BID NO.:598	PROJECT NAME & LOCATION	SUNY Downstate Medical New Academic Building 450 Clarkson Ave Brooklyn, New York 11203

Description: Provide Installation of Audio Visual Equipment
Bid Open Location: DASNY
515 Broadway, Albany, New York
Bid Open Date: April 19, 2018

Bid Open Time: 2:30 p.m. Contact: Kristen Costello (518) 257-3119

NOTICE TO BIDDERS

MAIL BIDS EARLY

Sealed bids will be received by DASNY at the above address for the items listed in the attached Bid Breakdown and Schedule. When submitting your bid you must:

1. Prepare your bid on the attached Bid Breakdown and Schedule. Return one signed original of the Bid Breakdown and Schedule

2. If your bid deviates from Specifications, explain such deviations or qualifications on your letterhead, setting forth therein such explanations, and attach them to the Bid Breakdown and Schedule.

3. Submission of a bid constitutes full knowledge and acceptance of all provisions of the Notice to Bidders, all information referenced in the Purchasing General Conditions, Supplemental and Detailed Specifications, the Bid Submission and any Supplemental General Requirements contained herein, as well as any addenda issued in relation to the Invitation for Bids.

4. Each bid shall bear on the outside of the envelope the name of the bidder, address, telephone number and designated as a bid for the following:
   DASNY Bid No. 598 -
   Bid Opening Date: April 19, 2018 @ 2:30PM
   Return to:
   DASNY
   Attn: Purchasing Unit
   515 Broadway
   Albany, NY 12207-2964

When a sealed bid is placed inside another delivery jacket, the bid delivery jacket must be clearly marked on the outside **"BID ENCLOSED"** and **"ATTENTION: PURCHASING UNIT".** The Dormitory Authority will not be responsible for receipt of bids which do not comply with these instructions.

5. Mail bid responses early in order for them to be received before the time of the bid opening. **Late bids will be automatically rejected**. Individuals submitting bids in person or by private delivery services should allow sufficient time for processing through building security to assure that the bids are received prior to the deadline for submitting bids. All individuals who plan to attend bid openings will be required to present government-issued picture identification to building security officials and obtain a visitor's pass prior to attending the bid opening.

6. In accordance with State Finance Law § 139-j and 139-k, this solicitation includes and imposes certain restrictions on communications between Dormitory Authority personnel and an Offerer during this procurement process. Designated contact for this solicitation is: Kristen Costello, Sr. Purchasing Coordinator , at Dormitory Authority – State of New York, 515 Broadway, Albany, NY 12207,(518) 257-3119. Contacts made to other Dormitory Authority Personnel regarding this procurement may disqualify the Offerer and affect future procurements with governmental entities in the State of New York. Please refer to the Authority's website www.dasny.org for Authority policy and procedures regarding this law, or the NYS office of General Services website www.ogs.ny.gov/BU/PC/ for more information about this law.

Bid No.: 598

If you are not submitting a bid it is requested that you complete and return the lower portion of this form

(Please check all that apply and provide comments in the space provided, if necessary)

- ☐ We are not Submitting a bid.
- ☐ We Request removal of our name from the mailing list.
- ☐ Location of the job site.
- ☐ Commodity is not carried by our company.
- ☐ Scope is too large.

Other/Additional Explanation: _____

_____

NAME OF BIDDER: _____

ADDRESS: _____

Street City State Zip

Telephone

_____ _____

Signature of Bidder Official Title

CLAUSES PURSUANT TO THE OMNIBUS PROCUREMENT ACT OF 1992

It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and woman-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York subcontractors and supplies is available from:

Empire State Development
Small Business Division
30 South Pearl Street, 7th Floor
Albany, NY 12207
Phone: (800) 782-8369

A directory of minority and woman-owned business enterprises is available from:

Empire State Development
Division of Minority and Women Business Development
30 South Pearl Street
Albany, NY 12207
Phone: (518) 292-5250

Online Directory: http://www.nylovesmwbe.ny.gov/cf/search.cfm

DASNY maintains a directory of minority and women-owned business enterprises:
http://www.dasny.org/construc/mwsbereg/index.php

The contractor acknowledges notice that New York State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

DASNY encourages the use of recycled Materials in the manufacturing process. To that end, the recycled product must meet the same codes, specifications and standards the non-recycled materials do, including requirements for cost, installation, aesthetics, availability and maintenance.

The Omnibus Procurement Act of 1992 and § 2879 of the NYS Public Authorities Law require that by signing this bid, contractors certify that whenever the total bid amount is greater than $1 million:

1. The contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and Subcontractors on this project, and has retained the documentation of these efforts to be provided upon request to the State. If the contractor determines that NYS business enterprises are not available to participate on the contract as subcontractors or suppliers, the contractor shall provide a statement indicating the method by which such determination was made. If the contractor does not intend to use subcontractors, contractor shall provide a statement verifying such;

2. The contractor has complied with the Federal Equal Opportunity Act of 1972 (PL 92-261), as amended;

3. The contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The contractor agrees to document these efforts and to provide said documentation to the State upon request;

DASNY is required by law to notify the NYS Department of Economic Development of any procurement contract for one million dollars or more that is to be awarded to an out-of-state vendor. This notice must be done simultaneous to the notification of award provided to the vendor. A purchase order or contract cannot be issued until fifteen (15) days after such notification is provided.

NEW YORK STATE OF OPPORTUNITY. | DASNY

GENERAL SPECIFICATIONS

(1) The enclosed Purchasing General Conditions are hereby incorporated by reference. Submission of a bid response shall constitute acceptance of such conditions. Any exceptions/clarifications/qualifications to these conditions or other specifications and/or requirements contained herein must be clearly stated in the bid response and, depending upon the nature of such, may be grounds for rejection of your bid.

(2) Bids must be submitted in the bidder's full legal name, or the bidder's full legal name plus a registered assumed name, if any.

(3) All NYS bidders are required to be registered to do business with the NYS Department of State or their local County Clerk, whichever is applicable.

(4) All out-of-state bidders will be required to provide proof of registration to do business in their state. All out-of-state bidders that "do business in New York State" MUST BE REGISTERED WITH THE NYS DEPARTMENT OF STATE. Please contact the NYS Department of State at (518) 473-2492. Information is available at the DOS website: http://www.dos.state.ny.us/corps/

(5) DASNY is required by law to notify the Empire State Development of any procurement contract for one million dollars or more that is to be awarded to an out-of-state vendor. This notice must be done simultaneous to the notification of award provided to the vendor. A purchase order or contract cannot be issued until fifteen (15) days after such notification is provided.

(6) Empire State Development is required by law to identify states and other jurisdictions that impose preferences or other penalties against New York bidders. DASNY is precluded from soliciting bids or entering into procurement contracts with companies that have their principal place of business located in one of the listed jurisdictions, unless the procurement is for a product that is substantially manufactured in New York State or the services are to be performed in New York State. Currently, this list of jurisdictions includes the states of Alaska, Hawaii, Louisiana, South Carolina, West Virginia and Wyoming.

(7) Unless otherwise noted, guarantee on all items is to be one year as detailed in Article XVI of the General Conditions

GENERAL SPECIFICATIONS CONTINUED

(8) All upholstered furniture and drapery panels and lining must meet strict flammability requirements. Standards applicable to this bid, if any, will be delineated in the Detailed Specifications.

(9) LABOR/TRADES - Any labor, materials or means whose employment, or utilization during the course of this contract, shall not in any way cause or result in strike, work stoppages, delays, suspension of work; or similar troubles by workers employed by this contractor or his subcontractors, or by any of the trades working in or about the buildings and premises where work is being performed. Any violation by the contractor of this requirement may in the sole judgment of DASNY be considered as proper and sufficient cause for declaring the contractor to be in default, and for the owner to take action against him as set forth in the Purchasing General Conditions, Article VIII, “Termination", or such other action as DASNY may deem proper.

(10) Bid results are available on the DASNY website (www.DASNY.org). Bid results will not be given over the phone.

(11) If you are a NYS Certified Minority or Women Owned Business, please include a copy of your certification with the bid.

ANDREW M. CUOMO
Governor

ALFONSO L. CARNEY, JR.
Chair

GERRARD P. BUSHELL, Ph.D.
President & CEO

SUPPLEMENTAL SPECIFICATIONS

The following items are attached for informational purposes. Referenced documents need not be returned with the proposal. These documents are only applicable to the successful bidder and the ensuing procurement contract. Documents are only applicable to the successful bidder and the ensuing procurement contract. Documents applicable to the procurement that will result from this Invitation for Bids are designated by a check box (☒). Unless otherwise indicated, the referenced documents are located at the end of this Invitation for Bids.

☒ **Purchasing General Conditions –** The DASNY Purchasing General Conditions contains terms and conditions of purchases made by DASNY. It is recommended that this document be reviewed fully.

☒ **M/WBE Utilization Plan and Request for Waiver -** Minority and Women-Owned Business Enterprise (M/WBE) goals for this project are 15% and 15%, respectively. The successful bidder shall be required to complete a Utilization Plan or Request for Waiver, to be approved by DASNY's Opportunity Programs Group. Reference Purchasing General Conditions, Article XIX, Affirmative Action for Contracts Mr. Michael Clay, DASNY Opportunity Programs Group at (518) 257-3464, is available to assist all bidders in attaining these goals. *Reference the enclosed "Good Faith Efforts Guidelines".*

☒ **Supplemental General Requirements –** Attached (if applicable) are the Supplemental General Requirements (SGRs) which provide important logistical information and additional conditions which govern this procurement. Please read these SGRs carefully.

☒ **Form of DASNY Contract** – The procurement resulting from the Invitation for Bids will be executed through a DASNY purchase order and a related contract. The contract executed with the successful bidder will be in the same substantial form as the attached "Form of Contract". Note that this Invitation for Bids and any response to such will be annexed as binding terms of the purchase agreement.

☒ **Certificate of Insurance** *(sample enclosed)* – The successful bidder will be required to provide a Certificate of Insurance pursuant to Article XIV of the enclosed Purchasing General Conditions. The certificate shall name DASNY and other designated parties as additional insureds.

SUPPLEMENTAL SPECIFICATIONS CONTINUED

☒ **Worker's Compensation / Disability Insurance** – The successful proposer will be required to provide specific documentation with respect to Worker's Compensation and Disability Insurance pursuant to Article XIV of the enclosed Purchasing General Conditions. Requirements are detailed in the enclosed "Workers' Compensation and Disability Benefits Requirements" document.

☒ **Prevailing Wage Schedule** – NYS Labor Law requires all wages paid by contractors and subcontractors on public work projects be paid at the prevailing wage rates. Enclosed is the current rate schedule for the appropriate county. Contractors and Subcontractors are responsible for obtaining current rates throughout the course of the project. The NYS Department of Labor (NYS DOL) updates these rates on July1st of each year. Current rates can be obtained on the NYS DOL website (www.labor.state.ny.us) or by fax at (518) 485-1870. Note that an executed Contractor and Subcontractor Certification and certified payrolls, which include the hours and days worked by each workman, laborer or mechanic, the occupation at which he worked, the hourly wage rate paid and the supplements paid or provided, must be submitted with each and every payment requisition. **DASNY will not process an invoice without this information.** Forms are available on the DASNY website: http://www.dasny.org/construc/forms2/vendors.php

☒ **Labor and Material Payment Bond –** The successful bidder must be prepared to provide surety bonds prior to award in accordance with Article XIV of the DASNY Purchasing General Conditions. The costs of these bonds are to be separately stated in the total bid price as indicated on the Bid Breakdown and Schedule.

☒ **Performance Bond –** The Successful bidder must be prepared to provide surety bonds prior to award in accordance with Article XIV of DASNY Purchasing General Conditions. The costs of these bonds are to be separately stated in the total bid price as indicated on the Bid Breakdown and Schedule.

☒ **Standard Vendor Responsibility Questionaire (SVRQ) –** The successful proposer, in accordance with Article XXII of DASNY Purchasing General Conditions, will be required to complete the enclosed SVRQ. The award of a contract will be subject to a review of the information contained in these forms.

SUPPLEMENTAL SPECIFICATIONS CONTINUED

☐ **NYS Uniform Contracting Questionaire (UCQ) –** The successful proposer will be required to complete the enclosed UCQ. The award of a contract will be subject to a review of the information contained in these forms.

☐ **DASNY Contractor and Consultant Questionaire (CCQ)** – The successful proposer will be required to complete the enclosed CCQ. The award of a contract will be subject to a review of the information contained in these

DORMITORY AUTHORITY OF THE STATE OF NEW YORK
("DASNY")
515 Broadway, Albany, New York 12207

SUNY Downstate Medical – New Academic Building

PROJECT SITE LOGISTICS FOR FF&E

Project Site Logistics
Fixtures, Furniture & Equipment Deliveries

A. **Project Overview:**

1. SUNY Downtown Medical College's New Academic Building consists of 1 (one) building(s) and contains approximately 106,500 GSF square feet of space spread across 8 floors. The New Academic Building consists of learning spaces, including simulation labs; a library/learning commons; meeting/function space; administrative offices; and student activity areas.

2. The facility is located at 450 Clarkson Avenue in Brooklyn, New York. Deliveries to the buildings are via the loading dock located at Lenox Road.

3. Occupancy is scheduled to occur July 2018.

B. **Site Visit, Conditions and Logistics:**

1. All vendors are responsible for scheduling a site visit to assess logistical delivery issues and site conditions. DASNY shall presume all vendors have visited the project site and verified existing field conditions. All visits must be coordinated with Facilities Maintenance & Design at SUNY Downstate.

2. Each vendor shall be responsible for assessing all site logistics, including appropriate truck size, loading dock conditions and gate availability, and shall be responsible for providing and fitting equipment in locations, as required. All vendors shall assume full responsibility for all equipment and accessories required to unload furniture and/or equipment at the dock.

3. If the site is still under construction at the time of delivery and/or installation, all workers entering the site must wear the required Personal Protective Equipment (PPE) including safety vests, hard hats, work boots, etc., in accordance with OSHA and other authorities having jurisdiction. No employees will be permitted on-site without proper PPE, no exceptions.

4. All loading dock and/or elevator usage must be coordinated with Bob Matychak, a minimum of seven (7) calendar days in advance of deliveries. Delivery dates and times are to be approved 30 days prior, in writing; Tel.: 718-270-4671; Mobile 917-225-9521. Deliveries will not be accepted without written approval from SUNY Downstate Campus. Attempts to deliver without appropriate authorization may be rejected at the vendor's expense.

DORMITORY AUTHORITY OF THE STATE OF NEW YORK
("DASNY")
515 Broadway, Albany, New York 12207

SUNY Downstate Medical – New Academic Building

PROJECT SITE LOGISTICS FOR FF&E

C. **Dock and Site Restrictions:**

1. The loading dock is located on Lenox Road between East 34th and East 35th Streets

    i. The loading dock does not have a dock leveler.
    ii. Refer to Drawing(s) for Loading Dock details. –see attached pdf
    iii. There is a staging area located in the building

2. Vendors shall provide flagmen with vests during deliveries to direct pedestrian and vehicular traffic, as required.

3. Dumpsters will not be available. Vendors shall be responsible for daily removal of debris off site. All vendors shall be responsible for obeying all site rules and established protocol.

4. Installation work shall include unloading, unpacking and delivering to respective floor locations.

D. Elevator Information:

- Service Elevator 1,
  a. Cab Interior
  b. Doorway:
  c. Capacity: 5000 LB

  At delivery, the vendor will be not be provided with exclusive use of the freight elevator for the area(s) where delivery will take place. Other Contractors may be currently working in the building and will be shared.

1. Vendors are responsible for confirming the dimension of the elevators cabs and doors before delivery.

2. Elevator protection: By vendors.

3. A person dedicated to operate the Freight Elevator is required by the vendor.

E. Building Protection:

1. The vendor shall be responsible for the protection of all access and work areas, including, but not limited to walls, doors etc., but not flooring. Flooring protection will be by the

vendors. The vendor will be held responsible for the repair or replacement of any damage to the building, grounds, walls, and flooring due to the delivery and installation of the product.

2. All delivery paths (walls, etc.) will be protected and maintained, with paper and masonite. The utilization of steel-wheel dollies is prohibited.

3. Furniture/Equipment Protection: All furniture/equipment work surfaces shall be protected after installation is completed. The work surface protection shall be removed by others at a later date.

F. Delivery Schedule:

1. All deliveries shall occur from 7:30 am to 3:00 pm.

2. The Vendor shall be responsible for coordinating permitting for their deliveries in the street as required with the City of New York.

3. The Vendor shall be responsible for coordinating exact delivery dates and times with the project site. Only products that can be immediately installed in a completed space shall be delivered, to avoid staging and on-site storage. The Vendor shall be responsible for temporarily storing materials in a secure warehouse for a period of up to 30 days from DASNY's requested delivery date at no additional cost. The Vendor shall be responsible for the rejection of product delivery, replacement, repair or any other corrective action required, for items received damaged, soiled or not conforming to the detailed specifications.

G. **Tentative Fixtures, Furniture and Equipment Delivery Schedule:**

1. Installation of furniture can begin after employees completing the Campus On-boarding requirements.
2. Installation of fixtures and equipment can begin on _after completing Campus On-boarding requirements for Contractor employees accessing the project site.

H. Supervision:

1. A full-time Coordinating Project Manager and a minimum of one (1) Coordinating Superintendent/Foreman per floor shall be engaged while delivery and installation work are performed.

DORMITORY AUTHORITY OF THE STATE OF NEW YORK
("DASNY")
515 Broadway, Albany, New York 12207

SUNY Downstate Medical – New Academic Building

PROJECT SITE LOGISTICS FOR FF&E

I. Parking:

1. Is Parking available on-site? None, The availability of public street parking is extremely limited and again permitting is the responsibility of each vendor for their deliveries by the City of New York.

J. Punch list:

1. Each vendor is responsible for contacting DASNY's designated representative at the end of each workday to review project status and obtain sign-off for daily work.
2. The furniture/equipment vendor shall schedule a punch list review with DASNY's designated representative. DASNY reserves the right to withhold 5% payment pending resolution of open punch list items.

SECURITY REQUIREMENTS

A. _Downstate Campus Public Safety office_ will control access to the facility only; any/all site security is the responsibility of each vendor.

B. Provide _Criminal Background information _ within 30 days following Award of Contract, personal information for each worker expected to be assigned to the Project. Campus Approval of the submission of employee Criminal Background Checks is required prior to mobilizing to the Project site.

C. Downstate Campus Public Safety Office_ will provide workers and office personnel with ID badges which shall be worn at all times. A fee of $20.00 will be charged to for badges.

D. Workers and visitors shall sign in each day and receive an ID badge. Each is required to sign out and return the ID badge when their work or visit for that day is complete. Badges shall not leave the facility.

E. All Contractors shall submit Daily Reports to _FM&D Project Manager_ by 10:00 am the following day. Daily Reports are to record, at the minimum, the date, temperature, weather conditions, number of workforce, subcontractors, work activities and location, and special observations. Submission of Daily Reports to FM&D Project Manager__ will be a condition of monthly payments to the Contractor.

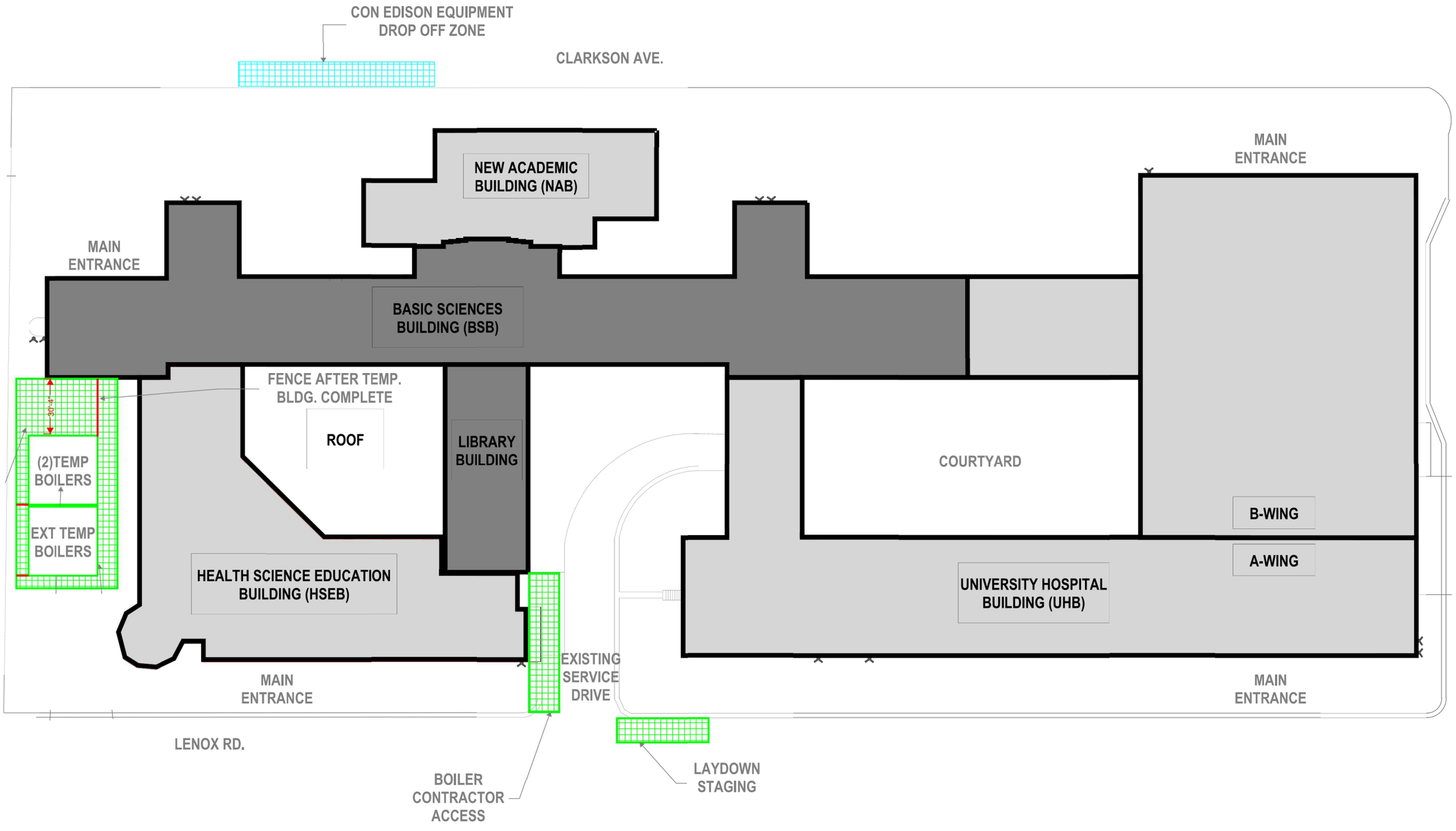
DORMITORY AUTHORITY OF THE STATE OF NEW YORK
("DASNY")
515 Broadway, Albany, New York 12207

SUNY Downstate Medical – New Academic Building

PROJECT SITE LOGISTICS FOR FF&E

SPECIAL PROVISIONS

A. This is a designated Hard Hat Project.
B. There shall be no eating in the work area.
C. Smoking is not permitted in the building, near air intakes, or within 30 feet of any building entrance or outdoor-air intakes.
D. Use of alcohol and controlled substances on the project site is not permitted.
E. Contractors are to comply with Owner's requirements for drug and background screening of contractor personnel working on the project site. Contractors are required to maintain a list of approved, screened personnel with a Nationally recognized background search company- see attached list of criteria.
F. No signs or advertising material will be permitted on the job site.


CON EDISON EQUIPMENT
DROP OFF ZONE
CLARKSON AVE.
NEW ACADEMIC
BUILDING (NAB)
MAIN
ENTRANCE
MAIN
ENTRANCE
BASIC SCIENCES
BUILDING (BSB)
FENCE AFTER TEMP.
BLDG. COMPLETE
ROOF
LIBRARY
BUILDING
COURTYARD
30'-0"
(2)TEMP
BOILERS
EXT TEMP
BOILERS
B-WING
A-WING
HEALTH SCIENCE EDUCATION
BUILDING (HSEB)
UNIVERSITY HOSPITAL
BUILDING (UHB)
EXISTING
SERVICE
DRIVE
MAIN
ENTRANCE
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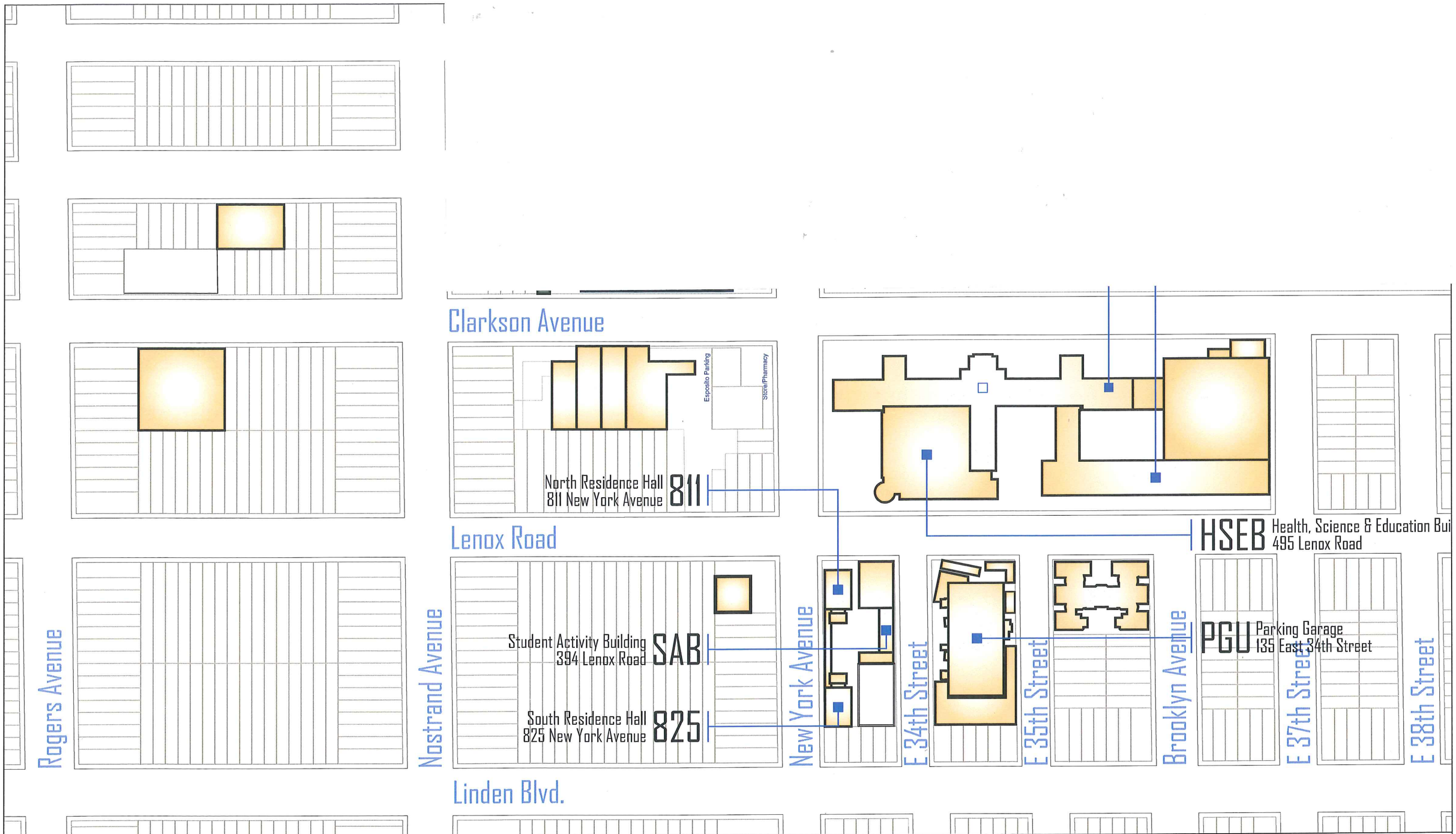
LENOX RD.
BOILER
CONTRACTOR
ACCESS
LAYDOWN
STAGING



DOWNSTATE MEDICAL CENTER
450 CLARKSON AVE, BOX 13
BROOKLYN, NEW YORK 11203-2098
FACILITIES MANAGEMENT
&
DEVELOPMENT
T.: (718)270-2345 F.: (718)270-3760

HEALTH SCIENCE CENTER AT BROOKLYN
CAMPUS LOCATION PLAN

FILENAME: s:\fmd\d & c administration_suny dmc campus_suny dmc site\hscb parking locate 01-13.dwg

DATE: 01/13/14

SUNY Downstate Medical Center
CONTRACTOR ON-BOARDING REQUIREMENTS (HOSPITAL)

A. Supplemental Human Resources Requirements

Scope: Contractors/Vendors working within the Hospital or Clinical Areas

Objective: Provide additional guidelines to contractor, sub-contractors vendors and their employees to ensure patient safety in accordance with CMS, NYSDOH and TJC requirements.
Contractors shall fulfill the following requirements prior to commencing ANY project related construction work within SUNY Downstate/UHB Facility:

I. Contractor Health Screening Requirements

Current Health Screening and Physical, including all the following

- **Varicella (chickenpox) – 2 Doses or positive titers**
- **Measles, Mumps, Rubella (MMR) – 2 Doses or positive titers. Contractors will be allowed to work after the first dose. Waiting time between vaccines shall be one month. The employee's file shall remain open pending the administering of the second (2^{nd}) inoculation. Employee Health Services shall notify the DMC project mgr. accordingly.**
- **TB (PPD or Quantiferon)**
- **Influenza (during flu season). Surgical mask must be worn if vaccine not received**
- **Fit-Testing (if required)**

II. Professional License and Certificate as applicable to trade

III. Post Contract SUNY Downstate/UHB Facility– Hospital Orientation and Training

Mandatory Training

- **Conducted on campus at no cost to the Contractors, Sub-Contractors or vendor**
- **Patient Rights, Confidentiality and HIPAA**
- **Fire and Safety**
- **Blood Borne Pathogens and Infection Prevention**
- **Behavior and Etiquette**

- **Department specific orientation to specialty areas such as the ICUs, Transplant, Pediatrics, Surgical Suites.**
- **Safety and security in closed units (pediatrics and L/D)**
- **ILSM/ICRA Monitoring Requirements during construction (Project Manager Monitoring Tool)**

SUNY Downstate Medical Center
CONTRACTOR ON-BOARDING REQUIREMENTS (HOSPITAL)

IV Criminal Background Checks

In Addition, The Following Background Results Must Be Provided:

1. **Motor Vehicle Report**
2. **Social Security Address/Alias Trace**
3. **Federal/State Criminal History (7 years) including Sex Offender Search**
4. **Office of Inspectors General Sanctions (OIG)**
5. **National Wants and Warrants**

Procedure for submission of documentation

1. **The contractor shall submit all required documentation for each employee. Place documentation in in two (2) separate envelopes, immunization history in one envelope addressed to Employee Health Services (EHS), 2nd envelope criminal background checks addressed to the Dept. of Human Resource (HR) in a sealed envelope and submit to the designated logistics construction manager (CM). Contents of the enclosed material shall be marked on the face of the envelope.**
2. **Designated site representative or construction manager will forward the sealed envelopes to the campus assigned project mgr. who will in turn forward to the Department of Human Resources and Employee Health Services for their reviews.**
3. **Review and turnaround by The Department of human Recourses (HR) including Employee Health Services (EHS) estimated at the campus 2.5 weeks maximum. Each Department in turn will notify the campus project manager of their determination regarding the employee background reviews.**
4. **Note To The Contractor**
   Prior to the issuance of I.D. badges, the contractor must have completed all On-Boarding requirements. The contractor shall not proceed with any work without having obtained approval and clearance from the Campus.

