PHASE "2" UPGRADING EXISTING MRI AT **FIRST FLOOR**

ARCHITECT:

JEFFREY BERMAN ARCHITECT

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ARCHITECTURAL:

A-000.00	COVER SHEET
A-001.00	LOCATION PLAN, GENERAL NOTES & ABBREVIATIONS
A-100.00	FIRST FLOOR DEMOLITION PLAN
A-101.00	SECOND FLOOR DEMOLITION PLAN
A-102.00	ROOF DEMOLITION PLAN
A-200.00	FIRST FLOOR CONSTRUCTION PLAN
A-201.00	SECOND FLOOR CONSTRUCTION PLAN
A-202.00	ROOF CONSTRUCTION PLAN
A-300.00	FIRST FLOOR REFLECTED CEILING PLAN
A-301.00	SECOND FLOOR REFLECTED CEILING PLAN
A-400.00	FIRST FLOOR EQUIPMENT / FURNITURE PLAN & SCHEDULE
A-500.00	ELEVATIONS AND NOTES
A-600.00	MILLWORK & DETAIL & PARTITION TYPES
A-601.00	GENERAL MRI ROOM & RF DETAILS
A-700.00	DOOR, SCHEDULE, HARDWARE & CEILING DETAILS
F-100.00	FIRST FLOOR FINISH PLAN & SCHEDULE

-FLPN.

SUNY DOWNSTATE MEDICAL CENTER

450 CLARKSON AVENUE BROOKLYN, NEW YORK 11203

CONSULTANT:

MECHANICAL:

M-001.00	MECH. NOTES, KEY OF SYMBOLS, AND DRAWING LIST
DM-101.00	FIRST FLOOR DEMOLITION PLAN
M-101.00	MECH. FIRST FLOOR PLAN
DM-102.00	MECH. SECOND FLOOR DEMOLITION PLAN
M-102.00	MECH. SECOND FLOOR PLAN
DM-103.00	MECH. ROOF DEMOLITION PLAN
M-103.00	MECH. ROOF PLAN
M-301.00	MECH. RISER DIAGRAM
M-401.00	MECH. SPECIFICATIONS
M-501.00	MECH. DETAIL SHEET 1

ELECTRICAL:

E-001.00	ELECTRICAL SYMBOL LIST, ABBREVIATIONS & DRAWING LIST
E-002.00	ELECTRICAL SPECIFICATIONS
E-003.00	UPS SYSTEM SPECIFICATIONS PART I
E-004.00	UPS SYSTEM SPECIFICATIONS PART II
E-100.00	ELECTRICAL CELLAR PLAN
DE-101.00	ELECTRICAL FIRST FLOOR DEMOLITION PLAN
E-101.00	ELECTRICAL FIRST FLOOR POWER PLAN
E-102.00	ELECTRICAL SECOND FLOOR PLAN
E-103.00	ELECTRICAL ROOF PLAN
E-201.00	ELECTRICAL FIRST FLOOR LIGHTING PLAN
E-301.00	ELECTRICAL ONE LINE DIAGRAM

ELECTRICAL DETAILS (SHEET 1) E-401.00 E-402.00 ELECTRICAL DETAILS (SHEET 2)

MECHANICAL, ELECTRICAL, **PLUMBING & FIRE PROTECTION:**

COSENTINI ASSOCIATES

TWO PENNSYLVANIA PLAZA NEW YORK, NEW YORK 10121

> TEL.: 212 615-3600 FAX.: 212 735-0555

WWW.COSENTINI.COM

FIRE PROTECTION:

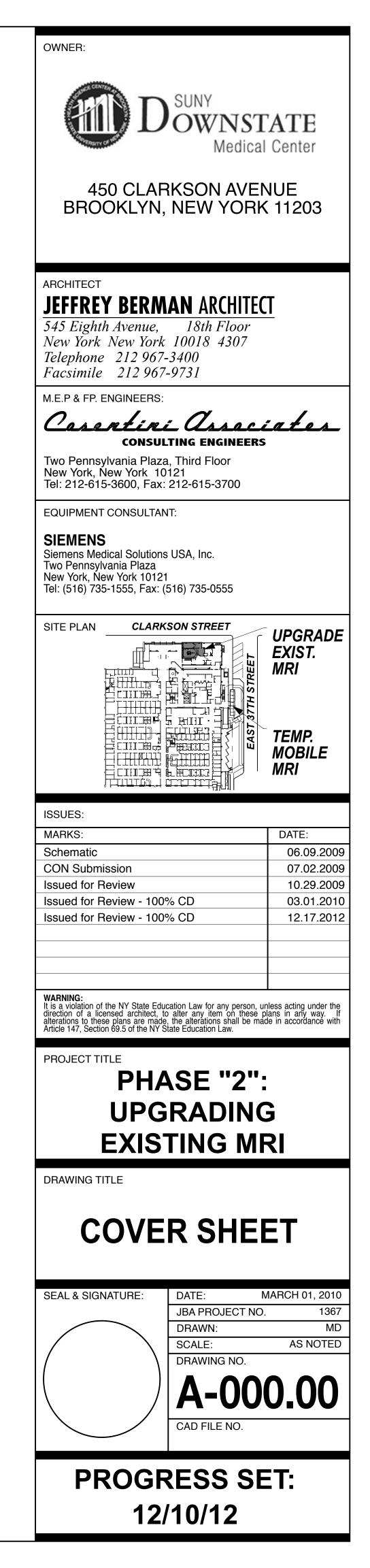
SP-001.00	SPRINKLER NOTES, KEY
DSP-101.00	FIRST FLOOR DEMOLITIC
SP-101.00	FIRST FLOOR SPRINKLEF
SP-102.00	SECOND FLOOR SPRINK
SP-401.00	SPRINKLER PRE-ACTION
SP-402.00	SPRINKLER PRE-ACTION
SP-501.00	SPRINKLER SCHEDULES

FIRE ALARM:

A-101.00	FIRE ALARM FIRST FLOO
A-301.00	FIRE ALARM NOTES, SYN
A-501.00	PRE ACTION FIRST FLOC
A-601.00	PRE ACTION NOTES, SYN

Y OF SYMBOLS AND DRAWING LIST ON PLAN ER PLAN IKLER PLAN N DETAILS N NOTES

OR PLAN MBOL LIST AND RISER DIAGRAM OR PLAN MBOL LIST AND RISER DIAGRAM



GENERAL NOTES:

1: ALL WORK SHALL BE PERFORMED MONDAY THRU FRIDAY 8 AM TO 4:30 PM DURING THE NORMAL ADMINISTRATIVE PORTION OF THE DAY.

2: PRIME TIME OR OTHER TIME REQUIRED TO COMPLETE THIS PROJECT AS DIRECTED BY THE OWNER SHALL BE AT NO ADDITIONAL EXPENSE TO THE HOSPITAL.

3: CONTRACTOR SHALL COMPLY WITH THE LATEST OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) LAWS, REGULATIONS AT ALL TIMES WITHOUT ANY DIRECTION FROM OWNER / SUNY DOWNSTATE HOSPITAL.

4: CONTRACTOR SHALL VERIFY IN THE FIELD ALL EXISTING CONDITIONS INCLUDING BUT NOT LIMITED TO, MEASUREMENTS, CONFLICTS, EXISTING UTILITIES, DIMENSIONS, QUANTITIES AND WHATEVER ELSE IS NECESSARY TO COMPLETE THE PROJECT. VERIFY LOCATION, DEPTHS, DIRECTION, SIZE, OR ANY EXISTING UTILITY, WHETHER SHOWN ON THE DRAWINGS OR NOT.

5: IT IS RECOMMENDED THAT THE CONTRACTOR PERFORM A DOCUMENTED SITE VISIT PRIOR TO BID.

6: CONTRACTOR SHALL SUBMIT TO THE OWNER ALL CONSTRUCTION MATERIALS, PRODUCTS AND EQUIPMENT. SUBMIT MATERIAL SAFETY DATA SHEETS FOR ALL PRODUCTS AND MATERIAL.

7: CONTRACTOR SHALL REPAIR TO THE SATISFACTION OF THE SUNY'S PROJECT MANAGER ANY UTILITY DISRUPTED, DAMAGED, BROKEN OR OTHERWISE HARMED IN ANY FASHION THRU THIS CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.

8: CONTRACTOR SHALL REPORT TO THE SUNY'S PROJECT MANAGER ANY NON-FUNCTIONING EXISTING UTILITY.

9: CONTRACTOR SHALL SUPPORT ANY EXISTING UTILITY AS REQUIRED BY CONSTRUCTION.

10: CONTRACTOR SHALL CLEAN THE WORK SPACE AT THE END OF EACH WORKING DAY, SECURE THE CONSTRUCTION AREA. ALL DEBRIS SHALL BE SWEPT UP, REMOVED AND DISPOSED OF BY THE CONTRACTOR IN CONTRACTOR SUPPLIED DUMPSTER.

11: CONTRACTOR SHALL PROVIDE HIS OWN STORAGE SPACE. STORAGE OF CONTRACTORS' MATERIALS SHALL BE PROHIBITED INSIDE THE WORK AREA. CONTRACTOR SHALL PROVIDE OWN SECURITY FOR STORAGE TRAILER.

12: CONTRACTOR SHALL SOLEY BE RESPONSIBLE FOR THE SAFETY OF THE WORKSITE AND TAKE IMMEDIATE ACTION, WITHOUT DIRECTION FROM GOVERNMENT EMPLOYEES' OR THE OWNER TO ELIMINATE SAFETY HAZARD(S) THAT POSE A THREAT(S) OR POTENTIAL THREAT(S) TO PATIENTS, EMPLOYEES, VISITORS AND CONTRACTORS' WORKFORCE.

13: THERE SHALL BE NO CLAIMS AGAINST THE SUNY DOWNSTATE OR REPRESENTATIVES OF SUNY DOWNSTATE FOR WORK STOPPAGES DUE TO ACTS OF GOD, WEATHER CONDITIONS, STOP WORK ORDERS (VERBAL OR WRITTEN OR BOTH), UNDERESTIMATION OF WORK, ESTIMATED QUANTITIES, MATERIALS SUPPLIES, SUPERVISION, TOOLS, LATE SUBMISSION, ANY RETURN OF SUBMISSION DELAY, CORRECTION OF SAFETY PROBLEMS, OR ANY OTHER REASON.

14: SUBMIT PRIOR TO FINAL PAYMENT AN "AS CONSTRUCTED DRAWING" DETAILING ALL NEW CONSTRUCTION AND SUBMIT TO THE SUNY'S PROJECT MANAGER. TO BE PROFESSIONALLY DRAWN USING STANDARD ENGINEERING PRACTICES.

15: CONTRACTOR SHALL TAKE AND MAINTAIN ALL MEASUREMENTS DURING THE COURSE OF THE PROJECT. ALL MEASUREMENTS SHALL BE NOTED ON THE "AS BUILT".

16: USE OF VIBRATORY IMPACT TOOLS ARE PROHIBITED IN ALL INTERIOR WORK. ANY PENETRATIONS THRU CONCRETE AND MASONRY SHALL BE CORE DRILLED WITH DIAMOND BIT ONLY. ALL PENETRATIONS SHALL BE SLEEVED AND FIREPROOFED.

17: ANY AND ALL RIGGING SHALL BE SOLELY AT THE EXPENSE OF THE CONTRACTOR OR COORDINATE ALL RIGGING WITH THE SUNY. PROVIDE ALL BARRICADES, BARRELS, TEMPORARY FENCING AND SIGNAGE AS REQUIRED BY THE SUNY'S PROJECT MANAGER TO SECURE RIGGING AREA FROM PATIENTS EMPLOYEES AND STAFF.

18: PARKING SHALL BE IN LEGAL PARKING SPACES ONLY. NO PARKING IN PATIENT LOTS, LOADING AREAS (EXCEPT FOR IMMEDIATE LOADING/UNLOADING MATERIALS AND OR SUPPLIES), OR OTHER DESIGNATED NON-PARKING AREAS.

19: SMOKING IS PROHIBITED IN ALL BUILDINGS AND WITHIN 50 FOOT OF EVERY EXTERIOR DOOR.

20: PRIOR TO THE PENETRATION OF ANY WALL, CONTRACTOR SHALL OBTAIN A "SMOKE BARRIER PENETRATION PERMIT" FROM THE SUNY'S FIRE DEPARTMENT. AT THE COMPLETION OF WORK THE VENDOR SHALL SCHEDULE AN INSPECTION WITH THE CONTRACTOR AND FIRE DEPARTMENT TO INSPECT ANY AND ALL PENETRATIONS AND REPAIR ANY AND ALL PENETRATIONS TO THE SATISFACTION OF THE SUNY. COPY OF THE PERMIT FORMS WILL BE FOUND IN THE SECTION 01010 GENERAL REQUIREMENTS. IF THERE IS NO COPY A COPY SHALL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING. - PRIOR TO THE START OF ANY WORK CONTRACTOR SHALL SUBMIT FOR APPROVAL SHOP DRAWING DETAILING ALL NEW PENETRATIONS.

21: CONTRACTOR SHALL PROVIDE AND INSTALL TEMPORARY CHAIN LINK FENCE, MINIMUM 6'-0" FEET IN HEIGHT AND LOCKING GATE, FOR DUMPSTERS AND ALL EXTERIOR CONSTRUCTION. FENCE POSTS SHALL BE A MINIMUM OF 2" DIAMETER, SCHEDULE 40 GALVANIZED STEEL, SPACED MAXIMUM OF 8 FEET ON CENTERS (OR CLOSER, AS REQUIRED BY THE LOCATION, TURNS, ENDS POSTS, ETC). POSTS SHALL EXTEND MINIMUM 24" INTO THE GROUND. WIRE FABRIC SHALL BE MAXIMUM OF 2 INCHES BY 2 INCHES, MINIMUM OF 9 GUAGE, TIE WIRE FABRIC TO POSTS USING A MINIMUM OF 3 WIRES PER POST.

IN LIEU OF THE ABOVE, SAFETY TYPE 6 FOOT HIGH RELOCATABLE TEMPORARY FENCING MAY BE SUBMITTED. SUBMIT TEMPORARY FENCE DETAIL FOR APPROVAL.

22: CONTRACTOR SHALL BE PROHIBITED FROM USING HILTI OR OTHER TYPE EXPLOSIVE SHOTS INTO CONCRETE FOR ANCHORING OR SECURING PURPOSES.

23: CONTRACTOR SHALL PRIOR TO THE START OR WORK SUBMIT A FULL SET OF COORDINATED DRAWINGS FOR ALL TRADES. DRAWING SHALL BE COMPLETE. DRAWING TO SHOW ALL EXISTING UTILITIES, DETAIL ALL NEW WORK RESOLVING ALL UTILITY

24: CONTRACTOR SHALL SUBMIT 3 COPIES OF ALL PAYROLLS AND 3 COPIES OF DAILY LOGS.

25: CONTRACTOR SHALL BE ADVISED THAT ANY CHANGES TO THE ORIGINAL SIGNED AND SEALED DOCUMENTS SHALL BE CONSIDERED ONLY WHEN ACCOMPANIED BY A REVISED DRAWING INDICATING THE PROPOSED CHANGE. THIS DOCUMENT SHALL BE SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE SUBJURTED TO THE CONTRACTING OFFICER, WITH SUPPORTING ENGINEERING CALCULATIONS, FOR REVIEW AND APPROVAL. THE ABOVE DOCUMENTS SHALL BE TRANSMITTED BY THE CONTRACTOR TO THE AE, ENGINEERING OFFICE AND BUSINESS SERVICE CENTER CONTRACTING OFFICE.

HAZARDOUS MATERIAL:

NEITHER THE OWNER OR THE ARCHITECT WARRANTIES OR GUARANTEES THE AREA OF WORK TO BE FREE OF HAZARDOUS, OR NUISANCE HAZARD MATERIAL.

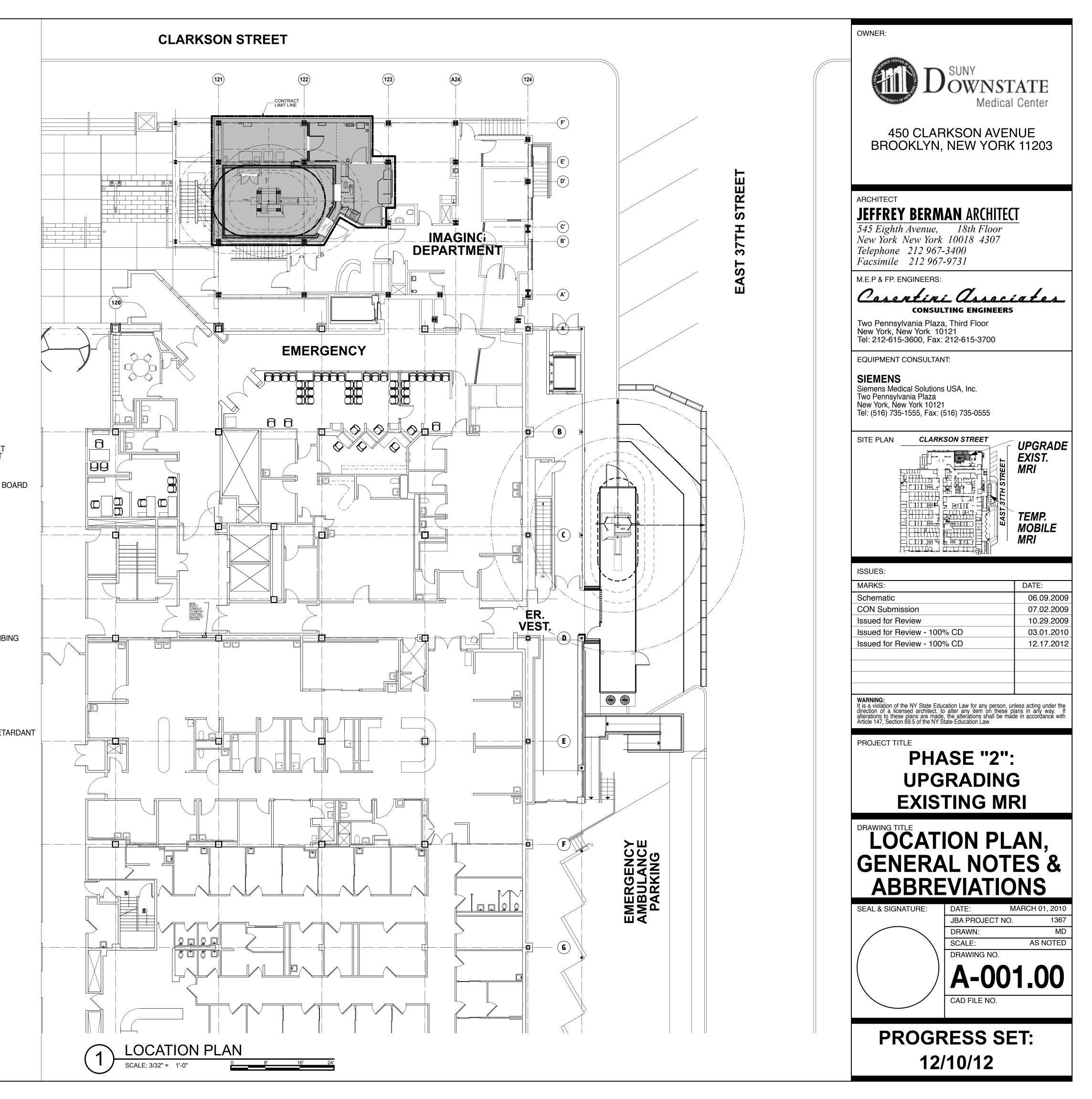
HAZARDOUS MATERIALS ARE INCLUDED BUT NOT LIMITED TO ASBESTOS PIPE COVERING (INSULATION), VINYL, ASBESTOS TILE AND SOME LINOLEUM, LEAD BASED PAINT, AND LATEX DUST.

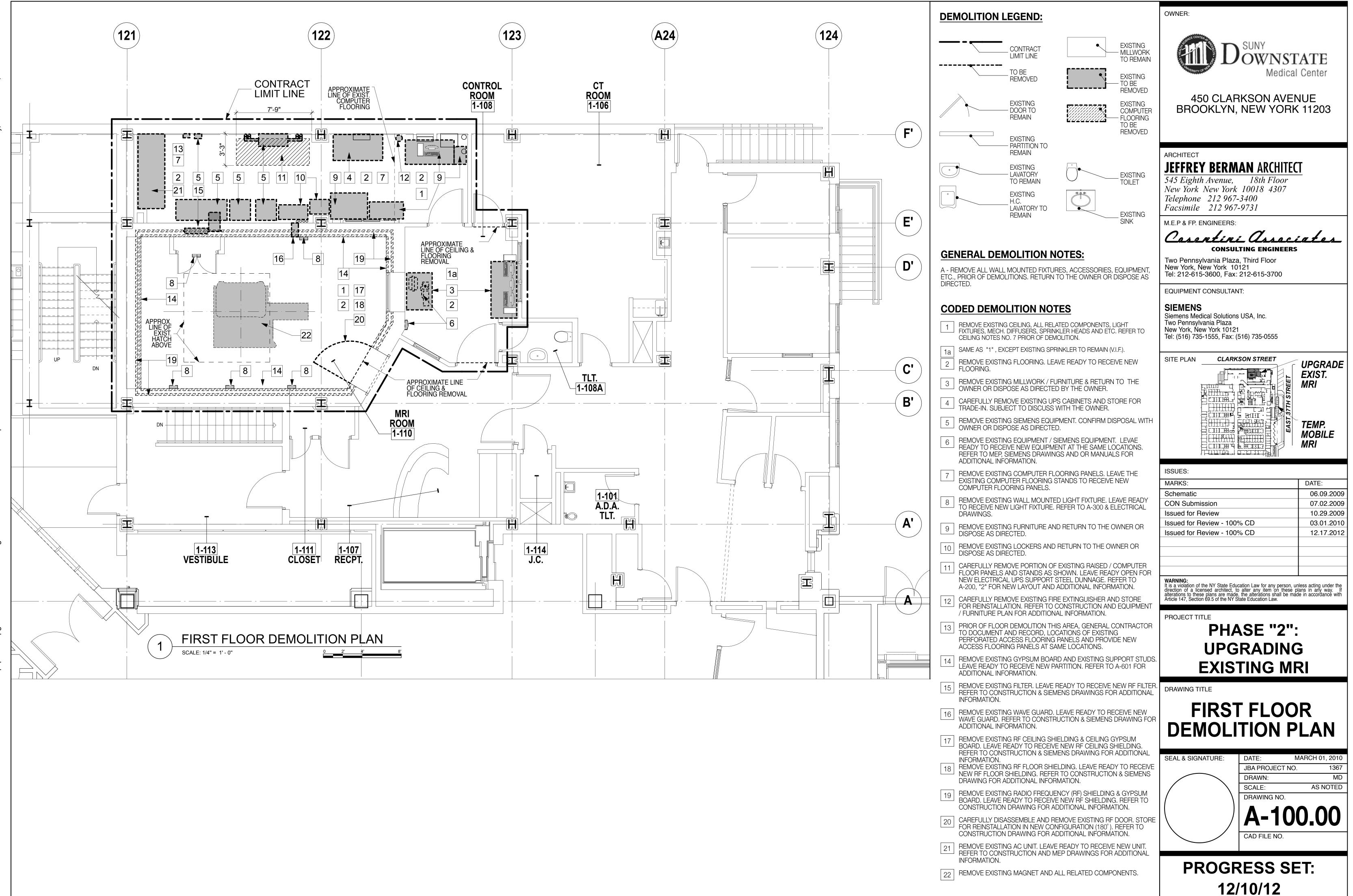
NUISANCE HAZARD MATERIAL INCLUDE BUT NOT LIMITED TO FIBERGLASS.

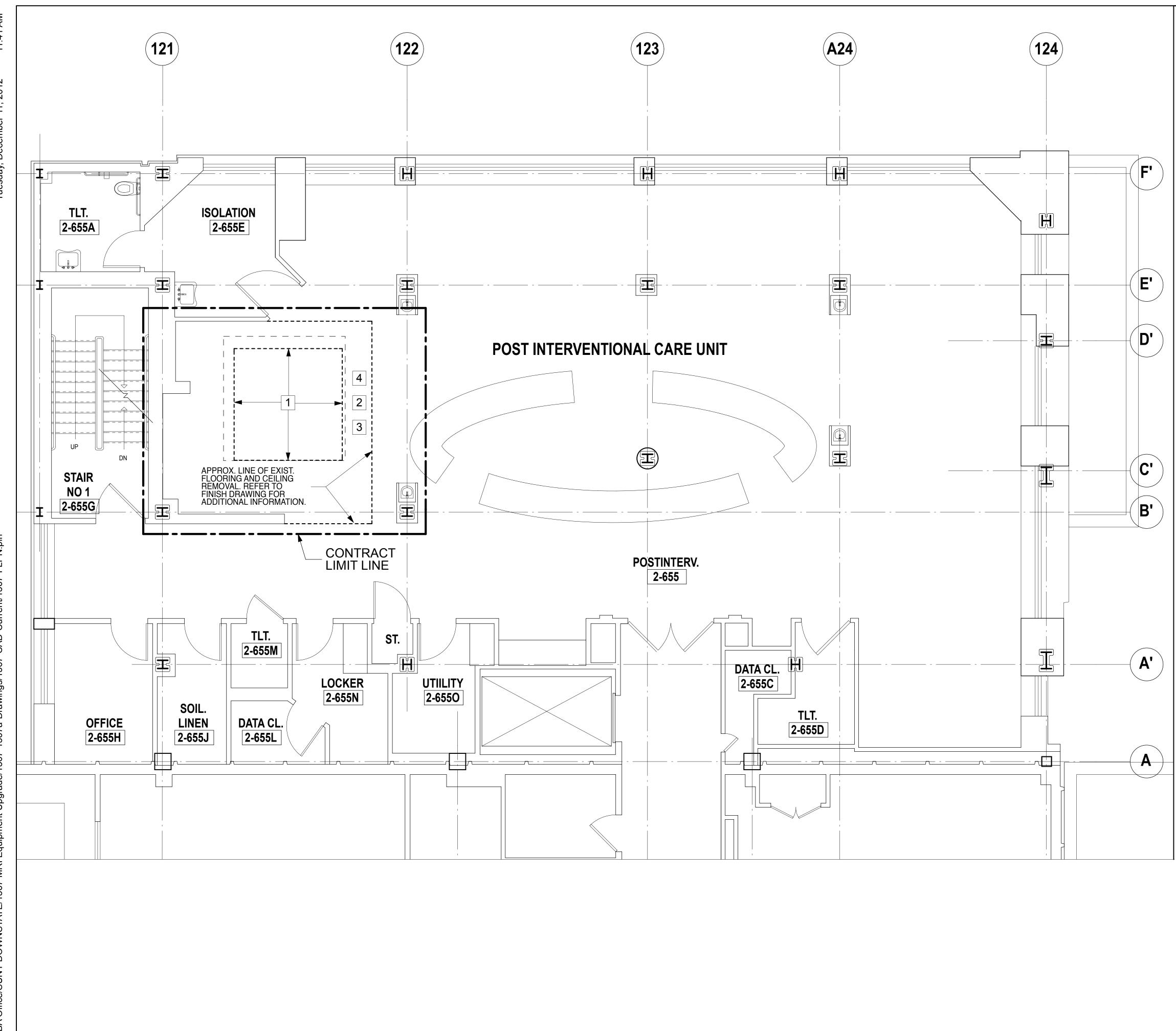
BEFORE COMMENCING, THE CONTRACTOR SHALL HAVE THE AREA INSPECTED BY AN AGENCY FAMILIAR WITH HAZARDOUS MATERIALS AND REPORT IN WRITING THE RESULTS OF INSPECTION TO THE OWNER. SHOULD HAZARDOUS MATERIALS BE ENCOUNTERED, THE CONTRACTOR SHALL STOP WORK, SEAL THE AREA, AND REPORT CONDITION TO THE OWNER AND THE ARCHITECT AND DO NO WORK UNTIL THE CONDITION IS CORRECTED.

ABBREVIATIONS:

AL.	ACOUSTICAL AIR CONDITIONING ACOUSTICAL CEILING TILE ABOVE FINISHED FLOOR ALUMINUM APPROXIMATE
BD.	BOARD
BG	BLOM-FIELD GUASS LINE
BIT.	BITUMINOUS
BLDG.	BUILDING
BLK.	BLOCK
BM.	BEAM
BOT.	BOTTOM
B/O.	BOTTOM OF
BR.	BRICK
B.U.R.	BUILT-UP ROOFING
CB.	CERAMIC BASE
CC	CUBICLE CURTAINS
CPT.	CARPET
CEM.	CEMENT
CLG.	CENTER LINE
CLG.	CEILING
CLR.	CLEAR
C.M.U.	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
C.T.	CERAMIC TILE
CW	CERAMIC WALL TILE
C.W.	COLD WATER
DET.	DETAIL
D.F.	DRINKING FOUNTAIN
D.G.J.	DUMMY GROOVE JOINT
DIM.	DIAMETER
DIM.	DIMENSION
DR.	DOOR
DWG.	DRAWING
E.C.	ELECTRICAL CONTRACTOR
E.J.	EXPANSION JOINT
EL.	ELEVATION
ELECT.	ELECTRICAL
ELEV.	ELEVATOR
EQ.	EQUAL
E.W.C. EX. EXIST. EXT.	ELECTRICAL WATER COOLER EXISTING EXISTING EXISTING EXTERIOR
FDTN.	FOUNDATION
F.E.B.	FIRE EXTINGUISHER BRACKE
F.E.C.	FIRE EXTINGUISHER CABINET
F.F.	FINISHED FLOOR
FIN.	FINISHED
F.P.S.C.	FIRE-PROOF SLEF CLOSING
F.R.C.B.	FIBER REINFORCED CEMENT
GALV.	GALVANIZED
GL.	GLASS
G.W.B.	GYPSUM WALL BOARD
HDWR.	HARDWARE
H.M.	HOLLOW METAL
HR.	HOUR
HR.	HEIGHT
HT.	INSULATION
INSUL.	INTERIOR
JT.	JOINT
JC	JANITOR CLOSET
L.	LONG
LAV.	LAVATORY
LK.	LOCKERS
LT.	LIGHT
M.O.	MASONRY OPENING
M.C.P.	MULTI-COLORED PAINT
M.E.P.	MECHANICAL, ELECT. & PLUM
MIN.	MINIMUM
NAT. N.I.C.	NEW NATURAL NOT IN CONTRACT
PLM. PLYWD.	PAINTED PARTIAL PARTITION PLASTER POLYMER FLOORING PLYWOOD PRESSURE TREATED FIRE RE
R.	RADIUS
RF.	RADIO FREQUENCY
RT.	RATED
SIM. SL. SLB. SLDG.	STANDARD GAUSS LINE SIMILAR SLATE SLATE BASE SLIDING STAINLESS STEEL STEEL SUSPENDED SEAMLESS VINYL FLOORING
T.O.S.	TOP OF SLAB
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.O.N. V.C.B. V.C.T. VERT. V.I.F. VNR. V.W.C.	UNLESS OTHERWISE NOTED VINYL COVERING BASE VINYL COMPOSITION TILE VERTICAL VERIFY IN FIELD VERIFY IN FIELD VENEER VINYL WALL COVERING
W.	WIDE
W/	WITH
W.C.	WATER COOLER
WD.	WOOD
W.P.	WORKING POINT
WT.	WINDOW TREATMENT
W.W.M.	WOVEN WIRE MESH







GENERAL DEMOLITION NOTES:

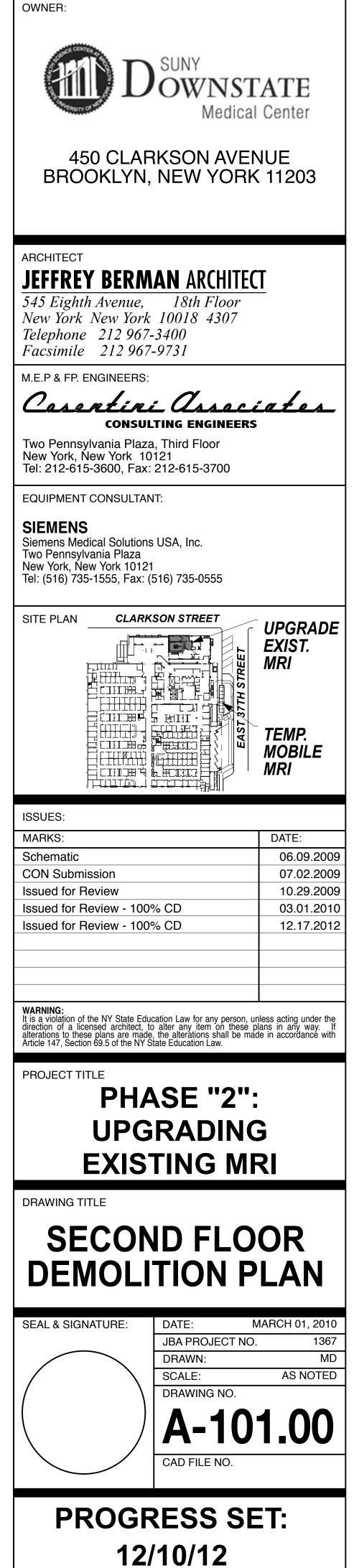
A - REFER TO MECHANICAL, ELECTRICAL, PLUMBING & FIRE PROTECTION DRAWINGS FOR THE EXTENT OF THE SCOPE OF WORK.

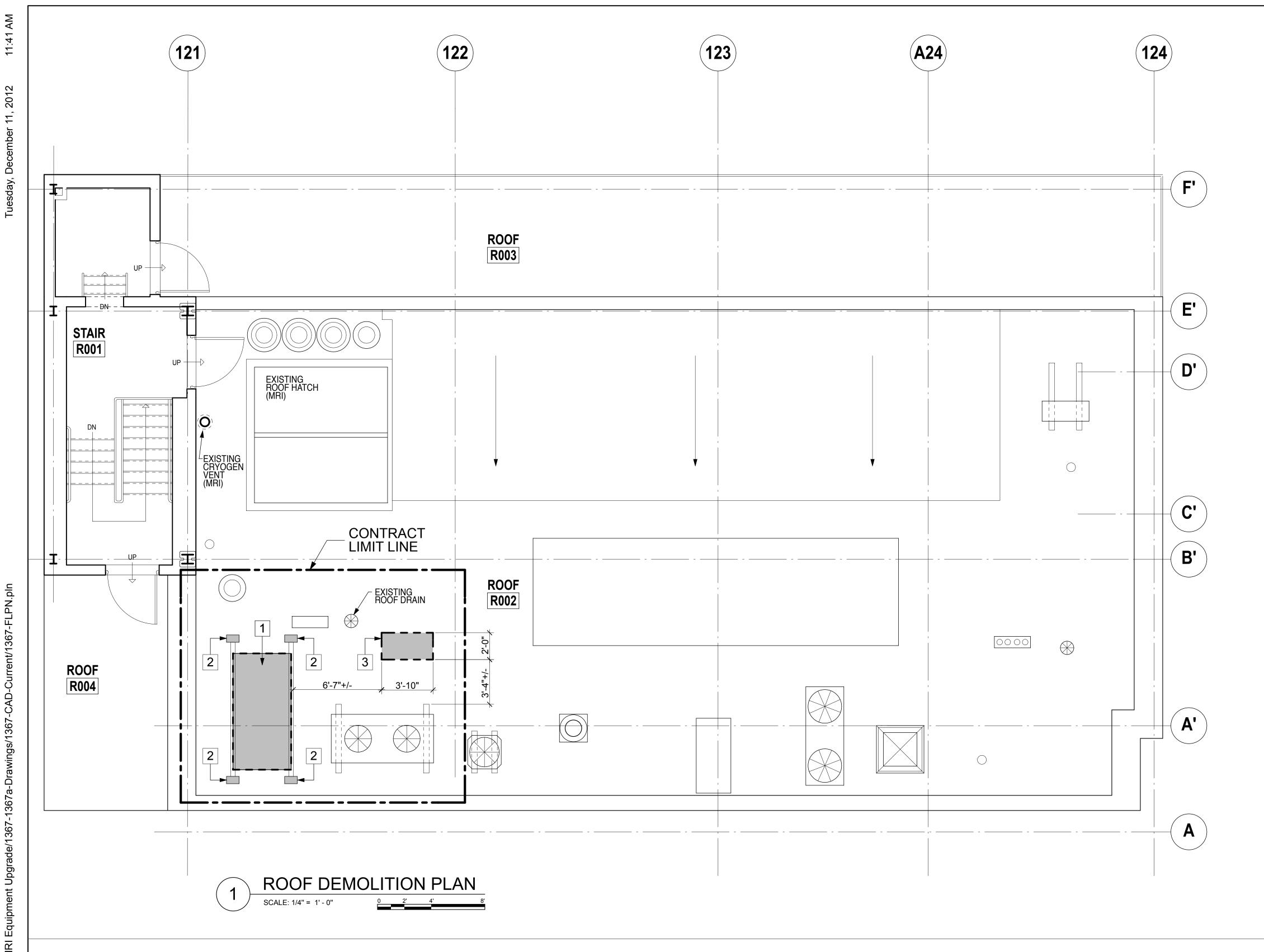
B - ALL DIMENSIONS SHALL BE VERIFIED BY GENERAL CONTRACTOR PRIOR OF THE CONSTRUCTION AND OR FABRICATIONS.

C - **NOTE:** IT IS GENERAL CONTRACTOR RESPONSIBILITIES TO DOCUMENT ALL EXISTING CEILING MOUNTED DEVICES PRIOR OF DEMOLITION FOR FUTURE REINSTALLATION.

CODED DEMOLITION NOTES

- REMOVE EXISTING FLOORING, THIS AREA TO OPEN THE EXISTING FLOOR HATCH FOR REMOVING EXISTING MAGNET AND REPLACING WITH NEW MAGNET. 1
- 2 REMOVE EXISTING FLOORING WITHIN AREA AS SHOWN.
- 3 REMOVE EXISTING ACOUSTICAL CEILING AND ALL COMPONENTS WITHIN AREA AS SHOWN. LEAVE READY TO RECEIVE NEW CEILING GRID, NEW ACOUSTIC TILES AND NEW SPRINKLER HEADS AT EXISTING LOCATIONS. REFER TO GENERAL DEMOLITION NOTE "C".
- 4 CAREFULLY REMOVE EXISTING LIGHT FIXTURES / REGISTERS, SPEAKERS, EXIT SIGNS, CURTAIN TRACKS AND DRAPERY, ETC., AND STORE FOR REINSTALLATION. REFER TO DEMOLITION GENERAL NOTE "C" FOR REINSTALLATION OF EXISTING.



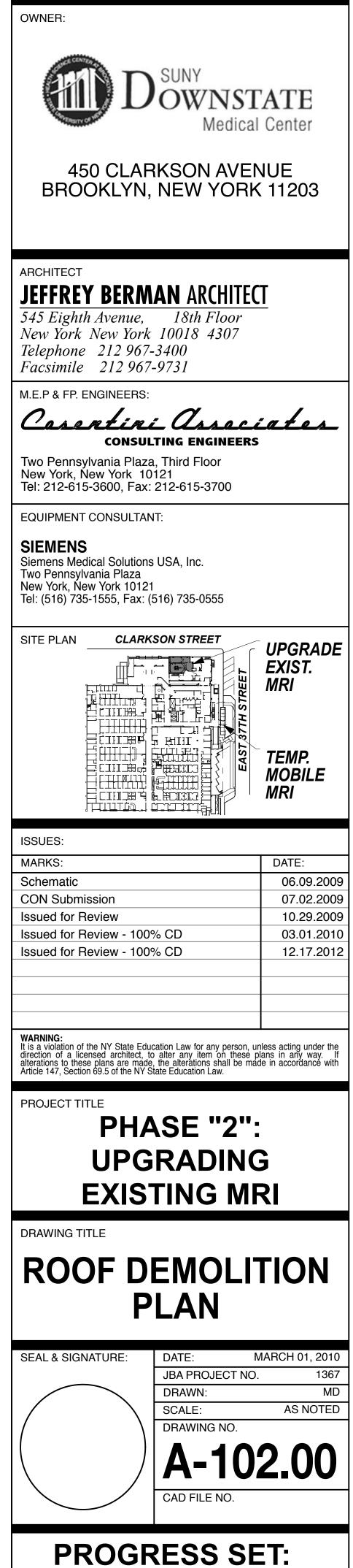


GENERAL DEMOLITION NOTES:

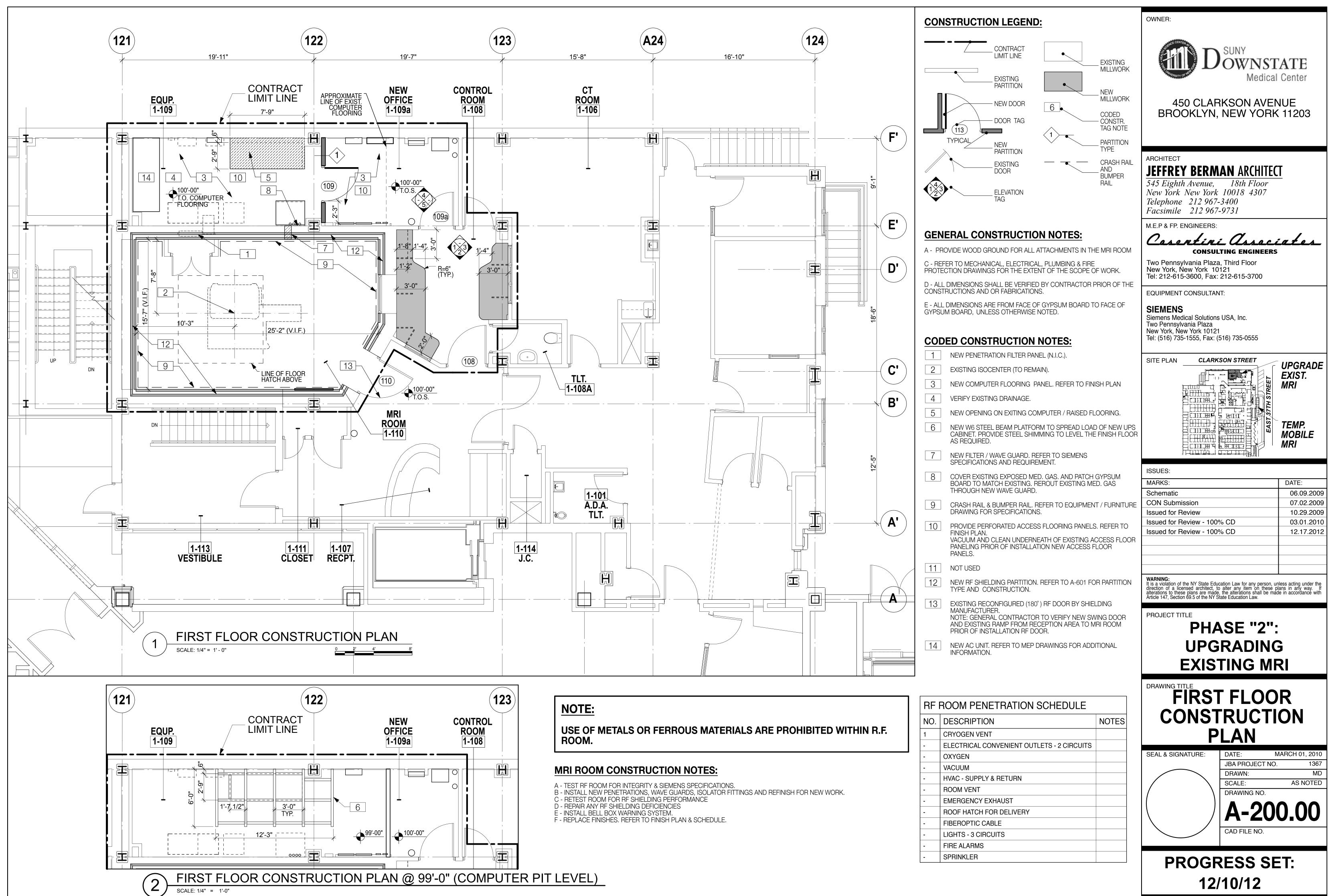
I - PATCH TO MATCH ROOFING AND FINISHES AFTER ROOF EQUIPMENT DEMOLITION / REMOVAL.

