGE FOR PAYMENT OF PERMIT AND FILING FEES WITH OWNER. TRADE CONTRACTORS SHALL SIGN AND SEAL PERMIT APPLICATIONS, ARRANGE FOR INSPECTIONS AND COORDINATE ANY OTHER REQUIREMENTS OF FEDERAL, STATE, COUNTY AND LOCAL AUTHORITIES HAVING JURISDICTION OVER THIS WORK AS WELL AS WITH INSURANCE AND LOCAL UTILITY COMPANIES IF THEIR APPROVAL IS REQUIRED. THE CONTRACTOR SHALL DELIVER ALL PERMITS, APPROVALS, AND CERTIFICATES OF INSPECTION FOR HIS WORK TO THE OWNER, WITHOUT ADDITIONAL COST, BEFORE REQUESTING FINAL PAYMENT FOR THE WORK.

5. PLANS AND SPECIFICATIONS SHOWN HEREIN ARE INTENDED FOR A COMPLETE PROJECT. "EXTRA COSTS" RESULTING FROM THIS WORK SHALL INVOLVE THE OWNER, ARCHITECT OR OTHER CONTRACTORS.

6. THE PLUMBING TRADE CONTRACTOR SHALL CONFIRM ALL UTILITY COMPANY REQUIREMENTS AND CONNECTION POINTS IN FIELD PRIOR TO STARTING WORK.

7. THE PLUMBING TRADE CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR FOR TOWN PERMITS AND ANY SERVICE REQUIRED UNDER THIS CONTRACT.

8. THE PLUMBING TRADE CONTRACTOR SHALL SUBMIT COPIES OF SHOP DRAWINGS WITH DIMENSIONS, CAPACITIES AND MANUFACTURER REQUIREMENTS. SHOP DRAWINGS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS AND EQUIPMENT:

* PLUMBING FIXTURES AND TRIM
* CLEANOUTS
* PIPING MATERIALS
* PIPING INSULATION
* FLOOR DRAINS/TRAPS

9. ALL SHOP DRAWINGS, PRODUCT DATA AND SAMPLES SUBMITTED BY THE PLUMBING TRADE CONTRACTOR SHALL ILLUSTRATE DETAILS OF WORK, EQUIPMENT, MATERIALS, PRODUCTS, SYSTEMS, DESIGN OR WORKMANSHIP THAT THE CONTRACTOR INTENDS TO USE IN ORDER TO COMPLY WITH THE DESIGN ESTABLISHED IN THE CONTRACT DOCUMENTS.

10. PRIOR TO SUBMITTING A BID, PLUMBING TRADE CONTRACTORS ARE REQUIRED TO VISIT THE SITE, TAKE MEASUREMENTS, DETERMINE EXACT INVERT ELEVATIONS, SIZE, DEPTH AND LOCATION OF ALL EXISTING UTILITIES WHERE CONNECTIONS ARE TO BE MADE OR INTERSECTIONS OCCUR. WORK BACK TOWARD FIXTURE FROM UTILITY CONNECTION FOR ALL PIPING SYSTEMS. AND INSPECT EXISTING CONDITIONS AND LIMITATIONS. NO ADDITIONAL ALLOWANCE WILL BE MADE BECAUSE OF MISUNDERSTANDING AS TO THE WORK INVOLVED UNDER THIS PROJECT.

11. THE PLUMBING TRADE CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYOUT OF WORK AND COORDINATE LAYOUT WITH OTHER TRADES BEFORE PROCEEDING WITH CONSTRUCTION.

12. ALL CHANGES FROM THE PLANS NECESSARY TO MAKE THE WORK OF THIS PROJECT CONFORM TO THE BUILDING AS CONSTRUCTED AND TO FIT THE WORK OF OTHER TRADES SHALL BE MADE WITHOUT EXTRA COST.

13. THE DRAWINGS SHALL NOT BE SCALED. REFER TO THE ARCHITECTURAL DRAWINGS AND DETAILS FOR ALL DIMENSIONS AND DETAILS, LOCATIONS OF PARTITIONS, PARTITION CONSTRUCTION AND LOCATIONS OF PLUMBING FIXTURES.

14. PROTECT ALL EQUIPMENT, MATERIALS AND WORK PERFORMED UNDER THIS PROJECT FROM DAMAGE THAT MAY BE CAUSED BY OTHER WORKMEN.

15. THE PLUMBING TRADE CONTRACTOR SHALL KEEP ALL PIPING AND EQUIPMENT CAPPED, PLUGGED, DRAINED OR OTHERWISE PROTECTED INCLUDING PROTECTION FROM FREEZING AND ENTRANCE OF BUILDING MATERIALS, SAND, DIRT, MORTAR, CONCRETE, ETC. AND MAINTAIN THE INTEGRITY OF ALL EXISTING PIPING SYSTEMS. PRIOR TO CONNECTING NEW WORK TO ANY EXISTING SYSTEM, CONFIRM SYSTEM IDENTIFICATION AND DIRECTION OF FLOW. VERIFY THAT EXISTING PIPING IDENTIFICATION LABELS ARE CORRECT, AND PROVIDE ALL INSTALLATION REQUIREMENTS FOR PROPER CONNECTION TO THE EXISTING SYSTEMS.

16. AT THE COMPLETION OF EACH WORKING DAY, THE OPEN ENDS OF ALL PIPES SHALL BE PROVIDED WITH TEMPORARY PLUGS TO PREVENT THE ENTRANCE OF FOREIGN MATTER.

17. THE PLUMBING TRADE CONTRACTOR SHALL PROVIDE THEIR OWN CLEAN UP, REMOVAL AND LEGAL DISPOSAL OF ALL RUBBISH ON A DAILY BASIS.

18. IT IS THE INTENT OF THE DRAWINGS TO SHOW THE UTILITIES AS ACCURATELY AS POSSIBLE. HOWEVER, THE PLUMBING TRADE CONTRACTOR SHALL VERIFY ACTUAL FIELD LOCATIONS AND INVERT ELEVATIONS BY DIGGING TEST HOLES PRIOR TO ANY CONSTRUCTION. IT IS THEREFORE THE PLUMBING CONTRACTOR'S RESPONSIBILITY TO DETERMINE TO THEIR OWN SATISFACTION THE LOCATION OF SUCH UTILITIES. THIS INCLUDES LOCATION OF VENT AND SANITARY RISERS LOCATED IN CHASE LOCATIONS.

19. TESTING OF COMPLETE SYSTEM SHALL BE MADE IN THE PRESENCE OF OWNER AND AUTHORITY HAVING JURISDICTION, AS REQUIRED BY LOCAL CODES.

20. THE PLUMBING TRADE CONTRACTOR SHALL REPLACE OR REPAIR AT THEIR OWN EXPENSE ANY PIECE OF EQUIPMENT AND/OR MATERIAL WHICH IS FOUND TO BE DEFECTIVE DURING INSPECTION OR TEST. INSPECTION AND TEST SHALL BE REPEATED FOR THE REPLACED AND REPAIRED EQUIPMENT OR MATERIALS.

21. THE PLUMBING TRADE CONTRACTOR SHALL ALSO REPAIR ALL DAMAGE TO SURROUNDING AREAS CAUSED BY FAILURE OR REPAIR OF DEFECTIVE EQUIPMENT OR MATERIAL.

22. ALL WORK SHALL BE SCHEDULED IN COMPLIANCE WITH THE OWNER'S REQUIREMENTS FOR THE USE OF EXISTING FACILITIES. ANY INTERRUPTION IN PRIMARY SERVICES MUST BE KEPT TO AN ABSOLUTE MINIMUM.

23. THE PLUMBING TRADE CONTRACTOR SHALL REPLACE ALL EXISTING CONSTRUCTION BEING REMOVED TO MATCH EXISTING FACILITIES.

24. ALL PIPING SUPPORTS SHALL BE FURNISHED AND INSTALLED BY THE PLUMBING TRADE CONTRACTOR.

25. FOR ADDITIONAL NOTES SEE DRAWING T02.

26. ALL ABANDONED PIPE AND EQUIPMENT SHALL BE REMOVED UNLESS OTHERWISE INDICATED.

UTILITY SERVICE PIPING NOTES

SANITARY/PROCESS

WASTE AND VENT PIPING

1. THE PLUMBING CONTRACTOR SHALL PROVIDE CLEANOUTS WHERE INDICATED ON DRAWINGS AND WHERE REQUIRED BY CODE. CLEANOUTS ON LINES UP TO 4" SHALL BE FULL PIPE SIZE.

2. ALL ABOVE GROUND PIPING SHALL BE RUN STRAIGHT AND PLUMB, AS DIRECT AS POSSIBLE, PARALLEL TO SLAB, AND AS CLOSE AS POSSIBLE TO THE STRUCTURAL MEMBERS.

3. MAKE CHANGES IN DIRECTION OF WASTE DRAINAGE AND VENT PIPING USING APPROPRIATE BRANCHES, BENDS AND LONG SWEEP BENDS. TEES AND SHORT–SWEEP 1/4 BENDS MAY BE USED ON VERTICAL STACKS. DO NOT CHANGE DIRECTION OF FLOW MORE THAN 90°F . USE PROPER SIZE OF STANDARD INCREASERS AND REDUCERS IF PIPES OF DIFFERENT SIZES ARE CONNECTED. REDUCING SIZE OF DRAINAGE PIPING IN DIRECTION OF FLOW IS PROHIBITED.

4. THE PLUMBING CONTRACTOR SHALL FURNISH ALL NEW PIPING.

5. ALL TESTING SHALL BE MADE IN THE PRESENCE OF THE OWNER AND PLUMBING INSPECTOR HAVING JURISDICTION AND IN ACCORDANCE WITH THE 2020 PLUMBING CODE OF NYS.

DCW AND DHW WATER PIPING

6. CONNECTION BETWEEN COPPER OR BRONZE AND STEEL PIPING SHALL BE MADE WITH DIELECTRIC UNIONS.

7. ALL PIPING SYSTEM SHALL BE PRESSURE TESTED FOR LEAKS IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST STANDARD SPECIFICATION OF ANSI B31.9

8. TESTING SHALL BE CONDUCTED BEFORE FINAL CONNECTIONS TO EQUIPMENT AND FIXTURES AND BEFORE APPLYING INSULATION.

9. PLUMBING CONTRACTOR SHALL FURNISH ALL TEMPORARY PIPE CONNECTIONS, PUMPS, COMPRESSORS AND INSTRUMENT TO PERFORM AND COMPLETE ALL TESTING.

10. TESTING OF COMPLETED SYSTEM SHALL BE CONDUCTED IN THE PRESENCE OF THE OWNER AND THE AUTHORITY HAVING JURISDICTION. REPAIR PIPING SECTIONS, WHICH FAIL REQUIRED PIPING TEST, BY DISASSEMBLY AND RE–INSTALLATION, USING NEW MATERIALS TO EXTENT REQUIRED TO OVERCOME LEAKAGE. DO NOT USE CHEMICALS, STOP–LEAK COMPOUNDS, MASTIC OR OTHER TEMPORARY REPAIR METHODS.

NATURAL GAS PIPING

1. NATURAL GAS PIPING SHALL BE STANDARD WEIGHT SCHEDULE 40 BLACK STEEL PIPE ASTM–A106 (SEAMLESS), THREADED WITH MALLEABLE IRON FITTINGS FOR PIPING 2–1/2" AND SMALLER. ALL NATURAL GAS PIPING RUNNING AT ELEVATED PRESSURES OR GREATER THAN 2–1/2" SHALL BE WELDED CONSTRUCTION AND COMPLY WITH AMERICAN WELDING SOCIETY (AWS) THE AMERICAN SOCIETY OF MECHANICAL ENGINEERING (ASME) AND THE 2020 NEW YORK STATE FUEL GAS CODE / (NFPA 54) STANDARDS FOR INSTALLATION AND TESTING.

2. NATURAL GAS SYSTEM VALVING SHALL BE PLUG VALVES, 175 LBS CLASS B IRON LUBRICATED, 2 BOLT COVER TYPE SHORT PATTERN, WRENCH OPERATED WITH THREADED ENDS.

3. NATURAL GAS PIPING SHALL BE INSTALLED AND TESTED IN COMPLIANCE WITH THE REQUIREMENTS OF THE 2020 NEW YORK STATE FUEL GAS CODE, NFPA 54 AND ALL AUTHORITIES AND AGENCIES HAVING JURISDICTION.

4. TESTING OF COMPLETED SYSTEM SHALL BE CONDUCTED IN THE PRESENCE OF THE OWNER AND THE AUTHORITY HAVING JURISDICTION. REPAIR PIPING SECTIONS, WHICH FAIL REQUIRED PIPING TEST, BY DISASSEMBLY AND RE–INSTALLATION, USING NEW MATERIALS TO EXTENT REQUIRED TO OVERCOME LEAKAGE. DO NOT USE CHEMICALS, STOP–LEAK COMPOUNDS, MASTIC OR OTHER TEMPORARY REPAIR METHODS.

5. ALL NEW GAS FIRED EQUIPMENT HAS BEEN SELECTED WITH AN OPERATING PRESSURE RANGE OF 4.0" TO 14.0" OF W.C. PLUMBING CONTRACTOR SHALL FIELD VERIFY INCOMING GAS PRESSURE AT THE MAIN AS WELL AS THE OPERATING PRESSURE OF THE MAIN AND ALL EQUIPMENT WITHIN THE BUILDING. WHERE GAS OPERATING PRESSURES WITHIN THE MAINS OR BRANCH PIPING SERVING GAS FIRED EQUIPMENT EXCEEDS ½ PSIG (14.0IN W.C.) THE INSTALLING CONTRACTOR SHALL PROVIDE A LOCK–UP STYLE LINE REGULATOR (SIMILAR TO MAXITROL 325 SERIES) TO BE VENTED TO ATMOSPHERE. REGULATORS SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR FOR EACH PIECE OF EQUIPMENT AND INSTALLED AS PER MANUFACTURERS AND LOCAL UTILITY COMPANIES GUIDELINES.

6. ALL MODIFICATIONS TO THE EXISTING NATURAL GAS SYSTEM AND/OR TIE IN TO THE METER SET SHALL BE REVIEWED AND APPROVED BY THE LOCAL GAS UTILITY COMPANY. THE PLUMBER SHALL COORDINATE ALL NEW PIPING AND/OR SYSTEM MODIFICATIONS WITH THE UTILITY COMPANY AND MODIFY PIPING AS REQUIRED AT THE INCOMING SERVICE TO ACCOMMODATE ANY METER MODIFICATIONS.

PIPE INSULATION

11. ALL WATER PIPING SHALL BE INSULATED WITH FIBERGLASS INSULATION WITH ALL SERVICE JACKET. THE THICKNESS OF INSULATION SHALL NOT BE LESS THAN 1".

12. INSULATION SHALL BE INSTALLED IN A SMOOTH, CLEAN, WORKMANLIKE MANNER. JOINTS SHALL BE TIGHT AND FINISHED SMOOTH, WITH A CONTINUOUS UNBROKEN VAPOR SEAL.

13. ALL SURFACES TO BE INSULATED SHALL BE DRY AND FREE OF LOOSE SCALE, DIRT, AND OIL OR WATER WHEN INSULATION IS APPLIED.

14. INSTALLATION OF INSULATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND IN ACCORDANCE WITH RECOGNIZED INDUSTRIAL PRACTICES TO ENSURE THAT INSULATION SERVES THE INTENDED PURPOSE.

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
BF	BELOW FLOOR
CA	COMPRESSED AIR
CFH	CUBIC FEET PER HOUR
CI	CAST IRON
CL	CENTER LINE
CLG	CEILING
CO	CLEAN OUT
CONN	CONNECTION
CONT.	CONTINUED
CU	COPPER
CUL	COPPER TYPE L
DCW	DOMESTIC COLD WATER
DFU	DRAINAGE FIXTURE UNIT
DHW	DOMESTIC HOT WATER
DHWR	DOMESTIC HOT WATER RETURN
DI	DEIONIZED/PURIFIED WATER
DIR	DEIONIZED/PURIFIED WATER RETURN
DIA	DIAMETER
DN	DOWN
DWG	DRAWING
(E)	EXISTING TO REMAIN
FCO	FLOOR CLEANOUT
FIN. FLR.	FINISHED FLOOR
FT.	FEET
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
GPF	GALLONS PER FOOT
GPH	GALLONS PER HOUR
IN	INCH
IN WG	INCHES WATER GAUGE
LAV	LAVATORY
MC	MECHANICAL CONTRACTOR
MFR	MANUFACTURER
NIC	NOT IN CONTRACT
No.	NUMBER
NTS	NOT TO SCALE
PC	PLUMBING CONTRACTOR
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
(R)	REMOVE AND REPLACE
SAN	SANITARY LINE
SQ. FT.	SQUARE FOOT
ST	STORM
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
UR	URINAL
V	VENT
V.I.F.	VERIFY IN FIELD
VTR	VENT THROUGH (THRU) ROOF
W	WASTE
WC	WATER CLOSET
WCO	WALL CLEANOUT
WHA	WATER HAMMER ARRESTOR
WSFU	WATER SUPPLY FIXTURE UNITS

LEGEND

SAN	SANITARY LINE ABOVE FLOOR
SAN	SANITARY LINE BELOW FLOOR
V	VENT LINE
	VALVE
	CHECK VALVE
	GLOBE VALVE
	UNION
DCW	DOMESTIC COLD WATER PIPING
DHW	DOMESTIC HOT WATER PIPING
DHWR	DOMESTIC HOT WATER RETURN PIPING
DI	DEIONIZED WATER PIPING
DIR	DEIONIZED WATER RETURN PIPING
CA	COMPRESSED AIR PIPING
NG	NATURAL GAS PIPING
	PIPE RISE
	PIPE DROP
	LUBRICATED PLUG VALVE
	SOLENOID VALVE
	UNION
P-1	TYPE OF EQUIPMENT & EQUIPMENT DESIGNATION NUMBER
	POINT OF CONNECTION (NEW TO EXISTING)
	POINT OF DISCONNECTION & REMOVAL (DEMOLITION)
1	SHEET NOTES
1	DEMOLITION NOTES
	REVISION
	ITEMS INCLUDED UNDER REVISION

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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PLUMBING

SCALE	AS NOTED
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DESIGNED BY:	JCM 25MAY21
CHECKED BY:	
APPROVED BY:	
PROJECT MANAGER:	

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
GENERAL NOTES, LEGEND, AND ABBREVIATIONS

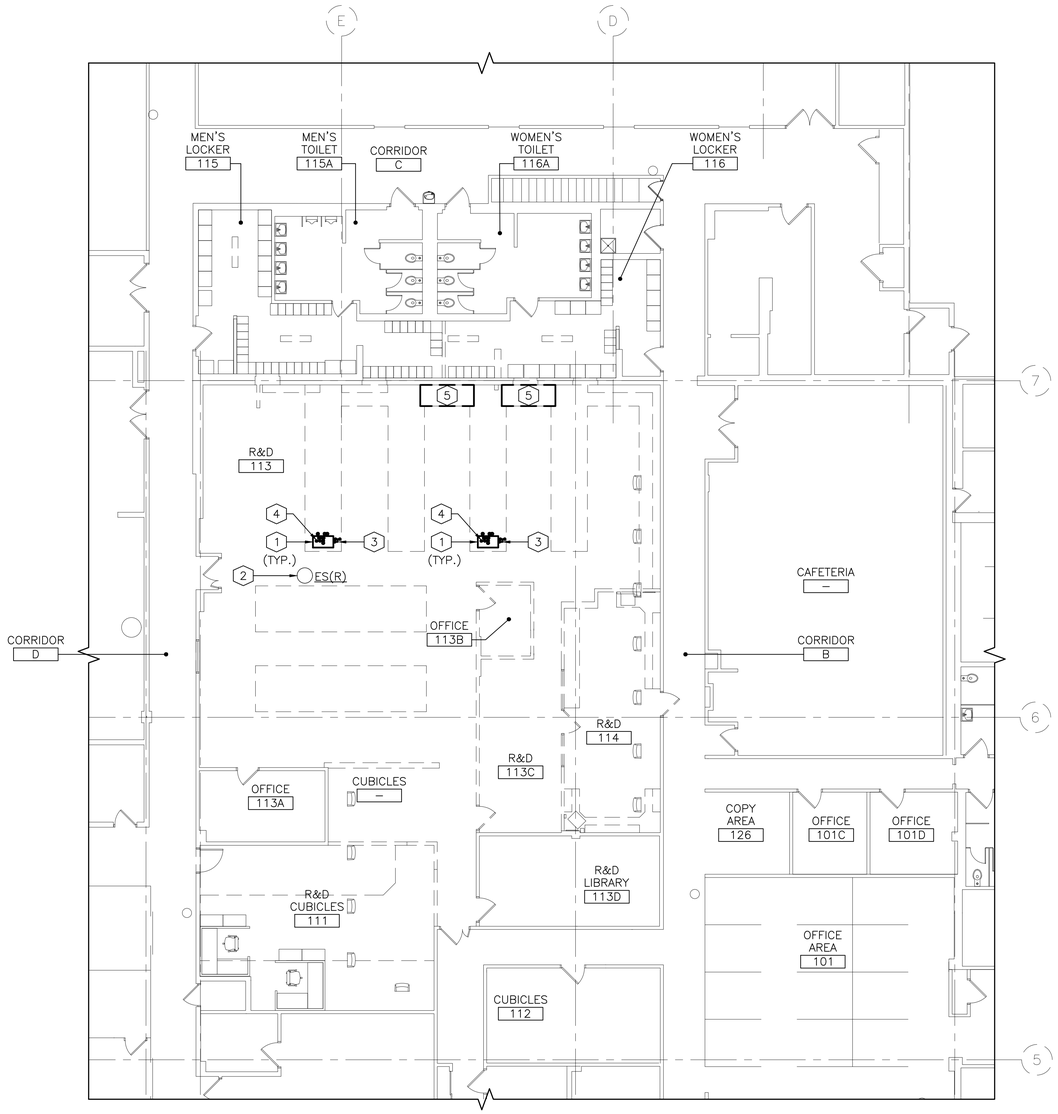
EIA DRAWING NO. P00

CLIENT DWG. NO. – – – – –

EIA PROJECT NO. EG8577.03

XX

PLAN NORTH



FIRST FLOOR DEMOLITION PLAN (1 / PD11)
1/8"=1'-0"

GENERAL NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES.
2. SEE GENERAL NOTES #19,20 AND 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. SEE SHEET AD00 FOR GENERAL, TYPICAL, ELECTRICAL, STRUCTURAL AND ALL OTHER TRADE DEMOLITION NOTES.
4. SEE P00 SERIES DWGS FOR GENERAL NOTES, ABBREVIATIONS, & LEGEND.
5. SEE P40 SERIES DWGS FOR DETAILS.
1. SEE P50 SERIES DRAWINGS FOR FIXTURE CONNECTIONS.
2. SEE P60 SERIES DWGS FOR SCHEDULES.
3. PLUMBING CONTRACTOR SHALL CONFIRM EXISTING PIPE LOCATIONS AND INVERT ELEVATIONS PRIOR TO DEMOLITION/CONSTRUCTION.
4. FLOOR WORK BY OWNER.

DEMOLITION NOTES:

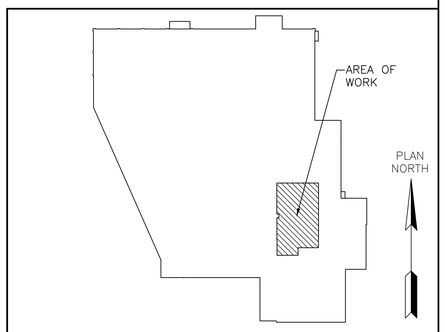
1. EXISTING LAB WORK STATIONS AND ALL ASSOCIATED PLUMBING FIXTURES AND PIPING TO BE REMOVED AND DISCARDED. THIS SHALL INCLUDE BUT IS NOT LIMITED TO ALL WASTE, VENT, HWS, HWR, LAB/ACID WASTE, DEIONIZED WATER AND NATURAL GAS PIPING. PLUMBER SHALL CUT BACK AND CAP PIPING AT MAINS. PLUMBER SHALL FIELD VERIFY EXACT PIPIE ROUTING AND CUT BACK AND TEMPORARILY CAP PIPING FOR FUTURE CONNECTION. REMOVE ALL HANGERS AND SUPPORTS AND PATCH EXISTING SURFACES AS TO ALLOW FOR A CLEAN WORK ARES. SEE DRAWING P11 FOR NEW CONNECTIONS.

2. APPROXIMATE LOCATION OF EXISTING EMERGENCY SHOWER AND ALL ASSOCIATED PIPING TO REMAIN. PLUMBER SHALL SHUT–OFF WATER SUPPLY TO FIXTURE AND PROVIDE TEMPORARY PROTECTION OF FIXTURE DURING DEMOLITION AND NEW WORK PHASES OF CONSTRUCTION. PROTECTION SHALL INCLUDE TEMPORARY PLYWOOD WALLS AND/OR PLASTIC SHEETING. NOTE: IN THE CASE THAT THE EXISTING SHUT–OFF VALVES ARE SIEZED THE PLUMBER SHALL PROVIDE NEW BALL VALVES OF SIZE AND QUANTITY TO MATCH EXISTING INSTALLATION. PLUMBER SHALL TEST EXISTING MIXING VALVE TO ASSURE THE PROPER TEMPERATURE TEPID WATER IS BEING DELIVERED TO THE EMERGENCY FIXTURES AS PER OSHA STANDARDS.

3. EXISTING EMERGENCY EYEWASH AND ALL ASSOCIATED APPURTANCES TO BE REMOVED AND DISCARDED. TEMPORARILY CUT BACK AND CAP PIPING AT THE MAIN FOR FUTURE RECONNECTION TO PIPING.

4. EXISTING DEIONIZED WATER FAUCET TO BE REMOVED AND DISCARDED. CUT BACK AND TEMPORARILY CAP DEIONIZED WATER SUPPLY AND RETURN PIPING AT THE MAIN FOR RECONNECTION.

5. EXISTING FUME HOOD IS TO BE REMOVED AND ALL ASSOCIATED PLUMBING FIXTURES AND PIPING TO BE REMOVED AND TURNED OVER TO BUILDING MANAGEMENT FOR SALVAGE/STORAGE. PIPING DEMOLITION SHALL INCLUDE BUT IS NOT LIMITED TO ALL WASTE, VENT, HWS, HWR, LAB/ACID WASTE, COMPRESSED AIR, DEIONIZED WATER, NATURAL GAS PIPING, ETC. PLUMBER SHALL CUT BACK AND CAP PIPING AT MAINS AND REMOVE ALL HANGERS/SUPPORTS. PATCH ALL EXISTING SURFACES TO MATCH EXISTING. VIF.



KEY PLAN – FIRST FLOOR
NTS

0 4' 8' 16' 32'
⅛" = 1'–0"

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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PLUMBING

SCALE: AS NOTED
DRAWN BY: / DESIGNED BY: / CHECKED BY: / APPROVED BY: / PROJECT MANAGER:
PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK
TITLE: FIRST FLOOR PLAN – DEMOLITION

EIA DRAWING NO.
PD11
CLIENT DWG. NO. – – – – –
EIA PROJECT NO. EG8577.03

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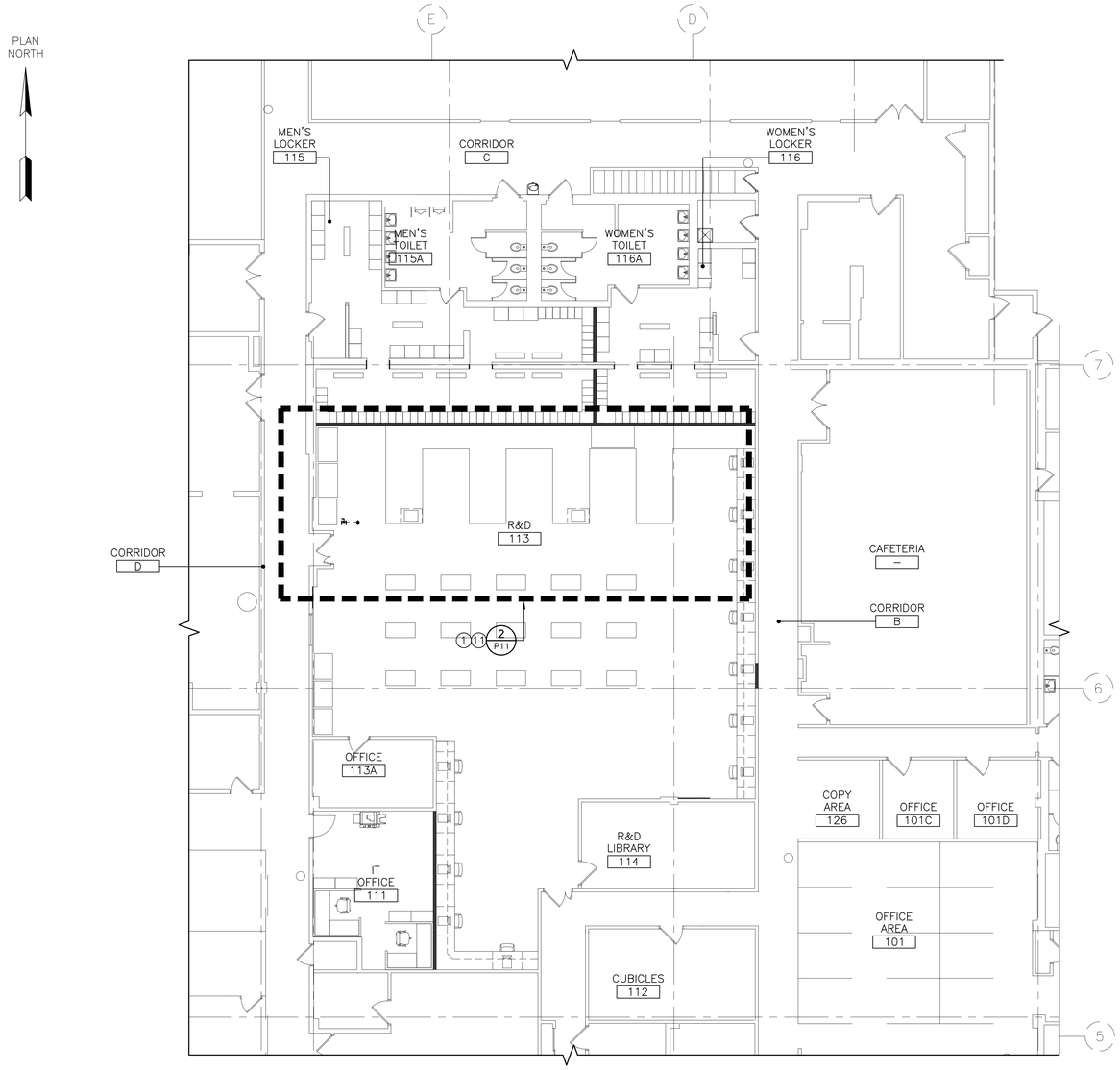
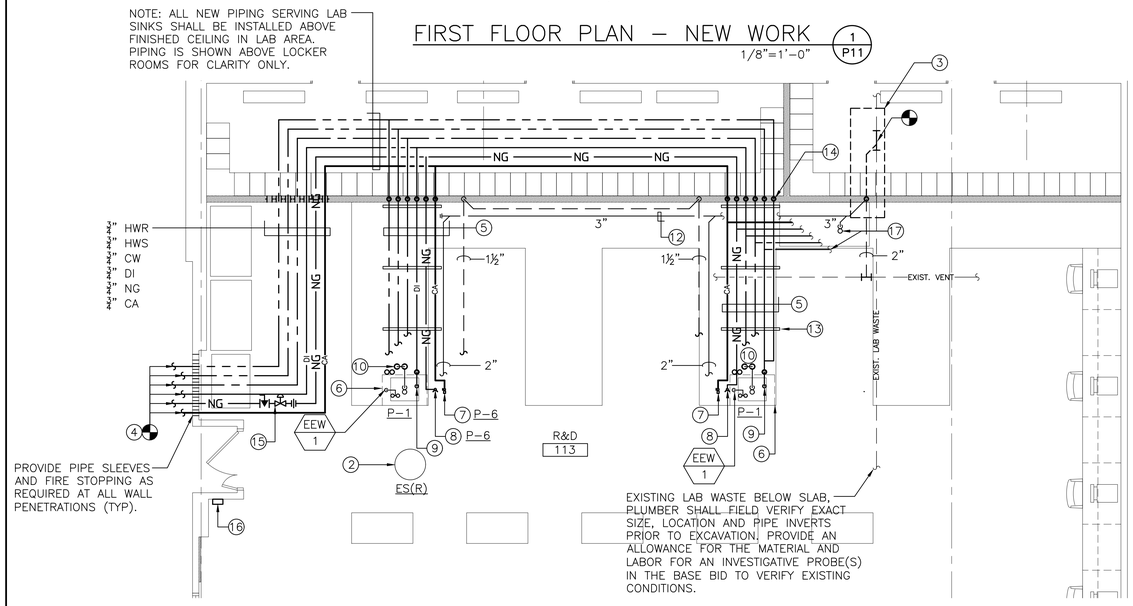


FIRST FLOOR PLAN – NEW WORK (1 P11)

1/8"=1'-0"



ENLARGED PART PLAN – NEW WORK (2 P11)

1/4"=1'-0"

GENERAL NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES.
2. SEE GENERAL NOTES #19,20 AND 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. SEE SHEET A000 FOR GENERAL, TYPICAL, ELECTRICAL, STRUCTURAL AND ALL OTHER TRADE DEMOLITION NOTES.
4. SEE P00 SERIES DWGS FOR GENERAL NOTES, ABBREVIATIONS, & LEGEND.
5. SEE P40 SERIES DWGS FOR DETAILS.
1. SEE P50 SERIES DRAWINGS FOR FIXTURE CONNECTIONS.
2. SEE P60 SERIES DWGS FOR SCHEDULES.
3. PLUMBING CONTRACTOR SHALL CONFIRM EXISTING PIPE LOCATIONS AND INVERT ELEVATIONS PRIOR TO DEMOLITION/CONSTRUCTION.
4. PLUMBING CONTRACTOR SHALL SNAKE AND FLUSH ALL EXISTING SANITARY/LAB WASTE LINES PRIOR TO NEW CONNECTION TO EXISTING MAINS.