SUNY Downstate Medical Center
Contractor On-Boarding Requirements for Non-Hospital Locations

Criminal Background Checks

Contractor must maintain a file including documentation of the compliance of each employee working at SUNY-DMC's and must make said file available via fax transmission or other reasonably requested medium to SUNY_DMC's Human Resources Department when requested, upon four (4) hours' notice. At a minimum such file must include for each individual, copies of any license, registration, certification and/or permits.

Contractor shall determine, through use of an appropriate consumer reporting agency, whether every individual under contract has at any time been convicted of a crime under any federal or state law, and shall furnish SUNY-DMC with copy of the report resulting from such process. In the event that the individual has been so convicted, SUNY-DMC shall determine, in its sole discretion, whether assignment of such individual is acceptable.

In addition to the above, the contractor must provide the following background results:

1. **Motor Vehicle Report**
2. **Social Security Address/Alias Trace**
3. **Federal/State Criminal History (7 years) including Sex Offender Search**
4. **Office of Inspectors General Sanctions (OIG)**
5. **National Wants and Warrants**

Procedure for submission of documentation

1. **The contractor shall submit all required documentation for each employee. Place Documentation in a sealed envelope and submit to the designated site representative or construction manager (CM). Contents of the enclosed material shall be marked on the face of the envelope.**
2. **Designated site representative or construction manager will forward the sealed envelope to the campus assigned project manager who will in turn forward to the department of Human Resources for their review.**
3. **Review and turnaround by The Department of Human Resource (HR) is estimated at the campus 4 weeks maximum. The Department of Human Resources in turn will notify the campus project manager of their determination regarding employee background reviews.**
4. **Note To The Contractor**
   Prior to the issuance of I.D. badges, the contractor must have completed all On-Boarding requirements. The contractor shall not proceed with any work without having obtained approval and clearance from the Campus.

The campus reserves the right to modify the requirements from time to time. The contractor shall be required to fulfil the requirements as may be required.

DORMITORY AUTHORITY -- STATE OF NEW YORK
515 BROADWAY, ALBANY, NEW YORK 12207-2964

SUNY Downstate Medical
New Academic Building
Brooklyn, New York

SCOPE OF WORK
Installation of Audio Visual Systems

GENERAL INFORMATION

You are invited to submit a Bid to install audio visual equipment for SUNY Downstate Medical's New Academic Building.

A Site Visit has been scheduled for April 10th at 10 am. Please contact Michele Williams, Project Coordinator at 718-270-8328 to confirm attendance. Please meet at 450 Clarkson Avenue, Brooklyn, New York 11203 in front of the building.

REFERENCE DOCUMENTS

- Contractor shall comply with the following:
  - All conditions described within this document
  - Supplemental Information and General Requirements
  - Detailed Specification and Scope of Work
  - Equipment List and Systems Descriptions
  - Dormitory Authority - State of New York Purchasing General Conditions
  - The responses to any Requests for Information and/or Addenda documents

RELATED DOCUMENTS

- This Section includes the following:
  - Drawings – see attached
  - Site Logistics Information

WORK COVERED BY CONTRACT DOCUMENTS

- Conduits, wireways, connection boxes, pull boxes, junction boxes, A/V floor boxes and outlet boxes permanently installed in floors, walls and ceilings.

- All electrical breaker panels and power receptacles necessary to bring power to the audio-visual systems equipment racks and to devices in the Project as indicated in the drawings.

- Room lighting fixtures, dimmers, power receptacle outlets, and interconnecting wiring for these circuits.

DORMITORY AUTHORITY -- STATE OF NEW YORK
515 BROADWAY, ALBANY, NEW YORK 12207-2964

SUNY Downstate Medical
New Academic Building
Brooklyn, New York

SCOPE OF WORK
Installation of Audio Visual Systems

- Structural work, wall openings, platforms, railings, stairs, fire prevention and safety devices, rough and finished trim, painting and patching, drapes, carpets, floor coverings, computer floors, glazing, acoustical treatments, and heating, ventilating, and air conditioning systems unless noted otherwise.

- Moveable furniture, desks, and chairs.

- Installation of structural ceiling or wall mounts (kindorf, threaded rod, blocking, etc.) for screens, projectors, and ceiling and wall mounted flat panel displays.

- Installation of all motorized projections screens. Please refer to specification section 11 52 13 for projection screen requirements

DEFINITIONS

1. "Owner" as used in this section refers to Dormitory Authority of the State of New York (DASNY)
2. "Consultant" as used in this section refers to Cerami and Associates
3. "Architect" as used in this section refers to Ennead
4. "Electrical Engineer" as used in this section refers to Jaros Baum & Bolles
5. The term "Design Team" shall refer to the Owner, Architect, Construction Manager and Consultant
6. "Bidder" as used in this section refers to an Audiovisual Systems Contracting firm submitting a bid response to this specification
7. "Audiovisual Contractor" or "AVC" as used in this section refers to the entity responsible for providing (furnishing and installing) the systems and devices described herein
8. "Supply" as used in this section means "to supply, complete with instructions, for installation by others "Provide" as used in this section means "to furnish, install and make operable".
9. "NIC" as used in this section and on the contract drawings means "not included in this section, not to be supplied"
10. "By Others" as used in this section and on the contract drawings means "not included in this section, supplied as part of another section"
11. "Or As Approved" as used in this section and on the contract drawings means "substitution only after written approval by the Consultant"

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AV CONTRACTOR SCOPE OF WORK

- Provide materials, labor, and equipment including but not limited to:
  - The delivery, unloading, setting in place, fastening to walls, floors, ceilings, counters, or other structures of audiovisual equipment, as required.
  - All AV equipment as shown on AV series drawings with mounts and accessories as required for a complete and working system. Coordinate blocking and electrical with Contractor.
  - All low voltage cable as per AV series drawings.
  - Interconnecting wiring of the system components and equipment alignment and adjustment.
  - All other work whether or not expressly specified herein and on the drawings to provide complete operational turnkey systems.
  - Provide motorized projection screens for installation by Contractor.
  - These specifications and the drawings do not necessarily indicate every single component part of each system. It is the responsibility of the AVC to engineer each system and its interconnection in order to provide, furnish, and install completely operational turnkey systems. No error or omission herein or on any related Construction Documents shall relieve the AVC from this responsibility to do so.
  - Install all equipment to industry safety and ergonomic standards, local building and safety codes, as applicable, and provide full engineering and technical support throughout the installation process.
  - The AVC shall study the drawings and familiarize himself with the Work of the entire project scope. The Work of this section shall be carefully organized and programmed so that its progress shall be concurrent with the work of all other trades and so that the work shall proceed as expeditiously as possible.
  - The AVC shall be responsible for the correct placing of the Work of this section, equipment to fit into the structure as built, and attachment of equipment to the work of all other trades and Owner furnished equipment and facilities.
  - It shall be the responsibility of the AVC to coordinate with those performing related work and to interface other systems with the Work of this section. The AVC shall ensure that the work by others shall integrate properly with the Work of this section and that all such work collectively complies with all requirements as specified herein.
  - Coordination shall include providing timely submittal and field coordination of mounting requirements, dimensions, and any other information required by other trades.
  - Maintain constant communications with all designated personnel of the Contractor and attend all construction meetings as requested by the Contractor.
  - The AVC shall generate all shop drawings and information for the complete installation and wiring of the system. The AVC shall provide (or sub-contract for) the on-site.

installation and wiring and shall provide on-going supervision and coordination duringthe implementation phase.

- Where there is a discrepancy between drawings or between drawings and documents, the AVC shall conform to the guidelines below. The AVC shall consider all the information in combination and not consider one element alone to meet a minimum requirement. The guidelines are as follows:
- Room layouts indicate device locations.
- Architectural and Electrical drawings indicate the location of all floor box, back box, and all conduit interconnect points as shall be installed as aninfrastructure by the Contractor. These drawings are to inform the Contractor as to all points within the facilities for cable and connector plate installation.
- Audio-Visual block diagrams indicate general signal flow and interconnection
- The Audio-Visual specifications delineate minimum performance requirements, methodologies, and the design intent.
- Where there is a conflict in number or type of device specified, the drawingsshall govern
- System Interconnections.
- The functional interconnections of the audio, control, and video systems shall comply with the manufacturer's system installation guidelines industry standard practices, and as specified herein.
- The AVC shall provide all interconnection cable, connectors, terminal strips, wire- way, flexible conduit, raceways, etc., to facilitate the audio-visual systems as detailed within these specifications and drawings.
- The AVC shall provide all custom connector panels required.
- The AVC shall be fully responsible for the coordination of the control system custom programming. Further, the AVC shall be responsible for coordinating the on-site programming, software de-bugging, and revision of custom screens after initial use, as required by the Owner, and/or AV Consultant.
- The AVC shall be responsible for the comprehensive adjustment of the systemsas specified herein and shall provide all test equipment for the system checkout and acceptance tests. AVC shall provide on-the-job training in systems operation and maintenance to Owner designated personnel.
- Adjust and balance all circuits as specified herein. Set all controls and software parameters to render fully and optimally operating systems and subsystems. All computer controlled functions shall require complete audio/computer/software setup, balancing, label-entry and documentation.

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SUBMITTALS

- Conduit and Cabling Submittals
  - Submit for approval all cable pull schedules and/or run sheets prior to cable installation. Review and documentation of the entire conduit and cabling installation shall be fully performed to construction documentation standards and as specified herein.
- System Design Submittal
  - Prior to fabrication the AVC shall submit for approval, all designs pertaining to the systems. These designs include, but are not limited to, the following:
    - Complete system construction and point to point wiring schematic drawings, including all component values and showing complete letter and number identification of all wire and cable as well as jacks, terminals, and connectors
    - All panels, plates, and designation strips, including details relating to terminology, engraving, finish, and color.
    - All custom designed consoles, tables, carts, support bases, and shelves
    - Schematic drawings of all custom components, assemblies, and circuitry
    - All equipment modifications
    - Patch-panel assignment layout drawings
    - Front mechanical drawings of each equipment rack
    - All items of equipment whether a stock manufactured item or custom built shall be supported by complete and detailed schematic drawings and replacement parts lists. No “black boxes” or unidentified components shall be acceptable
    - All touch panel and computer GUI interfaces and DSP programs

- System Installation Submittals
  - Provide week-by-week Work Progress schedules keyed to personnel, vendors, and tasks as specified herein and provide updates as requested by the Contractor, consultant or owner

- Close out Documents
  - At the completion of the installation, the AVC shall provide the following items, and submit at least six (6) sets of each. Two full sets shall be submitted to the owner, one to the Contractor and one to the consultant. The following list shall define “Close out Documents”.
  - Equipment manufacturer’s operation and maintenance manuals for each piece of equipment, bound in a three ring binder. Include any “as modified” drawings pertaining to any equipment that has been modified by the AVC

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- A full set of "As Built" or "As Installed" drawings showing all final connections and field wiring numbers
- A simplified functional block drawing identical to the specification drawing with the addition of all input and output circuit cable and terminal block numbers as well as all jack field circuit I.D. designations. A copy of this drawing shall be framed in protective plastic and mounted on the inner surface of the equipment rack door
- System Operation and Maintenance Manual
    - The AVC shall produce this manual specifically for the systems detailed herein. The "Operation" section shall describe in detail, all typical procedures necessary to activate each system to provide for the functional requirements as listed under the Specifications. The reader of this manual shall be assumed to be technically competent, but unfamiliar with this particular facility. The "Maintenance" section shall provide a recommended maintenance schedule with reference to the applicable pages in the manufacturer's maintenance manuals. Where the manufacturer provides inadequate information, the AVC shall provide the information necessary for proper maintenance. In addition to the more detailed System Operation and Maintenance Manual, prepare a more simplified "Quick Start" or "Executive Summary" version that shall consist of no more than one 8 ½ by 11 inch sheet describing the most basic functions. Laminated copies of this instruction sheet should be located for easy access by the user.
    - AVC is to provide control programming source code, passwords and all DSP program files

- LEED Building Submittal Requirements: The Contractor or subcontractor shall submit the following LEED Building certification items in accordance with Section 013329LEED Submittals:
    - GREEN BUILDING MATERIALS CERTIFICATION FORM and/or VOC REPORTING FORM
        - Material costs breakdowns
        - Letters of Certification, Product Cut Sheet, or other items to supportthe information as requested by the Architect
        - Material Safety Data Sheets, for all applicable products. Applicable products include, but are not limited to adhesives, sealants, carpets, paints, and coatings. Material Safety Data Sheets shall include the Volatile Organic Compound(VOC) of products submitted (If an MSDS does not include a product's VOC limits,then product data sheets, manufacturer literature, or a letter of certification from the manufacturer can be submitted in addition to the MSDS to indicate the VOC limits)
        - The LEED Building Submittal Information shall be assembled into one package per specification section and sent to the Architect for review.

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QUALITY ASSURANCE

- AVC Qualifications
  - AVC shall be a firm with at least ten (10) years experience in the fabrication assembly, and installation of audio-visual systems of similar magnitude and quality as specified herein, and shall provide documentation with the bid submission. This documentation must identify, specifically, similar projects of the same or greater magnitude. Of those projects noted, the bidder must provide current contact names and telephone numbers, as well as a job description with a clear delineation between labor and equipment costs, as well as duration of project. The descriptions supplied must clearly indicate the firm submitting the bid response has actively been involved in these projects and that the firm has actively been involved for at least ten years in projects of this magnitude.
  - The supervisor of the work of this section shall have at least five (5) years direct professional experience with devices, equipment, and system installation of the type and scope specified herein
  - All personnel engaged in the installation of this Section shall have at least three (3) years direct experience with devices, equipment, and system installations of the type and scope specified herein.
  - There shall be one (1) point of contact for the project.
  - There shall be one (1) point of contact for the project.
  - The AVC staff must hold industry certifications with ICIA (CTS or higher) or EST.

TIMELY DELIVERY AND STORAGE

- Timely delivery and installation of material required for the Work of this Section is the responsibility of the AVC. The AVC shall be held responsible for all delaysassociated with both specified and alternate materials, and for the timely submittal of proposals, submittal items, drawings, and other information in order to expedite the Work and to avoid delays.

- Costs of all shipping to the site, and of all storage requirements, shall be borne by the AVC. It shall be the responsibility of the AVC to make appropriate arrangements, and to coordinate with authorized personnel at the site, for the proper acceptance.

- During the installation, and up to the date of final acceptance, the AVC shall beunder obligation to protect his finished and unfinished work against damage and loss. In the event

of such damage or loss, he shall replace or repair such work at no cost to the Owner.

PROJECT SITE CONDITIONS

- The AVC shall be responsible to survey all areas to locate poke-thrus, furniture openings, sleeves, conduits, cable trays, conduit stub-ups, back boxes and pull boxes provided by others for Audiovisual Cabling.
    - The AVC shall be responsible for verifying on-site conditions of all systems, equipment and conditions that directly or indirectlyaffecting the AVC's scope of work to include but not limited to:
        - Walls painted
        - Carpet or other floor covering installed
        - All power and conduit installed as per consultant's drawings
        - All A/V devices installed by the Contractor such as: projection screens, screen low voltage control interfaces, A/V back boxes, A/V floor boxes, room lightingA/V interfaces and window shade low voltage control interfaces
        - All A/V related CATV, data, ISDN, T-1, IP, voice and analog lines as specified by the consultant
        - All A/Vrelated furniture installed such as lecterns, credenzas, board/conference tables, closets and other millwork designed to house A/V equipment
        - The AVC shall be responsible for meeting project schedule dates regardless of local disputes
        - The AVC shall be responsible for the protection of all installed and configured systems as well as non-installed stored materials from acts of theft
        - AVC shall be responsible for protection of his work from acts of vandalism and environmental conditions. Any delivery schedules affected by environmental conditions shall be noted to the Construction and Project managers not less than 72 hours prior to day of scheduled delivery with just cause documented in writing

SEQUENCING AND SCHEDULING

- The AVC shall maintain a running progress report. The AVC shall submit this report upon request of the consultant at any time during the contract period. This report shall include, but is not limited to:
    - Time line for each installation activity
    - Percentage of completion of each activity
    - Continuous vertical lines to identify the first working day of each week
    - Illustrate how start of a given activity depends on completion of preceding activities and

how completion of a given activity may restrain start ofsubsequent activities
- Identify the critical path
- Status of the installation detailing all remaining critical tasks
- Requests for receiving major equipment and material shipments
- Request for contractor to enter the job site
- Requests for utility service disconnection and connections
- Delays and stoppages - any delays or stoppages shall not affect thescheduled completion date unless instructed otherwise by the Contractor
- Emergencies and accidents
- Losses of material and property

GUARANTEE AND MAINTENANCE

- The AVC shall guarantee and/or complete the following:
  - The AVC shall guarantee all equipment and cabling, programming, and software furnished, in writing, against defects in workmanship and material for a period of ONE YEAR from the respective dates of final acceptance. All defects developing during that period shall be corrected in compliance with the "GUARANTEE" conditions underthese specifications
  - The AVC shall service the complete installation during this one year guarantee period
  - This Guarantee clause shall in no way preclude or nullify any manufacturer's warranties. All manufacturer warranty cards shall be sent to the respective manufacturers with photo-copies showing model number and serial numbers to be included with a certificate of warranty and to be delivered to the Owner by the AVC with the Owner's Operating Manual.
  - All equipment and systems provided under this section shall be guaranteed to be free from defects in materials and workmanship for a period as indicated in the Contract Documents from the date of final acceptance, provided it does not show abuse.
  - The AVC shall maintain regular service facilities and provide a qualified technician familiar with the work of this section, at the site, within four (4) hours of receipt of a notice of malfunction from the owner or his representative. As part of this guarantee, the AVC shall provide, at no expense to the Owner, all material, devices, equipment, and personnel necessary and provide alternate facilities, services, and systems for the duration of the repairs
  - All repairs and service under this guarantee shall be at the job site unless in violationof manufacturer's warranty, and/or practically not possible
  - Transportation of warranty substitute equipment, devices, material, parts, and personnel

to and from the job site shall be at no expense to the Owner, provided it does not show abuse

WARRANTY

- To maintain certain manufacturers' warranties, said equipment must beinstalled, aligned, and serviced by those installers authorized by said manufacturer to perform those duties. If said manufacturer does not authorize the AVC, it is the AVCs responsibility to make the appropriate arrangements and bear all cost and consequences thereof.

- Upon completion of all Work and compliance with all requirements of this Section, including submittals, tests, record drawings and data as requiredherein, the Owner may elect to verify the AVC's test data as part of the acceptance procedure. The AVC shall provide personnel and equipment, at the convenience of the Owner, to demonstrate any aspect or parameter of system performance and to assist the Owner with such tests. All costs associated with acceptance testing shall be the responsibility of the AVC.

SERVICE CONTRACT

- The AVC shall offer a separate annual service contract covering all installed systems.

- This service contract shall cover a minimum of four (4) visits per year, at regular intervals, to perform operation checks of the equipment; check focus, alignment, and convergence; clean recording/playback heads and other critical surfaces and to lubricate moving parts as recommended by the respective manufacturers. The service contract shall commence immediately after expiration of the initial base-bid warranty period and continue for one year. This service contract may be renewed under separate agreements between the AVC and the owner.

- The AVC shall also submit separate costs for emergency situation "on-call" service visits and an "in-shop" hourly-rate for repair and maintenance work as part of the post- guarantee period herein. Spaces have been provided for on the bid forms for "on-call" and "in-shop" service contract pricing

- The costs for this service contract shall not be commingled with the costs for the systems base bid. Spaces have been provided for on the bid forms for "SECOND YEAR" and "THIRD YEAR" service contract pricing.

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- This "Service Contract" shall not in any way conflict with the first year warranty covered as specified herein. The intent of this paragraph is for the Owner's option in preparing budgets and comparing long-term costs between vendors. As such the Bidder shall provide costs for year two and three to include cost escalations.

PART 2 – SYSTEMS AND EQUIPMENT

SYSTEM DESCRIPTIONS

- Refer to the attached Audiovisual Systems Equipment List for the following:
  - Type and quantity of spaces with audiovisual systems
  - Bullet point description of the audiovisual functions of each space
  - Description and quantities of audiovisual equipment within each space
  - Notes detailing special audiovisual equipment considerations or coordination requirements

- Green Building Performance Criteria: The Contractor shall implement practices and procedures to meet the Project's GREEN BUILDING requirements. The Contractor shall ensure that the requirements related to these goals, as defined in Section 01 81 13: "Sustainable Design Requirements", and as specified in this Section, are implemented to the fullest extent. Substitutions or other changes to the work shall not be proposed by the Contractor if such changes compromise the stated GREEN BUILDING Performance Criteria

- VOC Limits: All field-applied adhesives, sealants, primers, paints and coatings used on the interior of the building shall meet the volatile organic compound (VOC) and chemical component limitations as defined in Section 01 81 15 "Volatile Organic Compound Limits", VOC contents shall be identified and documented

- Insulation:
  - Fiberglass Insulation: Fiberglass insulation will contain no formaldehyde-based binders or will be third-partycertified for conformance with Greenguard or Indoor Advantage Gold. *(Many fiberglass insulation products are bonded with a formaldehyde resin, which can contribute to unwanted indoor emissions.)* Unfaced fiberglass batt insulation shall not be used above suspended ceilings. Fiberglass board products used in plenums and shafts or for insulating ductwork must be wrapped or enclosed.
  - Duct Acoustical Insulation: Insulation shall only be installed in duct where needed for sound attenuation, not solely for thermal insulation orcondensation.

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PART 3 – GENERAL REQUIREMENTS

GENERAL REQUIREMENTS

- All equipment shall be rack-mounted and permanently attached. All power supplies, rack- mounts, interconnects, brackets, etc., shall be included while they may not be specifically called out herein.

- All equipment shall be new and the latest model number and revision as of the proposal date.

- Material and equipment specified herein have been selected as thebasis of acceptable quality and performance and have been coordinated to function as component parts of the included systems. Where a particular material, device, equipment or system is specified directly, the current manufacturer's specification for it shall append these specifications.

- Subject to the functional and minimum performance requirements for each item, the Consultant may require independent laboratory tests proving equivalence of certain alternative equipment not fully or adequately described bythe technical specification of the manufacturers. Any and all costs arising from equivalency testing shall solely and completely be the responsibility of the AVC.

- Verify with all manufacturers and/or suppliers' availability and cost of all material and equipment proposed, including all material and equipment specified herein. No cost increases shall be allowed for manufacturers' cost increases, or for substitutions required because of unavailability of proposed equipment.

- The manufacturer specifications shall be considered as minimum performance levels of acceptance. Where a particular model is specified its performance, operating, and physical characteristics are part of these specifications. Further, these characteristics are part of a design as a whole and particularly the Architect's and Engineer's designs are in full coordination with these characteristics.

CUSTOM WALL PLATES

- Submit sample of engraved plate for owner approval before fabrication of job plates.

- All plates shall be equivalent in type, color and finish to other plates in the same room, unless otherwise specified by the Architect or Owner.

- Unless otherwise noted, all plates shall be 0.125-inch thick brushed andanodized aluminum with

45-degee chamfered edge.

- Clean recording/playback heads and other critical surfaces and to lubricate moving parts as recommended by the respective manufacturers. The service contract shall commence immediately after expiration of the initial base-bid warranty period and continue for one year. This service contract may be renewed under separate agreements between the AVC and the owner.
- Mounting screws shall be matching stainless or black Allen flat-head screws.
- Custom-fabricate to size indicated on drawings.
- Black or white filled engraving, whichever provides the highest contrast to the platecolor and finish. Typeface shall be 14 pt Helvetica Bold.

CUSTOM EQUIPMENT RACK PANELS

- Standard EIA specifications, nominal 19-inches wide, number of spaces as indicated or required.
- Material shall be brushed and anodized Aluminum, minimum 0.125-inch thick.
- Finish black anodized.
- White filled engraving.
- Typeface shall be 14 pt Helvetica Bold.
- Provide panel stiffeners as required to prevent panel deformation during normal plugging and switching operations.
- Mounting screws shall be matching stainless or black Allen flat-head screws with lock washers.

EQUIPMENT LAYOUT

- The equipment layout and locations shall be as detailed herein and in theaudio-visual section of the drawing as well as all architectural drawings that pertain to thisarea.

MEETINGS

- It shall be the responsibility of the AVC to supply any necessary requested information and have its project supervisor in attendance at all project meetings in order to coordinate with all related trades.

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COORDINATION

- All the Work of this section shall be coordinated with the current operation ofthe system(s).
- The AVC shall coordinate the finish required for all fixtures, plates, panels, grilles, and enclosures supplied as part of this specification section with the Architect and Owner. The AVC shall supply finish samples as requested by the Architect or Owner.
- The AVC shall be responsible for coordination with the Millworker for anyaudio-visual items to be built or mounted into millwork.
- It shall be the responsibility of the AVC to cooperate at all times with all AVCs doing work in the building, to the end that lost time, work stoppages, interference, and inefficiencies do not occur.
- Maintain constant communications with all designated personnel of the Contractor and attend all construction meetings as requested by the Contractor
- Coordinate the switch over of all systems; subsystems; and software with OWNER operations and maintenance personnel as designated by the Contractor.
- Perform field surveys to determine existing cabling and mechanical conditions.
- Verify existing as-builds including cable labeling and ensure new documentationand installation cabling is coordinated and appropriately labeled.

WORKMANSHIP

- Maintain a competent supervisor and supporting technical personnel, acceptable to the Architect, Contractor, Owner, and Consultant during the entire installation. The AVC shall submit the name and telephone number of the supervisor. Change of supervision during the project is not acceptable without prior written approval from the Contractor.
- Adjust and balance all circuits as specified herein. Set all controls and software parameters to render a fully and optimally operating systems and subsystems. All computer-controlled functions shall require complete audio/computer/software setup, balancing, label-entry and documentation.
- Install all equipment to industry safety and ergonomic standards and provide full engineering and technical support throughout the installation process.

FABRICATION & INSTALLATION

- All installation practices shall be in accordance with, but not limited to, these specifications and drawings. Installation shall be performed in accordance with the applicable standards, requirements, and recommendations of authorities having jurisdiction
- If, in the opinion of the AVC, an installation practice is desired or required, which is

contrary to these specifications or drawings, a written request for modification shall be made to the Consultant. Modifications shall not commence without written approval from the Consultant

- Provide intelligible, permanent identification on or adjacent to all patching jacks, connectors, receptacles, terminal blocks, meters, indicators, switches, equalizers, mixers, amplifiers, etc. The identification shall clearly indicate the function, or circuit
- The AVC must take such precautions as are necessary to guard against electromagnetic and electrostatic hum, to supply adequate ventilation, and to install the equipment so as to provide maximum safety to the operator.
- Care shall be exercised in wiring so as to avoid damage to the cables and to the equipment. All joints and connections shall be made with rosin-core solder orwith mechanical connectors approved by the Consultant
- All wire and cable shall be continuous and splice free for the entire length of run between designated connections or terminations
- When connecting stranded wire to compression screw terminals do not tinthe wire ends. When inserting wires into compression terminals take proper care to insert only the stripped portion.

EQUIPMENT RACK FABRICATION

- Wire all racks completely in the shop. No internal rack wiring shall be done on the job site.
- Install all rack-mounted equipment and devices in equipment racks in a logical, functional manner, demonstrative of signal flow within the respective system arranged for easy accessibility and convenient maintenance.
- Install equipment in racks with ventilating panels as required to provideadequate ventilation and according to equipment manufacturer's recommendations.
- Provide power outlets within each rack, and appropriately circuited, toprovide power to the installed equipment, with one (1) each extra outlet per blank space.
- Provide at least one (1) each dedicated A/C service outlet per rack.
- Ensure that all panel mounting holes are pre-tapped and free of debris.
- Run all microphone and line level wiring in the equipment racks on the equipment input side of the rack and all AC, control, and speaker wiring on the equipment output side of the rack.
- Do not buss the commons of the loudspeaker lines together, and do not ground.
- Provide unused panel space with blank or ventilating panels.
- Locate free standing racks as shown and provide access to rear without need for moving racks.
- Equipment racks of this system shall be firmly attached to each other, both mechanically and electrically, in order to provide a good ground connection between adjacent racks.
- Equipment racks of this system shall be totally isolated form equipment racks of other systems.

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- Provide each rack with protective plastic covers for run sheets, rack elevation, and single- line drawings.
- All power supplies shall be located, oriented, and connected electrically so as to minimize hum and RFI interference. Further, all plug-in type power supplies shall be firmly attached using mechanical fasteners to its associated power receptacle to insure against accidental removal and/or connection loss.

EQUIPMENT LABELING

- In addition to permanently labeling each cable and termination device, each piece of equipment, device, and panel shall have permanent label corresponding to its function as shown on system drawings.
- All user cables shall be labeled as to their function. User cables include audio, video, VGA, control or other connector cables that that the user is required to handle during normal system setup and use.

PATCH PANEL ASSIGNMENTS & DESIGNATIONS

- All patch panels shall be wired so that signal “sources” (outputs from) appear on the upper row of a row pair; and all “loads” (inputs to) appear on the lower row of a row pair.
- All audio and video patch panel designation strips shall utilize alphanumeric identifications and descriptive information. The jack position in each horizontal row shall be numbered sequentially from left to right. The horizontal jack rows shall be lettered sequentially from top to bottom. The alphanumeric identification of each jack shall be included on the functional block drawings, as well as on reproductions of these drawings that shall be mounted in an appropriate location near the patch bays.

GROUNDING

- In order to mitigate electromagnetic and RF interference from improper grounding and to achieve maximum signal-to-noise ratios, the grounding procedures shall be as detailed below.
- At no time shall there be a compromise in safety or any exception to the NEC.
- The following grounding practices shall be employed:
- Under no conditions shall the AC neutral conductor in a receptacle outlet be used for a system ground. “Third prong” grounding connectors shall be employed wherever such are provided with manufactured equipment
- Audio Cable Shields: All audio cable shields shall be dc-grounded at one point only.
- Video Receptacles: All video receptacles that are provided and installed by the AVC shall be insulated from the mounting panel, outlet box, or wire-way. Unless otherwise detailed herein,

this shall be accomplished by using insulated-from- panel type receptacles.

- When interconnecting video lines between devices that are powered from different ac power sources, the AVC shall use ground-loop isolation devices as required to eliminate any ground looping that may occur.
  - It shall be the responsibility of the AVC to follow good engineering practices. At no time shall there be a compromise in safety or any exception to the NEC and local codes.
  - Insulate all conductors in conduit, including shields, from the conduit, back boxes, and from each other for the entire conduit length.

IDENTIFICATION

All installation shall bear the following identification plate, supplied by this AVC, mounted on the front of the main rack at the top:

1. SYSTEMS ENGINEERED & DESIGNED BY:
   Cerami & Associates, Inc.
   404 Fifth Avenue
   New York, NY 10018
   Tel: 212-370-1776
   www.ceramiassociates.com

2. SYSTEM FABRICATED & INSTALLED BY: AVC
   Name
   Full Address
   Telephone
   Number

Engraving shall be white filled Helvetica lettering on a black background or as appropriate to the identification plate material.

Software

The contractor shall secure from the owner or owner's representative, in writing, approval for all control system graphical user interface layouts (control surfaces), audio dsp device configurations, or other customized software product applications prior to installation.

Preliminary control surfaces submittal

- Prior to creation of the preliminary control surface submittal the contractor shall coordinate a

meeting among contractor, consultant and owner to discuss overall programming intent and specific requirements or concerns that the owners or consultant has related to the control surface look, operation and capabilities.