CODED DEMOLITION NOTES

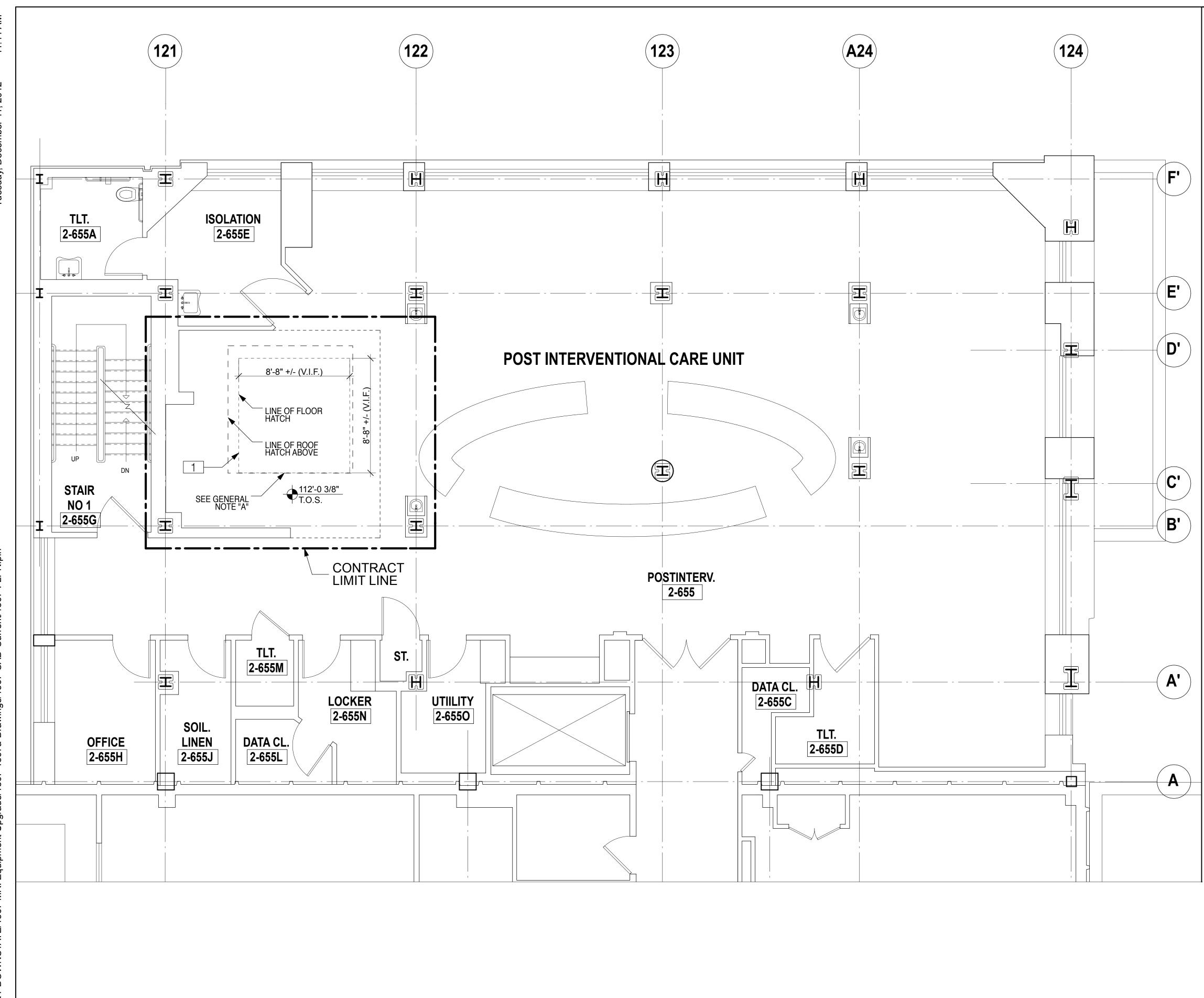
- REMOVE EXISTING CHILLER AND ALL RELATED COMPONENTS. LEAVE READY TO RECEIVE NEW CHILLER. REFER TO MEP DRAWINGS FOR ADDITIONAL INFORMATION. 1
- REMOVE PORTION OF EXISTING ROOFING AS SHOWN. LEAVE READY TO RECEIVE NEW EXTENDED ROOF DUNNAGE. REFER TO ROOF CONSTRUCTION FOR ADDITIONAL INFORMATION 2
- REMOVE PORTION OF EXISTING ROOFING AS SHOWN (APPROXIMATE). LEAVE READY TO RECEIVE NEW CONCRETE CURB. 3



12/10/12



	ROOM PENETRATION SCHEDULE	1
NO.	DESCRIPTION	NOTES
1	CRYOGEN VENT	
-	ELECTRICAL CONVENIENT OUTLETS - 2 CIRCUITS	
-	OXYGEN	
-	VACUUM	
-	HVAC - SUPPLY & RETURN	
-	ROOM VENT	
-	EMERGENCY EXHAUST	
-	ROOF HATCH FOR DELIVERY	
-	FIBEROPTIC CABLE	
-	LIGHTS - 3 CIRCUITS	
-	FIRE ALARMS	
-	SPRINKLER	



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GENERAL CONSTRUCTION NOTES:

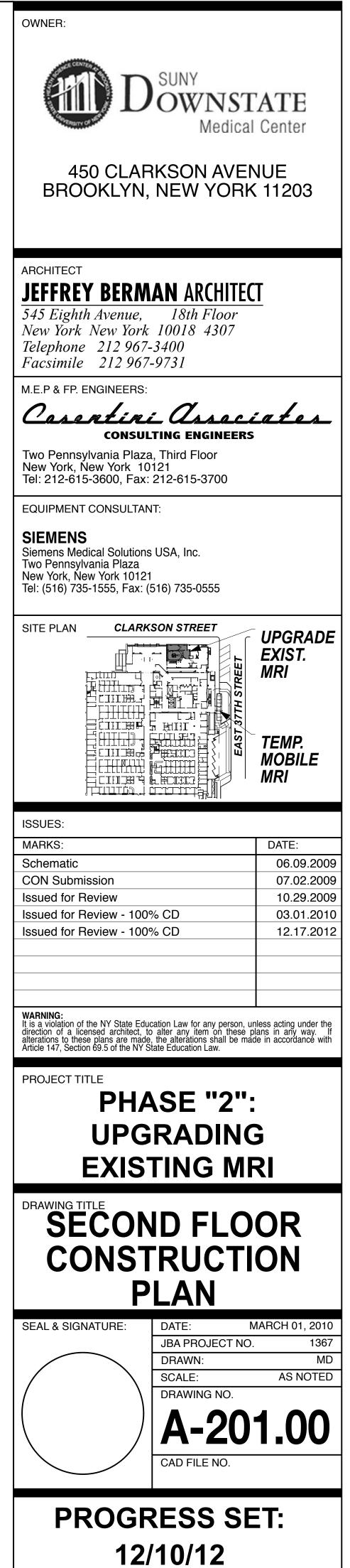
A - VERIFY ALIGNMENT OF EXISTING SECOND FLOOR HATCH (OPEN TO FIRST FLOOR MRI ROOM) AND EXISTING ROOF HATCH FOR REMOVAL OF EXISTING MAGNET AND PLACING NEW MAGNET. GENERAL CONTRACTOR TO COORDINATE THE RIGGING PROCESS WITH MAGNET PROVIDER (SIEMENS) SPECIFICATIONS.

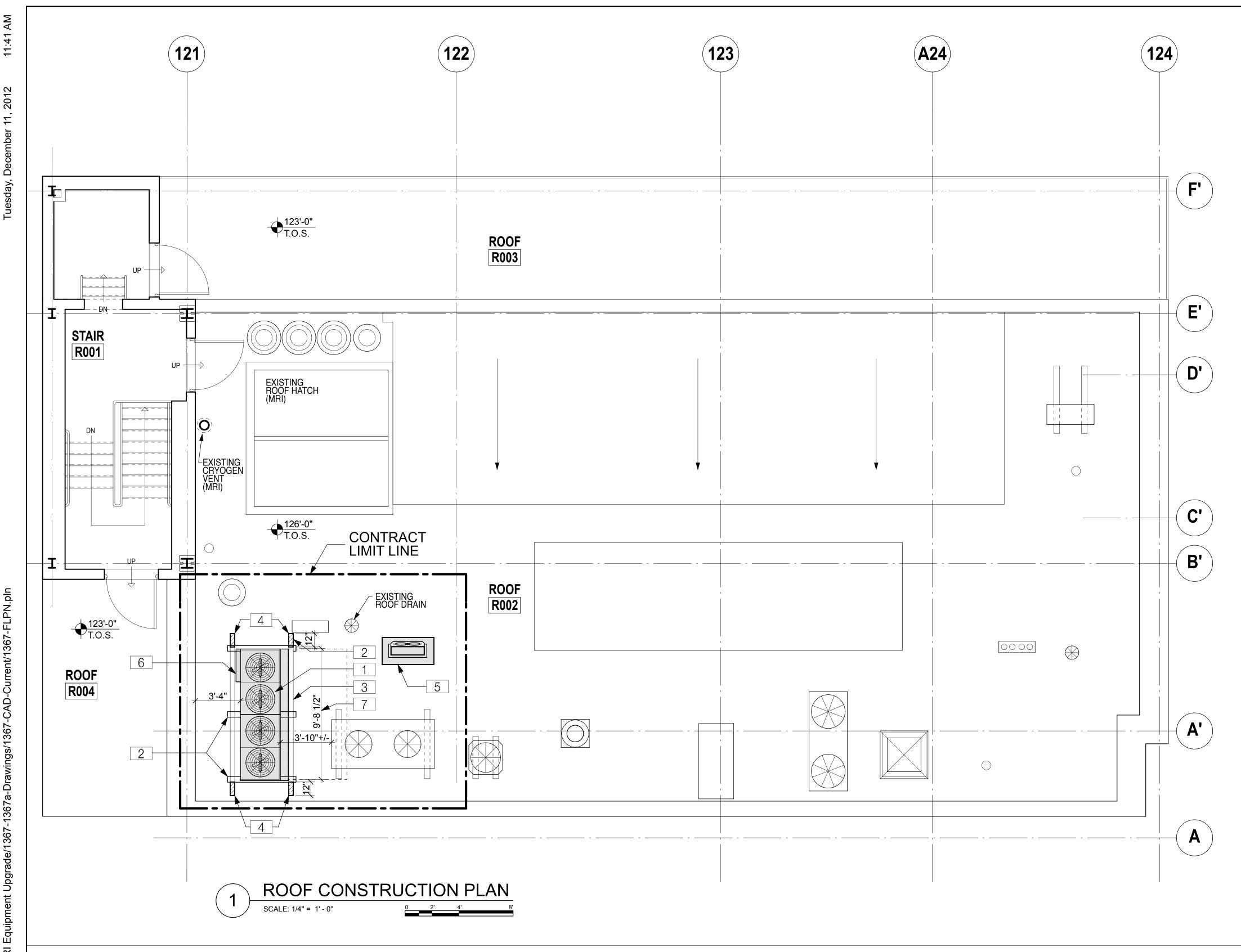
B - ALL DIMENSIONS SHALL BE VERIFIED BY CONTRACTOR PRIOR OF THE CONSTRUCTIONS AND OR FABRICATIONS.

C - REFER TO MECHANICAL, ELECTRICAL, PLUMBING & FIRE PROTECTION DRAWINGS FOR THE EXTENT OF THE SCOPE OF WORK.

CODED CONSTRUCTION NOTES:

1 EXISTING FLOOR HATCH TO REMAIN. OPEN THIS HATCH FOR REMOVAL OF EXISTING MAGNET AND PLACING NEW MAGNET. REFER TO PHASING PLAN FOR ADDITIONAL INFORMATION.





GENERAL CONSTRUCTION NOTES:

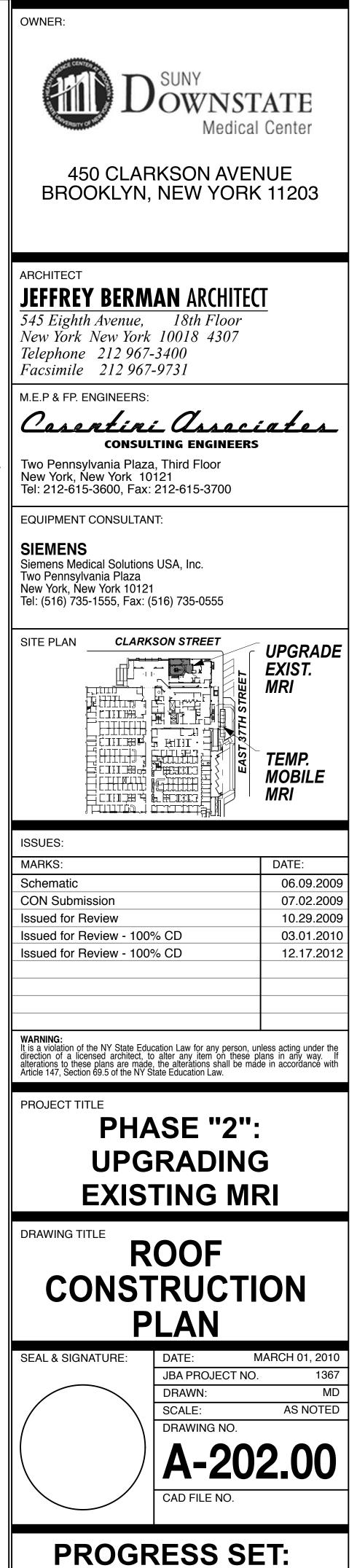
A - REFER TO STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING & FIRE PROTECTION DRAWINGS FOR THE EXTENT OF THE SCOPE OF WORK.

B - ALL DIMENSIONS SHALL BE VERIFIED BY CONTRACTOR PRIOR OF THE CONSTRUCTIONS AND OR FABRICATIONS.

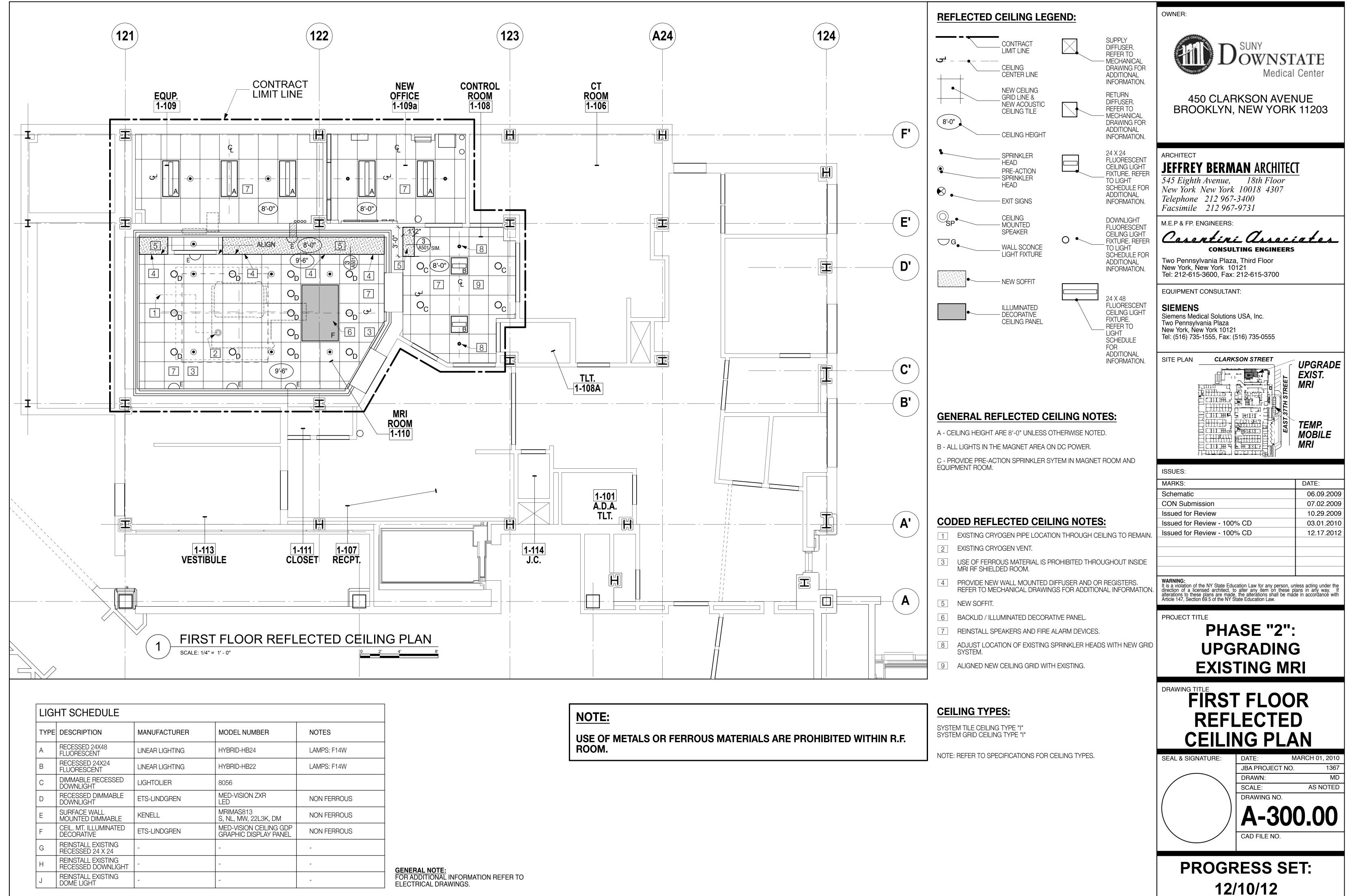
C - ROOFING WORK SHALL BE DONE BY LICENSED APPLICATOR FOR NEW WORK TO ASSURE OWNERS EXISTING WARRANTEE(S).

CODED CONSTRUCTION NOTES:

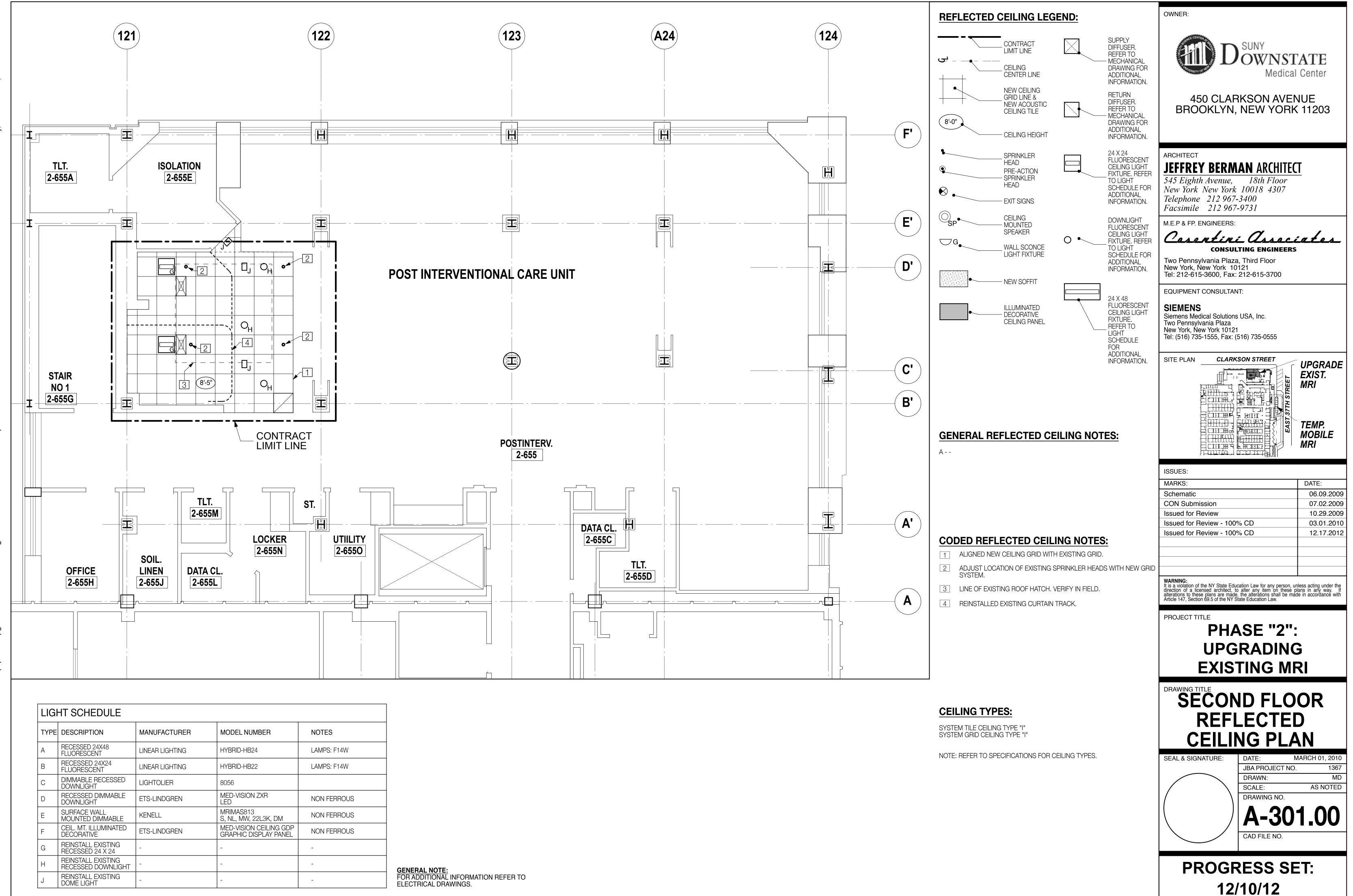
- 1 NEW CHILLER. REFER TO MEP DRAWINGS FOR ADDITIONAL INFORMATION.
- 2 NEW ISOLATORS ON REUSE EXISTING STEEL CHILLER ISOLATION SUPPORT (BEAMS). REFER TO MECHANICAL DRAWINGS FOR ISOLATOR SPECIFICATION.
- 3 EXISTING ROOF DUNNAGE TO REMAIN.
- 4 NEW EXTENDED ROOF DUNNAGE. PATCH ROOFING TO MATCH EXISTING.
- 5 NEW OUTDOOR CONDENSING UNIT WITH 4" THICK CONCRETE PAD PATCH ROOF TO MATCH. REFER TO MEP DRAWINGS FOR ADDITIONAL INFORMATION.
- 6 CILLER ACCESS PANEL.
- 7 VERIFY AND COORDINATE DIMENSIONS WITH SIEMENS CHILLER SPECIFICATIONS.



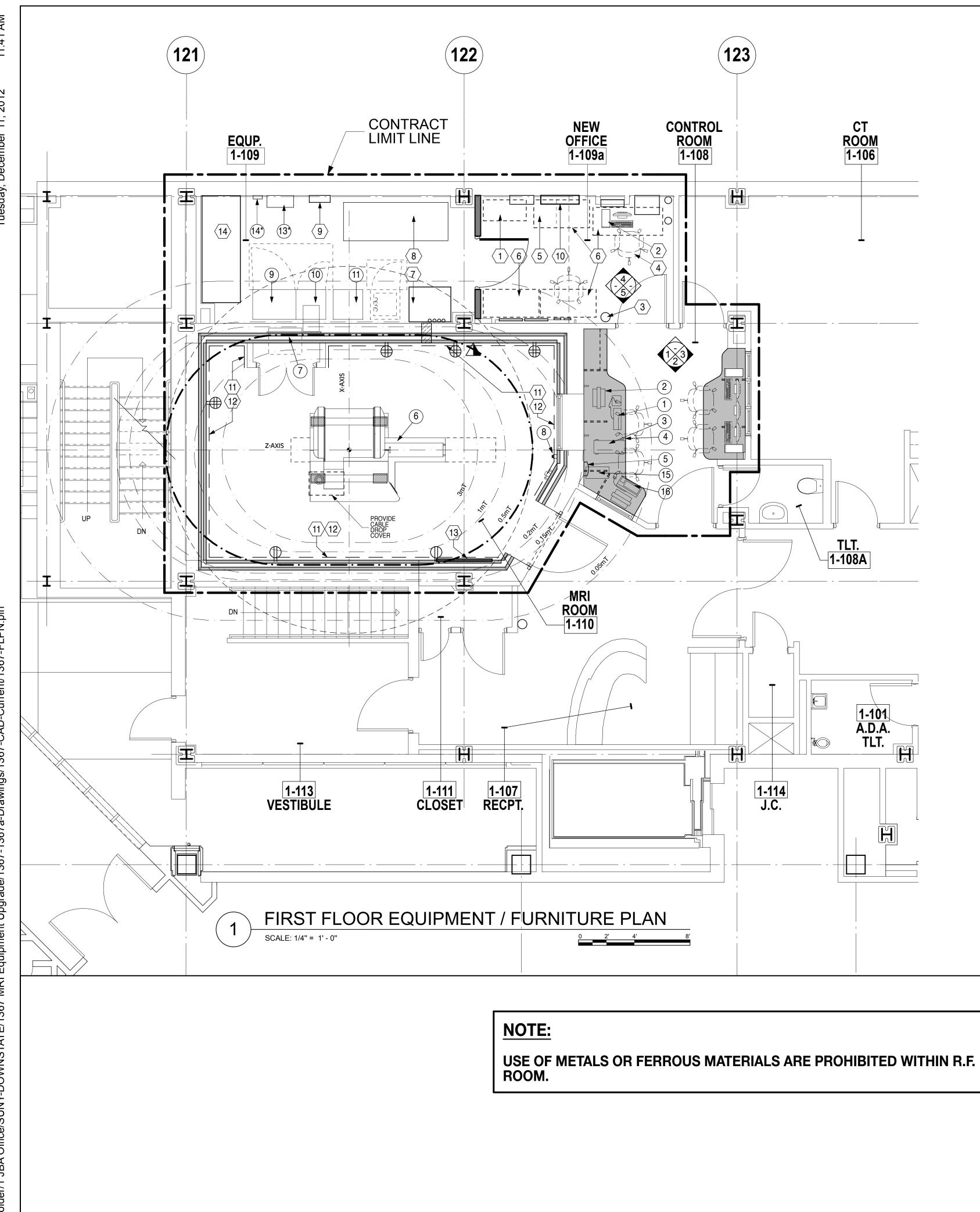
12/10/12



TYPE	DESCRIPTION	MANUFACTURER	MODEL NUMBER	NOTES				
А	RECESSED 24X48 FLUORESCENT	LINEAR LIGHTING	HYBRID-HB24	LAMPS: F14W				
В	RECESSED 24X24 FLUORESCENT	LINEAR LIGHTING	HYBRID-HB22	LAMPS: F14W				
С	DIMMABLE RECESSED DOWNLIGHT	LIGHTOLIER 8056						
D	RECESSED DIMMABLE DOWNLIGHT	ETS-LINDGREN	MED-VISION ZXR LED	NON FERROUS				
E	SURFACE WALL MOUNTED DIMMABLE	KENELL	MRIMAS813 S, NL, MW, 22L3K, DM	NON FERROUS				
F	CEIL. MT. ILLUMINATED DECORATIVE	ETS-LINDGREN	MED-VISION CEILING GDP GRAPHIC DISPLAY PANEL	NON FERROUS				
G	REINSTALL EXISTING RECESSED 24 X 24	-	-	-				
Н	REINSTALL EXISTING RECESSED DOWNLIGHT	-	-	-				
J	REINSTALL EXISTING DOME LIGHT	-	-	-				



LIG	LIGHT SCHEDULE						
TYPE	DESCRIPTION	MANUFACTURER MODEL NUMBER NOTES		NOTES			
А	RECESSED 24X48 FLUORESCENT	LINEAR LIGHTING	HYBRID-HB24	LAMPS: F14W			
В	RECESSED 24X24 FLUORESCENT	LINEAR LIGHTING	HYBRID-HB22	LAMPS: F14W			
С	DIMMABLE RECESSED DOWNLIGHT	LIGHTOLIER	8056				
D	RECESSED DIMMABLE DOWNLIGHT	ETS-LINDGREN MED-VISION ZXR N		NON FERROUS			
E	SURFACE WALL MOUNTED DIMMABLE	KENELL MRIMAS813 S, NL, MW, 22L3K, DM NG		NON FERROUS			
F	CEIL. MT. ILLUMINATED DECORATIVE	ETS-LINDGREN	MED-VISION CEILING GDP GRAPHIC DISPLAY PANEL	NON FERROUS			
G	REINSTALL EXISTING RECESSED 24 X 24	-	-	-			
Н	REINSTALL EXISTING RECESSED DOWNLIGHT	-	-	-			
J	REINSTALL EXISTING DOME LIGHT	-	-	-			



GENERAL EQUIPMENT / FURNITURE NOTES:

A - REFER TO "SIEMENS" DRAWINGS FOR THE FOLLOWING SYBOLS SHOWN ON THE EQUIPMENT / FURNITURE PLAN SYMBOLS: $({f X})$ B - ALL THE FURNITURE ARE NOT IN CONTRACT (NIC.) UNLESS OTHERWISE NOTED.

EQUIDAENT / EUDNITUDE SOUEDUILE

	EQUIPMENT / FURNITU	JRE SCHEDULE			$\langle 1 \rangle$
NO.	ITEMS	MANUFACTURER / MODEL NUMBER	PROVIDED BY	INSTALLED BY	NOTES
$\langle 1 \rangle$	LOCKER	FAMOUS LOCKERS - "Z" TIER - 7244 SUN WASH	GENERAL CONTRACTOR	GENERAL CONTRACTOR	11
$\left \left< 2 \right>\right $	MONITOR & COMPUTER	EXISTING	EXISTING	EXISTING	1
$\langle 2a \rangle$	MONITOR'S ARM	HUMANSCALE - MODEL: M7	GENERAL CONTRACTOR	GENERAL CONTRACTOR	12
(2b)	COMPUTER'S HOLDER	HUMANSCALE - MODEL: 555	GENERAL CONTRACTOR	GENERAL CONTRACTOR	12
$\langle 3 \rangle$	FIRE EXTINGUISHER	EXISTING	EXISTING	EXISTING	2
$\langle 4 \rangle$	CHAIR	HERMAN MILLER	OWNER	ONWER	1
$\langle 5 \rangle$	UNDER COUNTER REFRIGERATOR	GE - GMR06APPBB	OWNER	OWNER	1
$\langle 6 \rangle$	FURNITURE	HERMAN MILLER	OWNER	ONWER	1&6
$\langle 7 \rangle$	PRE-ACTION SYSTEM	-	GENERAL CONTRACTOR	GENERAL CONTRACTOR	4
$\langle 8 \rangle$	UNINTERRUPTIBLE POWER SYSTEM (UPS)	-	GENERAL CONTRACTOR	GENERAL CONTRACTOR	5
$\langle 9 \rangle$	PRE-ACTION PANEL	-	GENERAL CONTRACTOR	GENERAL CONTRACTOR	8
$\langle 10 \rangle$	NEW WALL MOUNTED SPLIT SYSTEM AC UNIT	-	GENERAL CONTRACTOR	GENERAL CONTRACTOR	7
$\langle 11 \rangle$	CRASH RAIL	C/S GROUP	GENERAL CONTRACTOR	GENERAL CONTRACTOR	9
$\langle 12 \rangle$	BUMPER RAIL	C/S GROUP	GENERAL CONTRACTOR	GENERAL CONTRACTOR	9
(13)	BACKLID / ILLUMINATED WINDOW	REFER TO DRAWING A-300	GENERAL CONTRACTOR	GENERAL CONTRACTOR	10
$\langle 14 \rangle$	NEW AC	-	GENERAL CONTRACTOR	GENERAL CONTRACTOR	4, 5, 7 & 10

FURNITURE / EQUIPMENT NOTES:

- FURNITURE NOT IN CONTRACT
 NON FERROUS. EXISTING TO BE VERIFIED.
- 3 RELOCATED EXISTING.
- 4 REFER TO PLUMBING / FIRE PROTECTION DRAWINGS.5 REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 6 NEW FURNITURE (NIC) 7 - REFER TO MECHANICAL DRAWINGS FOR MANUFACTURER, SPECIFICATIONS & ADDITIONAL INFORMATION.
 8 - NEW PANEL. REFER TO FIRE PROTECTION DRAWINGS.
 9 - REFER TO FINISHES FOR ADDITIONAL INFORMATION.
 10- PROVIDE POWER

- 11- SOLID PHENOLIC LOCKER 12- GENERAL CONTRACTOR VERIFY INSTALLATION'S LOCATION AND QUANTITIES IN FIELD.

ELECTRICAL LEGEND:

- \ominus SIMPLEX
- \oplus DUPLEX
- ⊕ QUAD
- DATA
- TELEPHONE DATA COMBINATION
- K TELEPHONE
- ⋈ w WALL MOUNTED TELEPHONE
- 46" MOUNTING HEIGHT INDICATION

OWNER:



450 CLARKSON AVENUE **BROOKLYN, NEW YORK 11203**

ARCHITECT

JEFFREY BERMAN ARCHITECT 545 Eighth Avenue, 18th Floor

New York New York 10018 4307 Telephone 212 967-3400 Facsimile 212 967-9731

M.E.P & FP. ENGINEERS:

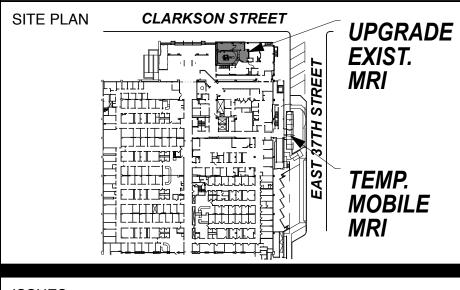


Two Pennsylvania Plaza, Third Floor New York, New York 10121 Tel: 212-615-3600, Fax: 212-615-3700

EQUIPMENT CONSULTANT:

SIEMENS

Siemens Medical Solutions USA, Inc. Two Pennsylvania Plaza New York, New York 10121 Tel: (516) 735-1555, Fax: (516) 735-0555



ISSUES:	
MARKS:	DATE:
Schematic	06.09.2009
CON Submission	07.02.2009
Issued for Review	10.29.2009
Issued for Review - 100% CD	03.01.2010
Issued for Review - 100% CD	12.17.2012

WARNING: It is a violation of the NY State Education Law for any person, unless acting under the direction of a licensed architect, to alter any item on these plans in any way. If alterations to these plans are made, the alterations shall be made in accordance with Article 147, Section 69.5 of the NY State Education Law.

PROJECT TITLE

PHASE "2": UPGRADING **EXISTING MRI**



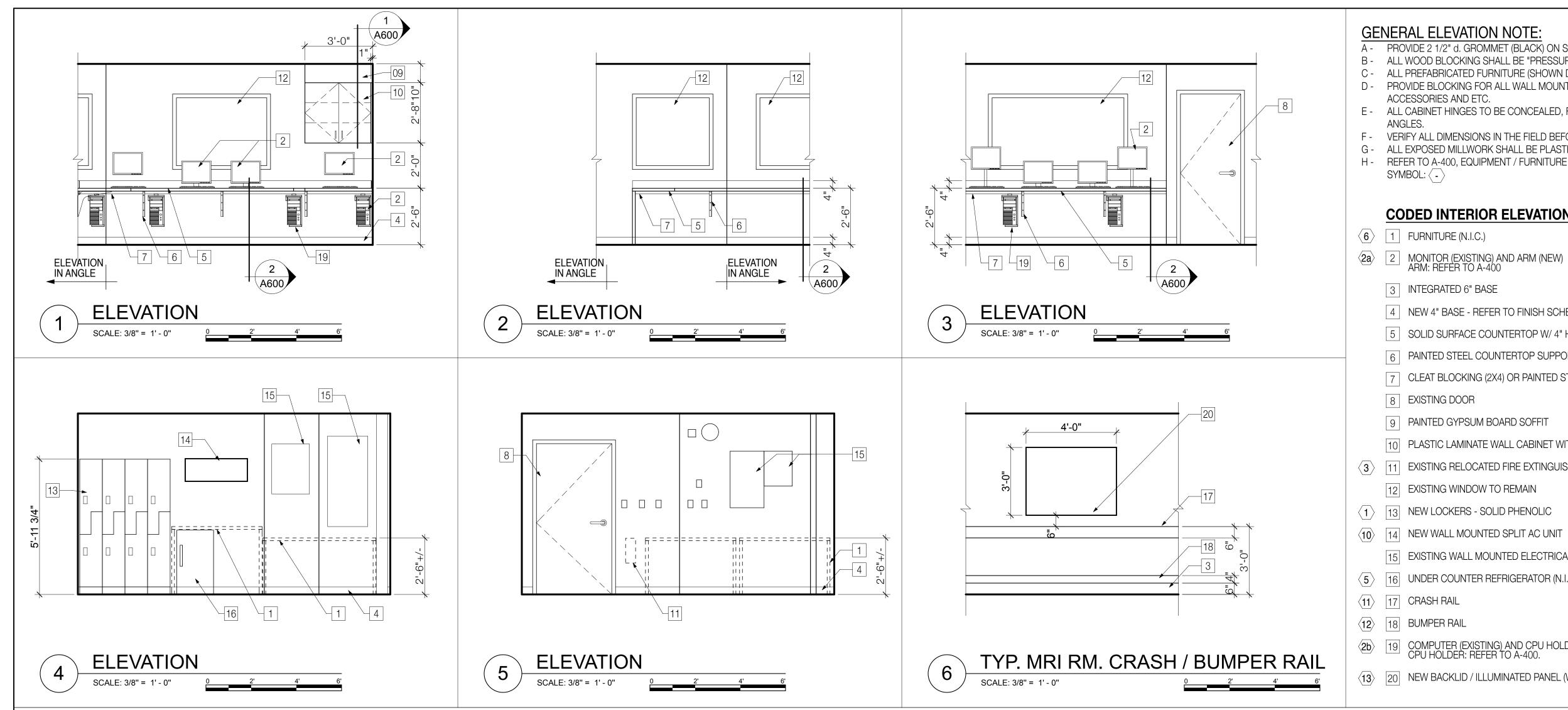
SCALE:

DRAWING NO. **A-400.00**

CAD FILE NO.

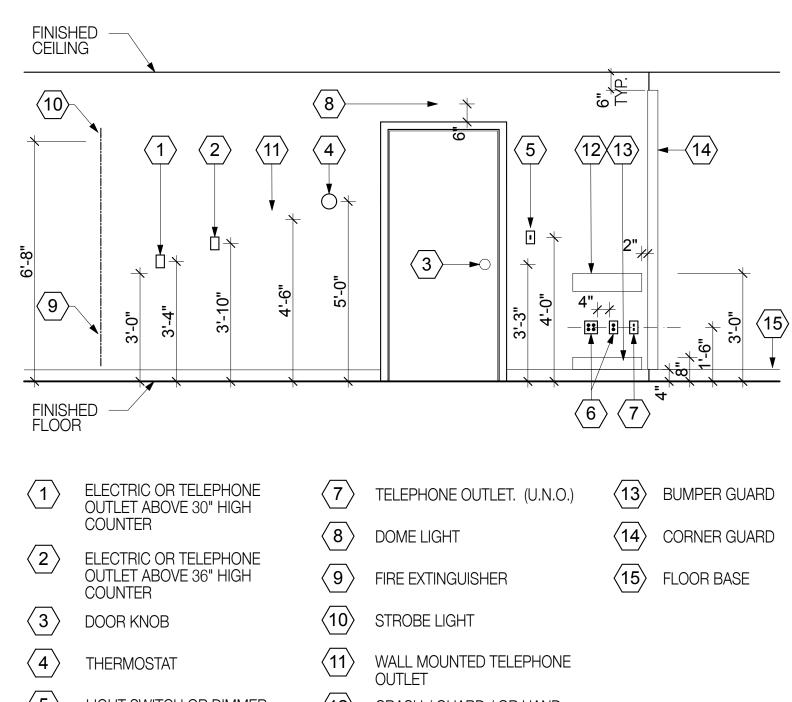
AS NOTED

PROGRESS SET: 12/10/12



PN

2



- $\langle 5 \rangle$ LIGHT SWITCH OR DIMMER
- $\langle 6 \rangle$ ELECTRICAL OUTLET. (U.N.O.)