SHEET NOTES:

(1) REFER TO ENLARGED PART PLAN 2 ON DRAWING P-11 FOR WORK IN THIS AREA.

(2) EXISTING EMERGENCY SHOWER TO REMAIN. PLUMBER SHALL CLEAN AND FLUSH EXISTING FIXTURE PRIOR TO PLACING IT BACK INTO SERVICE. COORDINATE NEW SIGNAGE WITH ARCHITECT UPON INSTALLATION OF CEILING.

(3) APPROXIMATE LOCATION OF SLAB CUTTING AND EXCAVATION TO ALLOW FOR CONNECTION OF NEW 3" LAB WASTE PIPING TO EXISTING MAIN BELOW FINISHED FLOOR. PLUMBER SHALL FIELD VERIFY EXACT LOCATION AND INVERT ELEVATION PRIOR TO DEMOLITION. UPON INSTALLATION AND SUCCESSFUL PRESSURE TEST OF PIPING THE TRENCH CAN BE BACKFILLED, COMPACTED AND PATCHED TO MATCH EXISTING SUBFLOOR.

(4) NEW 3/4" HWR; ¾" HWS; ¾"CW; ¾" DI; ¾" DIR; ¾" NATURAL GAS AND ¾" COMPRESSED AIR PIPING. CONNECT NEW PIPING TO EXISTING MAINS ABOVE FINISHED CEILING. FIELD VERIFY EXACT CONNECTION POINTS AND PIPE LENGTHS PRIOR TO INNSTALLATION. PLUMBER SHALL PROVIDE FOR ALL NEW PIPING, VALVES, FITTINGS, INSULATION, HAMGERS, SUPPORTS, SYSTEM SHUT-DOWNS, TESTING, ETC. AS REQUIRED FOR COMPLETE INSTALLATIONS AND CODE COMPLIANT SYSTEMS.

(5) NEW 3/4" HWR; ¾" HWS; ¾"CW; ¾" DI; ¾" NATURAL GAS AND ¾" COMPRESSED AIR PIPING. RUN PIPING IN CASEWORK AND SUPPORT FROM STRUCTURE IN A STACKED CONFIGURATION WITH 2" UNISTRUT SPACED A MAXIMUM OF 6'-0" ON CENTER. COORDINATE PIPE ROUTING WITH CASEWORK SHOP DRAWINGS PRIOR TO RELEASE FOR FABRICATION. REFER TO ARCHITECTURAL DETAIL D ON DRAWING A73 FOR PROPOSED LAYOUT.

(6) 3" WASTE DN., 2" VENT RISE, 1/2" H&CW TO LAB SINK; ½" DE-IONIZED (DI) H&CW WATER TO DEDICATED DI FAUCET; ¾" TEPID WATER TO COUNTER MOUNTED EMERGENCY EYEWASH; ½" NATURAL GAS UP TO GAS TURRET AND ¾" COMPRESSED AIR UP TO CA OUTLET. PLUMBER SHALL PROVIDE AND INSTALL ALL PIPE, FITTINGS, VALVES, INSULATION, SEDIMENT TRAP, SUPPLIES, ¼ TURN BALL VALVE TYPE STOPS, ESCUTCHEONS, MIVING VALVES, ETC. AS REQUIRED FOR A COMPLETE AND CODE COMPLIANT INSTALLATION. REFER TO P50 AND P60 FOR PLUMBING FIXTURES AND PIPING CONNECTIONS.

(7) ½" COMPRESSED AIR UP TO COMPRESSED AIR OUTLET. PROVIDE ½" BALL VALVE, WATER SEPERATOR/REGULATOR ASSEMPLY WITH PRESSURE GAUGE AND ⅜" QUICK CONNECT FITTING. ALL PIPING AND ESCUTCHEON ABOVE COUNTER SHALL BE CHROME PLATED.

(8) ½" NATURAL GAS UP TO NEW GAS TURRET. PLUMBER SHALL INSTALL A PLUG VALVE AND CHECK VALVE BELOW CASEWORK (TYPICAL FOR ALL).

(9) PROVIDE ½" DI WATER CONNECTION TO DEDICATED FAUCET.

(10) REFER TO ISLAND SINK DETAIL ON P41 FOR DRAINAGE PIPING TO LAB WORK STATIONS. COORDINATE ALL PIPING REQUIREMENTS WITH MILLWORK AND PROVIDE DIMENSIONED SHOP DRAWINGS INDICATING PIPE CHASES, CONDUIT RUNS, ACCESS PANELS FOR VALVES, ETC. SHOP MDRAWINGS SHALL BE REVIEWED AND APPROVED BY ENGINEER AND OWNER PRIOR TO RELEASE FOR FABRICATION.

(11) PLUMBER SHALL PROVIDE ALL PIPE, FITTINGS, VALVES, INSULATION, ESCUTCHEONS, FIXTURES, CARRIERS, HANGERS SUPPORTS, CORE DRLLING, PIPE SLEEVES, FIRE STOPS, PERMITS, ETC. AS NECESSARY FOR A COMPLETE AND CODE COMPLIANT ROUGH-IN AND FINISH. PLUMBER SHALL CONNECT TO EXISTING MAINS WITHIN THE LAB SERVING PREVIOUS FIXTURES IN THIS AREA. MODIFY EXISTING PIPING AS REQUIRED TO ACCOMMODATE NEW INSTALLATION (TYPICAL FOR ALL LAB FIXTURES).

(12) NEW 3" LAB WASTE PIPING TO BE RUN IN 6" FALSE BACK BEHIND CABINETS. LAB WASTE SHALL BE INSTALLED TIGHT TO WALL AND PITCHED AT ¼" PER LINEAR FOOT. COORDINATE INSTALLATION WITH MILLWORK SHOP DRAWINGS PRIOR TO RELEASE FOR FABRICATION TO ALLOW FOR ADEQUATE CLEARANCE AND PIPE PITCH.

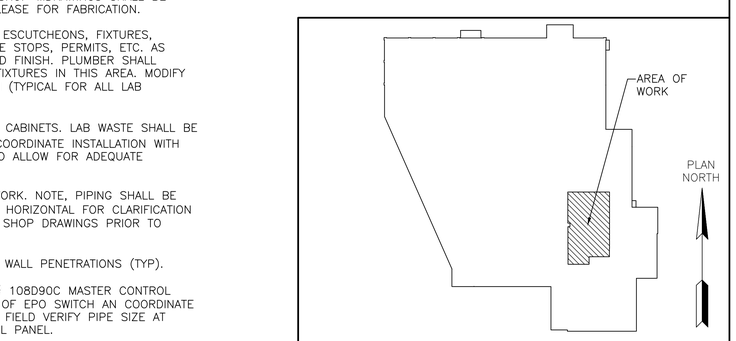
(13) PROVIDE PIPE SUPPORT IN FALSE BACK/VOID SPACE WITHIN CASEWORK. NOTE, PIPING SHALL BE RUN IN A VERTICAL/STACKED CONFIGURATION AND IS INDICATED AS HORIZONTAL FOR CLARIFICATION ONLY. COORDINATE EXACT DETAIL AND DIMENSIONS WITH MILLWORK SHOP DRAWINGS PRIOR TO RELEASE FOR FABRICATION (TYPICAL).

(14) PROVIDE PIPE SLEEVES AND FIRE STOPPING AS REQUIRED AT ALL WALL PENETRATIONS (TYP).

(15) PROVIDE NEW ASCO 3/4" GAS SOLENOID VALVE AND ASCO MODEL# 108D90C MASTER CONTROL STATION. SEE ELECTRICAL FLOOR PLANS FOR PROPOSED LOCATION OF EPO SWITCH AN COORDINATE ALL POWER REQUIREMENTS AND CONTROL WIRING. PLUMBER SHALL FIELD VERIFY PIPE SIZE AT CONNECTION TO MAIN PRIOR TO PURCHASE OF VALVE AND CONTROL PANEL.

(16) PROVIDE NEW BREAK GLASS TYPE EMERGENCY POWER GAS SHUT-OFF/MANUAL PULL STATION TO BE INSTALLED AT THE LAB EGRESS AND WIRED TO THE MASTER GAS CONTROL STATION ASCO MODEL 216C89 AND EXISTING BUILDING FIRE ALARM SYSTEM. PLUMBING CONTRACTOR SHALL COORDINATE ALL DEVICES, JUNCTION BOXES, CONDUITS, WIRING, RELAYS, EXTENSION PANELS, REMOTE ANNUCIATOR PANELS, ETC. WITH FIRE ALARM VENDOR PRIOR TO BID.

(17) 2" WASTE, 2" ISLAND VENT, 1/2" H&CW TO CUP SINK; ½" DE-IONIZED WATER ; ½" NATURAL GAS UP TO GAS TURRET AND ¾" COMPRESSED AIR UP TO CA OUTLET SERVING LAB EXHAUST HOOD UTILITIES. PLUMBER SHALL RUN PIPING BELOW COUNTER AND CONNECT TO HOOD OUTLETS. PLUMBER SHALL PROVIDE AND INSTALL ALL PIPE, FITTINGS, VALVES, INSULATION, SEDIMENT TRAP, SUPPLIES, ¼ TURN BALL VALVE TYPE STOPS, ESCUTCHEONS, MIXING VALVES, ETC. AS REQUIRED FOR A COMPLETE AND CODE COMPLIANT INSTALLATION. MODIFY PIPING AS REQUIRED TO ACCOMMODATE INSTALLATION.



KEY PLAN – FIRST FLOOR

NTS

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

EI ARCHITECTURE ENGINEERING PLANNING
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PLUMBING

SCALE: AS NOTED

DRAWN BY: FOR PERMIT

DESIGNED BY: FOR PERMIT

CHECKED BY:

APPROVED BY:

PROJECT MANAGER:

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
FIRST FLOOR PLAN

EIA DRAWING NO.
P11

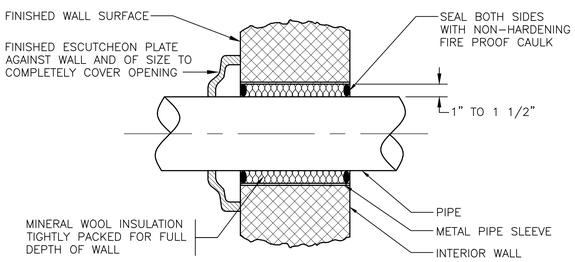
CLIENT DWG. NO.

EIA PROJECT NO.
EG8577.03

0 4' 8' 16' 32'
⅛" = 1'-0"

0 2' 4' 8' 16'
¼" = 1'-0"

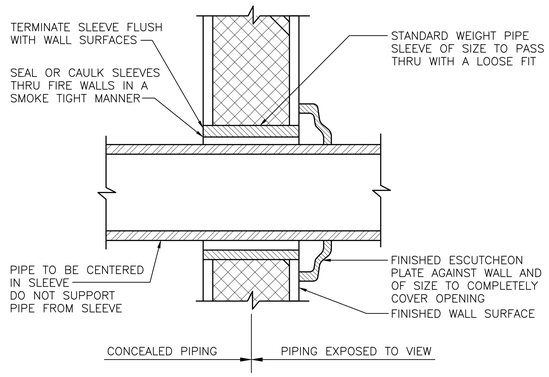
(XX)



PIPE PENETRATION THROUGH INTERIOR RATED WALL DETAIL (1 / P40)

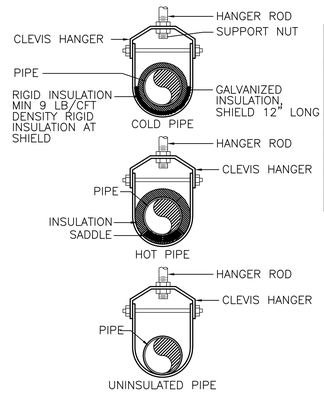
NTS

NOTE:
1. ALL PIPE PENETRATIONS THROUGH INTERIOR RATE RATED WALLS SHALL COMPLY WITH SECTION 713.3.1 AND 713.3.1.2 OF THE 2015 IBC.



PIPE PENETRATION THROUGH INTERIOR NON-RATED WALL DETAIL (2 / P40)

NTS

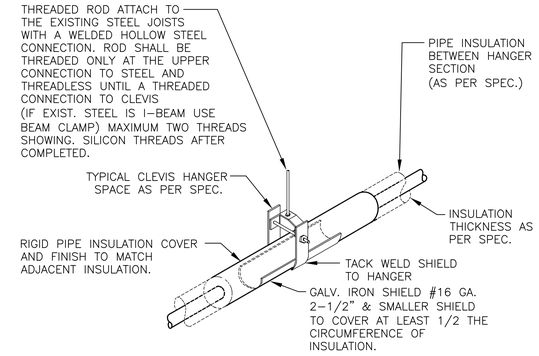


HANGER ROD SIZE/SPACING SCHEDULE			
PIPE SIZE	MINIMUM HANGER ROD SIZE	COPPER PIPE	
		HORIZ.	VERT.
1/2"	1/4"	6'	10'
3/4"	1/4"	6'	10'
1"	1/4"	6'	10'
1-1/4"	3/8"	6'	10'
1-1/2"	3/8"	10'	10'

NOTES:
1. HANGERS AND COMPONENTS SHALL BE COATED WITH RUST RESISTANT PRIMER (SEE SPEC.).
2. THREADED HANGER ROD SHALL BE FASTENED TO THE EXISTING STRUCTURE WITH APPLICABLE CLAMP OR FASTENER.

PIPING SUPPORT DETAILS (3 / P40)

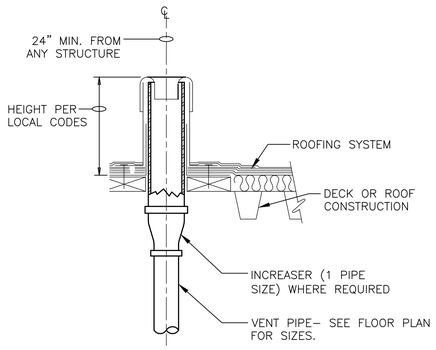
NTS



TYPICAL INSULATED PIPE HANGER DETAIL (4 / P40)

NTS

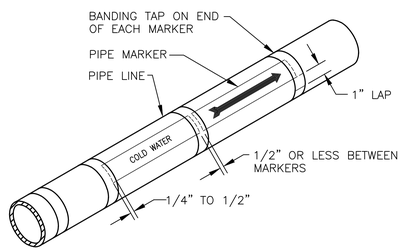
NOTE:
1. HANGERS AND COMPONENTS SHALL BE COATED WITH RUST RESISTANT PRIMER (SEE SPEC.).



PLUMBING VENT THRU ROOF DETAIL (5 / P40)

NTS

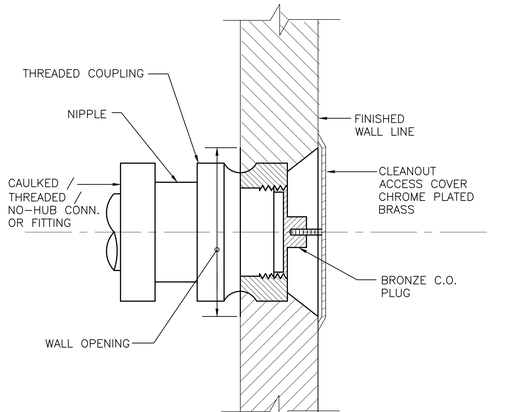
NOTE:
1. SEE DETAIL 3/A80 FOR ADDITIONAL INFORMATION.
2. SEE DETAIL 6/A80 FOR ADDITIONAL INFORMATION.
3. PLUMBING VENTS SHALL TERMINATE A MINIMUM OF 10'-0" AWAY FROM FRESH AIR INTAKES AND/OR OPERABLE WINDOWS.



HORIZONTAL PIPE LABELING LOCATION DETAIL (6 / P40)

NTS

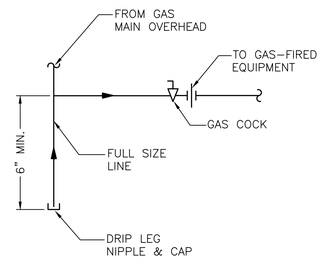
NOTES:
1. USE DOUBLE HEADED ARROWS WHERE FLOW CAN BE IN BOTH DIRECTIONS.



C.O. SIZE	WALL OPENING	ACCESS COVER
2" AND SMALLER	4" DIAM.	5" DIAM.
3" AND 4"	6" DIAM.	7" DIAM.

WALL CLEANOUT INSTALLATION DETAIL (7 / P40)

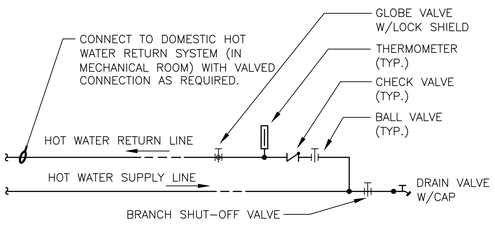
N.T.S.



NOTE: REFER TO PLANS FOR LINE SIZES.

GAS PIPING DRIP LEG DETAIL (8 / P40)

NTS



PROCEDURE FOR BALANCING HOT WATER RETURN PIPING

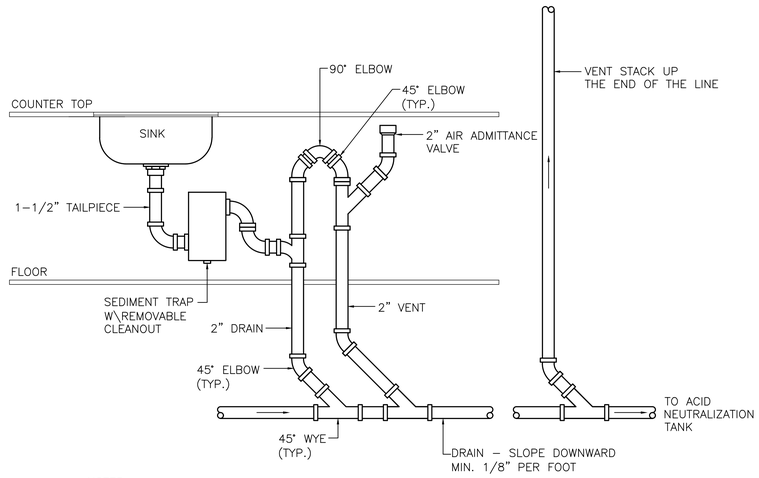
1. IN ORDER TO BALANCE HOT WATER RETURN TEMPERATURES IN THE RETURN PIPING THIS IS THE PROCEDURE TO BE FOLLOWED:

   BEFORE A RETURN CIRCULATION SYSTEM IS PUT INTO SERVICE, IT SHOULD BE ADJUSTED FOR RETURN LINE TEMPERATURE BALANCE UNDER CONDI-TIONS WHEREBY NO WATER IS DRAWN AT FIXTURE OUTLETS. THE ADJUST-MENT PROCEDURE IS SIMPLE AND MAY BE ACCURATELY DONE USING THER-MOMETERS. FIRST, CLOSE ALL BALANCING VALVES SO THAT ALL CIRCULA-TION GOES THROUGH BRANCH 1. THEN, OPEN THE BALANCING VALVE ON BRANCH 2 TO THE DEGREE NECESSARY SO THAT IT RETURNS WATER CON-STANTLY AT THE SAME TEMPERATURE AS BRANCH 1. SIMILARLY, ADJUST-MENT MAY BE MADE WITH BALANCING VALVE ON ANY OTHER RISERS OR BRANCHES SO THAT ALL RETURN WATER IS AT THE SAME TEMPERATURE.

2. CONTRACTOR, AT THE END OF THE PROJECT, TO SUBMIT A REPORT FOR RECORD TO THE ENGINEER THAT THE HOT WATER RETURN CIRCULATION SYSTEM HAS BEEN BALANCED PROPERLY.

HOT WATER RETURN LINE PIPING DETAIL (9 / P40)

NTS



NOTES:
1. COORDINATE EXACT ROUTING AND LOCATIONS WITH FIELD CONDITIONS, MILLWORK/CABINETRY AND PLANS.
2. REFER TO FLOOR PLANS AND RISER DIAGRAMS FOR PROPOSED PIPE ROUTING AND SIZES.

ISLAND LAB SINK ACID WASTE & VENT PIPING DETAIL (10 / P40)

N.T.S.

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PLUMBING

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DRAWN BY:
DESIGNED BY:
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
DETAILS

EIA DRAWING NO.
P40

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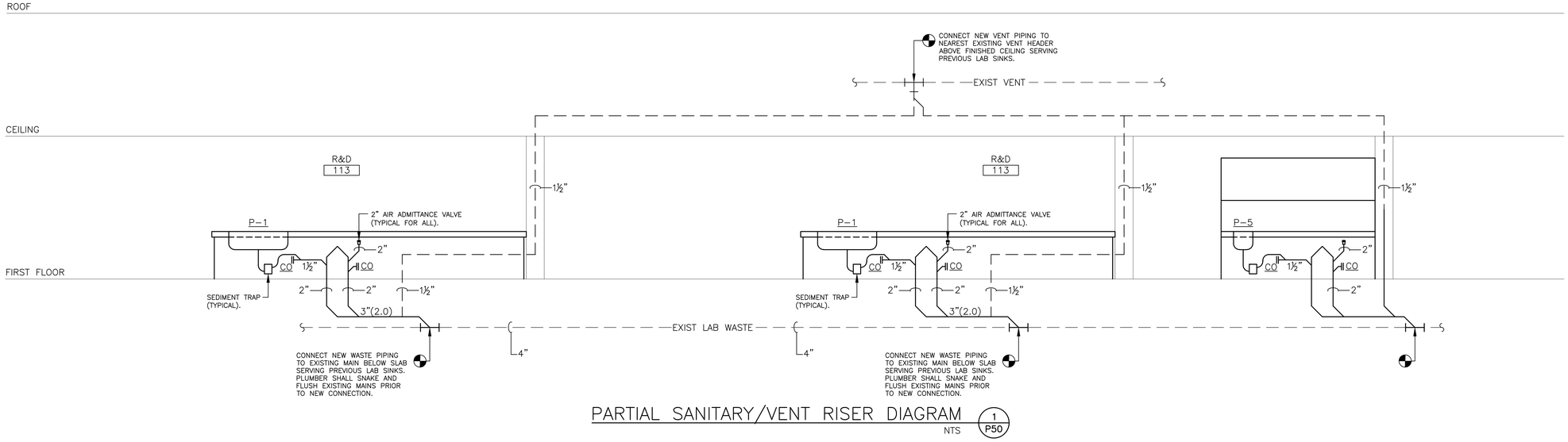
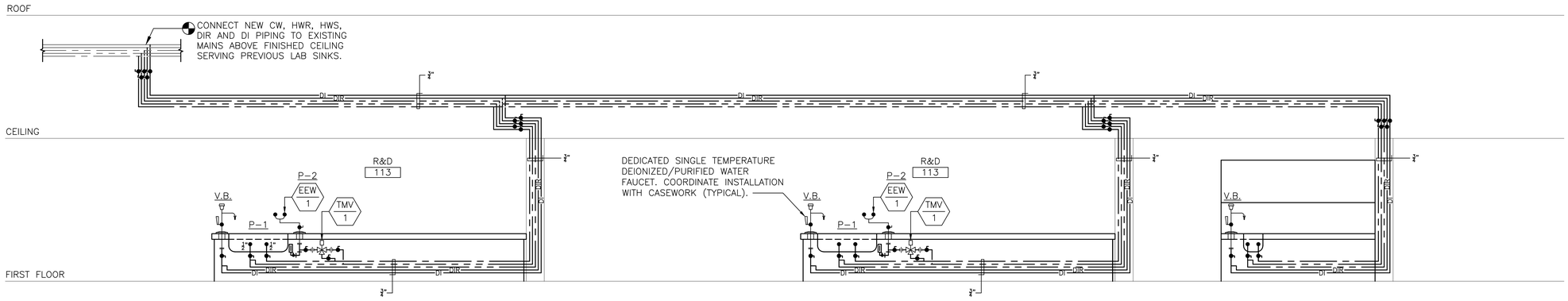
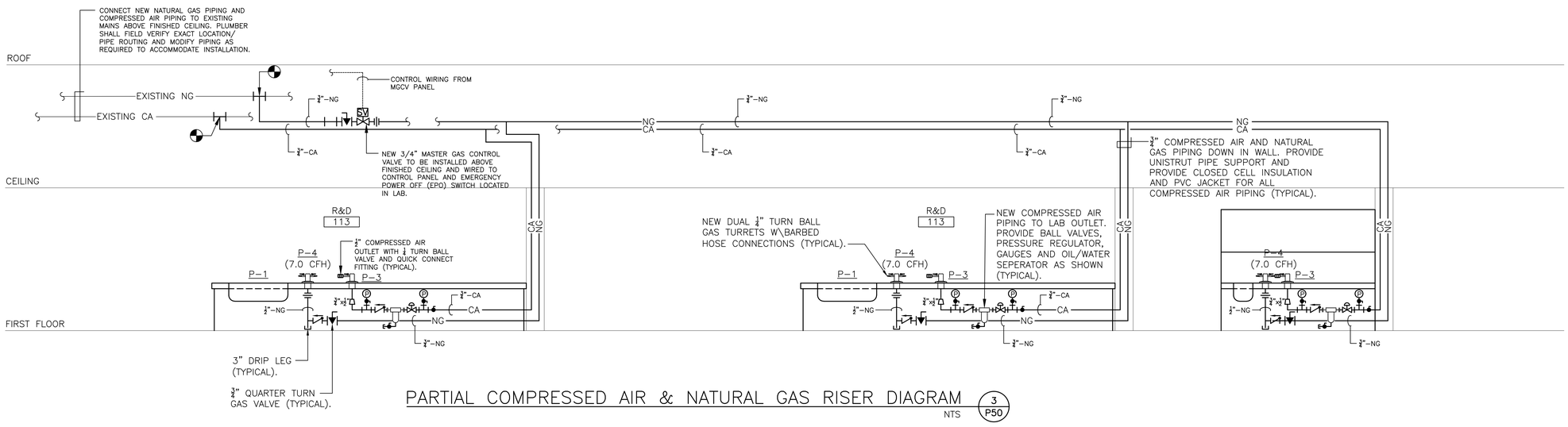


PARTIAL SANITARY/VENT RISER DIAGRAM (1/P50)
NTS



PARTIAL DOMESTIC & DEIONIZED WATER RISER DIAGRAM (2/P50)
NTS



PARTIAL COMPRESSED AIR & NATURAL GAS RISER DIAGRAM (3/P50)
NTS

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APPROVED BY:
PROJECT MANAGER:

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

EIA DRAWING NO.
P50

TITLE
RISER DIAGRAMS

CLIENT DWG. NO.
- - - - -

EIA PROJECT NO.
EG8577.03

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PLUMBING FIXTURE SCHEDULE

NUMBER FIXTURE	P-1	P-2	P-3	P-4	P-5	MGCV	AAV-1	DCVA
FIXTURE/ SERVICE	LABORATORY SINK	EMERGENCY SHOWER / EYE WASH	SINGLE OUTLET COMPRESSED AIR	DUAL OUTLET NATURAL GAS TURRET	CUP SINK	NATURAL GAS SHUTOFF CONTROL	AIR ADMITTANCE VALVE	DOMESTIC WATER
TYPE	COUNTERTOP	COMBINATION UNIT ADA	DECK MOUNT	DECK MOUNT ADA	BENCH MOUNTED	RELAY CONTROL PANEL & SOLENOID VALVE	MECHANICAL VENT	DOUBLE CHECK VALVE ASSEMBLY
COMPONENT MANUFACTURER MODEL NO.	SINK LAB FIXTURES MODEL# D33E EPOXY RESIN, DROP IN SINK W/SIDE SINK OUTLET 21"x17"x10" DEEP (BY CASEWORK) FAUCET (DHW&DCW) WATERSAVER FAUCET CO. ICI# 9500WSBH L411-VB-FC-1.0 DECK MOUNTED LABORATORY MIXING FAUCET W/6" RIGID VACUUM BREAKER 4" FORGET BRASS WRIST BLADE HANDLES REMOVABLE TEN SERRATION HOSE END 1.0 GPM (BY CASEWORK) DEIONIZED FAUCET COLE-PARMER ICI# CPL611-8VB-BH ITEM# UX-78984-74 SINGLE TEMP DI WATER FAUCET W\VACUUM BREAKER AND BLADE HANDLE (BY P.C.). POLYPROPYLENE SINK OUTLET LAB FIXTURES MODEL# SO3-R (BY CASEWORK) POLYPROPYLENE SINK STOPPER ICI# 9689 MODEL# STPR-02P-B POLYPROPYLENE 1½" TAILPIECE FLOWSERVE DURIRON IRON ALLOY DRUM-TRAP, P SWIVEL TYPE W/ CO MODEL: SA3485 (BY P.C.) SUPPLY ⅜" O.D. FLEXIBLE STAINLESS STEEL BRAIDED TUBING (BY P.C.)	DECK MOUNTED EMERGENCY EYE / FACE WASH (BY P.C.) MANUFACTURER: ACORN MODEL# SOA60-LH OPTIONAL RIGHT OR LEFT HAND INSTALLATION - LH ON PLANS 3.7GPM INTEGRAL FLOW CONTROL; ABS YELLOW PLATIC EYE/FACE WASH HEADS W\ DUST COVERS. 1/2" NPT CHROME PLATED BRASS STAY-OPNE BALL VALVE WITH S.S. PUSH HANDLE AND 50 MESH INLINE STRAINER. UNIVERSAL ANSI COMPLIANT IDENTIFICATION SIGN. CONTRACTOR SHALL FURNISH AND INSTALL THERMOSTATIC MIXING VALVE TMV-1; ACOTN MODEL# ET71-1-BVS-OTG W\SINGLE POLE FLOW SWITCH FLW2. NOTE: SEE MANUFACTURERS SUBMITTAL SHEET FOR ROUGH-IN DIMENSIONS. COORDINATE INSTALLATION WITH CASEWORK.	COMPRESSED AIR DECK MOUNTED; ¼" TURN BALL VALVE; CHROME FINISH, SINGE OUTLET; PROVIDE QUICK DISCONNECT COORDINATE MOUNTING HOLES WITH COUNTER-TOP AND CASEWORK. (BY CASEWORK) PLUMBER SHALL FIELD VERIFY LOCATION AND INSTALLATION REQUIREMENTS PRIOR TO CONSTRUCTION.	GAS TURRET DECK MOUNTED DUAL OUTLET MODEL# L4100-132AWSA DOUBLE BALL VALVES AT 90 DEGREES AND INTEGRAL STRAIGHT SERRATED HOSE ENDS VALVE BODY: FORGED BRASS W\CHROME FINISH VALVE UNIT: QUARTER-TURN OPEN/CLOSE WITH CHROME PATED BRASS BALL AND MOLDED PTFE SEALS HANDLE: FORGED BRASS LEVER HANDLES W/ COLOR COLDED INDEX DISC. INLET: FURNISHED W/ 1/2" IPS MOUNTING SHANK (ASSMBLED), LOCKNUT AND WASHER, 1/2" NPT MALE INLET OUTLET: INTEGRAL (NONREMOVABLE) SEVEN SERRATION HOSE ENDS FIXTURE IS FULLY ASSEMBLED AND FACTORY TESTED PRIOR TO SHIPMENT. GAS TURRETS SHALL BE SHIPPED LOOSE AND INSTALLED ON SITE.	ORION POLYETHYLENE LAB CUP SINK 7"Lx3⅜"Wx6⅞"H 6"Lx3"Wx4"D BOWL PERMITS ABOVE OR BELOW MOUNT. COLOR: BLACK DRAIN: 1½" DIA.	ASCO GAS SERVICE RELAY CONTROL PANEL MODEL: 108D90C 120V/60HZ AC VOLT CONTROL SOLENOID VALVE 1-1/4 INCH MODEL: 82158060 SOLENOID VALVE 24DC. 14.9 WATTS. COORDINATE POWER REQUIREMENTS WITH ELECTRICIAN. PROVIDE ALL CONTROL WIRING, CONDUITS, JUNCTION BOXES, ETC.	IPS CORPORATION 10 500 DISTRIBUTION PARKWAY COLLERVILLE, TN 38017 (901)853-5001 STUDOR MINI-VENT 2" W\PROTECTIVE COVER MODEL: 20301 NOTE: AIR ADMITTANCE VALVES SHALL BE INSTALLED ON ALL LAB SINKS. REFER TO ISLAND SINK DETAIL ON DRAWING P41 FOR PIPING LAYOUT.	DOUBLE CHECK VALVE ASSEMBLY WITH ¼ TURN FULL PORT BALL VALVES AND BRONZE STRAINER. WATTS SERIES 007 MODEL: 007MQT-S SIZE: 2" TEMPERATURE RATING: 33°F-180°F MAXIMUM PRESSURE: 175 PSI PROVIDE DIAL TYPE PRESSURE GAUGE ASSEMBLIES ON INLET AND OUTLET OF BACKFLOW PREVENTERS NOTE: INSTALLATION OF BACKFLOW PREVENTION DEVICES SHALL BE APPROVED BY LOCAL AUTHORITIES HAVING JURISDICTION BASED ON HEALTH HAZARD RISK ASSESSMENT. DOUBLE CHECK VALVE ASSEMBLIES FOR THIS APPLICATION HAVE BEEN INSTALLED IN ADDITION TO VACUUM BREAKERS LOCATED AT EACH LAB SINK.

NATURAL GAS PIPE SCHEDULE

ITEM	SERVICE	PIPE/TUBE	FINNISH	JOINT	FITTINGS	VALVES	TESTING
NG	NATURAL GAS (LOW PRESSURE)	2" & BELOW: CARBON STEEL, SEAMLESS ASTM A106, GRADE B, SCH. 40. 2½" & ABOVE: CARBON STEEL, ASTM A53, GRADE B, ELECTRIC RESISTANCE WELDED, SCH. 40, ANSI B36.10	N/A	2½" & UNDER: COUPLINGS FULL/REDUCING USE THREADED CONSTRUCTION. 3" AND OVER: BUTT WELDS, FULL SIZE-USE TEES, REDUCING SIZE-USE THREADOLETS OR BRANCH WELDS.	2½" & UNDER: MALLEABLE IRON FITTINGS, ANSI B16.3, ASTM A197, CLASS 150, STANDARD PATTERN, THREADED ENDS, ANSI B1.20.1 3" AND OVER: CARBON STEEL BUTT WELD FITTINGS, ASTM A234 GR.-WPB, SEAMLESS OR WELDED, ANSI B16.9, SCH. 40, ANSI B36.10.	2" & UNDER: GAS COCK, 200 PSI, ASTM A726, BRONZE BODY STRAIGHTAWAY PATTERN, WRENCH OPERATED, THREADED ENDS. 2½" AND OVER: PLUG VALVE, WRENCH OPERATED, TAPERED LUBRICATED, CAST IRON BODY, 200 PSI CWP, CLASS 125 FLANGED ENDS.	TEST IN ACCORDANCE WITH NFPA 54, PART 4, "GAS PIPING INSPECTION, TESTING AND PURGING" AND INTERNATIONAL FUEL GAS CODE-2018

NOTES
1. ALL GAS PIPING SHALL BE SANDED, PREPPED, PROMED WITH AS GALVANIZED BASED PRIMER AND PAINTED SAFETY YELLOW WITH A MINIMUM OF 2 COATS OF EPOXY BASED PAINT.

PLUMBING PIPE SCHEDULE

ITEM	SERVICE	PIPE/TUBE	FINISH	MFR.	JOINT	VALVE/ FITTINGS	TESTING	MISC.
SANITARY/ VENT	ABOVE GROUND WASTE/VENT	SERVICE WEIGHT CAST IRON DWV FITTINGS	NA	CHARLOTTE	HUSKY 4000 SERIES SS NO-HUB COUPLING	NA	WATER 10 FT.	-
LAB WASTE/ VENT	LAB WASTE AND VENT	FUSEAL POLYPRO SCH 40 DMV FITTINGS	NA	+GF+ PIPING	ELECTRO-FUSION SOCKET WELD	NA	WATER 10 FT.	SEE NOTE 1
HW/CW	HOT/COLD WATER	TYPE L COPPER	NA	MUELLER	95-5 TIN/ANTIMONY LEAD FREE SOLDER	BALL VALVES W\WROT COPPER FITTINGS	WATER/AIR 100 PSIG	DISINFECT (CUL)
TW	TEPID WATER	TYPE L COPPER	NA	MUELLER	95-5 TIN/ANTIMONY LEAD FREE SOLDER	SANITARY BALL (LOCKABLE HANDLE)	WATER/AIR 100 PSIG	DISINFECT (CUL)
CDIS/R	COLD DI/RO WATER	POLYPROPYLENE (PROGEF NATURAL PP-R)	NA	+GF+ PIPING	BCF PLUS FUSION WELDING	BALL/BCF PLUS	WATER/AIR 100 PSIG	SEE NOTES 5
HDIS/R	HOT DI/RO WATER	316L ASME-BPE SANITARY TUBING	20 RA POLISHED	CSI	ORBITAL WELD/ TRI-CLAMP	DIAPHRAGM-TEFLON/ BPE FITTINGS	WATER/AIR 100 PSIG	SEE NOTES 4, 5
CA	COMPRESSED AIR (0-175PSIG)	TYPE L COPPER	NA	MUELLER	95-5 TIN/ANTIMONY LEAD FREE SOLDER	BALL VALVES W\WROT COPPER FITTINGS	WATER/AIR 275 PSIG	SEE NOTES 6

NOTES
1. ACID WASTE PIPING SHALL BE FUSEAL POLYPRO MANUFACTUREED BY GEORGE FISHER HARVEL LLC. ALL PIPING AND SUPPORTS SHALL BE INSTALLED AS PER MANUFACTURERS GUIDELINES.
2. AT CONNECTION TO EXISTING SANITARY MAIN NO-HUB COUPLINGS SHALL BE A MINIMUM OF 4 CLAMPS PER COUPLING. CLAMPS SHALL BE TORQUED TO 80IN-LBS AS PER MANUFACTURERS INSTALLATION GUIDELINES. COUPLINGS SHALL BE SIMILAR OR APPROVED EQUAL TO ANACO-HUSKY 4000 HEAVY DUTY SERIES.
3. CASEWORK SHALL BE FURNISHED AND INSTALLED BY CASEWORK VENDOR. PLUMBER SHALL COORDINATE ALL REQUIRED OPENINGS, PIPE CHASES, ACCESS PANELS, ETC WITH THE CASEWORK MANUFACTURER AND PROVIDE DETAILED SHOP DRAWINGS FOR REVIEW AND APPROVAL BY ENGINEER AND OWNER PRIOR TO RELEASE FOR FABRICATION.
4. ORBITAL WELDS, INTERNALLY PURGED UNDER 99.9998% PURE ARGON/HELIUM BLANKET SHALL BE 10% BOROSCOPE INSPECTED, GASKETS SHALL BE TEFLON.
5. PROVIDE 2" CHLORIDE FREE CLOSED CELL INSULATION W/ PVC JACKET.
6. PROVIDE A MINIMUM OF (2) BALL VALVES, A REGULATOR, (2) PRESSURE GAUGES, FILTER/DRYERASSEMBLY AND A ⅜" QUICK CONNECT COUPLER FOR COMPRESSED AIR OUTLETS (TYPICAL). COORDINATE EXACT QUANTITY OF COMPRESSED AIR OUTLETS WITH BUILDING MANAGEMENT PRIOR TO BID.

DRAINAGE FIXTURE SCHEDULE

TAG	NAME	TRAP SIZE (IN.)	DRAIN FIX UNITS	NOTES
P-1	LAB SINK	1-1/2	2	SEE NOTES 1,2

NOTES
1. ALL PIPE SIZES SHOWN ARE MINIMAL REFER TO PLUMBING RISER DIAGRAMS FOR SCHEMATIC PIPING LAYOUT AND PIPE SIZES.
2. PROVIDE SEDIMENT TRAP WITH INTEGRAL CLEAN-OUT AS INDICATED ON PLUMBING FIXTURE SCHEDULE.

WATER FIXTURE SCHEDULE

TAG	NAME	BRANCH SIZE (IN.)	WSFU DW	WSFU DHW	NOTES
P-1	LAB SINK	3/4	1	1	-
P-2	EEW	1-1/4	-	-	MAX 20 GPM

NOTES
1. ALL PIPE SIZES SHOWN ARE MINIMAL REFER TO PLUMBING RISER DIAGRAMS FOR SCHEMATIC PIPING LAYOUT AND PIPE SIZES.

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PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
SCHEDULES

EIA DRAWING NO.
P60

CLIENT DWG. NO.
- - - - -

EIA PROJECT NO.
EG8577.03

(XX)

FIRE PROTECTION NOTES

1. THE ENTIRE INSTALLATION SHALL MEET THE APPROVAL OF THE OWNER'S INSURANCE CARRIER, NFPA, MUNICIPAL, STATE AGENCIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE 2020 FIRE CODE OF NYS.

2. CERTIFIED APPROVAL BY OWNER'S INSURANCE CARRIER AND ALL OTHERS AGENCIES AND AUTHORITIES HAVING JURISDICTION SHALL APPEAR ON CONTRACTORS SHOP DRAWING.

3. DESIGN CRITERIA:

* HAZARD CLASSIFICATION
  – AS SPECIFIED ON THE DRAWINGS

* DENSITY OF COVERAGE:
  – AS SPECIFIED ON THE DRAWINGS

* TEMPERATURE CLASSIFICATION OF SPRINKLER HEADS : SHALL BE PER NFPA 13 –2016 EDITION.

* MAXIMUM PROTECTED AREA PER SPRINKLER HEAD SHALL BE PER NFPA 13–2016 EDITION.

4. CONTRACTOR TO PERFORM HYDRAULIC CALCULATIONS TO DETERMINE THE NEW SPRINKLER PIPE SIZES.

5. SPRINKLER PIPE SHALL BE BLACK AND HOT–DIPPED ZINC COATED (DROP PIPE) WELDED AND SEAMLESS STEEL PIPE FOR FIRE PROTECTION USE PER ASTM A 795. FOR PIPING 1–1/4 INCH AND LARGER, SCHEDULE 10 ROLL GROOVED PIPE WITH VICTAULIC COUPLINGS MAY BE USED. OTHERWISE, SCHEUDLE 40 THREADED PIPE SHALL BE USED.

6. A NEW SPRINKLER SYSTEM SHALL BE REQUIRED AS INDICATED ON THE DRAWINGS COVERING 100% OF THE RENOVATED AREAS.

7. THE SPRINKLER SYSTEM SHALL BE HYDRAULICALLY DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13–2016 EDITION.

8. NOT USED.

9. SPRINKLERS AND FITTINGS SHALL BE UL LISTED AND FACTORY MUTUAL APPROVED.

10. SPRINKLER HEADS SHALL BE UNIFORMLY SPACED ON BRANCH LINES. SPRINKLERS IN SUSPENDED CEILINGS SHALL BE INSTALLED IN CENTER OF CEILING PANELS AND TILES AS APPLICABLE.

11. CONTRACTOR SHALL PRESSURE TEST WATER MAIN FOR ADEQUACY OF WATER FLOW AND PRESSURE.

12. THE SPRINKLER SYSTEM SHALL BE HYDRAULICALLY CALCULATED, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER WITH FIRE PROTECTION BACKGROUND AND REGISTERED IN THE STATE OF NEW YORK STATE.

13. CONTRACTOR SHALL SUBMIT SPRINKLER SHOP DRAWINGS INCLUDING LAYOUT, DETAILS AND HYDRAULIC CALCULATIONS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

14. CONTRACTOR SHALL FURNISH A CERTIFICATE OF FINAL INSPECTION TO THE OWNER FROM INSPECTION DEPARTMENT HAVING JURISDICTION.

15. ALL PIPING SHALL BE LABELED IN COLOR IN ACCORDANCE WITH ANSI REQUIREMENTS. VALVE TAGS SHALL BE FURNISHED AND ATTACHED BY BRASS LINE CHAIN TO EACH VALVE.

16. CONTRACTOR SHALL INSTALL "INSPECTOR'S TEST CONNECTIONS" IN SPRINKLER SYSTEM PIPING, COMPLETE WITH SHUTOFF VALVE, SIZED AND LOCATED ACCORDING TO NFPA 13–2016 EDITION.

17. CONTRACTOR SHALL INSTALL PRESSURE GAGES ON RISER OR FEED MAIN, AT EACH SPRINKLER TEST CONNECTION OF NOT LESS THAN NPS 1/4" AND WITH SOFT METAL SEATED GLOBE VALVE ARRANGED FOR DRAINING PIPING BETWEEN GAGE AND VALVE.

18. ALL HANGERS, BRACKETS AND STRAPS SHALL BE SECURED TO BUILDING STRUCTURE. HANGERS AND SUPPORTS FOR SPRINKLER PIPING AND SUPPORTS SHALL COMPLY WITH NFPA 13 EDITION FOR HANGER MATERIALS, PIPE.

19. CONTRACTOR SHALL SEAL ALL PIPE PENETRATIONS THROUGH NEW AND EXISTING BUILDING CONSTRUCTION WITH APPROVED FIRESTOP SAFING.

20. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS, NFPA 13–2016 EDITION AND 2020 FIRE CODE OF NYS.

21. CONTRACTOR SHALL PROVIDE ALL NECESSARY FACILITIES, WATER OR COMPRESSED AIR, GAUGE AND MEASURING DEVICES, PUMP AND LABOR AS REQUIRED FOR TESTING.

22. ALL REQUIRED FEES, PERMITS AND INSPECTIONS SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR.

23. COORDINATE SPRINKLER COVERAGE AT OBSTRUCTIONS SUCH AS ANY FORMED BY HVAC DUCTS & EQUIPMENT AND OTHER EQUIPMENT.

24. SPRINKLER HEAD SHALL BE UPRIGHT TYPE IN AREAS W/OUT CEILING. SPRINKLER HEADS BE CONCEALED TYPE, TILE CENTERED IN ONE DIRECTION, IN AREAS WITH CEILINGS.

25. AVOID INTERFERENCE WITH LIGHTS, DUCTS, DIFFUSERS, CEILING GRILLES, SPEAKERS, CEILING TEES, ETC. COORDINATE WORK WITH OTHER TRADES.

26. THE DENSITY SHALL BE MAINTAINED OVER 100% OF THE AREA.

27. CONTRACTOR SHALL COORDINATE WITH OWNER FOR TIE–IN AND SHUTTING OFF SPRINKLER WATER SERVICE BEFORE STARTING WORK. PROVIDE A WRITTEN SCHEDULE ON WORK REQUIREMENTS INDICATING WHEN THE EXISTING SPRINKLER SYSTEM IS EXPECTED TO BE SHUT–DOWN, HOW LONG OF A PERIOD, AND PROVIDE A FIRE WATCH THROUGHOUT THE JOB SITE.

28. EXISTING MAIN

STATIC WATER PSI	BY OWNER
RESIDUAL WATER MAIN (INSPECTION DATED)	BY OWNER
	BY OWNER
LOCATION HYDRANTS	BY OWNER
MAIN SIZE	BY OWNER

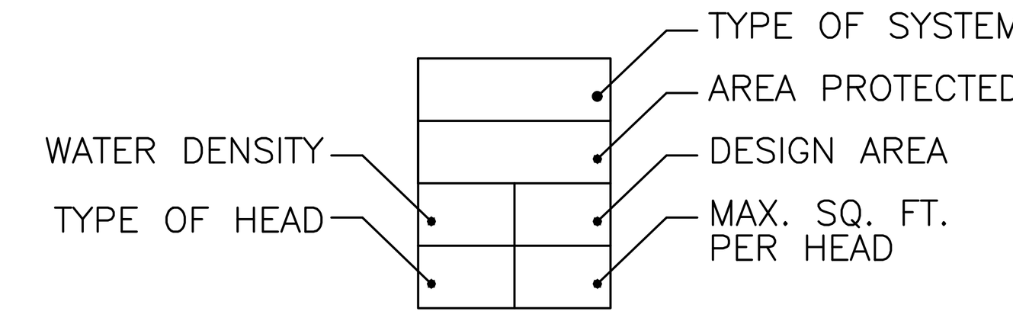
SYSTEM		MATERIAL
LOW–POINT DRAINAGE CONNECTIONS	CONCEALED	STEEL
SPRINKLER MAIN PIPING	CONCEALED	SCHEDULE 40 STEEL
SPRINKLER PIPING	EXPOSED	SCHEDULE 40 STEEL
SPRINKLER BRANCH PIPING	CONCEALED	SCHEDULE 40 STEEL
SPRINKLER HEADS	OFFICES	CONCEALED TYPE

FIRE PROTECTION CRITERIA SCHEDULE

AREA	DENSITY GPM/SF	MAX. PROTECTION AREA, SF	HAZARD CLASSIFICATION	SPRINKLER HEAD
LOCKER ROOM	0.10	1500	LIGHT HAZARD	CONCEALED AUTOMATIC SPK, RELIABLE G4FR
R&D LAB	0.15	1500	ORDINARY HAZARD	CONCEALED AUTOMATIC SPK, RELIABLE G4FR

LEGEND

DESIGNATED AREAS SHALL BE PROTECTED BY AND HYDRAULICALLY CALCULATED FOR THE DESIGNATED HAZARD CLASSIFICATION SHOWN ON THE DRAWINGS IN ACCORDANCE WITH NFPA 13–2016 EDITION.



ABBREVIATIONS:

°F	DEGREES FAHRENHEIT
(E)	EXISTING TO REMAIN
(D)	EXISTING TO BE REMOVED AND CAPPED
(N)	NEW
(R)	EXISTING TO BE RELOCATED
AH	PENDANT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BH	UPRIGHT
CH	UPRIGHT, GUARD
CS	CARBON STEEL
CSP	CONCEALED SPRINKLER
DH	FULLY RECESSED, CENTRAL TWO DIRECTIONS
DWG	DRAWING
FP	FIRE PROTECTION
GPM	GALLONS PER MINUTE
LH	LIGHT HAZARD
MAX	MAXIMUM
NA	NOT APPLICABLE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
PSI	POUNDS PER SQUARE INCH
SF	SQUARE FEET
SQ.FT.	SQUARE FEET
UH	UPRIGHT
UH(G)	UPRIGHT, GUARD
UL	UNDERWRITER'S LAB
U.O.N.	UNLESS OTHERWISE NOTED

FIRE PROTECTION SPECIFICATIONS

1. SCOPE OF WORK
   A. THE WORK UNDER THIS CONTRACT INCLUDES ALL LABOR, AND MATERIALS NECESSARY FOR THE FURNISHING, INSTALLATION AND TESTING, COMPLETE AND READY FOR SAFE OPERATION OF THE EXISTING FIRE PROTECTION SYSTEMS MODIFIED. INCLUDE ALL COSTS FOR PERMITS, LICENSES AND CERTIFICATE FILING AND INSPECTIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION. ALL WORK MUST COMPLY WITH NFPA AND OWNER'S CORPORATE STANDARDS.
   B. SPRINKLER SYSTEM SHALL BE:
      1. A MODIFICATION TO A EXISTING HYDRAULICALLY DESIGNED SYSTEM IN ACCORDANCE WITH THE STANDARDS OF THE NATIONAL FIRE PROTECTION AND OWNER'S GUIDELINES AND STANDARDS.
      2. DESIGN SYSTEM TO CONFORM WITH BUILDING STRUCTURAL, MECHANICAL AND ELECTRICAL SYSTEMS EITHER EXISTING OR PROPOSED.
   C. CONTRACTOR SHALL PROVIDE ALL SCAFFOLDING, RIGGING AND SERVICES NECESSARY FOR ERECTION AND DELIVERY ONTO THE PREMISES OF ALL MATERIALS FURNISHED AND/OR INSTALLED UNDER THIS SECTION OF THE SPECIFICATIONS AND REMOVE SAME FROM PREMISES WHEN NO LONGER REQUIRED.
   D. CONTRACTOR SHALL MAINTAIN CONSTRUCTION SITE IN A CLEAN AND ORDERLY CONDITION AND SHALL REMOVE ALL CONSTRUCTION DEBRIS/TRASH FROM THE PREMISES PRIOR TO ACCEPTANCE OF THE WORK.
   E. THE SCHEDULING OF THE SPRINKLER WORK SHALL BE COORDINATED WITH THE BUILDING OWNER AND OTHER CONTRACTORS ON THIS PROJECT.

2. SYSTEM PERFORMANCE REQUIREMENTS
   A. DESIGN AND OBTAIN APPROVAL FROM AUTHORITY HAVING JURISDICTION FOR FIRE PROTECTION SYSTEMS TO BE MODIFIED.
   B. SPRINKLER SYSTEM COMPONENTS SHALL BE CAPABLE OF WITHSTANDING A MINIMUM WORKING PRESSURE RATING OF 175 PSIG.
   C. THE SPRINKLER SYSTEM SHALL BE INSPECTED AND TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF LOCAL AUTHORITIES, NEW YORK STATE IBC, AND NFPA.

3. SUBMITTALS
   A. PRODUCT DATA FOR FIRE PROTECTION SYSTEM COMPONENTS. INCLUDE THE FOLLOWING:
      (1) PIPE MATERIAL, FITTINGS, AND NEW SPRINKLER HEADS.
      (2) SPRINKLER HEADS. INCLUDE SPRINKLER FLOW CHARACTERISTICS, MOUNTING, FINISH, AND OTHER DATA.
      (3) HANGERS AND SUPPORTS
      (4) SPRINKLER PIPING LAYOUT
   B. SPRINKLER SYSTEM DRAWINGS IDENTIFIED AS "WORKING PLANS", SHALL BE PREPARED ACCORDING TO NFPA 13, 2016 EDITION, CHAPTER 23. SUBMIT REQUIRED NUMBER OF SETS TO OWNER'S INSURANCE COMPANY FOR REVIEW, COMMENT AND STAMPED APPROVAL PRIOR TO SUBMITTING TO ENGINEER. INCLUDE SYSTEM HYDRAULIC CALCULATIONS WHERE APPLICABLE.
   C. MAINTENANCE DATA FOR EACH TYPE OF FIRE PROTECTION SPECIALTY SPECIFIED, FOR INCLUSION IN OPERATING AND MAINTENANCE MANUAL.
   D. PROVIDE TWO COPIES OF NFPA 13 CHAPTER 12 "RECOMMENDED PRACTICE FOR THE SYSTEM INSPECTION, TESTING AND MAINTENANCE OF SPRINKLER SYSTEMS." DELIVER TO OWNER'S MAINTENANCE PERSONNEL.

4. MATERIALS
   A. ALL SPRINKLER PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE. ALL FITTINGS SHALL BE AMERICAN STANDARD BLACK CAST IRON SPRINKLER FITTINGS, FLANGED OR SCREWED AS REQUIRED, DESIGNED AND MANUFACTURED FOR A WATER WORKING PRESSURE OF 175 POUNDS.
   B. ALL HEADS IN OFFICE AREAS SHALL BE NEW CONCEALED TYPE, SIMILAR TO VIKING HORIZON MIRAGE MODEL B–2.
   C. HANGERS AND THEIR COMPONENTS SHALL BE FERROUS. HANGERS SHALL BE ADJUSTABLE, FLAT IRON TYPE OR CLEVIS TYPE.
   D. MAXIMUM DISTANCE BETWEEN HANGERS SHALL NOT EXCEED 12 FT. FOR 1" AND 1–1/4" SIZES. NOR 15 FT. FOR SIZES 1–1/2" OR LARGER.
   E. SPRINKLER PIPING SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE WHICH MUST SUPPORT THE ADDED LOAD OF THE WATER–FILLED PIPE PLUS A MINIMUM OF 250 LBS. APPLIED AT THE POINT OF HANGING.
   F. ALL SPRINKLER PIPING SHALL BE SUBSTANTIALLY SUPPORTED AND SHALL COMPLY WITH THE STANDARDS OF THE NATIONAL FIRE PROTECTION ASSOCIATION FOR THE INSTALLATION OF SPRINKLER SYSTEMS AND AS REQUIRED BY THE STATE OF NEW JERSEY AND NFPA.

5. QUALITY ASSURANCE
   A. AS BUILT DRAWINGS – UPON COMPLETION OF INSTALLATION, SUBMIT VERIFIED AS BUILT DRAWINGS DETAILING EXACT SYSTEM INSTALLATION FOR SYSTEM ACCEPTANCE.
   B. COMPLY WITH REQUIREMENTS OF OWNER'S INSURANCE CARRIER AND AUTHORITY HAVING JURISDICTION FOR SUBMITTALS, APPROVALS, MATERIALS, HOSE THREADS, INSTALLATION, INSPECTION, AND TESTING.

6. GUARANTEE
   A. GUARANTEE FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER, ALL MATERIALS, WORKMANSHIP WHETHER FURNISHED BY HIMSELF OR BY HIS SUBCONTRACTORS AND HE SHALL REPLACE OR REPAIR IN A MANNER APPROVED BY THE ARCHITECTS, WITHOUT COST TO THE OWNER. ANY PART OR PARTS OF THE WORK WHICH MAY PROVE DEFECTIVE OR UNSATISFACTORY WITHIN THE PERIOD OF THE GUARANTEE.

SPRINKLER NOTE:

TYPE OF CEILING MOUNTED SPRINKLER HEAD SHOWN ON DRAWING IS BASIS OF DESIGN.
CONTRACTOR SHALL COORDINATE WITH OWNER ON TYPE OF CEILING MOUNTED SPRINKLER HEAD REQUIRED FOR PROJECT.