- The intent of the preliminary control surfaces submittal is to create a base level collaboration tool whereby the contractor can solicit direction from the owner and consultant towards a mutually agreeable design.
- Based upon the equipment lists and control system functionality provided in the audiovisual systems specification and in combination with the system topology illustrated on the signal flow drawings, the contractor shall generate preliminary control surface layouts for all pushbutton panels, touch sensitive panels, pc based controllers or other control surfaces. The contractor should endeavor to make the preliminary layouts as complete as possible.
- The layouts should illustrate all pushbuttons, labels, bar graphs, timers, video windows, etc. For each control panel and each system page. The contractor should include suggestions for color schemes and graphics where applicable.
- It is recommended that control touch panel layouts conform to the infocomm dashboard for controls design guide. This design guide is available on the infocomm website at http://www.infocomm.org.
- The contractor shall receive written response indicating approval to proceed, or changes required to the control surfaces layouts, within 10 working days of receipt of the submittal by the owner/consultant.
- Revised preliminary control surfaces submittal.
- If changes are required to the preliminary control surfaces submittal, the contractor shall generate a revised preliminary control surfaces submittal to include the additions, changes or revisions generated by the preliminary submittal review. The form and quantity of the submittal shall be identical to the preliminary submittal unless otherwise directed. If the revised control surfaces submittal reflects those additions, changes or revisions called for in the preliminary submittal review, the contractor shall receive written approval to proceed within 10 working days of receipt of the submittal by the owner/consultant.
- The contractor shall respond with the updated control surface submittal capturing all required changes indicated in the owner/consultant response within 10 working days of receipt of the response.
- A minimum of two control surface revisions shall be provided.
    - Post-integration adjustments
        - If so requested by the owner or consultant, and within 90 days of system acceptance as outlined in ‘system acceptance’, the contractor shall be prepared to make two visits to the site to make final adjustments to the control system code or programming without additional compensation. This could include, but may not be limited to, renaming or changing the size or location of buttons, page flip calls, or

adjustments to code to provide a fully functioning system. If engraved control system panels require modification at a cost to the Owner,such cost information must be submitted to the Owner for approval prior to any work being performed.

- The Contractor shall be responsible for insuring that any changes to the control system or control surfaces that occur post integration are appended to the Final System Documentation

Control system requirements

- Control system user interface
  - All panels are to have the time and date as icons, in the same position on every page.
  - All panels are to have a title, indicating the piece of equipment and/or functionality being controlled.
  - When a portable device is connected to the system while powered down the system shall be programmed to automatically wake and switch to the active input. Touch panels shall activate and switch to the local presentation page reflecting the active input used.
  - No individual component shall be programmed to function atypically.
  - Devices similar in nature shall be programmed to operate with a common format.
  - Pages for source equipment shall conform to the following guidelines:
    - Transport controls should be on the main device page.
    - The primary transport controls, <play>, <stop> and <pause> should be larger than the other transport controls.

DORMITORY AUTHORITY OF THE STATE OF NEW YORK
("DASNY")
515 Broadway, Albany, New York 12207

SUNY Downstate Medical – New Academic Building

DETAILED SPECIFICATION AND SCOPE OF WORK
INSTALLATION OF AUDIO VISUAL EQUIPMENT

AUDIOVISUAL DESIGN PACKAGE

Scope of Responsibilities for Audiovisual Work			
ITEM	FURNISHED BY	INSTALLED BY	NOTES
Containment, conduit, junction boxes, AV floorboxes, cable tray, wireways and other electrical (construction related) rough-in work pertaining to the installation of the AV systems.	Contractor	Contractor	See AV specification and drawings for requirements. New and existing equipment locations to be coordinated with AV Consultant, AV Contractor & Owner.
All AC power receptacles and related electrical requirements	Contractor	Contractor	See AV specification and drawings for requirements
IT, tel/data and CATV infrastructure as required for AV systems	Contractor	Contractor	Channel test due by Room Ready date
Wall blocking, Uni-strut/Kindorf, threaded rod, etc as required for AV devices	Contractor	Contractor	AV Contractor to coordinate locations
Millwork countertops, credenzas, conference tables and general woodwork.	Owner - FF&E Item	Contractor	AV Contractor to confirm all table and credenza dimensions and modifications per the Millworker or Furniture drawings.
Testing, evaluation and install of existing equipment.	Owner	Owner	

AV Contractor Scope of Responsibilities for Audiovisual Work			
ITEM	FURNISHED BY	INSTALLED BY	NOTES
Handling of all AV equipment from building dock to a secure location	AV Contractor	AV Contractor	
Projector mounts, Flat panel mounts	AV Contractor	AV Contractor	Electrical connections by the Contractor. AV Contractor to coordinate locations
All low voltage audiovisual cabling	AV Contractor	AV Contractor	Cable spec and run sheets to be provided to AV Consultant prior to install
All low voltage audiovisual terminations	AV Contractor	AV Contractor	
Program speakers	AV Contractor	AV Contractor	
Ceiling speakers (with backboxes, transformers & grilles where applicable)	AV Contractor	AV Contractor	
Ceiling and wall mounted LCD or Flat panel displays and Cameras	AV Contractor	AV Contractor	
Ceiling mounted video projectors and lifts	AV Contractor	AV Contractor	
Conference Table Connectivity Hatch	AV Contractor	Contractor	Provision in equipment list for AV Contractor provided table hatches to be reviewed. AV Contractor to provide connectivity hatch audiovisual faceplates
Control system touch screens and other hardware.	AV Contractor	AV Contractor	
Front projection screens	AV Contractor	Contractor	Electrical connections by the Contractor. AV Contractor to coordinate locations
Control system and Audio system programming	AV Contractor	AV Contractor	AV Contractor will be required to confirm code revisions and make adjustments to DSP code in field. See specifications.
Project Management, supervision, testing and commissioning of the AV systems	AV Contractor	AV Contractor	
Lecterns and teachers stations	Owner - FF&E Item	AV Contractor	Cutouts to be confirmed and supervised by AV Contractor
Provision of all OFE PC's, servers and digital cable boxes (as required for AV systems operation)	Owner - FF&E Item	AV Contractor	

1: All AV equipment shown is for reference only. Such equipment will be provided and installed by the AV trade Contractor, not the Contractor.

2: Where exact dimensions are not called for, the scale of this drawing is sufficiently accurate for determining location of equipment, junction boxes, outlet boxes, wireways, panels, etc. Where exact dimensions are called for, the reference surface shall be the final finished surface including any acoustical treatment. Room dimensions on this drawing have been taken from preliminary architectural drawings. All dimensions must be verified and any deviations causing changes exceeding 3 inches must be coordinated with the Architect and Cerami & Associates, Inc.

3: All power conduit, power wireways, and power junction boxes are to be reviewed by the Electrical Engineer for code compliance.

4: Empty conduit runs on these drawings show only interconnection between the termination points. The exact path of all conduits are to be determined by the Contractor and field conditions.

5: All empty conduit shall be deburred, cleaned, capped, tagged, and furnished with pull wires.

6: There shall be a minimum of one pull box for every 100 feet of straight empty conduit and a pull box for more than two 90 degree bends in a conduit run.

7: Power receptacles shown on these drawings are dedicated to specific audiovisual equipment and are shown for reference only. Refer to electrical drawings for additional utility power receptacles.

8: Power breaker panels are sized and specified by the Electrical Engineer, refer to electrical drawings. All circuits shall be protected by 120VAC, 20 amp breakers unless otherwise detailed.

9: Where power circuits are shown terminating in junction boxes without receptacles, the wires shall be taped and the boxes covered. These circuits will be connected by others during installation of the audiovisual systems equipment.

10: All cable tray that is surface mounted on slab below raised floor shall be securely fastened to slab. These trays shall be left open and not provided with covers.

11: The method of installation of boxes in walls, and the method of passage of conduits and wireways through acoustically sensitive walls shall be coordinated with the acoustical consultant.

12: Electrical feeds are not to be run parallel with video and/or audio lines or raceways. If electrical feeds must run parallel to audio/video lines, a minimum of 4 ft. of separators must be maintained.

13: All power for Audiovisual simulation systems and connected systems shall use a single common isolated grounding point. The Electrical Engineer shall design an EIA/TIA 607 grounding scheme for the audiovisual systems, as it may be required for telecommunications as well.

14: All devices are to be sized and provided by the Contractor.

15: All conduit for low-voltage cabling associated with the audiovisual systems shall observe a minimum bend radius of ten (10) times the conduit diameter.

16: Where conduit runs will exceed 100'-0" or require more than 180° of bend provide intermediate pull box.

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Drawings stricken from the drawing list or with grayed out areas are part of the medical simulation audiovisual scope that is outside of the scope of this package.

AUDIOVISUAL DRAWING LIST

NOTE: ALL ELECTRICAL, CABLE TV AND NETWORK DEVICES SHOWN ONLY FOR COORDINATION PURPOSES. REFER TO E OR IT SERIES DRAWINGS FOR RESPECTIVE SCOPES OF WORK.

7

Project Title
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Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN
DRAWING LIST NOTE & SCOPE OF RESPONSIBILITY

Date: April 10, 2012
Scale: NTS
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-000

AUDIOVISUAL ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
AV	Multi-discipline Floor box, with hinged cover plate and carpet flange; with divided compartments for shared access with voice, data and 120VAC power. Flush mount in floor unless otherwise indicated. Refer to Electrical drawings for floor box requirements. Subnumber indicates data port requirements.
AV	Poke Thru. Subnumber indicates data port requirements.
AV	Conduit stub-up under the millwork, for audiovisual cabling.
TV	Junction box, with removable cover for cable television receptacle. Surface mount on slab unless otherwise indicated.
	Telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Surface mount on slab unless otherwise indicated. Subnumber indicates port requirements.
CT	Screw cover junction box for audiovisual cable/conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 20 Amp. Surface mount on slab unless otherwise indicated.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.

SYMBOL	DESCRIPTION
VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
CT	Screw cover junction box for audiovisual conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
TV	Multi-discipline Wall box; with divided compartments for shared access with data and 120VAC power. Mount flush with finished wall treatment unless otherwise indicated. Subnumber indicates port requirements (if applicable). See Audiovisual Detail Sheets.
AV	
IR	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for assistive listening emitter. Mount flush with finished wall treatment, 6" below finished ceiling unless otherwise indicated. Subnumber indicates number of gang.
TP	Back box for wall-mounted audiovisual control system touch panel . Back box to be OEM by manufacturer; referenced to model number. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.

SYMBOL	DESCRIPTION
BP	Back box for wall-mounted audiovisual control system button panel . Subnumber indicates number of gang. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.
TV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for television receiver receptacle. Subnumber indicates number of gang. See Audiovisual detail sheets.
AV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for audiovisual receptacles. Mount flush with finished wall treatment. Subnumber indicates number of gang. See Audiovisual detail sheets.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.
R/L	Wall switch for projection screen, raise/stop/lower; supplied with screen. Mount flush with finished wall treatment, at base building electrical switch height unless otherwise indicated.
	Wall-mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements. See Audiovisual detail sheets.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, quad, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.

SYMBOL	DESCRIPTION
M PS	Projection screen, projector lift or shade with low-voltage interface, supplied with device. Mount above finished ceiling unless otherwise indicated. Maintenance access to box shall be provided in non-accessible ceilings. Provide utility-grade 120VAC unless otherwise indicated.
CS	Ceiling speaker with integrated enclosure, grille and grid support. Mount flush with finished ceiling, as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer. See Audiovisual Detail Sheets.
IR	Ceiling surface mounted IR emitter for assistive listening, as shown on the Architectural ceiling plans, unless otherwise indicated. See Audiovisual Detail Sheets.
AV	Ceiling mounted gangable junction box, for Audiovisual device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.
VC	Ceiling mounted gangable junction box, for video camera device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount flush with finished ceiling unless otherwise indicated.
	Power receptacle (Utility), duplex, 120 VAC, 15 Amp. Surface mount on slab unless otherwise indicated.
	Ceiling mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise indicated. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements.
	Cable tray for cabling, 12" wide x 3" high, with two (2) barrier compartments for routing audio and video cabling related to instructional or medical simulation systems.
	Cable tray for cabling, 18" wide x 6" high, with three (3) barrier compartments for routing audio, video, and network cabling related to instructional or medical simulation systems.

AUDIOVISUAL KEY NOTES LEGEND

TAG	DESCRIPTION
1-1 QTY	Audiovisual equipment rack, full size rack.
1-2 QTY	Audiovisual equipment rack for millwork applications, small size rack.
1-3 QTY	Audiovisual equipment pivoting rack, full size rack.
1-4 QTY	Lectern, floor standing
1-5 QTY	Furniture grade rolling equipment cabinet

TAG	DESCRIPTION
2-1 QTY	Multi-discipline floor box or poke-thru.
2-2 QTY	Table connectivity hatch
2-3 QTY	Audiovisual in wall touch panel location. Coordinate height with architectural and ADA requirements.
2-4 QTY	Audiovisual wall plate connectivity location. Mounted building standard receptacle outlet height, unless otherwise indicated.
2-5 QTY	Audiovisual in wall button panel location. Coordinate height with architectural and ADA requirements.
3-1 QTY	Audiovisual tabletop audio conferencing unit.
3-2 QTY	Wireless microphone antenna, ceiling mounted, by Audiovisual Contractor, dimensioned location by Architect.
3-3 QTY	Ceiling mounted microphone, by Audiovisual Contractor, dimensioned location by Architect.

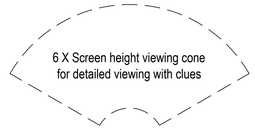
TAG	DESCRIPTION
4-1 QTY	Ceiling speaker assembly, with integrated enclosure; allow 12" clear A.F.C. for speaker enclosure.
4-2 QTY	IR radiator for Assistive Listening System, wall mount 6" below finished ceiling or ceiling mounted, as indicated on drawing.
5-1 QTY	Video camera with integrated Pan/Tilt/Zoom capability with wall mount, See Audiovisual detail sheets.
5-2 QTY	Video camera with integrated Pan/Tilt/Zoom capability with ceiling mount.
5-3 QTY	Fisheye or lipstick style fix focus camera with ceiling mount.
5-4 QTY	IP fix focus camera with ceiling mount.

TAG	DESCRIPTION
6-1 QTY	Flat-Panel Display, 40" nominal diagonal, with tilting wall mount. Wall blocking to support display weight required at this location (by others).
6-2 QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount. Wall blocking to support display weight required at this location (by others).
6-2A QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount and loudspeakers. Wall blocking to support display weight required at this location (by others).
6-3 QTY	Flat-Panel Display, 70" nominal diagonal, with tilting wall mount. Full height wall blocking to support display weight required at this location (by others).
7-1 QTY	Ceiling mounted data/video projector.
8-1 QTY	Motorized projection screen, with integrated low voltage interface with Viewing Area of 80" wide x 50" high.
8-2 QTY	Motorized projection screen, with integrated low voltage interface with Viewing Area of 110" wide x 69" high.

TAG	DESCRIPTION
9-1 QTY	Vertical cable trough from floor to cable tray above. 6" wide x 6" deep.

NOTE: ALL ELECTRICAL, CABLE TV AND NETWORK DEVICES SHOWN ONLY FOR COORDINATION PURPOSES. REFER TO E OR IT SERIES DRAWINGS FOR RESPECTIVE SCOPES OF WORK.

FOR REFERENCE ONLY



Project Title

NEW ACADEMIC BUILDING

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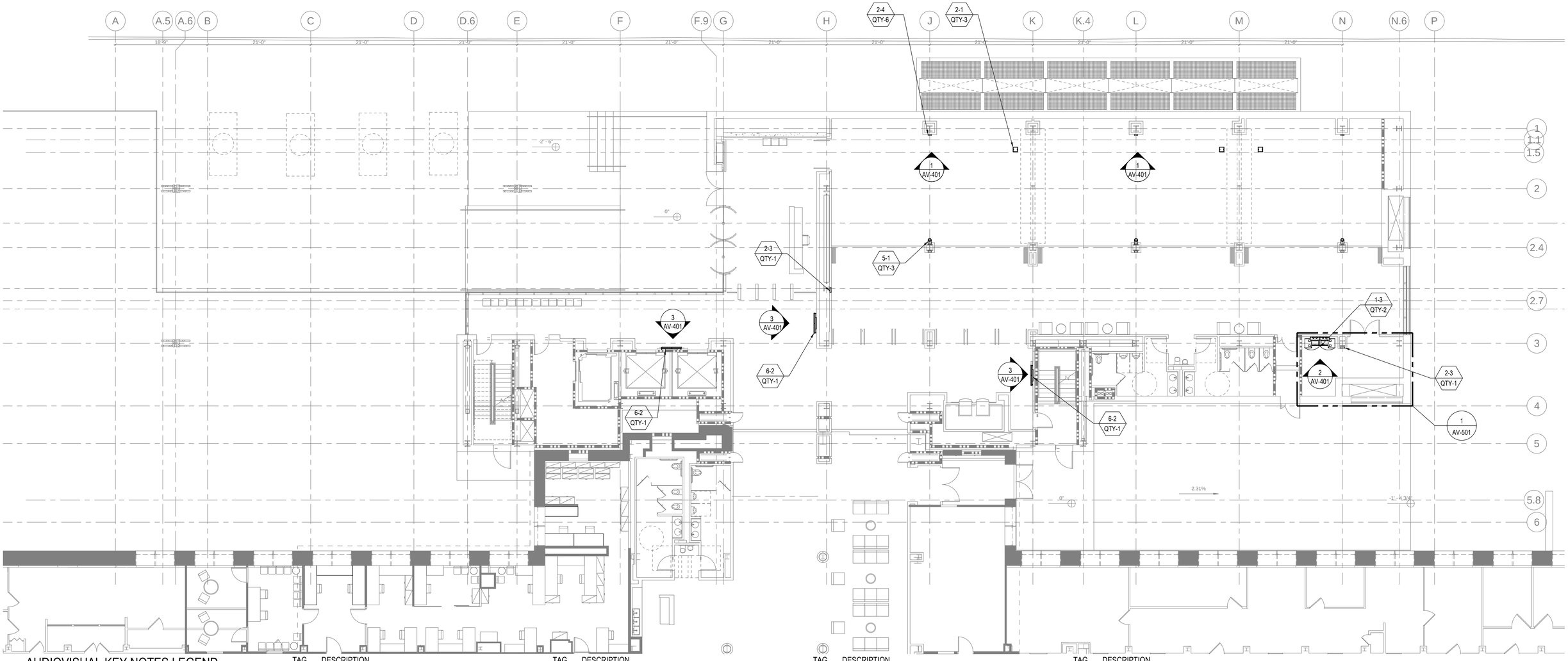
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

AUDIOVISUAL DESIGN
KEY NOTES AND ELECTRICAL SYMBOLS

Date: April 10, 2012
Scale: NTS
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-001



AUDIOVISUAL KEY NOTES LEGEND

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TAG	DESCRIPTION
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2-2 QTY	Table connectivity hatch
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TAG	DESCRIPTION
4-1 QTY	Ceiling speaker assembly, with integrated enclosure; allow 12" clear A.F.C. for speaker enclosure.
4-2 QTY	IR radiator for Assistive Listening System, wall mount 6" below finished ceiling or ceiling mounted, as indicated on drawing.
5-1 QTY	Video camera with integrated Pan/Tilt/Zoom capability with wall mount, See Audiovisual detail sheets.
5-2 QTY	Video camera with integrated Pan/Tilt/Zoom capability with ceiling mount.
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6-2 QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount. Wall blocking to support display weight required at this location (by others).
6-2A QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount and loudspeakers. Wall blocking to support display weight required at this location (by others).
6-3 QTY	Flat-Panel Display, 70" nominal diagonal, with tilting wall mount. Full height wall blocking to support display weight required at this location (by others).
7-1 QTY	Ceiling mounted data/video projector.
8-1 QTY	Motorized projection screen, with integrated low voltage interface with Viewing Area of 80" wide x 50" high.
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TAG	DESCRIPTION
9-1 QTY	Vertical cable trough from floor to cable tray above. 6" wide x 6" deep.

FOR REFERENCE ONLY

6 X Screen height viewing cone for detailed viewing with clues

Project Title

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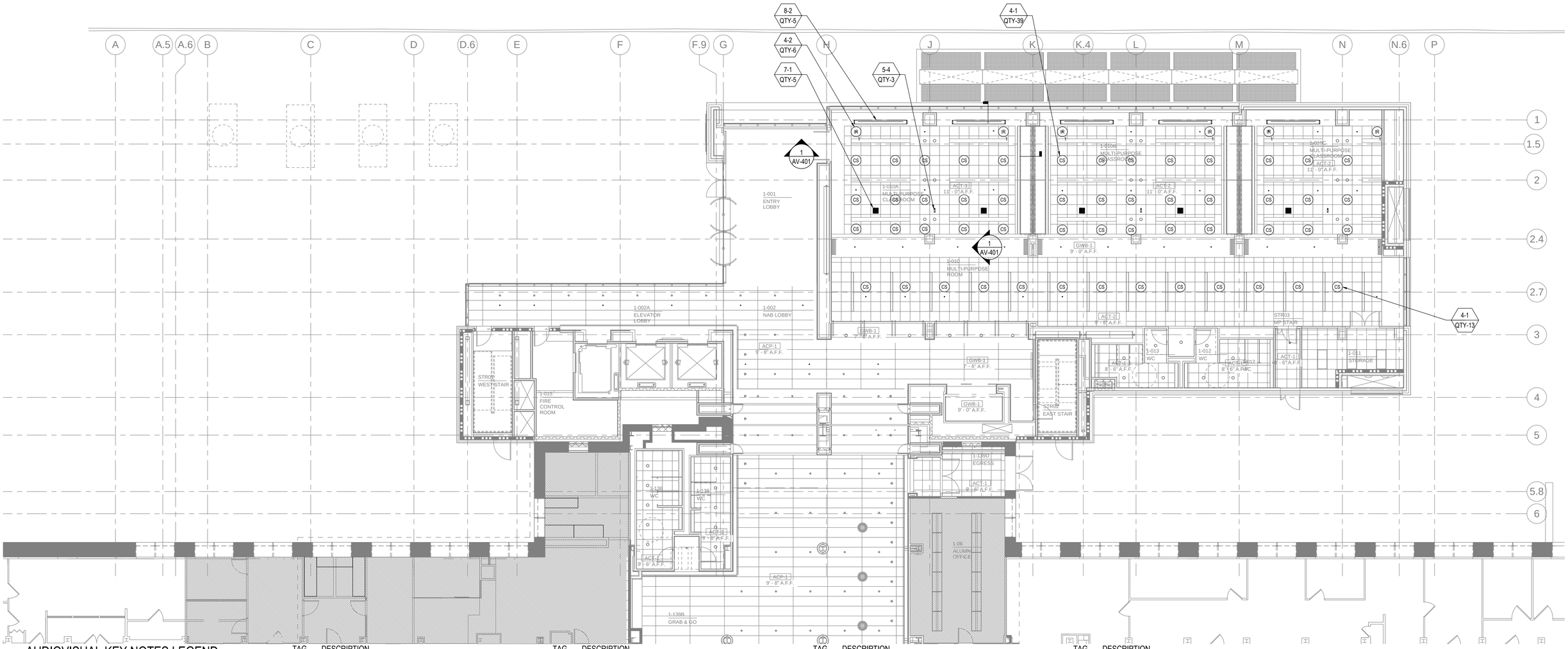
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
	RFI-470 RESPONSE	10/6/15
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

AUDIOVISUAL DESIGN
FACILITY FLOOR PLAN
FIRST FLOOR

Date: April 10, 2012
SUCF Project Number: 14A91
Sheet No.: AV-101.1
Scale: 1/8"=1'-0"
Ennead Project Number: 0917



AUDIOVISUAL KEY NOTES LEGEND

TAG	DESCRIPTION
1-1 QTY	Audiovisual equipment rack, full size rack.
1-2 QTY	Audiovisual equipment rack for millwork applications, small size rack.
1-3 QTY	Audiovisual equipment pivoting rack, full size rack.
1-4 QTY	Lectern, floor standing
1-5 QTY	Furniture grade rolling equipment cabinet
2-1 QTY	Multi-discipline floor box or poke-thru.
2-2 QTY	Table connectivity hatch
2-3 QTY	Audiovisual in wall touch panel location. Coordinate height with architectural and ADA requirements.
2-4 QTY	Audiovisual wall plate connectivity location. Mounted building standard receptacle outlet height, unless otherwise indicated.
2-5 QTY	Audiovisual in wall button panel location. Coordinate height with architectural and ADA requirements.
3-1 QTY	Audiovisual tabletop audio conferencing unit.
3-2 QTY	Wireless microphone antenna, ceiling mounted, by Audiovisual Contractor, dimensioned location by Architect.
3-3 QTY	Ceiling mounted microphone, by Audiovisual Contractor, dimensioned location by Architect.
4-1 QTY	Ceiling speaker assembly, with integrated enclosure; allow 12" clear A.F.C. for speaker enclosure.
4-2 QTY	IR radiator for Assistive Listening System, wall mount 6" below finished ceiling or ceiling mounted, as indicated on drawing.
5-1 QTY	Video camera with integrated Pan/Tilt/Zoom capability with wall mount, See Audiovisual detail sheets.
5-2 QTY	Video camera with integrated Pan/Tilt/Zoom capability with ceiling mount.
5-3 QTY	Fisheye or lipstick style fix focus camera with ceiling mount.
5-4 QTY	IP fix focus camera with ceiling mount.
6-1 QTY	Flat-Panel Display, 40" nominal diagonal, with tilting wall mount. Wall blocking to support display weight required at this location (by others).
6-2 QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount. Wall blocking to support display weight required at this location (by others).
6-2A QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount and loudspeakers. Wall blocking to support display weight required at this location (by others).
6-3 QTY	Flat-Panel Display, 70" nominal diagonal, with tilting wall mount. Full height wall blocking to support display weight required at this location (by others).
7-1 QTY	Ceiling mounted data/video projector.
8-1 QTY	Motorized projection screen, with integrated low voltage interface with Viewing Area of 80" wide x 50" high.
8-2 QTY	Motorized projection screen, with integrated low voltage interface with Viewing Area of 110" wide x 69" high.
9-1 QTY	Vertical cable trough from floor to cable tray above. 6" wide x 6" deep.

FOR REFERENCE ONLY

6 X Screen height viewing cone for detailed viewing with clues

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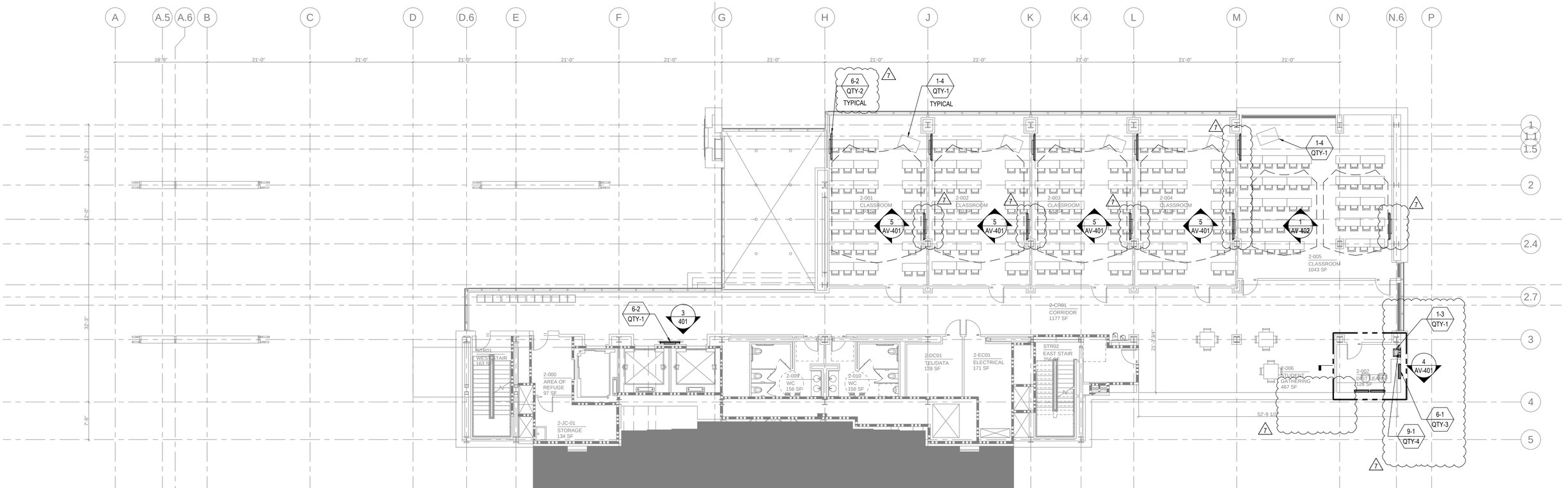
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN
FACILITY REFLECTED CEILING PLAN
FIRST FLOOR

Date: April 10, 2012
Scale: 1/8"=1'-0"
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-101.2



AUDIOVISUAL KEY NOTES LEGEND

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1-4 QTY	Lectern, floor standing
1-5 QTY	Furniture grade rolling equipment cabinet

TAG	DESCRIPTION
2-1 QTY	Multi-discipline floor box or poke-thru.
2-2 QTY	Table connectivity hatch
2-3 QTY	Audiovisual in wall touch panel location. Coordinate height with architectural and ADA requirements.
2-4 QTY	Audiovisual wall plate connectivity location. Mounted building standard receptacle outlet height, unless otherwise indicated.
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TAG	DESCRIPTION
4-1 QTY	Ceiling speaker assembly, with integrated enclosure; allow 12" clear A.F.C. for speaker enclosure.
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5-1 QTY	Video camera with integrated Pan/Tilt/Zoom capability with wall mount, See Audiovisual detail sheets.
5-2 QTY	Video camera with integrated Pan/Tilt/Zoom capability with ceiling mount.
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5-4 QTY	IP fix focus camera with ceiling mount.