NOTES:

LIGHT SWITCHES, ELECTRICAL, TELEPHONE, SIGNAL OUTLETS AND DIMMERS ALL TO BE MOUNTED VERTICALLY AT HEIGHTS INDICATED (REFER TO ENGINEERING DRAWINGS FOR ADDITIONAL INFORMATION). ALL DIMENSIONS ARE TO CENTER LINE OF PLATES. ALL SWITCHES, DIMMERS, HARDWARE & TRIM TO BE UNIFORM IN COLOR.

GENERAL ELEVATION NOTE:

PROVIDE 2 1/2" d. GROMMET (BLACK) ON SURFACE MILLWORK STATIONS AS REQUIRED. ALL WOOD BLOCKING SHALL BE "PRESSURE TREATED FIRE RETARDANT" (P.T.F.R.). ALL PREFABRICATED FURNITURE (SHOWN DASHED LINE) ARE NOT IN CONTRACT. PROVIDE BLOCKING FOR ALL WALL MOUNTED MILLWORKS, CABINETRY,

E - ALL CABINET HINGES TO BE CONCEALED, FREE SWINGING WITH 165 D. OPENING

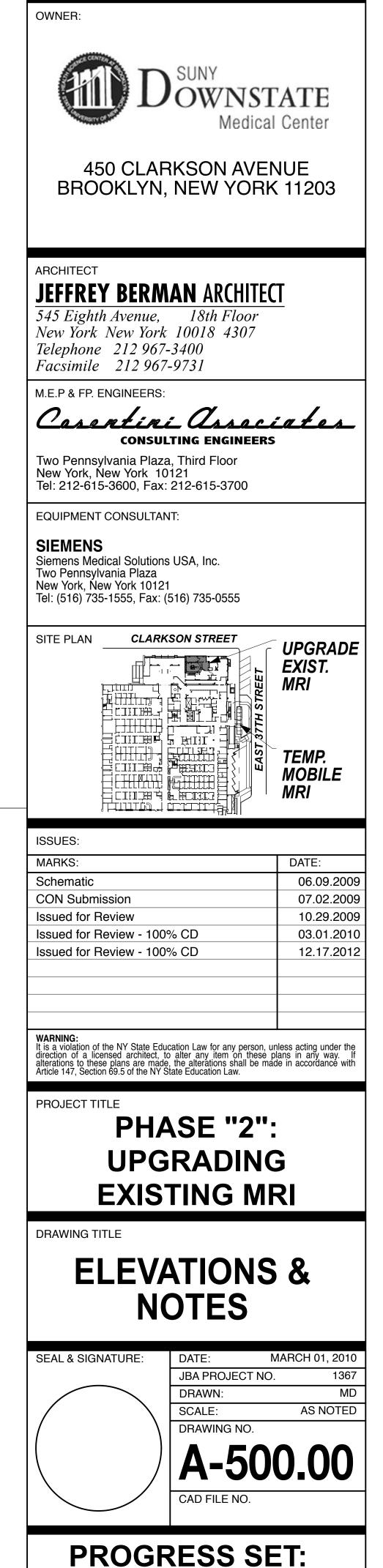
VERIFY ALL DIMENSIONS IN THE FIELD BEFORE FABRICATION. G - ALL EXPOSED MILLWORK SHALL BE PLASTIC LAMINATED. H - REFER TO A-400, EQUIPMENT / FURNITURE SCHEDULE FOR THE FOLLOWING CODED

CODED INTERIOR ELEVATION NOTES:

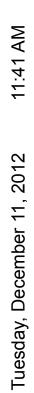
- 4 NEW 4" BASE REFER TO FINISH SCHEDULE
- 5 SOLID SURFACE COUNTERTOP W/ 4" H. SOLID SURFACE BACKSPLASH
- 6 PAINTED STEEL COUNTERTOP SUPPORT
- 7 CLEAT BLOCKING (2X4) OR PAINTED STEEL ANGLE 2X2.
- 9 PAINTED GYPSUM BOARD SOFFIT
- 10 PLASTIC LAMINATE WALL CABINET WITH ADJUSTABLE SHELVES
- $\langle \mathbf{3} \rangle$ [11] EXISTING RELOCATED FIRE EXTINGUISHER. (N.I.C.)
 - 12 EXISTING WINDOW TO REMAIN
- $\langle 1 \rangle$ 13 NEW LOCKERS SOLID PHENOLIC
- (10) [14] NEW WALL MOUNTED SPLIT AC UNIT
 - 15 EXISTING WALL MOUNTED ELECTRICAL PANEL TO REMAIN
- $\langle 5 \rangle$ 16 UNDER COUNTER REFRIGERATOR (N.I.C.).
- (2b) [19] COMPUTER (EXISTING) AND CPU HOLDER (NEW). CPU HOLDER: REFER TO A-400.
- (13) 20 NEW BACKLID / ILLUMINATED PANEL (WINDOW) WHERE CALLED. REFER TO A-400.00

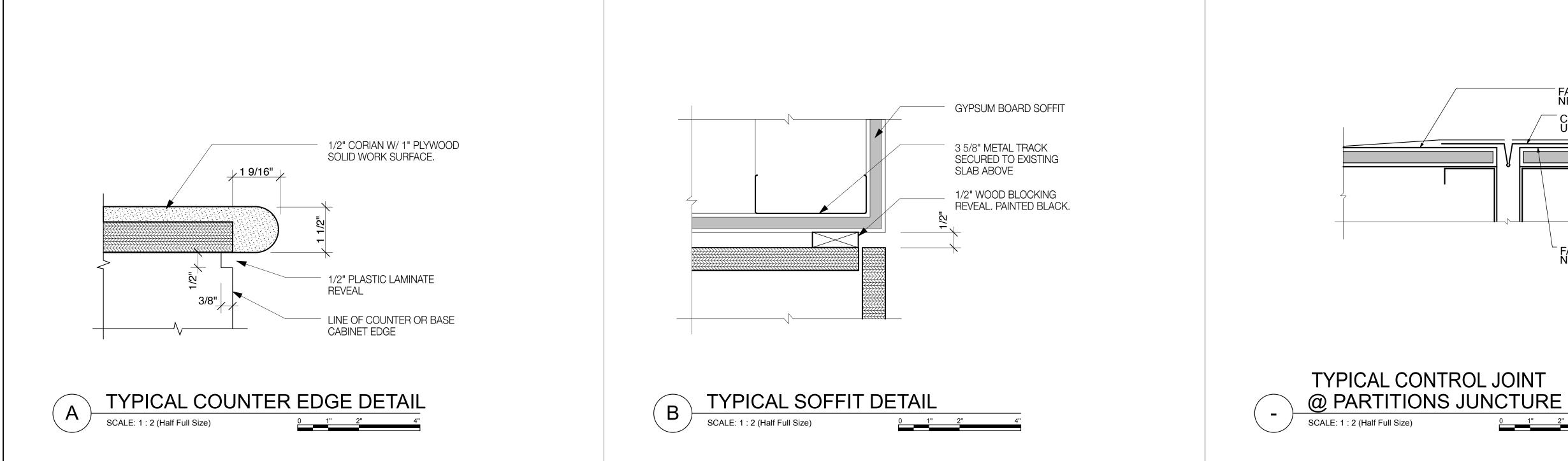
- (12) CRASH / GUARD / OR HAND
 - RIAL



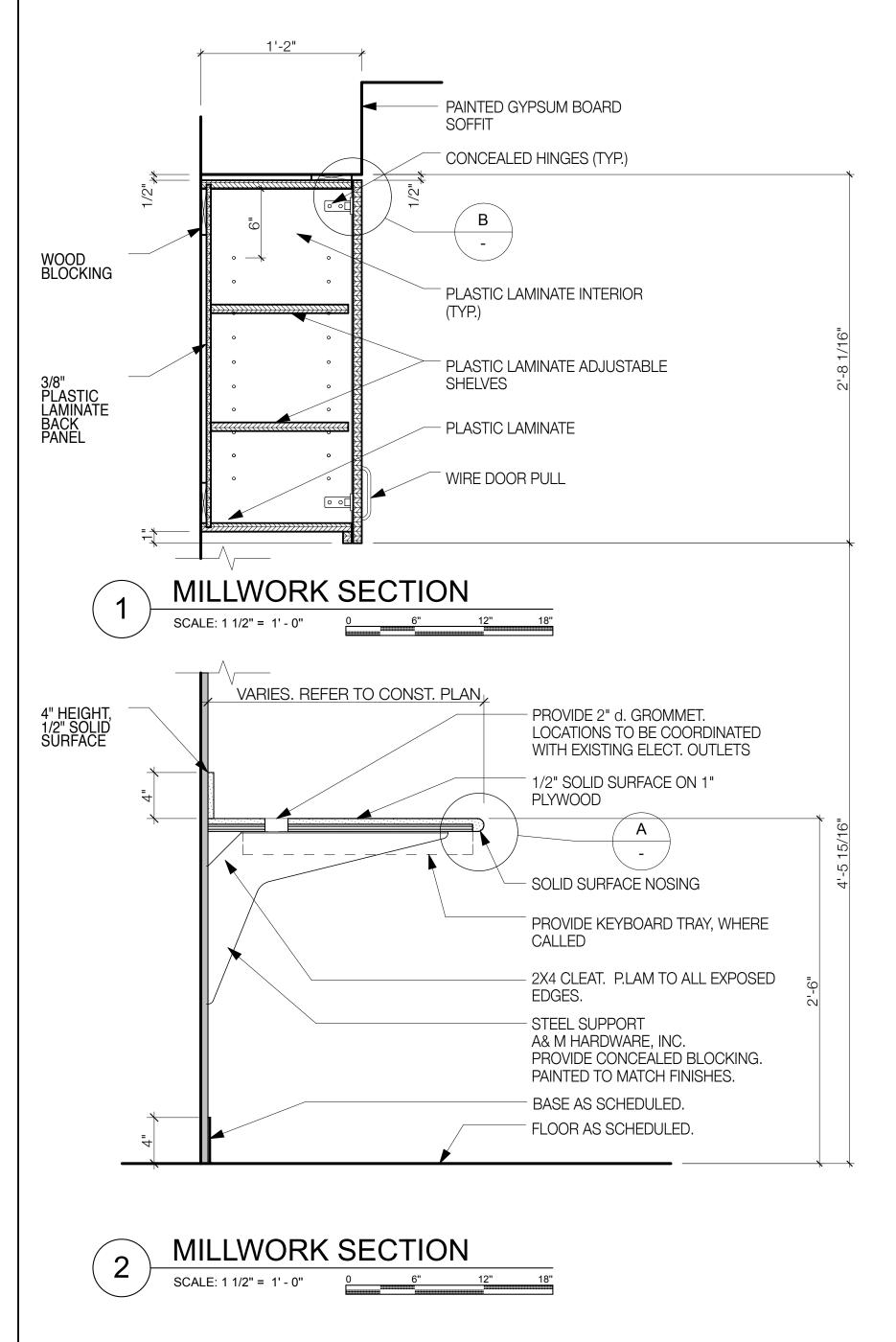


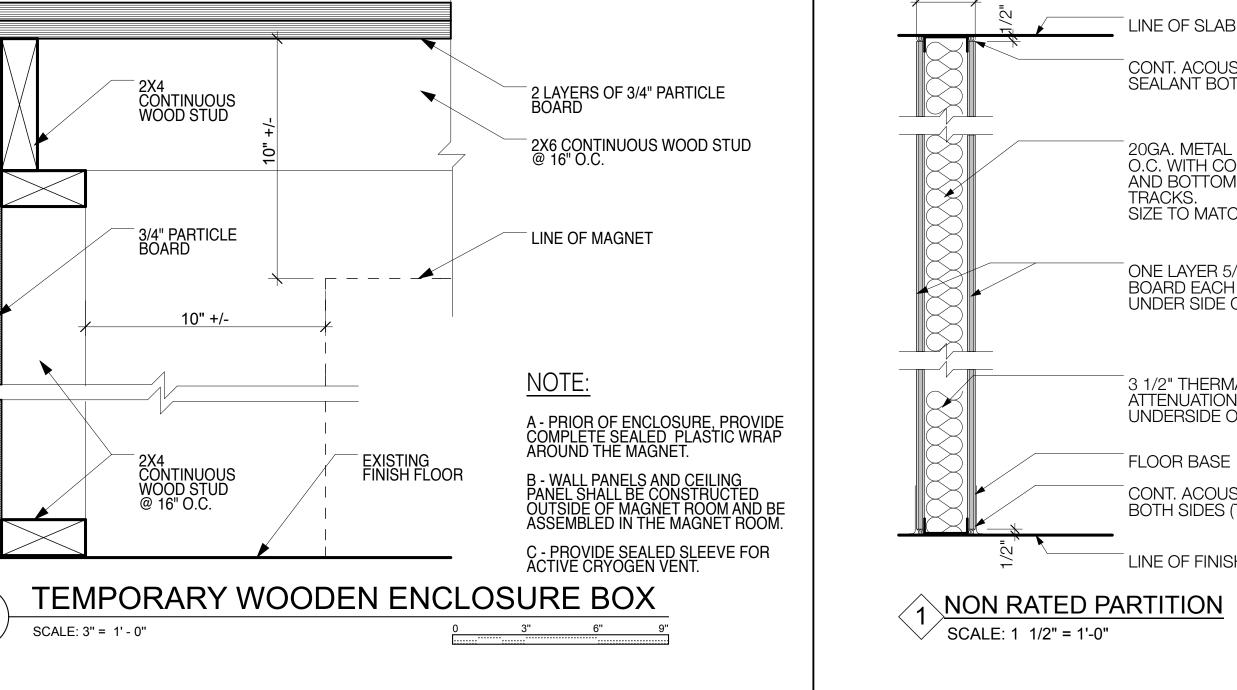
12/10/12





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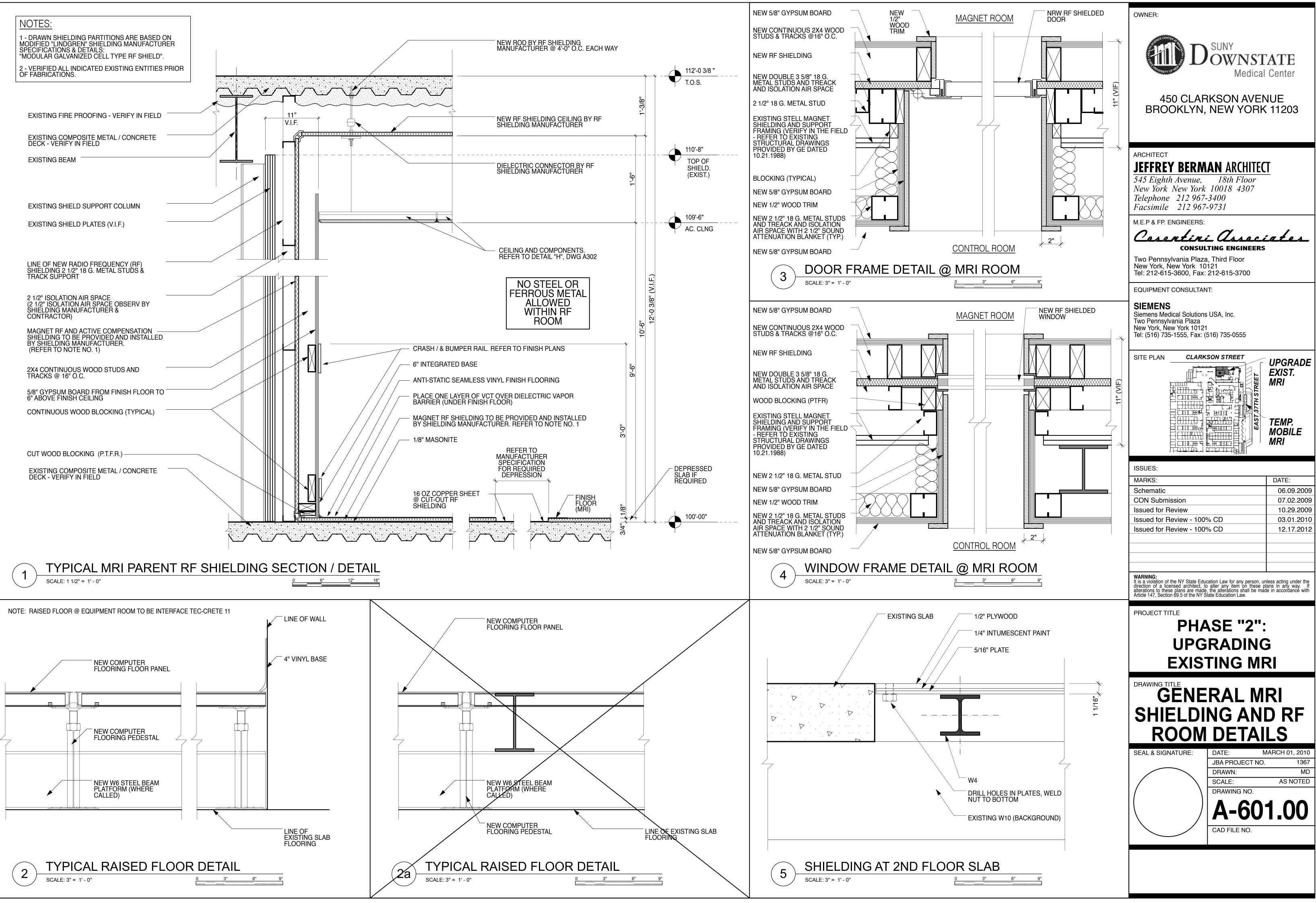


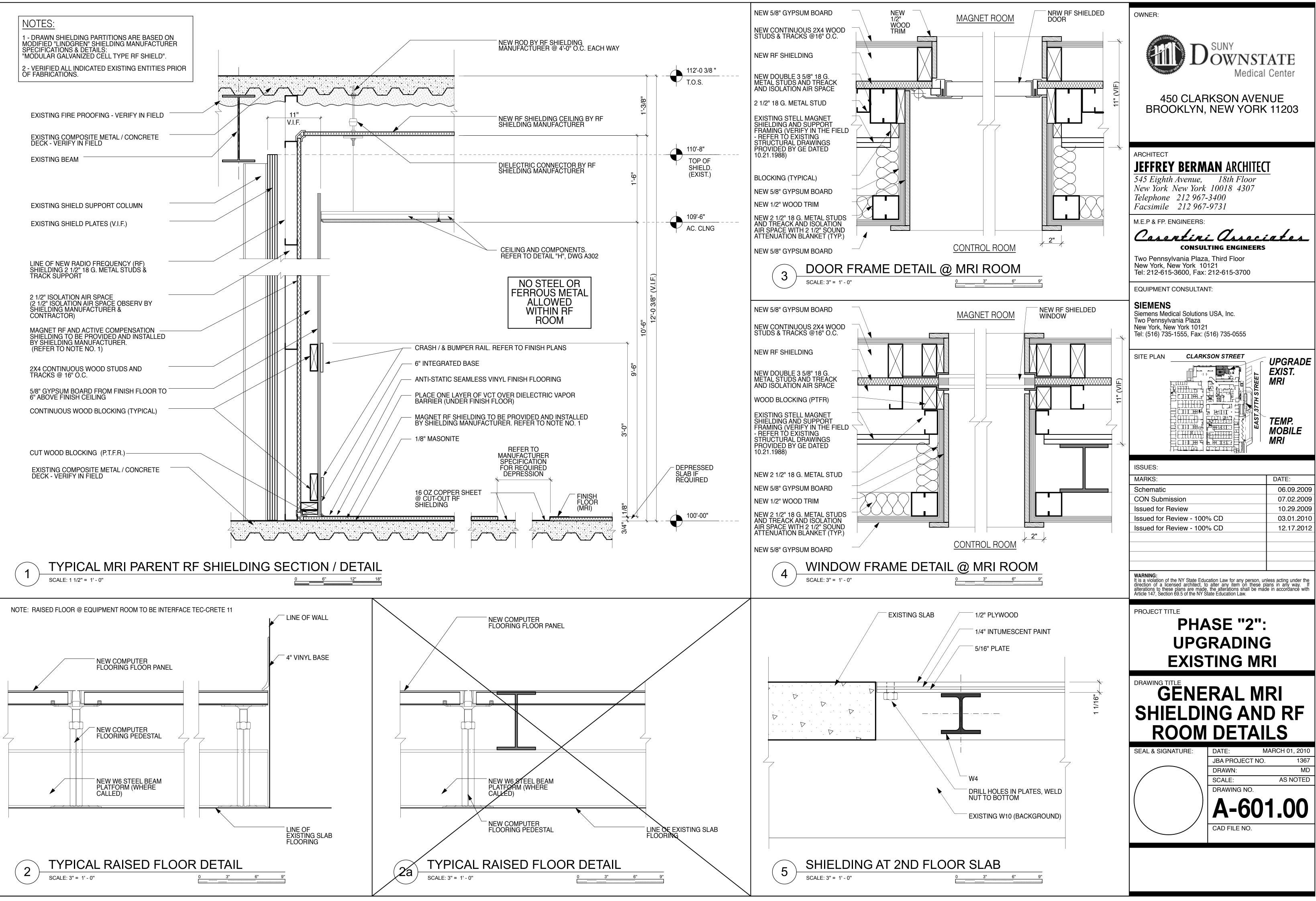


4 7/8"

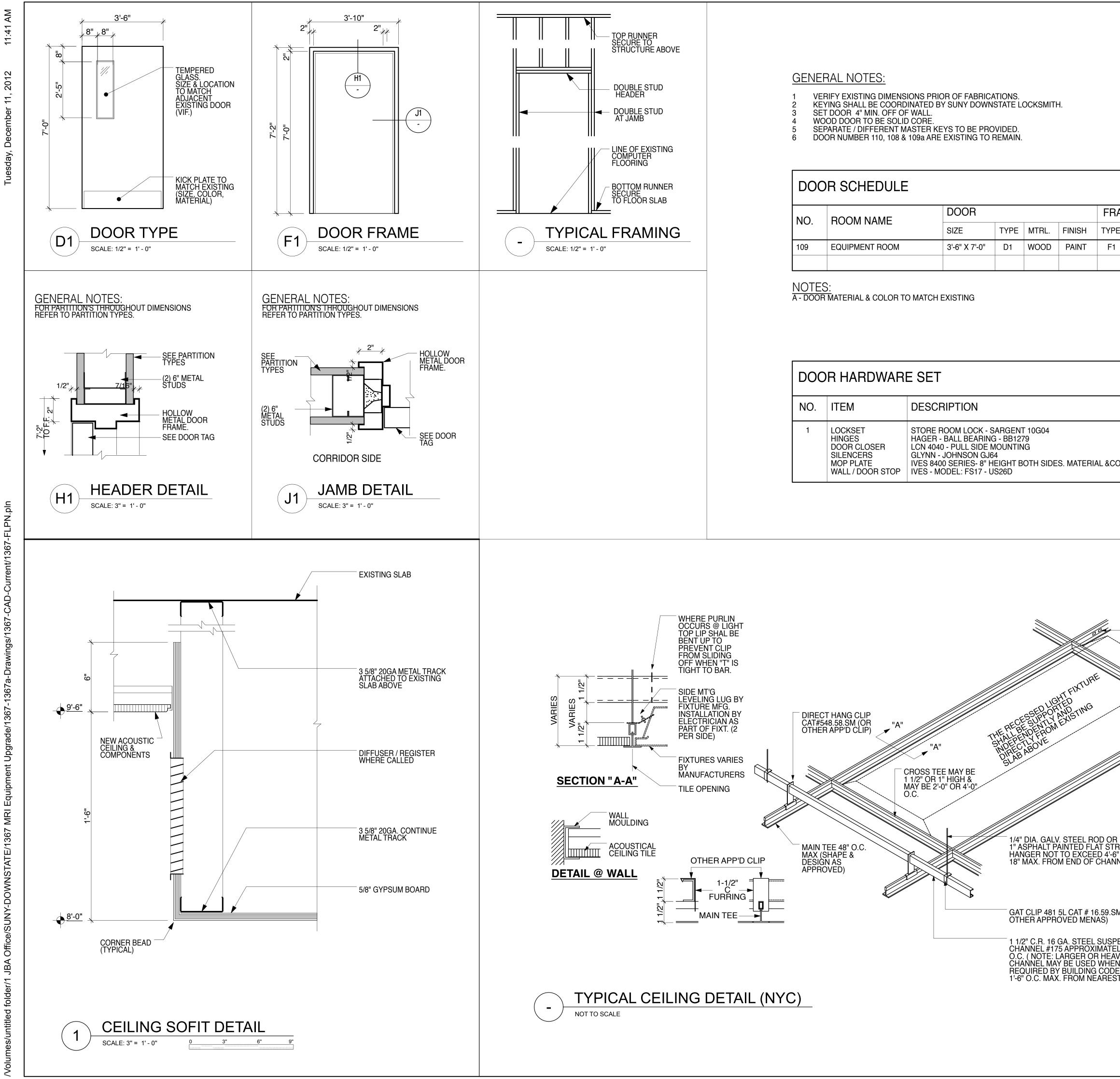
Downstate FACE OF EXIST. OR NEW PARTITION Medical Center CONTROL JOINT USG 093 450 CLARKSON AVENUE **BROOKLYN, NEW YORK 11203** ARCHITECT FACE OF EXIST. OR NEW PARTITION JEFFREY BERMAN ARCHITECT 545 Eighth Avenue, 18th Floor New York New York 10018 4307 Telephone 212 967-3400 *Facsimile* 212 967-9731 M.E.P & FP. ENGINEERS: Casentini Associates **CONSULTING ENGINEERS** Two Pennsylvania Plaza, Third Floor New York, New York 10121 Tel: 212-615-3600. Fax: 212-615-3700 EQUIPMENT CONSULTANT: SIEMENS Siemens Medical Solutions USA, Inc. Two Pennsylvania Plaza New York, New York 10121 Tel: (516) 735-1555, Fax: (516) 735-0555 SITE PLAN CLARKSON STREET UPGRADE EXIST. MRI IIII∄₽́∣ TEMP. MOBILE MRI ISSUES: MARKS: DATE: 06.09.2009 Schematic 07.02.2009 **CON Submission** Issued for Review 10.29.2009 Issued for Review - 100% CD 03.01.2010 12.17.2012 Issued for Review - 100% CD **WARNING:** It is a violation of the NY State Education Law for any person, unless acting under the direction of a licensed architect, to alter any item on these plans in any way. If alterations to these plans are made, the alterations shall be made in accordance with Article 147, Section 69.5 of the NY State Education Law. PROJECT TITLE **PHASE "2":** LINE OF SLAB ABOVE UPGRADING CONT. ACOUSTICAL SEALANT BOTH SIDES (TYP.) **EXISTING MRI** 20GA. METAL STUDS @ 16" O.C. WITH CONTINUOUS TOP DRAWING TITLE AND BOTTOM METAL TRACKS. SIZE TO MATCH EXISTING. MILLWORK DETAILS & PARTITION TYPES ONE LAYER 5/8" GYPSUM BOARD EACH SIDE TO UNDER SIDE OF SLAB ABOVE SEAL & SIGNATURE: MARCH 01, 2010 DATE: JBA PROJECT NO. 1367 [–] 3 1/2" THERMAFIBER SOUND ATTENUATION BLANKET TO UNDERSIDE OF SLAB ABOVE MD DRAWN AS NOTED SCALE: DRAWING NO. A-600.00 CONT. ACOUST. SEALANT BOTH SIDES (TYP.) CAD FILE NO. LINE OF FINISH FLOOR **PROGRESS SET:** 12/10/12

OWNER:





Q



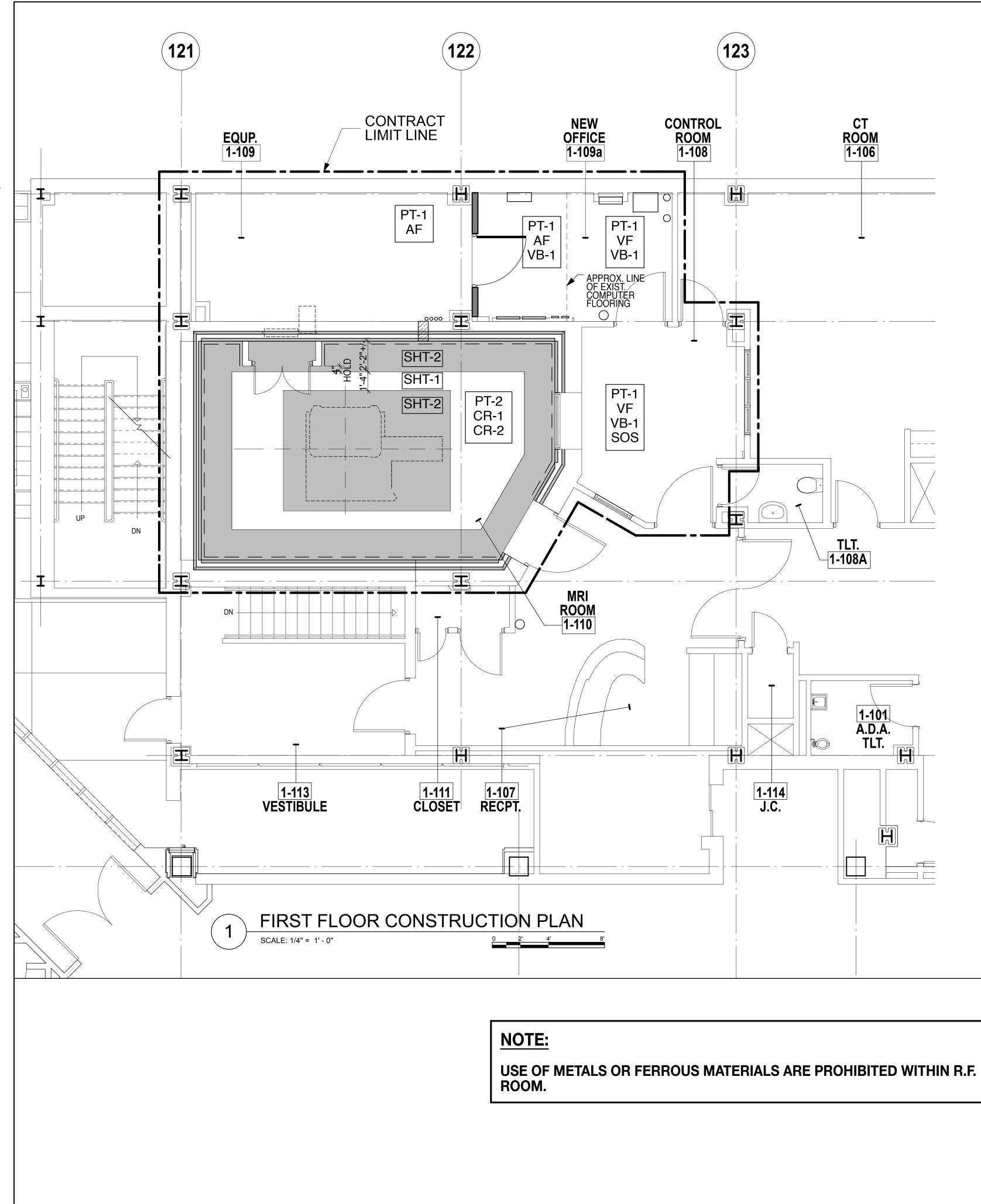
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1367-FLPN.pln CAD 36 367 SUNY-DOWNSTATE/ Ô A M

							OWNER:
	TES: ING DIMENSIONS PRIOR OF FABRIC L BE COORDINATED BY SUNY DOWN						Downstate Medical Center
 3 SET DOOR 4" 4 WOOD DOOR 5 SEPARATE / D 	MIN. OFF OF WALL. TO BE SOLID CORE. IFFERENT MASTER KEYS TO BE PRO R 110, 108 & 109a ARE EXISTING TO	OVIDED.					450 CLARKSON AVENUE BROOKLYN, NEW YORK 11203
DOOR SCH	IEDULE					XXXX	ARCHITECT
NO. ROOM	DOOR		FRAME	LABLE	E HW NC	DTES	JEFFREY BERMAN ARCHITECT 545 Eighth Avenue, 18th Floor
	SIZE ENT ROOM 3'-6" X 7'-0"	TYPEMTRL.FINISHD1WOODPAINT	TYPE MTRL. F1 HM			A	New York New York 10018 4307 Telephone 212 967-3400 Facsimile 212 967-9731
NOTES: - DOOR MATERIAL	. & COLOR TO MATCH EXISTING						M.E.P & FP. ENGINEERS: Consulting Engineers Two Pennsylvania Plaza, Third Floor New York, New York 10121 Tel: 212-615-3600, Fax: 212-615-3700
DOOR HAF	RDWARE SET						EQUIPMENT CONSULTANT: SIEMENS Siemens Medical Solutions USA, Inc. Two Pennsylvania Plaza New York, New York 10121
NO. ITEM	DESCRIPTION				QUAN	ITITY	Tel: (516) 735-1555, Fax: (516) 735-0555
1 LOCKSET HINGES DOOR CL SILENCE MOP PLA WALL / DO	OSER HAGER - BALL BEARIN LOSER LCN 4040 - PULL SIDE RS GLYNN - JOHNSON GJ	G - BB1279 MOUNTING 54 HEIGHT BOTH SIDES. MATERIA	AL &COLOR TO M	IATCH EXISTING	1 3 1 3 2 1		SITE PLAN CLARKSON STREET UPGRADE UPGRADE URGRADE URGR
						TEE SPLICE PLING SURS @ DOM)	ISSUES: MARKS: DATE: Schematic 06.09.200 CON Submission 07.02.200 Issued for Review 100% CD 03.01.201 Issued for Review - 100% CD 12.17.201
DIRECT HANG CL	IP	CESSED LIGHT FIXTUM				ROX. 4'-6" O.C. OCCUR CTLY OVER	WARNING: It is a violation of the NY State Education Law for any person, unless acting under the direction of a licensed architect, to alter any item on these plans in any way. If alterations to these plans are made, the alterations shall be made in accordance with Article 147, Section 69.5 of the NY State Education Law.
CAT#548.58.SM (COTHER APP'D CL	DR "A" IP) "A" "A" CROSS TEE MAY BE 1 1/2" OR 1" HIGH & MAY BE 2'-0" OR 4'-0" O.C.	HEALLENDERON SHALLENDEROVE NDEECTLYOVE DIRECTOVE SLABABOVE				ES TO SUIT ALLATION RANCE & T FIXTURE HT	PROJECT TITLE PHASE "2": UPGRADING EXISTING MRI
MAIN TEE 48" O.C MAX (SHAPE & DESIGN AS APPROVED)		1/4" DIA. GALV. STEEL RC 1" ASPHALT PAINTED FLA HANGER NOT TO EXCEE 18" MAX. FROM END OF 0	D OR 1/8" X AT STRAP D 4'-6" O.C. & CHANNEL	NOTES: 1 - AT EACH EN INTERLOCKING LOCKING BAR 2 - THE TOTAL AND OTHER EC ETC.) & CEILIN	G CROSS TEE MUST BE USE	OR D	DRAWING TITLE DOOR, SCHEDULE, HARDWARE & CEILING DETAILS SEAL & SIGNATURE: DATE: MARCH 01, 2010
λ		GAT CLIP 481 5L CAT # 16 OTHER APPROVED MENA 1 1/2" C.R. 16 GA. STEEL CHANNEL #175 APPROXII O.C. (NOTE: LARGER OR CHANNEL MAY BE USED REQUIRED BY BUILDING 1'-6" O.C. MAX. FROM NEA	AS) SUSPENSION MATELY 4'-6" HEAVIER WHEN CODES) &	AND OTHER EC ETC.) & CEILIN BY THE MAIN E THE ALLOWAB OF IT'S SPAN. I BE FURNISHEE MANUFACTURI 3 - SURFACE O MUST BE INDE FROM 1 1/2" BL FLOOR OR RO	D & CERTIFIEL ER PENDENTLY S LACK IRON OF	FIXTURES SUPPORTED	JBA PROJECT NO. 1367 DRAWN: ME SCALE: AS NOTED DRAWING NO. A-700.00 CAD FILE NO.
;)							PROGRESS SET:

12/10/12

												OWNER:
												Downstate
	RAL NOTES: ERIFY EXISTING DIMENSIONS											Medical Center
2 KE 3 SE	EXISTING DIMENSIONS EYING SHALL BE COORDINAT ET DOOR 4" MIN. OFF OF WAI DOD DOOR TO BE SOLID COP	ED BY SUNY DOWNS [*] L.		H.								450 CLARKSON AVENUE
5 SE	EPARATE / DIFFERENT MASTE DOR NUMBER 110, 108 & 109a	R KEYS TO BE PROV										BROOKLYN, NEW YORK 11203
	OR SCHEDULE									(XXXX)	7	ARCHITECT
		DOOR			FRAM	<u>/</u>					_	JEFFREY BERMAN ARCHITECT
NO.	ROOM NAME		TYPE MTRL.	FINISH		MTRL.	FINISH	LABLE	HW	NOTES		545 Eighth Avenue, 18th Floor New York New York 10018 4307 Telephone 212 967-3400
109	EQUIPMENT ROOM	3'-6" X 7'-0"	D1 WOOD	PAINT	F1	HM	PAINT	-	1	A	_	<i>Facsimile</i> 212 967-9731 M.E.P & FP. ENGINEERS:
NOTE												Casentini Associates
۱ - DOOI	R MATERIAL & COLOR TO MA	ICH EXISTING										CONSULTING ENGINEERS Two Pennsylvania Plaza, Third Floor New York, New York 10121
												Tel: 212-615-3600, Fax: 212-615-3700 EQUIPMENT CONSULTANT:
											7	SIEMENS Siemens Medical Solutions USA, Inc.
	DR HARDWARE S										_	Two Pennsylvania Plaza New York, New York 10121 Tel: (516) 735-1555, Fax: (516) 735-0555
NO.									(-	SITE PLAN CLARKSON STREET
I	HINGES HAC DOOR CLOSER LCN	RE ROOM LOCK - SA ER - BALL BEARING - 4040 - PULL SIDE MC NN - JOHNSON GJ64	- BB1279 DUNTING							1 3 1 3		UPGRADE EXIST.
	MOP PLATE IVE	\$ 8400 SERIES- 8" HE 5 - MODEL: FS17 - US	IGHT BOTH SIDE	S. MATERI	AL &COLO	DR TO N	MATCH EX	ISTING		2 1		
												ISSUES:
												MARKS: DATE: 06.09.2009
												CON Submission07.02.2009Issued for Review10.29.2009
										MAIN TEE S COUPLING (OCCURS @ RANDOM)		Issued for Review - 100% CD 03.01.2010 Issued for Review - 100% CD 12.17.2012
									/			
				HTFIXTUR						1 1/2" CHAN APPROX. 4'- MAY OCCUF DIRECTLY C	NEL -6" O.C. R)VER	WARNING: It is a violation of the NY State Education Law for any person, unless acting under the direction of a licensed architect to alter any item on these plans in any way.
	CT HANG CLIP 548.58.SM (OR ER APP'D CLIP)		RECESSED	ANDSTING						LIGHT		It is a violation of the NY State Education Law for any person, unless acting under the direction of a licensed architect, to alter any item on these plans in any way. If alterations to these plans are made, the alterations shall be made in accordance with Article 147, Section 69.5 of the NY State Education Law.
UTHE		"A" I	ALLENDERO. NDEPETLOVE							VARIES TO S INSTALLATION CLEARANCI LIGHT FIXTO	ON E &	PROJECT TITLE PHASE "2":
	CROS 1 1/2"	S TEE MAY BE OR 1" HIGH &	SLA							HÉIGHT		UPGRADING
	O.C.	E 2'-0" OR 4'-0"										EXISTING MRI
						9" Y	NOT	Ē				DRAWING TITLE DOOR, SCHEDULE,
MAX (DESIC	TEE 48" O.C. SHAPE & SN AS		1/4" DIA. GALY 1" ASPHALT P HANGER NOT 18" MAX. FRC	AINTED FL TO EXCEE M END OF	AT STRAF ED 4'-6" O CHANNE	.C. &) of Li Cros	GHT FIXTUR STEE OR E USED	REAN	HARDWARE &
APPR	OVED)						2 - TH	ε τοται ω			IRE	CEILING DETAILS
	*		GAT CLIP 481	5L CAT # 1 OVED MEN	6.59.SM ((AS)	OR	ETC.) BY TH THE A	& CEILING E MAIN BE LLOWABLE	MATE AM MU E DEFL	NT (AIR BOX RIAL SUPPC JST NOT EX ECTION OF	DRTED CEED 1/360	SEAL & SIGNATURE: DATE: MARCH 01, 2010 JBA PROJECT NO. 1367
			1 1/2" C.R. 16 CHANNEL #17	GA. STEEL	SUSPEN	SION 4'-6"	MANU	FACTURE	R	TION DATA N FIFIED BY TH		DRAWN: MD SCALE: AS NOTED DRAWING NO.
			O.C. (NOTE: CHANNEL MA REQUIRED B	LARGER OI Y BE USED Y BUILDING	R HEAVIE WHEN G CODES)	R &	MUST FROM	BE INDEP 1 1/2" BLA	ENDEN	ANT FIXTUF ITLY SUPPC ON OR FROM STRUCTION	DRTED M	A-700.00
;)			1'-6" O.C. MA)	K. FROM NE	AREST Ý	VALL	00		2011			CAD FILE NO.
/												
												PROGRESS SET:



Z

			FINISH SCHE	DULE	
	CODE	ITEM / DESCRIPTION	MANUFACTURER	NUMBER / COLOR	NOTES
	PT-1	WALL PAINT EGGSHELL	BENJAMIN MOORE	VANILLA ICE CREAM 2154-70	
WALL	PT-2	WALL PAINT EGGSHELL	BENJAMIN MOORE	WEDDING WEIL 2125-70	
	SHT-1	SHEET VINYL	NORA	ENVIRONCARE 2780 PHANTOM MIST	MRI ROOM (ACCENT)
FLOOR	SHT-2	SHEET VINYL	NORA	ENVIRONCARE 2936 FLAX	MRI ROOM (CENTER & PERIMETER) INTEGRATED BASE
FLC	VF	VINYL FLOORING	AMTICO	MAPLE W684	
BASE	VB-1	VINYL BASE	ALLSTATE	A31	
X	PL-1	PLASTIC LAMINATE	NEVAMAR	BLOSSOM CHERRY WC5581N	
MILLWORK	SOS	SOLID SURFACE	CORIAN	CHAMOIS	
	AF	ACCESS FLOORING PANEL	TOTE	MAPLE W684	1
EOUS	CR-1	CRASH RAIL	C/S GROUP	ACROVYN, SCR-48 COLOR: BLUE SILK, 930	ALUMINUM COMPONENT
MISCELLANEOUS	CR-2	BUMPER GURARD	C/S GROUP	ACROVYN - ACCENT RIAL, SCR-40 COLOR: BLUE SILK 930	ALUMINUM COMPONENT
Ш					

NOTE:

1 - CONTRACTOR SHALL DOCUMENT AND VERIFY EXISTING PERFORATED PANELS, PRIOR OF DEMOLITION AND PROVIDE THE NEW PERFORATED PNAELS AT THE SAME LOCATIONS.