GENERAL SPRINKLER NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #19, 20 & 21 ON SHEET T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. REFER TO AND COORDINATE FIRE PROTECTION WORK WITH THAT OF OTHER DISCIPLINES AS SHOWN ON ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND CIVIL DRAWINGS.
4. THE FIRE PROTECTION TRADE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH ANY WORK. WHERE DISCREPANCIES OCCUR BETWEEN THESE DOCUMENTS AND EXISTING CONDITIONS, THE DISCREPANCY SHALL BE REPORTED TO THE CONSTRUCTION MANAGER AND/OR ENGINEER FOR EXPEDITING AND RESOLUTION.
5. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS.
6. FURNISH ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR A COMPLETE FIRE SUPPRESSION SYSTEM WHERE SHOWN ON DRAWINGS AND AS REQUIRED BY NFPA No. 13, 2016 EDITION.
7. SPRINKLER CONTRACTOR SHALL INCLUDE IN HIS BID DRAINAGE OF THE EXISTING SYSTEM, CONNECTION TO THE MAIN AND RE–ACTIVATING SYSTEM. ALL OF THE ABOVE SHALL BE COORDINATED WITH THE OWNERS UNDERWRITERS INSURANCE COMPANY & LOCAL FIRE AUTHORITIES.
8. LOCATION OF INCOMING NEW AND/OR EXISTING SPRINKLER SERVICE PIPING AS SHOWN ON DRAWING IS APPROXIMATE. THIS TRADE SECTION SHALL VERIFY ALL LOCATIONS IN FIELD.
9. THE BUILDING WILL REMAIN TOTALLY OCCUPIED DURING THE ENTIRE DEMOLITION AND CONSTRUCTION PERIOD, ANY AND ALL UTILITY SERVICE SHUTDOWNS AND/OR FIRE PROTECTION SYSTEM INTERRUPTIONS (TO OPERATIONS) MUST BE LIMITED AND COORDINATED WITH THE OWNER'S REPRESENTATIVE PRIOR TO BEING IMPLEMENTED.
10. THE FIRE PROTECTION CONTRACTOR IS RESPONSIBLE TO REPAIR/REPLACE ANY DAMAGED EXISTING APPURTENANCES WHICH ARE NOT INTENDED TO BE DEMOLISHED DURING THIS PHASE OF WORK.

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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ARCHITECTURE ENGINEERING PLANNING
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GAETANO P. CIPRIANO, P.E. PROFESSIONAL ENGINEER LICENSE NO. NY 064215–1

FIRE PROTECTION

SCALE: AS NOTED
DRAWN BY: PBC 25MAY21
DESIGNED BY: JCM 25MAY21
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

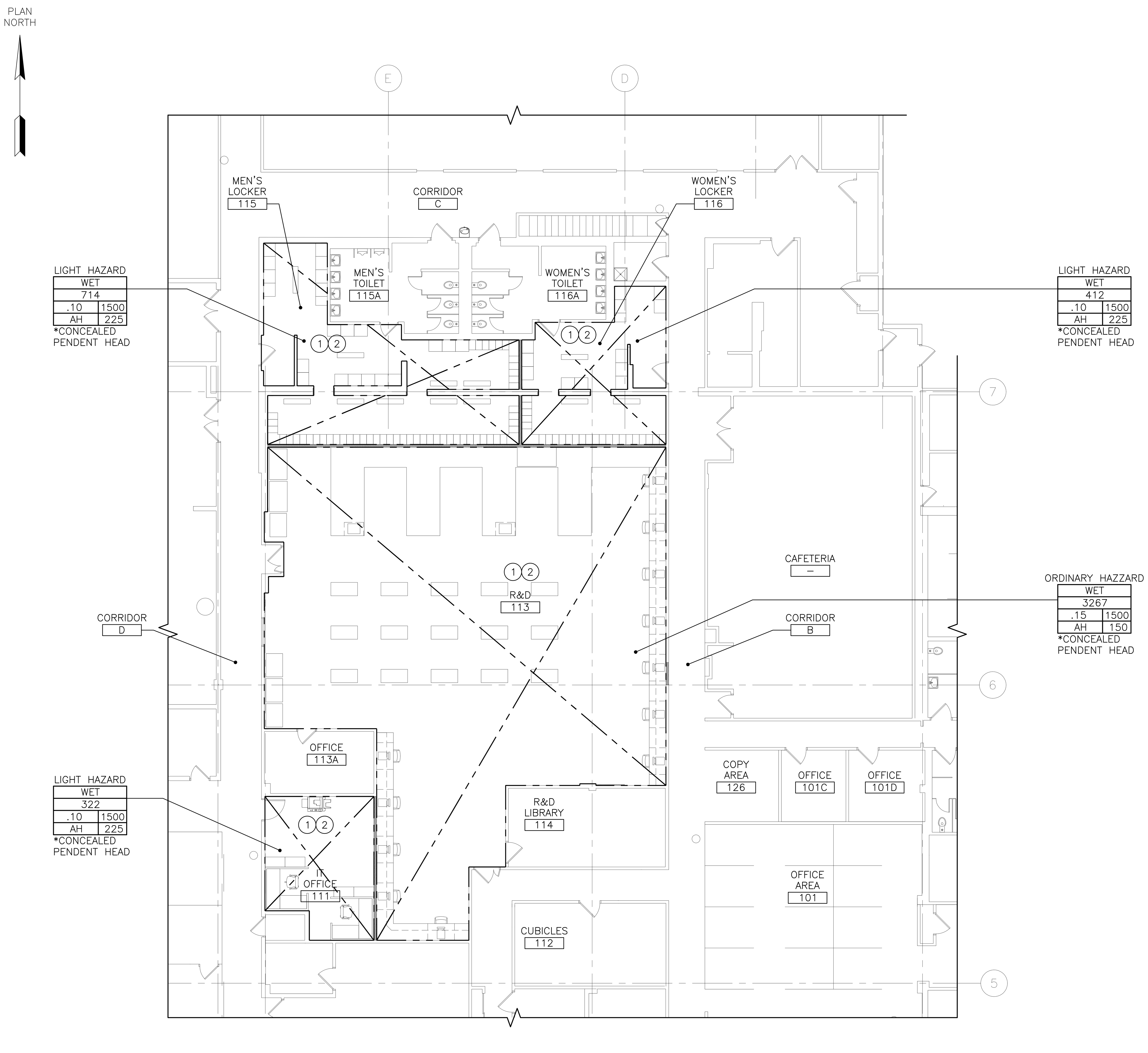
TITLE: GENERAL NOTES, LEGEND, AND ABBREVIATIONS

EIA DRAWING NO. FP00

CLIENT DWG. NO. – – – – –

EIA PROJECT NO. EG8577.03

XX



FIRST FLOOR PLAN – NEW WORK
1/8"=1'-0"
1 FP11

FIRE PROTECTION NOTES:

1. THE ENTIRE INSTALLATION SHALL MEET THE APPROVAL AND REQUIREMENTS OF FACTORY MUTUAL, OWNER'S INSURANCE CARRIER, NFPA, MUNICIPAL AND STATE AGENCIES HAVING JURISDICTION.
2. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS, NFPA 13 AND APPLICABLE NEW YORK STATE CODES.
3. CERTIFIED APPROVAL BY OWNER'S INSURANCE CARRIER AND ALL OTHERS AGENCIES AND AUTHORITIES HAVING JURISDICTION SHALL APPEAR ON CONTRACTORS SHOP DRAWING.
4. DESIGN CRITERIA:
   - 4.1. HAZARD CLASSIFICATION
     - 4.1.1. LIGHT HAZARD.
   - 4.2. DENSITY OF COVERAGE:
     - 4.2.1. LIGHT HAZARD DENSITY 0.10 GPM/SF OVER THE MOST HYDRAULICALY REMOTE 1500 SQUARE FEET FOR EACH ZONE.
     - 4.2.2. ORDINARY HAZARD DENSITY 0.15 GPM/SF OVER THE MOST HYDRAULICALY REMOTE 1500 SQUARE FEET FOR EACH ZONE.
   - 4.3. TEMPERATURE CLASSIFICATION OF SPRINKLER HEADS : 165°F OR U.O.N.
   - 4.4. MAXIMUM PROTECTED AREA PER SPRINKLER HEAD SHALL BE PER NFPA 13 REQUIREMENT AS FOLLOWS:
     - 4.4.1. 225 SQUARE FOOT FOR LIGHT HAZARD.
   - 4.5. SPRINKLER HEAD:
     - 4.5.1. CONCEALED PENDENT:
       - 4.5.1.1. K5.6, ½" ORDINARY TEMPERATURE
       - 4.5.1.2. RELIABLE MODEL: G4FR OR APPROVED EQUAL.
5. QUICK RESPONSE SPRINKLERS SHALL BE USED THROUGHOUT THE FACILITY. ALL EXISTING SPRINKLER HEADS IN PROPOSED AREAS OF WORK SHALL BE REPLACED WITH NEW QUICK RESPONSE. SPRINKLER HEADS IN FINISHED AREAS SHALL BE CONCEALED TYPE HEADS, RELIABLE MODEL G4FR WITH A MINIMUM K-FACTOR OF 5.6.
6. THE SPRINKLER TRADE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD, PRIOR TO BID AND STARTING WORK. VERIFY AVAILABLE STATIC AND RESIDUAL PRESSURE AND FLOW, IN SPRINKLER MAIN PRIOR TO BID AND STARTING WORK.
7. SPRINKLER PIPE SHALL BE BLACK WELDED OR SEAMLESS STEEL PIPE (SCHEDULE 40) WITH THREADED CONSTRUCTION UP TO 2" FOR FIRE PROTECTION USE PER ASTM A 795. FOR PIPING 2-1/2 INCH AND LARGER PIPING SHALL BE ROLL GROOVED PIPE WITH VICTAULIC COUPLINGS.
8. MINIMUM SPRINKLER BRANCH PIPE SIZING SHALL BE 1". IN THE CASE THAT EXISTING BRANCH PIPING IS LESS THAN 1" IT SHALL BE REPLACED WITH NEW AND SIZED AS REQUIRED PER HYDRAULIC CALCULATIONS SUBMITTED BY THE SPRINKLER CONTRACTOR.
9. THE SPRINKLER SYSTEM SHALL BE HYDRAULICALLY DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13 EDITION.
10. SPRINKLERS AND FITTINGS SHALL BE UL LISTED AND FACTORY MUTUAL APPROVED.
11. SPRINKLER HEADS SHALL BE UNIFORMLY SPACED ON BRANCH LINES. SPRINKLERS IN SUSPENDED CEILINGS SHALL BE INSTALLED IN CENTER OF CEILING PANELS AND TILES AS APPLICABLE.
12. CONTRACTOR SHALL PRESSURE TEST EXISTING WATER MAIN FOR ADEQUACY OF WATER FLOW AND PRESSURE.
13. THE SPRINKLER SYSTEM SHALL BE HYDRAULICALLY CALCULATED, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER WITH FIRE PROTECTION BACKGROUND AND REGISTERED IN THE STATE OF NEW JERSEY.
14. CONTRACTOR SHALL SUBMIT SPRINKLER SHOP DRAWINGS INCLUDING LAYOUT, DETAILS AND HYDRAULIC CALCULATIONS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
15. CONTRACTOR SHALL FURNISH A CERTIFICATE OF FINAL INSPECTION TO THE OWNER FROM INSPECTION DEPARTMENT HAVING JURISDICTION.
16. ALL PIPING SHALL BE LABELED IN COLOR IN ACCORDANCE WITH ANSI REQUIREMENTS. VALVE TAGS SHALL BE FURNISHED AND ATTACHED BY BRASS LINE CHAIN TO EACH VALVE.
17. CONTRACTOR SHALL INSTALL "INSPECTOR'S TEST CONNECTIONS" IN SPRINKLER SYSTEM PIPING, COMPLETE WITH SHUTOFF VALVE, SIZED AND LOCATED ACCORDING TO NFPA 13 EDITION.
18. ALL HANGERS, BRACKETS AND STRAPS SHALL BE SECURED TO BUILDING STRUCTURE. HANGERS AND SUPPORTS FOR SPRINKLER PIPING AND SUPPORTS SHALL COMPLY WITH NFPA 13 EDITION FOR HANGER MATERIALS, PIPE.
19. CONTRACTOR SHALL PROVIDE ALL NECESSARY FACILITIES, WATER OR COMPRESSED AIR, GAUGE AND MEASURING DEVICES, PUMP AND LABOR AS REQUIRED FOR TESTING.
20. ALL REQUIRED FEES, PERMITS AND INSPECTIONS SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR.
21. ALL PENETRATIONS OF RATED WALLS AND PARTITIONS TO BE PROVIDED WITH FIRESTOP. REFER TO SPECIFICATIONS FOR REQUIREMENTS FOR WALL AND PARTITION RATINGS (TYPICAL). COORDINATE WITH REQUIREMENT ON AREA DRAWINGS.
22. COORDINATE SPRINKLER COVERAGE AT OBSTRUCTIONS SUCH AS ANY FORMED BY HVAC DUCTS & EQUIPMENT AND OTHER EQUIPMENT.
23. AVOID INTERFERENCE WITH LIGHTS, DUCTS, DIFFUSERS, CEILING GRILLES, SPEAKERS, CEILING TEES, ETC. COORDINATE WORK WITH OTHER TRADES.
24. THE DENSITY SHALL BE MAINTAINED OVER 100% OF THE AREA.
25. SPRINKLER CONTRACTOR SHALL PROVIDE HYDRAULIC CALCULATIONS AS WELL AS A HYDRANT FLOW TEST INDICATING THE STATIC AND RESIDUAL PRESSURES OF THE EXISTING INCOMING SPRINKLER MAINFROM THE STREET. THE HYDRANT FLOW TEST SUBMITTED SHALL BE CONDUCTED WITHIN 6 MONTHS OF THE PROJECT STARY DATE.

GENERAL NOTES:

1. SEE SHEET T01 FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, SYMBOLS AND LEGENDS.
2. SEE GENERAL NOTES #18, 19 & 20 ON SHEET T01 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. THE SPRINKLER CONTRACTOR SHALL PROVIDE FOR TEMPORARY EGRESS SPRINKLER COVERAGE OR A FIRE WATCH THROUGHOUT CONSTRUCTION.

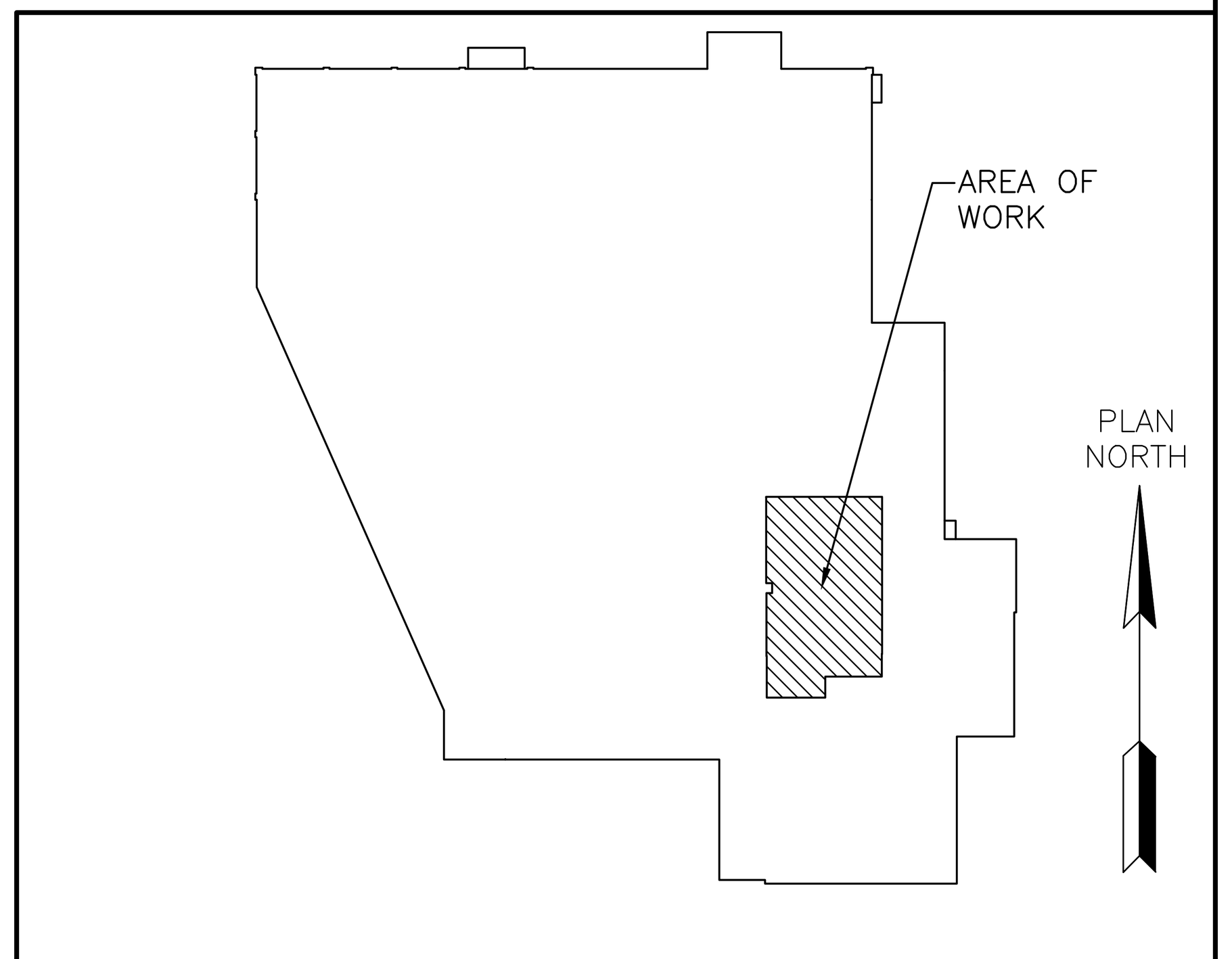
GENERAL SPRINKLER NOTES:

1. SPRINKLER PIPING IN GENERAL SHALL BE CONCEALED ABOVE HUNG CEILING WITH DROP NIPPLES TO SPRINKLER HEADS (UNLESS OTHERWISE NOTED)
2. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER CONTRACTORS INVOLVED IN SPACE CONDITIONS AND ARCHITECTURAL RCP BEFORE PROCEEDING. COORDINATE CEILING MOUNTED DEVICE LOCATIONS WITH LIGHTING, DIFFUSERS, HVAC EQUIPMENT, ETC.
3. THE CONTRACTOR SHALL INSTALL ALL SPRINKLERS IN CENTER OF PANELS AND PROVIDE ALL NECESSARY ELBOWS, TEES AND NIPPLES TO ACCOMMODATE SAME.
4. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS.
5. CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS REQUIRED FOR A COMPLETE FIRE SUPPRESSION SYSTEM WHERE SHOWN ON DRAWINGS AND AS REQUIRED BY NFPA No. 13.
6. QUANTITY AND LOCATIONS OF SPRINKLER HEADS SHOWN ON THESE PLANS ARE FOR ILLUSTRATION PURPOSES ONLY. EXACT QUANTITY AND LOCATION OF SPRINKLER HEADS SHALL BE SHOWN ON SPRINKLER CONSTRUCTION SHOP DRAWINGS, WHICH SHALL BE PROVIDED BY THIS CONTRACTOR. THE SPRINKLER CONTRACTOR SHALL PROVIDE AN ALLOWANCE IN THE BASE BID FOR THE MATERIALS AND LABOR ASSOCIATED WITH THE INSTALLATION OF 10 ADDITIONAL SPRINKLER HEADS, 100 LINEAR FEET OF 1" BRANCH PIPING, FITTINGS AND ALL ASSOCIATED HANGERS, SUPPORTS, VALVES, ETC. TO ACCOMMODATE ADDITIONAL SPRINKLER COVERAGE REQUIRED FOR EXISTING AND/OR NEW CONSTRUCTION CONDITIONS.
7. ALL SPRINKLER PIPING SHALL BE PITCHED BACK TO THE SPRINKLER MAIN TO ALLOW FOR DRAINAGE OF THE SYSTEM. WHERE LOW POINTS OCCUR IN THE SYSTEM DUE TO OBSTRUCTIONS THE CONTRACTOR SHALL INSTALL A LOW POINT DRIP DRAIN (TYPICAL FOR ALL).
8. THE GRAPHIC SYMBOLS IN THE PLAN LEGEND ARE SHOWN ON THE PLANS FOR GRAPHICAL LOCATION COORDINATION ONLY. SEE ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR SPECIFICS IN TERMS OF SIZE, TYPE, AND CAPACITY OF ALL MECHANICAL & ELECTRICAL EQUIPMENT.
9. NUMBER OF SPRINKLER HEADS SHOWN IS THE MINIMUM ALLOWABLE PER SQUARE FOOTAGE REQUIREMENTS PER NFPA No. 13.
10. SPRINKLER CONTRACTOR SHALL INCLUDE IN THEIR BID DRAINAGE OF THE EXISTING SYSTEM, CONNECTION TO THE MAIN, TESTING AND RE-ACTIVATIING SYSTEM. ALL OF THE ABOVE SHALL BE COORDINATED WITH THE OWNERS UNDERWRITERS INSURANCE COMPANY AND LOCAL FIRE AUTHORITIES.

SHEET NOTES:

(1) EXISTING SPRINKLER HEAD LOCATIONS AND ASSOCIATED PIPING AND ALL HANGERS, SUPPORTS, ETC. SHALL BE MODIFIED AS REQUIRED TO ACCOMMODATE NEW CEILING PLAN. VERIFY EXISTING CONDITIONS IN THE FIELD PRIOR TO THE START OF WORK.

(2) EXISTING SPRINKLER HEADS IN THIS AREA SHALL BE REPLACED WITH NEW AND RECONFIGURED TO ACCOMMODATE NEW CEILING PLAN. SPRINKLER CONTRACTOR SHALL COORDINATE NEW HEAD LAYOUT WITH FINAL ARCHITECTURAL REFLECTED CEILING PLAN. PRIVIDE AN ALLOWANCE FOR 10'-0' OF BRANCH PIPING AND NEW SPRINKLER HEADS BASED ON HAZZAD CLASSIFICATION. SPRINKLER CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH HYDRAULIC CALCULATIONS FOR REVIEW AND APPROVAL BY ENGINEER OF RECORD PRIOR TO CONSTRUCTION.



KEY PLAN – FIRST FLOOR
NTS

0 4' 8' 16' 32'
⅛" = 1'-0"

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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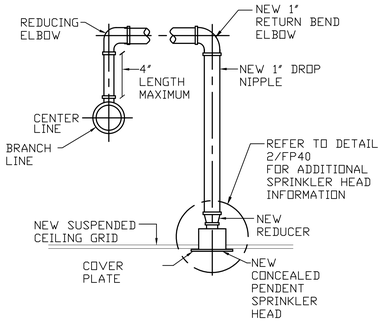
GAETANO P. CIPRIANO, P.E. PROFESSIONAL ENGINEER LICENSE NO. NY 064215-1
FIRE PROTECTION

SCALE: AS NOTED
DRAWN BY:
DESIGNED BY:
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

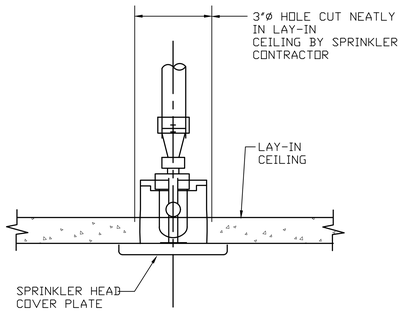
PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE: FIRST FLOOR PLAN

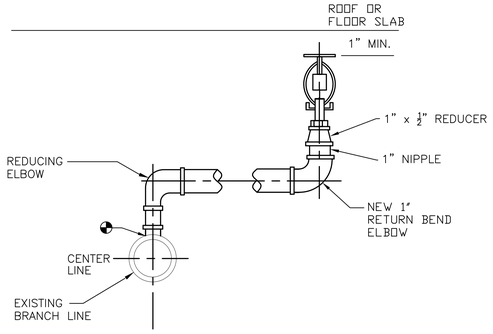
EIA DRAWING NO. FP11
CLIENT DWG. NO. – – – – –
EIA PROJECT NO. E08577.03



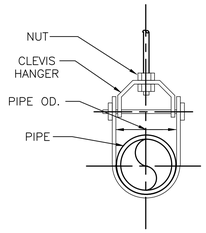
NEW CONCEALED SPRINKLER HEAD DETAIL — NTS — 1 FP40



TYPICAL CONCEALED SPRINKLER HEAD DETAIL — NTS — 2 FP40

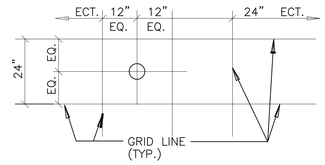


UPRIGHT SPRINKLER HEAD PIPING DETAIL — NTS — 3 FP40



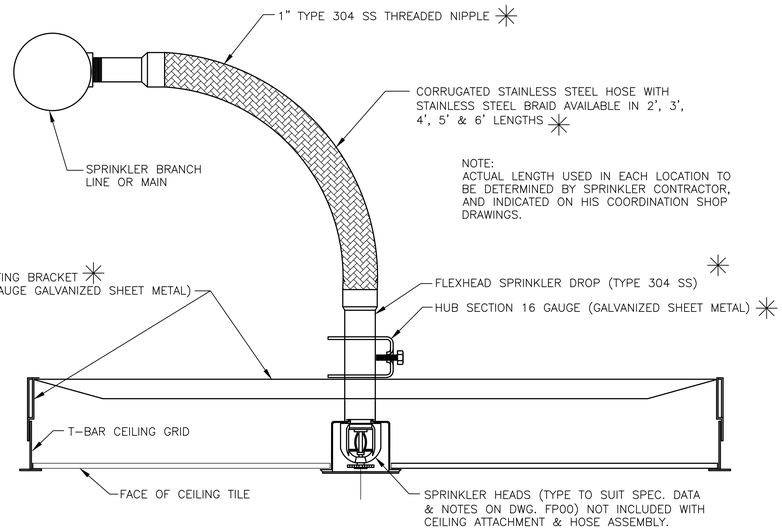
NOTES:
1. HANGERS AND COMPONENTS SHALL BE COATED WITH RUST RESISTANT PRIMER (SEE SPEC.).
2. THREADED HANGER ROD SHALL BE ATTACHED TO THE EXISTING STEEL STRUCTURE WITH A WELDED HOLLOW STEEL CONNECTION. (IF EXIST. STEEL IS I-BEAM USE BEAM CLAMP)

PIPE HANGER CLEVIS TYPE DETAIL — NTS — 4 FP40



24" x 24" SUSPENDED ACOUSTIC TILES

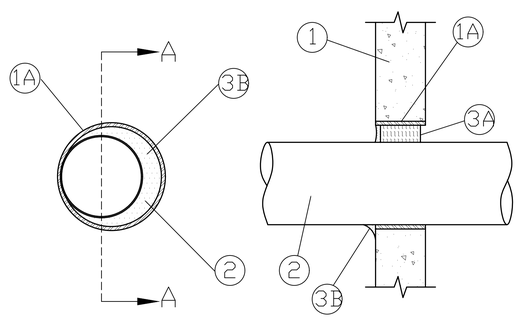
SPRINKLER HEAD INSTALLATION DETAIL — NTS — 5 FP40



FLEXIBLE HEAD CEILING SPRINKLER INSTALLATION DETAIL — NTS — 6 FP40

✳ DESIGNATES COMPONENTS SUPPLIED BY FLEXIBLE CEILING SPRINKLER UNIT MANUFACTURER.

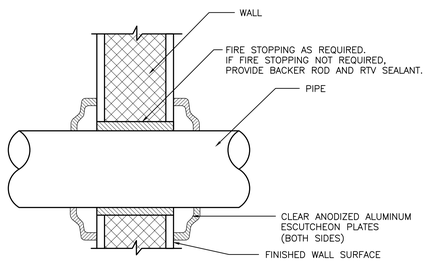
NOTE: ALL PENDENT WET-PIPE SPRINKLER HEADS, INSTALLED IN SUSPENDED CEILINGS (LABS & OFFICES) SHALL BE FED FROM (RIGID) STEEL SPRINKLER BRANCHES, AND MAINS, UTILIZING COMPONENTS SHOWN ABOVE. EACH SPRINKLER INSTALLATION REQUIRES: 1" THREADED NIPPLE; HOSE ASSEMBLY WITH SPRINKLER DROP; HUB SECTION AND MOUNTING BRACKET. ALL COMPONENTS SHALL BE 'FLEXHEAD INDUSTRIES' MODEL #2024, 2036, 2048, 2060 OR 2072 TYPE, COMMERCIAL CEILING UNIT (OR APPROVED EQUAL)



SECTION A-A

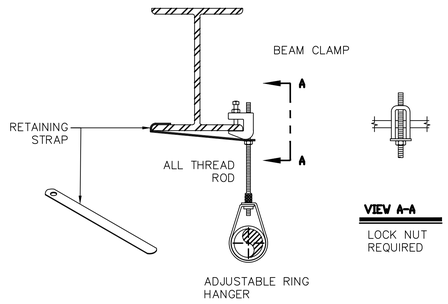
SYSTEM NO. C-AJ-1427
MAY 18, 2005
F RATING - 3 HR
T RATING - 0 HR
W RATING - CLASS I (SEE ITEM 3)

FIRE PENETRATION DETAIL FULL HEIGHT CMU WALL — NTS — 7 FP40



PIPE PENETRATION INTERIOR WALL BELOW CEILING DETAIL — NTS — 9 FP40

NOTE:
REFER TO SPECIFICATION 078413, "THROUGH-PENETRATION FIRESTOP SYSTEMS" FOR ADDITIONAL INFORMATION ON FIRE STOPPING REQUIREMENTS.



ADJUSTABLE RING HANGER DETAIL FROM STEEL — NTS — 10 FP40

1. FLOOR OR WALL ASSEMBLY – MIN 2-1/2 IN. (64 MM) THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF OR 1600-2400 KG/M3) CONCRETE FLOORS OR MIN 3 IN. (76 MM) THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALLS. FLOOR ASSEMBLY MAY ALSO BE CONSTRUCTED OF ANY MIN 6 IN. (152 MM) THICK UL CLASSIFIED HOLLOW-CORE PRECAST CONCRETE UNITS*. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAM OF OPENING 12-3/4 IN. (324 MM) MAX DIAM OF OPENING IN FLOORS CONSTRUCTED OF HOLLOW-CORE CONCRETE IS 7 IN. (78 MM). SEE CONCRETE BLOCKS (CAZT) AND PRECAST CONCRETE UNITS (CFTV) CATEGORIES IN FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

1A. STEEL SLEEVE – NOM 12 IN. (305 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL SLEEVE CAST OR GROUTED INTO FLOOR OR WALL ASSEMBLY. STEEL SLEEVE MAY BE INSTALLED FLUSH OR MAY PROJECT MAX 2 IN. (51 MM) BEYOND THE FLOOR OR WALL SURFACES.

2. THROUGH PENETRANT – ONE METALLIC PIPE, CONDUIT, TUBING OR FLEXIBLE METAL PIPING INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN OPENING. ANNULAR SPACE BETWEEN PENETRANT AND PERIPHERY OF OPENING OR SLEEVE SHALL BE MIN OF 0 IN. (POINT CONTACT) TO MAX 2 IN. (0 MM TO MAX 51 MM). PENETRANT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF PENETRANTS MAY BE USED:

A. STEEL PIPE – NOM 10 IN. (254 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.

B. IRON PIPE – NOM 10 IN. (254 MM) DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.

C. CONDUIT – NOM 6 IN. (152 MM) DIAM (OR SMALLER) STEEL CONDUIT OR NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING.