TAG	DESCRIPTION
6-1 QTY	Flat-Panel Display, 40" nominal diagonal, with tilting wall mount. Wall blocking to support display weight required at this location (by others).
6-2 QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount. Wall blocking to support display weight required at this location (by others).
6-2A QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount and loudspeakers. Wall blocking to support display weight required at this location (by others).
6-3 QTY	Flat-Panel Display, 70" nominal diagonal, with tilting wall mount. Full height wall blocking to support display weight required at this location (by others).
7-1 QTY	Ceiling mounted data/video projector.
8-1 QTY	Motorized projection screen, with integrated low voltage interface with Viewing Area of 80" wide x 50" high.
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TAG	DESCRIPTION
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FOR REFERENCE ONLY

6 X Screen height viewing cone for detailed viewing with clues

F.9

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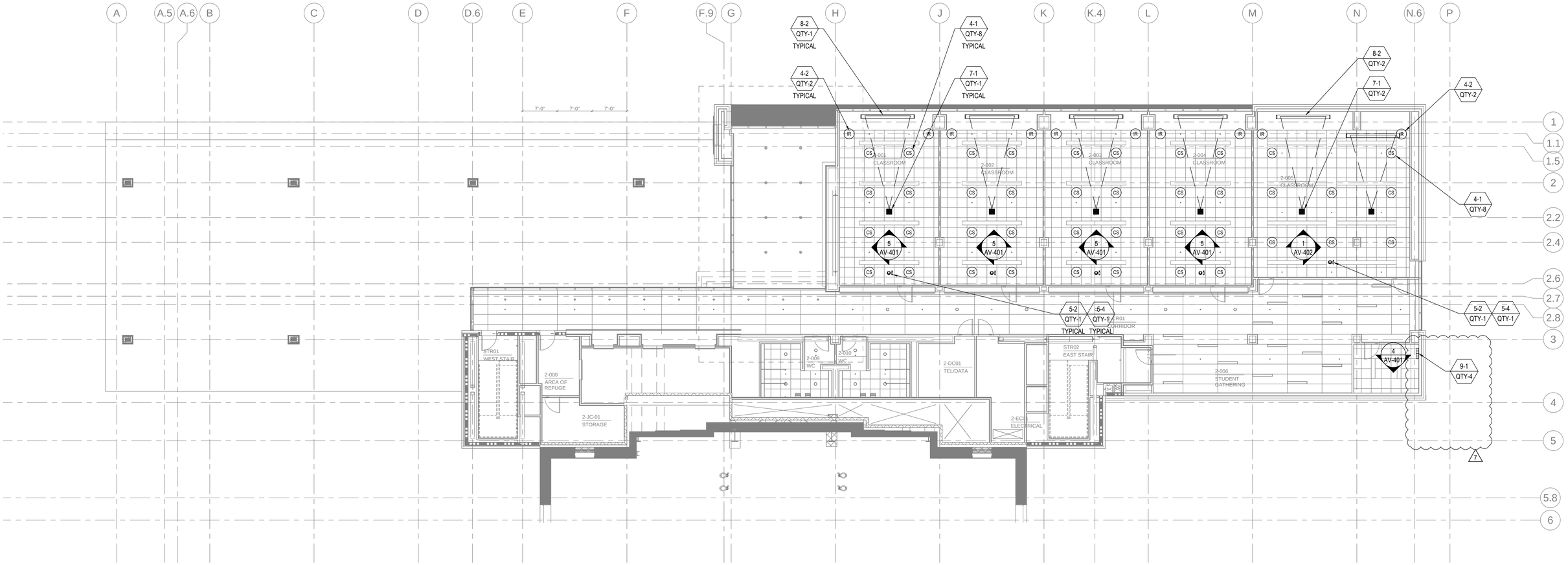
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN
FACILITY FLOOR PLAN
SECOND FLOOR

Date: April 10, 2012
Scale: 1/8"=1'-0"
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-102.1



AUDIOVISUAL KEY NOTES LEGEND

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1-5 QTY	Furniture grade rolling equipment cabinet

TAG	DESCRIPTION
2-1 QTY	Multi-discipline floor box or poke-thru.
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TAG	DESCRIPTION
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6 X Screen height viewing cone for detailed viewing with clues

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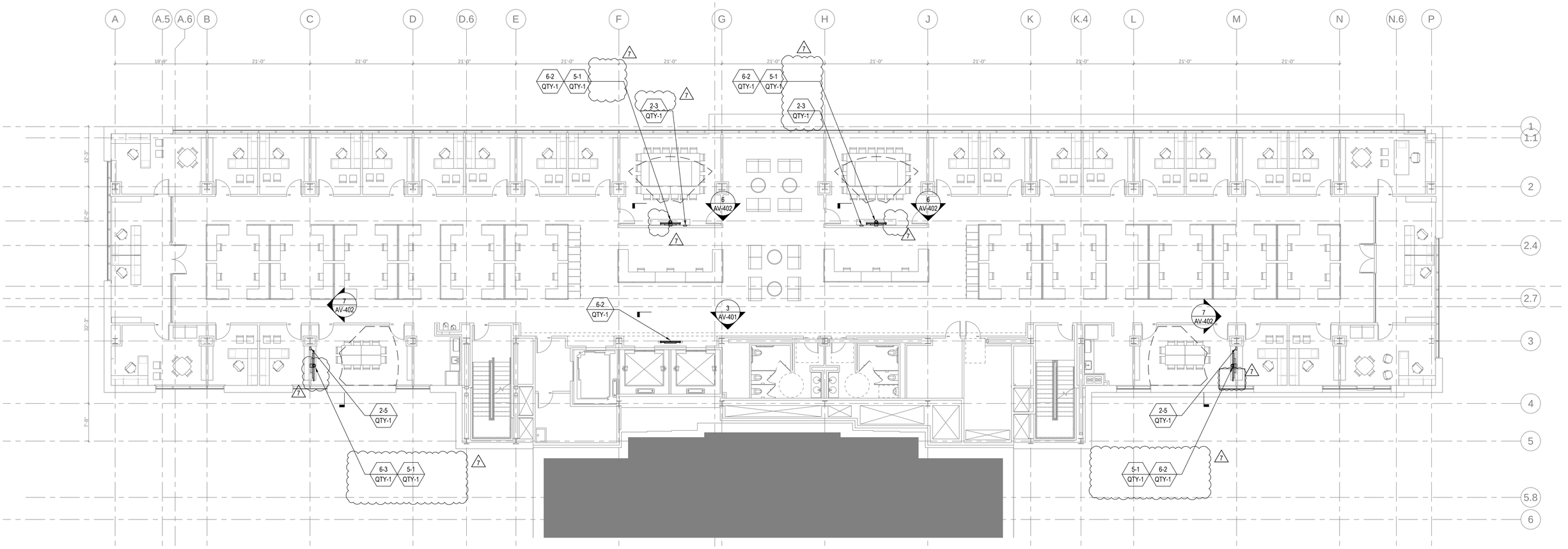
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

AUDIOVISUAL DESIGN
FACILITY REFLECTED CEILING PLAN
SECOND FLOOR

Date: April 10, 2012
Scale: 1/8"=1'-0"
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-102.2



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TAG	DESCRIPTION
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TAG	DESCRIPTION
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1	BID DOCUMENTS	4/10/12

Sheet Title

AUDIOVISUAL DESIGN
FACILITY FLOOR PLAN
FOURTH FLOOR

Date: April 10, 2012
SUCF Project Number: 14A91
Sheet No.: AV-104.1
Scale: 1/8"=1'-0"
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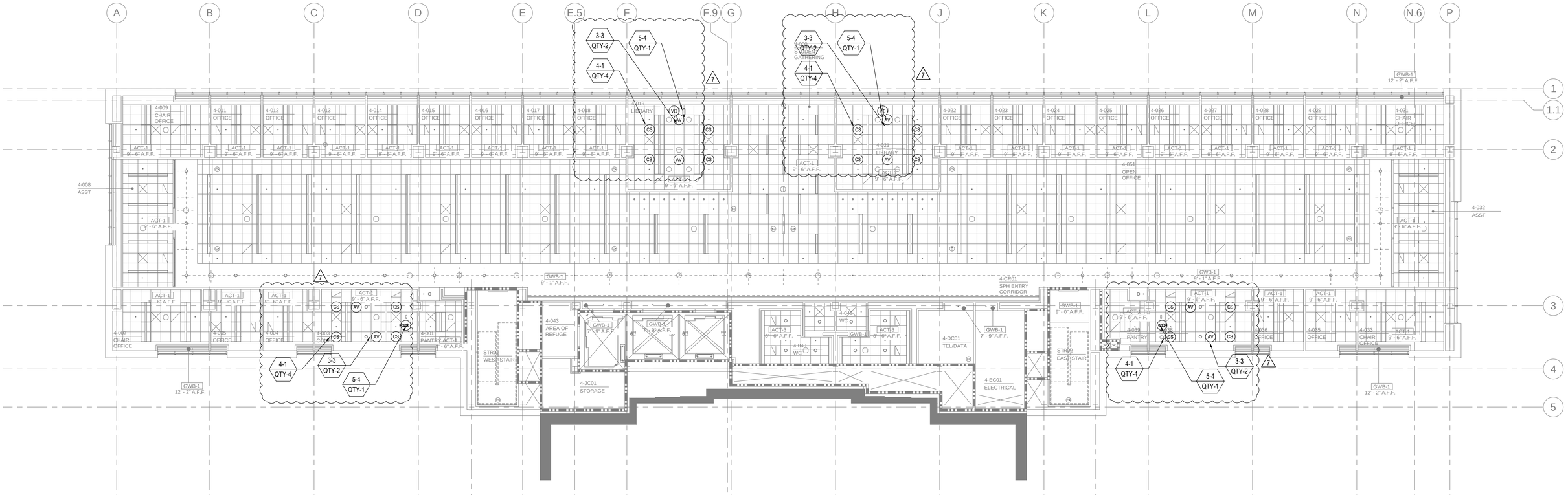

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3-2 QTY	Wireless microphone antenna, ceiling mounted, by Audiovisual Contractor, dimensioned location by Architect.
3-3 QTY	Ceiling mounted microphone, by Audiovisual Contractor, dimensioned location by Architect.

TAG	DESCRIPTION
4-1 QTY	Ceiling speaker assembly, with integrated enclosure; allow 12" clear A.F.C. for speaker enclosure.
4-2 QTY	IR radiator for Assistive Listening System, wall mount 6" below finished ceiling or ceiling mounted, as indicated on drawing.
5-1 QTY	Video camera with integrated Pan/Tilt/Zoom capability with wall mount, See Audiovisual detail sheets.
5-2 QTY	Video camera with integrated Pan/Tilt/Zoom capability with ceiling mount.
5-3 QTY	Fisheye or lipstick style fix focus camera with ceiling mount.
5-4 QTY	IP fix focus camera with ceiling mount.

TAG	DESCRIPTION
6-1 QTY	Flat-Panel Display, 40" nominal diagonal, with tilting wall mount. Wall blocking to support display weight required at this location (by others).
6-2 QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount. Wall blocking to support display weight required at this location (by others).
6-2A QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount and loudspeakers. Wall blocking to support display weight required at this location (by others).
6-3 QTY	Flat-Panel Display, 70" nominal diagonal, with tilting wall mount. Full height wall blocking to support display weight required at this location (by others).
7-1 QTY	Ceiling mounted data/video projector.
8-1 QTY	Motorized projection screen, with integrated low voltage interface with Viewing Area of 80" wide x 50" high.
8-2 QTY	Motorized projection screen, with integrated low voltage interface with Viewing Area of 110" wide x 69" high.

TAG	DESCRIPTION
9-1 QTY	Vertical cable trough from floor to cable tray above. 6" wide x 6" deep.

FOR REFERENCE ONLY

6 X Screen height viewing cone for detailed viewing with clues

Project Title

NEW ACADEMIC BUILDING

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Seal

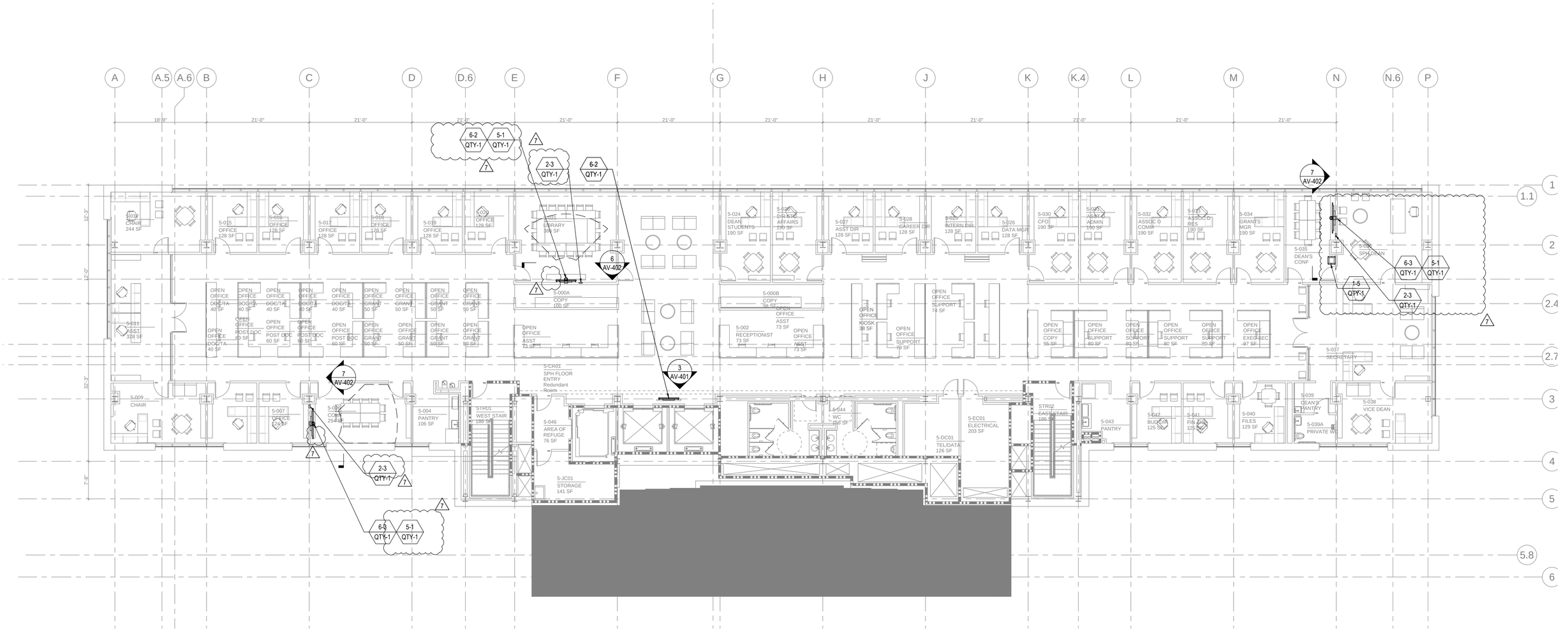
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

AUDIOVISUAL DESIGN
FACILITY REFLECTED CEILING PLAN
FOURTH FLOOR

Date: April 10, 2012
Scale: 1/8"=1'-0"
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-104.2



AUDIOVISUAL KEY NOTES LEGEND

TAG	DESCRIPTION
1-1 QTY	Audiovisual equipment rack, full size rack.
1-2 QTY	Audiovisual equipment rack for millwork applications, small size rack.
1-3 QTY	Audiovisual equipment pivoting rack, full size rack.
1-4 QTY	Lectern, floor standing
1-5 QTY	Furniture grade rolling equipment cabinet

TAG	DESCRIPTION
2-1 QTY	Multi-discipline floor box or poke-thru.
2-2 QTY	Table connectivity hatch
2-3 QTY	Audiovisual in wall touch panel location. Coordinate height with architectural and ADA requirements.
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8-2 QTY	Motorized projection screen, with integrated low voltage interface with Viewing Area of 110" wide x 69" high.

TAG	DESCRIPTION
9-1 QTY	Vertical cable trough from floor to cable tray above. 6" wide x 6" deep.

FOR REFERENCE ONLY

6 X Screen height viewing cone for detailed viewing with clues

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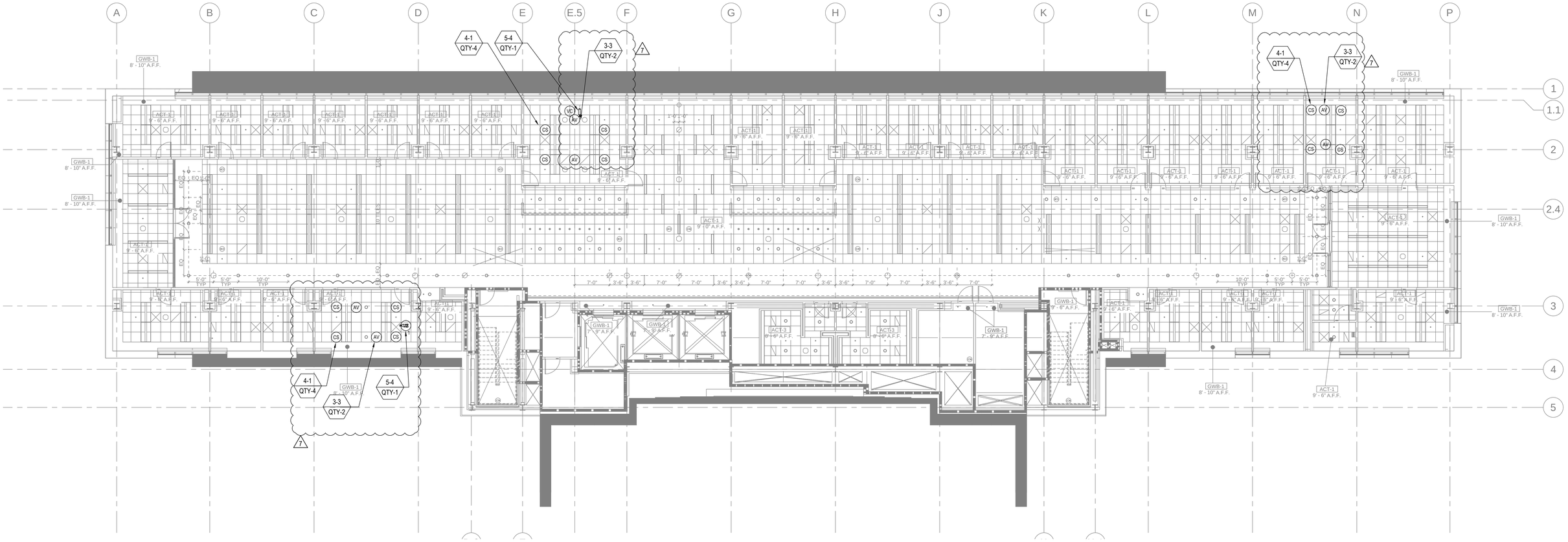
Seal

Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
	RFI-470 RESPONSE	10/6/15
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN
FACILITY FLOOR PLAN
FIFTH FLOOR

Date: April 10, 2012
Scale: 1/8"=1'-0"
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-105.1



AUDIOVISUAL KEY NOTES LEGEND

TAG	DESCRIPTION
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1-4 QTY	Lectern, floor standing
1-5 QTY	Furniture grade rolling equipment cabinet

TAG	DESCRIPTION
2-1 QTY	Multi-discipline floor box or poke-thru.
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TAG	DESCRIPTION
9-1 QTY	Vertical cable trough from floor to cable tray above. 6" wide x 6" deep.

FOR REFERENCE ONLY

6 X Screen height viewing cone for detailed viewing with clues

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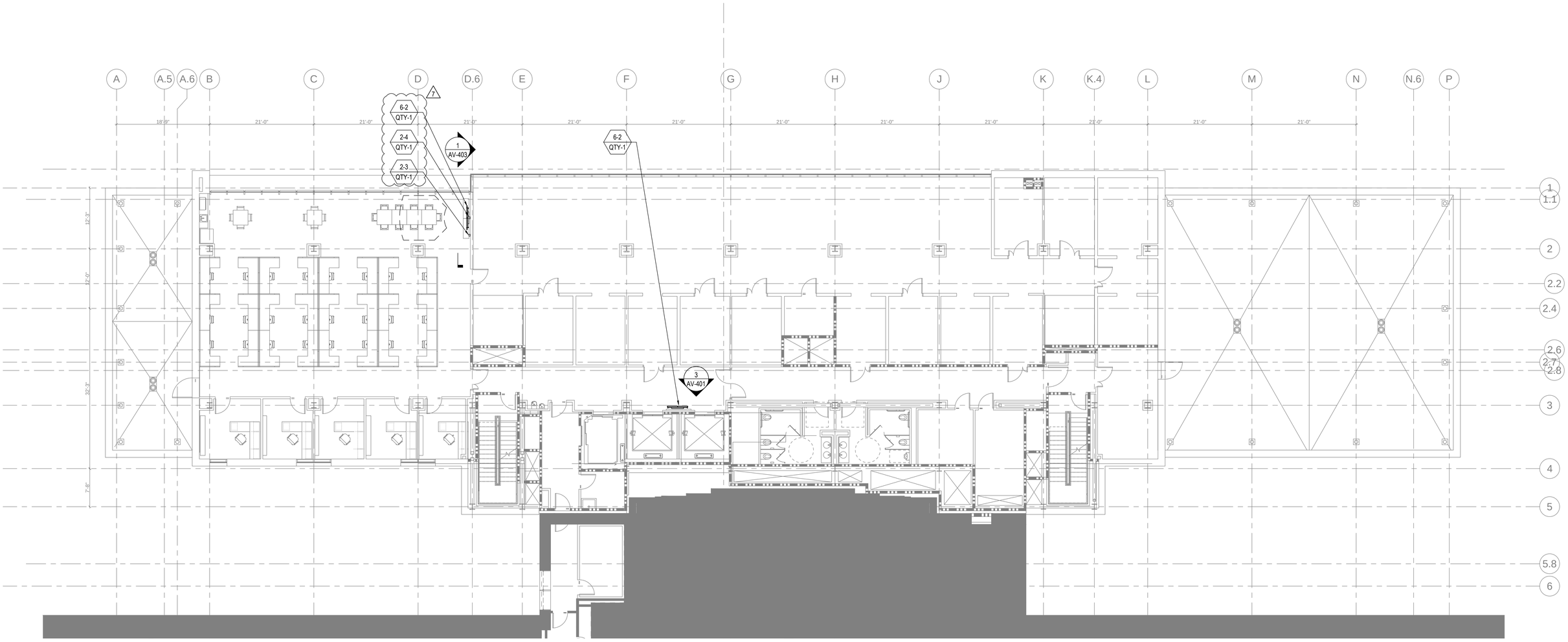
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN
FACILITY REFLECTED CEILING PLAN
FIFTH FLOOR

Date: April 10, 2012
Scale: 1/8"=1'-0"
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-105.2



AUDIOVISUAL KEY NOTES LEGEND

TAG	DESCRIPTION
1-1 QTY	Audiovisual equipment rack, full size rack.
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TAG	DESCRIPTION
2-1 QTY	Multi-discipline floor box or poke-thru.
2-2 QTY	Table connectivity hatch
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TAG	DESCRIPTION
9-1 QTY	Vertical cable trough from floor to cable tray above. 6" wide x 6" deep.

FOR REFERENCE ONLY

6 X Screen height viewing cone for detailed viewing with clues

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Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN
FACILITY FLOOR PLAN
SEVENTH FLOOR

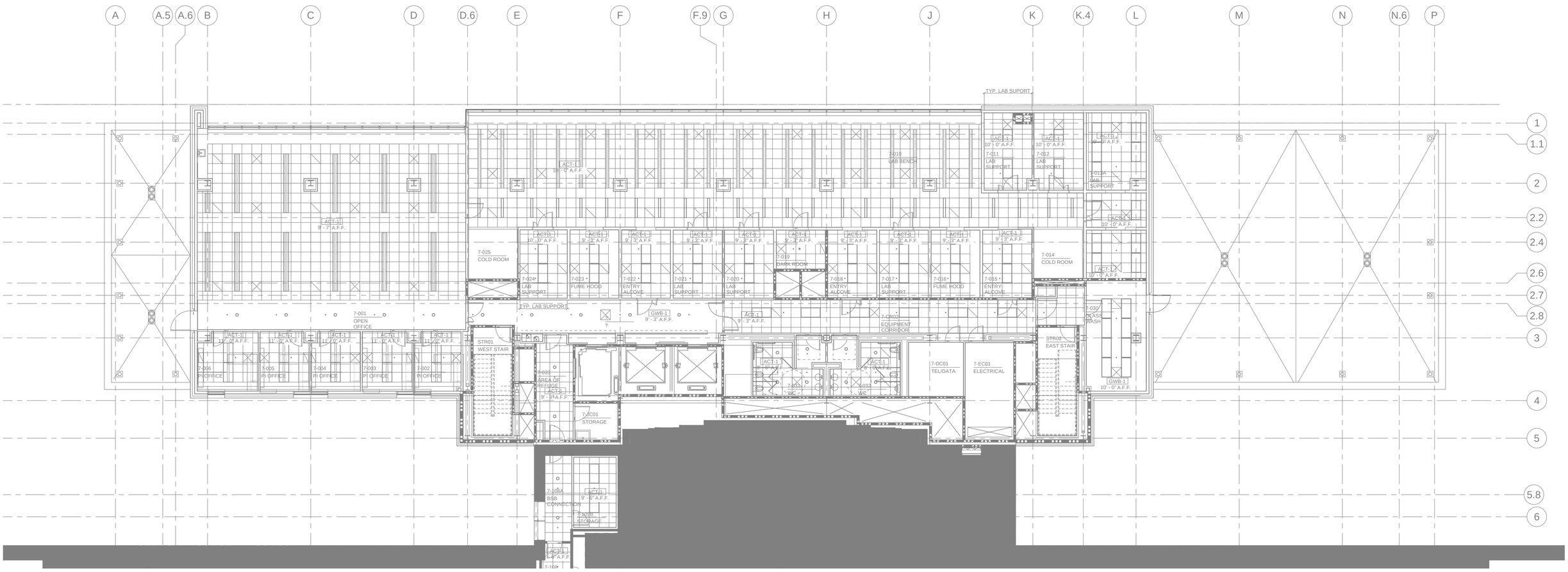
Date
April 10, 2012

Scale
1/8"=1'-0"

SUCF Project Number
14A91

Ennead Project Number
0917

Sheet No.
AV-107.1



NO SCOPE THIS SHEET

AUDIOVISUAL KEY NOTES LEGEND

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TAG	DESCRIPTION
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FOR REFERENCE ONLY

6 X Screen height viewing cone for detailed viewing with clues

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Seal

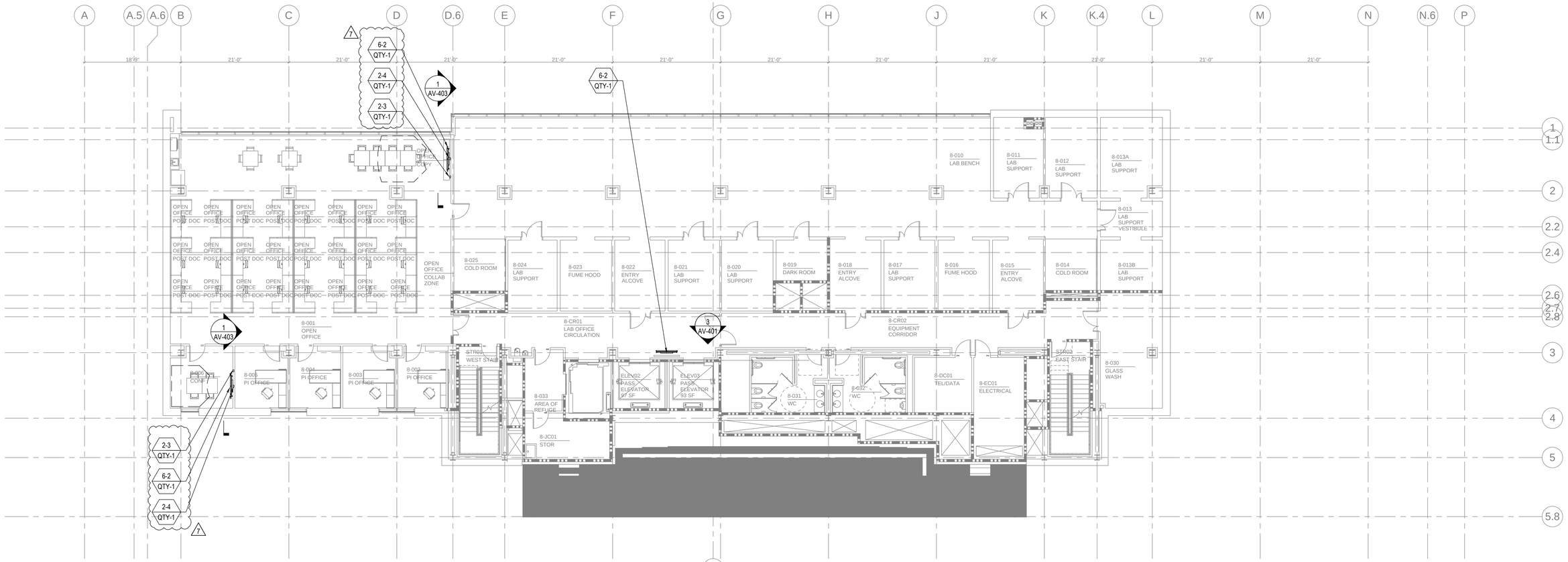
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

AUDIOVISUAL DESIGN
FACILITY REFLECTED CEILING PLAN
SEVENTH FLOOR

Date: April 10, 2012
Scale: 1/8"=1'-0"
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-107.2



AUDIOVISUAL KEY NOTES LEGEND

TAG	DESCRIPTION
1-1 QTY	Audiovisual equipment rack, full size rack.
1-2 QTY	Audiovisual equipment rack for millwork applications, small size rack.
1-3 QTY	Audiovisual equipment pivoting rack, full size rack.
1-4 QTY	Lectern, floor standing
1-5 QTY	Furniture grade rolling equipment cabinet
2-1 QTY	Multi-discipline floor box or poke-thru.
2-2 QTY	Table connectivity hatch
2-3 QTY	Audiovisual in wall touch panel location. Coordinate height with architectural and ADA requirements.
2-4 QTY	Audiovisual wall plate connectivity location. Mounted building standard receptacle outlet height, unless otherwise indicated.
2-5 QTY	Audiovisual in wall button panel location. Coordinate height with architectural and ADA requirements.
3-1 QTY	Audiovisual tabletop audio conferencing unit.
3-2 QTY	Wireless microphone antenna, ceiling mounted, by Audiovisual Contractor, dimensioned location by Architect.
3-3 QTY	Ceiling mounted microphone, by Audiovisual Contractor, dimensioned location by Architect.
4-1 QTY	Ceiling speaker assembly, with integrated enclosure; allow 12" clear A.F.C. for speaker enclosure.
4-2 QTY	IR radiator for Assistive Listening System, wall mount 6" below finished ceiling or ceiling mounted, as indicated on drawing.
5-1 QTY	Video camera with integrated Pan/Tilt/Zoom capability with wall mount, See Audiovisual detail sheets.
5-2 QTY	Video camera with integrated Pan/Tilt/Zoom capability with ceiling mount.
5-3 QTY	Fisheye or lipstick style fix focus camera with ceiling mount.
5-4 QTY	IP fix focus camera with ceiling mount.
6-1 QTY	Flat-Panel Display, 40" nominal diagonal, with tilting wall mount. Wall blocking to support display weight required at this location (by others).
6-2 QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount. Wall blocking to support display weight required at this location (by others).
6-2A QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount and loudspeakers. Wall blocking to support display weight required at this location (by others).
6-3 QTY	Flat-Panel Display, 70" nominal diagonal, with tilting wall mount. Full height wall blocking to support display weight required at this location (by others).
7-1 QTY	Ceiling mounted data/video projector.
8-1 QTY	Motorized projection screen, with integrated low voltage interface with Viewing Area of 80" wide x 50" high.
8-2 QTY	Motorized projection screen, with integrated low voltage interface with Viewing Area of 110" wide x 69" high.
9-1 QTY	Vertical cable trough from floor to cable tray above. 6" wide x 6" deep.

FOR REFERENCE ONLY

6 X Screen height viewing cone for detailed viewing with clues

Project Title
NEW ACADEMIC BUILDING
School of Public Health, State University of New York Health Science Center at Brooklyn
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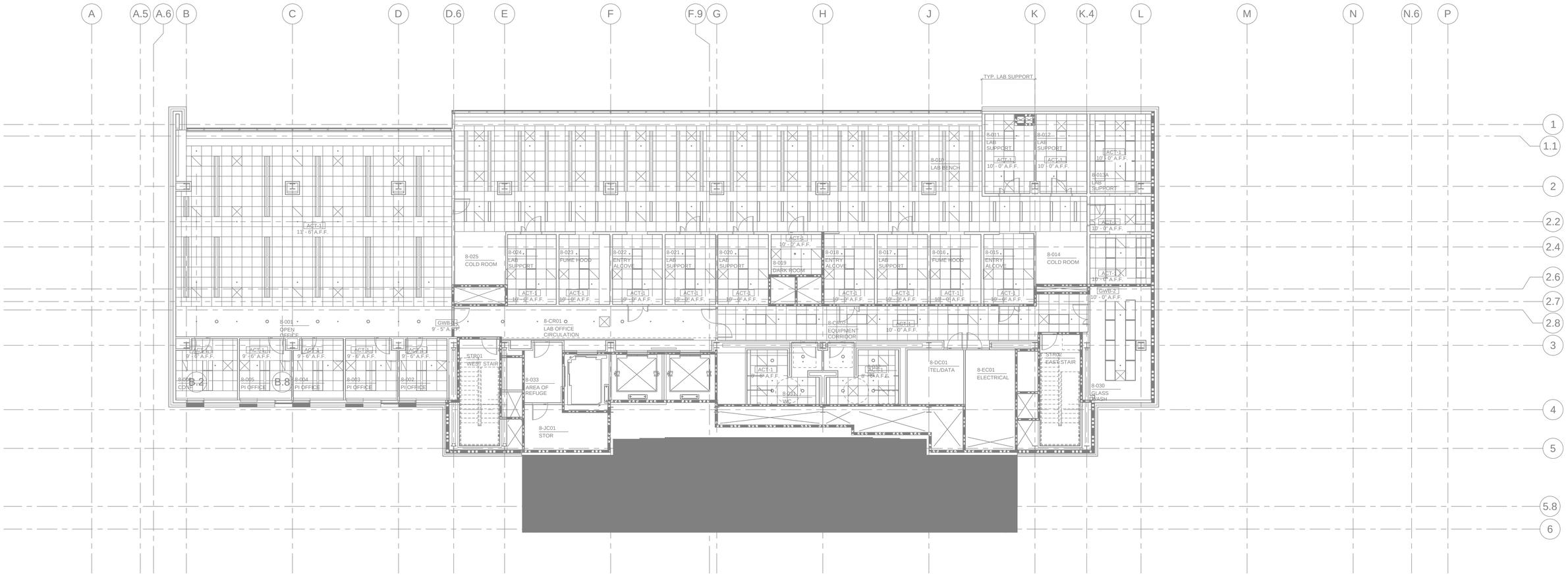
Seal

Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN
FACILITY FLOOR PLAN
EIGHTH FLOOR

Date: April 10, 2012
SUCF Project Number: 14A91
Sheet No.: AV-108.1
Scale: 1/8"=1'-0"
Ennead Project Number: 0917



NO SCOPE THIS SHEET

AUDIOVISUAL KEY NOTES LEGEND

TAG	DESCRIPTION
1-1 QTY	Audiovisual equipment rack, full size rack.
1-2 QTY	Audiovisual equipment rack for millwork applications, small size rack.
1-3 QTY	Audiovisual equipment pivoting rack, full size rack.
1-4 QTY	Lectern, floor standing
1-5 QTY	Furniture grade rolling equipment cabinet

TAG	DESCRIPTION
2-1 QTY	Multi-discipline floor box or poke-thru.
2-2 QTY	Table connectivity hatch
2-3 QTY	Audiovisual in wall touch panel location. Coordinate height with architectural and ADA requirements.
2-4 QTY	Audiovisual wall plate connectivity location. Mounted building standard receptacle outlet height, unless otherwise indicated.
2-5 QTY	Audiovisual in wall button panel location. Coordinate height with architectural and ADA requirements.
3-1 QTY	Audiovisual tabletop audio conferencing unit.
3-2 QTY	Wireless microphone antenna, ceiling mounted, by Audiovisual Contractor, dimensioned location by Architect.
3-3 QTY	Ceiling mounted microphone, by Audiovisual Contractor, dimensioned location by Architect.