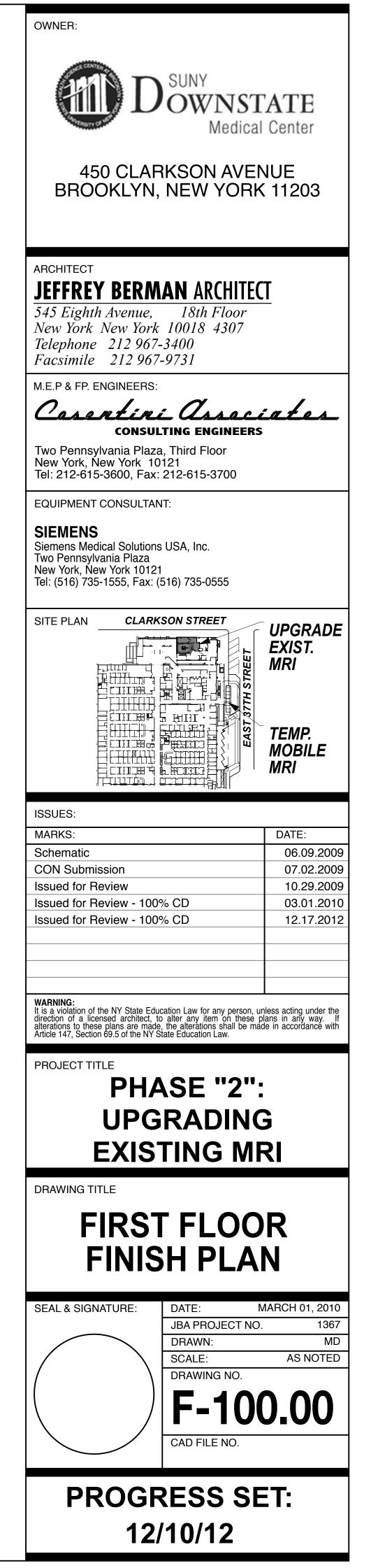
GENERAL NOTE:

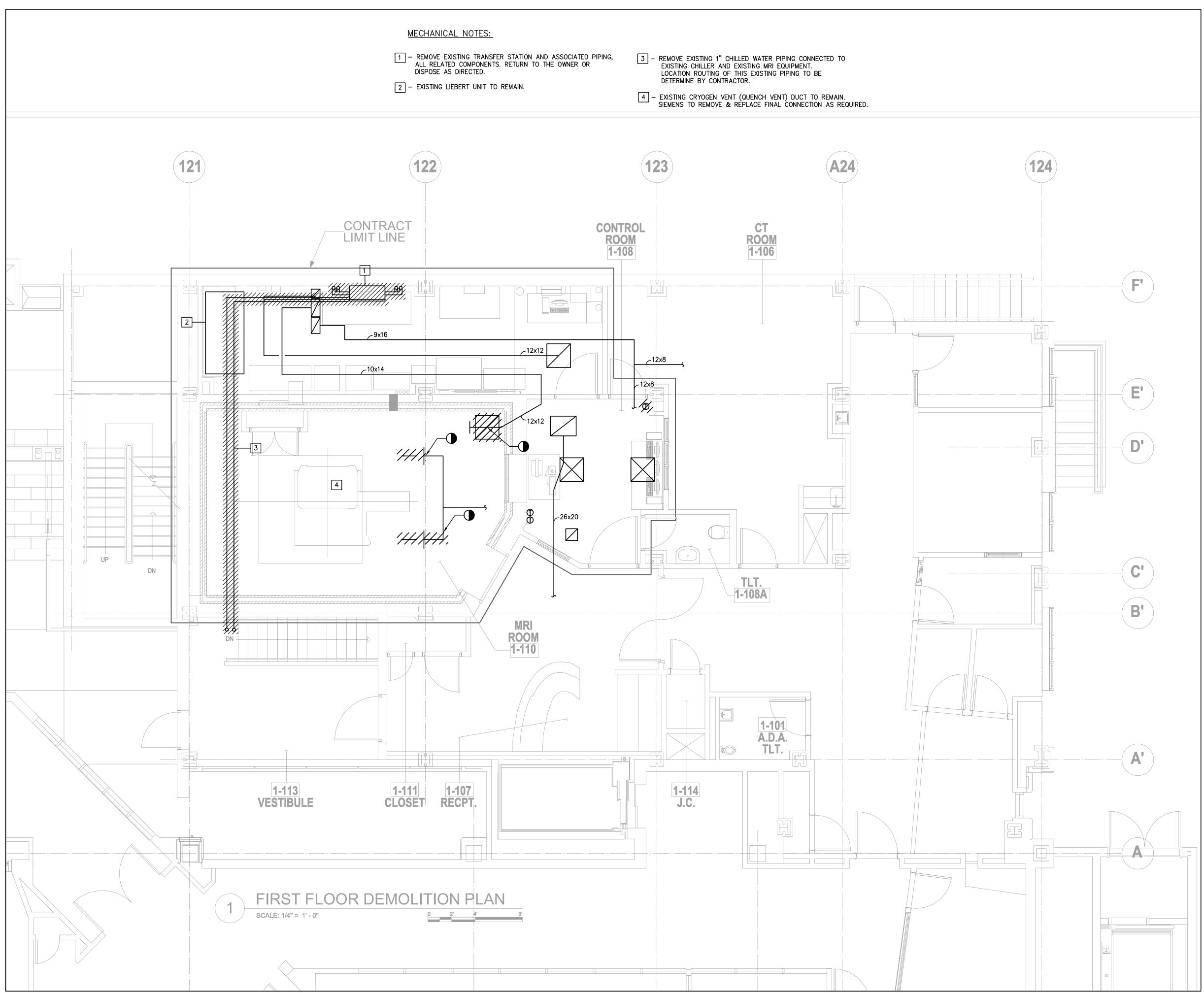
A - DOOR, AND DOOR FRAME PAINT SHALL BE MATCH TO EXISTING ADJACENT NEWELY FINISH AREA. CONTRACTOR TO VERIFY IN FIELD.

B - REMOVE ALL FINISHES AS SHOWN AND NOTED ON DEMOLITION PLAN, UNLESS OTHERWISE NOTED.

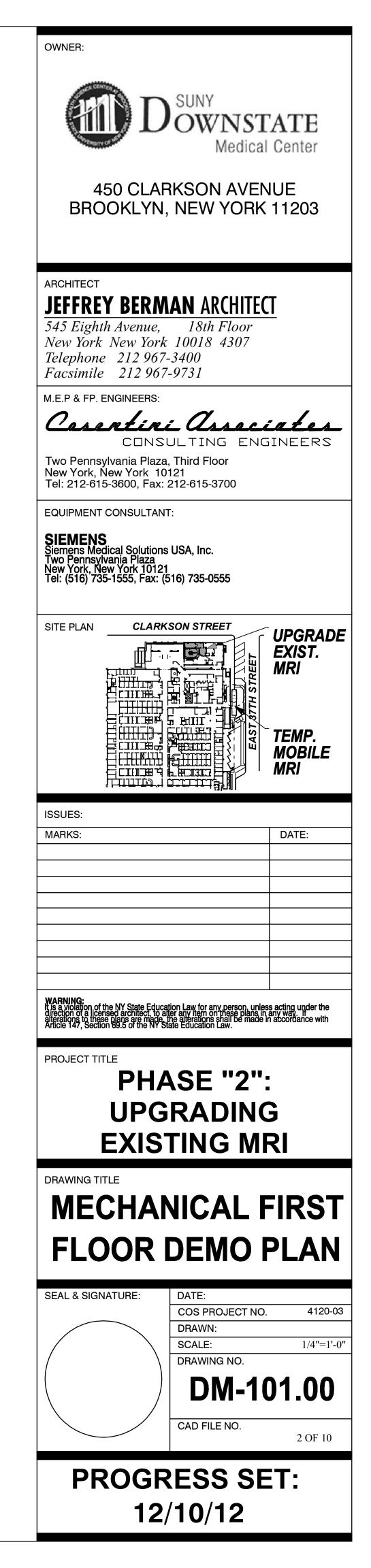
C - FLASH PATCH / SELF LEVELING CEMENTITIOUS UNDERLAYMENT TO LEAVE FLOOR READY TO ACCEPT NEW FINISHES. D - PATCH AND REPAIR WALLS & FLOORS AT ALL AREAS OF FINISH REMOVAL.

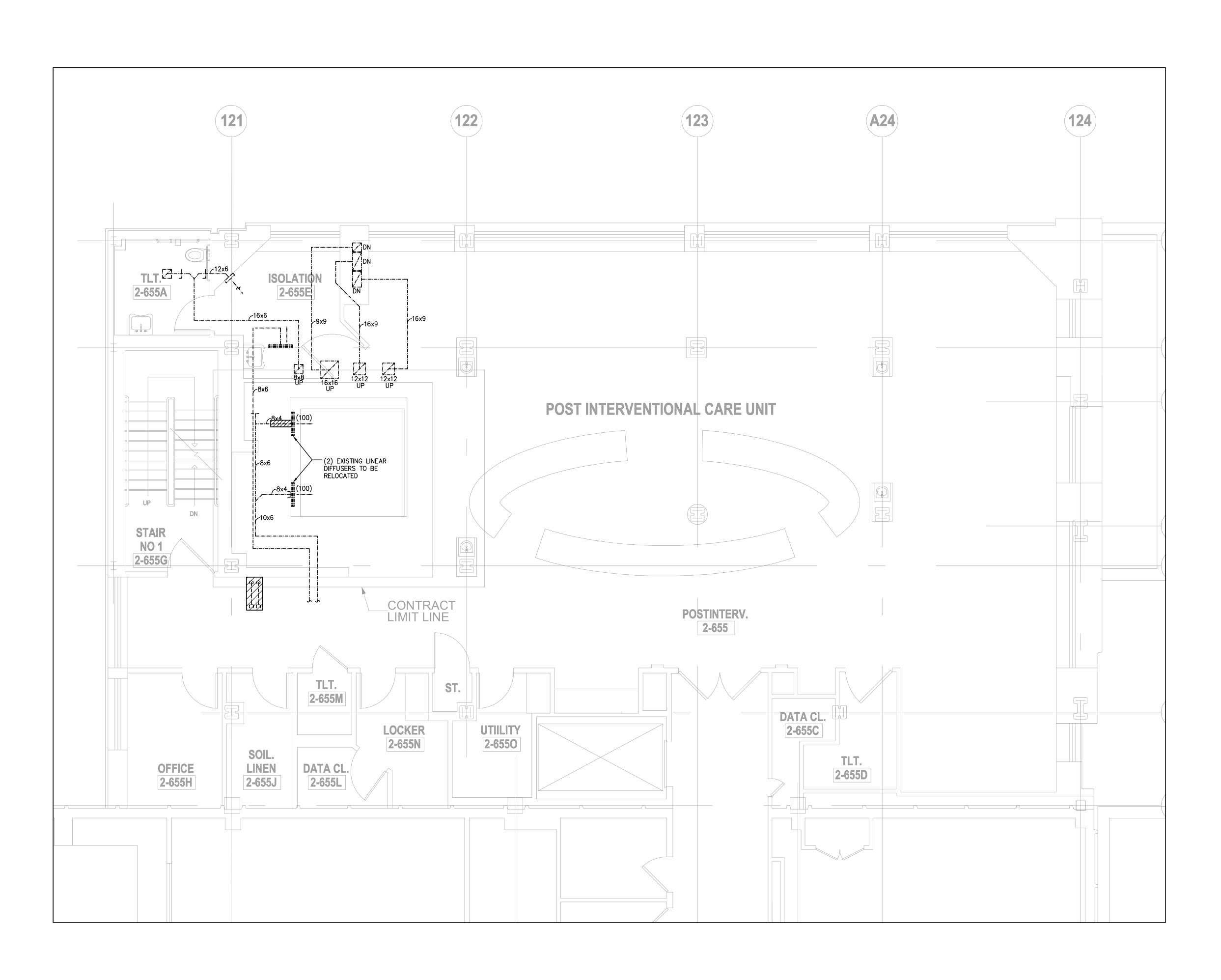
E - SHERE COVE BASED MEET AT A CORNER, USE A PROPER CORNER PIECE OR MITRE THE EDGES. TYPICAL FOR ALL BASE TYPES. F - NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING.



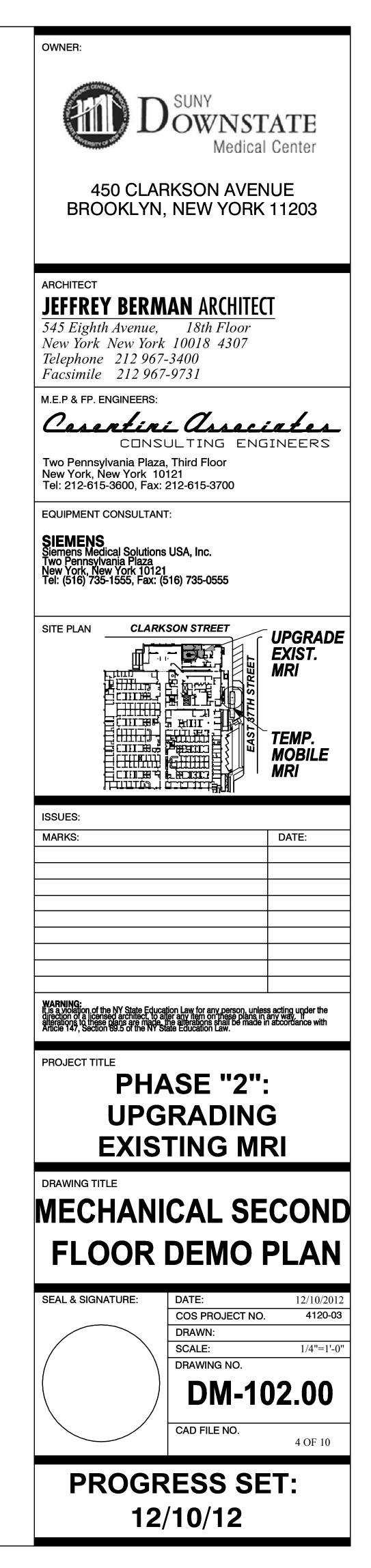


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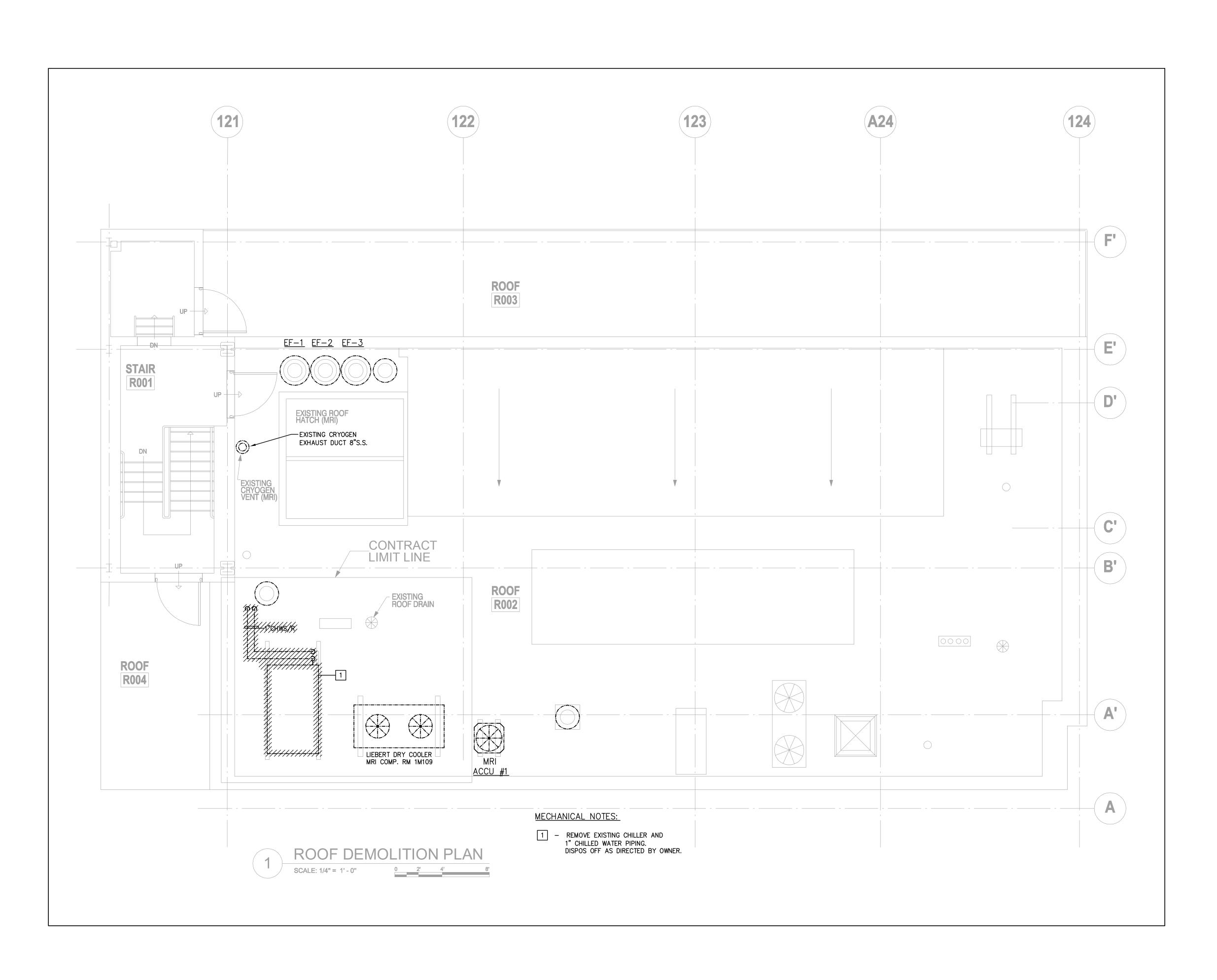


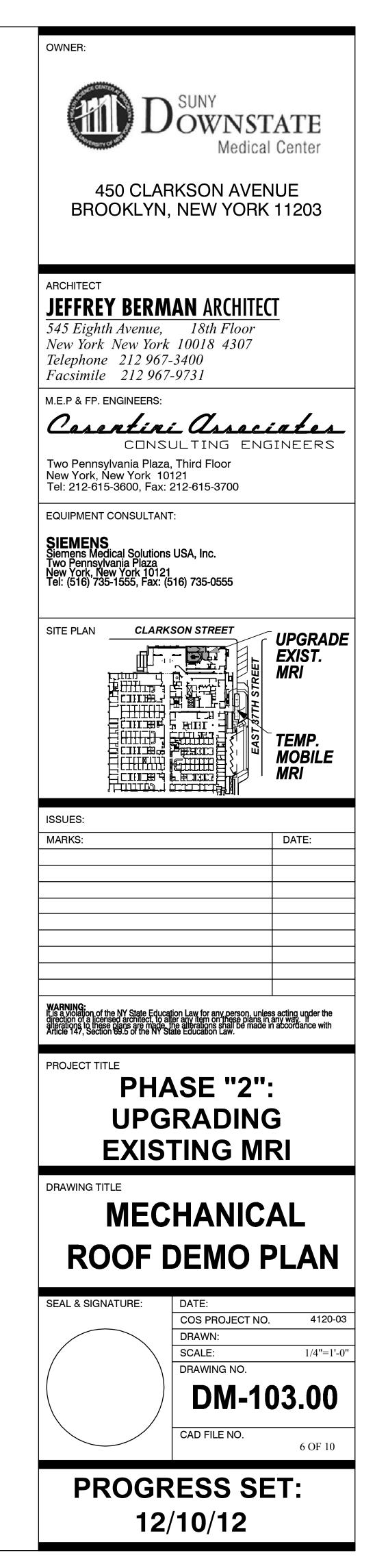


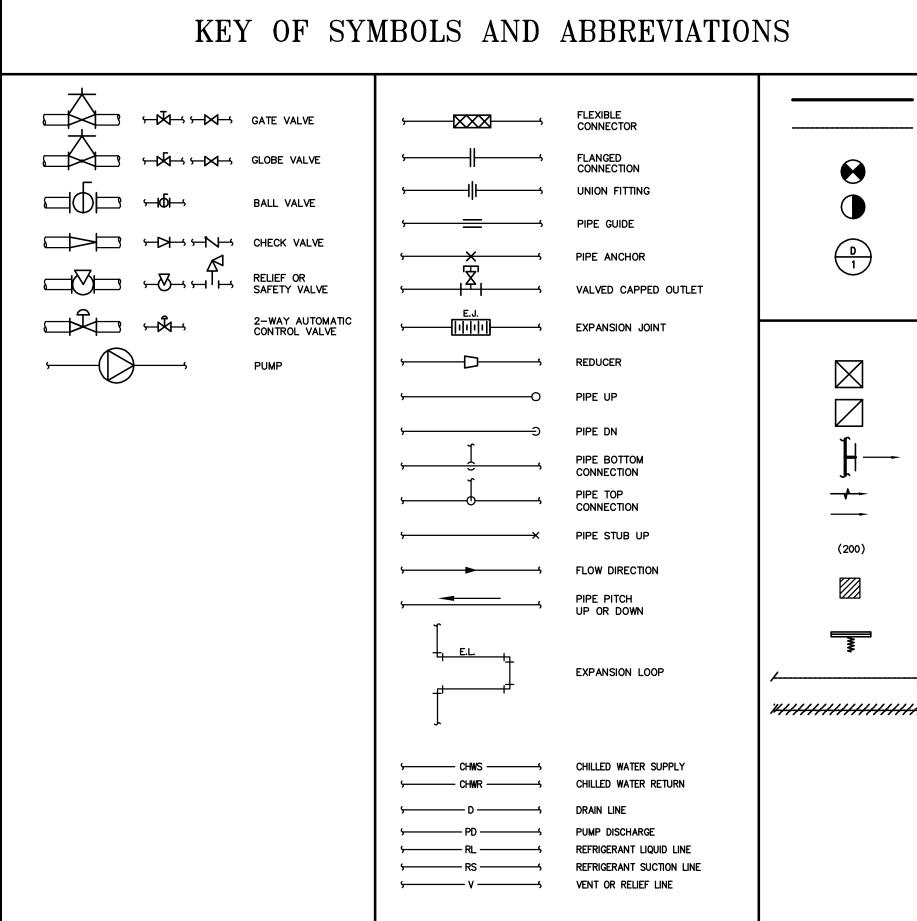
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GENERAL NOTES:

- CONTRACTOR TO RUN DUCTWORK AND PRESSURE PIPING UP AND DOWN TO COORDINATE WITH OTHER TRADES AND ARCHITECT'S CEILING REQUIREMENTS. ALL GRAVITY PIPING (DRAIN PIPING) TO PITCH DOWN IN DIRECTION OF FLOW. PROVIDE CONDENSATE PUMPS AS REQUÍRED IF THE DRAIN PIPING CAN NOT BE PITCHED.
- 2. ALL FLOOR MOUNTED EQUIPMENT TO BE MOUNTED ON MINIMUM 4" HOUSEKEEPING PADS TO BE PROVIDED BY GC.
- 3. PROVIDE FSD W/ACCESS DOOR AT ALL DUCTS WHICH PENETRATE 2-HOUR FIRE RATED WALL, SHAFT/SLAB, WHETHER SHOWN HERE OR NOT. PROVIDE DUCT SMOKE DETECTOR AND SM AS PART OF THE HVAC SYSTEM. SEE THE LATEST ARCHITECTURAL DRAWINGS FOR THE EXTEND OF 2-HR FIRE RATED
- CONSTRUCTION 4. FOR EXACT LOCATIONS OF ALL VISIBLE ELEMENTS, INCLUDING GRILLES, DIFFUSERS,
- THERMOSTATS, ETC, REFER TO ARCHITECTURAL DOCUMENTS. 5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

	MECHANICAL DRAWING LIST
DWG. #	DESCRIPTION
M-001.00	MECHANICAL GENERAL NOTES, KEY OF SYMBOLS, AND DRAWING LIST
DM-101.00	MECHANICAL FIRST FLOOR DEMO PLAN
M-101.00	MECHANICAL FIRST FLOOR PLAN
DM-102.00	MECHANICAL SECOND FLOOR DEMO PLAN
M-102.00	MECHANICAL SECOND FLOOR PLAN
DM-103.00	MECHANICAL ROOF DEMO PLAN
M-103.00	MECHANICAL ROOF PLAN
M-301.00	MECHANICAL RISER DIAGRAM
M-401.00	MECHANICAL SPECIFICATIONS
M-501.00	MECHANICAL DETAIL SHEET 1

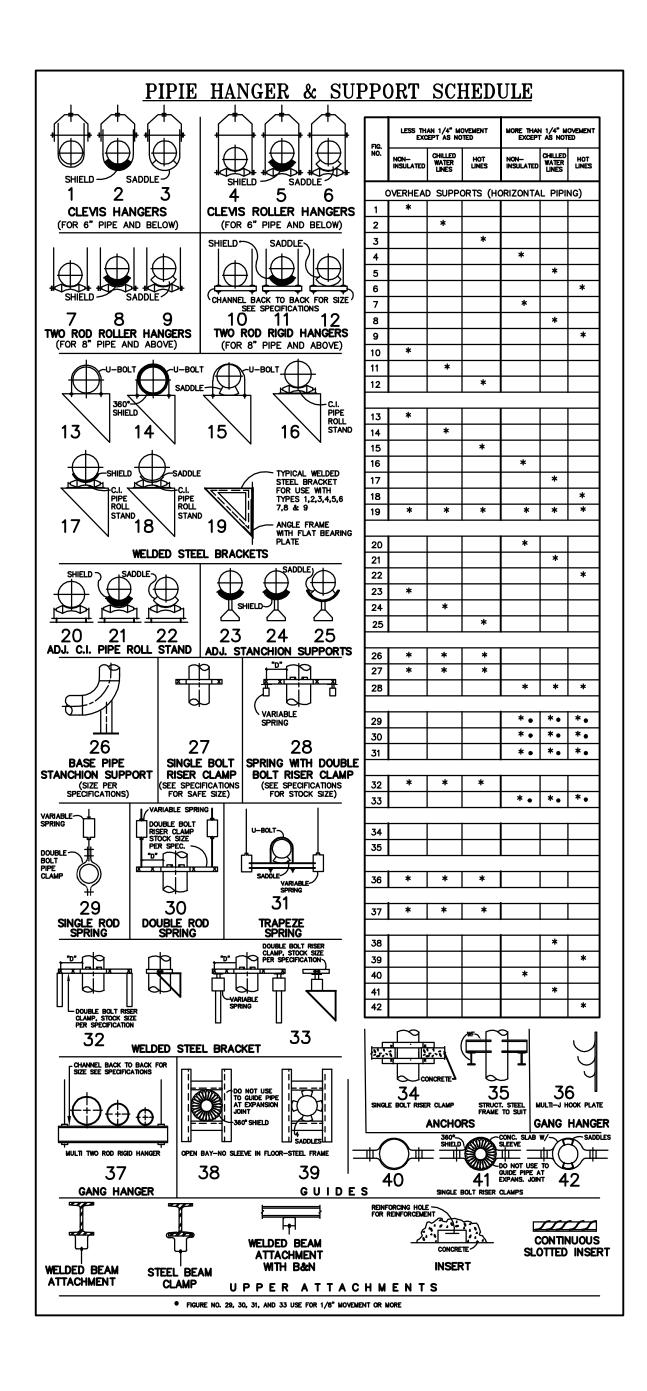
ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE COMPLIANCE STATEMENT: TO THE BEST OF MY KNOWLEDGE, BELIEF, AND PROFESSIONAL JUDGEMENT, THIS APPLICATION IS IN COMPLIANCE WITH THE ECCCNYS 2010.

HVAC GENERAL NOTES:

- CONTRACTOR SHALL PAY ALL FEES AND OBTAIN ALL PERMI
- REQUIRED BY LOCAL AND STATES CODES. WHERE PIPING, LIGHTS AND DUCTWORK CONFLICT, DUCTWO
- SHALL BE COORDINATED IN THE FIELD TO SUIT CONDITIO ALL DUCTWORK TO BE KEPT AS HIGH AS POSSIBLE SO AS
- MAINTAIN CEILING HEIGHTS SHOWN ON ARCHITECTURAL DR PROVIDE VOLUME DAMPERS ON ALL TAPS FOR ALL LOW PRE DUCTWORK. DO NOT INSTALL DAMPERS ON MEDIUM PRESSUR
- DUCTWORK, UPSTREAM OF THE VAV BOXES. ACCESS IS REQUIRED BELOW ALL DAMPERS, VALVES, VAV BOXES AND EQUIPMENT.
- REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN. FOR EXACT LOCATION AND ARRANGEMENT OF ROOM THERMOS AND EXHAUST FAN SWITCHES, SEE THE ARCHITECT'S DRAW IF NONE IS SHOWN, THERMOSTAT/SWITCH SHALL BE NEXT THE LIGHT SWITCH.
- 8. DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
- . DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED PER LA EDITION OF THE SMACNA DUCT CONSTRUCTION STANDARDS.
- 0. FOR EXACT LOCATION OF THERMOSTATS, GRILLES, AND DIFFUSERS REFER TO ARCHITECT DRAWINGS. ALL GRILLES DIFFUSERS PAINTED TO MATCH ADJACENT COLORS. COLORS TO BE APPROVED BY ARCH. &OWNER.
- ALL SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR DUCTWO GALV. SHEET METAL UNLESS OTHERWISE SPECIFIED IN TH OR DWGS.
- 12. ALL STRAP HANGER & SUPPORTS FOR FLEXIBLE DUCTWORK BE SIZES & INSTALLED IN ACCORDANCE W/SMACNA STANDA NOT LESS THAT 1-1/2" WIDE.
- PROVIDE MINIMUM OF R-4.2 ON DUCTWORK ABOVE CEILING. ALL FLEXIBLE DUCTWORK SHALL BE ALL METAL CONSTRUCT CONSISTING OF A CORE STANDARD TRIPLE LOCK METAL FLE DUCTING FOR STRENGTH AND AIRTIGHTNESS.
- AIR HANDLING UNITS OVER 2,000 CFM SHALL HAVE SMOKE ON THE SUPPLY DUCT. AIR HANDLING UNITS OVER 15,00 SHALL HAVE SMOKE DETECTORS ON THE SUPPLY AND RETUR

	NOTE:	THE KEY OF SYMBOLS ONLY AND ITEMS INDIC WITHIN THE SCOPE OF	ATI	ED ARE N	
		NEW WORK		AC	AIR CONDITIONING
-		EXISTING WORK		ACU	AIR CONDITIONING UNIT
				AD	ACCESS DOOR
		CONNECT NEW WORK		CD	CEILING DIFFUSER
				CFM	CUBIC FEET PER MINUTE
		CUT & CAP		CG	CEILING GRILLE
		CONDENSATE DRAIN RISER		CR DN	CEILING REGISTER DOWN
				EF	EXHAUST FAN
				FC	FLEXIBLE CONNECTION
				FD	FLOOR DRAIN
				GC	GENERAL CONTRACTOR
		CEILING DIFFUSER		GE	GENERAL EXHAUST
				GP	GLYCOL PUMP
		RETURN GRILLE		GPM	GALLONS PER MINUTE
		TOP REGISTER		HP	HORSEPOWER
				RA	RETURN AIR
		RETURN/EXHAUST AIR		UL	UNDERWRITER'S LABORATORY
		SUPPLY AIR			
		AIR QUANTITY (200 CFM)			
		ELECTRICAL RADIANT PANEL			
		USER LINEAR DIFFUSER LOT DIFFUSER, SUPPLY			
-/	EXISTING EQUIPMEN	DUCTWORK, PIPING OR IT TO REMAIN.			
41	EXISTING EQUIPMEN	DUCTWORK, PIPING OR IT TO BE REMOVED.			

4	<u>IVAC GENERAL NOIES:</u>		
	CONTRACTOR SHALL PAY ALL FEES AND OBTAIN ALL PERMITS REQUIRED BY LOCAL AND STATES CODES.	15.	WHERE FIRE OR FIRE/SMOKE DAMPERS ARE LOCATED ABOVE A SHEETROCK/NON ACCESSIBLE CEILING. THE CEILING ACCESS DOOR SHALL BE INSTALLED TO ALLOW ACCESS TO THE DUCT ACCESS DOOR.
•	WHERE PIPING, LIGHTS AND DUCTWORK CONFLICT, DUCTWORK SHALL BE COORDINATED IN THE FIELD TO SUIT CONDITIONS.	16.	ALL DUCTWORK IS TO BE KEPT AS HIGH AS POSSIBLE SO AS TO MAINTAIN CEILING HEIGHTS SHOWN ON ARCHITECTURAL DRAWINGS.
	ALL DUCTWORK TO BE KEPT AS HIGH AS POSSIBLE SO AS TO MAINTAIN CEILING HEIGHTS SHOWN ON ARCHITECTURAL DRAWINGS.	17.	WHERE PIPING, LIGHTS AND DUCTWORK CONFLICT, DUCTWORK SHALL SET UP AND DOWN.
	PROVIDE VOLUME DAMPERS ON ALL TAPS FOR ALL LOW PRESSURE DUCTWORK. DO NOT INSTALL DAMPERS ON MEDIUM PRESSURE DUCTWORK, UPSTREAM OF THE VAV BOXES.	18.	PROVIDE COMBINATION FIRE/SMOKE DAMPERS (WITH ACCESS DOORS) AT THE FOLLOWING POINTS.
	ACCESS IS REQUIRED BELOW ALL DAMPERS, VALVES, VAV BOXES AND EQUIPMENT.		A. POINT OF PASSING THROUGH SHAFT WALLS TO CONNECT TO VERTICAL RISERS. B. WHERE PASSING THROUGH FLOOR OR CEILING CONSTRUCTION
	FOR EXACT LOCATION OF CEILING DIFFUSERS AND REGISTERS REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN.		(NOT IN AIR SHAFTS). IF THE FLOOR AND CEILING RATED 2 HRS OR MORE.
	FOR EXACT LOCATION AND ARRANGEMENT OF ROOM THERMOSTATS AND EXHAUST FAN SWITCHES, SEE THE ARCHITECT'S DRAWINGS. IF NONE IS SHOWN. THERMOSTAT/SWITCH SHALL BE NEXT TO		 C. WHERE PASSING THROUGH FIRE RATED PARTITIONS (REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF FIRE RATED PARTITION). RATED 2 HRS OR MORE. D. WHERE INDICATED OR REQUIRED BY CODE.
		19.	PROVIDE FUSIBLE LINK FIRE DAMPERS IN EXHAUST DUCTS OR SHAFTS WHERE THE EXHAUST FAN IS MAINTAINED IN OPERATION DURING
	DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS. DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED PER LATEST		OCCUPANCY IE, TOILET EXHAUST DUCTS, ACCESS IS REQUIRED BELOW ALL DAMPERS, VALVES, EXPANSION JOINTS, AIR TERMINAL BOXES, ACCESS DOORS IN DUCTWORK AND OTHER MECHANICAL EQUIPMENT.
	EDITION OF THE SMACNA DUCT CONSTRUCTION STANDARDS.	20.	PROVIDE VOLUME DAMPERS IN LOW PRESSURE DUCTWORK FOR ALL SUPPLY,
	FOR EXACT LOCATION OF THERMOSTATS, GRILLES, AND DIFFUSERS REFER TO ARCHITECT DRAWINGS. ALL GRILLES AND DIFFUSERS PAINTED TO MATCH ADJACENT COLORS.		RETURN, AND EXHAUST OUTLETS, PROVIDE VOLUME DAMPERS (VD) AT EVERY DUCTWORK BRANCH, TAP AND SPLIT. DO NOT INSTALL VOLUME DAMPERS ON MEDIUM PRESSURE DUCTWORK.
		21.	PROVIDE ACCESS DOORS IN DUCTWORK WHERE INDICATED OR REQUIRED FOR ACCESS TO SYSTEM COMPONENTS INCLUDING, BUT NOT LIMITED TO
	ALL SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR DUCTWORK SHALL BE GALV. SHEET METAL UNLESS OTHERWISE SPECIFIED IN THE SPECS OR DWGS.		THE FOLLOWING: A. AUTOMATIC DAMPERS B. FIRE DAMPERS
	ALL STRAP HANGER & SUPPORTS FOR FLEXIBLE DUCTWORK SHALL BE SIZES & INSTALLED IN ACCORDANCE W/SMACNA STANDARDS, BUT		C. COMBINATION FIRE SMOKE DAMPERS D. SMOKE DAMPERS
	NOT LESS THAT 1-1/2" WIDE.	22.	PROVIDE INSULATED CONDENSATE DRAIN TO NEAREST FLOOR DRAIN FOR ALL AC UNITS. PROVIDE CONDENSATE PUMP WITH A MIN.CAPACITY OF
i	PROVIDE MINIMUM OF R-4.2 ON DUCTWORK ABOVE CEILING. ALL FLEXIBLE DUCTWORK SHALL BE ALL METAL CONSTRUCTION CONSISTING OF A CORE STANDARD TRIPLE LOCK METAL FLEXIBLE DUCTING FOR STRENGTH AND AIRTIGHTNESS.		20'TDH@120GPH, 115/1/60, 6FT.PLUG IN, RESERVOIR, COMPLETE VALVE PACKAGE AND ACCESSORIES IF THE CONDENSATE CAN NOT BE DRAINED BY GRAVITY.
I	AIR HANDLING UNITS OVER 2,000 CFM SHALL HAVE SMOKE DETECTORS ON THE SUPPLY DUCT. AIR HANDLING UNITS OVER 15,000 CFM SHALL HAVE SMOKE DETECTORS ON THE SUPPLY AND RETURN DUCTS.	23.	ALL COILS AND FILTERS SHALL BE INSTALLED ON TRACKS FOR EASY REMOVAL. INSTALLATIONS THAT REQUIRE DISASSEMBLY OF THE UNIT OR PLENUM FOR COIL REMOVAL ARE NOT ACCEPTABLE.