D. COPPER TUBING – NOM 4 IN. (102 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.

E. COPPER PIPE – NOM 4 IN. (102 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.

F. THROUGH PENETRATING PRODUCT* – FLEXIBLE METAL PIPING – THE FOLLOWING TYPES OF STEEL FLEXIBLE METAL GAS PIPING MAY BE USED:

1. NOM 2 IN. (51 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

OMEGA FLEX INC.

2. NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

TITEFLEX CORP, A BUNDY CO.

3. NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
WARD MFG INC.

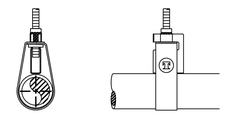
3. FIRESTOP SYSTEM – THE DETAILS OF THE FIRE STOP SYSTEM SHALL BE AS FOLLOWS:
A. PACKING MATERIAL – MIN 2 IN. (51 MM) THICKNESS OF MIN 4 PCF (64 KG/M3) MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR TO EDGE OF SLEEVE OR FROM BOTH SURFACES OF WALL OR BOTH ENDS OF SLEEVE AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL. IN FLOORS CONSTRUCTED OF HOLLOW-CORE CONCRETE, PACKING MATERIAL TO BE RECESSED FROM TOP AND BOTTOM SURFACES OF FLOOR OR SLEEVE AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
B. FILL, VOID OR CAVITY MATERIALS* – CAULK OR SEALANT-MIN 1/2 IN. (13 MM) THICKNESS OF CAULK APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR TOP EDGE OF SLEEVE OR WITH BOTH SURFACES OF WALL OR BOTH ENDS OF SLEEVES. IN FLOORS CONSTRUCTED OF HOLLOW-CORE CONCRETE, MIN 1/2 IN. (13 MM) THICKNESS OF CAULK APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP AND BOTTOM SURFACES OF FLOOR OR SLEEVE. MIN 1/4 IN. (6MM) DIAM BEAD OF CAULK APPLIED TO THE PENETRANT/CONCRETE OR PENETRANT/SLEEVE INTERFACE AT THE POINT CONTACT LOCATION ON THE TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL OR HOLLOW-CORE CONCRETE.

3M COMPANY – IC 15WB+, CP 25WB+ CAULK OR FB-3000 WT SEALANT.
(NOTE: W RATING APPLIES ONLY WHEN FB-3000 WT IS USED.)

*BEARING THE UL CLASSIFICATION MARK

TOLCO SURGE RESTRAINER

TYPE 1 – FOR 1" AND 1-1/4" PIPE AND HANGER TYPE 2 – FOR 1-1/2" AND 2" PIPE AND HANGER



TOLCO SURGE RESTRAINER IS DESIGNED TO BE USED ONLY WITH TOLCO BAND HANGERS AND 2NFPA TO RESTRAIN THE UPWARD MOVEMENT OF PIPE AS IT OCCURS DURING SPRINKLER HEAD ACTIVATION OR SEISMIC ACTIVITY

PIPE HANGER SURGE RESTRAINER DETAIL — NTS — 8 FP40

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

EI ARCHITECTURE ENGINEERING PLANNING
EI Associates
ARCHITECTS & ENGINEERS, PC
8 RIDGEDALE AVENUE•CEDAR KNOLLS NJ 07927•973.775.7777

GAETANO P. CIPRIANO, P.E. PROFESSIONAL ENGINEER LICENSE NO. NY 064215-1

FIRE PROTECTION

SCALE: AS NOTED
DRAWN BY:
DESIGNED BY:
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
DETAILS

EIA DRAWING NO.
FP40

CLIENT DWG. NO.
EIA PROJECT NO.
EG8577.03

XX

GENERAL NOTES:

1. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE FOLLOWING CODES:
   - NEC –NATIONAL ELECTRICAL CODE 2017 (NFPA 70)
   - –STANDARDS FOR ELECTRICAL SAFETY AT WORK PLACE (NFPA 70E)
   - IBC –2018 INTERNATIONAL BUILDING CODE, NEW YORK EDITION
   - UL –UNDERWRITER'S LABORATORIES
   - IEEE –INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
   - NEMA –NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
   - IPCEA –INSULATED POWER CABLE ENGINEERS ASSOCIATION
   - OSHA –OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
   - ADA –AMERICAN WITH DISABILITY ACT
   - ANSI –AMERICAN NATIONAL STANDARDS INSTITUTE
2. ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES, INCLUDING ANY RULES AND REGULATIONS ESTABLISHED BY THE UTILITY COMPANY, THE STATE AND TOWN CONSTRUCTION DEPARTMENT.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR PRIOR TO SUBMITTING HIS BID, TO VISIT THE SITE AND INSPECT THE ENTIRE AREA OF THE WORK. THE CONTRACTOR SHALL COMPLETELY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS AFFECTING THE WORK. IF IN THE EXECUTION OF THE WORK EXTRA WORK IS NECESSARY DUE TO THE CONTRACTOR'S FAILURE TO BE FAMILIAR WITH EXISTING CONDITIONS, SUCH EXTRA WORK SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOB SAFETY.
5. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED.
6. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADE CONTRACTORS THE SCOPE OF LIGHTING, POWER, POWER, FIRE ALARM, COMMUNICATION AND SECURITY SYSTEM/INTRUSION DETECTION SYSTEM. COORDINATE ALL LIGHTING, POWER, FIRE ALARM, COMMUNICATION AND SECURITY SYSTEM/INSTRUSION DETECTION SYSTEM SHUTDOWN WITH THE OWNER OR HIS REPRESENTATIVE AND OTHER CONTRACTORS. COMMUNICATION AND SECURITY/INTRUSION DETECTION SYSTEM SUCH AS TELEPHONE AND DATA FOR COMMUNICATION CABLE AND OUTLET DROPS, CARD READERS, DOOR ENTRY BUZZER, KEYPAD, ETC IS LIMITED TO OUTLET BACK–BOXES, JUNCTION BOXES AND CONDUITS WITH PULL WIRES. EQUIPMENT REQUIRES 120V WIRING SHALL BE PROVIDED BY CONTRACTOR.
7. THE CONTRACTOR SHALL SUPPLY ALL EQUIPMENT, LABOR, SERVICES AND MATERIAL REQUIRED FOR THE COMPLETE ELECTRICAL WORK SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED. ALL MATERIALS SHALL BE NEW AND SHALL BEAR THE UNDERWRITER'S LABORATORY LABEL WHEREVER SUCH A LISTING APPLIES.
8. UPON COMPLETION OF ALL THE WORK, FURNISH THE OWNER OR HIS REPRESENTATIVE WITH CERTIFICATES OF APPROVAL FROM THE LOCAL AUTHORITIES HAVING JURISDICTION AND/OR AS MAY BE DESIGNATED BY THE OWNER. THE CONTRACTOR SHALL PAY ALL FEES.
9. INCLUDE THE COST OF ALL SMALL DETAILS AND INCIDENTAL WORK NOT SHOWN OR SPECIFIED, BUT WHICH CAN BE REASONABLY INFERRED AS REQUIRED FOR A COMPLETE AND SATISFACTORY SYSTEM.
10. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED CUTTING AND PATCHING ASSOCIATED WITH ELECTRICAL WORK.
11. THE OWNER RESERVES THE RIGHT TO RELOCATE, PRIOR TO INSTALLATION, ALL EQUIPMENT, DEVICES AND COMPONENTS TO A MAXIMUM DISTANCE OF FIFTEEN (15) FEET IN ANY DIRECTION FROM THE LOCATION INDICATED ON THE DRAWINGS, AT NO ADDITIONAL COST TO THE OWNER.
12. THE CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO THE EQUIPMENT PROVIDED BY OTHERS, UON.
13. FURNISH AND INSTALL ALL SUPPORTS, HANGERS AND MISCELLANEOUS METALS, SUCH AS GALVANIZED IRON PIPE STANCHIONS, RACKS, FITTINGS, J–HOOKS ETC., REQUIRED FOR PROPER INSTALLATION OF THE WORK. ALL MISCELLANEOUS RACKS AND FITTINGS SHALL BE GALVANIZED, AND SHALL BE EITHER KINDORF CHANNEL, POWER STRUT OR UNISTRUT, UNLESS OTHERWISE SPECIFIED.
14. LOCATIONS OF EXISTING AND NEW EQUIPMENT AND CABLE TERMINATIONS IN CONNECTION WITH THE NEW EQUIPMENT ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD WITH OWNER'S APPROVAL. ALL ELECTRICAL, LOW VOLTAGE SYSTEMS AND COMMUNICATION INFRASTRUCTURE RELOCATION, ROUTING AND FINAL TERMINATION LOCATION SHALL BE COORDINATED WITH THE OWNER OR HIS REPRESENTATIVE PRIOR TO INSTALLATION.
15. CONTRACTOR SHALL SUBMIT FOR ENGINEER'S APPROVAL DETAILED SHOP DRAWINGS FOR ALL EQUIPMENT SPECIFIED, AS WELL AS DETAILED INSTALLATION LAYOUTS.
16. UPON COMPLETION OF LIGHTING, POWER AND FIRE ALARM SYSTEM CABLE INSTALLATION THE CONTRACTOR SHALL TEST AND RECORD THE SYSTEM CABLING FOR SHORTS, GROUNDS, AND PROPER OPERATION IN THE PRESENCE OF THE OWNER OR HIS REPRESENTATIVE.
17. UPON COMPLETION OF THE LIGHTING, POWER, FIRE ALARM, LOW VOLTAGE SYSTEM AND COMMUNICATION INSTALLATIONS, THE CONTRACTOR SHALL PROVIDE TWO SETS OF "AS–BUILT" DRAWINGS IN COPIES, AND IN AUTOCAD FORMAT 2019 INCLUDING PEN TABLESPECIFICATION . AUTOCAD FILES DRAWINGS XREFS SHALL BE BOUND, PURGED AND AUDITED. THESE DRAWINGS SHALL PROVIDE AN ACCURATE AND COMPLETE RECORD OF ALL WORK INSTALLED.
18. WHERE LIGHTING MOTION SENSORS OF EITHER TYPE ARE SHOWN, THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONTACTS, RELAYS, TRANSFORMERS AND OTHER EQUIPMENT REQUIRED FOR THE CONTROL OF THE RESPECTIVE ROOM OR AREA'S LIGHTING BY THE SENSOR AND MAKE ALL REQUIRED CONNECTIONS. SENSORS ARE SHOWN FOR DIAGRAMMATIC PURPOSES ONLY, TO ILLUSTRATE WHICH ROOMS OR AREAS REQUIRED OCCUPANCY SENSORS CONTROL. THE CONTRACTOR SHALL PROVIDE QUANTITY OF SENSORS AND LOCATIONS AS REQUIRED FOR PROPER COVERAGE OF EACH SPACE BASED ON MANUFACTURER'S RECOMMENDATIONS FOR THE SENSORS USED. LIGHT SWITCHES IN THE RESPECTIVE ROOMS SHALL BE WIRED TO ALLOW THE OCCUPANT TO TURN–OFF THE LIGHTING REGARDLESS OF SENSOR OUTPUT.

19 EXISTING ELECTRIC, LOW VOLTAGE AND COMMUNICATION SERVICES TO THE BUILDINGS WILL BE IN OPERATION DURING CONSTRUCTION. CONTINUITY OF ELECTRICAL, LOW VOLTAGE AND COMMUNICATION SYSTEMS MUST BE MAINTAINED. ALL SHUTDOWN NEED TO BE COORDINATED WITH OWNER OR HIS REPRESENTATIVE.

20. EQUIPMENT INSTALLED ON WALLS SHALL BE INSTALLED ON METAL CHANNEL SUPPORTING UNITS BOLTED TO FLOOR OR BUILDING STRUCTURE. CABLE INSTALLATION BELOW CEILING AND ABOVE ACCESSIBLE CEILING SPACE SHALL BE IN TRAPEZE HANG SECURED AT EVERY 5 FEET INTERVAL.

GENERAL NOTES: (CONTINUED)

21. MODIFICATIONS TO EXISTING POWER DISTRIBUTION EQUIPMENT AND ASSOCIATED EQUIPMENT DUE TO RENOVATION WILL REQUIRE PERIODIC SHUTDOWNS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR COORDINATING THE SHUTDOWN SCHEDULE WITH OWNER OR HIS REPRESENTATIVE TO AVOID DISRUPTION OPERATIONS DURING DESIGNATED WORKING HOURS.
22. THE CONTRACTOR IS RESPONSIBLE FOR MAINTINING POWER, LOW VOLTAGE AND COMMUNICATION SIGNALS TO BUILDINGS AND OTHER LOCATIONS NOT AFFECTED BY HIS WORK DURING CONSTRUCTION.
23. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO START OF WORK AND NOTIFY THE OWNER OR HIS REPRESENTATIVE OF ANY DISCREPANCIES OR PROBLEMS THAT WILL INTERFERE WITH THE SATISFACTORY COMPLETION OF THE WORK.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY SERVICE FOR ALL UTILITIES THAT WILL BE BREACHED DUE TO HIS CONTRUCTION OPERATIONS.
25. PROVIDE BARRICADES, WARNING SIGNS AND LIGHTS AT AREAS SUBJECT TO PUBLIC, PERSONNEL AND TRAFFIC ACTIVITIES. KEEP CONSTRUCTION DEBRIS CLEAR OF TRAFFIC AREAS.
26. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH THE REGULATIONS AND GUIDELINES SET FORTH BY ALL AGENCIES HAVING JURISDICTION OVER THE WORK.
27. THE CONTRACTOR SHALL SUBMIT THE FOLLOWING INFORMATION TO THE OWNER OR HIS REPRESENTATIVE FOR APPROVAL:
   - A. ELECTRICAL, LOW VOLTAGE AND COMMUNICATION SYSTEMS SHUTDOWN SCHEDULES.
   - B. PLANS PROVIDING TEMPORARY ELECTRIC SERVICE TO FACILITIES REQUIRING CONTINUOUS ELECTRIC SERVICE.
   - C. PLANS TO PROTECT EXISTING UTILITIES AND STRUCTURES IN AREAS ADJACENT TO THE WORK.
28. TEMPORARY POWER IS TO BE PROVIDED BY CONTRACTOR AND BE AVAILABLE IN THE FIELD FOR OTHER TRADES. IT IS HIS RESPONSIBILITY TO FURNISH AND INSTALL, CONNECT, MAINTAIN AND THEN REMOVE ALL ASSOCIATED EQUIPMENT BEFORE COMPLETION OF WORK.
29. CONTRACTOR SHALL VISIT THE SITE SPECIFICALLY INCLUDING ALL AREAS INDICATED ON THE DRAWINGS. HE SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THESE EXISTING CONDITIONS, AND BY SUBMITTING HIS BID ACCEPT CONDITIONS UNDER WHICH HE WILL BE REQUIRED TO PERFORM HIS WORK.
30. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
31. EXCEPT WHERE SPECIFICALLY DIMENSIONED OR OTHERWISE LOCATED BY PERTINENT DETAILS, THE ROUTING OF CONDUITS OR CABLES AS SHOWN ON THE PLANS IS APPROXIMATE. THE CONTRACTOR, WITH THE APPROVAL OF THE OWNER, MAY MODIFY CONDUIT OR CABLE ROUTING SHOWN ON THE DRAWINGS DUE TO EXISTING FIELD CONDITIONS. PROVIDE REQUIRED FITTINGS, CONDULETS, ELBOWS AND PULL BOXES.
32. ALL WALL CUTS IN ORDER TO EXECUTE THE WORK SHALL BE PATCHED AND FINISHED SIMILAR TO ADJACENT SPACES.
33. CONTRACTOR SHALL RUN BUILDING INTERIOR CONDUIT OR CABLE CONCEALED IN HUNG CEILINGS AND WALLS.
34. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS. ALL DISCREPANCIES SHALL BE REPORTED TO OWNER OR HIS REPRESENTATIVE AND RESOLVED BEFORE THE WORK IS PERFORMED.
35. ALL SPARE CONDUITS SHALL BE PROVIDED WITH A NYLON PULL CORD OR EQUIVALENT WITH A MINIMUM OF 200 POUND PULLING TENSION.
36. ALL UNUSED ENTRANCE CONDUITS MUST BE CAPPED/PLUGGED AND INSTALLED WITH PULL WIRES.
37. ALL METALLIC CONDUIT AND SLEEVES MUST BE REAMED, BUSHED, AND CAPPED WHEN PLACED.
38. NEUTRAL SHARING OR COMMON NEUTRAL WIRING IS PROHIBITED.
39. ALL MANUFACTURER'S MATERIALS, COMPONENTS, FASTENERS, ASSEMBLIES, ETC. SHALL BE HANDLED AND INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS. WHERE BRAND NAMES AND MANUFACTURED PRODUCTS ARE CALLED FOR SHALL BE PROVIDED. WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN IN ADVANCE TO BE OF LIKE AND OF APPROVED EQUAL QUALITY.
40. ALL CHANGES SHALL BE REQUESTED IN WRITING AND MAY ONLY BE APPROVED IN WRITING BY THE OWNER OR HIS REPRESENTATIVE PRIOR TO ANY CHANGES BEING MADE.
41. THE OWNER OR HIS REPRESENTATIVE HAS THE RIGHT TO REJECT ANY PORTION OF WORK THAT IS POORLY INSTALLED, DOES NOT MEET INDUSTRY STANDARD, UNAUTHORIZED, OR WORK DONE CONTRARY TO THE THE INTENT OF THE CONTRACT DOCUMENTS. SUCH WORK SHALL BE REPLACED, REPAIRED OR REMOVED AT THE CONTRACTOR'S EXPENSE.
42. THE CONTRACTOR SHALL GUARANTEE ALL HIS WORK AND THE WORK OF HIS SUBCONTRACTORS FOR A PERIOD ONE YEAR UON AFTER RECEIVING FINAL ACCEPTANCE AND DO ALL REPAIR WORK AND REPLACEMENT AS NECESSARY DURING THAT PERIOD AT THE CONTRACTOR'S EXPENSE.
43. IN NO EVENT SHALL STRUCTURAL MEMBERS BE CUT OR DRILLED WITHOUT THE WRITTEN APPROVAL OF A LICENSED STRUCTURAL ENGINEER.
44. THE CONTRACTOR SHALL PROVIDE SAFE AND SANITARY CONDITIONS WHERE DEMOLITION AND WRECKING OPERATIONS ARE BEING CARRIED ON. WORK SHALL BE EXECUTED IN SUCH A MANNER THAT HAZARD FROM FIRE, POSSIBILITY OF INJURY, DANGER TO HEALTH AND CONDITIONS WHICH MAY CONSTITUTE A PUBLIC NUISANCE SHALL BE MINIMIZED.
45. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION METHODS, PROCEDURES AND JOB SITE CONDITIONS INCLUDING SAFETY. CONSTRUCTION SHALL BE PERFORMED IN SUCH A MANNER TO PROTECT CRAFT LABOR, OCCUPANTS AND THE PUBLIC FROM INJURY AND ADJOINING PROPERTY SHALL BE PROTECTED FROM DAMAGE BY USE OF SCAFFOLDING,UNDERPINNING OR OTHER APPROVED METHOD. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE CAUSED DURING OR RESULTING FROM HIS OPERATIONS IN KIND TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.

GENERAL NOTES: (CONTINUED)

46. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A CLEAN, DEBRIS FREE CONDITION. THE DUST RESULTING FROM REMOVALS SHALL BE CONTROLLED SO AS TO PREVENT ITS SPREAD TO OCCUPIED PORTIONS OF THE BUILDING AND TO AVOID CREATION OF A NUISANCE IN THE SURROUNDING AREA.
47. ONCE LIGHTING. POWER, FIRE ALARM, SECURITY/INTRUSION DETECTION AND COMMUNICATION SYSTEM DRAWINGS ARE APPROVED BY THE BUILDING DEPARTMENT FOR CONSTRUCTION, ANY DESIGN MODIFICATIONS AND ALTERATIONS MADE BY CONTRACTOR FROM THE ELECTRICAL, LOW VOLTAGE AND COMMUNICATION SYSTEM DRAWINGS WITHOUT THE ENGINEER OF RECORD KNOWLEDGE ARE DONE AT CONTRACTOR'S RISK. THE ENGINEER OF RECORD SHALL NOT BE HELD RESPONSIBLE FOR THE CONSEQUENCES OF ANY SUCH CHANGES.
48. PROVIDE NAMEPLATES ON EQUIPMENT AND SAFETY SWITCHES STATING PANELBOARD AND CKT. DESIGNATIONS. NAMEPLATES TO BE 1/2" HIGH WHITE ENGRAVED BLOCK LETTERS ON A BLACK BACKGROUND. THREE LAYER LAMINATED WITH ADHESIVE BACKING.
49. ALL WIRING DEVICES SHALL BE PROVIDED WITH SELF–ADHESIVE TAPE WITH PERMANENT LABEL IN BLACK TEXTS WHITE BACKGROUND COLOR ON FACEPLATE STATING THE WIRING DEVICE SOURCE PANEL AND CIRCUIT DESIGNATION.
50. CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OFF SITE IN AN APPROVED MANNER. THE OWNER SHALL BE CONSULTED PRIOR TO DISPOSAL OF ANY SALVAGED OR EXCESS MATERIALS AT THE COMPLETION OF THE PROJECT.
51. UPON COMPLETION OF WORK, ALL EXCESS MATERIAL, DEBRIS, ETC. SHALL BE REMOVED AND THE WORK AREA SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
53. ALL WORK SHALL BE SCHEDULED IN COMPLIANCE WITH THE OWNER'S REQUIREMENTS FOR THE USE OF THE EXISTING FACILITY.
54. CONTRACTOR SHALL FURNISH ALL EQUIPMENT THAT MAY BE REQUIRED TO PERFORM THE WORK INDICATED IN A SAFE AND ORDERLY MANNER.
55. THE CONTRACTOR SHALL SUBMIT THE FOLLOWING INFORMATION TO THE OWNER OR HIS REPRESENTATIVE FOR APPROVAL:
   - A. ELECTRICAL SYSTEMS SHUTDOWN SCHEDULES.
   - B. PLANS PROVIDING TEMPORARY ELECTRIC SERVICE TO FACILITIES REQUIRING CONTINUOUS ELECTRIC SERVICE AFFECTED BY DEMOLITION AND RENOVATION WORK.
   - C. PLANS TO PROTECT EXISTING UTILITIES AND STRUCTURES IN AREAS ADJACENT TO THE WORK.
56. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AS TO CONFIRM THE EXACT FINAL LOCATION OF THEIR RESPECTIVE EQUIPMENT. SUPPLY POWER AND MAKE CONNECTIONS TO MOTORS, EQUIPMENT, WORKSTATIONS, ETC. REQUIRING ELECTRICAL CONNECTIONS AS INDICATED ON THE ONE–LINE DIAGRAM, ELECTRICAL DRAWINGS, AND DRAWINGS OF OTHER TRADES. REVIEW THE DRAWINGS OF OTHER TRADES FOR CONTROL WIRING DIAGRAMS, SIZE AND LOCATION OF EQUIPMENT. UNLESS PROVIDED BY EQUIPMENT MANUFACTURER, DISCONNECT SWITCHES, STARTERS, VFDS, POWER AND CONTROL WIRING, CONTROLS DEVICES, WHIPS AND CONDUITS FOR MECHANICAL, PLUMBING AND WORKSTATION AND AUXILIARY SYSTEMS OPERATIONS SHALL BE PROVIDED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN MANUFACTURER'S SHOP DRAWINGS OF EQUIPMENT PROVIDED BY OTHER TRADES PRIOR TO ROUGHING IN THE CONDUITS/WIRING TO EQUIPMENT.

CONDUITS AND WIRE NOTES:

1. ALL CONDUITS SHALL BE GROUNDED AND AND SUPPORTED FROM THE BUILDING STRUCTURE IN AN APPROVED MANNER AND IN ACCORDANCE WITH REQUIREMENTS OF THE NEC.
2. ARRANGEMENT OF CONDUIT AND EQUIPMENT SHALL BE AS INDICATED, BUT MAY BE MODIFIED AS REQUIRED TO SUIT FIELD CONDITIONS OR TO AVOID INTERFERENCE WITH WORK OF OTHER TRADES.
3. CONDUIT SHALL RUN AT RIGHT ANGLES OR PARALLEL TO BUILDING LINES AND SHALL BE NEATLY RACKED AND SECURELY FASTENED. PULL BOXES AS PER NEC REQUIREMENTS SHALL BE PROVIDED, WHERE REQUIRED, TO FACILITATE THE INSTALLATION OF CABLES.
4. CONDUIT TERMINATIONS AT SHEET METAL ENCLOSURES LOCATED IN DRY, INDOOR NON–HAZARDOUS AREAS SHALL BE MADE USING DOUBLE LOCKNUTS AND INSULATED BUSHINGS. FOR ENCLOSURES LOCATED OUTDOORS, OR IN WET AREAS, CONDUIT SHALL BE TERMINATED USING GASKETED, TREADED CONDUIT HUBS.
5. FURNISH AND INSTALL EXPANSION FITTINGS WHERE CONDUIT PASS THROUGH STRUCTURAL EXPANSION JOINTS.
6. ELECTRICAL METAL TUBING SHALL BE USED IN ALL DRY LOCATIONS. IN WET LOCATIONS CONDUIT SHALL BE RIGID GALVANIZED STEEL. THE MINIMUM SIZE FOR CONDUITS SHALL BE 3/4". FLEXIBLE STEEL CONDUITS OR TYPE MC CABLE MAY BE USED FOR CONNECTION TO RECESSED LIGHTING FIXTURES. TYPE MC CABLE MAY BE USED TO SUPPLY RECEPTACLES IN DRY PARTITION WALL.
7. INDOOR CONDUIT SHALL BE CONCEALED TO THE MAXIMUM POSSIBLE EXTENT IN THE EXISTING BUILDING. INDOOR CONDUIT IN RENOVATED AND EXISTING AREAS SHALL BE RUN FULLY CONCEALED.
8. PANELS AND DISCONNECT SWITCHES SHALL BE INSTALLED ON WALL OR ON METAL CHANNEL SUPPORTING UNITS BOLTED TO FLOOR OR BUILDING STRUCTURE.
9. PENETRATED FORMED WALLS AND FLOORS SHALL BE STUFF/MESHED WITH FIRE STOPPING MATERIALS.
10. THE MINIMUM WIRE SIZE SHALL BE #12 AWG FOR POWER AND LIGHTING, UON; #14 AWG FOR CONTROL. SINGLE CONDUCTOR WIRE SHALL BE COPPER WITH THHN/THWN, 600V INSULATION UON. SIZE LARGER THAN #10 SHALL BE STRANDED.
11. ALL DRAWINGS ARE DIAGRAMMATIC IN NATURE. CONTRACTOR SHALL PROVIDE NUMBER OF WIRES AS REQUIRED TO PROVIDE LIGHTING CONTROL AS INDICATED.

CONDUITS AND WIRES NOTES: (CONTINUED)

12. ALL BRANCH CIRCUIT PANEL BOARDS AND DISTRIBUTION PANEL BOARDS SHALL BE SURFACE MOUNTED, FACTORY PAINTED, COPPER BUSES, HINGED DOOR, COMBINATION LATCH AND LOCK, AND DIRECTORY CARD MOUNTED UNDER GLASS OR HEAVY DUTY NON–YELLOWING PLASTIC. CIRCUIT BREAKERS SHALL BE THERMO–MAGNETIC, BOLT–ON TYPE, OF THE SIZE AND KINDS NOTED IN THE PANEL BOARD SCHEDULES. CIRCUIT BREAKERS OF TWO AND THREE POLES SHALL HAVE A COMMON TRIP–HANDLES ARE PERMITTED. MINIMUM CIRCUIT BREAKER SYMMETRICAL INTERRUPTING CAPACITY SHALL BE 22,000 AMPERES UON, FULLY RATED AT 120/208VAC, 3–PHASE FULL SIZE NEUTRAL AND GROUND BUSES, AND MINIMUM CIRCUIT BREAKER SYMMETRICAL INTERRUPTING CAPACITY SHALL BE 14,000 AMPERES UON, FULLY RATED AT 277/480VAC, 3–PHASE FULL SIZE NEUTRAL AND GROUND BUSES. WHERE CIRCUIT BREAKERS ARE TO BE USED AS SWITCHES FOR LIGHTING CIRCUITS, BREAKERS SHALL BE APPROVED FOR SWITCHING DUTY AND SHALL BE MARKED 'SWD'.
13. ALL CIRCUIT NUMBERS SHOWN ON THE PLANS ARE FOR INDICATION PURPOSES ONLY. THE CONTRACTOR SHALL ARRANGE ALL CIRCUITS ON THE PANEL BOARD SO AS TO BALANCE ALL LOADS ON ALL PHASES, A TYPEWRITTEN DIRECTORY–CARD, HANDWRITING IS PROHIBITED, SHALL BE PROVIDED TO INCLUDE DIRECTORY DATE IN EACH PANEL TO INDICATE THE LOADS ACTUALLY INSTALLED.
14. ALL WIRING DEVICES (SWITCHES AND RECEPTACLES) SHALL BE PROVIDED AS INDICATED ON THE PLANS AND AS IDENTIFIED IN THE SYMBOL LIST. ALL DEVICES SHALL BE COMMERCIAL SPECIFICATION GRADE, BACK AND SIDE WIRED WITH SEPARATE GROUNDING SCREWS, EXCEPT WHERE OTHERWISE SPECIFIED FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL DEVICES REFER TO ELECTRICAL DRAWINGS OTHERWISE IT SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO INSTALLATION. OUTLET BOXES IN DRY INDOOR LOCATIONS SHALL BE GALVANIZED STAMPED STEEL TYPE (MINIMUM OF 4–INCH SQUARE). OUTLET BOXES IN WET INTERIOR AND EXTERIOR LOCATIONS SHALL BE IN CAST ALUMINUM (NEMA 3R CONSTRUCTION). EACH BOX SHALL BE OF THE SIZE AND STYLE REQUIRED FOR THE NUMBER OF WIRES AND THE DEVICE TO BE CONTAINED WITHIN.
15. ALL CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS:

NEUTRAL CONDUCTORS	WHITE
GROUND CONDUCTORS	GREEN
ISOLATED GROUND CONDUCTORS	GREEN WITH YELLOW TRACER

SYSTEM VOLTAGE	PHASE CONDUCTORS		
250–VOLTS AND BELOW	BLACK	RED	BLUE
250–600 VOLTS	BROWN	ORANGE	YELLOW

16. THE CONTRACTOR IS REQUIRED TO PERFORM PHASE AND NEUTRAL CONDUCTORS, MINIMUM CONDUCTOR SIZE #3, INSULATION TESTS PER NETA CONDUCTOR INSULATION TESTING PROCEDURES AFTER PULLING CONDUCTORS IN CONDUITS AND BEFORE TERMINATING CONDUCTORS ON LANDING LUGS. SUBMIT 5 SETS OF INSULATION TESTING REPORT FOR REVIEW AND APPROVAL.
17. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE UL APPROVED CABLE AND CONDUIT SUPPORT. SECURE AND SUPPORT ALL ELECTRICAL AND LOW VOLTAGE CABLES AND CONDUITS IN CEILING SPACES, CONCEALED WALLS AND IN EXPOSED AREAS. ELECTRICAL AND LOW VOLTAGE CABLE AND CONDUIT SUPPORT SPACING SHALL BE INSTALLED PER NEC. ELECTRICAL AND LOW VOLTAGE CABLE AND CONDUIT SUPPORT SHALL BE ATTACHED AND SECURED AT BUILDING STRUCTURAL MEMBERS. USING THE CEILING GRID, LIGHTING FIXTURES, PIPING AND OTHER MISCELLANEOUS EQUIPMENT TO ATTACH AND SECURE ELECTRICAL AND LOW VOLTAGE CABLE AND CONDUIT SUPPORT IS STRICTLY PROHIBITED. DO NOT WRAP CABLES AROUND BUILDING STRUCTURAL MEMBERS.