TAG	DESCRIPTION
4-1 QTY	Ceiling speaker assembly, with integrated enclosure; allow 12" clear A.F.C. for speaker enclosure.
4-2 QTY	IR radiator for Assistive Listening System, wall mount 6" below finished ceiling or ceiling mounted, as indicated on drawing.
5-1 QTY	Video camera with integrated Pan/Tilt/Zoom capability with wall mount, See Audiovisual detail sheets.
5-2 QTY	Video camera with integrated Pan/Tilt/Zoom capability with ceiling mount.
5-3 QTY	Fisheye or lipstick style fix focus camera with ceiling mount.
5-4 QTY	IP fix focus camera with ceiling mount.

TAG	DESCRIPTION
6-1 QTY	Flat-Panel Display, 40" nominal diagonal, with tilting wall mount. Wall blocking to support display weight required at this location (by others).
6-2 QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount. Wall blocking to support display weight required at this location (by others).
6-2A QTY	Flat-Panel Display, 55" nominal diagonal, with tilting wall mount and loudspeakers. Wall blocking to support display weight required at this location (by others).
6-3 QTY	Flat-Panel Display, 70" nominal diagonal, with tilting wall mount. Full height wall blocking to support display weight required at this location (by others).
7-1 QTY	Ceiling mounted data/video projector.
8-1 QTY	Motorized projection screen, with integrated low voltage interface with Viewing Area of 80" wide x 50" high.
8-2 QTY	Motorized projection screen, with integrated low voltage interface with Viewing Area of 110" wide x 69" high.

TAG	DESCRIPTION
9-1 QTY	Vertical cable trough from floor to cable tray above. 6" wide x 6" deep.

FOR REFERENCE ONLY

6 X Screen height viewing cone for detailed viewing with clues

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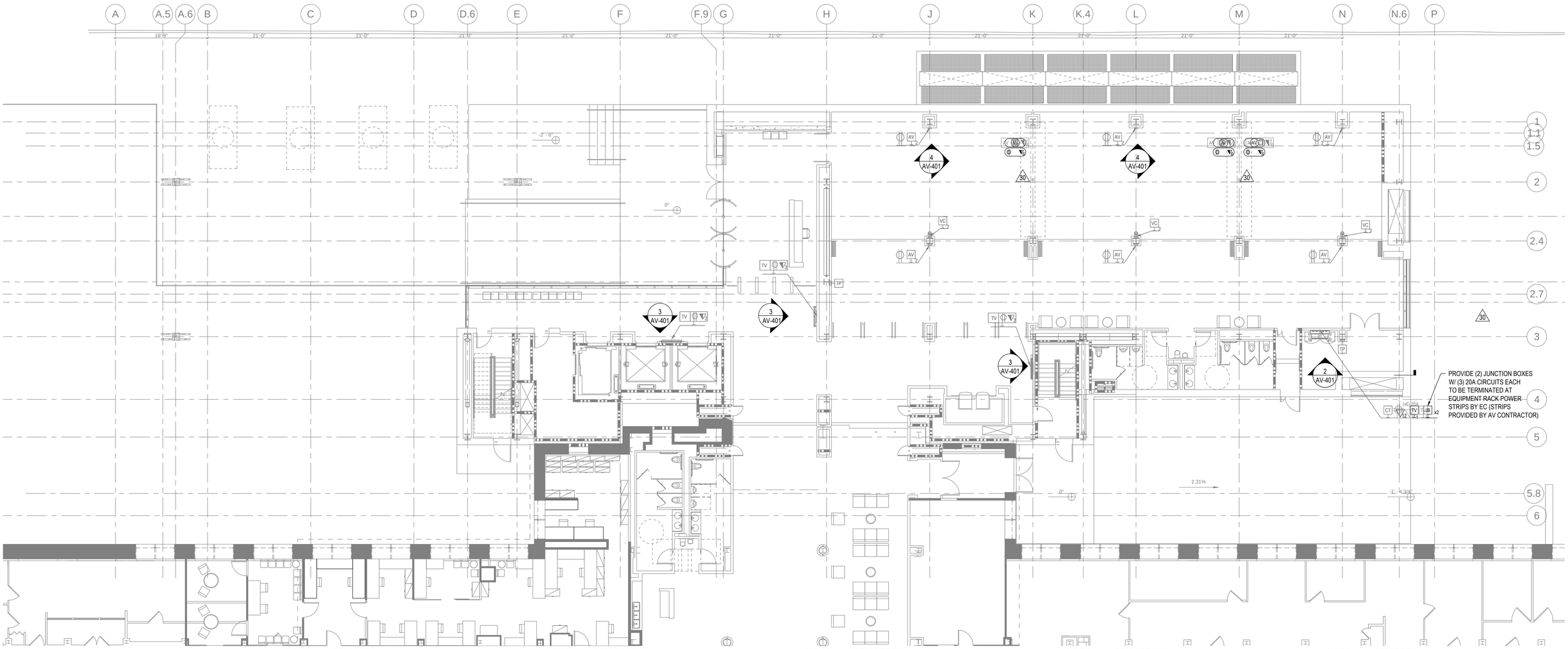
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

AUDIOVISUAL DESIGN
FACILITY REFLECTED CEILING PLAN
EIGHTH FLOOR

Date: April 10, 2012
Scale: 1/8"=1'-0"
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-108.2



AUDIOVISUAL ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
AV	Multi-discipline Floor box, with hinged cover plate and carpet flange; with divided compartments for shared access with voice, data and 120VAC power. Flush mount in floor unless otherwise indicated. Refer to Electrical drawings for floor box requirements. Subnumber indicates data port requirements.
AV	Poke Thru. Subnumber indicates data port requirements.
AV	Conduit stub-up under the millwork, for audiovisual cabling.
TV	Junction box, with removable cover for cable television receptacle. Surface mount on slab unless otherwise indicated.
	Telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Surface mount on slab unless otherwise indicated. Subnumber indicates port requirements.
CT	Screw cover junction box for audiovisual cable/conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 20 Amp. Surface mount on slab unless otherwise indicated.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.

SYMBOL	DESCRIPTION
VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
CT	Screw cover junction box for audiovisual conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
TV AV	Multi-discipline Wall box; with divided compartments for shared access with data and 120VAC power. Mount flush with finished wall treatment unless otherwise indicated. Subnumber indicates port requirements (if applicable). See Audiovisual Detail Sheets.
IR	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for assistive listening emitter. Mount flush with finished wall treatment, 6" below finished ceiling unless otherwise indicated. Subnumber indicates number of gang.
TP	Back box for wall-mounted audiovisual control system touch panel . Back box to be OEM by manufacturer; referenced to model number. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.

SYMBOL	DESCRIPTION
BP	Back box for wall-mounted audiovisual control system button panel . Subnumber indicates number of gang. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.
TV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for television receiver receptacle. Subnumber indicates number of gang. See Audiovisual detail sheets.
AV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for audiovisual receptacles. Mount flush with finished wall treatment. Subnumber indicates number of gang. See Audiovisual detail sheets.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.
R/L	Wall switch for projection screen, raise/stop/lower; supplied with screen. Mount flush with finished wall treatment, at base building electrical switch height unless otherwise indicated.
	Wall-mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements. See Audiovisual detail sheets.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, quad, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.

SYMBOL	DESCRIPTION
M PS	Projection screen, projector lift or shade with low-voltage interface, supplied with device. Mount above finished ceiling unless otherwise indicated. Maintenance access to box shall be provided in non-accessible ceilings. Provide utility-grade 120VAC unless otherwise indicated.
CS	Ceiling speaker with integrated enclosure, grille and grid support. Mount flush with finished ceiling, as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer. See Audiovisual Detail Sheets.
IR	Ceiling surface mounted IR emitter for assistive listening, as shown on the Architectural ceiling plans, unless otherwise indicated. See Audiovisual Detail Sheets.
AV	Ceiling mounted gangable junction box, for Audiovisual device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.
VC	Ceiling mounted gangable junction box, for video camera device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount flush with finished ceiling unless otherwise indicated.
	Power receptacle (Utility), duplex, 120 VAC, 15 Amp. Surface mount on slab unless otherwise indicated.
	Ceiling mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise indicated. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements.
	Cable tray for cabling, 12" wide x 3" high, with two (2) barrier compartments for routing audio and video cabling related to instructional or medical simulation systems.
	Cable tray for cabling, 18" wide x 6" high, with three (3) barrier compartments for routing audio, video, and network cabling related to instructional or medical simulation systems.

Project Title

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Seal

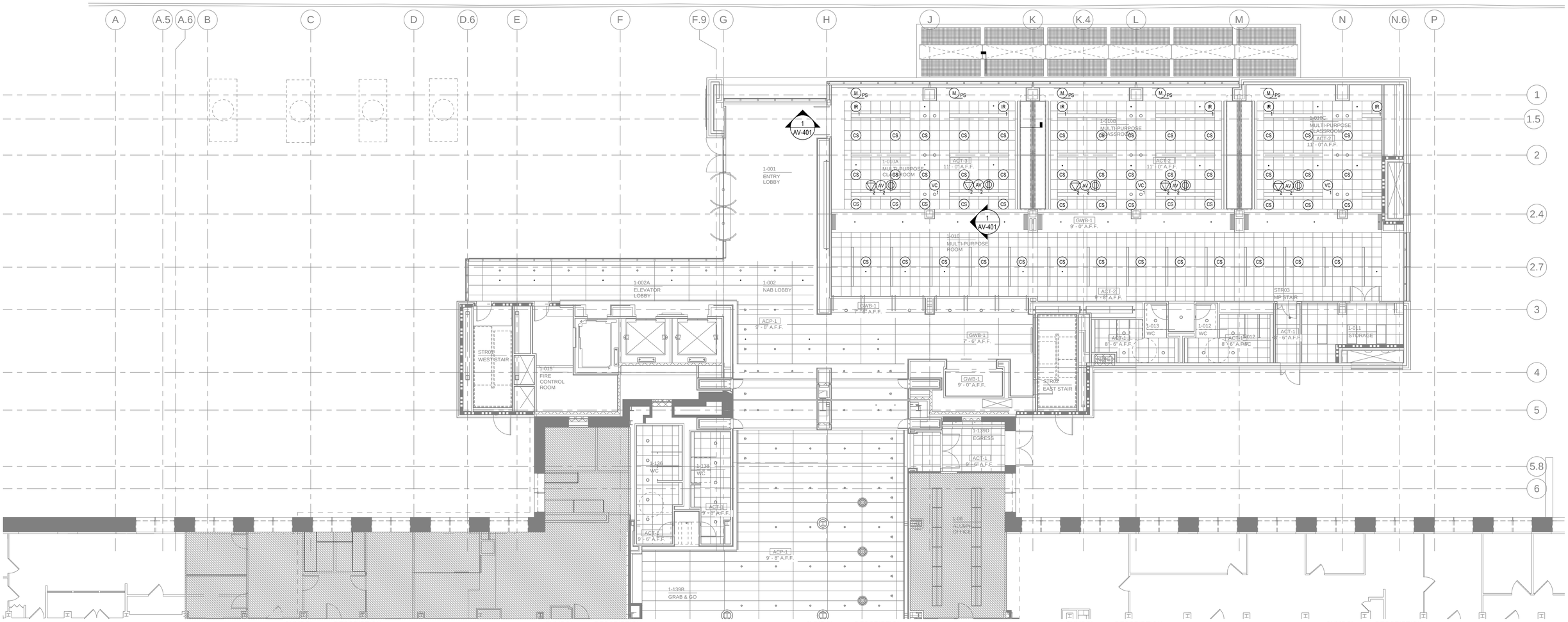
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
30	BULLETIN #30	5/10/13
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

AUDIOVISUAL DESIGN
ELECTRICAL FLOOR PLAN
FIRST FLOOR

Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	
Scale	Ennead Project Number	
1/8"=1'-0"	0917	AV-201.1



AUDIOVISUAL ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
AV	Multi-discipline Floor box, with hinged cover plate and carpet flange; with divided compartments for shared access with voice, data and 120VAC power. Flush mount in floor unless otherwise indicated. Refer to Electrical drawings for floor box requirements. Subnumber indicates data port requirements.
AV	Poke Thru. Subnumber indicates data port requirements.
AV	Conduit stub-up under the millwork, for audiovisual cabling.
TV	Junction box, with removable cover for cable television receptacle. Surface mount on slab unless otherwise indicated.
	Telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Surface mount on slab unless otherwise indicated. Subnumber indicates port requirements.
CT	Screw cover junction box for audiovisual cable/conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 20 Amp. Surface mount on slab unless otherwise indicated.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.

SYMBOL	DESCRIPTION
VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
CT	Screw cover junction box for audiovisual conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
TV AV	Multi-discipline Wall box; with divided compartments for shared access with data and 120VAC power. Mount flush with finished wall treatment unless otherwise indicated. Subnumber indicates port requirements (if applicable). See Audiovisual Detail Sheets.
IR	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for assistive listening emitter. Mount flush with finished wall treatment, 6" below finished ceiling unless otherwise indicated. Subnumber indicates number of gang.
TP	Back box for wall-mounted audiovisual control system touch panel . Back box to be OEM by manufacturer; referenced to model number. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.

SYMBOL	DESCRIPTION
BP	Back box for wall-mounted audiovisual control system button panel . Subnumber indicates number of gang. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.
TV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for television receiver receptacle. Subnumber indicates number of gang. See Audiovisual detail sheets.
AV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for audiovisual receptacles. Mount flush with finished wall treatment. Subnumber indicates number of gang. See Audiovisual detail sheets.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.
R/L	Wall switch for projection screen, raise/stop/lower; supplied with screen. Mount flush with finished wall treatment, at base building electrical switch height unless otherwise indicated.
	Wall-mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements. See Audiovisual detail sheets.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, quad, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.

SYMBOL	DESCRIPTION
M PS	Projection screen, projector lift or shade with low-voltage interface, supplied with device. Mount above finished ceiling unless otherwise indicated. Maintenance access to box shall be provided in non-accessible ceilings. Provide utility-grade 120VAC unless otherwise indicated.
CS	Ceiling speaker with integrated enclosure, grille and grid support. Mount flush with finished ceiling, as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer. See Audiovisual Detail Sheets.
IR	Ceiling surface mounted IR emitter for assistive listening, as shown on the Architectural ceiling plans, unless otherwise indicated. See Audiovisual Detail Sheets.
AV	Ceiling mounted gangable junction box, for Audiovisual device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.
VC	Ceiling mounted gangable junction box, for video camera device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount flush with finished ceiling unless otherwise indicated.
	Power receptacle (Utility), duplex, 120 VAC, 15 Amp. Surface mount on slab unless otherwise indicated.
	Ceiling mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise indicated. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements.
	Cable tray for cabling, 12" wide x 3" high, with two (2) barrier compartments for routing audio and video cabling related to instructional or medical simulation systems.
	Cable tray for cabling, 18" wide x 6" high, with three (3) barrier compartments for routing audio, video, and network cabling related to instructional or medical simulation systems.

Project Title
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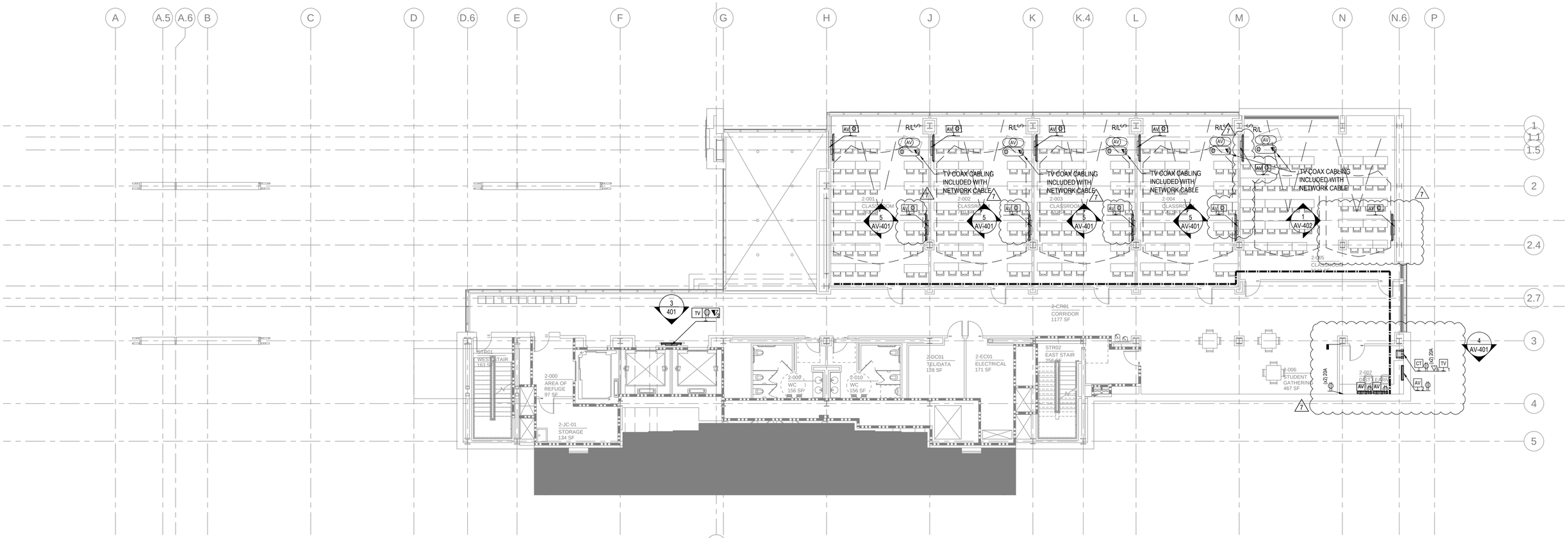
Seal

Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN
ELECTRICAL REFLECTED CEILING PLAN
FIRST FLOOR

Date: April 10, 2012
Scale: 1/8"=1'-0"
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-201.2



AUDIOVISUAL ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
AV	Multi-discipline Floor box, with hinged cover plate and carpet flange; with divided compartments for shared access with voice, data and 120VAC power. Flush mount in floor unless otherwise indicated. Refer to Electrical drawings for floor box requirements. Subnumber indicates data port requirements.
AV	Poke Thru. Subnumber indicates data port requirements.
AV	Conduit stub-up under the millwork, for audiovisual cabling.
TV	Junction box, with removable cover for cable television receptacle. Surface mount on slab unless otherwise indicated.
	Telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Surface mount on slab unless otherwise indicated. Subnumber indicates port requirements.
CT	Screw cover junction box for audiovisual cable/conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 20 Amp. Surface mount on slab unless otherwise indicated.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.

SYMBOL	DESCRIPTION
VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
CT	Screw cover junction box for audiovisual conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
TV	Multi-discipline Wall box; with divided compartments for shared access with data and 120VAC power. Mount flush with finished wall treatment unless otherwise indicated. Subnumber indicates port requirements (if applicable). See Audiovisual Detail Sheets.
AV	
IR	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for assistive listening emitter. Mount flush with finished wall treatment, 6" below finished ceiling unless otherwise indicated. Subnumber indicates number of gang.
TP	Back box for wall-mounted audiovisual control system touch panel . Back box to be OEM by manufacturer; referenced to model number. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.

SYMBOL	DESCRIPTION
BP	Back box for wall-mounted audiovisual control system button panel . Subnumber indicates number of gang. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.
TV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for television receiver receptacle. Subnumber indicates number of gang. See Audiovisual detail sheets.
AV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for audiovisual receptacles. Mount flush with finished wall treatment. Subnumber indicates number of gang. See Audiovisual detail sheets.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.
R/L	Wall switch for projection screen, raise/stop/lower; supplied with screen. Mount flush with finished wall treatment, at base building electrical switch height unless otherwise indicated.
	Wall-mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements. See Audiovisual detail sheets.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, quad, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.

SYMBOL	DESCRIPTION
M PS	Projection screen, projector lift or shade with low-voltage interface, supplied with device. Mount above finished ceiling unless otherwise indicated. Maintenance access to box shall be provided in non-accessible ceilings. Provide utility-grade 120VAC unless otherwise indicated.
CS	Ceiling speaker with integrated enclosure, grille and grid support. Mount flush with finished ceiling, as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer. See Audiovisual Detail Sheets.
IR	Ceiling surface mounted IR emitter for assistive listening, as shown on the Architectural ceiling plans, unless otherwise indicated. See Audiovisual Detail Sheets.
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Seal

Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
7	ISSUED FOR AV BID	12/16/16
30	BULLETIN #30	5/10/13
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

AUDIOVISUAL DESIGN
ELECTRICAL FLOOR PLAN
SECOND FLOOR

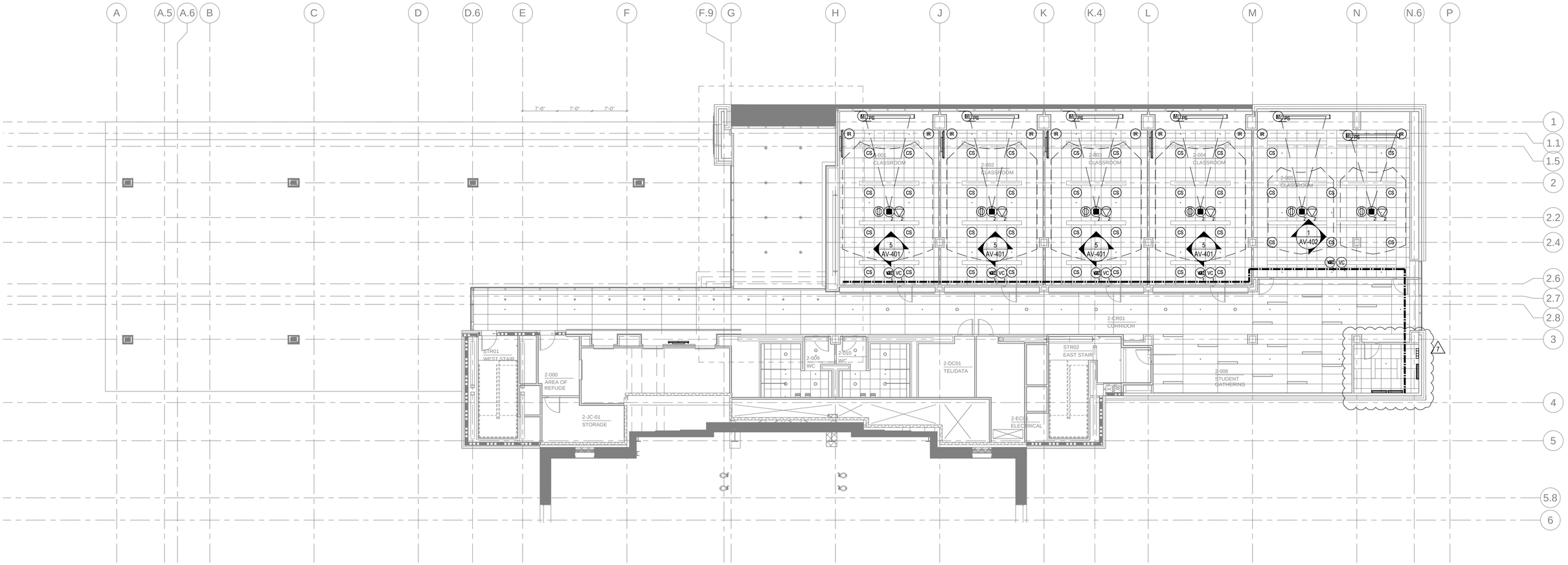
Date
April 10, 2012

Scale
1/8"=1'-0"

SUCF Project Number
14A91

Ennead Project Number
0917

Sheet No.
AV-202.1



AUDIOVISUAL ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
AV	Multi-discipline Floor box, with hinged cover plate and carpet flange; with divided compartments for shared access with voice, data and 120VAC power. Flush mount in floor unless otherwise indicated. Refer to Electrical drawings for floor box requirements. Subnumber indicates data port requirements.
AV	Poke Thru. Subnumber indicates data port requirements.
AV	Conduit stub-up under the millwork, for audiovisual cabling.
TV	Junction box, with removable cover for cable television receptacle. Surface mount on slab unless otherwise indicated.
	Telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Surface mount on slab unless otherwise indicated. Subnumber indicates port requirements.
CT	Screw cover junction box for audiovisual cable/conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 20 Amp. Surface mount on slab unless otherwise indicated.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.

SYMBOL	DESCRIPTION
VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
CT	Screw cover junction box for audiovisual conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
TV	Multi-discipline Wall box; with divided compartments for shared access with data and 120VAC power. Mount flush with finished wall treatment unless otherwise indicated. Subnumber indicates port requirements (if applicable). See Audiovisual Detail Sheets.
AV	
IR	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for assistive listening emitter. Mount flush with finished wall treatment, 6" below finished ceiling unless otherwise indicated. Subnumber indicates number of gang.
TP	Back box for wall-mounted audiovisual control system touch panel . Back box to be OEM by manufacturer; referenced to model number. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.

SYMBOL	DESCRIPTION
BP	Back box for wall-mounted audiovisual control system button panel . Subnumber indicates number of gang. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.
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JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.
R/L	Wall switch for projection screen, raise/stop/lower; supplied with screen. Mount flush with finished wall treatment, at base building electrical switch height unless otherwise indicated.
	Wall-mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements. See Audiovisual detail sheets.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, quad, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.

SYMBOL	DESCRIPTION
M PS	Projection screen, projector lift or shade with low-voltage interface, supplied with device. Mount above finished ceiling unless otherwise indicated. Maintenance access to box shall be provided in non-accessible ceilings. Provide utility-grade 120VAC unless otherwise indicated.
CS	Ceiling speaker with integrated enclosure, grille and grid support. Mount flush with finished ceiling, as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer. See Audiovisual Detail Sheets.
IR	Ceiling surface mounted IR emitter for assistive listening, as shown on the Architectural ceiling plans, unless otherwise indicated. See Audiovisual Detail Sheets.
AV	Ceiling mounted gangable junction box, for Audiovisual device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.
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SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount flush with finished ceiling unless otherwise indicated.
	Power receptacle (Utility), duplex, 120 VAC, 15 Amp. Surface mount on slab unless otherwise indicated.
	Ceiling mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise indicated. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements.
	Cable tray for cabling, 12" wide x 3" high, with two (2) barrier compartments for routing audio and video cabling related to instructional or medical simulation systems.
	Cable tray for cabling, 18" wide x 6" high, with three (3) barrier compartments for routing audio, video, and network cabling related to instructional or medical simulation systems.

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Seal

Key Plan

No.	Issue Name	Date
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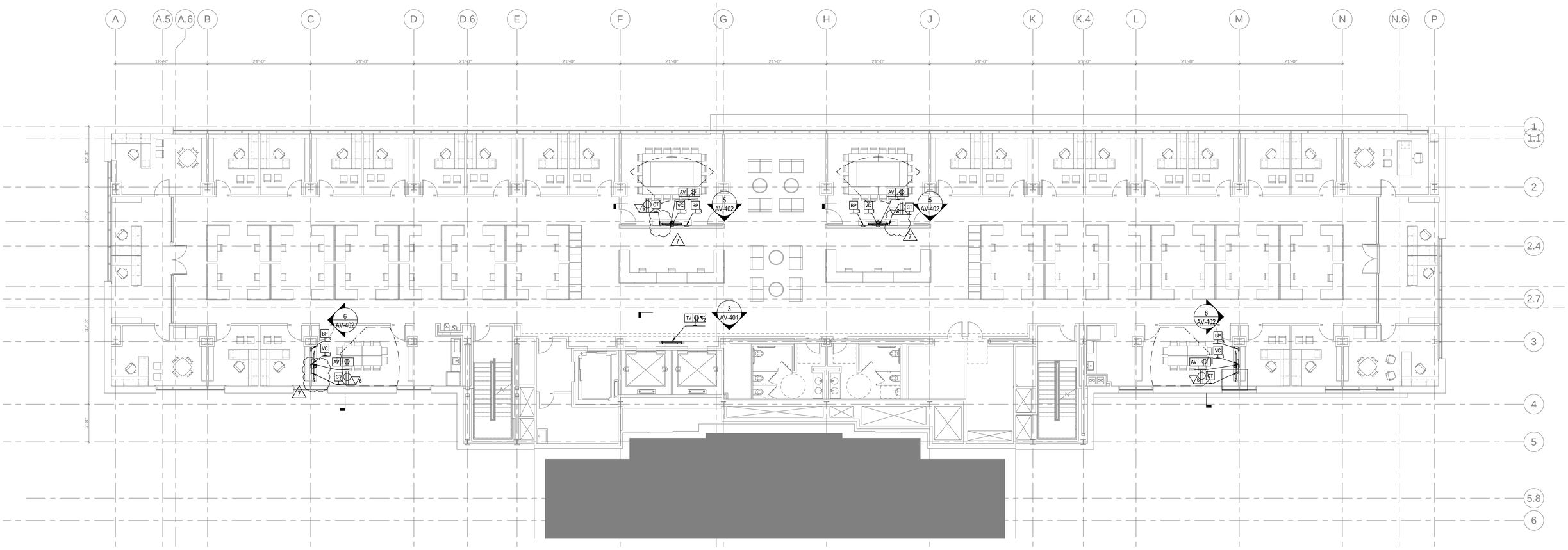
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

AUDIOVISUAL DESIGN
ELECTRICAL REFLECTED CEILING PLAN
SECOND FLOOR

Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	
Scale	Ennead Project Number	
1/8"=1'-0"	0917	

AV-202.2



AUDIOVISUAL ELECTRICAL LEGEND

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CT	Screw cover junction box for audiovisual cable/conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 20 Amp. Surface mount on slab unless otherwise indicated.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.