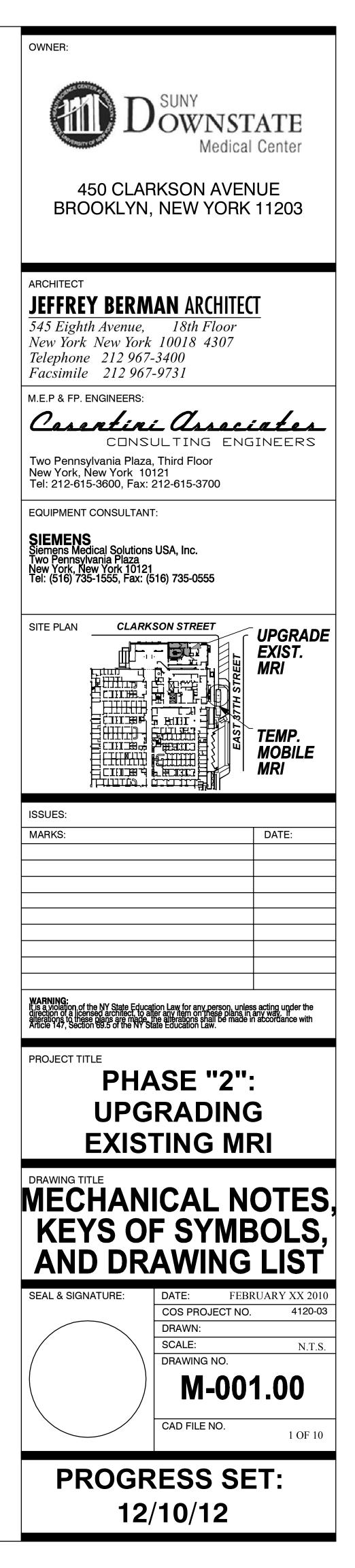


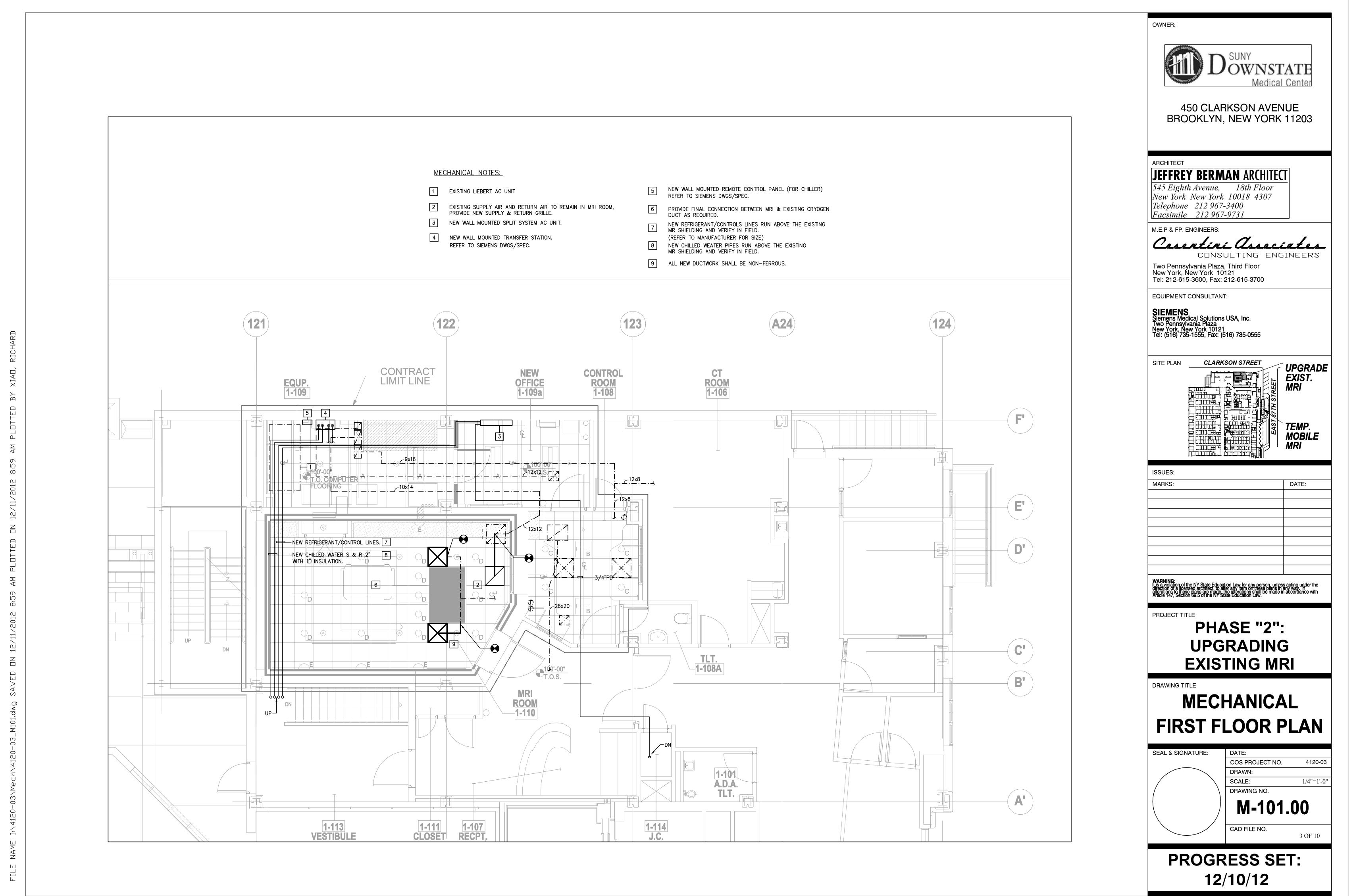
SPECIFIC NOTES

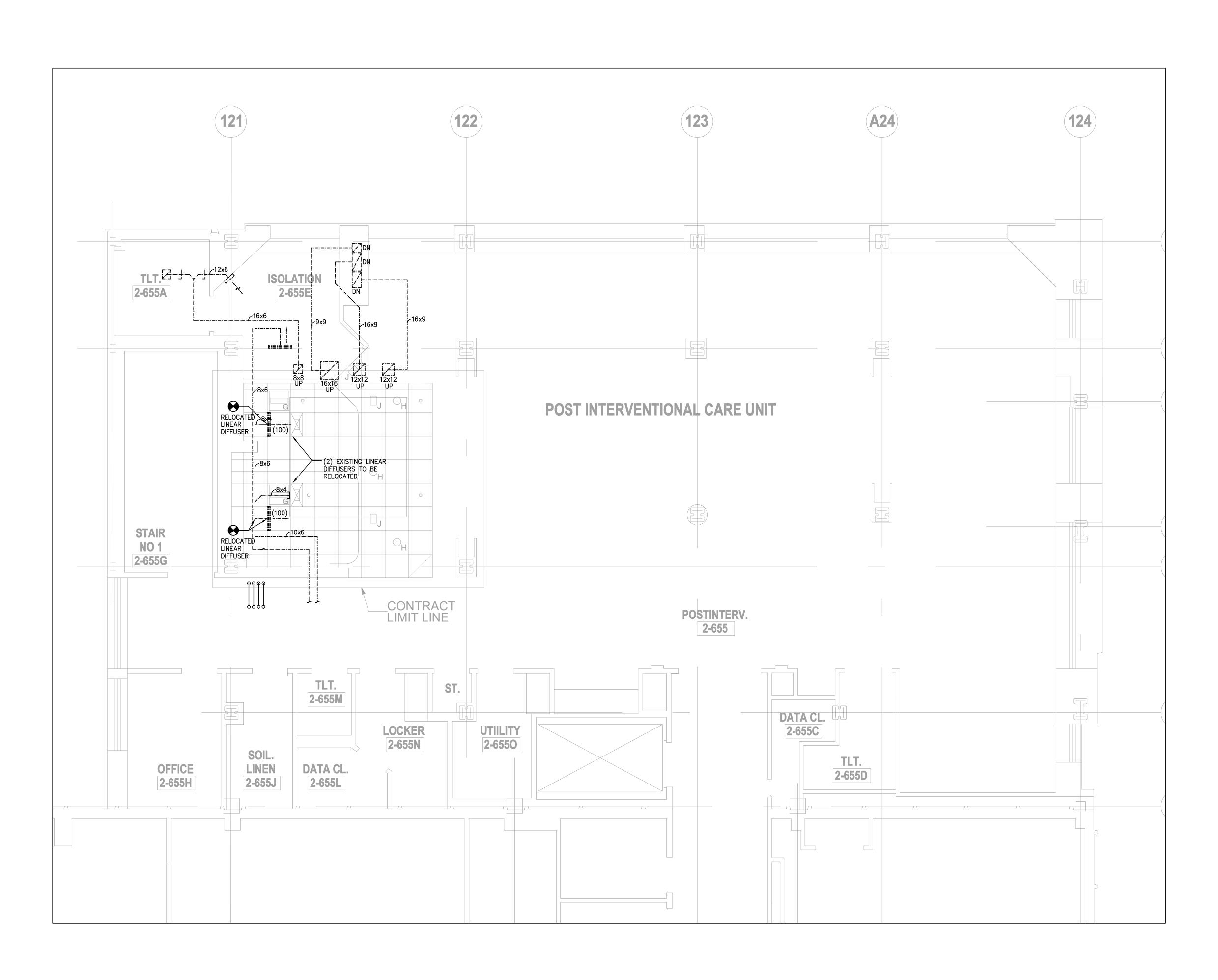
1. REFRIGERATION (AIR CONDITIONING) SYSTEMS COMPLY WITH RS 13-6.

GENERAL NOTES

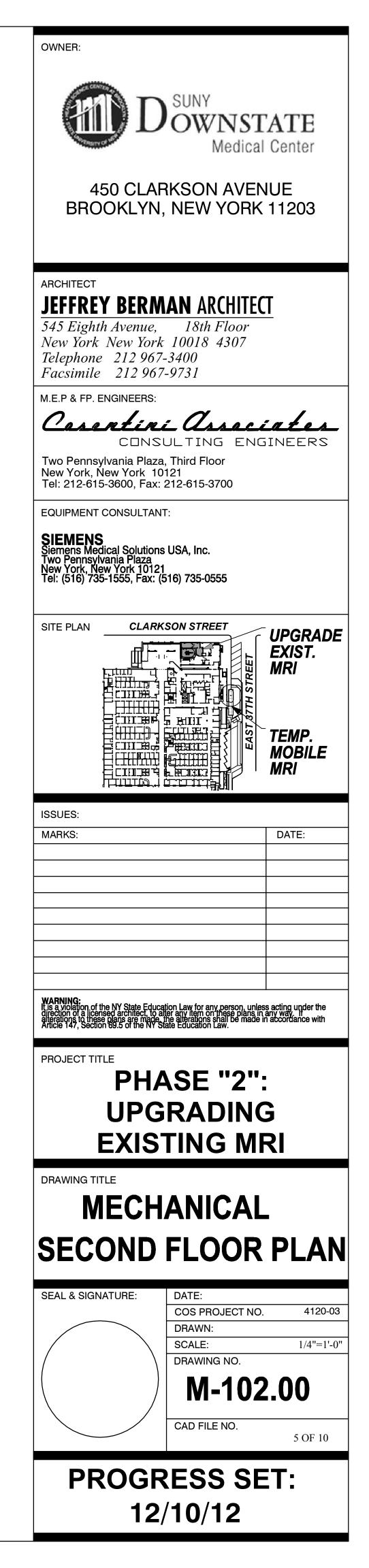
- MARGIN TYPES, COLOR, FINISHES, AND METHOD OF ATTACHMENT FOR ALL DIFFUSERS, GRILLES, REGISTERS SHALL BE COORDINATED WITH THE ARCHITECTURAL CEILING DETAILS AND SPECIFICATIONS.
- 2. FOR EXACT LOCATIONS AND FACE SIZES OF REGISTERS, DIFFUSERS AND GRILLES IN HUNG CEILINGS, SEE ARCHITECTURAL REFLECTED CEILING PLANS.
- 3. PROVIDE DRAIN VALVES AT ALL LOW POINTS OF ALL WATER SYSTEMS.
- 4. PROVIDE AUTOMATIC VENTS AT ALL HIGH POINTS OF ALL WATER SYSTEMS.
- 5. PROVIDE INSULATED CONDENSATE DRAIN TO NEAREST FLOOR DRAIN FOR ALL AC UNITS.
- 6. FOR PIPE CONNECTIONS DETAILS FOR EQUIPMENT, SEE DETAIL SHEET DRAWINGS AND SPECIFIVATIONS. 7. ALL MOTOR STARTERS LOCATED OUTDOORS OR EXPOSED TO WET OR DAMP CONDITIONS SHALL BE NEMA TYPE 4.
- 8. FOR PIPE SIZES NOT INDICATED ON PLANS, SEE EQUIPMENT CONNECTION DETAILS. 9. PROVIDE FITTINGS FOR CHANGE IN PIPE SIZES FOR FINAL CONNECTIONS AS REQUIRED.
- 10. PROVIDE UNION OR FLANGED CONNECTIONS AT EACH PIECE OF EQUIPMENT AND ON BOTH SIDES OF CONTROL VALVES.
- 11. DRAINAGE PIPING PITCH NOT LESS THAN 1/8 PER FOOT.
- 12. ALL EQUIPMENT SHALL BE TIE-IN TO BASE BUILDING BMS. 13. THE SEIMEN'S DRAWINGS FOR SUNY HEALTH SCIENCE CENTER-MRI SUITE ARE PART OF THESE CONTRACT DOCUMENTS.
- THIS CONTRACTOR IS RESPONSIBLE FOR THE TRADEMARK INDICATED ON THOSE DRAWINGS AND COORDINATING HIS WORK WITH THE WORK OF THE EQUIPMENT VENDOR. REFER TO THOSE DRAWINGS FOR ADDITIONAL INFORMATION.

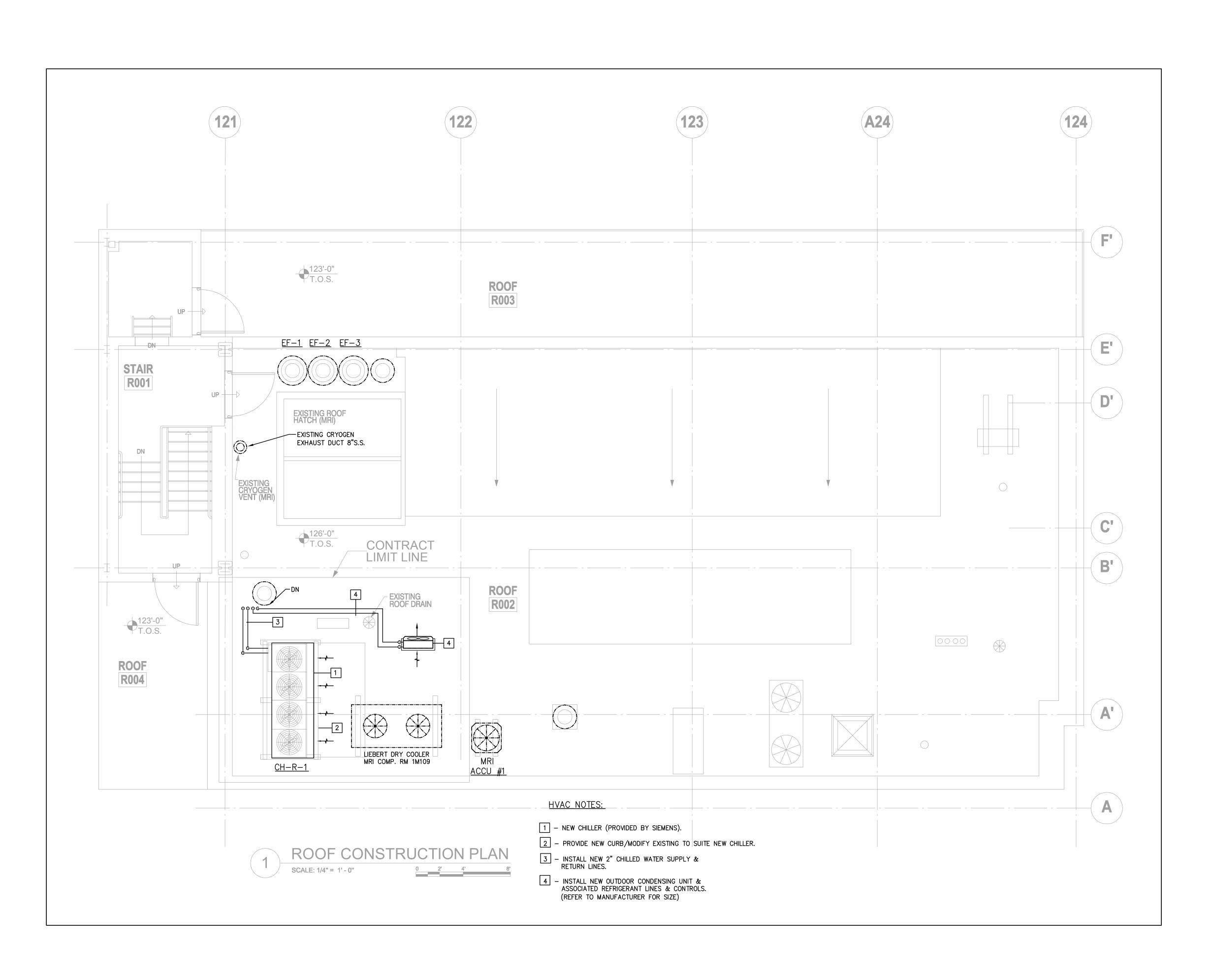


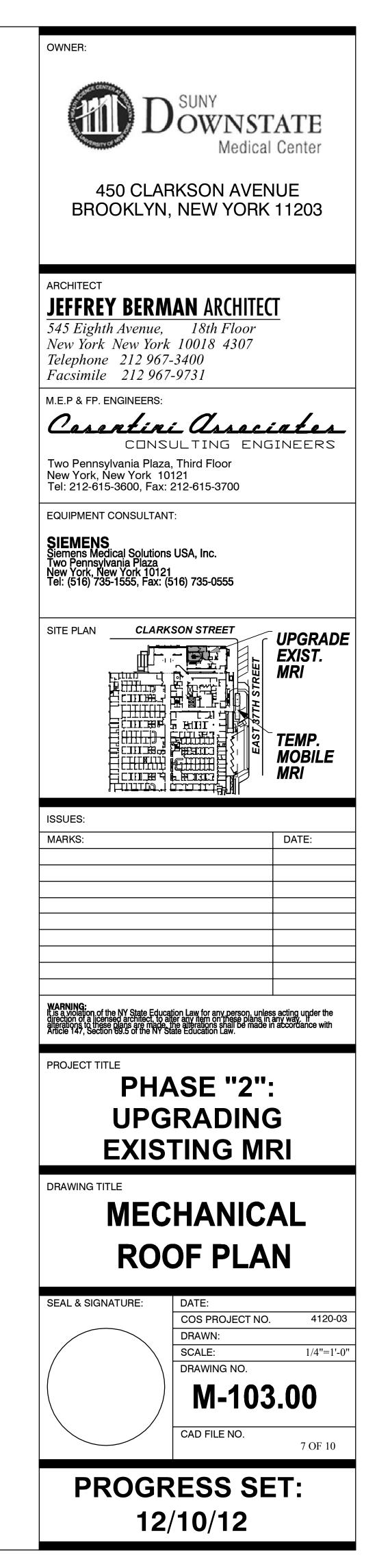




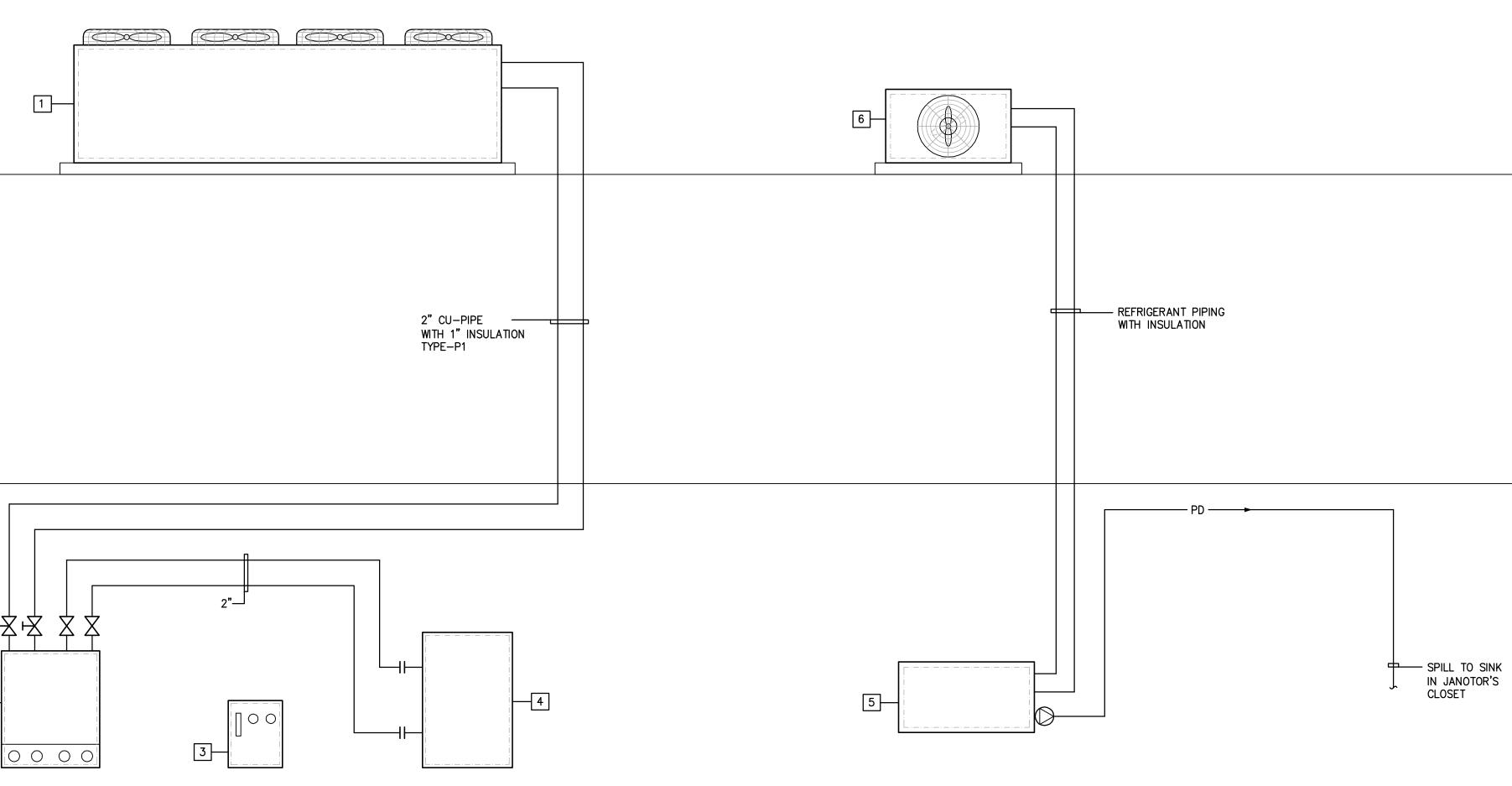
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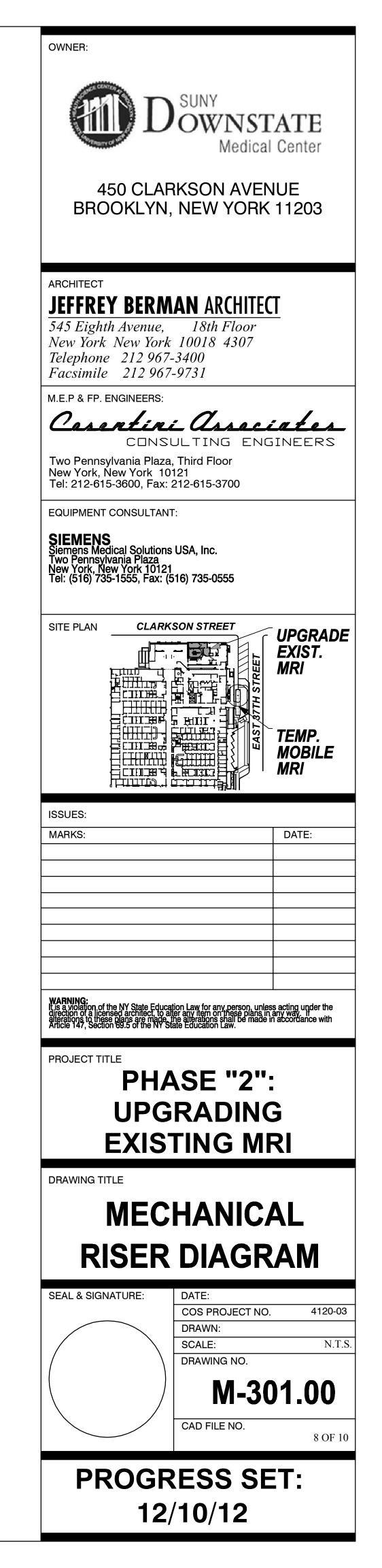
2 0 0 0 0

2nd FLOOR

ROOF

1ST FLOOR

- 1 AIRCOOLED WATER CHILLER (PROVIDE BY SIEMENS)
- 2 TRANSFER STATION (BY SIEMENS)
- 3 REMOTE CONTROL PANEL (BY SIEMENS)
- 4 RCA SIEMENS (BY SIEMENS)
- 5 MINI SPLIT AC UNIT (INDOOR UNIT) WALL MOUNTED
- 6 MINI SPLIT (OUTDOOR) UNIT



- SPILL TO SINK

MECHANICAL SPECIFICATION

- 1. GENERAL CONDITIONS
 - A. THE APPLICABLE PROVISIONS OF THE GENERAL CONSTRUCTION SPECIFICATIONS SHALL APPLY.
 - B. THE CONTRACTOR SHALL PROVIDE ALL ITEMS OF LABOR OR MATERIALS NOT SPECIFICALLY INDICATED, BUT REQUIRED TO COMPLETE THE INTENDED INSTALLATIONS.
 - C. THE WORK UNDER THIS CONTRACT SHALL BE PERFORMED SIMULTANEOUSLY WITH WORK OF OTHER TRADES, SO AS NOT TO DELAY THE OVERALL PROGRESS OF WORK.
 - D. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR HIS WORK WITH ITS COMPLETION AND FINAL ACCEPTANCE AND SHALL REPLACE ANY OF SAME WHICH MAY BE DAMAGED, LOST OR STOLEN, WITHOUT ADDITIONAL COSTS TO THE OWNER.
 - E. ALL WORK IS TO BE CONDUCTED IN ACCORDANCE WITH THE BUILDING'S RULE AND REGULATIONS. A COPY OF THE REGULATIONS CAN BE OBTAINED AT THE BUILDING OFFICE.
- 2. OPERATING & MAINTENANCE INSTRUCTIONS
 - A. AFTER FINAL TESTS AND ADJUSTMENTS, FULLY INSTRUCT OWNER'S OPERATING PERSONNEL IN ALL DETAILS OF OPERATION FOR EQUIPMENT INSTALLED.
 - B. PROVIDE TO THE OWNER OPERATION AND MAINTENANCE MANUALS.
 - C. GUARANTEE AND SERVICE
 - 1. THE CONTRACTOR SHALL GUARANTEE THE ENTIRE INSTALLATION FOR A PERIOD OF ONE YEAR FROM THE DATE OF THE FINAL ACCEPTANCE OF THE INSTALLATION BY THE OWNER.
 - 2. THE CONTRACTOR SHALL DURING THE PERIOD OF GUARANTEE REPLACE OR REPAIR AT HIS OWN EXPENSE ANY PIECE OF EQUIPMENT AND/OR MATERIAL WHICH IS FOUND TO BE DEFECTIVE. THE CONTRACTOR SHALL ALSO REPAIR ALL DAMAGE TO SURROUNDING WORK CAUSED BY THE FAILURE, REPAIR OR REPLACEMENT OF DEFECTIVE EQUIPMENT AT HIS OWN EXPENSE.
- 3. SHOP DRAWINGS & EQUIPMENT SUBMISSIONS
 - A. SIX (6) COPIES OF DUCTWORK AND PIPING AND CERTIFIED EQUIPMENT MANUFACTURER'S DATA SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION, ERECTION OR PURCHASE.
 - B. PRODUCT DATA SUBMIT MANUFACTURER'S PRINTED LITERATURE, CATALOG CUTS, CERTIFIED EQUIPMENT PERFORMANCE DATA, WIRING DIAGRAMS AND INSTALLATION INSTRUCTIONS.
 - C. <u>SHOP DRAWINGS</u> SUBMIT PLANS, SECTIONS, DETAILS, SCHEDULES AND CALCULATIONS. LAYOUTS SHALL BE DOUBLE LINE, SCALE: 3/8"=1'-0"COORDINATED WITH OTHER TRADES AND WITH BUILDING CONSTRUCTION ELEMENTS. SUBMIT ONE REPRODUCIBLE AND FIVE (5) PRINTS OF EACH DRAWING.
 - D. MAINTENANCE MANUALS PREPARE OPERATING AND MAINTENANCE MANUAL INCLUDING THE FOLLOWING:
 - a . MANUFACTURER; S LITERATURE DESCRIBING EACH PIECE OF EQUIPMENT.
 - b. COPIES OF PRODUCT WARRANTIES AND GUARANTIES.
 - c. OPERATING AND MAINTENANCE PROCEDURES, SERVICING INSTRUCTIONS.
 - E. ALL SHOP DRAWINGS MUST BE APPROVED BY THE BUILDING MANAGEMENT OFFICE BEFORE CONSTRUCTION PROCEEDS, INCLUDING THE FOLLOWING :
 - a. CATALOG CUTS AND PERFORMANCE OF PROPOSED MECHANICAL EQUIPMENT (6 SETS). b. CONTRACTOR ? SCALE SHEET METAL SHOP DRAWINGS (6 SETS) SHOP DRAWINGS MUST BE APPROVED BY BUILDING MANAGEMENT OFFICE BEFORE CONSTRUCTION
 - 4. RECORD DRAWINGS

PROCEEDS.

- A. REPRODUCIBLE RECORD DRAWINGS SHALL BE SUPPLIED UPON WHICH CORRECTIONS SHALL BE MADE TO PROVIDE AN ACCURATE AND COMPLETE RECORD OF THE WORK AS INSTALLED.
- B. AS-BUILT INFORMATION SHALL BE SUBMITTED AS FOLLOWS
- 1. CAD DRAWING FILES ON DISKS IN AUTOCAD VERSION 12 FORMAT. 2. ONE (1) SET OF REPRODUCIBLE DRAWINGS. 3. TWO (2) SETS OF BLUEPRINTS.
- 5. TESTING, ADJUSTMENTS AND BALANCING
 - A. IT IS THE INTENT UNDER THIS SECTION OF THE WORK TO OBTAIN COMPLETE BALANCING OF AIR CONDITIONING UNIT, PUMP, WATER SYSTEM, AIR OUTLET, ETC.
 - B. MAKE ALL REQUIRED ADJUSTMENTS OF WATER SYSTEM DEVICES UNTIL ALL SPECIFIED PERFORMANCES ARE MET.
 - C. ADJUST WATER BALANCING VALVES TO OBTAIN REQUIRED FLOW AND SPECIFIED PRESSURE DROPS ACROSS COILS.
 - D. PIPING SYSTEMS SHALL BE TESTED TO A HYDROSTATIC PRESSURE AT LEAST 1 1/2 TIMES THE MAXIMUM OPERATING PRESSURE (BUT NOT LESS THAN 40 LBS. PER SQ. IN.) FOR A SUFFICIENTLY LONG TIME (4 HOUR MINIMUM) TO DETECT ALL LEAKS AND DEFECTS. WHERE NECESSARY, PIPING SHALL BE TESTED IN SECTIONS TO PERMIT THE PROGRESS OF THE JOB.
- 6. VERIFYING EXISTING CONDITIONS, REMOVALS & ALTERATIONS
 - A. THE CONTRACTOR SHALL VISIT THE PREMISES TO DETERMINE EXISTING CONDITIONS AND SATISFY HIMSELF OF ALL CONDITIONS PRIOR TO THE SUBMISSION OF A BID PROPOSAL. NO ALLOWANCE WILL BE MADE FOR FAILURE TO COMPLY WITH THESE REQUIREMENTS AND A BID PROPOSAL SHALL BE CONSTRUED AS EVIDENCE HE HAS DONE SO.
 - B. THE CONTRACTOR SHALL REMOVE, RELOCATE, REPLACE, ADJUST, ADAPT AND MODIFY EXISTING EQUIPMENT AND/OR SYSTEMS AS REQUIRED BY THE DRAWINGS OR SPECIFICATIONS AND AS MAY BE REQUIRED WHEN SUCH WORK IS UNCOVERED AND FOUND TO INTERFERE WITH THE COMPLETION OF WORK IN THIS CONTRACT OR OTHER CONTRACT WORK.
 - C. ALL REMOVED EQUIPMENT AND MATERIAL SHALL BE REMOVED FROM THE PROJECT SITE.
 - D. PROVIDE SHUTDOWNS, DRAINING AND REFILLING, RECONNECTIONS AND STARTUPS OF EXISTING SYSTEMS NECESSARY IN CONNECTION WITH THE NEW WORK. COORDINATE SHUTDOWNS WITH THE OWNER.
 - E. TEMPORARY SERVICES: PROVIDE TEMPORARY SERVICES DURING THE INTERRUPTION IN SERVICE CREATED BY THE DEMOLITION OF THE EXISTING FACILITY AND UNTIL THE NEW FACILITY BECOMES OPERATIONAL. PROCURE RENTAL EQUIPMENT OF ADEQUATE CAPACITIES AND ASSUME ALL COSTS RELATED TO THIS INSTALLATION AND OPERATION OF SAME. ALL COSTS RELATED TO THE INSTALLATION AND PROVIDE CONNECTIONS TO BUILDING UTILITIES INCLUDING ELECTRICAL. BUILDING UTILITIES INCLUDING ELECTRICAL.

7. REMOVALS & ALTERATIONS

- THE CONTRACTOR SHALL REMOVE, RELOCATE, REPLACE, ADJUST, ADAPT AND MODIFY EXISTING EQUIPMENT AND/OR SYSTEMS AS REQUIRED BY THE DRAWINGS OR SPECIFICATIONS AND AS MAY BE REQUIRED WHEN SUCH WORK IS UNCOVERED AND FOUND TO INTERFERE WITH THE COMPLETION OF WORK IN THIS CONTRACT OR OTHER CONTRACT WORK.
- ALL REMOVED EQUIPMENT AND MATERIAL SHALL BE RETURNED TO THE BUILDING MANAGEMENT FOR THEIR DETERMINATION AS TO WHAT WILL HAPPEN TO SAID EQUIPMENT OR MATERIAL.

8. GRILLES, REGISTERS AND DIFFUSERS

- A. FURNISH AND INSTALL ALL METAL DIFFUSERS, GRILLES AND REGISTERS OF MANUFACTURERS MODELS, SIZES, AIR DISTRIBUTION PATTERNS AND AIR VOLUME CAPACITIES AS SPECIFIED ON THE DRAWINGS.
- B. ALL AIR OUTLETS SHALL BE STEEL AND BE FACTORY PAINTED WITH ACRYLIC WHITE ENAMEL PAINT FINISH OR OTHER COLOR AS DIRECTED BY ARCHITECT.
- D. A SCHEDULE OF DIFFUSERS, GRILLES AND REGISTERS WITH MANUFACTURERS MODELS, SIZES, ACCESSORIES, FINISHES, ETC., SHALL BE SUBMITTED FOR APPROVAL PRIOR TO RELEASE FOR FABRICATION AND DELIVERY.

9. INSULATION/LINING REQUIREMENTS

- A. INSULATION SHALL BE APPLIED TO PIPING OF MATERIALS AS SPECIFIED BELOW.
- INSULATION/LINING SHALL HAVE COMPOSITE (INSULATION OR FACING AND C. ADHESIVE USED TO ADHERE THE FACING TO THE INSULATION) FIRE AND SMOKE HAZARD RATINGS AS TESTED BY PROCEDURE ASTM E.84, NFPA 255 OR UL 723 NOT EXCEEDING:

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FLAME SPREAD SMOKE DEVELOPED

ACCESSORIES SUCH AS ADHESIVES, MASTICS, CEMENTS AND TAPES FOR FITTINGS SHALL HAVE THE SAME COMPONENT RATING AS LISTED ABOVE. ALL PRODUCTS OR THEIR SHIPPING CARTONS SHALL BEAR A LABEL INDICATING THAT FLAME AND SMOKE RATINGS DO NOT EXCEED REQUIREMENTS. TREATMENT OF FACINGS TO IMPART FLAME AND SMOKE-SAFETY SHALL BE PERMANENT. THE USE OF WATERSOLUBLE TREATMENTS IS PROHIBITED.

D. PIPING INSULATION

- INSULATION SHALL BE GLASS FIBER WITH A MAXIMUM K FACTOR OF 0.24 AT 75 DEGREES F MEAN TEMPERATURE WITH FACTORY APPLIED ALL-SERVICE JACKET.
- JACKET LAPS AND BUTT STRAPS SHALL BE ADHERED NEATLY IN PLACE WITH BENJAMIN FOSTER 85-20 OR APPROVED EQUAL. END OF PIPE INSULATION SHALL BE SEALED OFF WITH BF 30-35 AT ALL FLANGES, VALVES AND FITTINGS AND AT INTERVALS OF NOT MORE THAN 21 FEET ON CONTINUOUS RUNS OF PIPE.
- CONCEALED FITTINGS AND VALVES SHALL BE INSULATED WITH MINIMUM 3. ONE-POUND DENSITY FSK-FACED FIBERGLASS BLANKET WRAPPED FIRMLY UNDER COMPRESSION (MINIMUM 2-1) AND SECURED WITH 18 GAGE COPPER-CLAD WIRE. EXPOSED EDGES OF INSULATION SHALL BE SEALED OFF WITH BF 30-35. FINISHED THICKNESS OF INSULATION ON FITTINGS AND VALVES SHALL BE AT LEAST AS GREAT AS THAN ON ADJOINING PIPES.
- 4. EXPOSED FITTINGS, VALVES AND ALL FLANGES SHALL BE INSULATED WITH MOLDED FITTING COVERS OR FABRICATED SEGMENTS OF PIPE INSULATION. FLANGE INSULATION SHALL EXTEND A MINIMUM OF 1" BEYOND THE END OF THE BOLTS, AND THE BOLT AREA SHALL BE FILLED WITH MINERAL WOOL CEMENT. INSULATION ON EXPOSED FITTINGS AND VALVES AND ALL FLANGES SHALL BE VAPOR SEALED BY IMBEDDING A LAYER OF WHITE OPEN WEAVE (20x20) GLASS FABRIC IN A 1/16" THICK COAT OF BF 30-35 AND THEN APPLYING A SECOND COAT IN THE SAME THICKNESS AFTER THE FIRST COAT HAS DRIED.
- E. EXTENT OF PIPING INSULATION
 - 1. CHILLED WATER SUPPLY & RETURN PIPING
- 2. CONDENSATE DRAIN PIPING
- 3. GLYCOL CONDENSER WATER (ALUMINUM JACKET FOR EXTERIOR PIPING).

10. MATERIALS FOR PIPE

2" DIA. & LESS

A. PIPE SHALL BE FABRICATED FROM THE FOLLOWING:

DRAINS, VENTS, RELIEF TYPE K KOPPEL

TYPE "K" COPPER (BRAZED) GLYCOL/CONDENSER WATER/CHILLED WATER

B. ALL COPPER TUBING SHALL BE NOT LESS THAN 99.9 PERCENT PURE COPPER, AS MANUFACTURED BY REVERE COPPER AND BRASS CO., CHASE BRASS AND COPPER CO., INC., BRIDGEPORT BRASS CO., OR OTHER APPROVED. WHEREVER POSSIBLE, TUBING SHALL BE CONTINUOUS WITH COUPLINGS UP TO 20 FT. IN LENGTH. TUBING SHALL CONFORM TO ASTM B88.

- C. PIPING SPECIFICATIONS SHALL BE SUBMITTED WITH SHOP DRAWINGS.
- D. PROVIDE DIELECTRIC UNIONS AT THE CONNECTION POINT OF DISSIMILAR METALS.
- E. ALL CONDENSER WATER PIPING TO HAVE BRAZED CONNECTIONS SPECIFIED.

11. HANGERS, SUPPORTS, ANCHORS AND GUIDES

ALL REQUIRED SUPPORTS, HANGERS, ANCHORS AND GUIDES SHALL BE PROVIDED AND INSTALLED BY THIS CONTRACTOR AND SHALL BE SEIMICALLY DESIGNED. 12. EQUIPMENT SCHEDULE

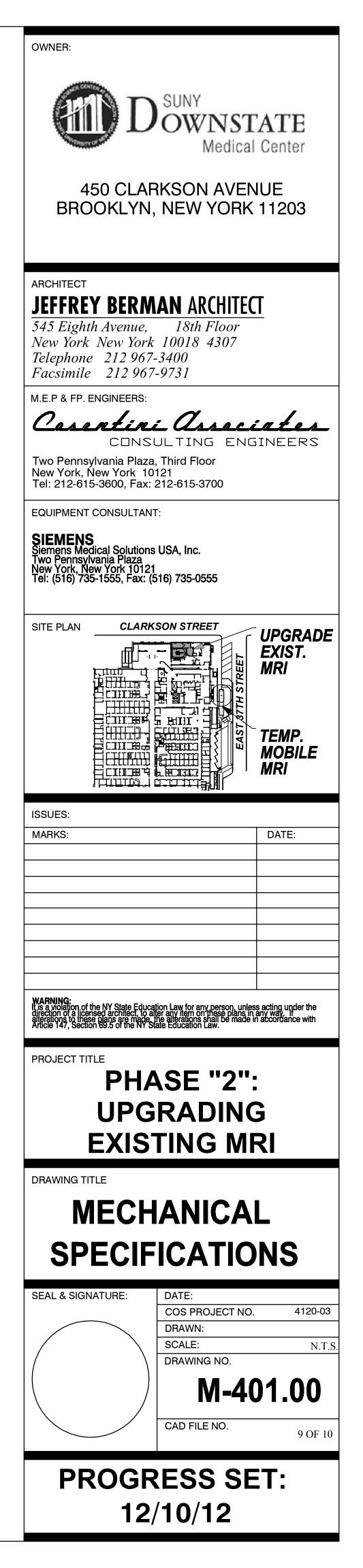
FURNISH AND INSTALL ALL ITEMS AS HEREIN SPECIFIED OR SHOWN ON DRAWINGS AND THOSE ITEMS OF LABOR OR MATERIALS NOT SPECIFICALLY INDICATED, BUT REQUIRED TO COMPLETE THE INTENDED INSTALLATIONS.