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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ELECTRICAL

SCALE	AS NOTED
DRAWN BY:	SIGN CHECKED
DESIGNED BY:	SIGN CHECKED
CHECKED BY:	
APPROVED BY:	
PROJECT MANAGER:	SIGN CHECKED

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
GENERAL NOTES
CONDUIT AND WIRE

EIA DRAWING NO.
E00

CLIENT DWG. NO.
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EIA PROJECT NO.
EG8577.03

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DEMOLITION NOTES:

1. IN GENERAL, THE DEMOLITION PLAN SHOWS ALL EXISTING EQUIPMENT TO BE REMOVED; HOWEVER, ELECTRICAL, SECURITY/INTRUSION DETECTION AND COMMUNICATION EQUIPMENT, WHETHER SHOWN ON THIS DRAWING OR NOT THAT IS LOCATED IN REMOVED WALLS, FLOORS OR CEILINGS, INSIDE AND OUTSIDE UNDERGROUND INSTALLATIONS SHALL BE REMOVED UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL VISIT THE SITE SPECIFICALLY INCLUDING ALL AREAS INDICATED ON THE DRAWINGS. HE SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THESE EXISTING CONDITIONS, AND BY SUBMITTING A BID ACCEPTS CONDITIONS UNDER WHICH HE WILL BE REQUIRED TO PERFORM HIS WORK.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH OWNER EQUIPMENT THAT ARE TO BE REMOVED OR ABANDONED. DISCONNECT AND REMOVE ALL EXISTING LIGHTING FIXTURES, PANELBOARDS, WIRING DEVICES, FIRE ALARM DEVICES, COMMUNICATION DEVICES, SECURITY/INTRUSION DETECTION DEVICES AND WIRING AFFECTED BY RENOVATION AREAS THIS SHALL INCLUDE RE-ROUTING, OR EXTENSION OF EXISTING WIRING, CONDUITS, FEEDERS WHERE NECESSARY TO MAINTAIN THE CONTINUITY OF EXISTING EQUIPMENT REMAINING.
4. ALL CIRCUIT NUMBERS AND EXISTING CONDUIT HOMERUNS SHOWN ON THESE DRAWINGS WERE TAKEN FROM EXISTING RECORD DRAWINGS. IT IS THIS CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF HOMERUNS, AND ADJUST CIRCUIT NUMBERS ACCORDING TO EXISTING CONDITIONS IF REQUIRED.
5. EXISTING CONDUIT FEEDS UP THROUGH FLOOR SHALL BE CUT OFF AND PLUGGED FLUSH WITH FLOOR WHERE EXISTING WALLS, ETC., ARE REMOVED. REMOVE CONDUCTORS FROM THIS POINT BACK TO LAST OUTLET REMAINING IN SERVICE.
6. WHERE EXISTING WALLS HAVE BEEN REMOVED, AND THERE ARE EXISTING CONDUIT FEEDS WHICH HAVE BEEN CUT-OFF AND CAPPED FLUSH WITH FLOOR, IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND DIMENSION ALL SUCH CONDUITS ON THE "AS-BUILT" DRAWINGS UNLESS OTHERWISE NOTED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CONTINUITY OF ALL ELECTRICAL, SECURITY/INTRUSION DETECTION AND COMMUNICATION SYSTEMS, EQUIPMENT, ETC., REMAINING IN OPERATION WHICH ARE BEING FED BY REMOVED AND OR REPLACED EQUIPMENT. MAINTAINING CONTINUITY SHALL CONSIST OF RE-ROUTING AND EXTENDING CONDUIT WIRING ETC., AS REQUIRED.
8. ALL LIGHTING FIXTURES, WIRING DEVICES, FIRE ALARM DEVICES, SECUIRITY/ INTRUSION DETECTION DEVICES, THAT ARE REMOVED, SHALL BE REMOVED COMPLETELY, INCLUDING, CONDUIT AND WIRING BACK TO THE LAST FIXTURE, DEVICES, EQUIPMENT ETC., REMAINING IN SERVICE.
9. EXISTING CIRCUITS WHICH ARE REMOVED AND NOT RE-USED SHALL BE IDENTIFIED ON THE SCHEDULE AS 'SPARE'. UPDATE AND PROVIDE TYPEWRITTEN DIRECTORY. ALL NEW AND UPDATED TYPEWRITTEN DIRECTORY SHALL BE SUBMITTED TO ENGINEER OF RECORD FOR REVIEW AND APPROVAL..
10. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO REMOVAL OF EXISTING LIGHTING FIXTURES, WIRING DEVICES, FIRE ALARM, SECURITY/INTRUSION DETECTION AND COMMUNICATION EQUIPMENT, AND TURN OVER REMOVED EQUIPMENT THAT THE OWNER REQUESTS IN AN 'AS-FOUND' CONDITION. EQUIPMENT THAT IS TO BE TURNED OVER SHALL BE BOXED AND TAGGED TO IDENTIFY THE SPECIFIC EQUIPMENT.
11. EXISTING CONDUIT MAYBE RE-USED WITH WRITTEN PERMISSION FROM OWNER, IF ADEQUATELY SIZED, BUT IN NO CASE SHALL ANY EXISTING CONDUCTORS BE RE-USED.
12. IN SOME INSTANCES, IT MAY BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY EXTEND, RELOCATE, RE-ROUTE, ETC. THE EXISTING LIGHTING, POWER, FIRE ALARM, SECURITY/INTRUSION DETECTION AND COMMUNICATION EQUIPMENT. THIS SHALL BE DONE SO THAT THE SYSTEMS IN ALL PHASES (THOSE COMPLETED AND THOSE YET TO BEGIN) ARE IN COMPLETE, OPERABLE CONDITION AS CONSTRUCTION PROCEEDS THROUGH EACH PHASE.
13. WHERE NEW CIRCUITS ARE SHOWN CROSSING PHASING BOUNDERIES (I.E., CORRIDOR LIGHTING, ETC.) THIS CONTRACTOR SHALL CONNECT ALL EQUIPMENT, FIXTURES, ETC. IN THE PHASE WHICH IS THEN UNDER CONSTRUCTION. CONTRACTOR SHALL STUB-OUT ALL REQUIRED CONDUITS AND WIRING ACROSS PHASE BOUNDERIES; THEN, PICK-UP AND EXTEND THESE CONDUIT RUNS WHEN CONTRUCTION BEGINS IN THE ADJACENT PHASE.
14. DURING EACH PHASE OF DEMOLITION, ALL CIRCUITS FROM EXISTING PANELS WHICH FEED AREAS OUTSIDE THE BOUNDARIES OF THAT PHASE, SHALL BE MAINTAINED.
15. ALL ABANDONED OUTLETS INCLUDING LIGHT, RECEPTACLES, TEL/DATA, ETC., SHALL BE COVERED AND PATCHED TO MATCH THE FINISH OF SURROUNDING WALL OR CEILING TO THE SATISFACTION OF THE OWNER.
16. SURVEY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED TO DETERMINE EXTENT OF DEMOLITION.
17. DEMOLITION CAN NOT COMMENCE UNTIL ALL NEW LIGHTING, POWER, FIRE ALARM, SECURITY/IDS AND COMMUNICATION SYSTEM WORK ARE INSTALLED AND TERMINATED AT THEIR RESPECTIVE EQUIPMENT AND APPROVED BY OWNER OR HIS REPRESENTATIVE.
18. MAINTAIN ELECTRIC SERVICE TO EXISTING OPERATING AREAS AND PROTECT THAT SERVICE DURING THE DEMOLITION.
19. COORDINATE ANY REQUIRED POWER SHUTDOWN WITH THE OWNER. PROVIDE AT LEAST 5 DAYS NOTICE OF ANY SHUTDOWN.
20. INSURE THAT ELECTRIC POWER IS DISCONNECTED FROM ALL EQUIPMENT BEFORE DEMOLITION.
21. WHEN LOADS ARE REMOVED FROM BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICES. TAG ALL DISCONNECTED DEVICES AS SPARES.
22. COORDINATE DEMOLITION WORK WITH CONSTRUCTION MANAGEMENT.DEMOLITION REQUIRED TO CLEAR THE ELECTRICAL, LOW VOLTAGE AND COMMUNICATION INSTALLATION IN AFFECTED AREAS SHALL BE PERFORMED AS DIRECTED BY OWNER. ELECTRICAL, LOW VOLTAGE AND COMMUNICATION CABLES INCLUDING ABANDONED CABLES SHALL BE REMOVED FROM THEIR ASSOCIATED POWER/SIGNAL SOURCE.
23. COORDINATE WITH OWNER FOR ELECTRICAL, LOW VOLTAGE AND COMMUNICATION EQUIPMENT TO BE REMOVED, EQUIPMENT TO BE LEGALLY DISPOSED OF BY CONTRACTOR, RELOCATED OR RETURNED TO OWNER FOR STORAGE.
24. CONTRACTOR SHALL REMOVE ALL LIGHTING, POWER, FIRE ALARM, SECURITY/IDS, AND COMMUNICATION CABLES BACK TO PANELS, IN DEMOLITION AREA.
25. OWNER WILL OCCUPY THE BUILDINGS DURING DEMOLITION WORK. CONDUCT DEMOLITION SO THAT OWNER'S OPERATIONS WILL NOT BE DISRUPTED. THIS WILL INVOLVE RECONNECTION OF CERTAIN ITEMS AS INDICATED BEFORE DEMOLITION CAN PROCEED.
26. WHEN UNANTICIPATED ELEMENTS THAT CONFLICT WITH THE DESIGN ARE ENCOUNTERED, INVESTIGATE THE NATURE OF THE CONFLICT AND NOTIFY THE OWNER OR HIS REPRESENTATIVE.
27. TRANSPORT DEMOLISHED MATERIAL (EXCLUDING USABLE EQUIPMENT AS PER OWNER'S DEFINITION) OFF THE OWNER'S PROPERTY AND LEGALLY DISPOSE THEM OFF.

DEMOLITION NOTES: (CONTINUED)

28. IN GENERAL, THE DEMOLITION PLAN SHOWS ALL EXISTING EQUIPMENT TO BE REMOVED; HOWEVER, ELECTRICAL, LOW VOLTAGE AND COMMUNICATION EQUIPMENT, WHETHER SHOWN ON THIS DRAWING OR NOT THAT IS LOCATED IN REMOVED WALLS, FLOORS, ROOFS AND CEILINGS SHALL BE REMOVED INCLUDING ABANDONED CABLES AND CABLES REPLACED BY NEW CABLE WORK UON.
29. PANELS OR TERMINAL CABINETS WHICH ARE LOCATED IN A WALL THAT IS TO BE DEMOLISHED, SHALL REMAIN IN AN OPERATIVE CONDITION UNTIL ALL AREAS FED BY THE RELATED PANELS HAVE BEEN DEMOLISHED. THIS CONTRACTOR SHALL PROVIDE AND INSTALL ALL EQUIPMENT REQUIRED TO TEMPORARILY SUPPORT PANELS. PANELS MAY BE TEMPORARILY FREESTANDING, MOUNTED IN TEMPORARY PORTION OF WALLS TO BE DEMOLISHED LATER, ETC. CHECK WITH OWNER OR HIS REPRESENTATIVE FOR APPROVAL OF SUPPORTS. IT SHALL ALSO BE THIS CONTRACTOR'S RESPONSIBILITY TO RELOCATE AND RECONNECT ALL CIRCUITS ON A TEMPORARY BASIS IF THE PANELS, TERMINAL CABINETS, ETC., CONFLICT WITH THE NEW CONSTRUCTION PHASES, AND THEN REMOVED AFTER COMPLETION OF PHASES.
30. REFER TO ARCHITECTURAL DRAWING DETAILS FOR ROOF, FLOOR AND SLABS FOR PATCHING AND REPAIRING OF OPENINGS VACATED BY ELECTRICAL DEMOLITION WORK.

ABBREVIATIONS:

A, AMP	AMPERE
AIC	SHORT CIRCUIT INTERRUPTING CAPACITY IN AMPERE UNIT.
AFF	ABOVE FINISH FLOOR
ATC	ABOVE FINISH FLOOR
C	CONDUIT, CEILING MOUNT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
DS	DISCONNECT SWITCH
DWG	DRAWING
(E), EXIST.	EXISTING TO REMAIN
EM	EMERGENCY WITH BATTERY BACK-UP
FACP	FIRE ALARM CONTROL PANEL (FOR HORNS)
FAVCP	FIRE ALARM VOICE COMMAND EVACUATION CONTROL PANEL (FOR SPEAKER).
FT.	FEET
GFI, GFCI	GROUND FAULT CIRCUIT INTERRUPTING DEVICE
G, GND, GRD	GROUNDING
L	LENGTH IN FEET
LTG	LIGHTING
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
(N)	NEW
N	NEUTRAL
NEC	NATIONAL ELECTRICAL CODE
N.I.C.	NOT IN CONTRACT
NL	NIGHT LIGHT, 24 HOURS OPERATION
NTS	NOT TO SCALE
ø	PHASE
P	POLE
(REL)	EXISTING TO BE RELOCATED
(TYP.)	TYPICAL
UL	UNDERWRITERS LABORATORIES
UON	UNLESS OTHERWISE NOTED
V.D.	VOLTAGE DROP IN PERCENT
W	WIRE
WP	WEATHERPROOF/RAINPROOF/RAINTAIGHT
WPIU	WEATHERPROOF WHILE IN USE. PROVIDE UL LISTED METAL BUBBLE COVER
XFMR	TRANSFORMER

ELECTRICAL SYMBOLS:

- ELECTRICAL PANEL
- 60A / 240V 3R — 30A, 600 VOLT, 3-POLE UON, UNFUSED ENCLOSED DISCONNECT SWITCH LOCKABLE IN "OFF" POSITION, 30 – INDICATES SWITCH RATING IN AMPS; 3R – INDICATES ENCLOSURE NEMA TYPE; 3P – 3-POLE. 2P – 2-POLE. 240V INDICATE VOLTAGE CLASS.
- 15/60A / 240V — FUSED DISCONNECT SWITCH, HEAVY DUTY, 30A, 600V, 3-POLE UON, SURFACE MOUNTED; 60A DENOTE SWTCH SIZE; 15 DENOTE FUSE SIZE; 3P DENOTE 3-POLE; 2P DENOTE 2-POLE; 240V DENOTE VOLTAGE CLASS
- JH — JUNCTION BOX WALL MOUNTED
- AC WP / RPF-23 GFCI GFI WPIU M — WALL RECESS MOUNTED 20 AMP, 125 VOLT, 2-POLE, 3 WIRE, GROUNDING, STRAIGHT BLADE (NEMA5-20R) DUPLEX POWER RECEPTACLE (COLOR BY ARCHITECT) WITH BRUSHED CHROME FACEPLATE. MOUNT HEIGHT: 18" AFF, UON
  - 23- INDICATES CIRCUIT #23 FROM DESIGNATED PANEL
  - RPF-23- INDICATES CIRCUIT NUMBER FROM PANEL RPF
  - WP- INDICATES WEATHER PROOF(METAL COVER WITH GASKET)
  - WPIU- INDICATES WEATHER PROOF WHILE IN USE (METAL BUBBLE COVER WITH GASKET)
  - GFI OR GFCI- INDICATES GROUND FAULT CIRCUIT INTERRUPTER, TANDEM OUTLET CONNECTION IS NOT ALLOWED.
  - M – INDICATES DUPLEX RECEPTACLE FOR TV MONITOR MOUNTED 66" AFF, UON.
  - AC – INDICATES MOUNTED ABOVE COUNTER.
- $M — FRACTIONAL HORSEPOWER MANUAL STARTER WITH OVERLOAD RELAY. M –INDICATES MOTOR RATED
- HOME RUN TO PANEL. CIRCUIT NUMBER INDICATED AT END OF ARROW. REFER TO PANEL SCHEDULE AND ONE-LINE FOR WIRE AND CONDUIT SIZE. NUMBER OF ARROWS DENOTES TYPE OF CIRCUIT BREAKER (3-POLE, 2-POLE, 1-POLE).
- CONDUIT ROUTED CONCEALED IN WALLS OR ABOVE CEILING.
- CONDUIT ROUTED BELOW FLOOR SLAB OR BELOW GRADE.
- CONDUIT TURNING DOWN
- CONDUIT TURNING UP
- REMOVE/DEMOLISH UON.
- (M) MOTOR
- VFD — VARIABLE FREQUENCY DRIVE.
- CR — CARD READER.
- CEILING MOUNTED UTILITY PLATES.

LIGHTING SYMBOLS:

- CEILING MOUNTED EXIT SIGN, SINGLE FACE AS INDICATED BY SHADED SECTOR, DIRECTIONAL IF SHOWN BY ARROW,
- WALL MOUNTED EXIT SIGN, SINGLE FACE AS INDICATED BY SHADED SECTOR, DIRECTIONAL IF SHOWN BY ARROW.
- EMERGENCY LIGHTING UNIT TWO HEADS WITH BATTERY BACK-UP.
- ROOF MOUNTED SERVICE MAST.
- RECESSED 2' X 2' LED LIGHTING FIXTURE. REFER TO LIGHTING FIXTURE SCHEDULE FOR MORE LIGHTING SYMBOLS AND DESCRIPTION.
- RECESSED 2' X 2' LED LIGHTING FIXTURE WITH STAND-BY BATTERY BACK-UP. REFER TO LIGHTING FIXTURE SCHEDULE.
- $ — WALL RECESS MOUNTED 20 AMP, 277 VOLT, SINGLE POLE LIGHTING TOGGLE SWITCH, HORSEPOWER RATED (COLOR BY ARCHITECT) WITH BRUSHED CHROME FACEPLATE.
- ^{3} — SINGLE POLE TOGGLE SWITCH; 3 -INDICATES 3-WAY SWITCH
- DT$_O$ — WALL SWITCH DUAL TECHNOLOGY SENSOR. PROVIDE WALL PLATE. COLOR SHALL BE APPROVED BY OWNER. PROVIDE WATTSTOPPER CATALOG NUMBER DW-200.
- OS — CEILING MOUNTED INFRARED OCCUPANCY SENSOR.
- DOUBLE CIRCUIT

GENERAL SYMBOLS:

- X / E70 — REFERENCE DETAIL. X DENOTES DETAIL NUMBER. E70 DENOTES DRAWING NUMBER.
- # — KEYED NOTE
- # — REVISION SYMBOL
- (REL) – RELOCATE EXISTING FROM ~ TO
- NO NOMENCLATURE – INDICATES NEW

FIRE ALARM SYMBOLS:

- F — MANUAL FIRE ALARM PULL STATION.
- F — WALL MOUNTED FIRE ALARM HORN
- F — WALL MOUNTED FIRE ALARM STROBE LIGHT
- F — WALL MOUNTED FIRE ALARM HORN/STROBE
- S — FIRE ALARM SMOKE DETECTOR.
- D R,S — FIRE ALARM DUCT MTD. SMOKE DETECTOR. R -RETURN DUCT, S -SUPPLY DUCT
- FACP — FIRE ALARM CONTROL PANEL.

COMMUNICATION SYMBOLS:

- ▼2 — FLUSH WALL MOUNT 4 11/16" SQUARE BACK BOX, 2 1/8" DEEP WITH 1 GANG RAISED COVER FOR TELEPHONE JACK, MOUNTED 18" AFF UON. CONTRACTOR SHALL PROVIDE 1 1/2" CONDUIT FOR USE BY IT CONTRACTOR WHERE WALLS WILL BE CLOSED BEFORE INSTALLATION OF LOW VOLTAGE WIRING. EXTEND CONDUIT 6" ABOVE CEILING SPACE, PROVIDE BUSHING AT CONDUIT END AND GROUND CONDUIT TO NEAREST EFFECTIVELY GROUNDED BUILDING STEEL COLUMN USING #6 AWG COPPER CONDUCTOR. 2 DENOTES TELEPHONE JACKS QUANTITY IF MORE THAN 1.
- ▼ — FLUSH WALL MOUNT 4 11/16" SQUARE BACK BOX, 2 1/8" DEEP WITH 1 GANG RAISED COVER FOR COMBINATION DATA AND TELEPHONE JACK, MOUNTED 18" AFF UON. CONTRACTOR SHALL PROVIDE 1 1/2" CONDUIT FOR USE BY IT CONTRACTOR WHERE WALLS WILL BE CLOSED BEFORE INSTALLATION OF LOW VOLTAGE WIRING. EXTEND CONDUIT 6" ABOVE CEILING SPACE, PROVIDE BUSHING AT CONDUIT END AND GROUND CONDUIT TO NEAREST EFFECTIVELY GROUNDED BUILDING STEEL COLUMN USING #6 AWG COPPER CONDUCTOR.
- ▽2 — FLUSH WALL MOUNT 4 11/16" SQUARE BACK BOX, 2 1/8" DEEP WITH 1 GANG RAISED COVER FOR DATA JACK, MOUNTED 18" AFF UON. CONTRACTOR SHALL PROVIDE 1 1/2" CONDUIT FOR USE BY IT CONTRACTOR WHERE WALLS WILL BE CLOSED BEFORE INSTALLATION OF LOW VOLTAGE WIRING. EXTEND CONDUIT 6" ABOVE CEILING SPACE, PROVIDE BUSHING AT CONDUIT END AND GROUND CONDUIT TO NEAREST EFFECTIVELY GROUNDED BUILDING STEEL COLUMN USING #6 AWG COPPER CONDUCTOR. 2 – DENOTES QUANTITY OF DATA JACKS.
- (S) — EXISTING CEILING MOUNTED INTERCOM. SPEAKER.

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0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

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ELECTRICAL

SCALE: AS NOTED
DRAWN BY:
DESIGNED BY:
CHECKED BY:
APPROVED BY:
PROJECT MANAGER: LG

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
DEMOLITION NOTES ABBREV, AND SYMBOL LISTS

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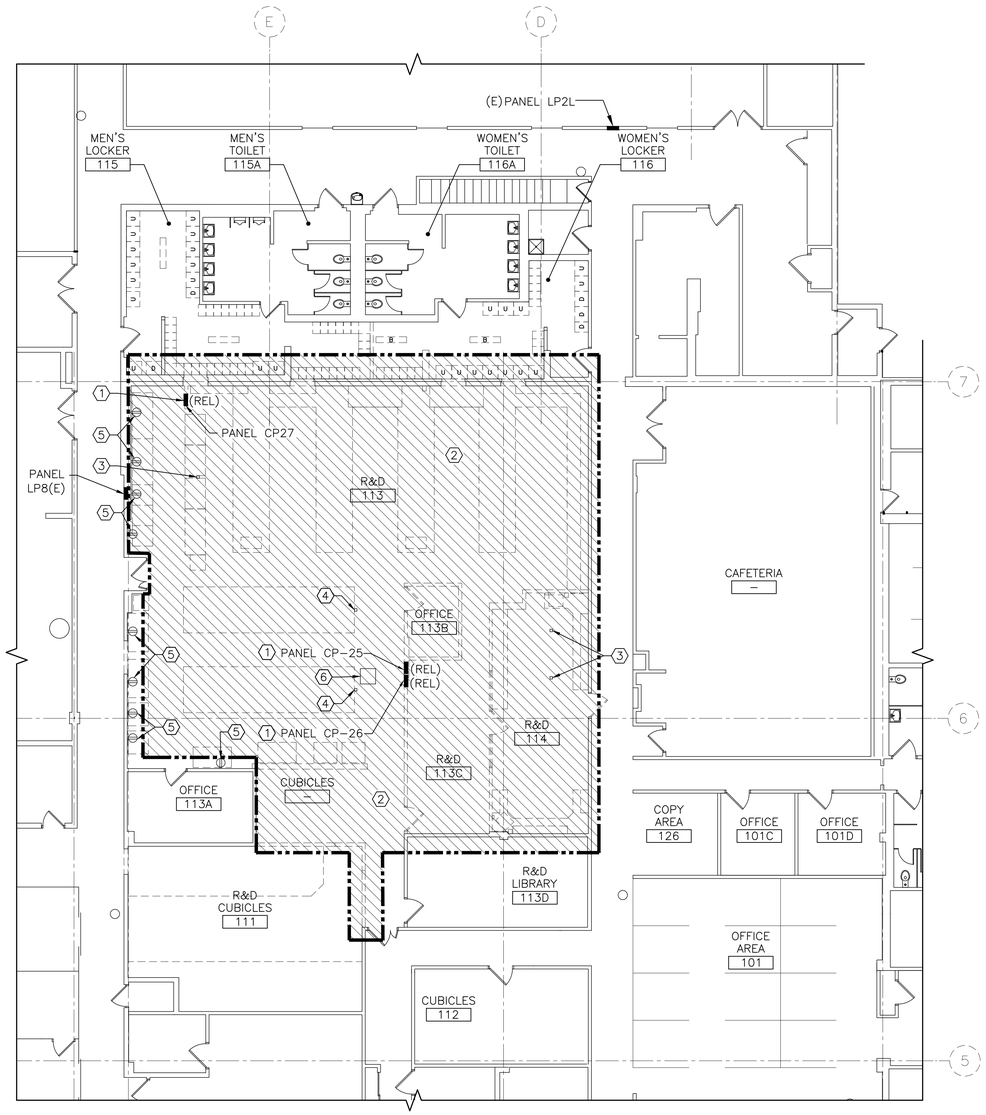
PLAN NORTH



FIRST FLOOR DEMOLITION PLAN

1/8"=1'-0" (1 / ED11)

DEMOLITION KEYED NOTES:

1. CONTRACTOR TO FIELD VERIFY, DISCONNECT AT SOURCE AND REMOVE AND RELOCATE EXISTING 120/208V PANELBOARD(S). REFER TO DWG. E11 FOR NEW LOCATION(S). EXTEND EXISTING CIRCUITS AS REQUIRED TO NEW PANEL LOCATION(S).
2. CONTRACTOR TO REMOVE EXISTING RECEPTACLES, TELCO/DATA OUTLETS, WALL SWITCHES, FIRE ALARM DEVICES AND ASSOCIATED CONDUIT AND WIRE FROM WALLS TO BE DEMOLISHED. REMOVAL OF EXISTING DEVICES SHALL NOT INTERFERE WITH REMAINING DEVICES OPERATIONS. SEE DEMOLITION NOTE 4 ON THIS DRAWING.
3. CONTRACTOR TO REMOVE EXISTING POWER POLE, CONDUIT AND WIRE BACK AS CLOSE TO SOURCE AS PRACTICAL WITHOUT INTERFERING WITH EXISTING CIRCUITS THAT REMAIN.
4. EXISTING POWER POLE TO BE REMOVED. CONDUIT AND WIRE TO BE REMOVED BACK TO SOURCE PANEL AND LABEL CIRCUIT BREAKER AS SPARE.
5. EXISTING RECEPTACLES TO REMAIN.
6. EXISTING PULL BOX LOCATED ABOVE CEILING FOR ROUTING POWER TO PANELS CP-25 AND CP-26. (TO REMAIN)

0 4' 8' 16' 32'

1/8" = 1'-0"

SYMBOLS:

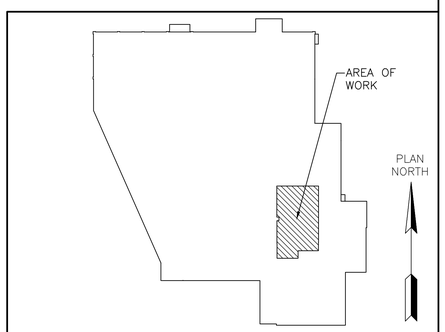
REMOVE/DEMOLISH UON.

(E) DENOTES EXISTING TO REMAIN.

(REL) DENOTES EXISTING TO BE RELOCATED.

DEMOLITION NOTES:

1. REFER TO DRAWING NUMBERS E00 AND E01 FOR GENERAL NOTES, CONDUIT AND WIRE, DEMOLITION, ABBREVIATIONS, SYMBOL LIST AND GROUNDING.
2. THE CONTRACTOR SHALL FIELD VERIFY EXISTING BRANCH CIRCUITS AND FEEDERS PRIOR TO START OF DEMOLITION. BRANCH CIRCUITS AND FEEDERS AFFECTED BY RENOVATION AND DEMOLITION WORK SHALL BE RE-ROUTED, EXTENDED AND/OR REWIRED AS REQUIRED AND IF APPLICABLE FOR NEW CONSTRUCTION.
3. CIRCUIT BREAKERS BEING MADE SPARE BY REMOVALS IN DEMOLISHED AND RENOVATED AREAS MAY BE RE-USED FOR NEW WORK WHEN NO OTHER CIRCUITS IN THE PANEL ARE AVAILABLE. THE CONTRACTOR SHALL DETERMINE ACCURATE EXISTING CIRCUITING ARRANGEMENTS IN THE FIELD AND UPDATE PANEL DIRECTORIES (TYPE WRITTEN) THAT ARE BEING AFFECTED BY THIS WORK.
4. ALL EXISTING WIRING DEVICES, COMMUNICATION, FIRE ALARM, SECURITY/INTRUSION DETECTION SYSTEMS THAT ARE NOT AFFECTED BY CEILING OR WALL REMOVAL IN AREAS OF RENOVATION SHALL REMAIN AND BE FULLY OPERTIONAL UON.
5. ELECTRICAL EQUIPMENT AND WIRING TO BE REMOVED IN RENOVATED AND AFFECTED AREAS IS NOT ALL SHOWN ON THIS DRAWING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY, CONFIRM AND COORDINATE WITH THE OWNER. THERE WILL BE NO EXTRA COST BY THE OWNER FOR ANY MISSED EQUIPMENT AND WIRING TO BE REMOVED.
6. CONTRACTOR IS TO REFER TO MECHANICAL DRAWINGS AND COORDINATE FOR ELECTRICAL EQUIPMENT AND WIRING TO BE REMOVED.
7. THE ELECTRICAL CONTRACTOR IS TO FIELD VERIFY, DISCONNECT AND MAKE SAFE ALL POWER SOURCES BEFORE BEGINNING DEMOLITION.
8. WHETHER SHOWN OR NOT ON THE DEMOLITION PLANS, THE CONTRACTOR IS REQUIRED TO REMOVE, RELOCATE, RECONNECT, AND/OR REWIRE ALL ELECTRICAL, AUXILIARY SYSTEMS AND ASSOCIATED EQUIPMENT AFFECTED BY DEMOLITION, INCLUDING ABANDONED CABLES.
9. THE CONTRACTOR SHALL MAINTAIN POWER TO ANY EXISTING EQUIPMENT THAT IS POWERED FROM BRANCH CIRCUITS IN CONDUITS THAT ARE ROUTED THROUGH THE DEMOLITION AREA. THE CONTRACTOR SHALL RE-ROUTE ANY EXISTING BRANCH CIRCUITS AND ASSOCIATED CONDUITS TO MAINTAIN POWER TO ANY EXISTING EQUIPMENT OUTSIDE OF DEMOLITION EXTENTS.
10. REFER TO MECHANICAL DEMOLITION PLANS FOR MECHANICAL EQUIPMENT TO BE REMOVED. THE CONTRACTOR SHALL REMOVE POWER WIRING, CONDUIT, AND CONNECTIONS FROM EQUIPMENT SHOWN TO BE REMOVED ON MECHANICAL PLANS AND SCHEDULE OUTAGE OF MECHANICAL EQUIPMENT.
11. THE CONTRACTOR SHALL KEEP ALL EGRESS PATHS FREE AND CLEAR AT ALL TIMES.