SYMBOL	DESCRIPTION
VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
CT	Screw cover junction box for audiovisual conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
TV 2	Multi-discipline Wall box; with divided compartments for shared access with data and 120VAC power. Mount flush with finished wall treatment unless otherwise indicated. Subnumber indicates port requirements (if applicable). See Audiovisual Detail Sheets.
AV	
IR	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for assistive listening emitter. Mount flush with finished wall treatment, 6" below finished ceiling unless otherwise indicated. Subnumber indicates number of gang.
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Seal

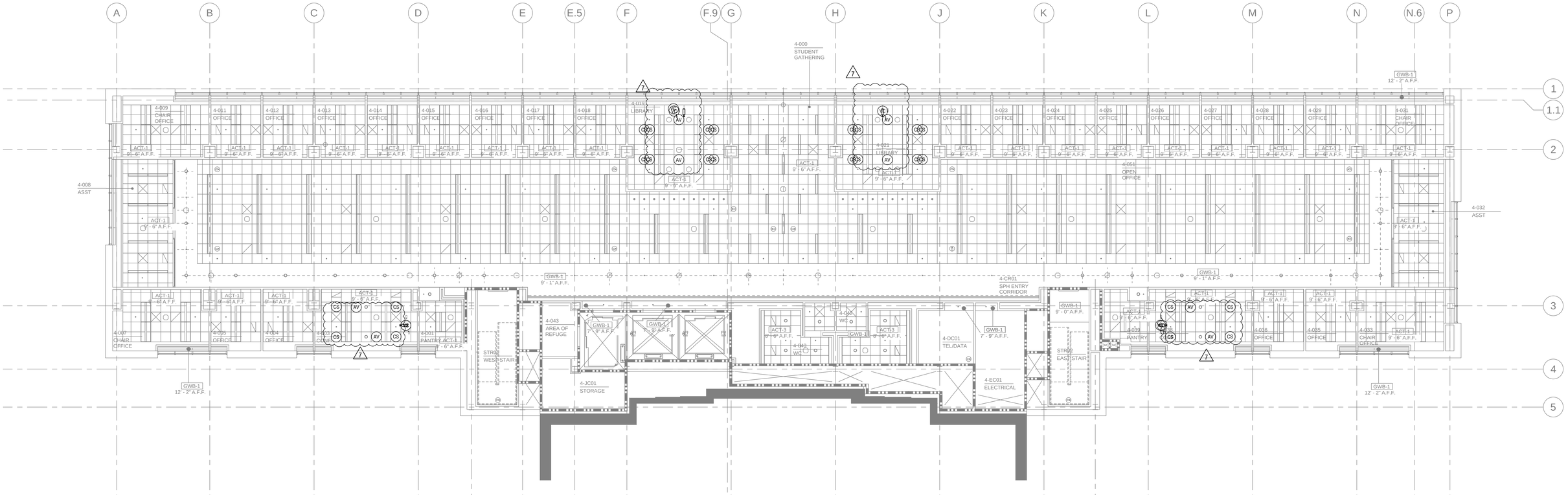
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

AUDIOVISUAL DESIGN
ELECTRICAL FLOOR PLAN
FOURTH FLOOR

Date: April 10, 2012
Scale: 1/8"=1'-0"
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-204.1



AUDIOVISUAL ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
AV	Multi-discipline Floor box, with hinged cover plate and carpet flange; with divided compartments for shared access with voice, data and 120VAC power. Flush mount in floor unless otherwise indicated. Refer to Electrical drawings for floor box requirements. Subnumber indicates data port requirements.
AV	Poke Thru. Subnumber indicates data port requirements.
AV	Conduit stub-up under the millwork, for audiovisual cabling.
TV	Junction box, with removable cover for cable television receptacle. Surface mount on slab unless otherwise indicated.
	Telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Surface mount on slab unless otherwise indicated. Subnumber indicates port requirements.
CT	Screw cover junction box for audiovisual cable/conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 20 Amp. Surface mount on slab unless otherwise indicated.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.

SYMBOL	DESCRIPTION
VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
CT	Screw cover junction box for audiovisual conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
TV	Multi-discipline Wall box; with divided compartments for shared access with data and 120VAC power. Mount flush with finished wall treatment unless otherwise indicated. Subnumber indicates port requirements (if applicable). See Audiovisual Detail Sheets.
AV	
IR	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for assistive listening emitter. Mount flush with finished wall treatment, 6" below finished ceiling unless otherwise indicated. Subnumber indicates number of gang.
TP	Back box for wall-mounted audiovisual control system touch panel . Back box to be OEM by manufacturer; referenced to model number. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.

SYMBOL	DESCRIPTION
BP	Back box for wall-mounted audiovisual control system button panel . Subnumber indicates number of gang. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.
TV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for television receiver receptacle. Subnumber indicates number of gang. See Audiovisual detail sheets.
AV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for audiovisual receptacles. Mount flush with finished wall treatment. Subnumber indicates number of gang. See Audiovisual detail sheets.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.
R/L	Wall switch for projection screen, raise/stop/lower; supplied with screen. Mount flush with finished wall treatment, at base building electrical switch height unless otherwise indicated.
	Wall-mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements. See Audiovisual detail sheets.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, quad, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.

SYMBOL	DESCRIPTION
M PS	Projection screen, projector lift or shade with low-voltage interface, supplied with device. Mount above finished ceiling unless otherwise indicated. Maintenance access to box shall be provided in non-accessible ceilings. Provide utility-grade 120VAC unless otherwise indicated.
CS	Ceiling speaker with integrated enclosure, grille and grid support. Mount flush with finished ceiling, as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer. See Audiovisual Detail Sheets.
IR	Ceiling surface mounted IR emitter for assistive listening, as shown on the Architectural ceiling plans, unless otherwise indicated. See Audiovisual Detail Sheets.
AV	Ceiling mounted gangable junction box, for Audiovisual device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.
VC	Ceiling mounted gangable junction box, for video camera device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount flush with finished ceiling unless otherwise indicated.
	Power receptacle (Utility), duplex, 120 VAC, 15 Amp. Surface mount on slab unless otherwise indicated.
	Ceiling mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise indicated. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements.
	Cable tray for cabling, 12" wide x 3" high, with two (2) barrier compartments for routing audio and video cabling related to instructional or medical simulation systems.
	Cable tray for cabling, 18" wide x 6" high, with three (3) barrier compartments for routing audio, video, and network cabling related to instructional or medical simulation systems.

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Key Plan

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6	CONFORMANCE SET	7/18/12
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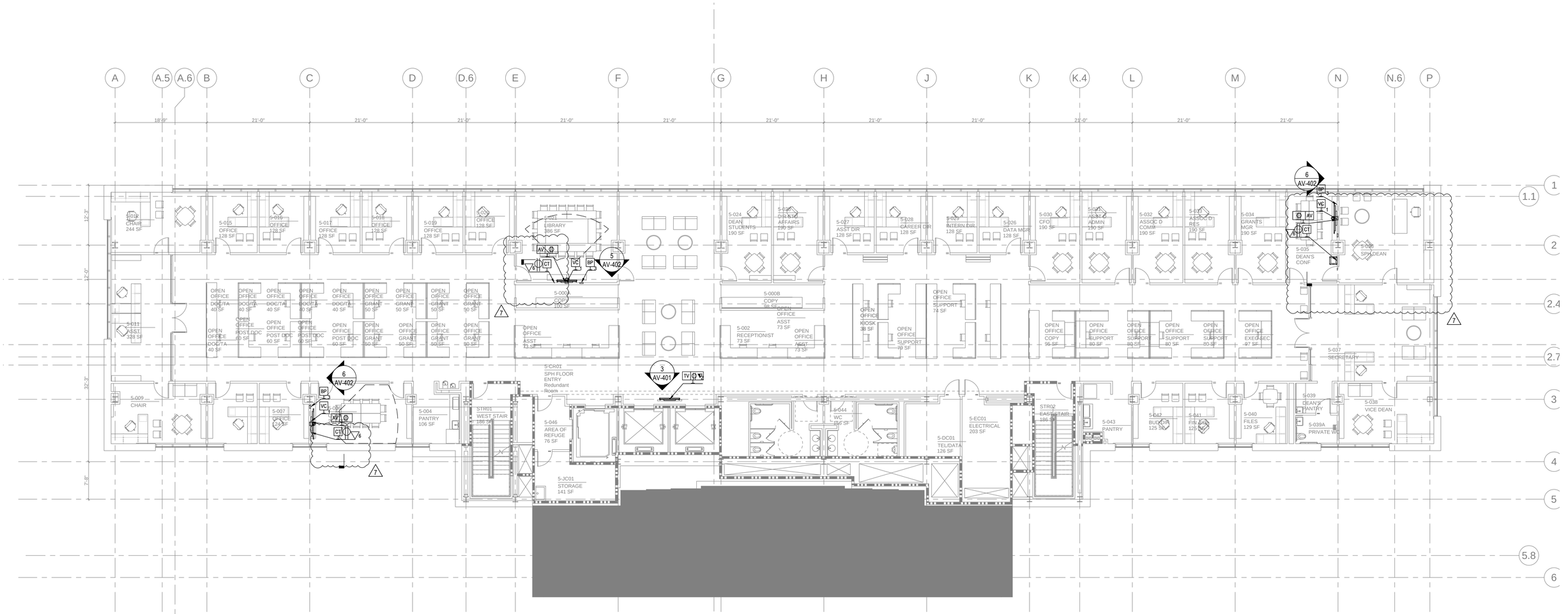
Sheet Title

AUDIOVISUAL DESIGN
ELECTRICAL REFLECTED CEILING PLAN
FOURTH FLOOR

Date: April 10, 2012
Scale: 1/8"=1'-0"
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-204.2



AUDIOVISUAL ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
AV	Multi-discipline Floor box, with hinged cover plate and carpet flange; with divided compartments for shared access with voice, data and 120VAC power. Flush mount in floor unless otherwise indicated. Refer to Electrical drawings for floor box requirements. Subnumber indicates data port requirements.
AV	Poke Thru. Subnumber indicates data port requirements.
AV	Conduit stub-up under the millwork, for audiovisual cabling.
TV	Junction box, with removable cover for cable television receptacle. Surface mount on slab unless otherwise indicated.
	Telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Surface mount on slab unless otherwise indicated. Subnumber indicates port requirements.
CT	Screw cover junction box for audiovisual cable/conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 20 Amp. Surface mount on slab unless otherwise indicated.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.

SYMBOL	DESCRIPTION
VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
CT	Screw cover junction box for audiovisual conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
TV AV	Multi-discipline Wall box; with divided compartments for shared access with data and 120VAC power. Mount flush with finished wall treatment unless otherwise indicated. Subnumber indicates port requirements (if applicable). See Audiovisual Detail Sheets.
IR	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for assistive listening emitter. Mount flush with finished wall treatment, 6" below finished ceiling unless otherwise indicated. Subnumber indicates number of gang.
TP	Back box for wall-mounted audiovisual control system touch panel . Back box to be OEM by manufacturer; referenced to model number. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.

SYMBOL	DESCRIPTION
BP	Back box for wall-mounted audiovisual control system button panel . Subnumber indicates number of gang. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.
TV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for television receiver receptacle. Subnumber indicates number of gang. See Audiovisual detail sheets.
AV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for audiovisual receptacles. Mount flush with finished wall treatment. Subnumber indicates number of gang. See Audiovisual detail sheets.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.
R/L	Wall switch for projection screen, raise/stop/lower; supplied with screen. Mount flush with finished wall treatment, at base building electrical switch height unless otherwise indicated.
	Wall-mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements. See Audiovisual detail sheets.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, quad, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.

SYMBOL	DESCRIPTION
M PS	Projection screen, projector lift or shade with low-voltage interface, supplied with device. Mount above finished ceiling unless otherwise indicated. Maintenance access to box shall be provided in non-accessible ceilings. Provide utility-grade 120VAC unless otherwise indicated.
CS	Ceiling speaker with integrated enclosure, grille and grid support. Mount flush with finished ceiling, as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer. See Audiovisual Detail Sheets.
IR	Ceiling surface mounted IR emitter for assistive listening, as shown on the Architectural ceiling plans, unless otherwise indicated. See Audiovisual Detail Sheets.
AV	Ceiling mounted gangable junction box, for Audiovisual device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.
VC	Ceiling mounted gangable junction box, for video camera device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount flush with finished ceiling unless otherwise indicated.
	Power receptacle (Utility), duplex, 120 VAC, 15 Amp. Surface mount on slab unless otherwise indicated.
	Ceiling mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise indicated. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements.
	Cable tray for cabling, 12" wide x 3" high, with two (2) barrier compartments for routing audio and video cabling related to instructional or medical simulation systems.
	Cable tray for cabling, 18" wide x 6" high, with three (3) barrier compartments for routing audio, video, and network cabling related to instructional or medical simulation systems.

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Seal

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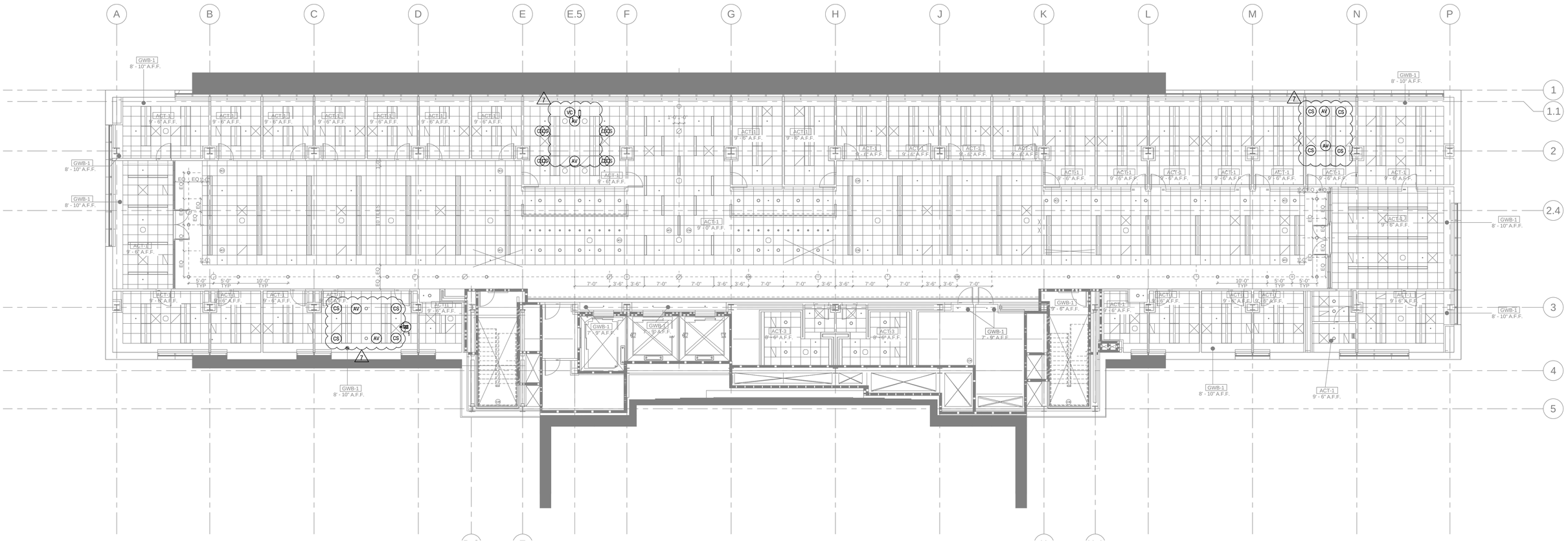
Sheet Title
AUDIOVISUAL DESIGN
ELECTRICAL FLOOR PLAN
FIFTH FLOOR

Date
April 10, 2012
Scale
1/8"=1'-0"
SUCF Project Number
14A91
Ennead Project Number
0917
Sheet No.
AV-205.1



AUDIOVISUAL ELECTRICAL LEGEND

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	Telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Surface mount on slab unless otherwise indicated. Subnumber indicates port requirements.
CT	Screw cover junction box for audiovisual cable/conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 20 Amp. Surface mount on slab unless otherwise indicated.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.

SYMBOL	DESCRIPTION
VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
CT	Screw cover junction box for audiovisual conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
TV	Multi-discipline Wall box; with divided compartments for shared access with data and 120VAC power. Mount flush with finished wall treatment unless otherwise indicated. Subnumber indicates port requirements (if applicable). See Audiovisual Detail Sheets.
AV	
IR	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for assistive listening emitter. Mount flush with finished wall treatment, 6" below finished ceiling unless otherwise indicated. Subnumber indicates number of gang.
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SYMBOL	DESCRIPTION
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R/L	Wall switch for projection screen, raise/stop/lower; supplied with screen. Mount flush with finished wall treatment, at base building electrical switch height unless otherwise indicated.
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	Power receptacle, duplex, 220 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
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SYMBOL	DESCRIPTION
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IR	Ceiling surface mounted IR emitter for assistive listening, as shown on the Architectural ceiling plans, unless otherwise indicated. See Audiovisual Detail Sheets.
AV	Ceiling mounted gangable junction box, for Audiovisual device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.
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SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount flush with finished ceiling unless otherwise indicated.
	Power receptacle (Utility), duplex, 120 VAC, 15 Amp. Surface mount on slab unless otherwise indicated.
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Signage
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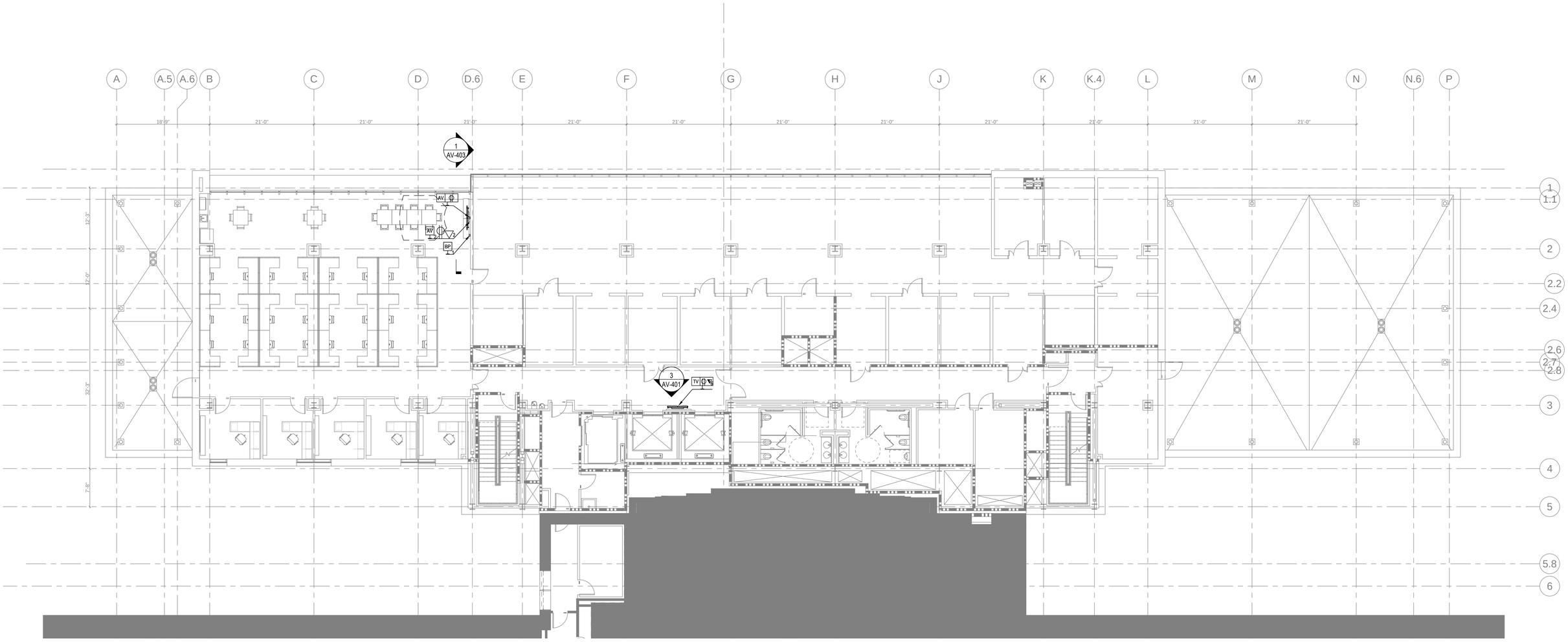
Seal

Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN
ELECTRICAL REFLECTED CEILING PLAN
FIFTH FLOOR

Date
April 10, 2012
Scale
1/8"=1'-0"
SUCF Project Number
14A91
Ennead Project Number
0917
Sheet No.
AV-205.2



AUDIOVISUAL ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
AV	Multi-discipline Floor box, with hinged cover plate and carpet flange; with divided compartments for shared access with voice, data and 120VAC power. Flush mount in floor unless otherwise indicated. Refer to Electrical drawings for floor box requirements. Subnumber indicates data port requirements.
AV	Poke Thru. Subnumber indicates data port requirements.
AV	Conduit stub-up under the millwork, for audiovisual cabling.
TV	Junction box, with removable cover for cable television receptacle. Surface mount on slab unless otherwise indicated.
	Telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Surface mount on slab unless otherwise indicated. Subnumber indicates port requirements.
CT	Screw cover junction box for audiovisual cable/conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 20 Amp. Surface mount on slab unless otherwise indicated.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.

SYMBOL	DESCRIPTION
VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
CT	Screw cover junction box for audiovisual conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
TV AV	Multi-discipline Wall box; with divided compartments for shared access with data and 120VAC power. Mount flush with finished wall treatment unless otherwise indicated. Subnumber indicates port requirements (if applicable). See Audiovisual Detail Sheets.
IR	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for assistive listening emitter. Mount flush with finished wall treatment, 6" below finished ceiling unless otherwise indicated. Subnumber indicates number of gang.
TP	Back box for wall-mounted audiovisual control system touch panel . Back box to be OEM by manufacturer; referenced to model number. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.

SYMBOL	DESCRIPTION
BP	Back box for wall-mounted audiovisual control system button panel . Subnumber indicates number of gang. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.
TV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for television receiver receptacle. Subnumber indicates number of gang. See Audiovisual detail sheets.
AV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for audiovisual receptacles. Mount flush with finished wall treatment. Subnumber indicates number of gang. See Audiovisual detail sheets.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.
R/L	Wall switch for projection screen, raise/stop/lower; supplied with screen. Mount flush with finished wall treatment, at base building electrical switch height unless otherwise indicated.
	Wall-mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements. See Audiovisual detail sheets.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, quad, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.

SYMBOL	DESCRIPTION
M PS	Projection screen, projector lift or shade with low-voltage interface, supplied with device. Mount above finished ceiling unless otherwise indicated. Maintenance access to box shall be provided in non-accessible ceilings. Provide utility-grade 120VAC unless otherwise indicated.
CS	Ceiling speaker with integrated enclosure, grille and grid support. Mount flush with finished ceiling, as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer. See Audiovisual Detail Sheets.
IR	Ceiling surface mounted IR emitter for assistive listening, as shown on the Architectural ceiling plans, unless otherwise indicated. See Audiovisual Detail Sheets.
AV	Ceiling mounted gangable junction box, for Audiovisual device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.
VC	Ceiling mounted gangable junction box, for video camera device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount flush with finished ceiling unless otherwise indicated.
	Power receptacle (Utility), duplex, 120 VAC, 15 Amp. Surface mount on slab unless otherwise indicated.
	Ceiling mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise indicated. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements.
	Cable tray for cabling, 12" wide x 3" high, with two (2) barrier compartments for routing audio and video cabling related to instructional or medical simulation systems.
	Cable tray for cabling, 18" wide x 6" high, with three (3) barrier compartments for routing audio, video, and network cabling related to instructional or medical simulation systems.

Project Title
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Seal

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Sheet Title
AUDIOVISUAL DESIGN
ELECTRICAL FLOOR PLAN
SEVENTH FLOOR

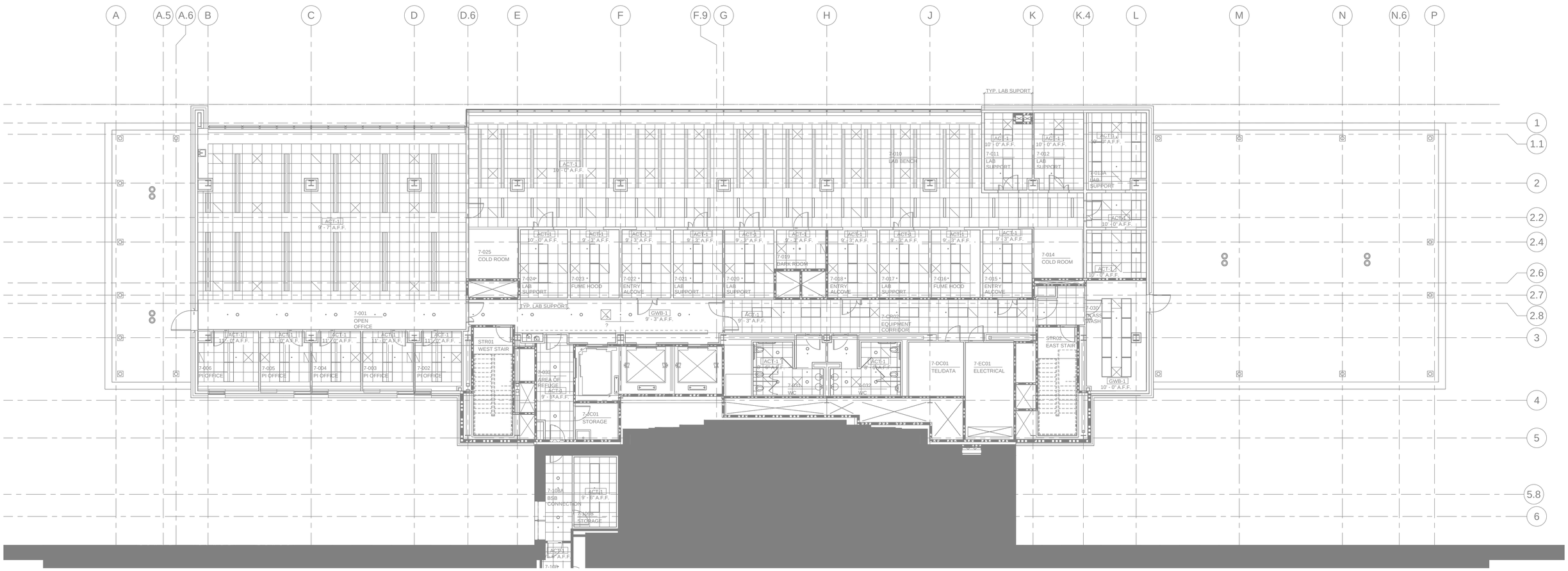
Date
April 10, 2012

Scale
1/8"=1'-0"

SUCF Project Number
14A91

Ennead Project Number
0917

Sheet No.
AV-207.1



NO SCOPE THIS SHEET

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CT	Screw cover junction box for audiovisual cable/conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 20 Amp. Surface mount on slab unless otherwise indicated.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.

SYMBOL	DESCRIPTION
VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
CT	Screw cover junction box for audiovisual conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
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IR	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for assistive listening emitter. Mount flush with finished wall treatment, 6" below finished ceiling unless otherwise indicated. Subnumber indicates number of gang.
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	Power receptacle, duplex, 220 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.

SYMBOL	DESCRIPTION
M PS	Projection screen, projector lift or shade with low-voltage interface, supplied with device. Mount above finished ceiling unless otherwise indicated. Maintenance access to box shall be provided in non-accessible ceilings. Provide utility-grade 120VAC unless otherwise indicated.
CS	Ceiling speaker with integrated enclosure, grille and grid support. Mount flush with finished ceiling, as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer. See Audiovisual Detail Sheets.
IR	Ceiling surface mounted IR emitter for assistive listening, as shown on the Architectural ceiling plans, unless otherwise indicated. See Audiovisual Detail Sheets.
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Sheet Title
AUDIOVISUAL DESIGN
ELECTRICAL REFLECTED CEILING PLAN
SEVENTH FLOOR

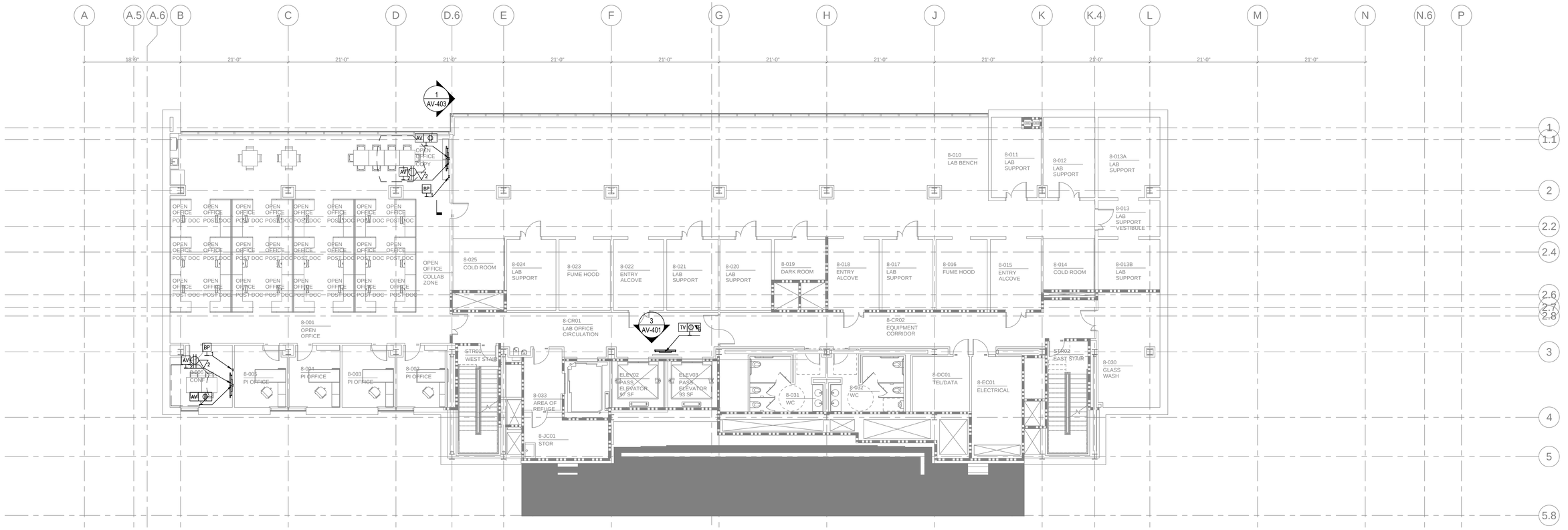
Date
April 10, 2012

Scale
1/8"=1'-0"

SUCF Project Number
14A91

Ennead Project Number
0917

Sheet No.
AV-207.2



AUDIOVISUAL ELECTRICAL LEGEND

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VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
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AUDIOVISUAL DESIGN ELECTRICAL FLOOR PLAN EIGHTH FLOOR

Date: April 10, 2012
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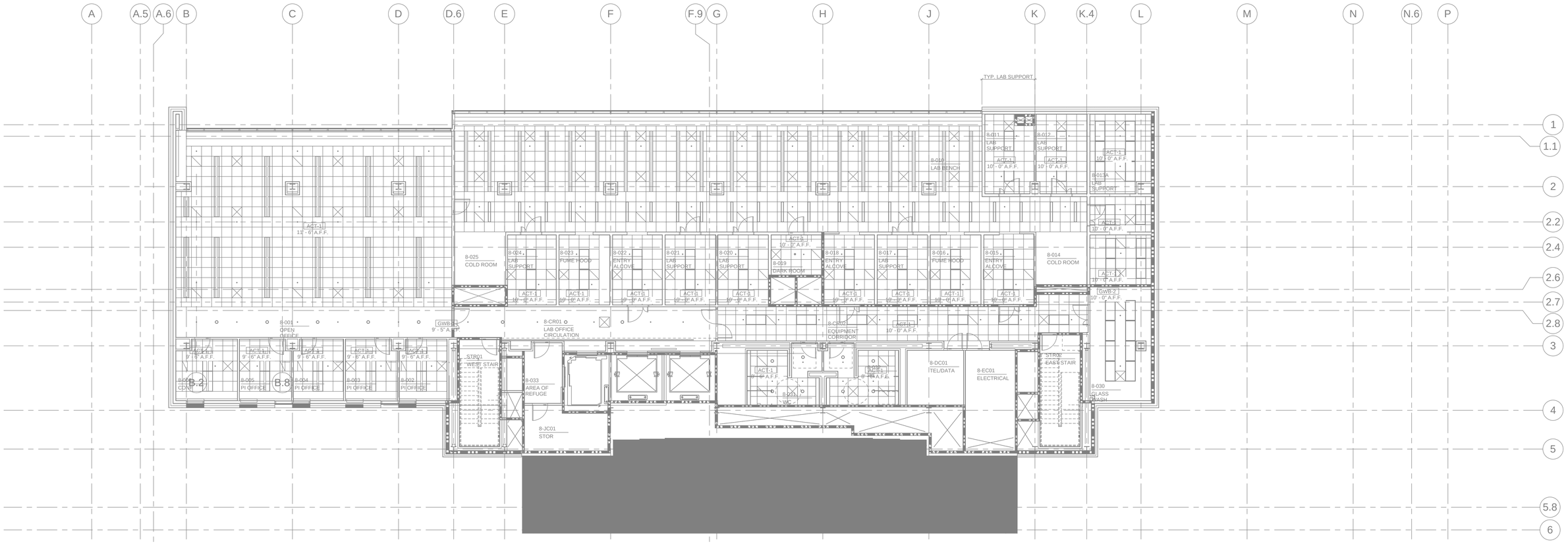
Ennead Project Number: 0917
Sheet No.: AV-208.1



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AV	Multi-discipline Floor box, with hinged cover plate and carpet flange; with divided compartments for shared access with voice, data and 120VAC power. Flush mount in floor unless otherwise indicated. Refer to Electrical drawings for floor box requirements. Subnumber indicates data port requirements.
AV	Poke Thru. Subnumber indicates data port requirements.
AV	Conduit stub-up under the millwork, for audiovisual cabling.
TV	Junction box, with removable cover for cable television receptacle. Surface mount on slab unless otherwise indicated.
	Telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Surface mount on slab unless otherwise indicated. Subnumber indicates port requirements.
CT	Screw cover junction box for audiovisual cable/conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 20 Amp. Surface mount on slab unless otherwise indicated.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.