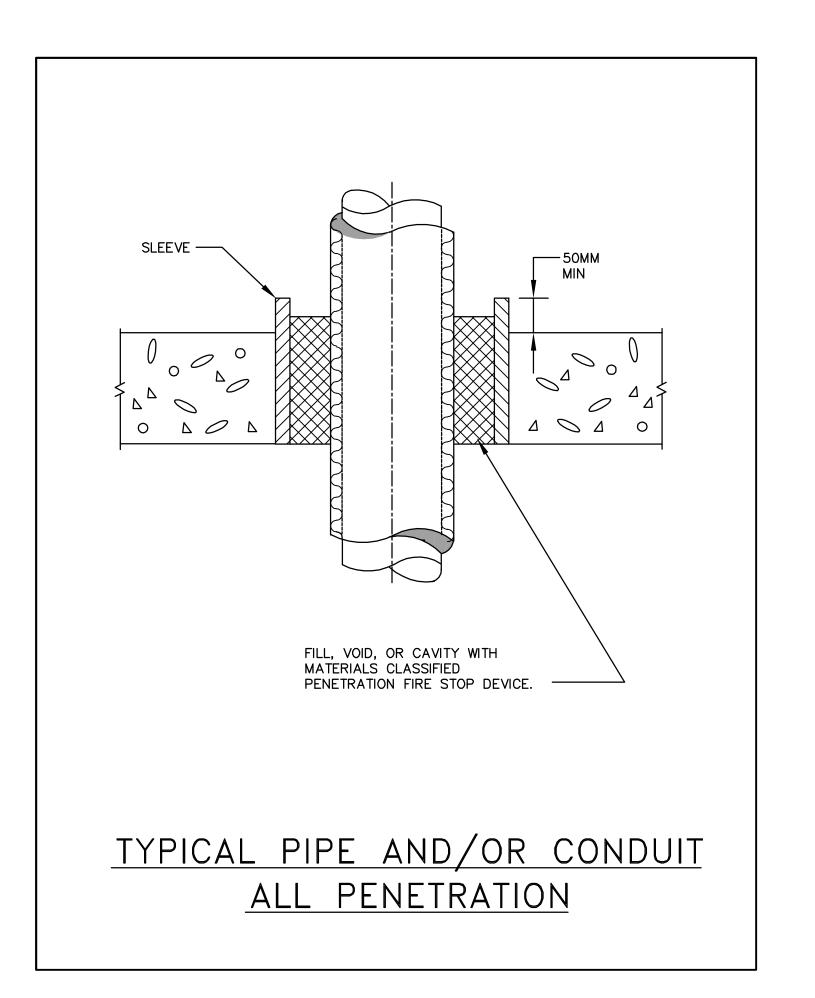
13. BUILDING MANAGEMENT SYSTEM (BMS)

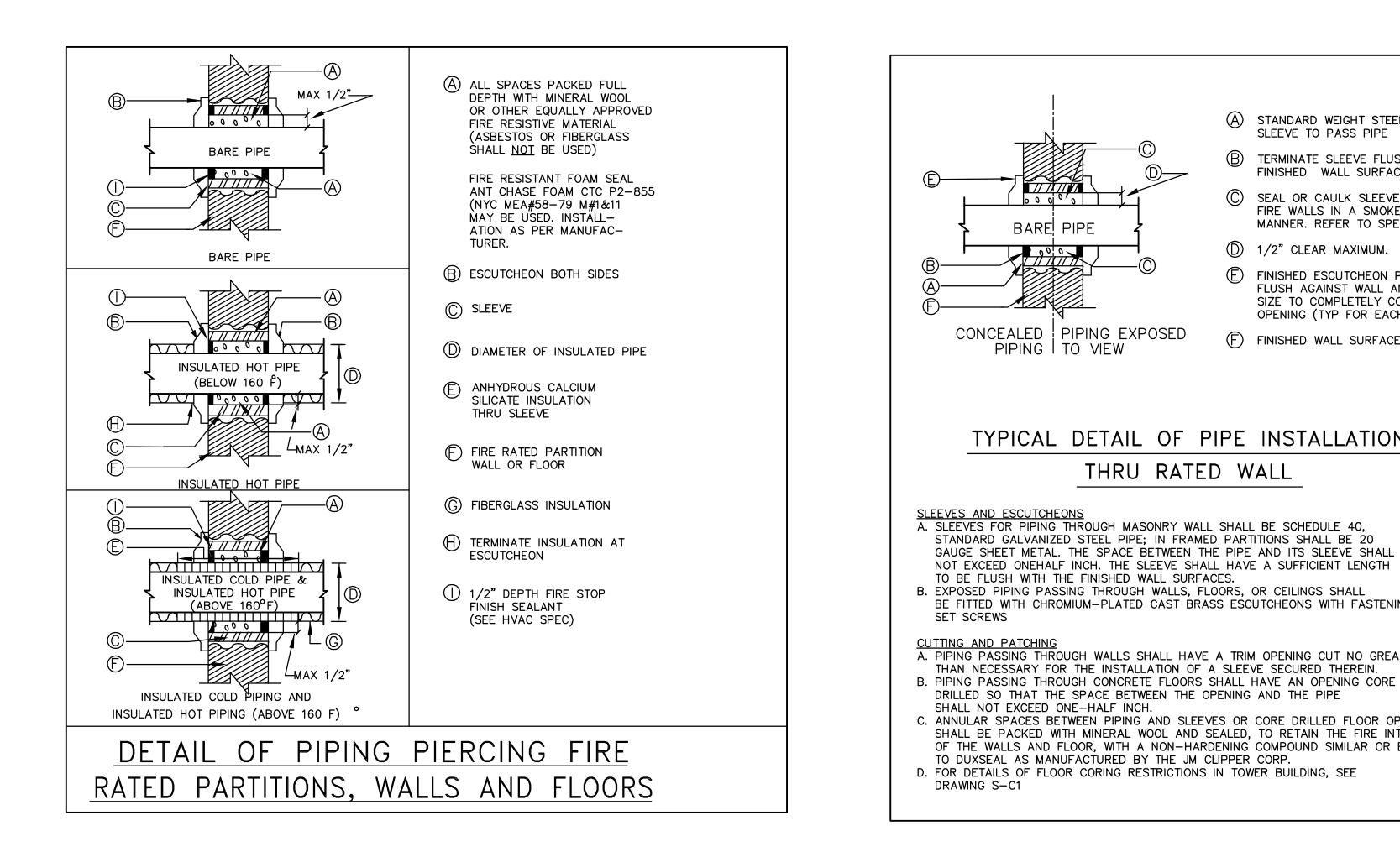
NEW CHILLER SHALL BE CONNECTED TO EXISTING BMS SYSTEM.

14. VIBRATION ISOLATION FOR ROOF MOUNTED AIR COOLED CHILLER

- PROVIDE SEISMICALLY RESTRAINED SPRING ISOLATOR "TYPE-B"
- DEFLECTION : 2" 2.
- SIMILAR TO VMC : AWRS, ASM AB : CT, SWSR 3.



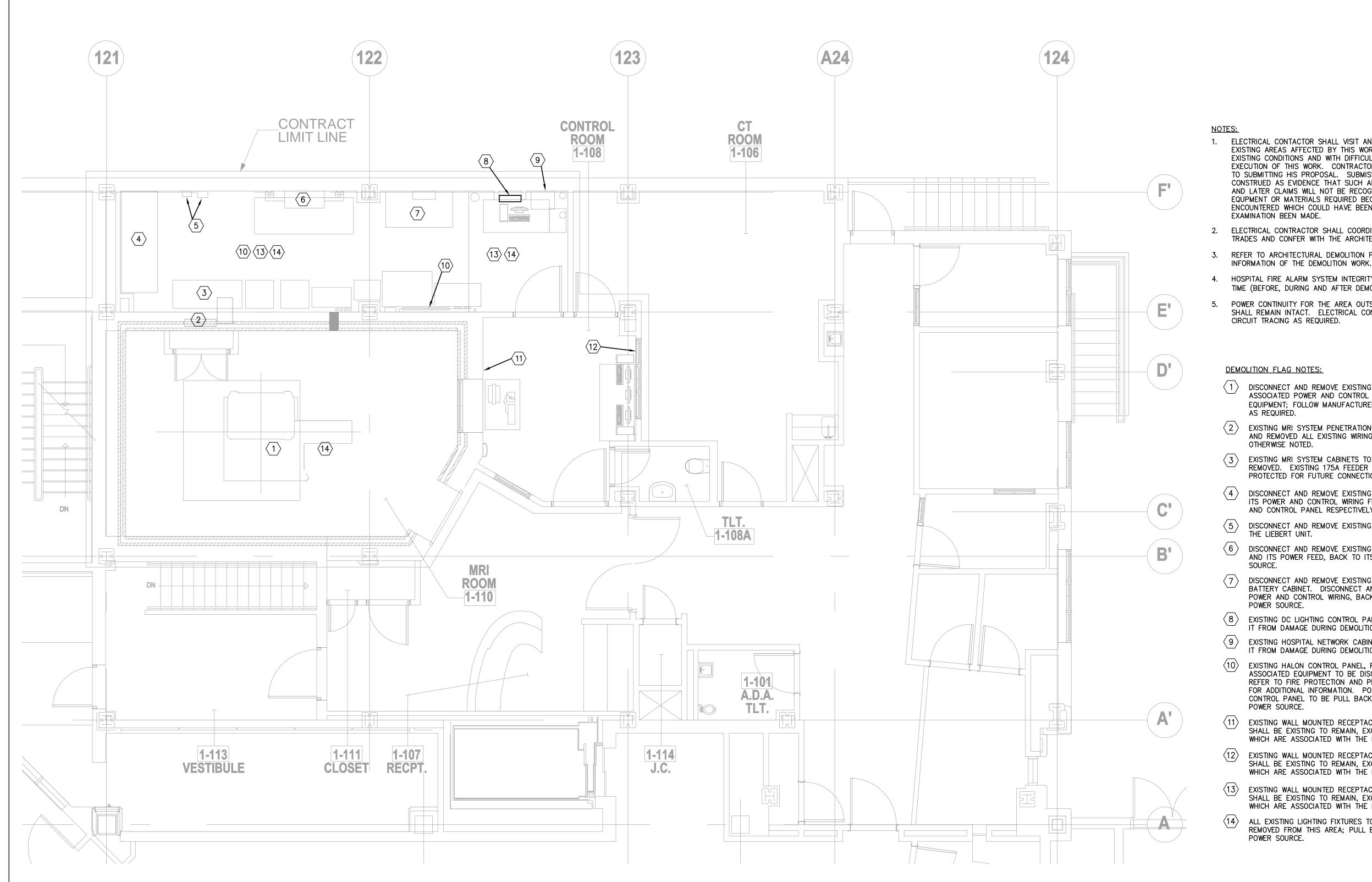




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12/10/12



INGEN 1. ELECTRICAL CONTACTOR SHALL VISIT AND EXAMINE CAREFULLY THE EXISTING AREAS AFFECTED BY THIS WORK TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND WITH DIFFICULTIES THAT WILL ATTEND THE EXECUTION OF THIS WORK. CONTRACTOR SHALL PERFORM THIS, PRIOR TO SUBMITTING HIS PROPOSAL. SUBMISSION OF PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE AND LATER CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN AND SUCH AN

2. ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES AND CONFER WITH THE ARCHITECT.

REFER TO ARCHITECTURAL DEMOLITION PLAN FOR ADDITIONAL

4. HOSPITAL FIRE ALARM SYSTEM INTEGRITY SHALL BE MAINTAINED AT ALL TIME (BEFORE, DURING AND AFTER DEMOLITION).

POWER CONTINUITY FOR THE AREA OUTSIDE OF THE DEMOLITION AREA SHALL REMAIN INTACT. ELECTRICAL CONTRACTOR SHALL PERFORM CIRCUIT TRACING AS REQUIRED.

 $\langle 1 \rangle$ disconnect and remove existing MRI machine and its ASSOCIATED POWER AND CONTROL WIRING FROM MRI CONTROL EQUIPMENT; FOLLOW MANUFACTURER'S DEMOLITION GUIDELINE

2 EXISTING MRI SYSTEM PENETRATION OPENING TO BE CLEAN AND REMOVED ALL EXISTING WIRING AND CABLES, UNLESS OTHERWISE NOTED.

EXISTING MRI SYSTEM CABINETS TO BE DISCONNECTED AND REMOVED. EXISTING 175A FEEDER TO BE SAVED AND PROTECTED FOR FUTURE CONNECTION.

4 DISCONNECT AND REMOVE EXISTING LIEBERT AC UNITS AND ITS POWER AND CONTROL WIRING FROM THE POWER SOURCE AND CONTROL PANEL RESPECTIVELY.

5 DISCONNECT AND REMOVE EXISTING DISCONNECT SWITCH OF THE LIEBERT UNIT.

DISCONNECT AND REMOVE EXISTING AC UNIT CONTROL PANEL AND ITS POWER FEED, BACK TO ITS RESPECTIVE POWER

7DISCONNECT AND REMOVE EXISTING UPS MODULES AND ITS
BATTERY CABINET. DISCONNECT AND REMOVE ALL EXISTING POWER AND CONTROL WIRING, BACK TO ITS RESPECTIVE POWER SOURCE.

EXISTING DC LIGHTING CONTROL PANEL TO REMAIN; PROTECT IT FROM DAMAGE DURING DEMOLITION.

(9) EXISTING HOSPITAL NETWORK CABINET TO REMAIN; PROTECT IT FROM DAMAGE DURING DEMOLITION.

EXISTING HALON CONTROL PANEL, PULL STATION AND ITS ASSOCIATED EQUIPMENT TO BE DISCONNECT AND REMOVED. REFER TO FIRE PROTECTION AND PLUMBING DEMOLITION PLAN FOR ADDITIONAL INFORMATION. POWER SOURCE FOR HALON CONTROL PANEL TO BE PULL BACK TO THE RESPECTIVE POWER SOURCE.

EXISTING WALL MOUNTED RECEPTACLES AND DATA OUTLETS SHALL BE EXISTING TO REMAIN, EXCEPT FOR THE DEVICES WHICH ARE ASSOCIATED WITH THE EXISTING MRI SYSTEM.

(12) EXISTING WALL MOUNTED RECEPTACLES AND DATA OUTLETS SHALL BE EXISTING TO REMAIN, EXCEPT FOR THE DEVICES WHICH ARE ASSOCIATED WITH THE EXISTING MRI SYSTEM.

(13) EXISTING WALL MOUNTED RECEPTACLES AND DATA OUTLETS SHALL BE EXISTING TO REMAIN, EXCEPT FOR THE DEVICES WHICH ARE ASSOCIATED WITH THE EXISTING MRI SYSTEM.

ALL EXISTING LIGHTING FIXTURES TO BE DISCONNECTED AND REMOVED FROM THIS AREA; PULL BACK TO THE RESPECTIVE POWER SOURCE.



450 CLARKSON AVENUE BROOKLYN, NEW YORK 11203

Medical Center

ARCHITECT

OWNER:

JEFFREY BERMAN ARCHITECT

545 Eighth Avenue, 18th Floor New York New York 10018 4307 *Telephone* 212 967-3400 Facsimile 212 967-9731

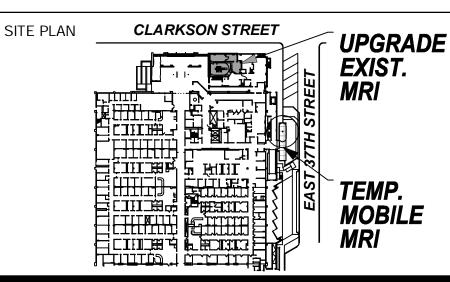
M.E.P & FP. ENGINEERS:



Two Pennsylvania Plaza, Third Floor New York, New York 10121 Tel: 212-615-3600, Fax: 212-615-3700

EQUIPMENT CONSULTANT:

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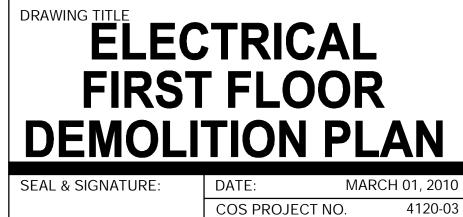
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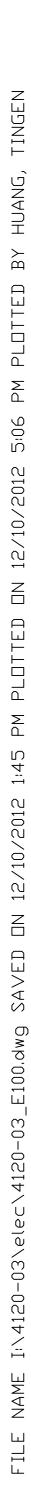
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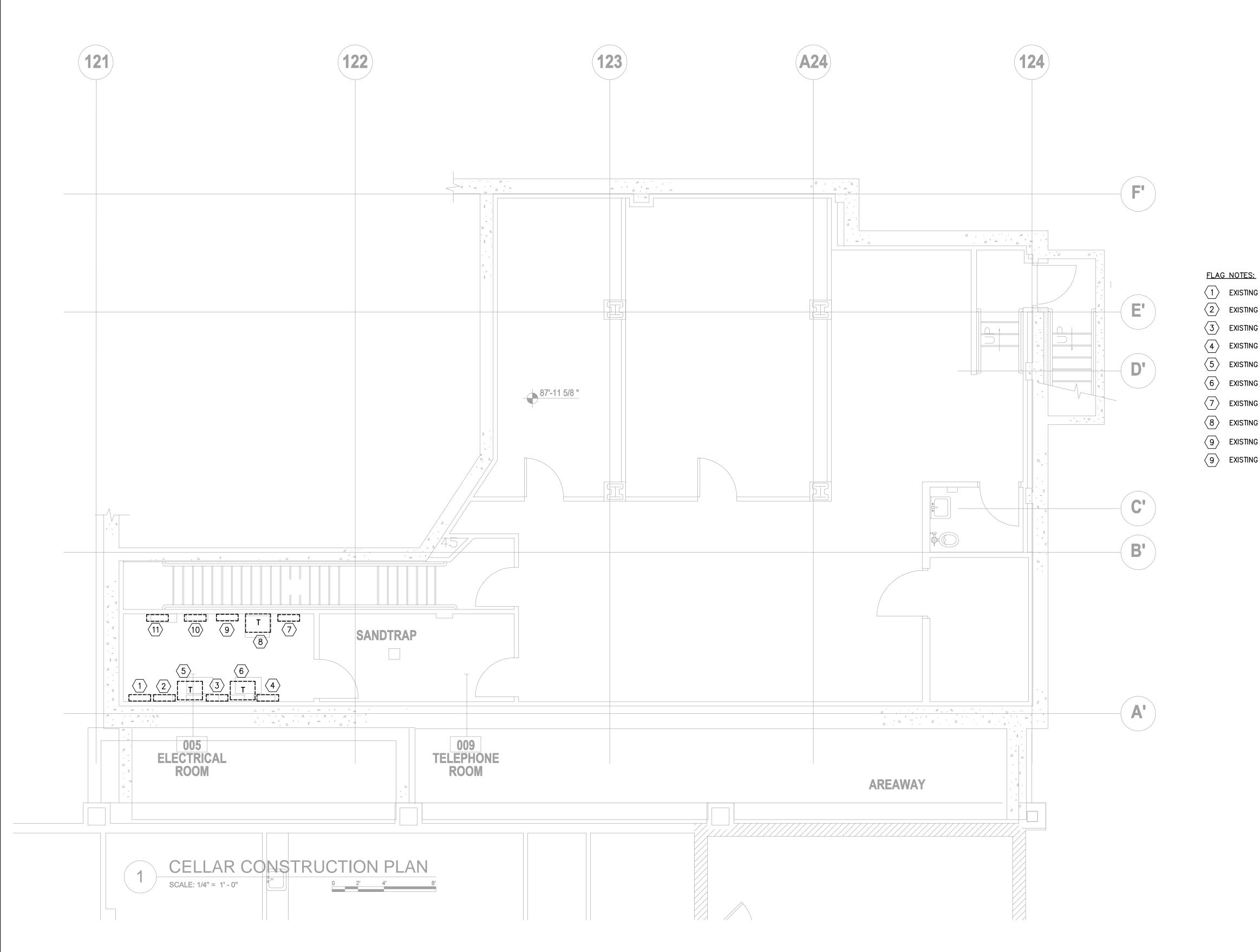
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DRAWN: MD AS NOTED SCALE: DRAWING NO. **DE-101.00** CAD FILE NO. **PROGRESS SET:** 12/10/12





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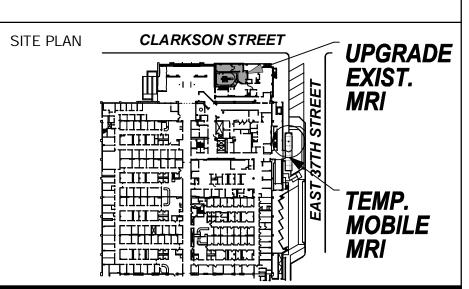
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DATE:

ISSUES:

MARKS:

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PROJECT TITLE PHASE "2": UPGRADING EXISTING MRI

DRAWING TITLE

ELECTRICAL CELLAR PLAN

SEAL & SIGNATURE: DATE: MARCH 01, 2010 COS PROJECT NO. 4120-03 DRAWN: MD SCALE: AS NOTED DRAWING NO. E-100.000 CAD FILE NO. PROGRESS SET: 12/10/12

 FLAG NOTES:

 1
 EXISTING 225A, 3Ø, 4W, 120/208V PANEL "L"

 2
 EXISTING 100A, 3Ø, 4W, 120/208V PANEL "L1"

 3
 EXISTING 400A, 3Ø, 4W, 277/480V PANEL "P"

 4
 EXISTING 100A, 3Ø, 4W, 120/208, PANEL WITH NO NAME

 5
 EXISTING 45KVA, 480V–120/208V TRANSFORMER

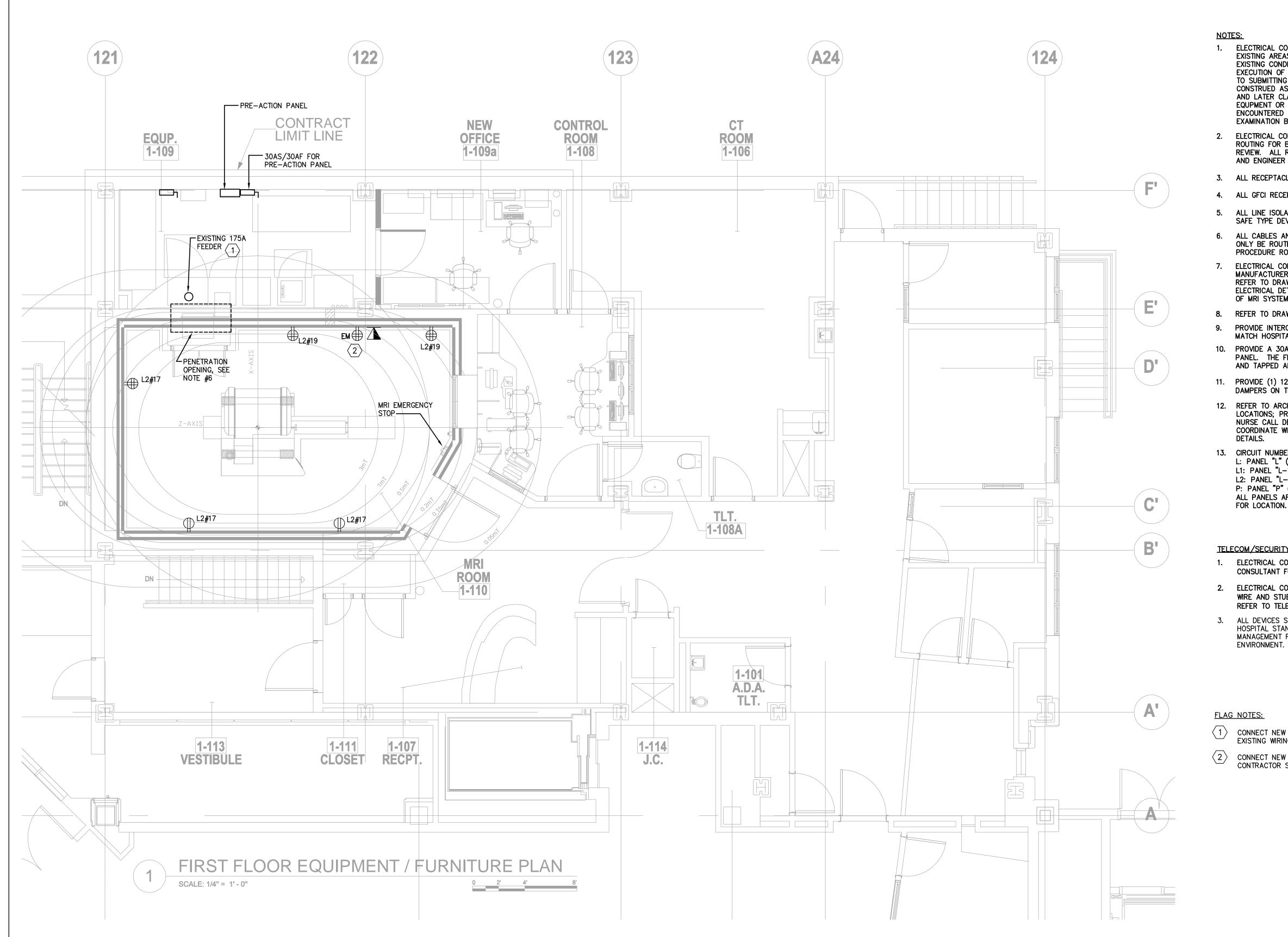
 6
 EXISTING 30KVA, 480V–120/208V TRANSFORMER

 7
 EXISTING 400A, 277/480V PANEL "PH"

 8
 EXISTING 30KVA, 480V–120/208V TRANSFORMER

 9
 EXISTING 100A, 3Ø, 4W, 120/208, PANEL "LP2"

 $\langle 9 \rangle$ EXISTING FIRE ALARM CONTROL PANEL



ELECTRICAL CONTACTOR SHALL VISIT AND EXAMINE CAREFULLY THE EXISTING AREAS AFFECTED BY THIS WORK TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND WITH DIFFICULTIES THAT WILL ATTEND THE EXECUTION OF THIS WORK. CONTRACTOR SHALL PERFORM THIS, PRIOR TO SUBMITTING HIS PROPOSAL. SUBMISSION OF PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE AND LATER CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN AND SUCH AN EXAMINATION BEEN MADE.

2. ELECTRICAL CONTRACTOR SHALL SUBMIT SHOP DRAWING TO INDICATE THE ROUTING FOR BUILDING MANAGEMENT APPROVAL AND FOR ENGINEER REVIEW. ALL ROUTING SHALL BE APPROVED BY BUILDING MANAGEMENT AND ENGINEER PRIOR TO THE INSTALLATION.

3. ALL RECEPTACLES SHALL BE HOSPITAL GRADE.

4. ALL GFCI RECEPTACLES SHALL BE SELF-TESTING AND FAIL SAFE TYPE.

5. ALL LINE ISOLATION MONITOR (LIMS) SHALL BE SELF-TESTING AND FAIL SAFE TYPE DEVICES.

6. ALL CABLES AND CONDUITS INTO THE MRI PROCEDURE ROOM SHALL ONLY BE ROUTED THROUGH THE PENETRATION OPENING BETWEEN THE PROCEDURE ROOM AND EQUIPMENT ROOM.

7. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH SIEMENS MRI MANUFACTURER FOR ALL DETAILS OF MRI POWER WIRING REQUIREMENT. REFER TO DRAWING E-401.00, E-402.00 AND E-403.00 FOR SOME ELECTRICAL DETAILS OF MRI SYSTEM. FINAL WORKING DETAILS DIAGRAM OF MRI SYSTEM SHALL BE OBTAINED FROM MRI MANUFACTURER.

8. REFER TO DRAWING E-301.00 FOR FEEDER SIZE FOR HVAC EQUIPMENT. PROVIDE INTERCOM DEVICES AS REQUIRED; INTERCOM DEVICES SHALL MATCH HOSPITAL STANDARD.

10. PROVIDE A 30AS/30AF FUSED DISCONNECT SWITCH FOR PRE-ACTION PANEL. THE FEEDER OF THE PRE-ACTION PANEL SHALL BE CONNECTED AND TAPPED AHEAD OF MAIN FROM THE NEARBY EMERGENCY PANEL.

11. PROVIDE (1) 120V, 20A EMERGENCY CIRCUIT FOR ALL FIRE SMOKE DAMPERS ON THIS FLOOR FROM EMERGENCY PANEL, ERP-MRI.

12. REFER TO ARCHITECTURAL DRAWINGS FOR NURSE CALL STATION LOCATIONS; PROVIDE JUNCTION BOX AND STUB-UP FOR CONNECTION. NURSE CALL DEVICES SHALL BE MATCH HOSPITAL STANDARD. COORDINATE WITH HOSPITAL ENGINEER AND ARCHITECT FOR EXACT

13. CIRCUIT NUMBER PREFIX AS FOLLOW:

L: PANEL "L" (120/208V) L1: PANEL "L-1" (120/208V)

L2: PANEL "L-2" (120/208V)

P: PANEL "P" (277/480V) ALL PANELS ARE LOCATED IN THE BASEMENT, SEE DRAWING E-100.00

TELECOM/SECURITY NOTES:

ELECTRICAL CONTACTOR COORDINATE WITH TELECOM/SECURITY CONSULTANT FOR EXACT DETAILS FOR TELECOM/SECURITY SYSTEM.

2. ELECTRICAL CONTRACTOR SHALL PROVIDE EMPTY CONDUITS WITH DRAG WIRE AND STUB UP FOR TELECOM/SECURITY SYSTEM INSTALLATION. REFER TO TELECOM/SECURITY DRAWINGS FOR ALL DETAILS.

3. ALL DEVICES SHALL BE HOSPITAL GRADE AND SHALL BE MATCH HOSPITAL STANDARDS. COORDINATE WITH HOSPITAL ENGINEER AND MANAGEMENT FOR MATERIALS THAT SUITABLE FOR HOSPITAL ENVIRONMENT.

CONNECT NEW MRI CABINET TO EXISTING 175A POWER FEEDER; EXTEND EXISTING WIRING WITH NEW AS REQUIRED.

CONNECT NEW QUAD OUTLET TO 120V EMERGENCY POWER CIRCUIT. ELECTRICAL CONTRACTOR SHALL BE VERIFY IN FIELD FOR THE CLOSEST EMERGENCY PANEL.

OWNSTATE Medical Center 450 CLARKSON AVENUE BROOKLYN, NEW YORK 11203 ARCHITECT JEFFREY BERMAN ARCHITECT 545 Eighth Avenue, 18th Floor New York New York 10018 4307 *Telephone* 212 967-3400 Facsimile 212 967-9731 M.E.P & FP. ENGINEERS: Conentini Ussaciates CONSULTING ENGINEERS Two Pennsylvania Plaza, Third Floor New York, New York 10121 Tel: 212-615-3600, Fax: 212-615-3700 EQUIPMENT CONSULTANT: SIEMENS Siemens Medical Solutions USA, Inc. Two Pennsylvania Plaza New York, New York 10121 Tel: (516) 735-1555, Fax: (516) 735-0555 SITE PLAN CLARKSON STREET **UPGRADE** EXIST. MRI TEMP. MOBILE MRI ┶┰┰┰┰╩┥╷┢╌╌┎┙┰┰┲╬ **ISSUES**: MARKS: It is a violation of the NY State Education Law for any person, unless acting under the direction of a licensed architect, to after any item on these plans in any way. If alterations to these plans are made, the alterations shall be made in accordance with Article 147. Section 69.5 of the NY State Education Law.

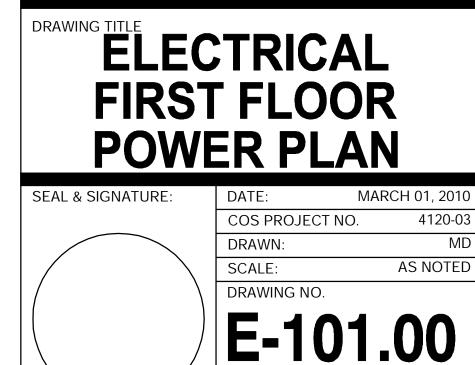
OWNER:

PHASE "2": UPGRADING **EXISTING MRI**

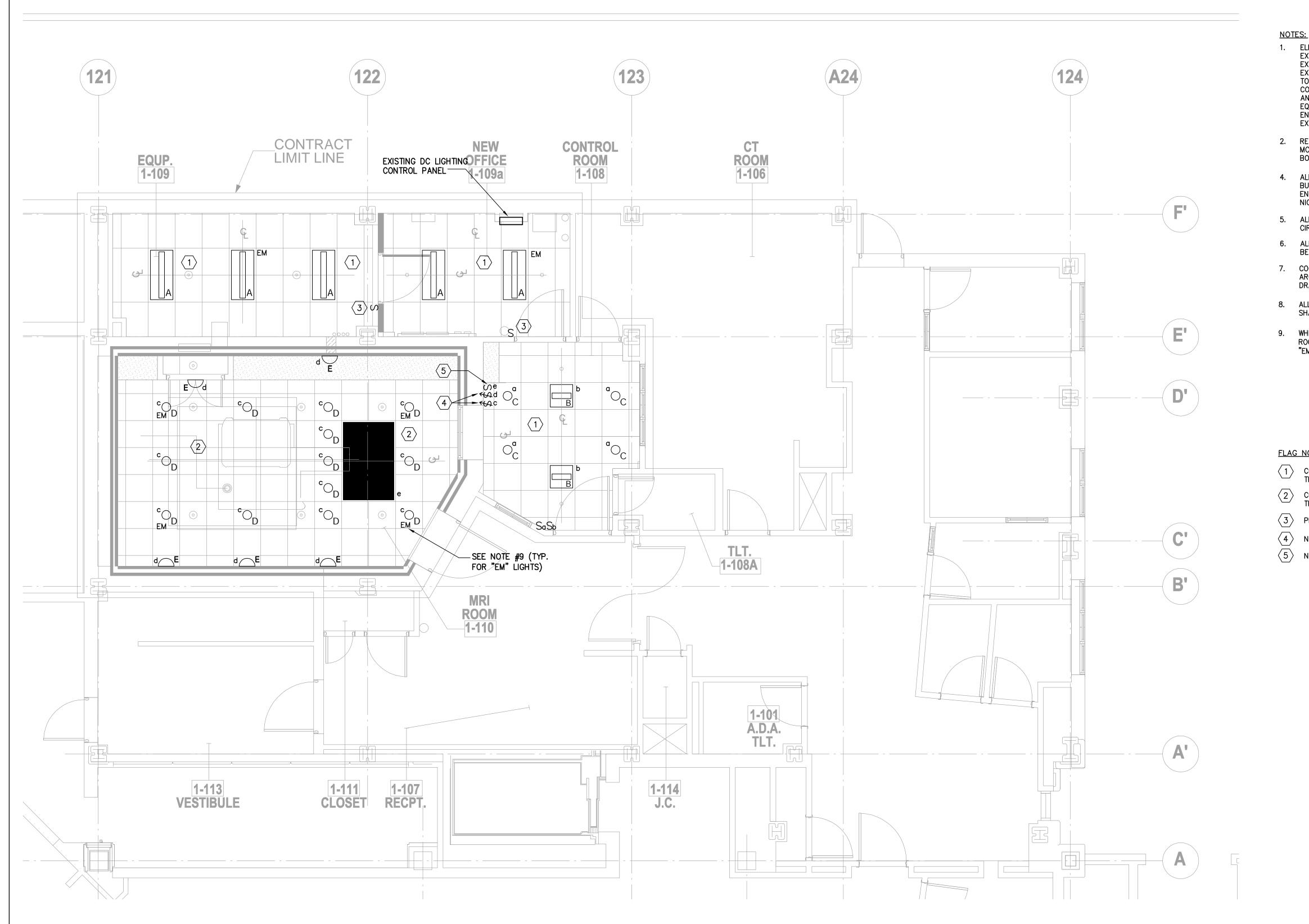
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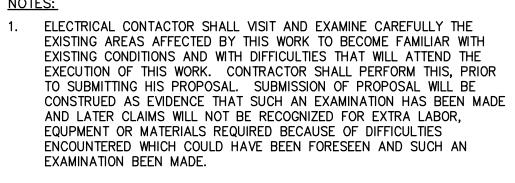
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CAD FILE NO. **PROGRESS SET:** 12/10/12



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2. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES, SWITCHES AND JUNCTION BOXES.

4. ALL EMERGENCY AND NIGHT LIGHT SHALL BE CONNECTED TO EXISTING BUILDING EMERGENCY POWER SOURCE. COORDINATE WITH BUILDING ENGINEER FOR THE AVAILABILITY OF SPARE CIRCUIT FOR EMERGENCY AND NIGHT LIGHT.

5. ALL NEW EXIT SIGN SHALL BE CONNECTED TO EXISTING EXIT SIGN CIRCUIT SERVING THE SPACE.

6. ALL LIGHTING WIRING ROUTING SHALL BE VIA THE COMMON OPENING BETWEEN MRI ROOM AND EQUIPMENT ROOM.

7. COORDINATE LIGHTING FIXTURE TYPES AND SPECIFICATIONS WITH ARCHITECT. REFER TO LIGHTING FIXTURE SCHEDULES ON ARCHITECTURAL DRAWINGS.

8. ALL LIGHTING FIXTURES WHICH ARE CONTROLLED BY A DIMMER SWITCH SHALL BE WIRED TO A CIRCUIT WITH A DEDICATED NEUTRAL WIRE.

9. WHEN POWER OUTAGE HAPPENS, THE "EM" LIGHTS IN THE PROCEDURE ROOM SHALL BE ABLE TO BY PASS THE DIMMER AND TO POWER THE "EM" LIGHTS TO THE FULL BRIGHTNESS.

FLAG NOTES:

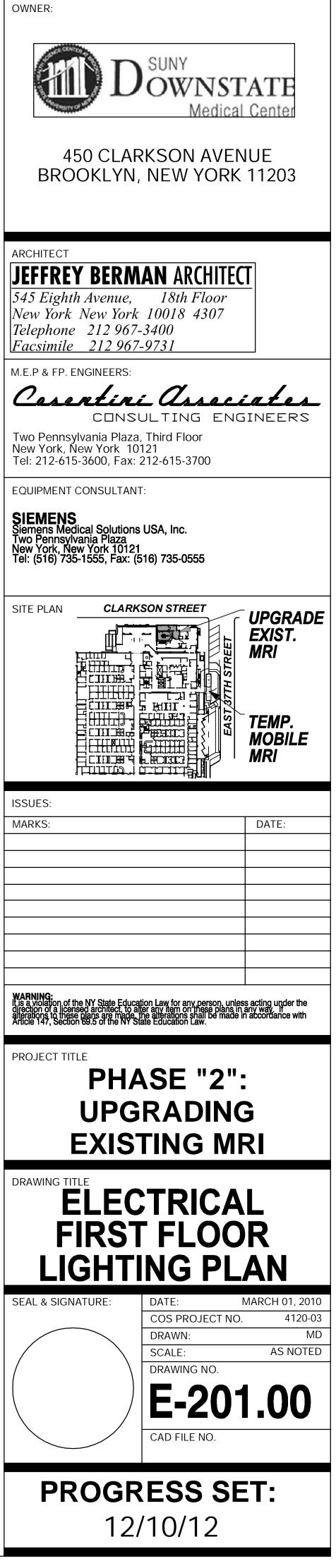
(1) CONNECT NEW LIGHTING FIXTURES TO EXISTING CIRCUIT IN THIS AREA.

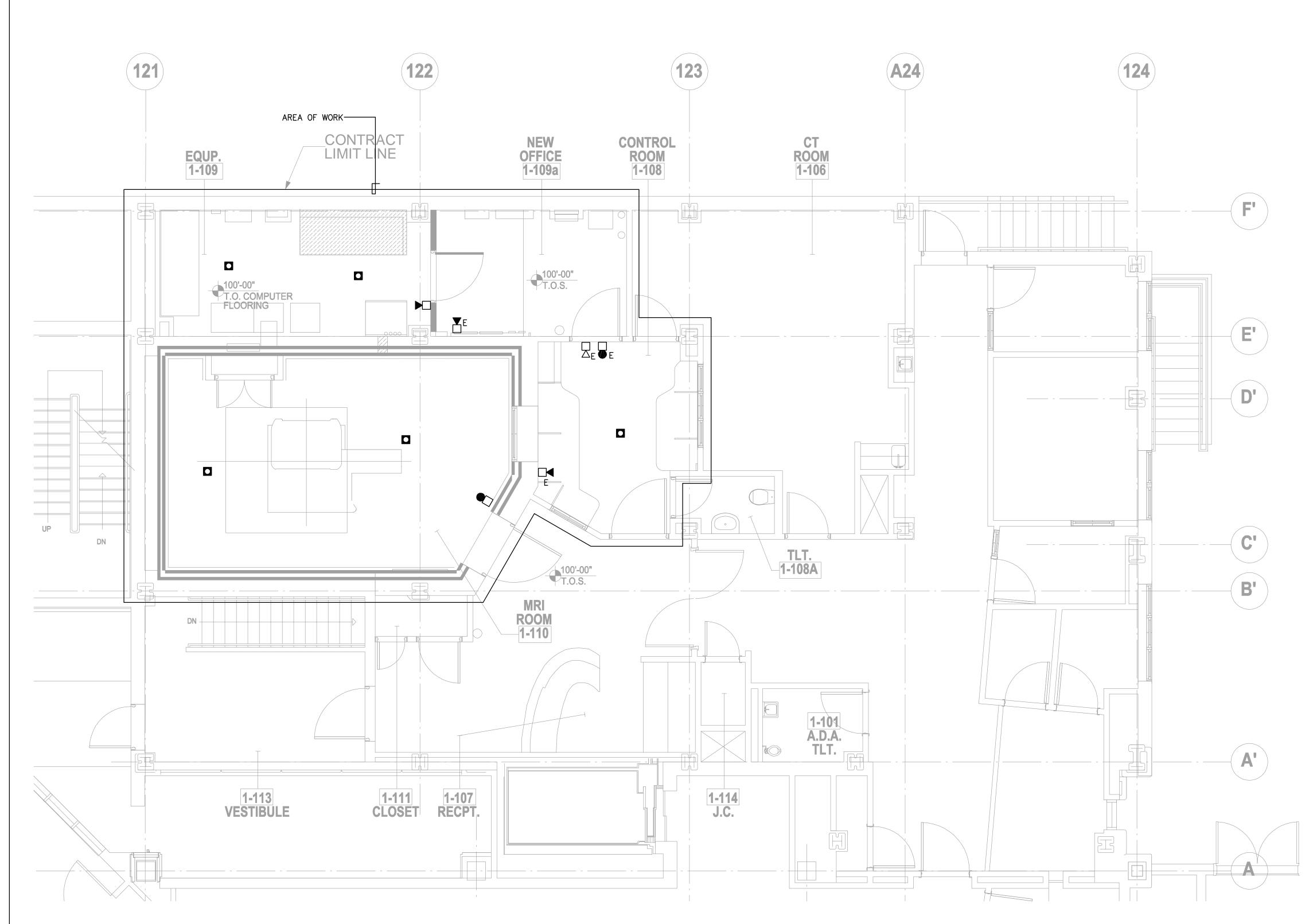
2 CONNECT NEW LIGHTING FIXTURES TO EXISTING DC CIRCUIT IN THIS AREA.

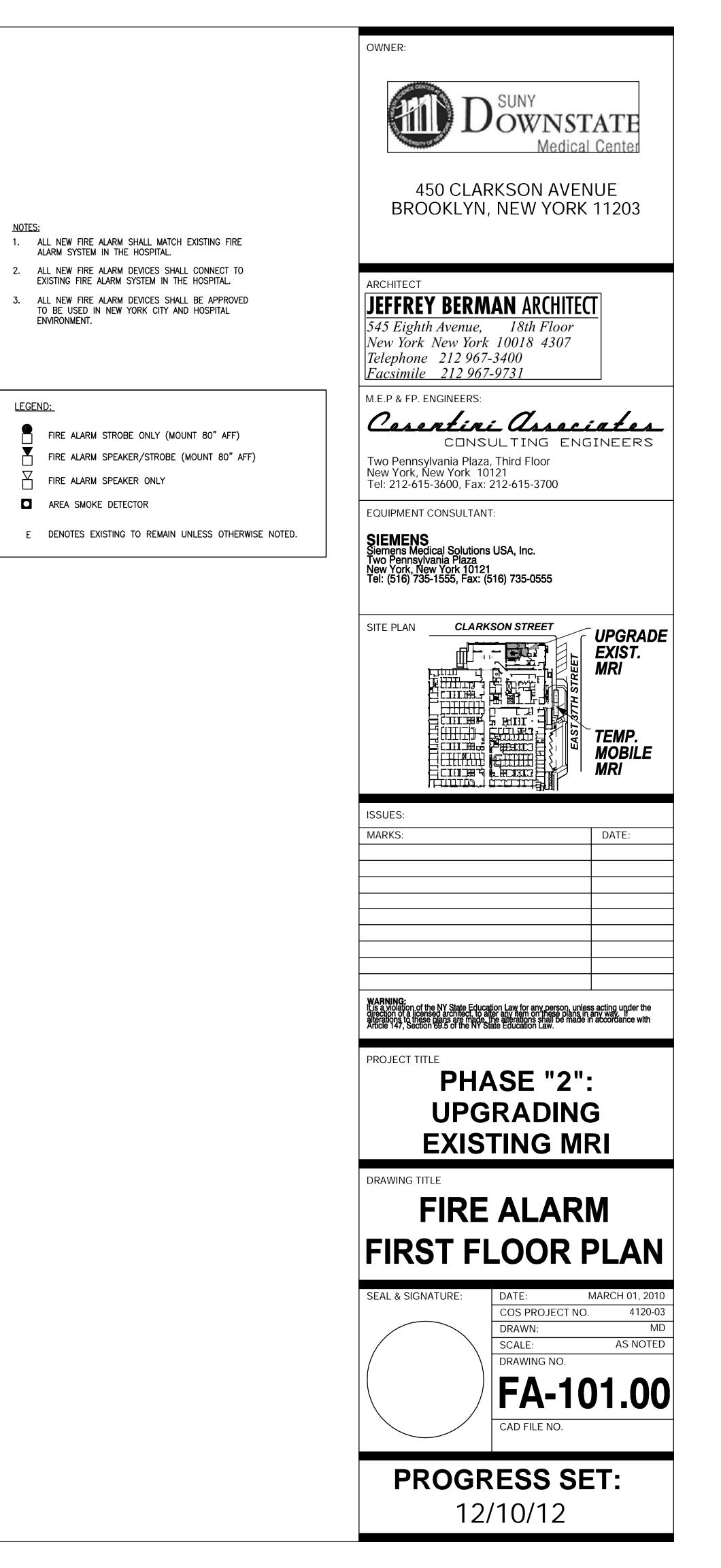
 $\langle 3 \rangle$ provide a new switch to control lighting fixture in the room.