KEY PLAN – FIRST FLOOR

NTS

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

EI ARCHITECTURE ENGINEERING PLANNING

EI Associates
ARCHITECTS & ENGINEERS, PC
8 RIDGEDALE AVENUE•CEDAR KNOLLS NJ 07927•973.775.7777

GAETANO P. CIPRIANO, P.E. PROFESSIONAL ENGINEER LICENSE NO. NY 064215-1

ELECTRICAL

SCALE	AS NOTED
DRAWN BY:	GCM (INITIALS)
DESIGNED BY:	RCV (INITIALS)
CHECKED BY:	
APPROVED BY:	
PROJECT MANAGER:	RCV (INITIALS)

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
FIRST FLOOR DEMOLITION PLAN

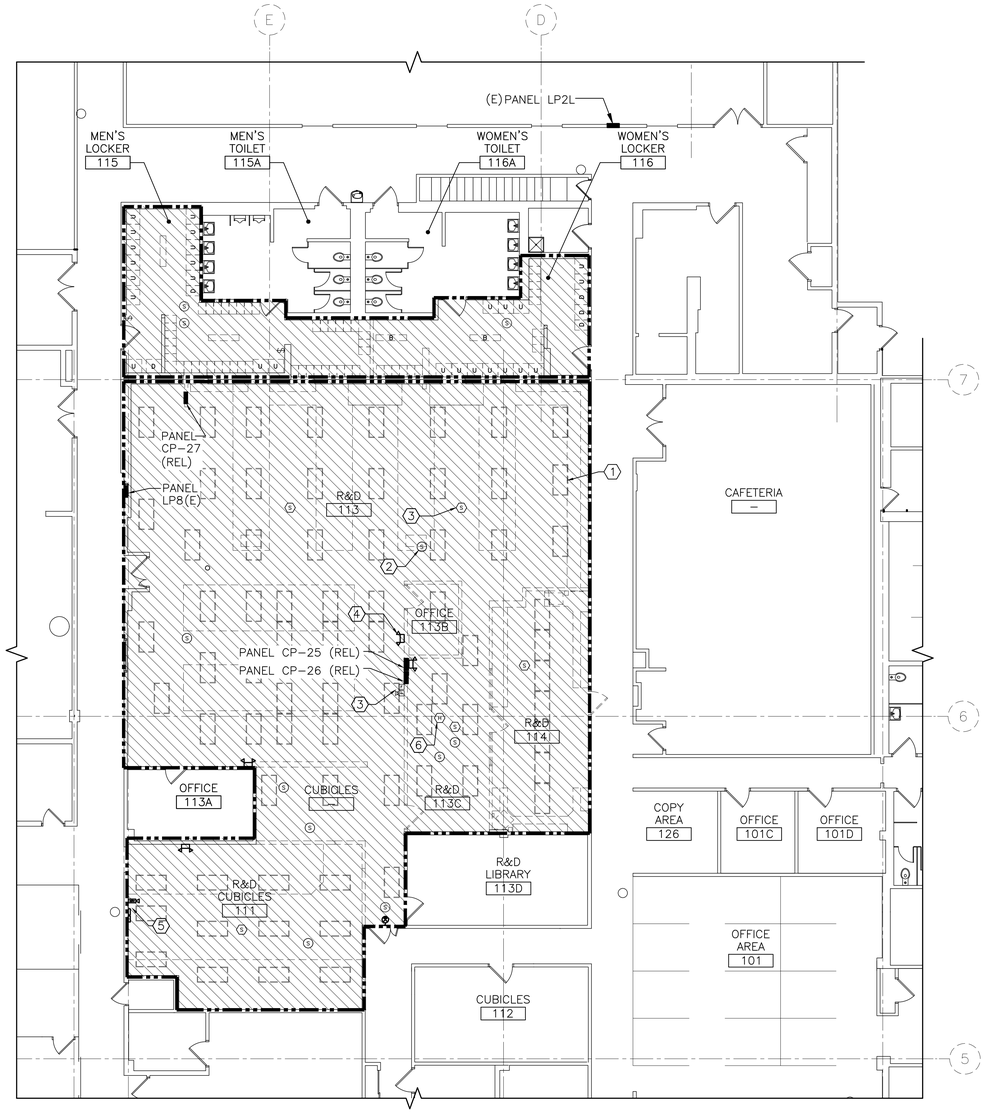
EIA DRAWING NO.
ED11

CLIENT DWG. NO.

EIA PROJECT NO.
EG8577.03

(XX)

PLAN NORTH



FIRST FLOOR DEMOLITION PLAN (1 / ED12)
1/8"=1'-0"

NOTES

1. REFER TO DRAWING NUMBERS E00 AND E01 FOR GENERAL NOTES, CONDUIT AND WIRE, DEMOLITION, ABBREVIATIONS, SYMBOL LIST AND GROUNDING.
2. SEE DEMOLITION NOTES ON DRAWING ED11 FOR ADDITIONAL INFORMATION.

DEMOLITION KEYED NOTES:

1. SOME EXISTING LED LIGHT FIXTURES SHALL BE REMOVED AND RE-USED IN LOCATIONS AS NOTED ON NEW LIGHTING PLAN E21.
2. EXISTING CEILING MOUNTED INTERCOM. SPEAKERS TO BE CAREFULLY REMOVED AND RE-INSTALLED AS PART OF NEW CONSTRUCTION. SEE NEW LIGHTING PLAN E21.
3. EXISTING FIRE ALARM SMOKE DETECTORS AND OTHER FIRE ALARM DEVICES MOUNTED ON WALLS AND CEILING SCHEDULED FOR DEMOLITION ARE TO BE CAREFULLY REMOVED AND RE-INSTALLED AS PART OF NEW CONSTRUCTION. THIS WORK TO BE DONE BY CLIENTS FIRE ALARM CONTRACTOR.
4. EXISTING EMERGENCY LIGHT FIXTURES MOUNTED ON WALLS SCHEDULED FOR DEMOLITION SHALL BE REMOVED AND RE-INSTALLED IN LOCATIONS AS NOTED ON NEW LIGHTING PLAN E21.
5. EXISTING WALL MOUNTED SECURITY CAMERAS TO REMAIN, AND BE PROTECTED DURING DEMOLITION PHASE OF THIS PROJECT. UON.
6. EXISTING HEAT DETECTOR TO BE REMOVED.

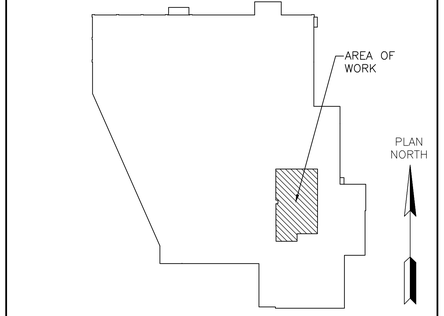
SYMBOLS:

REMOVE/DEMOLISH UON.

(E) EXISTING TO REMAIN.

(REL) DENOTES EXISTING TO BE RELOCATED.

0 4' 8' 16' 32'
1/8" = 1'-0"



KEY PLAN – FIRST FLOOR
NTS

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

EI ARCHITECTURE ENGINEERING PLANNING
EI Associates
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8 RIDGEDALE AVENUE•CEDAR KNOLLS NJ 07927•973.775.7777

GAETANO P. CIPRIANO, P.E. PROFESSIONAL ENGINEER LICENSE NO. NY 064215-1

ELECTRICAL

SCALE	AS NOTED
DRAWN BY:	CRV CHECKED
DESIGNED BY:	RCV CHECKED
CHECKED BY:	
APPROVED BY:	
PROJECT MANAGER:	RCV CHECKED

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
FIRST FLOOR LIGHTING DEMO PLAN

EIA DRAWING NO.
ED12
CLIENT DWG. NO.
EIA PROJECT NO.
EG8577.03

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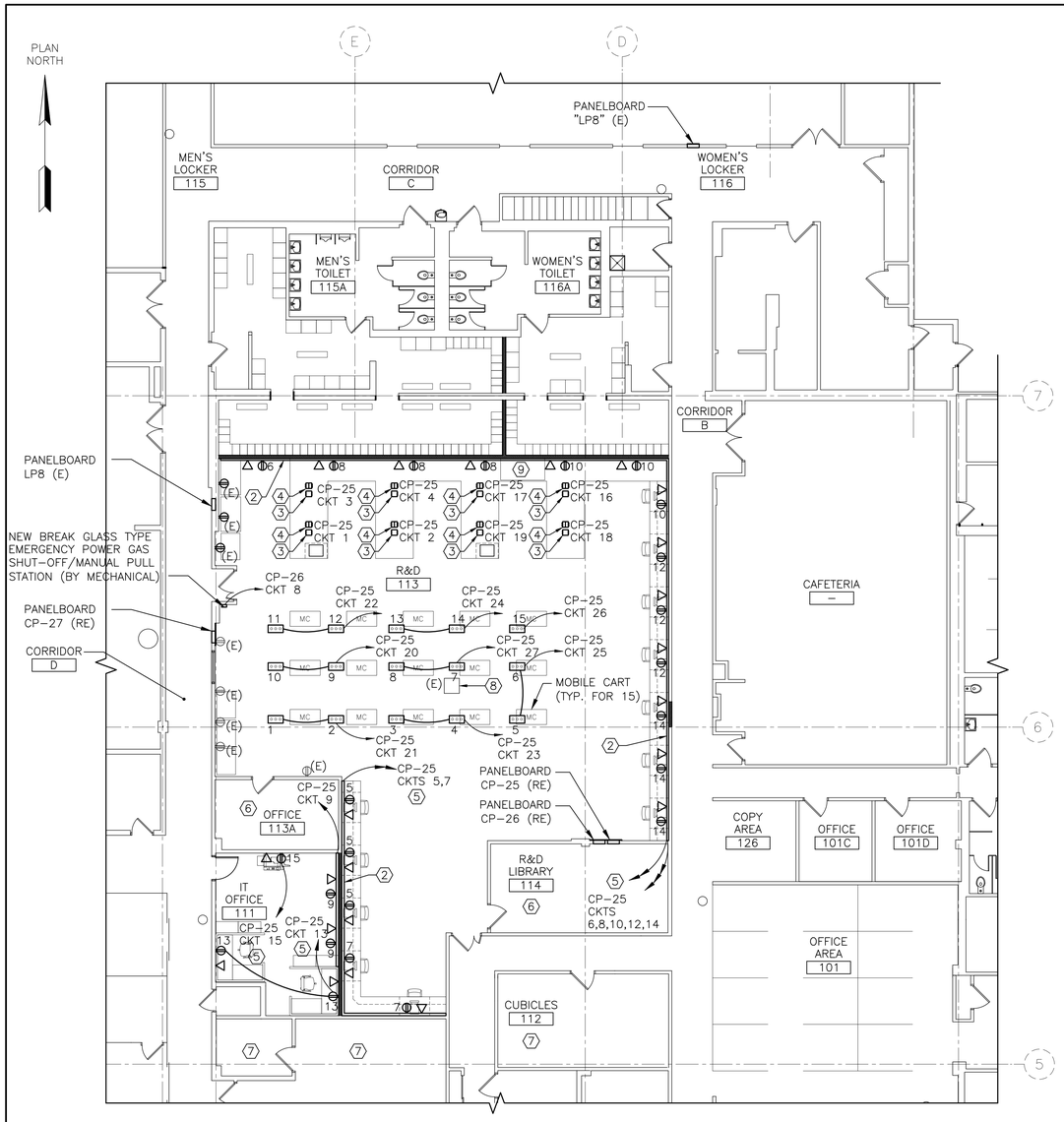


FIRST FLOOR PLAN

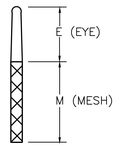
1/8"=1'-0" (1 E11)

KEYED NOTES:

1. NOTE NOT USED.
2. CONTRACTOR TO FURNISH AND INSTALL CONTINUOUS WIREWAY (WIREMOLD DS4000 SERIES DIVIDED RACEWAY WITH 2 SECTIONS FOR POWER AND DATA). COORDINATE LOCATION WITH ARCHITECTURAL DRAWINGS FOR CASEWORK HEIGHTS. MOUNT WIREMOLD 2" ABOVE TOP OF BACKSPLASH TO BOTTOM OF WIREMOLD. WHERE NO BACKSPLASH EXISTS, MOUNT WIREMOLD 6" ABOVE COUNTER/DESKTOP TO BOTTOM OF WIREMOLD.
3. CONTRACTOR TO FURNISH AND INSTALL WIREMOLD 525I SERVICE FITTING WITH 20A 120V DUPLEX RECEPTACLES (BOTH SIDES). COORDINATE LOCATION WITH ARCHITECTURAL DRAWINGS.
4. CONTRACTOR TO FURNISH AND INSTALL WIREMOLD 525 SERVICE FITTING WITH BLANK PLATE FOR DATA/TELCO (BY OTHERS). COORDINATE LOCATION WITH ARCHITECTURAL DRAWINGS FOR CASEWORK DETAILS.
5. CIRCUITING FOR WIREMOLD POWER SHALL BE 120V. RUN 2#12, 1#12G FOR EACH CIRCUIT TO PANEL INDICATED.
6. ELECTRICAL RECEPTACLES TO REMAIN. CONTRACTOR TO REPOWER EXISTING RECEPTACLES TO PANEL AS INDICATED ON E50.
7. CONTRACTOR TO ENSURE THAT OFFICES OUTSIDE THE SCOPE OF WORK ARE NOT IMPACTED BY PANEL RELOCATIONS. EXTEND ANY AFFECTED CIRCUITS AS REQUIRED TO PANEL AS REQUIRED.
8. EXISTING PULL BOX.
9. CONTRACTOR TO REUSE POWER CIRCUIT FOR RELOCATED HOOD.

- SINGLE EYE, CLOSED MESH, STAINLESS STEEL FOR PERMANENT SUPPORT WHEN CABLE END IS AVAILABLE TO BE INSTALLED THROUGH GRIP.

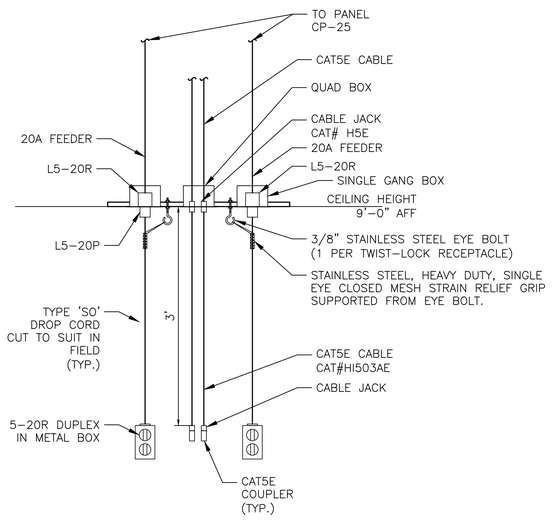
CABLE DIA. RANGE IN INCHES.	APPROX. BREAKING STRENGTH (lbs.)	STAINLESS STEEL E	STAINLESS STEEL M	CAT. NO.
.50"–.62"	1,370	7"	10"	02401013
.63"–.74"	2,060	8"	10"	02401014
.75"–.99"	2,060	8"	13"	02401015
1.00"–1.24"	2,678	9"	14"	02401017
1.25"–1.49"	4,490	10"	15"	02401018
1.50"–1.74"	4,492	12"	17"	02401019



N.T.S.

- BASIS OF DESIGN: KELLEMS STANDARD DUTY SUPPORT GRIPS SINGLE EYE, SINGLE WEAVE, STAINLESS STEEL.
- BASIS OF DESIGN: GRAINGER UNIVERSAL BEAM CLAMP #6H375 1.74 x .93" TAPPED. THREAD SIZE 1/4–20.

NOTE:
CONTRACTOR TO SEAL ALL CEILING PENETRATIONS USING AN APPROVED CAULKING COMPOUND SUITABLE FOR THE AREA.



CEILING MOUNTED UTILITY PLATE

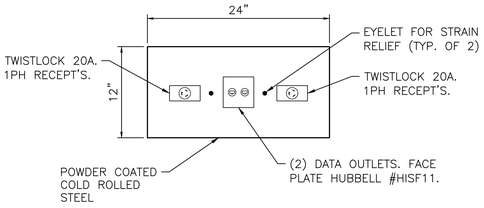
N.T.S. (2 E11)

NOTES:

1. REFER TO DRAWING NUMBERS E00 AND E01 FOR GENERAL NOTES, CONDUIT AND WIRE, DEMOLITION NOTES, ABBREVIATIONS AND SYMBOL LIST.

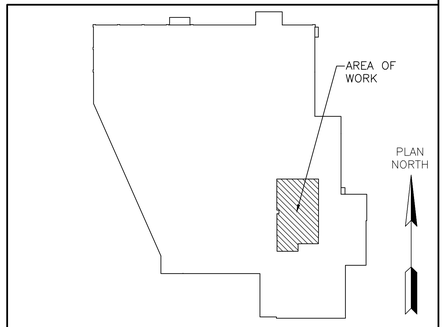
ELECTRICAL NOTES:

1. CIRCUIT NUMBERS SHALL BE AS INDICATED, BUT MAY BE MODIFIED AS REQUIRED TO SUIT FIELD CONDITIONS BASED ON AVAILABILITY OF CIRCUITS IN PANELS AFTER DEMOLITION PHASE.



SERVICE PANEL RECEPT. ARRG'T

NTS (3 E11)



KEY PLAN – FIRST FLOOR

NTS

0 4' 8' 16' 32'

1/8" = 1'-0"

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

EI ARCHITECTURE ENGINEERING PLANNING
EI Associates
ARCHITECTS & ENGINEERS, PC
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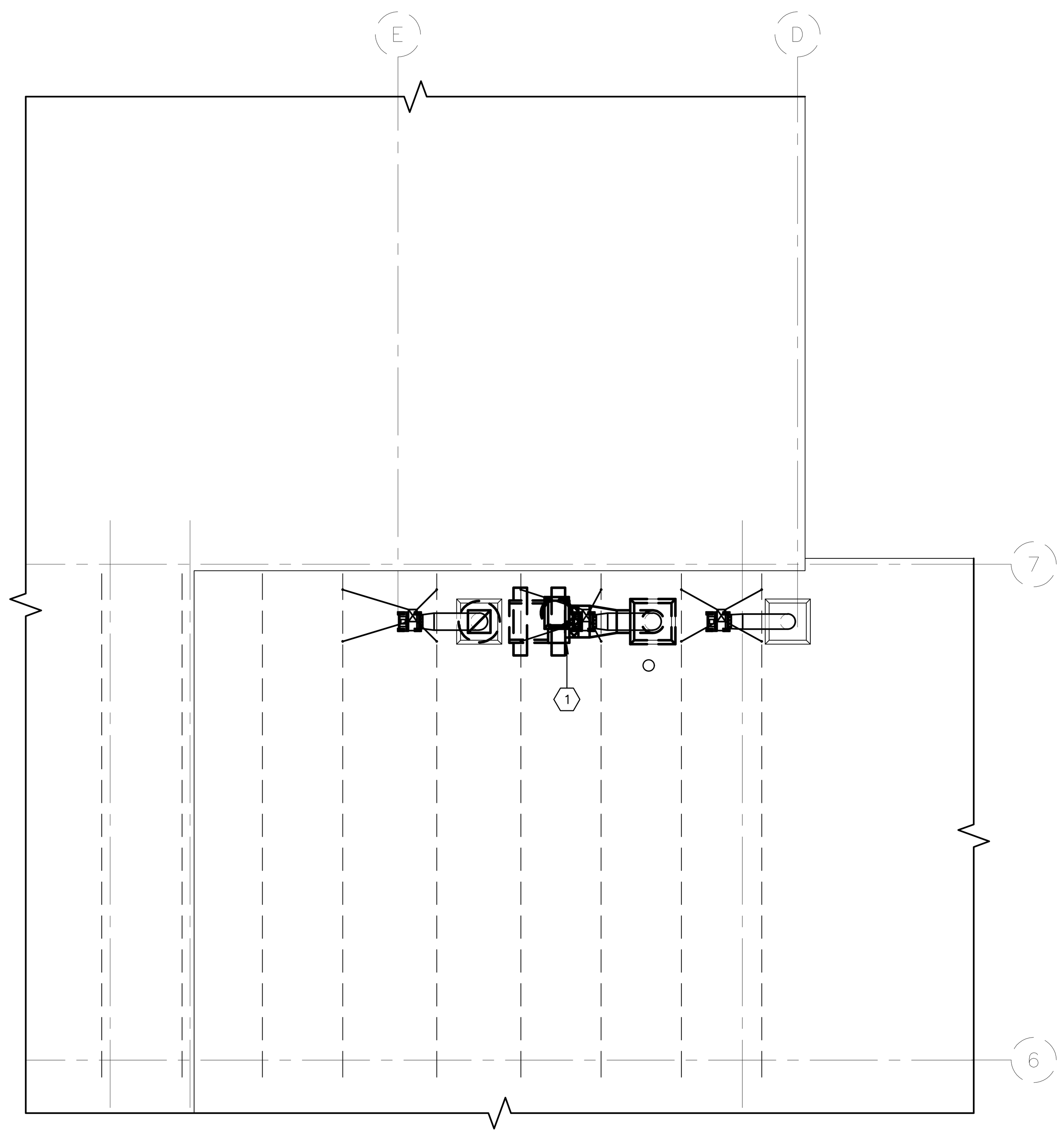
GAETANO P. CIPRIANO, P.E. PROFESSIONAL ENGINEER LICENSE NO. NY 064215–1

ELECTRICAL

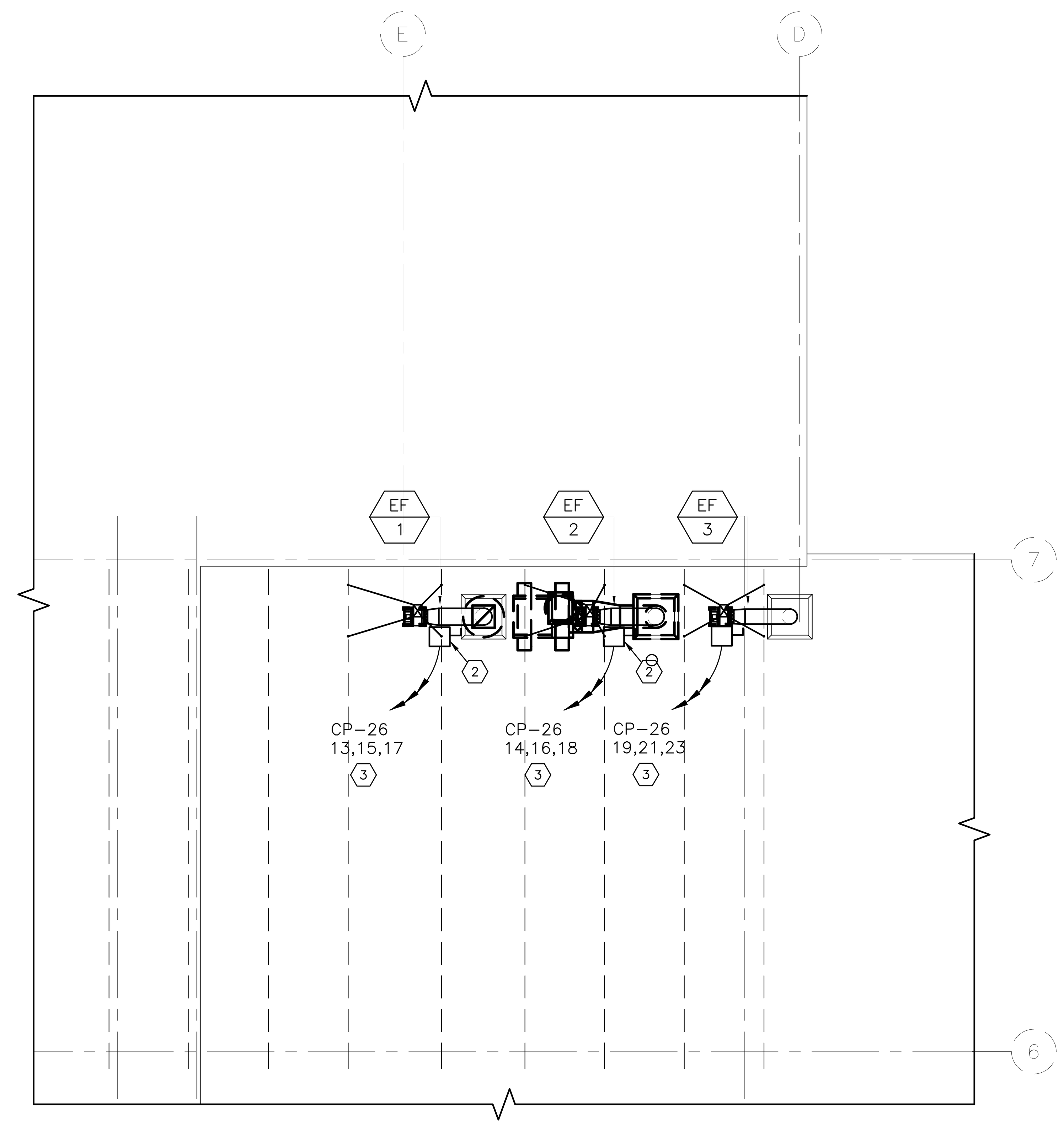
SCALE	AS NOTED
DRAWN BY:	SIGN APPROVED
DESIGNED BY:	SIGN APPROVED
CHECKED BY:	
APPROVED BY:	
PROJECT MANAGER:	SIGN APPROVED
PROJECT	INSTRUMENTATION LABORATORY LOCKER ROOM EXPANSION ORANGEBURG NEW YORK
TITLE	PARTIAL ELECTRICAL PLAN FIRST FLOOR
EIA DRAWING NO.	E11
CLIENT DWG. NO.	– – – – –
EIA PROJECT NO.	EG8577.03

(XX)

PLAN NORTH



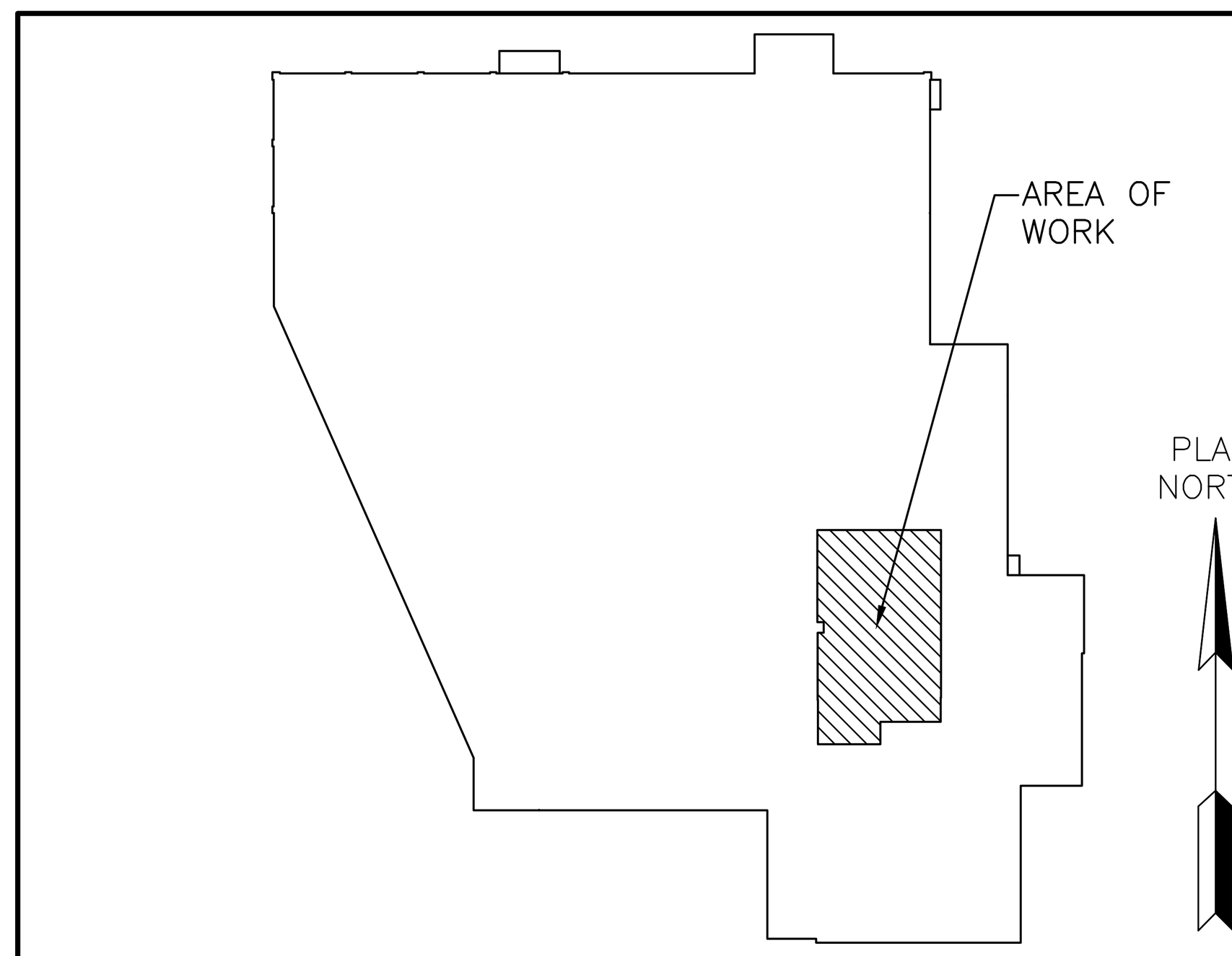
PARTIAL ROOF AREA – DEMOLIOTION PLAN (1/E15)
1/8"=1'-0"



PARTIAL ROOF AREA – NEW WORK PLAN (2/E15)
1/8"=1'-0"

ELECTRIC KEYED NOTES:

1. CONTRACTOR TO COORDINATE ELECTRICAL DISCONNECTION OF EXISTING EXHAUST FAN WITH MECHANICAL CONTRACTOR. REMOVE EXISTING CONDUIT AND WIRE BACK TO SOURCE.
2. CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR THE INSTALLATION OF THE NEW EXHAUST FANS. COORDINATE ALL POWER AND CONTROL WIRING WITH ELECTRICIAN AND CONTROLS CONTRACTOR PRIOR TO BID/CONSTRUCTION. EF-1 AND EF-2 SHALL BE OPERATED ON A TIME CLOCK CONTROLLER WITH A MANUAL SWITCH OVERRIDE. COORDINATE LOCATION OF TIME COCK CONTROLLERS WITH MECHANICAL CONTRACTOR. DISCONNECT SWITCH PROVIDED WITH UNIT.
3. CONTRACTOR TO RUN 3#12, 1#12G IN 3/4"C TO PANEL CP-26.