SYMBOL	DESCRIPTION
VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
CT	Screw cover junction box for audiovisual conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
TV AV	Multi-discipline Wall box; with divided compartments for shared access with data and 120VAC power. Mount flush with finished wall treatment unless otherwise indicated. Subnumber indicates port requirements (if applicable). See Audiovisual Detail Sheets.
AV	
IR	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for assistive listening emitter. Mount flush with finished wall treatment, 6" below finished ceiling unless otherwise indicated. Subnumber indicates number of gang.
TP	Back box for wall-mounted audiovisual control system touch panel . Back box to be OEM by manufacturer; referenced to model number. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.

SYMBOL	DESCRIPTION
BP	Back box for wall-mounted audiovisual control system button panel . Subnumber indicates number of gang. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.
TV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for television receiver receptacle. Subnumber indicates number of gang. See Audiovisual detail sheets.
AV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for audiovisual receptacles. Mount flush with finished wall treatment. Subnumber indicates number of gang. See Audiovisual detail sheets.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.
R/L	Wall switch for projection screen, raise/stop/lower; supplied with screen. Mount flush with finished wall treatment, at base building electrical switch height unless otherwise indicated.
	Wall-mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements. See Audiovisual detail sheets.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, quad, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.

SYMBOL	DESCRIPTION
M PS	Projection screen, projector lift or shade with low-voltage interface, supplied with device. Mount above finished ceiling unless otherwise indicated. Maintenance access to box shall be provided in non-accessible ceilings. Provide utility-grade 120VAC unless otherwise indicated.
CS	Ceiling speaker with integrated enclosure, grille and grid support. Mount flush with finished ceiling, as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer. See Audiovisual Detail Sheets.
IR	Ceiling surface mounted IR emitter for assistive listening, as shown on the Architectural ceiling plans, unless otherwise indicated. See Audiovisual Detail Sheets.
AV	Ceiling mounted gangable junction box, for Audiovisual device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.
VC	Ceiling mounted gangable junction box, for video camera device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount flush with finished ceiling unless otherwise indicated.
	Power receptacle (Utility), duplex, 120 VAC, 15 Amp. Surface mount on slab unless otherwise indicated.
	Ceiling mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise indicated. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements.
	Cable tray for cabling, 12" wide x 3" high, with two (2) barrier compartments for routing audio and video cabling related to instructional or medical simulation systems.
	Cable tray for cabling, 18" wide x 6" high, with three (3) barrier compartments for routing audio, video, and network cabling related to instructional or medical simulation systems.

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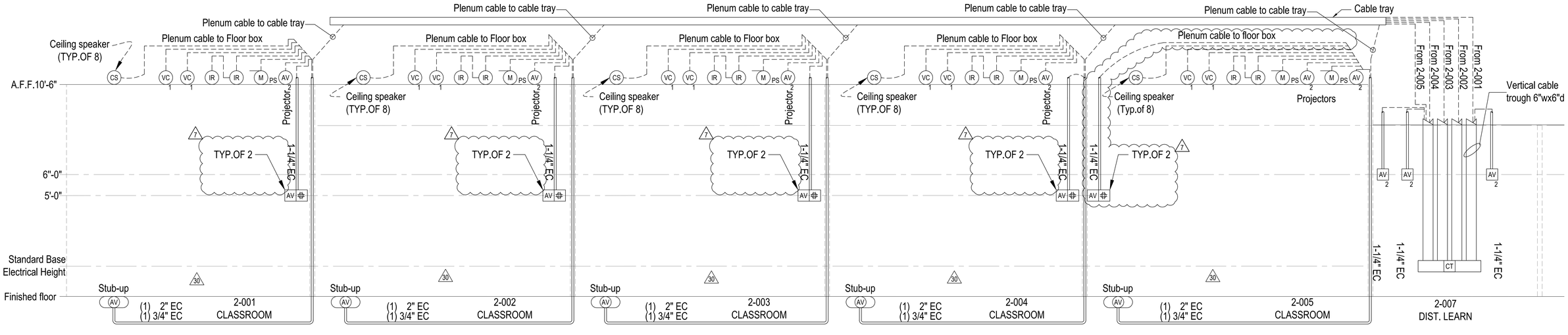
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

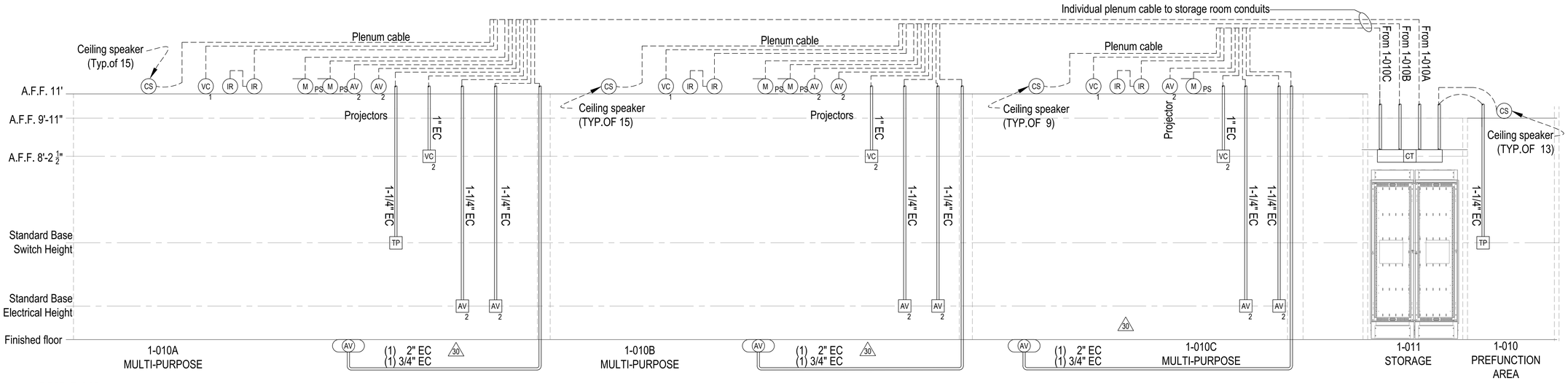
Sheet Title

AUDIOVISUAL DESIGN
ELECTRICAL REFLECTED CEILING PLAN
EIGHTH FLOOR

Date: April 10, 2012
Scale: 1/8"=1'-0"
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-208.2



2 SECOND FLOOR AUDIOVISUAL RISER DIAGRAM
SCALE: NTS



1 FIRST FLOOR AUDIOVISUAL RISER DIAGRAM
SCALE: NTS

NOTE:

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- FOR ELECTRICAL SYMBOLS SEE SHEET AV-001

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No.	Issue Name	Date
7	~~REVISED PERMANENT~~	~~12/18/15~~
30	BULLETIN #30	5/10/13
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Seal

Key Plan

Sheet Title
AUDIOVISUAL DESIGN
RISER DIAGRAM

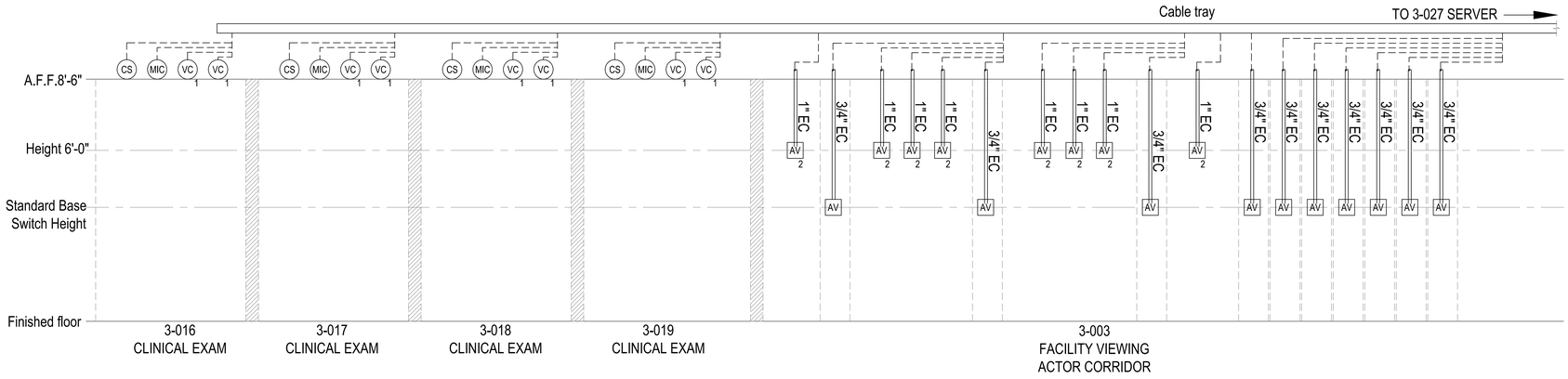
Date
April 10, 2012

SUCF Project Number
14A91

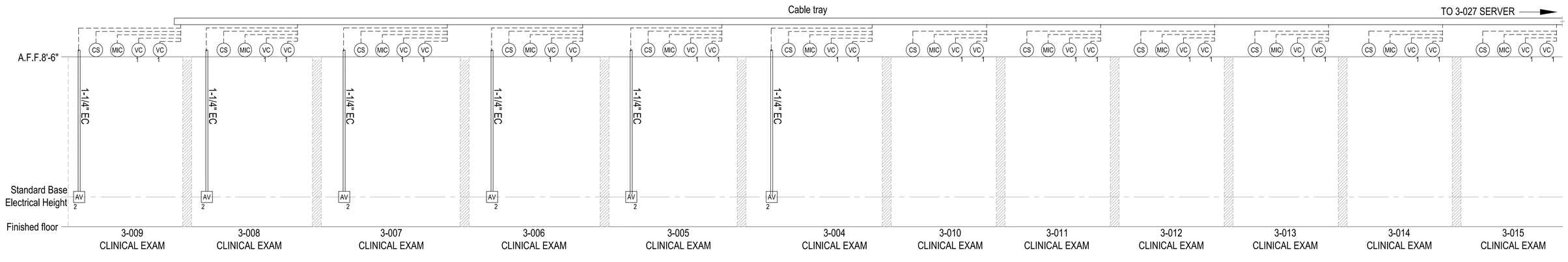
Ennead Project Number
0917

Scale
NTS

Sheet No.
AV-250



3 THIRD FLOOR – PART F
AUDIOVISUAL RISER DIAGRAM
SCALE: NTS



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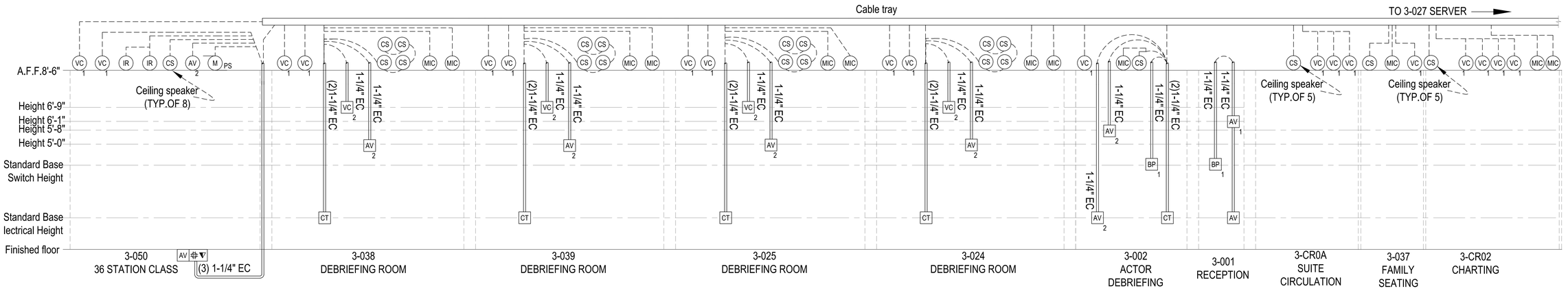
AUDIOVISUAL RISER DIAGRAM
SCALE: NTS



1 THIRD FLOOR – PART D
AUDIOVISUAL RISER DIAGRAM
SCALE: NTS

NOTE:

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- FOR ELECTRICAL SYMBOLS SEE SHEET AV-001

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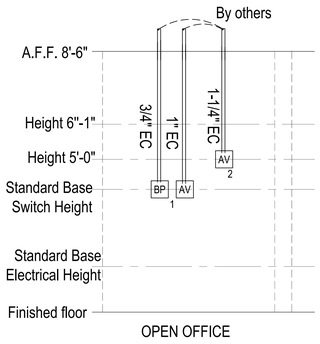
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
	RFI-470 RESPONSE	10/6/15
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN RISER DIAGRAM

Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	
Scale	Ennead Project Number	
NTS	0917	AV-252



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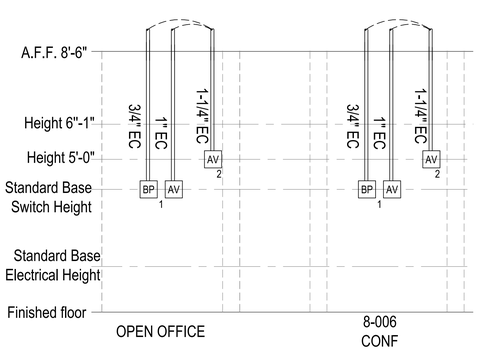
SCALE: NTS



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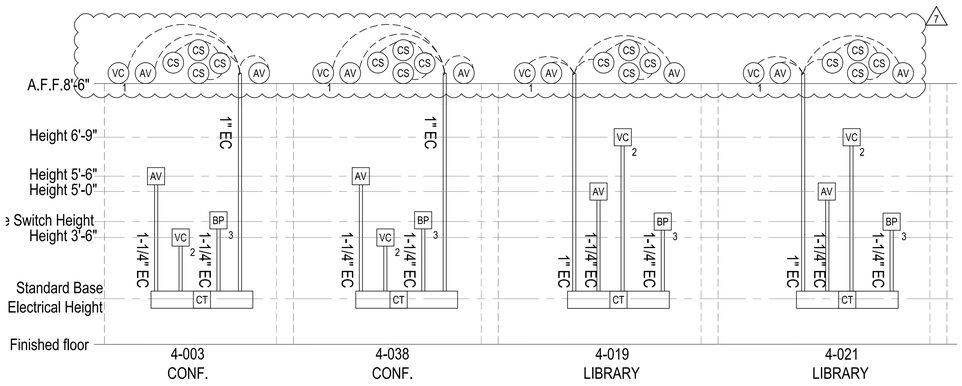
SCALE: NTS



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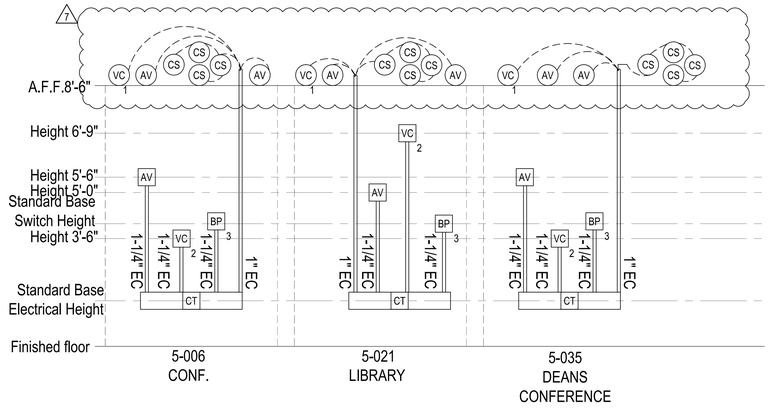
SCALE: NTS



1 FIFTH FLOOR AUDIOVISUAL RISER DIAGRAM
SCALE: NTS

NOTE:

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7	ISSUED FOR AV BID	12/16/16
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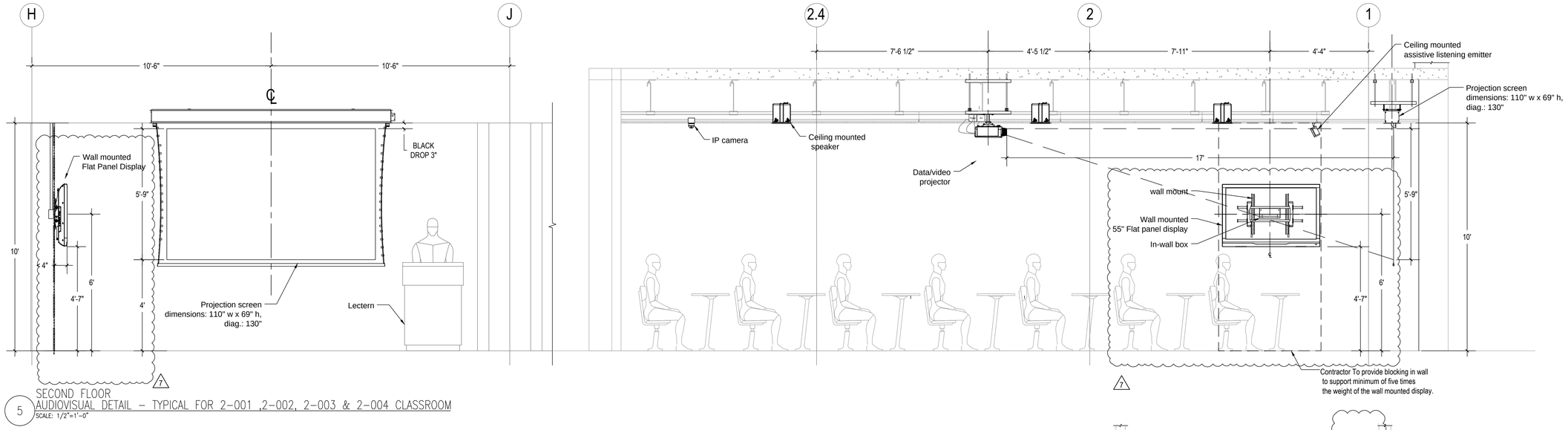
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN RISER DIAGRAM

Date: April 10, 2012
Scale: NTS
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-253



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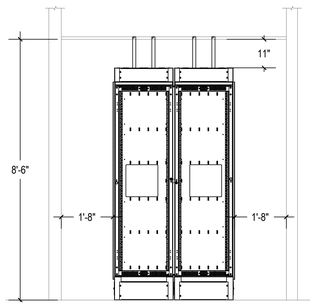
AUDIOVISUAL DETAIL – TYPICAL FOR 2-001 ,2-002, 2-003 & 2-004 CLASSROOM
SCALE: 1/2"=1'-0"



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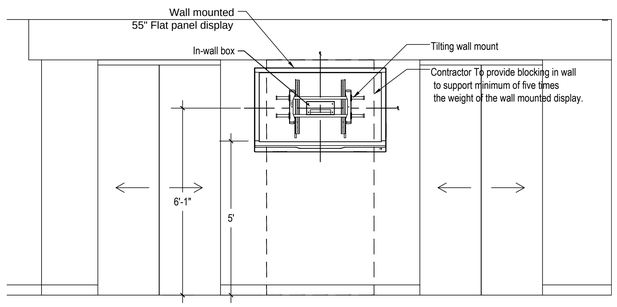
AUDIOVISUAL DETAIL – 1-011 STORAGE
SCALE: 1/2"=1'-0"



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AUDIOVISUAL DETAIL – TYPICAL FOR ALL CORRIDOR
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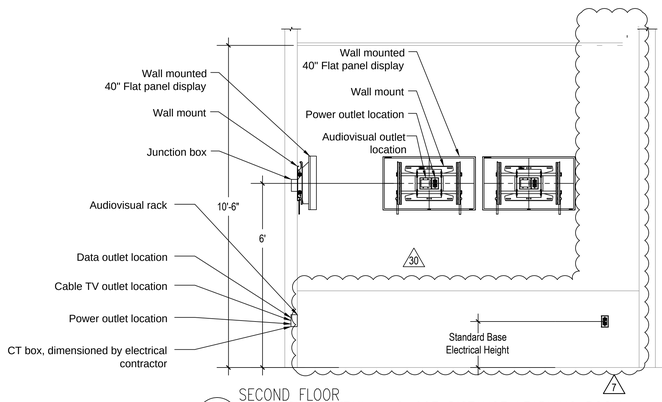

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AUDIOVISUAL DETAIL – 2-007 DISTANCE LEARNING ROOM
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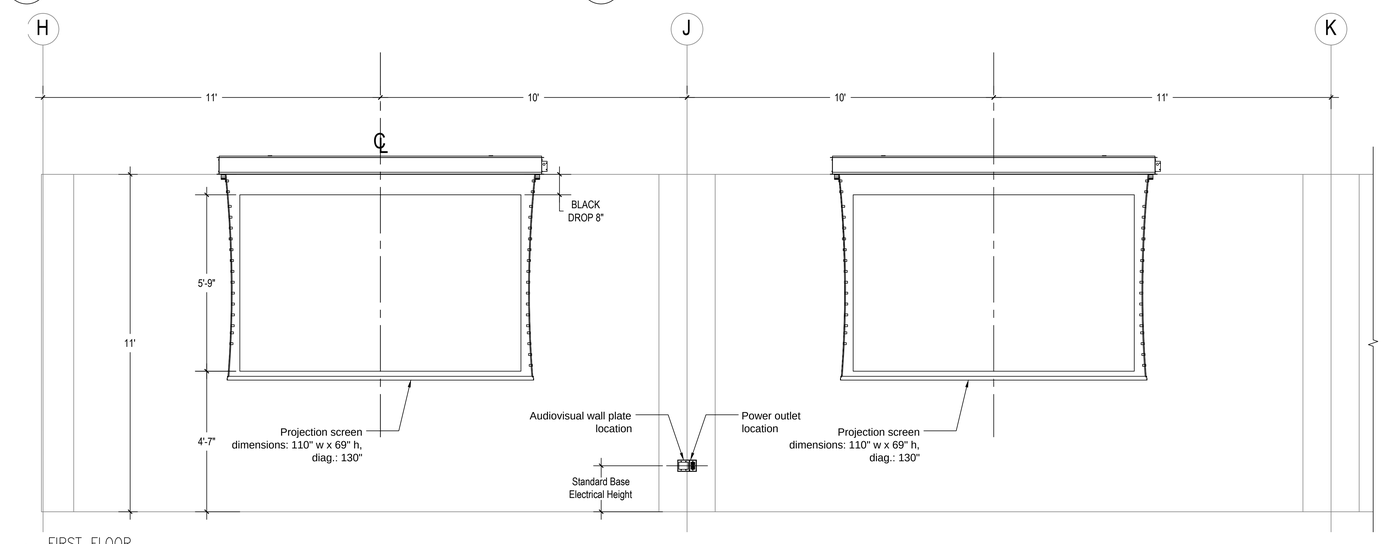
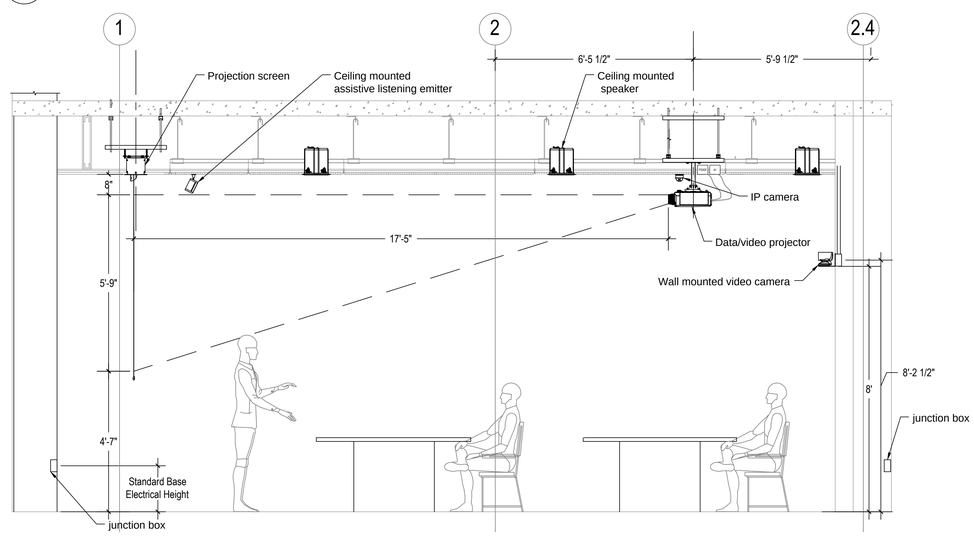


1 FIRST FLOOR
AUDIOVISUAL DETAIL – TYPICAL FOR 1-010A , 1-010B & 1-010C MULTIPURPOSE ROOM
SCALE: 1/2"=1'-0"



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Seal

Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
30	BULLETIN #30	5/10/13
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN
DETAILS

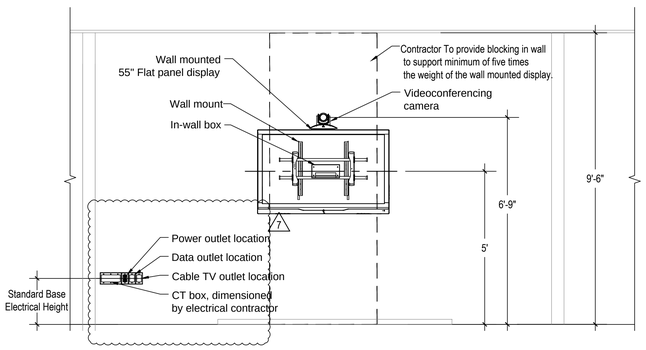
Date
April 10, 2012

Scale
1/2"=1'-0"

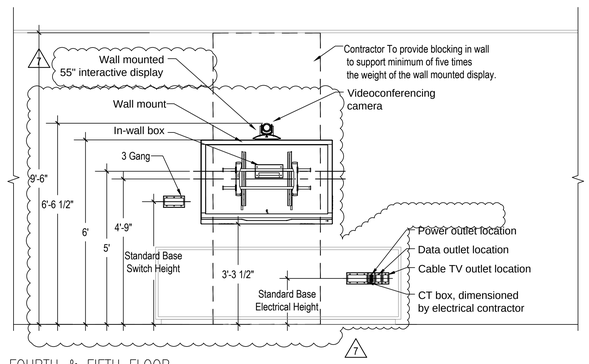
SUCF Project Number
14A91

Ennead Project Number
0917

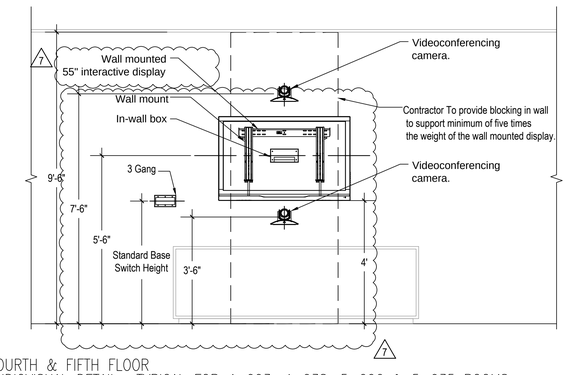
Sheet No.
AV-401



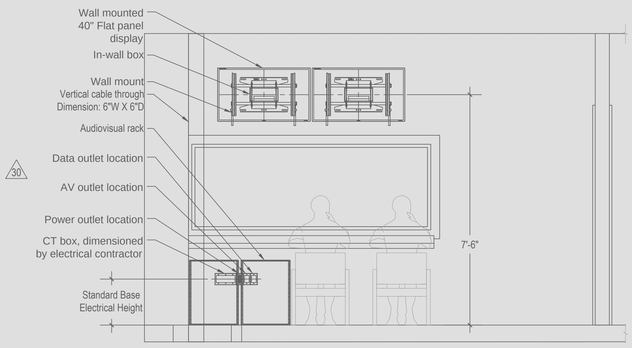
5 FOURTH & FIFTH FLOOR
AUDIOVISUAL DETAIL –TYPICAL FOR 3–024, 3–025, 3–038 & 3–039
SCALE: 1/2"=1'–0"



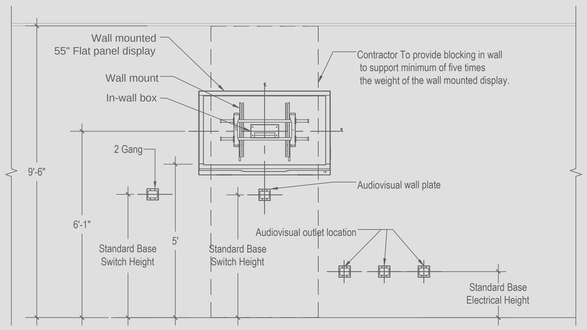
6 FOURTH & FIFTH FLOOR
AUDIOVISUAL DETAIL –TYPICAL FOR 4–019, 4–021 & 5–021 LIBRARY
SCALE: 1/2"=1'–0"



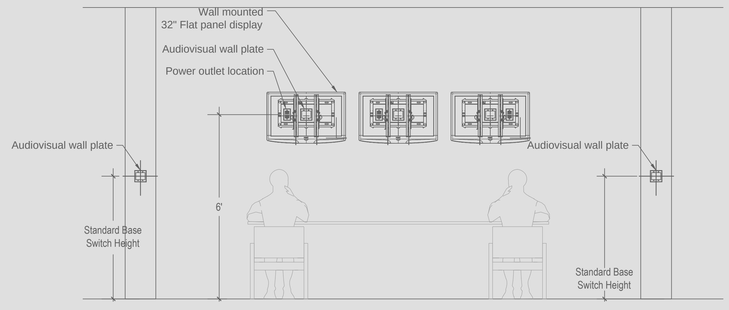
7 FOURTH & FIFTH FLOOR
AUDIOVISUAL DETAIL –TYPICAL FOR 4–003, 4–038, 5–006 & 5–035 ROOMS
SCALE: 1/2"=1'–0"