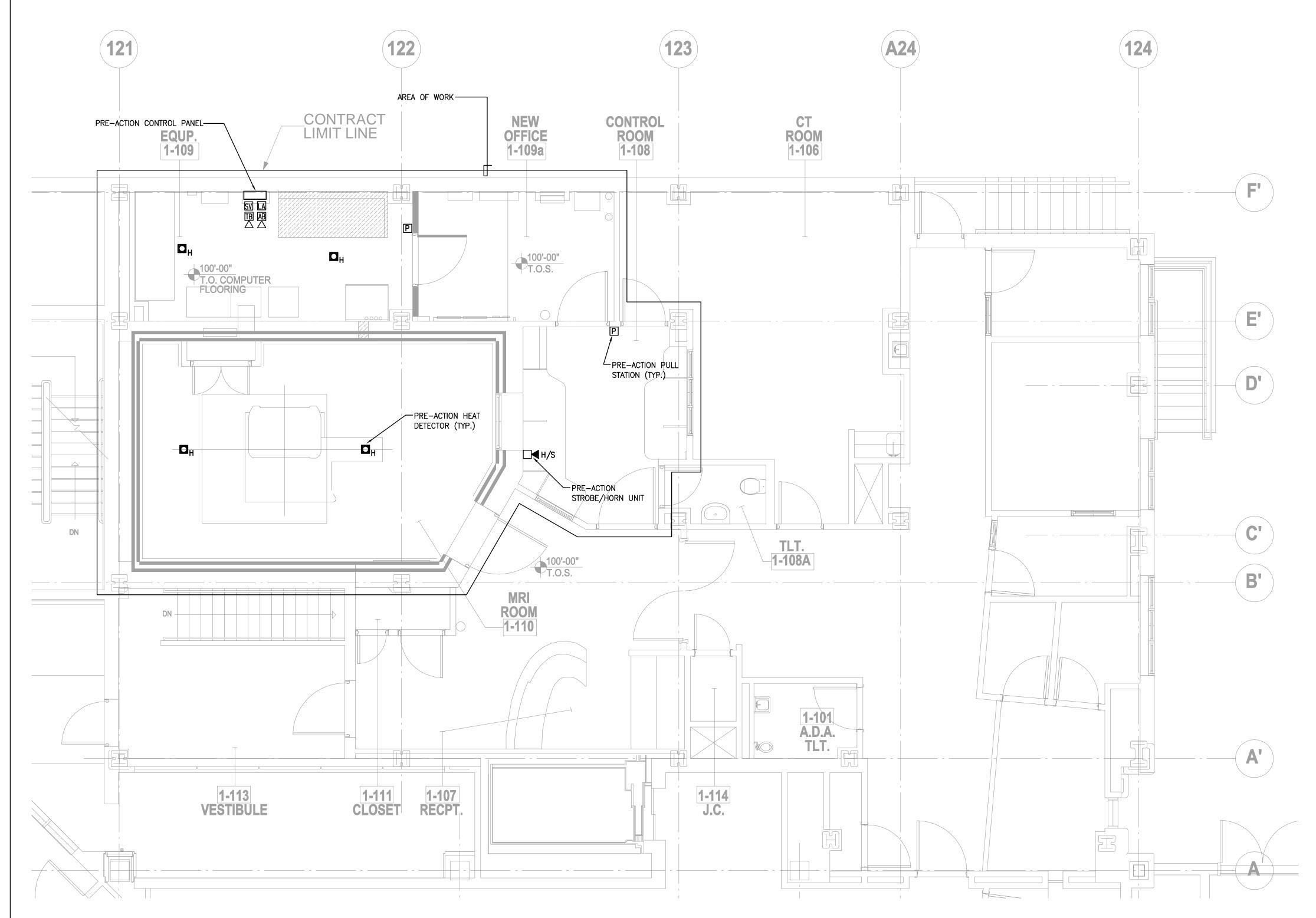
 $\langle 4 \rangle$ NEW DC DIMMER TO CONTROL LIGHTS IN MRI ROOM

 $\langle 5 \rangle$ NEW DC SWITCH TO CONTROL LIGHT IN MRI ROOM

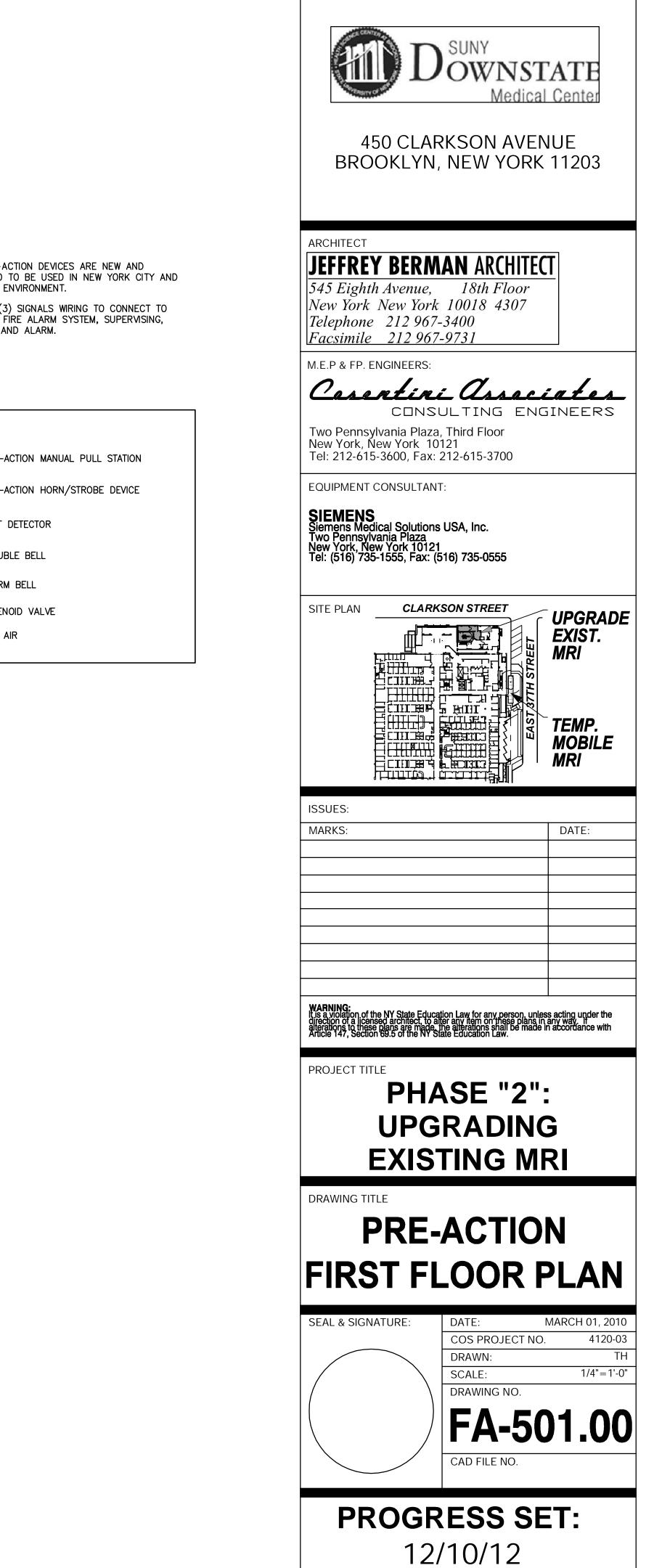








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OWNER:

NOTES:

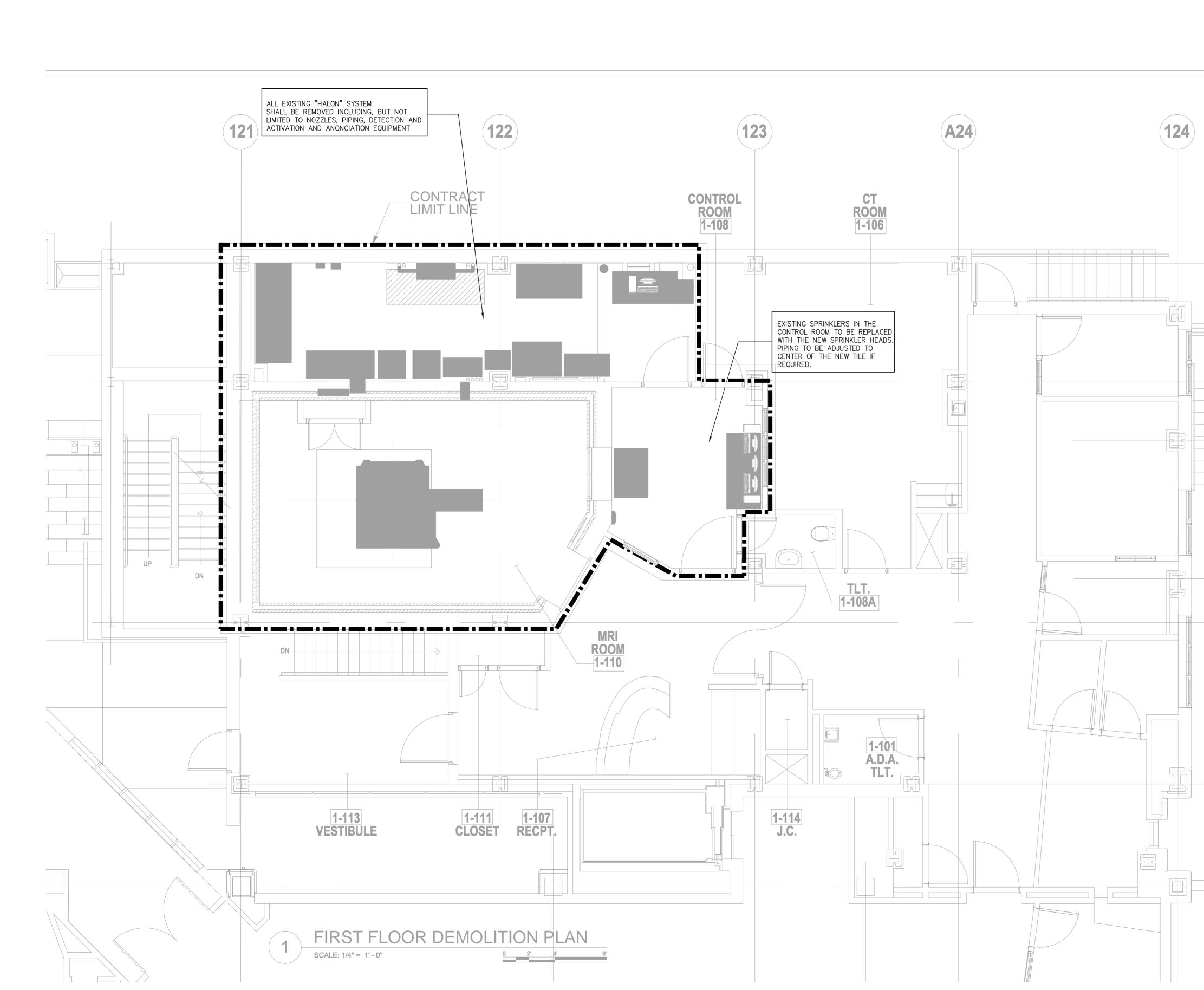
- 1. ALL PRE-ACTION DEVICES ARE NEW AND APPROVED TO BE USED IN NEW YORK CITY AND HOSPITAL ENVIRONMENT.
- 2. PROVIDE (3) SIGNALS WIRING TO CONNECT TO HOSPITAL FIRE ALARM SYSTEM, SUPERVISING, TROUBLE AND ALARM.

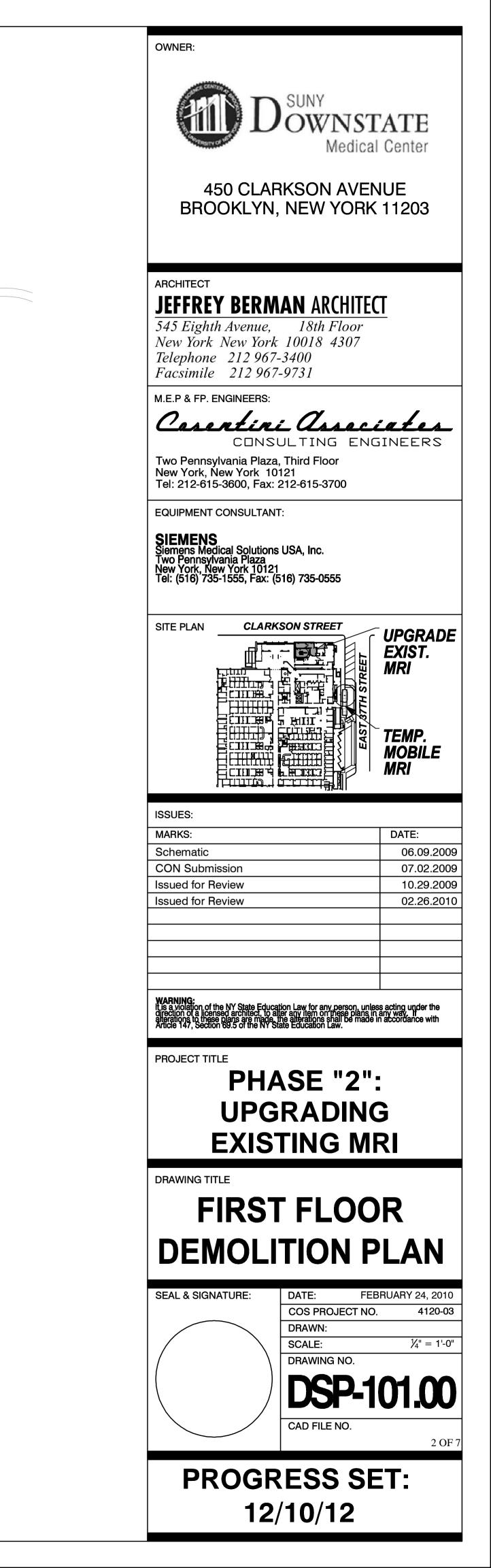
LEGEND:

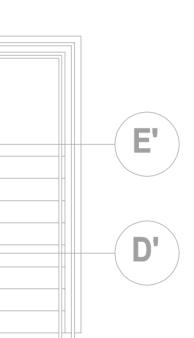
Ρ PRE-ACTION MANUAL PULL STATION ∎ ⊔н/s PRE-ACTION HORN/STROBE DEVICE HEAT DETECTOR TROUBLE BELL ſŤÐ ∇ ALARM BELL Ŕ

SV SOLENOID VALVE

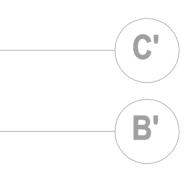
LA LOW AIR



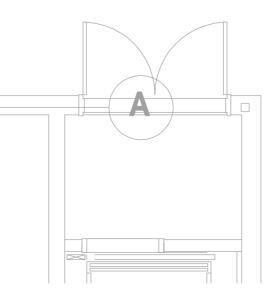




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NEW YORK CITY SPRINKLER NOTES

SECTION BC Q102

SECTION BC Q102.

- THE INSTALLATION COMPONENT, SIZING, SPACING, CLEARANCES, POSITION, AND TYPE OF SYSTEM SHALL CONFORM TO SECTION BC 903 AND APPENDIX Q,
- ONLY APPROVED MATERIALS SHALL BE USED AS PER CHAPTER 6 OF APPENDIX Q,
- 3. DIRECT CONNECTION OF SPRINKLERS TO THE PUBLIC WATER SYSTEM SHALL
- CONFORM TO SECTION BCQ102.1 SECTIONS 15.2.1 AND 15.1.1 (d). 4. SPRINKLER SHALL BE PROTECTED AGAINST FREEZING AND INJURY AS PER
- APPENDIX Q BCQ102, SECTIONS 8.15.3 AND 6.2.8. 5. INSPECTIONS AND TESTS OF SPRINKLERS SHALL BE CONDUCTED AS PER
- SEC. 901.5 AND APPENDIX Q, SEC. BCQ102, CH. 16. THE OCCUPANCY OF THE AREAS TO BE SPRINKLERED IN ACCORDANCE WITH
- SECTIONS 5.2 AND A.5.2 OF APPENDIX Q SECTION BCQ102. 7. WATER SUPPLY TEST PIPES AND GAUGES SHALL BE PROVIDED AS PER
- SECTION 8.16.1 AND 8.16.4 OF APPENDIX Q SECTION BCQ102.
- PIPING, FITTINGS, SPECIFICATIONS, PIPE SCHEDULES, SYSTEM TEST PIPES. PROTECTION AGAINST CORROSION, DAMAGE, VALVES, HANGERS, SPRINKLER GUARDS AND SHIELDS SHALL BE AS PER APPENDIX Q SECTION BCQ102, CHAPTERS 6 AND 9.
- STOCK OF EXTRA SPRINKLERS SHALL BE FURNISHED AS PER SECTION 6.2.9 APPENDIX Q SECTION BCQ102 (REQUIRED FOR EACH TEMPERATURE RATING).
- 10. SPRINKLER ALARM WILL BE IN ACCORDANCE WITH SECTION 8.16.1 OF APPENDIX Q SECTION BCQ102.
- 11. SPACING, LOCATION AND POSITION OF SPRINKLERS WILL BE AS PER SECTION 8 OF APPENDIX Q SECTION BCQ102.
- 12. ALL BLIND SPACES EXCEEDING 6" IN WIDTH OR DEPTH WHICH CONTAIN COMBUSTIBLE MATERIAL WILL BE SPRINKLERED.
- 13. ALL PIPING PASSING THROUGH WALLS WILL COMPLY WITH SECTION BC712.
- 14. THERE IS NO HIGH PILED STORAGE AS DEFINED IN SECTION 3-3.12 OF APPENDIX Q SECTION BCQ102.
- 15. DISTANCE OF SPRINKLERS FROM HEAT SOURCE SHALL BE AS PER NFPA 13 TABLES 8.3.2.5 (a) AND 8.3.2.5 (b).
- 16. AS PER SECTION BC903.1.2 PROVIDE DEPARTMENT OF ENVIRONMENTAL PROTECTION LETTER WITH FLOW TEST DATA IF THERE IS A DIRECT CONNECTION TO THE STREET WATER SUPPLY.
- 17. ALL PIPES PASSING THROUGH FOUNDATION WALLS SHALL BE PROTECTED AS PROVIDED BY SECTION 305.5 OF THE PLUMBING CODE.
- 18. ALL VALVES SHALL BE IDENTIFIED AS REQUIRED BY SECTION 6-7.4 OF OF APPENDIX Q SECTION BCQ102.
- 19. DRAINAGE SHALL CONFORM TO SECTION 8.15.2 OF APPENDIX Q SECTION BCQ102.
- 20. A ONE PIECE REDUCING FITTING SHOULD BE USED WHEREVER A CHANGE IS MADE IN THE SIZE OF PIPE, AS PER SECTION 6.4.6 OF APPENDIX Q SECTION BCQ102.
- 21. ALL VALVES ON CONNECTIONS TO WATER SUPPLY TO SPRINKLER SHALL BE
- APPROVED OS&Y OR APPROVED INDICATOR TYPE.
- 22. DRAIN VALVES AND TEST VALVES SHALL BE APPROVED TYPE AS PER SECTION 6.7.3 OF APPENDIX Q SECTION BCQ102.
- 23. HANGERS SHOULD BE SUPPORTED BY WROUGHT IRON U TYPE OR APPROVED ADJUSTABLE HANGERS. HANGERS SHALL BE OF THE TYPE APPROVED FOR USE WITH THE PIPE OR TUBE INVOLVED, AS PER CHAPTER 9 OF APPENDIX Q SECTION BCQ102.
- 24. PROVISIONS SHOULD BE MADE TO FACILITATE FLUSHING SYSTEM PIPING BY PROVIDING FLUSHING CONNECTION CONSISTING OF A CAPPED NIPPLE 4" LONG ON END OF A CROSS MAIN AS PER SECTION 8.14.16 OF APPENDIX Q SECTION BCQ102.
- 25. SPRINKLER SHALL BE AN APPROVED TYPE AS PER SECTION 8.3 OF APPENDIX Q SECTION BCQ102.
- 26. SPRINKLER TEMPERATURE RATING SHALL COMPLY WITH SECTION 8.3 OF APPENDIX Q SECTION BCQ102.
- 27. 18" MINIMUM CLEARANCE MUST BE MAINTAINED BELOW SPRINKLER DEFLECTOR AS PER SECTION 8.5.6 OF APPENDIX Q SECTION BCQ102.
- 28. SPACING AND LOCATION OF SPRINKLERS SHALL COMPLY WITH CHAPTER 8 OF
- 29. SPRINKLER SYSTEM SHALL COMPLY WITH NFPA 13-2002 AS MODIFIED BY APPENDIX Q SECTION BCQ102.
- 30. SOURCES OF WATER SUPPLY FOR SPRINKLER SYSTEMS SHALL COMPLY WITH CHAPTER 15 OF APPENDIX Q SECTION BCQ102.
- 31. PIPE SCHEDULE SYSTEMS SHALL BE IN ACCORDANCE WITH SECTION 14.5 OF APPENDIX Q SECTION BCQ102.
- 32. AUTOMATIC INTERLOCK CUTOFF SWITCH FOR VENTILATION WILL CONFORM TO
- CHAPTER 6 OF THE MECHANICAL CODE (APPLICABLE ONLY IF THERE IS AN AIR SYSTEM UTILIZING RECIRCULATED AIR AND REQUIRING A THERMOSTATIC DEVICE). 33. HYDRAULICALLY DESIGNED SPRINKLER SYSTEMS SHALL BE IN ACCORDANCE WITH
- CHAPTER 14 OF APPENDIX Q SECTION BCQ102. 34. MINIMUM BRANCH PIPE SIZE TO BE ONE INCH (1").

APPENDIX Q SECTION BOQTO2.

35. THIS APPLICATION IS MADE ONLY FOR WORK INDICATED ON THE SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE

SPRINKLER SPECIFICATIONS . GENERAL A. REFERENCE TO GENERAL CONDITIONS

- PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE GENERAL CONDITIONS.
- B. DEFINITIONS
- WHENEVER REFERRED TO IN THIS SPECIFICATION AND/OR ON THE DRAWING "JURISDICTIONAL AUTHORITY" OR "AUTHORITY HAVING
- FOLLOWING:
- (2) BUILDING STANDARD
- (3) ARCHITECT
- (4) ENGINEER
- C. CODES AND STANDARDS ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS. (1) BUILDING CODES OF THE STATE OF NEW YORK
- (2) BUILDING STANDARDS
- (3) OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA). D. PRIOR INSPECTION DURING BID
- PRIOR TO SUBMISSION OF HIS BID, THIS CONTRACTOR SHALL VISIT THE JOB SITE TO ASCERTAIN THE ACTUAL FIELD CONDITIONS AS THEY RELATE TO THE WORK AS INDICATED ON THE ARCHITECT'S AND ENGINEER'S ATTENTION PRIOR TO SUBMISSION OF HIS BID, AND IF NOT RESOLVED TO HIS SATISFACTION, SHALL BE WRITTEN
- QUALIFICATION OF HIS BID. E. REVIEW OF ALL TRADES AND COORDINATION OF WORK THE CONTRACTOR SHALL REVIEW WORK REQUIRED BY ALL TRADES AND COORDINATE THE INSTALLATION OF HIS WORK AS FOLLOWS:
- (1) PRIOR TO SUBMISSION OF HIS FORMAL BID. THE CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THE ENTIRE PROJECT INCLUDING GENERAL CONSTRUCTION, DEMOLITION, ELECTRICAL,
- INDICATED OR IMPLIED IN OTHER SECTIONS OF WORK.
- INSTALLATION OF HIS WORK. F. INSPECTION AND TESTS
- THIS CONTRACTOR SHALL BE SUBJECT TO PERIODIC INSPECTIONS OF HIS WORK BY THE ARCHITECT ENGINEER AND BUILDING PERSONNEL DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL PERFORM ANY AND ALL TESTS AS REQUIRED BY ALL AUTHORITIES HAVING JURISDICTION. WORK SHALL NOT BE ENCLOSED PRIOR TO APPROVAL OF ALL REQUIRED TESTS.
- G. CUTTING, PATCHING, CORE DRILLING AND CHASING
- OTHER WORK WHICH RESULT IN NOISE OBJECTIONABLE TO ALL AUTHORITIES HAVING JURISDICTION OF THE WORK SHALL BE DONE AT TIME DESIGNED BY THE JURISDICTIONAL AUTHORITIES AT NO EXTRA COST TO THE OWNER.
- (2) THIS CONTRACTOR SHALL NOT DO ANY CUTTING, CORING OR CHASING THAT MAY IMPAIR THE STRENGTH OF THE BUILDING. NO HOLES, EXCEPT THOSE FOR SMALL SCREWS, MAY BE DRILLED IN BEAMS, OR OTHER STRUCTURAL MEMBERS WITHOUT OBTAINING PRIOR APPROVAL. ALL WORK SHALL BE DONE IN A WORKMANLIKE
- H. GENERAL INSTALLATION (1) THE SPRINKLER DRAWINGS ARE IN INTERPRETATION OF THE
 - CONTRACTOR FROM PROVIDING ALL WORK AND EQUIPMEN NECESSARY TO COMPLETE THE INSTALLATION ACCORDING TO THE REQUIREMENTS. THE NUMBER AND SPACING OF SPRINKLER HEADS, SPACING AND SIZE OF PIPE, LOCATION AND NUMBER OF VALVES, METHOD OF DRAINING LINES, AND ALL OTHER DETAILS AND WORK SHALL BE AS REQUIRED BY THE CITY OF NEW YORK BUILDING CODE, N.Y.I.S.O., OWNERS UNDERWRITERS, N.F.P.A.
- (2) THE SPRINKLER HEADS IN ALL AREAS ARE TO BE INSTALLED IN THE CENTER OF TILE, ON A TRUE AXIS LINE IN BOTH DIRECTIONS "WITH A MAXIMUM DEVIATION FROM THE AXIS LINE OF 1/2" PLUS OR MINUS". AT THE COMPLETION OF THE INSTALLATION. IF ANY HEADS ARE FOUND TO EXCEED THE ABOVE MENTIONED TOLERANCE, THEY SHALL BE REMOVED AND REINSTALLED BY THIS CONTRACTOR.
- (3) THE ARRANGEMENT, POSITIONS AND CONNECTIONS OF PIPES, DRAINS, VALVES, ETC., SHOWN ON THE DRAWINGS SHALL BE TAKEN AS CLOSE APPROXIMATION AND WHILE THEY SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE, THE RIGHT IS RESERVED BY THE ARCHITECT TO CHANGE THE LOCATIONS, TO ACCOMMODATE ANY CONDITIONS WHICH MAY ARISE DURING THE PROGRESS OF THE WORK WITHOUT ADDITIONAL COMPENSATION TO THIS CONTRACTOR FOR SUCH CHANGES, PROVIDED THAT THE CHANGES ARE REQUESTED PRIOR TO THE INSTALLATION OF THIS
- IT BE FOUND THAT ANY OF HIS WORK IS SO LAID OUT THAT INTERFERENCES WILL OCCUR HE SHALL SO REPORT THAT TO THE (4) PROVIDE ALL SPRINKLER HEADS AND WORK IN STRICT
- RESERVES THE RIGHT TO REJECT ANY AND ALL WORK NOT IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS. I. ACCESS DOORS
- (2) NOTIFY G.C. OF ALL LOCATIONS REQUIRED.
- J. AS-BUILT DRAWINGS UPON COMPLETION OF WORK THE CONTRACTOR SHALL FURNISH ONE

JURISDICTION" SHALL INCLUDE BUT NOT BE LIMITED TO THE

(1) BUILDING CODES OF THE STATE OF NEW YORK

MECHANICAL PLUMBING AND SPRINKLER AND SHALL NOTIFY TH GENERAL CONTRACTOR OF WORK REQUIRED IN HIS BID WHICH IS

(2) DURING CONSTRUCTION THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH WORK OF ALL TRADES TO INSURE PROPER

ALL CUTTING, CORE DRILLING, CHASING OF CONCRETE AND

MANNER BY MECHANICS SKILLED IN THEIR TRADE.

INFORMATION INCLUDED IN THE SPECIFICATION, AND ARE GIVEN AS A GUIDE ONLY, AND THEY THEREFORE DO NOT RELIEVE THIS AND ALL OTHER GOVERNING AUTHORITIES.

CONTRACTOR'S WORK. THE RESPONSIBILITY FOR ACCURATELY LAYING OUT THE WORK RESTS WITH THIS CONTRACTOR. SHOULD

ACCORDANCE WITH APPROVED SHOP DRAWINGS. THE ARCHITECT

(1) THIS CONTRACTOR TO FURNISH AND INSTALL TAGS AT ALL LOCATIONS WHERE CEILING ACCESS IS REQUIRED.

COMPLETE SET OF AS-BUILT DRAWINGS INDICATING EXACT LOCATIONS OF ALL WORK ON A SET OF REPRODUCIBLE DRAWINGS.

2. SCOPE OF WORK

- A. WORK INCLUDED IN THIS SECTION: ALL LABOR AND MATERIALS NECESSARY TO COMPLETE ALL SPRINKLER WORK AS SPECIFIED HEREIN AND/OR AS REQUIRED BY JOB CONDITIONS INCLUDING BUT NOT LIMITED TO THE FOLLOWING
- (1) EXTEND NEW BRANCH PIPING FROM EXISTING SPRINKLER PIPING TO ALL NEW SPRINKLER HEADS AS INDICATED ON THE PLAN.
- (2) RELOCATE SPRINKLER HEADS AS INDICATED ON THE PLAN.
- (3) NEW SPRINKLER HEADS WHERE REQUIRED DUE TO DAMAGE PRIOR TO OR DURING CONSTRUCTION.
- (4) RELOCATION OF EXISTING SPRINKLER PIPING DUE TO NEW CEILING HEIGHTS AND CONFLICTS WITH NEW DUCTWORK.
- (5) OBTAINING ALL APPROVALS AND PAYMENT FOR ALL PERMITS AND FEES NECESSARY TO OBTAIN APPROVAL FROM ALL AUTHORITIES HAVING JURISDICTION.
- (6) TEST CONNECTIONS, TESTS AND ADJUSTMENTS.
- (7) COORDINATION WITH OTHER TRADES.
- (8) SHOP DRAWINGS.
- PIPING A. ALL PIPING MATERIALS SHALL BE AS PER CODE.
 - B. PIPE SIZING SHALL BE IN ACCORDANCE WITH NEW YORK CITY CODE. CONTRACTOR SHALL SUBMIT HYDRAULIC CALCULATIONS.
 - C. HANGERS AND SUPPORTS
 - 1. PIPING SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN ACCORDANCE WITH NATIONAL FIRE PROTECTION ASSOCIATION PAMPHLET No. 13 AND No. 14 LATEST EDITION.
 - 2. SUPPORT HANGERS FROM APPROVED CONCRETE INSERTS WHERE CONCRETE SLABS ARE AVAILABLE.
 - 3. ALL HANGERS, RODS, INSERTS, CLAMPS, STANCHIONS, BRACKETS, SHALL BE DIPPED IN ZINC CHROMITE PRIMER BEFORE INSTALLATION
 - OR SHALL BE GALVANIZED. 4. WHERE "C" CLAMP HANGER ATTACHMENTS ARE UTILIZED, RETAINER
 - CLIPS SHALL BE PROVIDED ON EACH CLAMP. 5. PIPING 3" AND SMALLER SHALL UTILIZE ADJUSTABLE SWIVEL LOOP
 - HANGERS. 6. PIPING 4" AND LARGER SHALL UTILIZE CLEVIS TYPE HANGERS ONLY.
 - 7. ALL HANGER RODS SHALL BE DOUBLE NUTTED.
 - 8. CHAIN STRAPS, PERFORATED BARS, WIRE HANGERS ARE NOT PERMITTED.

HEADS

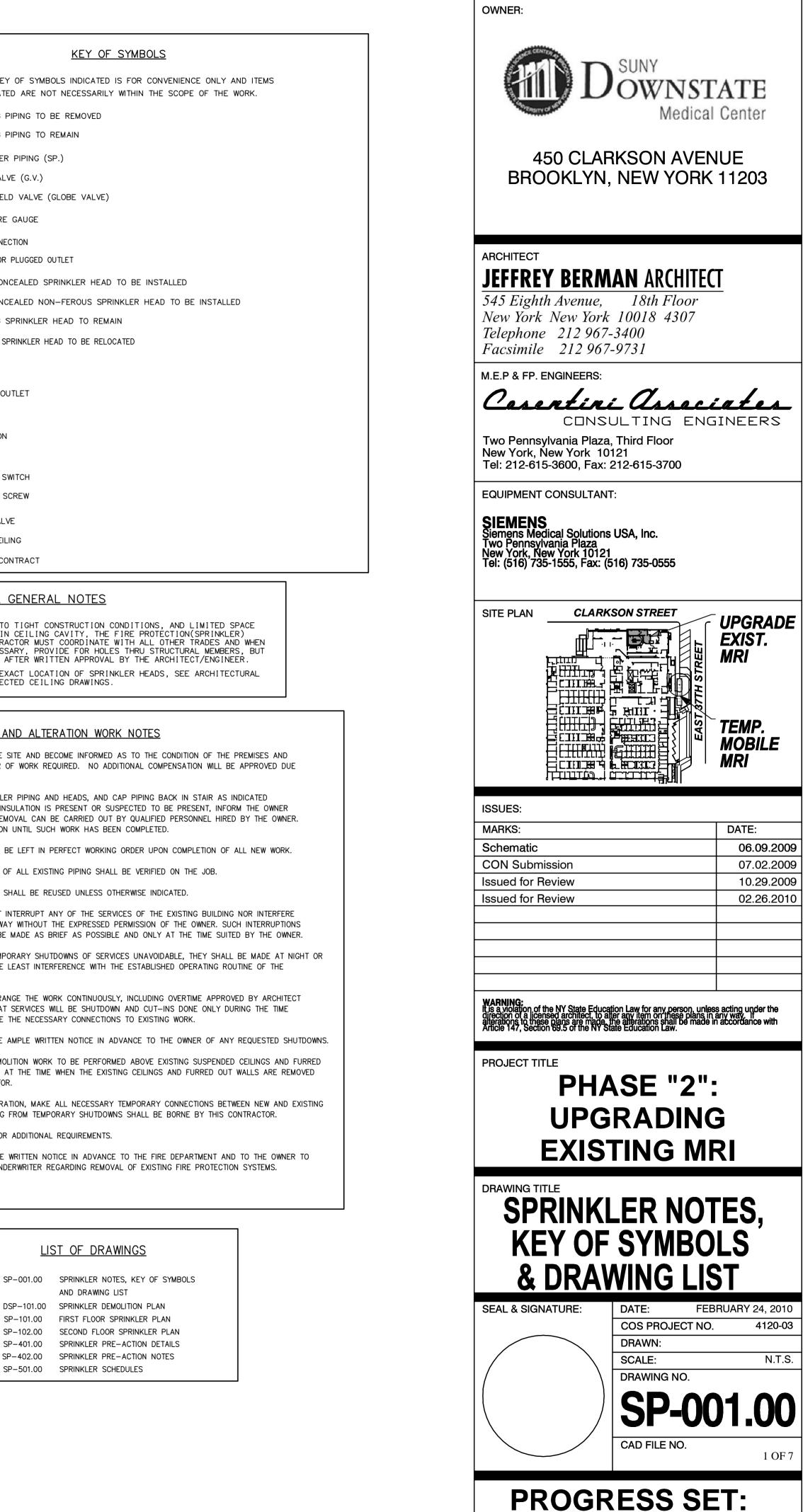
- A. SPRINKLER HEADS TO BE AS FOLLOWS:
- (1) RELIABLE MODEL G4 CONCEALED TYPE IN ALL FINISHED AREAS. (2) RELIABLE MODEL G RECESSED IN CLOSETS.
- 5. ACCESS DOORS
 - A. FURNISH ACCESS DOORS AS REQUIRED BY CONSTRUCTION, AND SIZE AS REQUIRED TO MAINTAIN COMPLETE ACCESS TO EQUIPMENT MINIMUM 12"
 - B. SETTING OF ACCESS DOORS SHALL BE BY THE GENERAL CONTRACTOR IN
 - LOCATIONS AS DIRECTED BY THIS CONTRACTOR. C. SUBMIT SHOP DRAWINGS OF ALL ACCESS DOORS AND LOCATIONS.
- AS-BUILT DRAWINGS

X 12

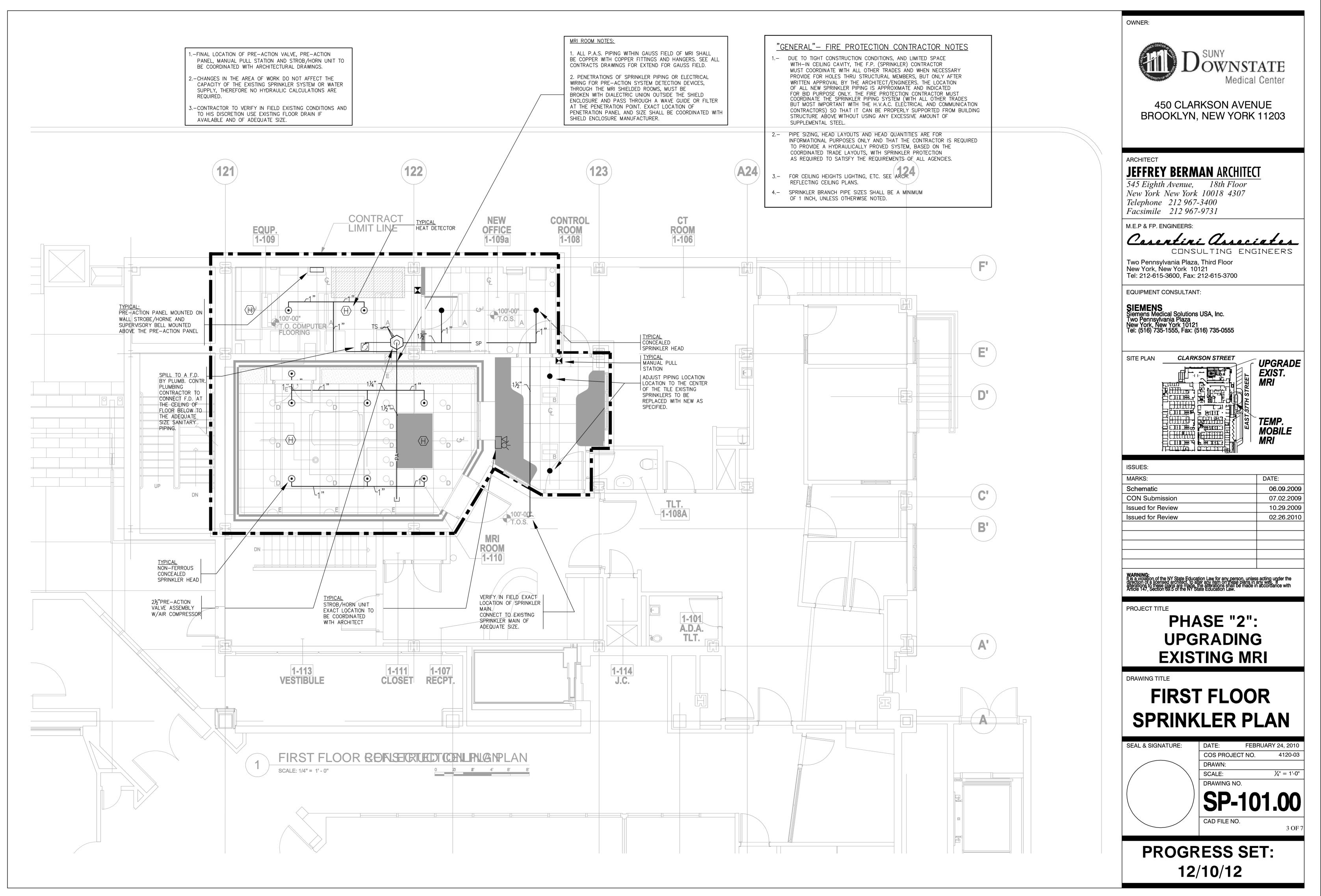
- A. RECORD ALL DEVIATIONS FROM THE CONTRACT DRAWINGS AND DELIVER TO THE OWNER TRACINGS INDICATING THE WORK AS INSTALLED. B. SUBMIT BUILDING DEPARTMENT APPROVED SHOP DRAWINGS AND
- HYDRAULIC CALCULATIONS TO THE BUILDING MANAGEMENT.
- SHOP DRAWINGS
- A. PRIOR TO COMMENCEMENT OF WORK CONTRACTOR TO SUBMIT COMPLETE MANUFACTURERS SHOP DRAWINGS ON THE FOLLOWING: (1) SPRINKLER HEADS
- (2) PIPING, INCLUDING HYDRAULIC CALCULATIONS
- 8. BUILDING SHUT-DOWN
 - SHUT-DOWN OF BUILDING FIRE STANDPIPE SHALL BE DONE AT TIMES DESIGNATED BY BUILDING ENGINEER AND PERFORMED IN COMPLIANCE WITH ALL LOCATION CODES. COSTS RESULTING FROM TEMPORARY SHUT-DOWNS SHALL BE BORNE BY THIS CONTRACTOR.
- 9. HYDRAULIC CALCULATIONS
 - A. BEFORE ANY WORK IS COMMENCED. SHOP DRAWINGS SHALL BE CAREFULLY PREPARED AND SUBMITTED FOR APPROVAL. IT I REQUIRED THAT THE SPRINKLER SYSTEMS BE SIZED HYDRAULICALLY IN ACCORDANCE WITH NFPA STANDARDS. SUBMIT HYDRAULIC CALCULATIONS OF EACH SYSTEM FOR EACH SHOP DRAWING SHOWING BALANCED SYSTEM DELIVERY AND BALANCED SUPPLY AND DEMAND. AS DEFINED FOR LIGHT HAZARD AREAS IN N.F.P.A. No. 13 (1989) LATEST EDITION. SUCH DRAWINGS AND CALCULATIONS MUST BE REVIEWED AND APPROVED BY THE INSURANCE RATING ORGANIZATION. THE ENGINEER AND ALL GOVERNING AUTHORITIES BEFORE ANY WORK IS COMMENCED AT THE JOB SITE.
- 10. SPRINKLER DRAINS AND TEST CONNECTIONS
- PROVIDE ALL NECESSARY DRAIN VALVES, DRAIN RISERS, CAPPED NIPPLES, AUXILIARY PIPING, ETC., AS REQUIRED TO DRAIN THE SYSTEM
- B. PROVIDE ALL PIPING REQUIRED TO SPILL THE DRAINS AND TEST CONNECTIONS TO APPROVED SAFE WASTE.
- C. PROVIDE INSPECTORS TEST CONNECTIONS. PIPE TO WASTE AND INCLUDE SITE CONNECTION AS NECESSARY.
- 11. SIGNS
- PROVIDE ALL DESIGNATING SIGNS AS REQUIRED BY THE AGENCIES HAVING JURISDICTION.
- 12. UNIT PRICES
 - A. THIS CONTRACTOR'S PROPOSAL SHALL STATE THE QUANTITY OF EACH TYPE OF SPRINKLER HEAD ON WHICH THE PROPOSAL WAS BASED. INCLUDE UNIT PRICES (ADD AND DEDUCT) THAT ARE TO APPLY FOR EACH TYPE OF SPRINKLER HEAD. UNIT PRICES SHALL BE COMPLETE COST AND INCLUDE RECEIVING, HANDLING, DISTRIBUTING, STORING, HOISTING, PROTECTION, OVERHEAD, PROFIT, TAXES, ETC., AND PIPING, FITTINGS, HANGERS, ESCUTCHEONS, HEADS AND ALL ACCESSORIES.
- 13. GUARANTEES AND CERTIFICATIONS
 - A. ALL WORK SHALL BE GUARANTEED TO BE FREE FROM LEAKS OR DEFECTS. ALL DEFECTIVE MATERIALS OR WORKMANSHIP AS WELL AS DAMAGE TO THE WORK OF ALL TRADES RESULTING FROM SAME SHALL BE REPLACED OR REPAIRED AS DIRECTED FOR THE DURATION OF STIPULATED GUARANTEED PERIODS. THE DURATION OF GUARANTEED PERIODS SHALL BE ONE YEAR.