KEY PLAN – FIRST FLOOR
NTS

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

0 4' 8' 16' 32'
1/8" = 1'-0"

EI Associates
ARCHITECTS & ENGINEERS, PC
ARCHITECTURE ENGINEERING PLANNING
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GAETANO P. CIPRIANO, P.E. PROFESSIONAL ENGINEER LICENSE NO. NY 064215-1

ELECTRICAL

SCALE: AS NOTED
DRAWN BY: SRN
DESIGNED BY: BCH
CHECKED BY:
APPROVED BY:
PROJECT MANAGER: BCH

PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE: ROOF PLAN

EIA DRAWING NO. E15
CLIENT DWG. NO. – – – –
EIA PROJECT NO. EG8577.03

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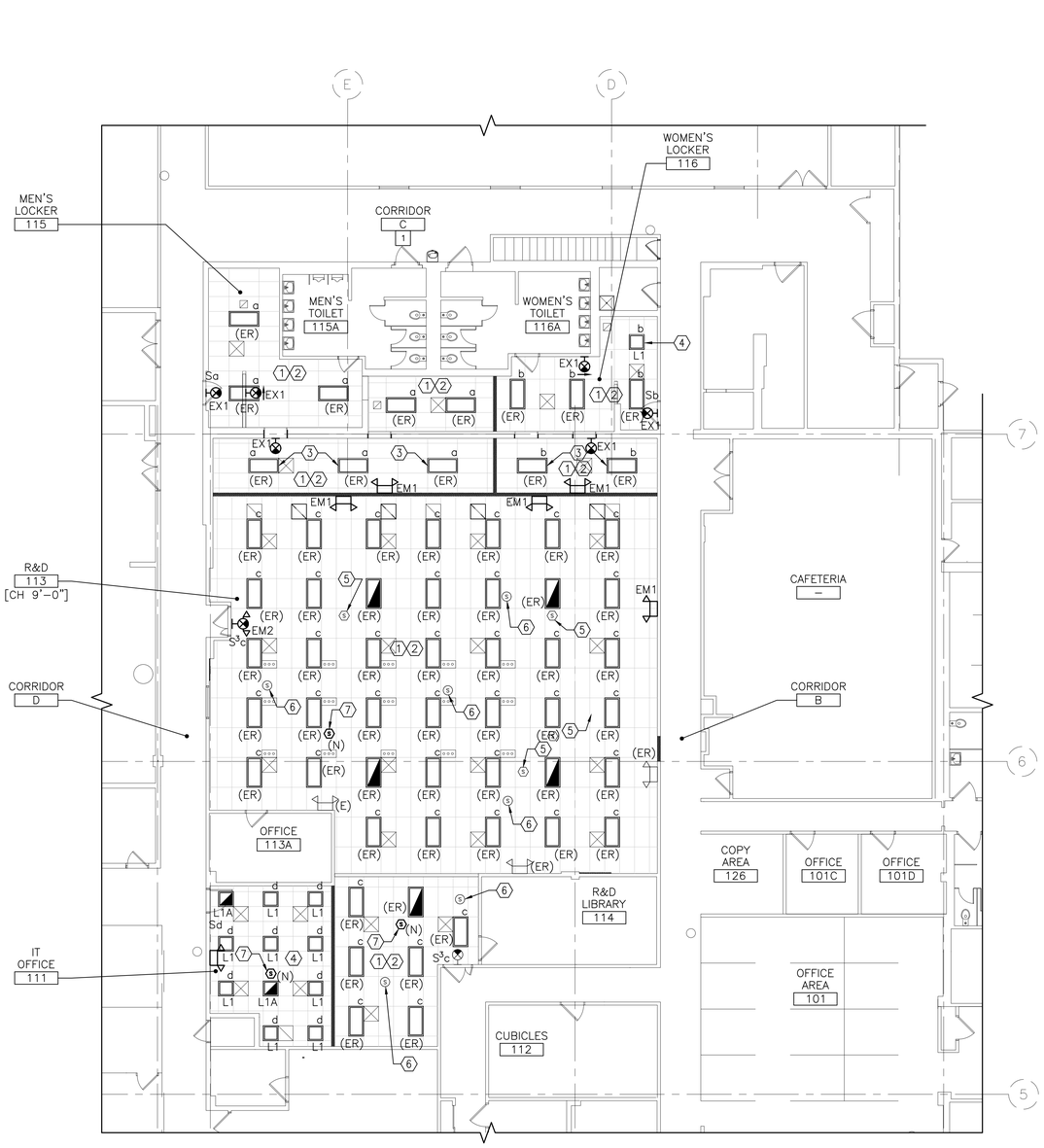


FIRST FLOOR PLAN (1 / E21)
1/8"=1'-0"

SYMBOLS LIST:

- (E) DENOTES EXISTING/EXISTING TO REMAIN
- (N) DENOTES NEW DEVICE
- a INDICATES CONTROLLED CIRCUIT
- LIGHT FIXTURE
- L1 FIXTURE TYPE–SEE LIGHTING SCHEDULE
- (SP) CEILING MOUNTED SPEAKER
- Sa WALL RECESS MOUNTED 20 AMP, 277 VOLT, SINGLE POLE LIGHTING TOGGLE SWITCH (COLOR BY ARCHITECT) WITH BRUSHED CHROME FACEPLATE.
  a – INDICATES CONTROLLED CIRCUIT.
- S^3 SINGLE POLE TOGGLE SWITCH
  3 – INDICATES 3–WAY SWITCH
- NIGHT LIGHT FIXTURE. WIRE AHEAD OF SWITCH.

KEYED NOTES

1. CONTRACTOR TO REUSE CIRCUITS FROM DEMOLITION PHASE FOR RELOCATED LIGHT FIXTURES.
2. LIGHT FIXTURES LABELED (ER) ARE EXISTING AND SHALL BE CLEANED AND TESTED PRIOR TO RE–INSTALLATION. ALL SURPLUS EXISTING LIGHT FIXTURES ARE TO BE RETURNED TO THE OWNER IN GOOD CONDITION. (CONTRACTOR TO ONLY USE FIXTURES WITHOUT BATTERY BACK UP UNLESS NOTED ON DRAWING.)
3. EXTEND LIGHTING CIRCUIT FROM LOCKER ROOM CIRCUIT FOR RELOCATED LIGHT FIXTURES IN LOCKER ROOM ADDITION.
4. NEW LIGHT FIXTURES–POWER WITH EXISTING CIRCUIT FROM DEMOLITION PHASE OF WORK.
5. EXISTING FIRE ALARM SMOKE DETECTORS RE–INSTALLED AS PART OF NEW CONSTRUCTION. THIS WORK TO BE DONE BY CLIENTS FIRE ALARM CONTRACTOR.
6. EXISTING CEILING MOUNTED INTERCOM SPEAKERS RE–INSTALLED AS PART OF NEW CONSTRUCTION. COORDINATE LOCATIONS WITH OWNER.
7. NEW SMOKE DETECTOR. THIS WORK TO BE DONE BY CLIENTS FIRE ALARM CONTRACTOR.

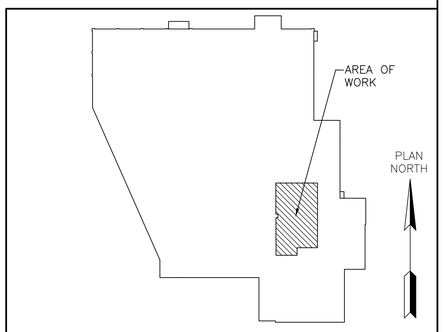
NOTES:

1. REFER TO DRAWING NUMBER E00 AND E01 FOR ABBREVIATIONS, LEGEND, SYMBOLS, GENERAL NOTES, CONDUIT AND WIRE NOTES, DEMOLITION NOTES. REFER TO DRAWING NUMBER E60 FOR FIRE ALARM NOTES.
2. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR LOCATION OF NEW AND/OR RELOCATED LIGHTING FIXTURES AND MOUNTING HEIGHTS OF FIXTURES.
3. SEE MECHANICAL DRAWINGS FOR EXACT LOCATION OF MECHANICAL EQUIPMENT.
4. CONNECT LIGHTING FIXTURES THRU SWITCHES AND OCCUPANCY SENSORS AS SHOWN IN EXISTING SPACES BEING RENOVATED AND NEW SPACES TO NEW AND/OR RELOCATED LIGHTING CIRCUITS.
5. UTILIZE EXISTING LIGHTING CIRCUIT HOMERUNS VACATED BY DEMOLITION PHASE WHERE INDICATED ON THE PLANS. HANDLE WITH CARE, PROTECT AND SAFEGUARD EXISTING LIGHTING CIRCUIT HOMERUN TO BE UTILIZED AT ALL TIMES DURING CONSTRUCTION TO PREVENT FROM ANY ACCIDENTAL AND POSSIBLE DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE AND BEAR THE COST OF REPLACING DAMAGED CIRCUIT(S) DUE TO HIS FAILURE TO PROTECT THE FIXTURES.
6. COORDINATE MOUNTING HEIGHTS AND LOCATION OF ALL LIGHTING FIXTURES, SWITCHES, LIGHTING CONTROLS, ETC WITH ARCHITECTURAL, MECHANICAL AND STRUCTURAL PLANS.
7. PROVIDE PULL WIRES IN ALL EMPTY CONDUITS.
8. ALL LIGHT FIXTURES AND ILLUMINATED EXIT LIGHTS HAVING EMERGENCY BATTERY PACKS SHALL BE CONNECTED AHEAD OF LIGHT OCCUPANCY SENSOR/POWER PACK AND LIGHT SWITCH (UNSWITCHED PHASE CONDUCTOR) OF THE PARTICULAR CIRCUIT INDICATED.
9. COORDINATE THE INSTALLATION OF LIGHTING FIXTURE ABOVE THE CEILING TO PROVIDE THE GREATEST POSSIBLE CLEARANCE FOR PLUMBING AND MECHANICAL EQUIPMENT AND BOTH CURRENT AND FUTURE. CONDUITS SHALL BE RACKED, AND KEPT TIGHT TO STRUCTURE OR ROUTED THROUGH STRUCTURAL TRUSSES WHEREVER POSSIBLE. LOCATE LIGHTING FIXTURES TO ENSURE LIGHT IS EVENLY DISTRIBUTED THROUGHOUT THE ROOM. TYPICAL OF ROOMS THAT ARE OPEN TO THE STRUCTURE ABOVE.
10. SUPPORT ALL LIGHTING FIXTURES FROM THE BUILDING STRUCTURE. DO NOT SUPPORT FIXTURES FROM CEILING GRID SYSTEM SUPPORTED WIRES.
11. WIRE NEW LIGHTING FIXTURES AND LIGHTING CONTROL DEVICES TO EXISTING LIGHTING CIRCUIT HOMERUN VACATED BY DEMOLITION PHASE INDICATED ON THE PLANS UON.
12. CONNECT NEW LIGHTING FIXTURES THRU NEW SWITCHES AS SHOWN IN RENOVATION AREAS TO EXISTING LIGHTING CIRCUIT HOMERUN SERVING THESE AREAS. THE CONTRACTOR SHALL UPDATE EXISTING PANELBOARD DIRECTORIES THAT ARE BEING AFFECTED BY HIS WORK. THE CONTRACTOR SHALL FIELD VERIFY NEW LIGHTING FIXTURES AND SWITCHES TO MATCH EXISTING LIGHTING CIRCUIT VOLTAGE, WIRE GAUGE, MATERIAL AND INSULATION TYPE. CONNECT NO MORE THAN 1920VA AND 4000VA PER 20A, 1–POLE, 120 VOLTS AND 277 VOLTS CIRCUIT BREAKER, RESPECTIVELY.
13. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE PERMANENT PRINTED LEGIBLE ADHESIVE TYPE ID LABEL IDENTIFYING THE LIGHTING PANEL FIXTURE AND LIGHTING CONTROL DEVICE ON FIXTURE HOUSING AND DEVICE FACEPLATE, RESPECTIVELY, WITH THE ACTUAL POWER SOURCE PANEL AND CIRCUIT NUMBER. THE CONTRACTOR SHALL UPDATE PANELBOARD DIRECTORIES.
14. FLOOR SLAB CHASE, CORE DRILL OR ANY FORM OF CUTTING SHALL BE REQUESTED TO THE OWNER OR HIS AUTHORIZED REPRESENTATIVE FOR APPROVAL AND IN WRITING.
15. THE CONTRACTOR IS TO FIELD VERIFY BOTH SIDES OF FLOOR DECKING BEFORE DRILLING BEGINS SO AS TO AVOID CONTACT WITH ANY CONCEALED AND SURFACE MOUNTED PIPING, DUCTWORK OR OTHER OBSTRUCTION THAT MAY BE PRESENT ON THE FLOOR BELOW. THE CONTRACTOR IS TO REPORT ANY POSSIBLE INTERFERENCE TO THE OWNER OR OWNER'S REPRESENTATIVE FOR A SOLUTION.
16. EXISTING ELECTRICAL AND AUXILIARY SYSTEMS SHALL REMAIN IN NORMAL AND FULL OPERATION, UON. IN ROOMS AND AREAS NOT INCLUDED IN THE CONTRACT AFFECTED BY DEMOLITION AND RENOVATION WORK SHALL BE RECONNECTED TO NEAREST PANELBOARD. WHEN REWIRING EXISTING 15A AND 20A ELECTRICAL TO REMAIN OR EXISTING CIRCUITS TO UTILIZE, IT SHALL NOT EXCEED TOTAL CONNECTED LOAD OF 10 AMPS AND 14 AMPS AT 120V PER CIRCUIT, RESPECTIVELY, TYPICAL FOR 277V.
17. FOR ELECTRICAL PANEL LOCATIONS SEE DRAWING E11.

LIGHTING FIXTURE SCHEDULE

SYMBOL	LABEL/QTY	MANUFACTURER	DESCRIPTION AND CAT. NO.	TYPE	VOLTS	WATTS
□	L1	MERCURY LIGHTING	2' X 2' LED TROFFER LIGHTING FIXTURE, RECESSED MOUNT, 3000 LUMENS, 80 CRI LIGHT QUALITY, 0–10V DIMMING, STEEL HOUSING, ULTRA–THIN 3–1/2" FIXTURE HEIGHT AND T–BARCLIPS. MADE IN USA. MERCURY LIGHTING CATALOG NO. LR302–22G–3000–35K–1%–UNI (NO SUBSTITUTIONS)	LED	120/277	28
◪	L1A	MERCURY LIGHTING	2' X 2' LED TROFFER LIGHTING FIXTURE, RECESSED MOUNT, 3000 LUMENS, 80 CRI LIGHT QUALITY, 0–10V DIMMING, STEEL HOUSING, ULTRA–THIN 3–1/2" FIXTURE HEIGHT AND T–BARCLIPS. WITH 7W STANDBY LIGHTING OPTION. MADE IN USA. MERCURY LIGHTING CATALOG NO. LR302–22G–3000–35K–1%–UNI (NO SUBSTITUTIONS)	LED	120/277	35
⊗	EX1	MULE LIGHTING	LED EXIT SIGN, UL94V–0 FLAME RATING MULE LIGHTING CATALOG NUMBER: MXBRU–SD–USA (NO SUBSTITUTIONS)	LED	120/277	NA
⊏⊐	EM1	MULE LIGHTING	LED EMERGENCY LIGHT, UL94V FLAME RATING MULE LIGHTING CATALOG NUMBER: SQ–LED–W–SD (NO SUBSTITUTIONS)	LED	120/277	NA
⊗	EM2	MULE LIGHTING	LED EXIT SIGN AND EMERGENCY LIGHT COMBO, UL94V FLAME RATING MULE LIGHTING CATALOG NUMBER: SQC–LED–R–WW–SD (NO SUBSTITUTIONS)	LED	120/277	NA

0 4' 8' 16' 32'
⅛" = 1'–0"



KEY PLAN – FIRST FLOOR
NTS

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

EI ARCHITECTURE ENGINEERING PLANNING
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ELECTRICAL

SCALE AS NOTED
DRAWN BY:
DESIGNED BY:
CHECKED BY:
APPROVED BY:
PROJECT MANAGER:

PROJECT
INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE
FIRST FLOOR REFLECTED CEILING PLAN

EIA DRAWING NO.
E21

CLIENT DWG. NO.
– – – – –

EIA PROJECT NO.
EG8577.03

(XX)

PANELBOARD NAME: PANEL CP-25 — 10,000 RMS SYMMETRICAL A.I.C.
PANELBOARD TYPE: — FLUSH MOUNTED, NEMA 1 ENCLOSURE
PANEL LOCATION: R&D 113 — 208Y/120 VOLTS, 3 PHASE, 4 WIRE, 60 Hz — 100 AMP MAINS
SUPPLIED FROM: PANEL DP-2 — RELOCATED PANEL

CKT NO.	TRIP AMPS	NO. POLES	WIRE / GND / COND	LOAD SERVED	LOAD VA	Ø	LOAD VA	LOAD SERVED	WIRE / GND / COND	NO. POLES	TRIP AMPS	CKT NO.
1	20	1	2#12 , #12 GND, 3/4" C	**RECEPTACLE (DOGHOUSE)**	800	A	800	**RECEPTACLE (DOGHOUSE)**	2#12 , #12 GND, 3/4" C	1	20	2
3	20	1	2#12 , #12 GND, 3/4" C	**RECEPTACLE (DOGHOUSE)**	800	B	800	**RECEPTACLE (DOGHOUSE)**	2#12 , #12 GND, 3/4" C	1	20	4
5	20	1	2#12 , #12 GND, 3/4" C	**WIREMOLD R&D 113**	800	C	800	**WIREMOLD R&D 113**	2#12 , #12 GND, 3/4" C	1	20	6
7	20	1	2#12 , #12 GND, 3/4" C	**WIREMOLD R&D 113**	800	A	800	**WIREMOLD R&D 113**	2#12 , #12 GND, 3/4" C	1	20	8
9	20	1	2#12 , #12 GND, 3/4" C	**WIREMOLD IT OFFICE 111**	800	B	800	**WIREMOLD R&D 113**	2#12 , #12 GND, 3/4" C	1	20	10
11	20	1	2#12 , #12 GND, 3/4" C	**EMERGENCY LIGHTS**	800	C	800	**WIREMOLD R&D 113**	2#12 , #12 GND, 3/4" C	1	20	12
13	20	1	2#12 , #12 GND, 3/4" C	**CUBICLES IT OFFICE 111**	800	A	800	**WIREMOLD R&D 113**	2#12 , #12 GND, 3/4" C	1	20	14
15	20	1	2#12 , #12 GND, 3/4" C	**PRINTER IT OFFICE 111**	1000	B	800	**RECEPTACLE (DOGHOUSE)**	2#12 , #12 GND, 3/4" C	1	20	16
17	20	1	2#12 , #12 GND, 3/4" C	**RECEPTACLE (DOGHOUSE)**	800	C	800	**RECEPTACLE (DOGHOUSE)**	2#12 , #12 GND, 3/4" C	1	20	18
19	20	1	2#12 , #12 GND, 3/4" C	**RECEPTACLE (DOGHOUSE)**	800	A	720	**CEILING PLATES 9,10**	2#12 , #12 GND, 3/4" C	1	20	20
21	20	1	2#12 , #12 GND, 3/4" C	**CEILING PLATES 1,2**	720	B	720	**CEILING PLATES 11,12**	2#12 , #12 GND, 3/4" C	1	20	22
23	30	1	2#12 , #12 GND, 3/4" C	**CEILING PLATES 3,4**	720	C	720	**CEILING PLATES 13,14**	2#12 , #12 GND, 3/4" C	1	20	24
25	20	1	2#12 , #12 GND, 3/4" C	**CEILING PLATES 5,6**	720	A	360	**CEILING PLATE 15**	2#12 , #12 GND, 3/4" C	1	20	26
27	20	1	2#12 , #12 GND, 3/4" C	**CEILING PLATES 7,8**	720	B		**SPARE**		1	20	28
29	20	1		**SPARE**		C		**SPARE**		1	20	30
31	20	1		**SPARE**		A		**SPARE**		1	20	32
33	20	1		**SPARE**		B		**SPARE**		1	20	34
35	20	1		**SPARE**		C		**SPARE**		1	20	36
37	20	1		**SPARE**		A		**SPARE**		1	20	38
39	20	1		**SPARE**		B		**SPARE**		1	20	40
41	20	1		**SPARE**		C		**SPARE**		1	20	42

TOTAL CONNECTED LOAD = 20.8 kVA X 76% DEMAND FACTOR = 15.8 kVA ESTIMATED DEMAND LOAD
PHASE BALANCE (KVA) - A: 7.4 , B: 7.2 , C: 6.2 DESIGN LOAD = 44 AMPERES, TOTAL LOAD WITH EXPANSION = 66 AMPERES

EXISTING 208/120VAC PANEL CP–25 (1/E50)

PANELBOARD NAME: PANEL CP-26 — 10,000 RMS SYMMETRICAL A.I.C.
PANELBOARD TYPE: — FLUSH MOUNTED, NEMA 1 ENCLOSURE
PANEL LOCATION: R&D 113 — 208Y/120 VOLTS, 3 PHASE, 4 WIRE, 60 Hz — 225 AMP MAINS
SUPPLIED FROM: PANEL DP-2 — RELOCATED PANEL

CKT NO.	TRIP AMPS	NO. POLES	WIRE / GND / COND	LOAD SERVED	LOAD VA	Ø	LOAD VA	LOAD SERVED	WIRE / GND / COND	NO. POLES	TRIP AMPS	CKT NO.
1	20	1	2#12 , #12 GND, 3/4" C	**OUTLETS OFFICE 113A**	800	A	800	**OUTLETS R&D LIBRARY 114**	2#12 , #12 GND, 3/4" C	1	20	2
3	20	1	2#12 , #12 GND, 3/4" C	**OUTLETS OFFICE 113A**	800	B	800	**OUTLETS R&D LIBRARY 114**	2#12 , #12 GND, 3/4" C	1	20	4
5	20	1		**SPARE**		C	800	**OUTLETS R&D LIBRARY 114**	2#12 , #12 GND, 3/4" C	1	20	6
7	20	1		**SPARE**		A	180	**EMERGENCY GAS SHUTOFF**	2#12 , #12 GND, 3/4" C	1	20	8
9	20	1		**SPARE**		B		**SPARE**		1	20	10
11	20	1		**SPARE**		C		**SPARE**		1	20	12
13	20	3	3#12 , #12 GND, 3/4" C	**EF-1**	550	A	550	**EF-2**	3#12 , #12 GND, 3/4" C	3	20	14
					550	B	550					
					550	C	550					
19	20	3	3#12 , #12 GND, 3/4" C	**EF-3**	550	A		**SPARE**		2	20	20
					550	B						
					550	C		**SPARE**		2	20	24
25	40	1		**SPARE**		A						
27	30	2		**SPARE**		B		**SPARE**		2	30	28
						C						
31	30	3		**SPARE**		A		**PANEL CP-27**		3	100	32
						B						
						C						
37	30	2		**SPARE**		A		**SPARE**		1	20	38
						B		**SPARE**		1	20	40
41	20	1		**SPARE**		C		**SPARE**		1	20	42

TOTAL CONNECTED LOAD = 9.1 kVA X 100% DEMAND FACTOR = 9.1 kVA ESTIMATED DEMAND LOAD
PHASE BALANCE (KVA) - A: 3.4 , B: 3.3 , C: 2.5 DESIGN LOAD = 25 AMPERES, TOTAL LOAD WITH EXPANSION = 38 AMPERES

EXISTING 208/120VAC PANEL CP–26 (2/E50)

PANELBOARD NAME: PANEL CP-27 — 10,000 RMS SYMMETRICAL A.I.C.
PANELBOARD TYPE: — SURFACE MOUNTED, NEMA 1 ENCLOSURE
PANEL LOCATION: R&D 113 — 208Y/120 VOLTS, 3 PHASE, 4 WIRE, 60 Hz — 100 AMP MAINS
SUPPLIED FROM: PANEL CP-26 — RELOCATED PANEL

CKT NO.	TRIP AMPS	NO. POLES	WIRE / GND / COND	LOAD SERVED	LOAD VA	Ø	LOAD VA	LOAD SERVED	WIRE / GND / COND	NO. POLES	TRIP AMPS	CKT NO.
1	20	2		**SPARE**		A		SPARE		2	15	2
						B						
5	20	1		**SPARE**		C	800	OUTLET LEFT OF DOOR (EXIST)	2#12 , #12 GND, 3/4" C	1	20	6
7	20	1		**SPARE**		A	800	OUTLET LEFT OF DOOR (EXIST)	2#12 , #12 GND, 3/4" C	1	20	8
9	20	1		**SPARE**		B	800	OUTLET LEFT OF DOOR (EXIST)	2#12 , #12 GND, 3/4" C	1	20	10
11	20	1		**SPARE**		C	800	OUTLET LEFT OF DOOR (EXIST)	2#12 , #12 GND, 3/4" C	1	20	12
13	20	1		**SPARE**		A	800	OUTLET LEFT OF DOOR (EXIST)	2#12 , #12 GND, 3/4" C	1	20	14
15	20	1		**SPARE**		B		SPARE		1	20	16
17	20	1		**SPARE**		C		SPARE		1	20	18
19	20	1		**SPARE**		A		SPARE		1	20	20
21	20	1		**SPARE**		B		SPARE		1	20	22
23	20	1		**SPARE**		C		SPARE		1	20	24

TOTAL CONNECTED LOAD = 4 kVA X 100% DEMAND FACTOR = 4 kVA ESTIMATED DEMAND LOAD
PHASE BALANCE (KVA) - A: 1.6 , B: 0.8 , C: 1.6 DESIGN LOAD = 11 AMPERES, TOTAL LOAD WITH EXPANSION = 17 AMPERES

EXISTING 208/120VAC PANEL CP–27 (3/E50)

PANELBOARD NAME: PANEL LP-8 — 18,000 RMS SYMMETRICAL A.I.C.
PANELBOARD TYPE: — FLUSH MOUNTED, NEMA 1 ENCLOSURE
PANEL LOCATION: R&D 113 — 480Y/277 VOLTS, 3 PHASE, 4 WIRE, 60 Hz — 225 AMP MAINS
SUPPLIED FROM: BOILER ROOM PANEL K — EXISTING PANEL

CKT NO.	TRIP AMPS	NO. POLES	WIRE / GND / COND	LOAD SERVED	LOAD VA	Ø	LOAD VA	LOAD SERVED	WIRE / GND / COND	NO. POLES	TRIP AMPS	CKT NO.
1	20	1		WAREHOUSE LIGHTS		A		WAREHOUSE LIGHTS		1	20	2
3	20	1		WAREHOUSE LIGHTS		B		WAREHOUSE LIGHTS		1	20	4
5	20	1		WAREHOUSE LIGHTS		C		WAREHOUSE LIGHTS		1	20	6
7	20	1		WAREHOUSE LIGHTS		A		WAREHOUSE LIGHTS		1	20	8
9	20	1		WAREHOUSE LIGHTS		B		WAREHOUSE LIGHTS		1	20	10
11	20	1		WAREHOUSE LIGHTS		C		WAREHOUSE LIGHTS		1	20	12
13	20	1		WAREHOUSE LIGHTS		A		WAREHOUSE LIGHTS		1	20	14
15	20	1		WAREHOUSE LIGHTS		B		WAREHOUSE LIGHTS		1	20	16
17	20	1		WAREHOUSE LIGHTS		C		SPARE		1	20	18
19	20	1		SPACE		A		SPARE		1	20	20
21	30	1		SPACE		B		SPARE		1	20	22
23	20	1		SPACE		C		SPARE		1	20	24
25	20	1		SPACE		A		SPARE		1	20	26
27	20	1		EXIT LIGHTS		B		SPARE		1	20	28
29	20	1		SPARE		C		SPARE		1	20	30
31	20	1		SPARE		A		HEATERS		1	20	32
33	20	1		SPARE		B		EXHAUST FANS		1	20	34
35	20	1		SPARE		C		TEMP EXHAUST FANS		1	20	36

TOTAL CONNECTED LOAD = 0 kVA X 0% DEMAND FACTOR = 0 kVA ESTIMATED DEMAND LOAD
PHASE BALANCE (KVA) - A: 0 , B: 0 , C: 0 DESIGN LOAD = 0 AMPERES, TOTAL LOAD WITH EXPANSION = 0 AMPERES

PANEL SHOWN FOR REFERENCE ONLY

EXISTING 480/277VAC PANEL LP–8 (4/E50)

REV	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21

EI ARCHITECTURE ENGINEERING PLANNING
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GAETANO P. CIPRIANO, P.E. PROFESSIONAL ENGINEER LICENSE NO. NY 064215–1

ELECTRICAL

SCALE: AS NOTED
DRAWN BY: DATE ISSUED
DESIGNED BY: DATE ISSUED
CHECKED BY:
APPROVED BY:
PROJECT MANAGER: DATE ISSUED

PROJECT: INSTRUMENTATION LABORATORY
LOCKER ROOM EXPANSION
ORANGEBURG NEW YORK

TITLE: PANEL SCHEDULES

EIA DRAWING NO.: E50

CLIENT DWG. NO.: – – – – –

EIA PROJECT NO.: EG8577.03

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