	<u>KEY O</u>
N	OTE: THE KEY OF SYMBOLS INDICATE INDICATED ARE NOT NECESSARII
× × × ×	⇐ EXISTING PIPING TO BE REMOVED ■ EXISTING PIPING TO REMAIN
SP	- SPRINKLER PIPING (SP.)
-x3	GATE VALVE (G.V.)
6 <u></u> 5	LOCKSHIELD VALVE (GLOBE VALVE
Q	
	NEW CONNECTION
C	CAPPED OR PLUGGED OUTLET
•	NEW CONCEALED SPRINKLER HEA
\odot	NEW CONCEALED NON-FEROUS SF
0	EXISTING SPRINKLER HEAD TO REM
×_	EXISTING SPRINKLER HEAD TO BE REL
CLG.	CEILING
VAL. 0. V.O.	VALVED OUTLET
DN.	DOWN
EL.	ELEVATION
FL.	FLOOR
T.S.	TAMPER SWITCH
0.S.&Y.	OUTSIDE SCREW
G.V.	& YOKE GATE VALVE
н.с.	HUNG CEILING
N.I.C.	NOT IN CONTRACT
	TYPICAL GENERAL NOTES 1 - DUE TO TIGHT CONSTRUCTION WITHIN CEILING CAVITY, THE CONTRACTOR MUST COORDINATE
	NECESSARY, PROVIDE FOR HOU ONLY AFTER WRITTEN APPROV 2 - FOR EXACT LOCATION OF SPR REFLECTED CEILING DRAWING
SPRINKLER DE	EMOLITION AND ALTERATION WO
	HALL VISIT THE SITE AND BECOME INFORME ND CHARACTER OF WORK REQUIRED. NO A
2. REMOVE ALL EX ON DRAWINGS.	ISTING SPRINKLER PIPING AND HEADS, AND IF ASBESTOS INSULATION IS PRESENT OR THAT SUCH REMOVAL CAN BE CARRIED OU
	INCE DEMOLITION UNTIL SUCH WORK HAS E
3. ALL EXISTING S	YSTEMS SHALL BE LEFT IN PERFECT WORK
4. EXACT SIZES AN	ND LOCATIONS OF ALL EXISTING PIPING SH
5. NO REMOVED EX	KISTING PIPING SHALL BE REUSED UNLESS
WITH THE SERV	OR SHALL NOT INTERRUPT ANY OF THE SE ICES IN ANY WAY WITHOUT THE EXPRESSE INCES SHALL BE MADE AS BRIEF AS POSSI
	RK MAKES TEMPORARY SHUTDOWNS OF SEI ILL CAUSE THE LEAST INTERFERENCE WITH
IF REQUIRED, T	OR SHALL ARRANGE THE WORK CONTINUOL O ASSURE THAT SERVICES WILL BE SHUTD JIRED TO MAKE THE NECESSARY CONNECTI
	OR SHALL GIVE AMPLE WRITTEN NOTICE IN
10. ANY AND ALL OUT WALLS SH	REQUIRED DEMOLITION WORK TO BE PERFO HALL BE DONE AT THE TIME WHEN THE EX RAL CONTRACTOR.
11. TO INSURE CON	NTINUOUS OPERATION, MAKE ALL NECESSAI STS RESULTING FROM TEMPORARY SHUTDO
12. REFER TO SPE	CIFICATIONS FOR ADDITIONAL REQUIREMENT
	OR SHALL GIVE WRITTEN NOTICE IN ADVAN INSURANCE UNDERWRITER REGARDING REM
	LIST OF DR

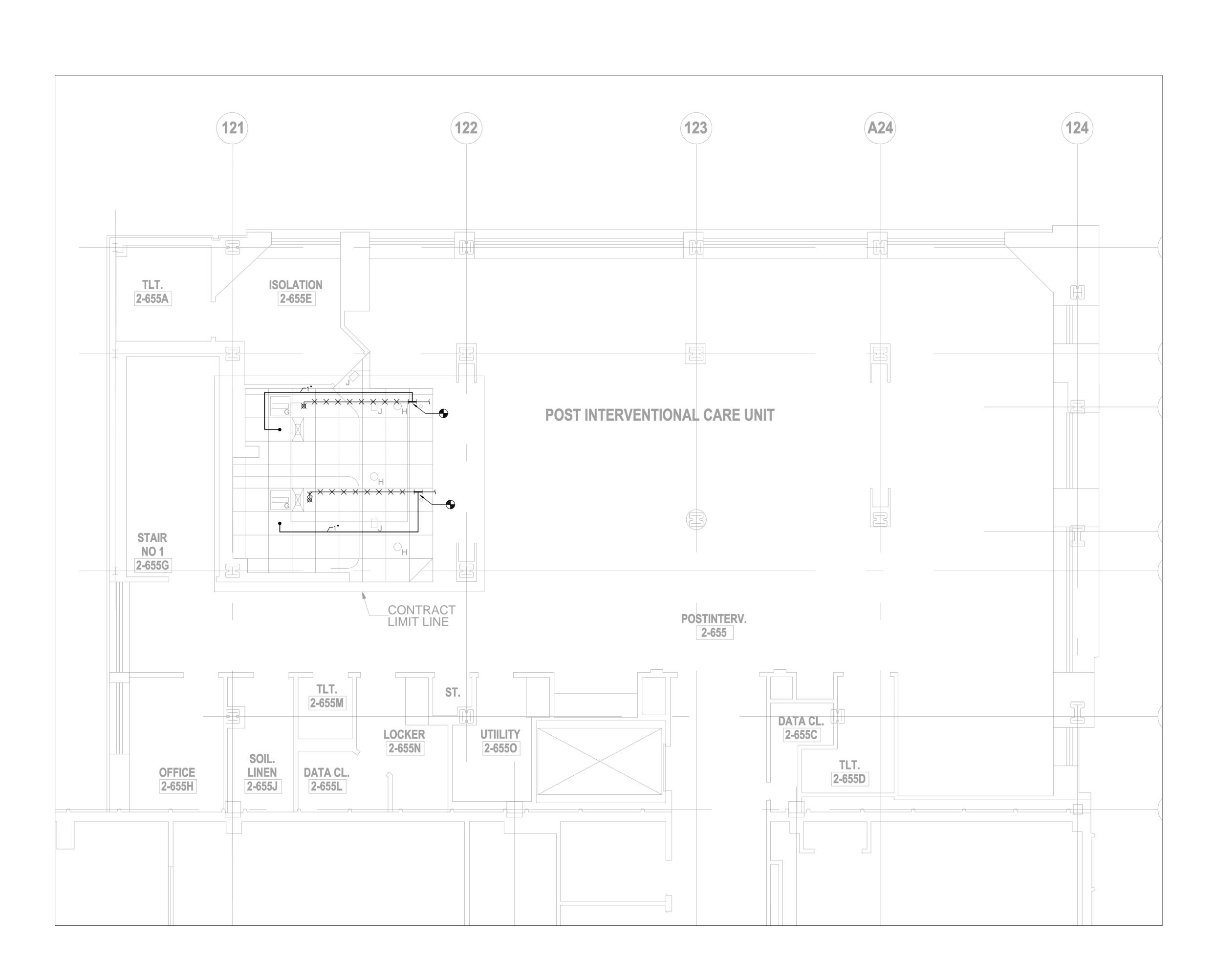
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		AN	D	DR	A	WI
DSP-101.0	00	SP	RII	١KI	E	R
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SP-102.00	C	SE	СС	ND)	FL(

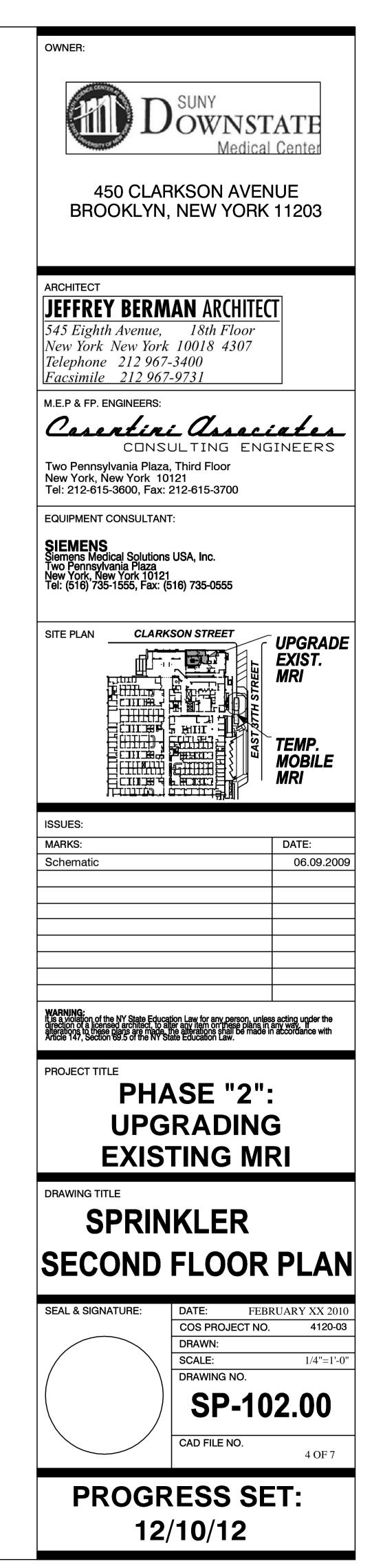


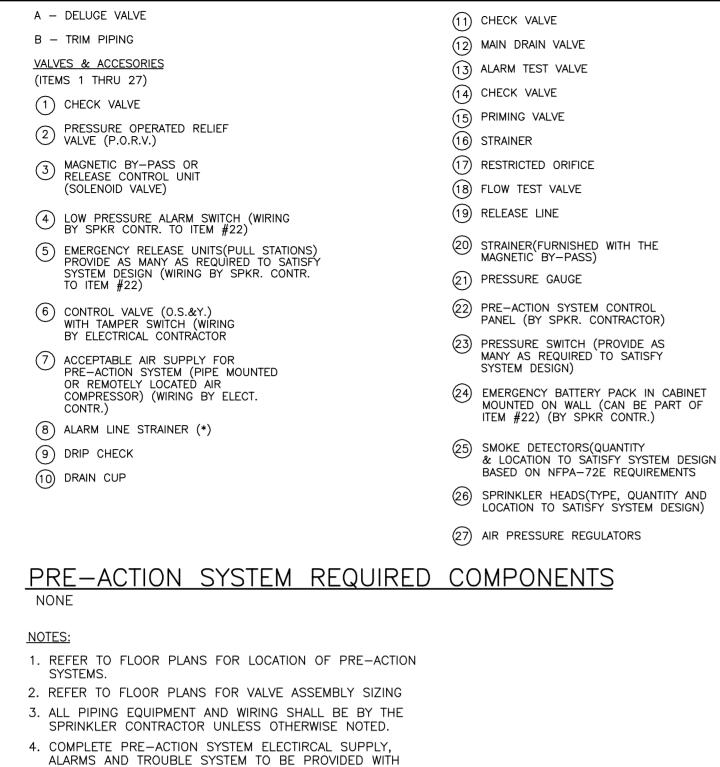
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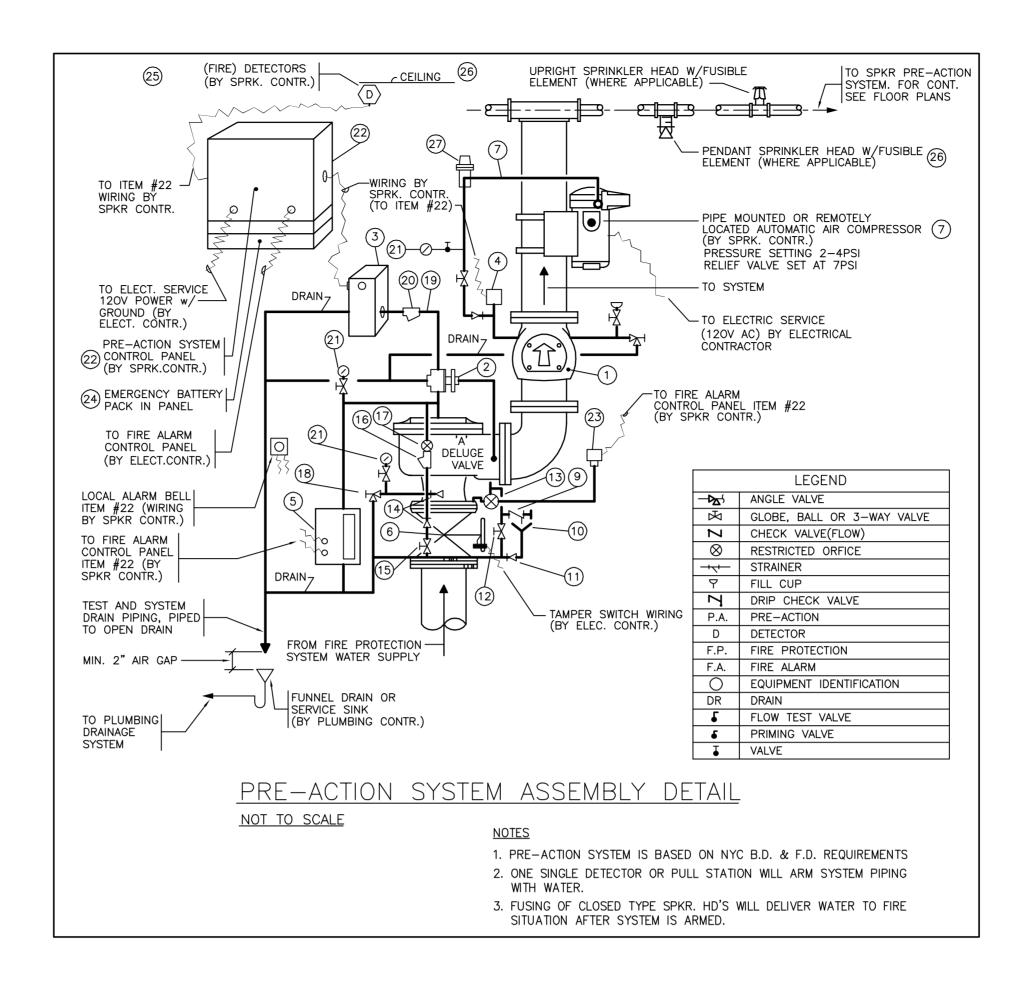
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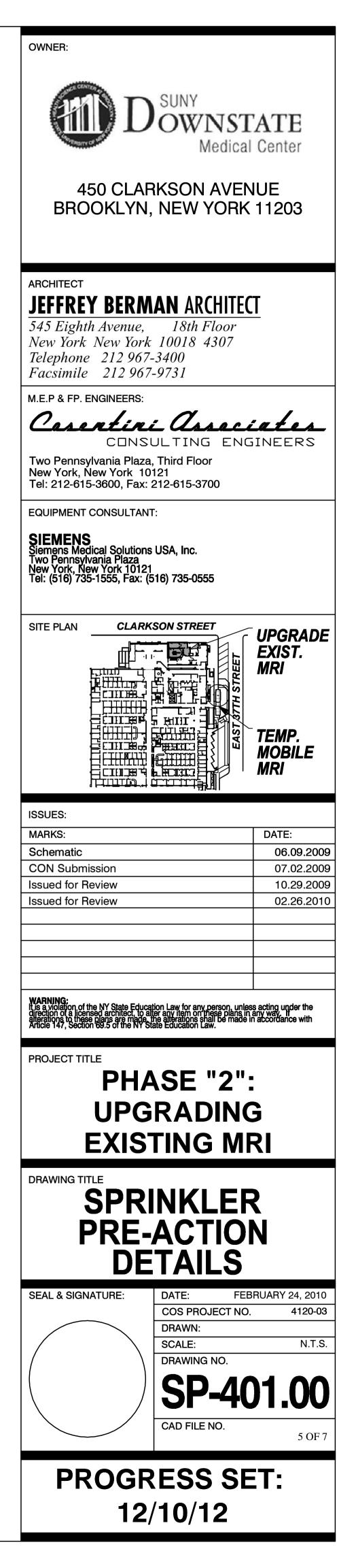






EMERGENCY ELECTRICAL SERVICE. a. EMERGENCY ELECTRICAL SERVICE TO BE PROVIDED BY ELECT. CONTR.





	PRE-ACTION	SYSTEM	NOTES
1.	Each pre-action system shall be separate and complete and ready for operation as an approved type system.	10.	The following shall be provided by electrical Sprinkler contractor to coordinate:
2.	All system equipment, and accessory parts, shall be manufactured by one manufacturer. The pre-action system shall be as manufactured by "VICTAULIC" or approved equal.		a. A.C. power to be taken from line side panel with battery backup on constan provided in control unit.
3.	The sprinkler contractor shall be responsible for providing a complete and approved type installation as indicated on		 b. Interconnection to building fire alarm s coordinated with building engineer and building system.
	drawings, "Pre-action System Assembly Detail" and specifications, and manufacturer's installation recommendations. Sprinkler contractor must provide all		c. No conduit or wire may enter top of a
	electrical and mechanical components, equipment, accessories, pressure switches, detectors, panel, etc.		d. Electrical connections and installation of devices for entire system to be by el
4.	Sprinkler contractor shall coordinate all electrical requirements with electrical contractor and shall be responsible to receive correct interface of his equipment with electrical service.		e. Feed to panel to be 120 VAC, 60 HZ., an approved, lockable fuse cutout with neutral. Fuse cutout shall be painted red and permanently and properly lab
5.	Pre-action system electrical system shall be connected to base building system emergency power.		f. Electrical contractor to file required do forms for his portion of work, with th having jurisdication.
6.	Pre-action system valve assembly and all components shall be installed at an elevation above the finished floor that will allow for easy service and operation. Mounting heights of		g. Activation of a single detector shall co to building fire alarm panel.
	devices shall be as follows, unless otherwise noted on the drawings:		h. All wiring shall be type THHR or THWN conduit in strict compliance with all c authorities having jurisdiction.
	 a. Valve assembly - not above 6'-6" A.F.F. b. Control panel - 6'-0" to the top A.F.F. c. Pull stations, and other switches - center line 48" A.F.F. 		i. All field device wiring shall be series po No parallel branching (tee tapping) is
	d. Alarms — top of device 6" below ceiling line Sprinkler contractor shall coordinate with the plumbing	11.	Sprinkler contractor shall provide and submit for approval prior to fabrication and installa
	contractor for location and installation of funnel or floor drains for proper drainage and testing of pre-action valve assembly.		should be complete with all required and ne a. Manufacturers cuts of manual pull stat and combination bell/strobe lights and
•	All pre-action system piping shall pitch back to valve assembly (for proper drainage) in accordance with NFPA #13 Rules and Regulations.		zone areas. b. Manufacturers cuts of tamper switch f
	Sprinkler contractor shall coordinate with electrical		valve and air compressor. c. Piping and equipment details of pre-a
	contractor for interface of pre-action system equipment and available electric service and shall provide and install the following:		all required accessories numbered and d. Pre-action system wiring diagram and wiring and type of approved wiring mo
	a. A separate fuse cut-out box with solid (removable) copper bar for each pre-action sub-system, and label as such.		type installation. e. Additional dry contacts within control p
	 A separate pressure switch (water flow) for each pre- action sub-system with individual connection and read-out and alarm at the building Fire Alarm Panel system. 		additional pressure switches (number operate all required alarms, bells, hor down of equipment of other trades as
	<u>NOTE:</u> Actuation of pressure switch (water flow) shall perform all required functions.		 f. Shop drawings shall be submitted and complete information necessary for th the complete system.
	c. Separate manual pull stations as indicated on the drawings and for each remotely located room.		 (1) Detailed 1/8 to 1/4 inch scale and pre-action value assembly NFPA No. 13 shall be prepared
	d. Means of testing water flow switches for each pre-action sub-system.		protection (sprinkler) installation shall be submitted for approval fabrication. Drawings and catal
	e. A means of testing detector for each pre-action sub- system.		submitted in a complete set fo partial submission will not be a
	f. Trouble condition(s) and interconnect to building Fire Alarm Panel system for pre-action control.		(2) A complete electrical system (on details indicating all electrical c equipment requiring high and lo
	g. Means of shutting down A/C unit supplying air to protected area and all equipment within the protected area, upon actuation of any device controlling the pre- action system.		systems and alarm systems. (3) A complete layout of detection s indicating location of detectors
	h. A separate #10 green ground wire from building main water line or building steel for each pre-action sub-system control.		same. (4) A complete layout of Detector sp with NFPA requirements, manual
	i. Label all spare wires in pre-action sub-system control panel.		wiring for same, indicating horiz locations.
	j. Interface each pre-action sub-system to the building Fire Alarm Panel system.		(5) Hydraulic calculations for each a(6) All equipment to have (FM when
	k. Number, spacing and location of smoke detectors, pull stations and abort switches required shall be in strict	12	control panels and devices. The sprinkler contractor is responsible for pr
	accordance with NFPA-72E, and local authority having jurisdication. The ceiling configuration and on air movement shall be taken into consideration.		and material necessary to provide a comple action type system, acceptable to all author jurisdiction.
		13.	Arrange for a fire department inspection and action sub-systems by submitting a written
		14.	Final approval of sprinkler contractors shop of subject to compliance with the above notes.

Ē

al contractor.	PRE-ACTION SPRINKLER SYSTEMS DESCRIPTION AND SEQUENCE OF OPERATION	<u>PRE-ACTION SPRINKLER</u> <u>INTERLOCK TYPE WITH E</u>
ide of local floor		
Ide of local floor 1 tant trickle charge 1 m system shall be and/or vendor of of control panel. . of electrical velectrical contractor. . HZ., single phase through with a solid copper nted fire department labeled. 2. documents and of the Authorities . cause notification .	 A. The single interlock pre-action system utilizes a deluge valve which is tripped by the actuation of a solenoid valve from the operation of the detection system. This puts water in the system piping prior to fusing of the sprinklers, thereby permitting a more rapid fire attack. The system piping is pressurized with air for supervisory purposes. If the system piping or a sprinkler heads is broken, the pressure will be reduced and an alarm will sound. B. Pre-action water supply control valve is provided with a tamper switch to supervise the systems water supply. GENERAL SYSTEM OPERATION A. Water pressure is maintained in the top chamber of deluge valve by passing through a small check valve and restricted orifice. System piping is pressured with air so alarm will sound if a sprinkler head opens or piping is damaged, but no water will flow. When detectors are operated, the solenoid valve in the magnetic bypass or release control unit vents the top chamber of deluge 	 <u>GENERAL</u> A. Provide approved type automate consisting of closed sprinkler in areas protected including electric actuated by properly spaced electric and manual break-glass releas shall be 120 Volt A.C. current rectification to 24 Volt D.C. for electric work from 120 Volt por source. Secondary power source 24 Volt storage batteries and the of automatically maintained low full accordance with the required having jurisdication, and Nation shall be Underwriters Laboratory required. Automatic pre-action provided for areas indicated on B. The complete pre-action sub-sy and installed by a reliable context ten (10) years experience species installation of Fire Protection S
WN in rigid threaded Il codes of a parallel loop. is permitted. mit the following allation. The submittal necessary components. stations, alarms, horn and signs for designated h for O.S.&Y. control e-action system, with	 valve faster than water can be replaced through restricted orifice which causes it to open and operate alarm system. If a sprinkler head fuses or the sprinkler piping is damaged, the air pressure is lowered (within the system) which activates a pressure switch causing a low air pressure alarm, but no water will flow. B. When a combination of two (2) "cross-zoned" detectors operates within the affected area and the system is armed with water, and the temperature at the sprinkler heads reaches their fusing point (normally 165°F) water will flow to suppress a fire. ACTUAL SYSTEM OPERATION A. The system shall function as follows when any single detector operates within the protected area. 1. Trouble light will indicate on control panel at pre-action valve and designated area. 	C. <u>SYSTEM CHECKOUT, OWNER TRAIN</u> Upon completion of installation, at the job site with the sprinkl contractors, involved with the in equipment suppliers and owner The contractor shall familiarize personnel with system componer recommended procedures. At of system will be demonstrated test. Such test is necessary to the system to operate properly provide the necessary personner conduct this test. The contractor with a system check list which acceptance of the system. The the owner with a complete oper manual as well as a written su test conducted. The contractor
and identified. and detection system material and of panel and/or er and identify) to horns, lights, shut s as required.	 Alarm bells with strobe unit and horn unit will sound within the affected area and designated areas. Sound combination bell/light, and horn unit on control panel at pre-action valve and designated office area indicating fire situation. Initiate signal to the building fire alarm system panel. (Coordinate contact closure requirements). 	conducting semi-annual system to recondition the complete sys event of a system actuation. D. PRE-ACTION SYSTEM OPERATION FOLLOWS: 1. Check valve on discharge retain supervisory air pre
nd shall include the installation of ale (minimum size) drawings bly details conforming to red by an accredited fire tion company, and oval prior to atalog cuts shall be for the entire area; e acceptable. (one-line) drawing and al components and d low voltage electrical	 B. Subsequent operation of a "cross-zoned" detector with the affected area shall: 1. Sound combination horn/light, on control panel at pre-action valve and designated office areas indicating for situation. 2. Silence alarm bells. 3. Initiate record zone signal to the building fire alarm system panel to automatically notify the Fire Department. 4. Actuate circuits to operate fire safety system, opening of exist doors, etc. 5. Shut down all equipment, including computers and A.C. units, etc., unless otherwise noted within affected areas. 	 Electrically operated delug release of water in syste External reset provision to deluge valve. Electric releases to retain deluge valve. Release control panel to release mechanism. End-line resistors to regu in detector units. Trouble signal and bell signal Power supply panels to pan
on system components ors and wiring for r spaced in accordance hual pull stations and porizontal and vertical	 Actuate pre-action sprinkler valve. Activate output alarm contact. With detectors in operation within the affected area and the sprinkler heads fused, water will be discharging to suppress a fire 	9. Storage battery units to p of power supply. 10. Tamper switches to super valves, controlling water
h area. nen required/U.L. approvals) providing all work nplete and approved pre- thorities having and test of the pre- ten request therefore.	 suppress a fire. <u>NOTES</u> 1. Common trouble alarm shall initiate signal to building (Class "E") system and designated office area. 2. Activation of pre-action manual pull station system shall perform functions under item 'B' above 2 through 8. 	 Smoke detector heads as to initiate operation of restored in the initiate operation of restored
op drawings are tes.		silence switch, O.S.&Y. m 15. Air maintenance device wi regulator, low pressure a check valve.

ION SPRINKLER SYSTEMS SINGLE K TYPE WITH FLECTRICAL RELEASE

pproved type automatic sprinkler pre-action systems of closed sprinkler heads properly spaced to cover the tected including electrically operated deluge valves by properly spaced electric smoke type detector heads, ual break-glass releases. Primary electric power source 120 Volt A.C. current with transformation and on to 24 Volt D.C. for system operation. Provide all ork from 120 Volt power source, and emergency power econdary power source shall be provided by means of torage batteries and battery charger. Provide the source atically maintained low air pressure. System shall be in dance with the requirements of the all Authorities risdication, and National Fire Protection Association and Inderwriters Laboratory listed, and FM approved when Automatic pre-action sprinkler systems shall be for areas indicated on drawings.

ete pre-action sub-system shall be fabricated lled by a reliable contractor with a minimum of years experience specializing in the of Fire Protection Systems.

HECKOUT, OWNER TRAINING AND ACCEPTANCE npletion of installation, a meeting shall be held site with the sprinkler contractor and all other rs, involved with the installation of the systems suppliers and owner personnel present actor shall familiarize the owner. with system components, system functions and nded procedures. At this time a functional test will be demonstrated, including a discharge ch test is necessary to demonstrate ability of m to operate properly. The contractor shall ne necessary personnel and instruments to his test. The contractor will provide the owner stem check list which owner will sign as ce of the system. The contractor will provide with a complete operational and maintenance well as a written summary of any functional ucted. The contractor shall be capable of semi-annual system inspections and be equipped lition the complete system within 24 hours in the

IN SYSTEM OPERATION AND BASIC COMPONENTS AS

eck valve on discharge side of deluge valve to ain supervisory air pressure.

trically operated deluge valve to withhold ease of water in system.

rnal reset provision to facilitate testing of uge valve.

tric releases to retain or release clapper in uge valve.

ase control panel to supervise and control ase mechanism. -line resistors to regulate supervisory current

detector units.

ble signal and bell signal circuit faults.

er supply panels to provide primary power supply nd emergency power supply)to release mechanism.

age battery units to provide secondary source power supply.

per switches to supervise 0.S.&Y. control ves, controlling water supply to deluge valve.

oke detector heads as required Detector initiate operation of release control panels.

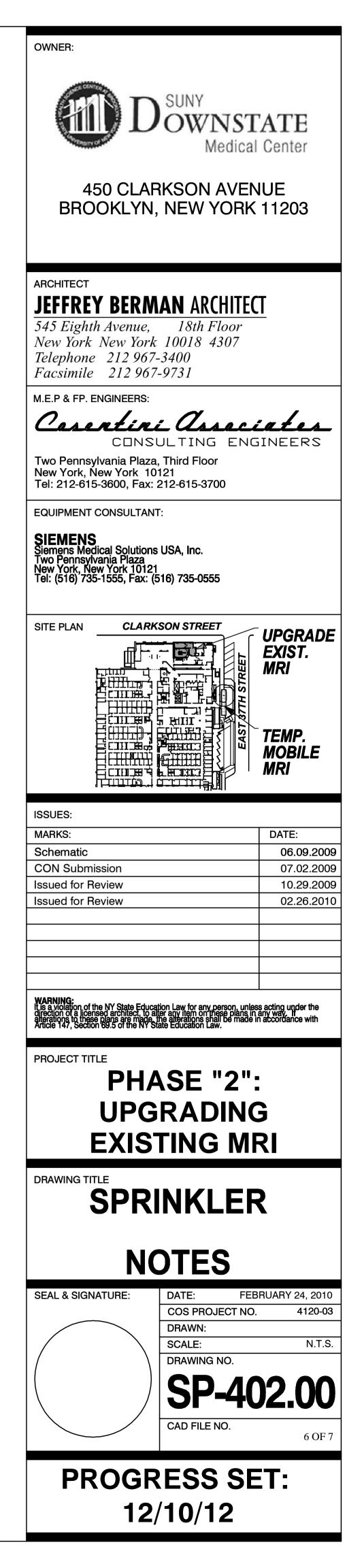
rgency break glass stations for manual visions for operating release control panels.

tric alarm switches to operate electric alarms on water flow.

ervisory air supply, self—contained, with air npressor panel, air compressor, check valve, ssure gauge, tubing, audible and visual alarm, nce switch, O.S.&Y. monitor switch.

maintenance device with valve, filter, ulator, low pressure alarm, pressure gauge, eck valve.

with strobe unit, and horn units.



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		VALV	E SPECIFIC			N	_											_									_				TIO	N	—
TYPE	MANUFACTURER	FIG. NO.	SIZE	THREADED	FLANGED	GROOVED	CATE VALVES		BRUNZE B-01 BRONJE B-62		10		KESILIENI WEUGE				UL LISTED FOR TRIM & DRAIN		34-3				1		600# WWP	/20# WWP 1000# WWP	1480# WWP	ZONE	ZONE	ZONE	FSP ZONE 4 FSP ZONF 5	ZONE	FRGROU
	N	T-104-0	1/2"-2"		$\left \right $		+	+	+	+			+	+	\vdash				\vdash	+	+	+	+		\vdash	+	+	\vdash	+	+	+	\vdash	⊢
0.175	N	F-607-RW	2 1/2"-12"	•	\square		•	+			+	\vdash	+	+	•	•			•	-	+	+	\vdash	\vdash	\square	+	+	H	+	+	+		⊢
GATE VALVES	N	M-609-RW	4"-12"		•		•	+	+	+	+		┥	•	•	•				+	•	+	\vdash	\vdash	\vdash	+	+	•	•	+	+	\vdash	\vdash
VALVES	N	F-609-RW	4"-12"				+	•	+	+	\vdash		\uparrow	• •	•	•			+	1	•	+	\vdash	\vdash	\vdash	+	\vdash	H	+	+	+	\vdash	
	N	F-667-0	2"-12"		•		+	•	+	+	\square		•	•	•	•					•	+				+	\square	H	+		+		ħ
	Ν	F-697-0	2 1/2"-10"		•		•	+	+	+	•	\vdash	+	+		•					+	+	\square	•		+	\square	H	+	• •	•	\square	F
	Ν	G-607RW	3"-8"		•		•	+	+	+	•		+	+	•	•										+		H	+		+		F
	Ν	F-6070TS	2 1/2"-12"			•	•	+	+	+		\vdash	•	•	•					-	•	+				+		H	+		+		F
	С	76	2"-12"		•		•	+	+	+	•	\vdash	+	+	•	•			•		+	+	\square			+	\square	H	+		+		F
	N	KT-403-W	1/2"-3"		•		•	+	+	+	\vdash	•	+	+	H				+		+	+		\vdash	\square	•	• •	H	+	+		•	F
	Ν	F-908-W	2 1/2"-12"	•			+	+					+						\square	•		+				+		H	+		+		F
CHECK	N	F-968-B	2 1/2"-6"		•		+	+	+	+	•	\vdash	+	+	•	•			•		+	+	\square	\vdash	\square	+	\square		+	+	+	\square	F
VALVES	Ν	G-917W	2 1/2"-6"		•		+	+	+	+	•	\vdash	+			•			+			+		•		+		H	•	• •			F
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NOTE: FOR PRESSURE RATING OF VALVES, REFER TO RISER DIAGRAM. <u>MANUFACTURE_KEY</u> N = NIBCO BALANCE OF VALVES LISTED

M = MILWAUKEE BUTTERFLY VALVES through 2 1/2" ONLY (BBHSCSO2 SERIES) FOR FIRE SPRINKLER SYSTEM

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V= VICTAULIC FIRELOCK BUTTERFLY VALVE (FOR FIRE SPRINKLER SYSTEM) C = CRANE CAST STEEL GATE & CHECK VALVES (FIGS 175,76) FOR HIGH RISE SYSTEM PRESSURES (SEE TABLE IN FIRE PROTECTION SPECIFICATIONS)

N.R.S.- NON-RISING STEM AWWA- AMERICAN WATER WORKS ASSOCIATIONS BS&A- N.Y.C. BOARD OF STANDARDS AND APPEALS MEA- N.Y.C. MATERIAL AND ACCEPTANCE DIVISION

•FIRE PROTECTION MATERIAL SCHEDULE SYSTEM FITTINGS JOINTS NOTES: 1. FOR REQUIRED PRESSURE RATINGS, SEE RISER DIAGRAM. 2. ALL MATERIALS SELECTED ON THIS SCHEDULE MUST BE APPROVED BY THE LOCAL AUTHORITIES. 3. TO BE USED DOWNSTREAM OF SPRINKLER FLOOR CONTROL VALVE. 4. TO BE USED ON RISERS, MAINS, AND SPRINKLER BRANCH PIPING UP TO 2". . COPPER TUBING TO BE USED FOR MRI AREAS FOR SPRINKLER SYSTEMS ONLY.

 SPRINKLER
 (SEE NOTES 3 & 5)
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'B' 007 ZEROFLEX OL/FM APPROVED WITH LT. WALL PIPE ROLL GROOVE 330 PSI WWP 'C' 77 UL/FM APPROVED WITH LT. WALL PIPE ROLL GROOVE 450 PSI WWP 'D' 75 UL/FM APPROVED WITH LT. WALL PIPE ROLL GROOVE 450 PSI WWP

		<u>S</u> (CHEDULE OF SPRINKLEF	R HEADS						
SYMBOL	MANUFACTURER & MODEL No.	TYPE	LOCATION	FINISH & REMARKS	TEMP. Rating		SP. HD. COVERAGE	MIN. FLOW	MIN. PRESS.	APPROVALS
•	RELIABLE MODEL G5-56	CONCEALED PENDENT SPRINKLER QUICK RESPONSE	OFFICE AREA, CONTROLL ROOM	PLAIN COVER, FINISH AS PER ARCHITECT	165'F SEE NOTE #1 AND #3	5.62		NOTE #4	NOTE #4	
۲	RELIABLE MODEL F4FR-NF	RECESSED PENDENT QUICK RESPONSE	IN NMR AND MRI ROOMS WITH HUNG OR GYPSUM CEILINGS.	FINISH AS PER ARCHITECT	135 ° F	5.6		NOTE #4	NOTE #4	NYC MEA 258–93–E

NOTES:

. SPRINKLER HEADS SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS.

. PROVIDE LISTED METAL WIRE GUARDS WHERE SPRINKLERS ARE SUBJECT TO DAMAGE, SUCH AS SPRINKLER HEADS LOCATED UNDER HVAC DUCTS IN MECHANICAL EQUIPMENT ROOMS WHEN LOCATED LOWER THAN 7'-O" A.F.F.

- 3. ALL SPRINKLER HEADS THROUGHOUT THE FACILITY SHALL BE OF THE ORDINARY TEMPERATURE RATING EXCEPT AS FOLLOWS: a. SPRINKLER HEADS LOCATED CLOSE TO HEATERS, STEAM
- PIPING, LOW-PRESSURE BLOW-OFF VALVE OR WHERE INDICATED ON THE DRAWINGS SHALL BE OF THE TEMPERATURE RATING AS REQUIRED BY NFPA 13. b. SPRINKLER HEADS LOCATED IN AUTO-CLAVE ROOMS
- CAGEWASH ROOMS OR WHERE INDICATED ON THE DRAWINGS SHALL BE OF THE INTERMEDIATE TEMPERATURE RATING AND HAVE WAX OVER LEAD COATING.
- c. ALL SPRINKLERS LOCATED CLOSE TO RADIANT PANELS SHALL BE OF TEMPERATURE RATING ABOVE 180°F.

d. ALL HEAT GENERATING EQUIPMENT WHICH CAN AFFECT THE TEMPERATURE RATING OF THE SPRINKLER HEADS SHALL BE CLEARLY IDENTIFIED ON THE SHOP DRAWINGS PRIOR TO SUBMISSION FOR APPROVAL.

- DESIGN DENSITIES.
- 5. ALL SPRINKLER HEAD FINISHES TO BE APPROVED BY ARCHITECT.

4. SPRINKLER HEADS MINIMUM FLOW & MINIMUM PRESSURE REQUIREMENTS TO BE BASED ON HYDRAULIC CALCULATION

IN MRI, LINAC AREAS SPRINKLER HEADS MUST NOT CONTAIN FERROUS MATERIALS. ESCUTCHEONS MUST BE MADE OF NON COMBUSTIBLE, NON FERROUS MATERIALS.