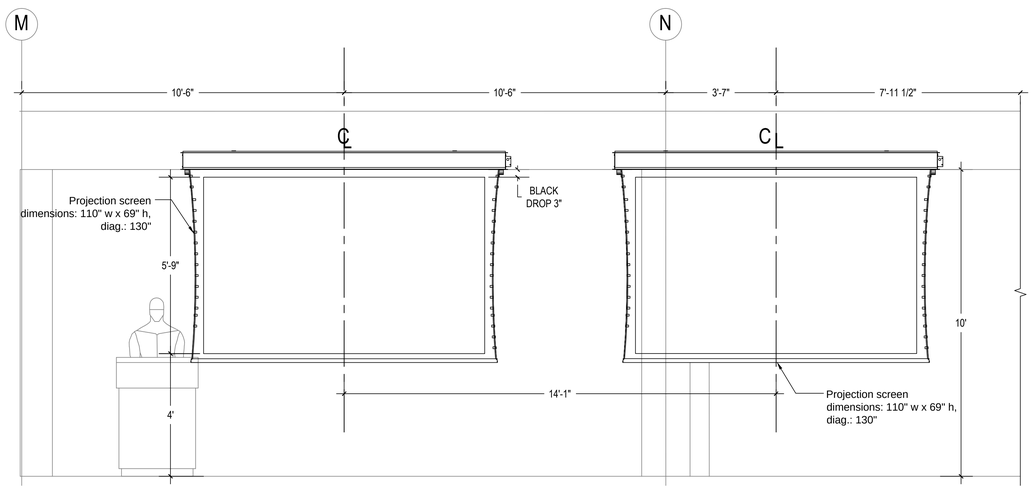
2 THIRD FLOOR
AUDIOVISUAL DETAIL –TYPICAL FOR 3–041, 3–035, 3–032, 3–029 CONTROL ROOM
SCALE: 1/2"=1'–0"

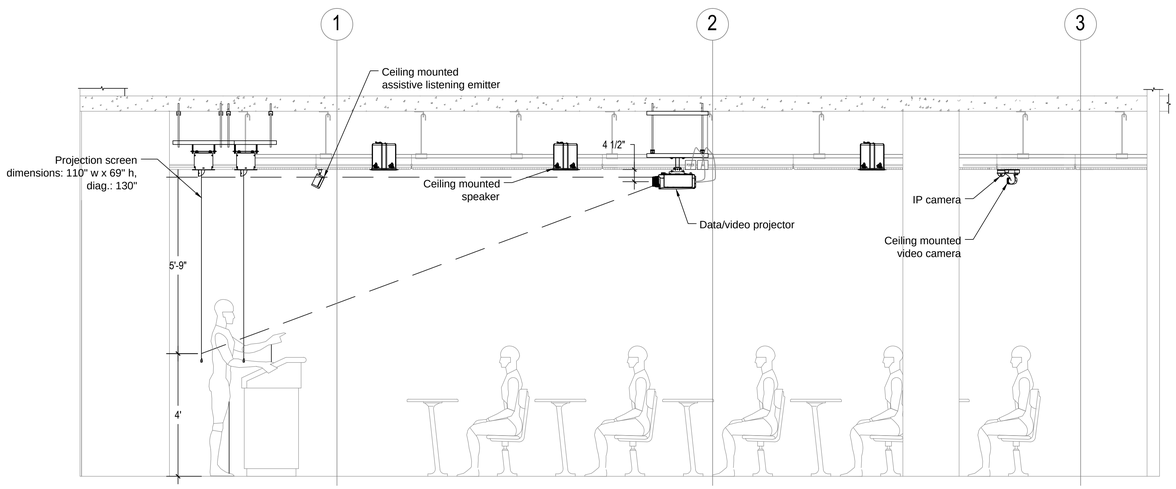


3 THIRD FLOOR
AUDIOVISUAL DETAIL –TYPICAL FOR O.R. ROOM 3–042, U.P.R. 3–028, 3–030, 3–031, 3–034, 3–036 & MULTIPURPOSE 3–040
SCALE: 1/2"=1'–0"



4 THIRD FLOOR
AUDIOVISUAL DETAIL –TYPICAL FOR CLINICAL EXAM ROOMS
SCALE: 1/2"=1'–0"





1 SECOND FLOOR
AUDIOVISUAL DETAIL – 2–005 CLASSROOM
SCALE: 1/2"=1'–0"

Project Title

NEW ACADEMIC BUILDING

School of Public Health, State University of New York Health Science Center at Brooklyn

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6	CONFORMANCE SET	7/18/12
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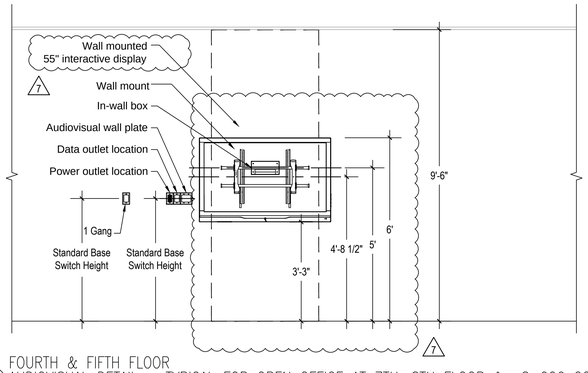
Seal

Key Plan

Sheet Title

AUDIOVISUAL DESIGN DETAILS

Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	AV-402
Scale	Ennead Project Number	
1/2"=1'-0"	0917	



1 FOURTH & FIFTH FLOOR
AUDIOVISUAL DETAIL – TYPICAL FOR OPEN OFFICE AT 7TH, 8TH FLOOR & 8-006 CONFERENCE ROOM
SCALE: 1/2"=1'-0"

Project Title

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Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
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Sheet Title

AUDIOVISUAL DESIGN DETAILS

Date
April 10, 2012

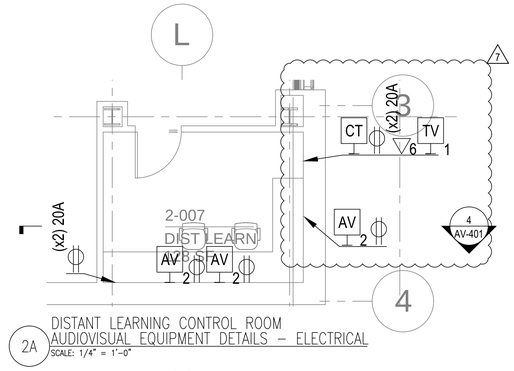
Scale
1/2"=1'-0"

SUCF Project Number
14A91

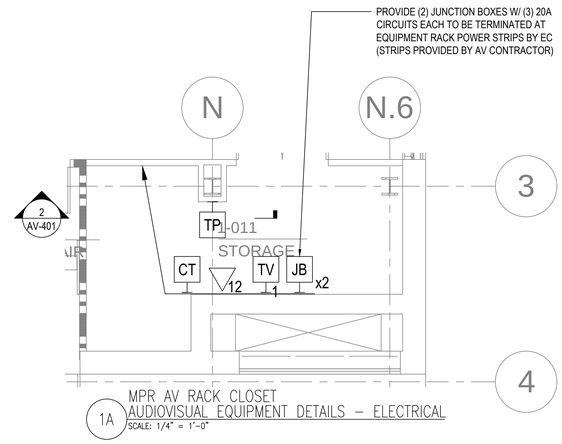
Ennead Project Number
0917

Sheet No.

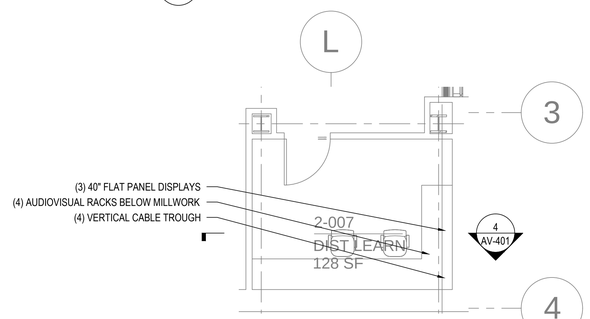
AV-403



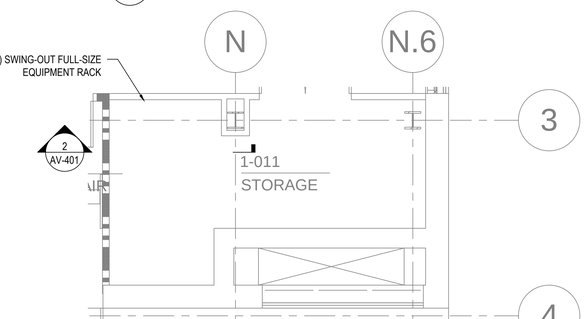
2A DISTANT LEARNING CONTROL ROOM AUDIOVISUAL EQUIPMENT DETAILS – ELECTRICAL
SCALE: 1/4" = 1'-0"



1A MPR AV RACK CLOSET AUDIOVISUAL EQUIPMENT DETAILS – ELECTRICAL
SCALE: 1/4" = 1'-0"



2 DISTANT LEARNING CONTROL ROOM AUDIOVISUAL EQUIPMENT DETAILS – FACILITY
SCALE: 1/4" = 1'-0"



1 MPR AV RACK CLOSET AUDIOVISUAL EQUIPMENT DETAILS – FACILITY
SCALE: 1/4" = 1'-0"

AUDIOVISUAL ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
AV	Multi-discipline Floor box, with hinged cover plate and carpet flange; with divided compartments for shared access with voice, data and 120VAC power. Flush mount in floor unless otherwise indicated. Refer to Electrical drawings for floor box requirements. Subnumber indicates data port requirements.
AV	Poke Thru. Subnumber indicates data port requirements.
AV	Conduit stub-up under the millwork, for audiovisual cabling.
TV	Junction box, with removable cover for cable television receptacle. Surface mount on slab unless otherwise indicated.
	Telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Surface mount on slab unless otherwise indicated. Subnumber indicates port requirements.
CT	Screw cover junction box for audiovisual cable/conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 20 Amp. Surface mount on slab unless otherwise indicated.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.

SYMBOL	DESCRIPTION
VC	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for video camera receptacles. Mount flush with finished wall treatment, unless otherwise indicated. Subnumber indicates number of gang. Provide adjacent power. See Audiovisual detail sheets.
CT	Screw cover junction box for audiovisual conduit termination; sized by Electrical Contractor. All conduits terminate at this box unless otherwise indicated.
TV AV	Multi-discipline Wall box; with divided compartments for shared access with data and 120VAC power. Mount flush with finished wall treatment unless otherwise indicated. Subnumber indicates port requirements (if applicable). See Audiovisual Detail Sheets.
AV	
IR	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for assistive listening emitter. Mount flush with finished wall treatment, 6" below finished ceiling unless otherwise indicated. Subnumber indicates number of gang.
TP	Back box for wall-mounted audiovisual control system touch panel . Back box to be OEM by manufacturer; referenced to model number. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.

SYMBOL	DESCRIPTION
BP	Back box for wall-mounted audiovisual control system button panel . Subnumber indicates number of gang. Mount flush with finished wall treatment; coordinate height with architectural and ADA requirements.
TV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for television receiver receptacle. Subnumber indicates number of gang. See Audiovisual detail sheets.
AV	Gangable wall box, 4-11/16" high x 2-1/2" deep, with 1-1/4" conduit knockouts and blank cover plate; for audiovisual receptacles. Mount flush with finished wall treatment. Subnumber indicates number of gang. See Audiovisual detail sheets.
JB	Junction box, with removable cover for power branch circuit delivery to AV Equipment Rack locations. Surface mount unless otherwise indicated.
R/L	Wall switch for projection screen, raise/stop/lower; supplied with screen. Mount flush with finished wall treatment, at base building electrical switch height unless otherwise indicated.
	Wall-mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise noted. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements. See Audiovisual detail sheets.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, quad, 120 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 120 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 20 Amp. Mount adjacent to associated AV device, unless otherwise indicated.
	Power receptacle, duplex, 220 VAC, 30 Amp. Mount adjacent to associated AV device, unless otherwise indicated.

SYMBOL	DESCRIPTION
M PS	Projection screen, projector lift or shade with low-voltage interface, supplied with device. Mount above finished ceiling unless otherwise indicated. Maintenance access to box shall be provided in non-accessible ceilings. Provide utility-grade 120VAC unless otherwise indicated.
CS	Ceiling speaker with integrated enclosure, grille and grid support. Mount flush with finished ceiling, as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer. See Audiovisual Detail Sheets.
IR	Ceiling surface mounted IR emitter for assistive listening, as shown on the Architectural ceiling plans, unless otherwise indicated. See Audiovisual Detail Sheets.
AV	Ceiling mounted gangable junction box, for Audiovisual device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.
VC	Ceiling mounted gangable junction box, for video camera device. Mount flush with finished ceiling as shown on the Architectural ceiling plans, unless otherwise indicated. Confirm the integrity of the ceiling grid system with the Structural Engineer.

SYMBOL	DESCRIPTION
	Power receptacle, duplex, 120 VAC, 20 Amp. Mount flush with finished ceiling unless otherwise indicated.
	Power receptacle (Utility), duplex, 120 VAC, 15 Amp. Surface mount on slab unless otherwise indicated.
	Ceiling mounted telecom outlet box; quantity and type of cabling as per project standards, unless otherwise indicated. Refer to the Architectural drawings for dimensioned location. Subnumber indicates port requirements.
	Cable tray for cabling, 12" wide x 3" high, with two (2) barrier compartments for routing audio and video cabling related to instructional or medical simulation systems.
	Cable tray for cabling, 18" wide x 6" high, with three (3) barrier compartments for routing audio, video, and network cabling related to instructional or medical simulation systems.

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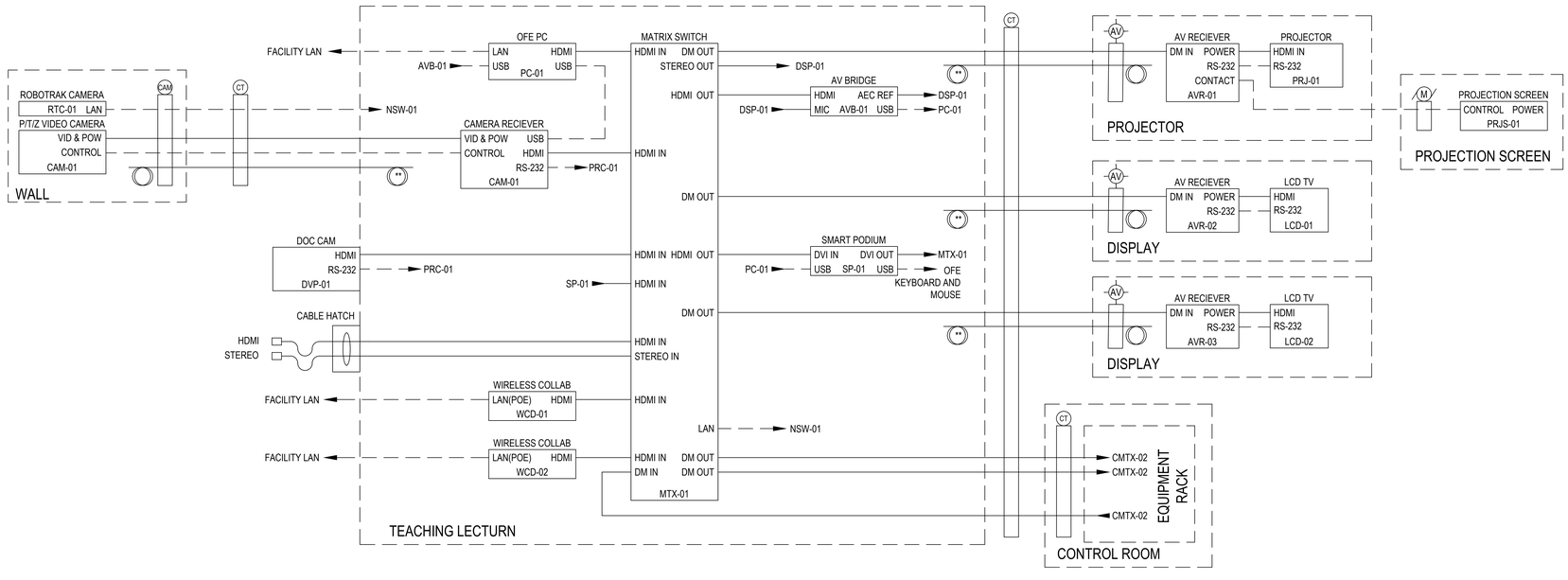
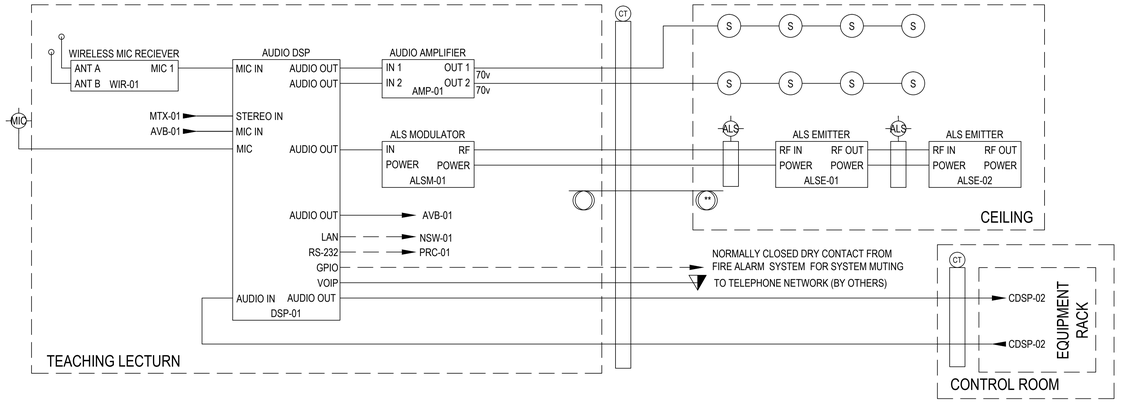
Sheet Title
AUDIOVISUAL DESIGN
ENLARGED PLANS
AV RACK ROOMS

Date: April 10, 2012
Scale: 1/4"=1'-0"
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-501



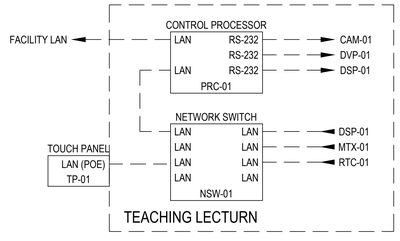
1 TYPICAL CLASSROOM VIDEO SYSTEM DIAGRAM
SCALE: NONE



2 TYPICAL CLASSROOM AUDIO SYSTEM DIAGRAM
SCALE: NONE

14	ALS MODULATOR
13	WIRELESS MIC RECIEVER
12	AMPLIFIER
11	AUDIO DSP
10	CONTROL PROCESSOR
9	AIR MEDIAS
8	CAMERA CCU / AV BRIDGE
7	OFE PC
6	
5	MATRIX SWITCH
4	
3	
2	
1	POWER DISTRIBUTION UNIT

4 TYPICAL CLASSROOM LECTURN RACK ELEVATION
SCALE: NONE



3 TYPICAL CLASSROOM CONTROL SYSTEM DIAGRAM
SCALE: NONE

GLOBAL SHEET NOTE:
** *CONTRACTOR TO PROVIDE 10% SPARE CABLES (MINIMUM 1) OF EACH TYPE WITH SERVICE LOOPS FOR EVERY LOCATION - EXCEPT FOR ACTIVE TYPE CABLES.*

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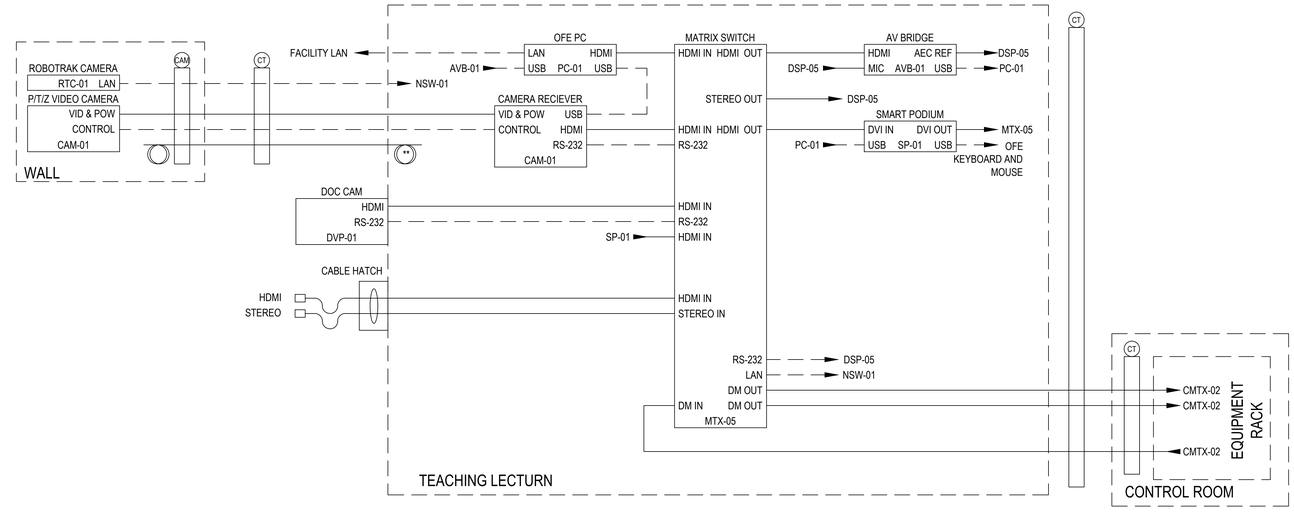
Key Plan

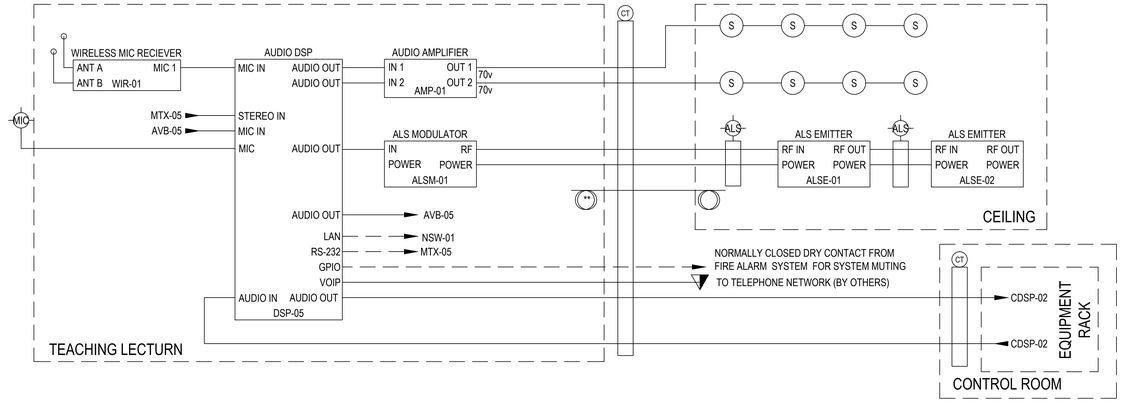
No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN SYSTEMS DIAGRAMS

Date
April 10, 2012
Scale
NONE
SUCF Project Number
14A91
Ennead Project Number
0917
Sheet No.
AV-601



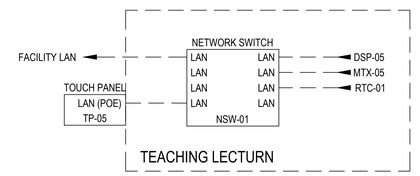
1 LARGE CLASSROOM VIDEO SYSTEM DIAGRAM
SCALE: NONE



2 LARGE CLASSROOM AUDIO SYSTEM DIAGRAM
SCALE: NONE

13	ALS MODULATOR
12	AMPLIFIER
11	AUDIO DSP
10	WIRELESS MIC RECIEVER
9	AIR MEDIA
8	CAMERA CCU / AV BRIDGE
7	OFE PC
6	
5	BLANK
4	MATRIX SWITCH
3	
2	
1	POWER DISTRIBUTION UNIT

4 LARGE CLASSROOM LECTURN EQUIPMENT RACK ELEVATION
SCALE: NONE



3 LARGE CLASSROOM CONTROL SYSTEM DIAGRAM
SCALE: NONE

GLOBAL SHEET NOTE:
** *CONTRACTOR TO PROVIDE 10% SPARE CABLES (MINIMUM 1) OF EACH TYPE WITH SERVICE LOOPS FOR EVERY LOCATION - EXCEPT FOR ACTIVE TYPE CABLES.*

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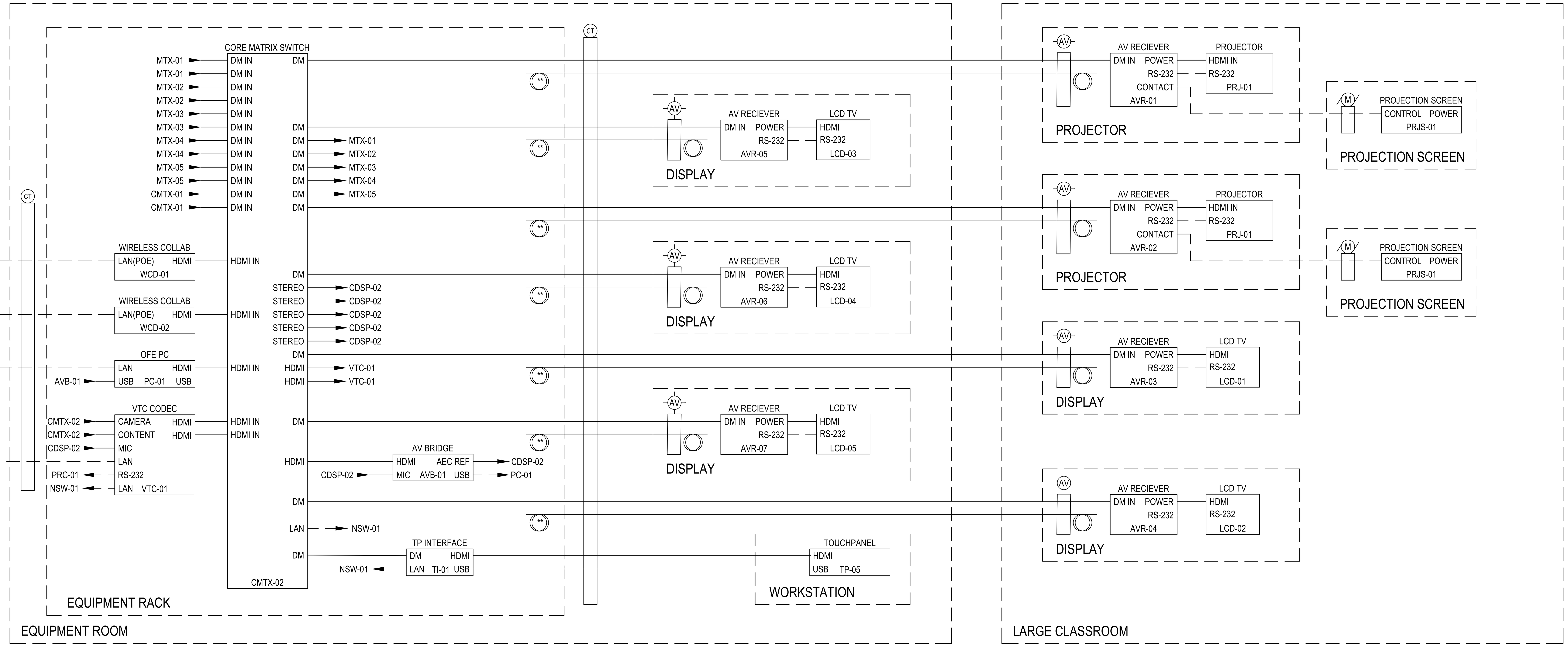
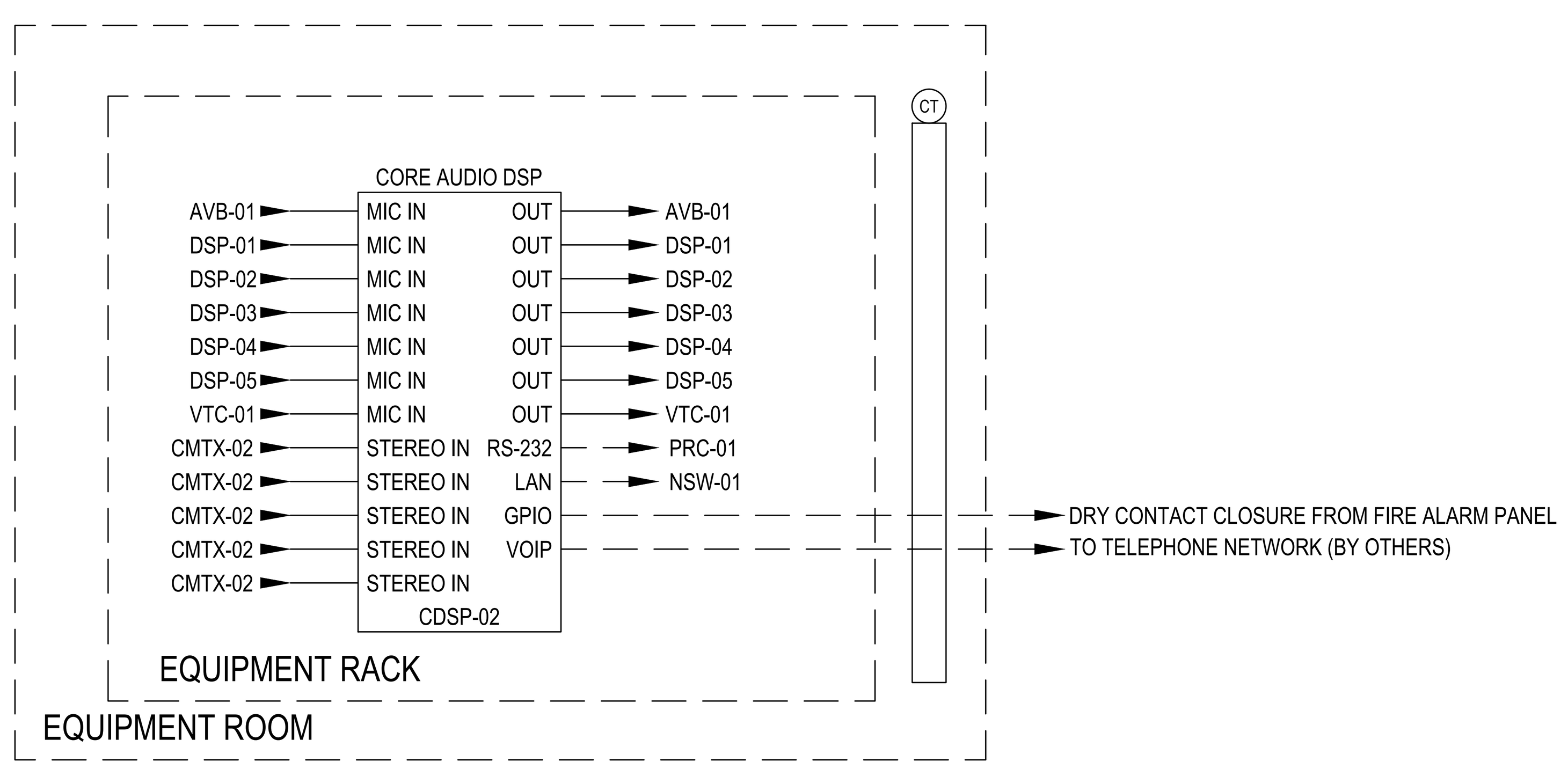
Sheet Title
AUDIOVISUAL DESIGN SYSTEMS DIAGRAMS

Date
April 10, 2012
Scale
NONE
SUCF Project Number
14A91
Ennead Project Number
0917
Sheet No.
AV-602



1 DISTANCE LEARNING CONTROL ROOM VIDEO SYSTEM DIAGRAM
SCALE: NONE



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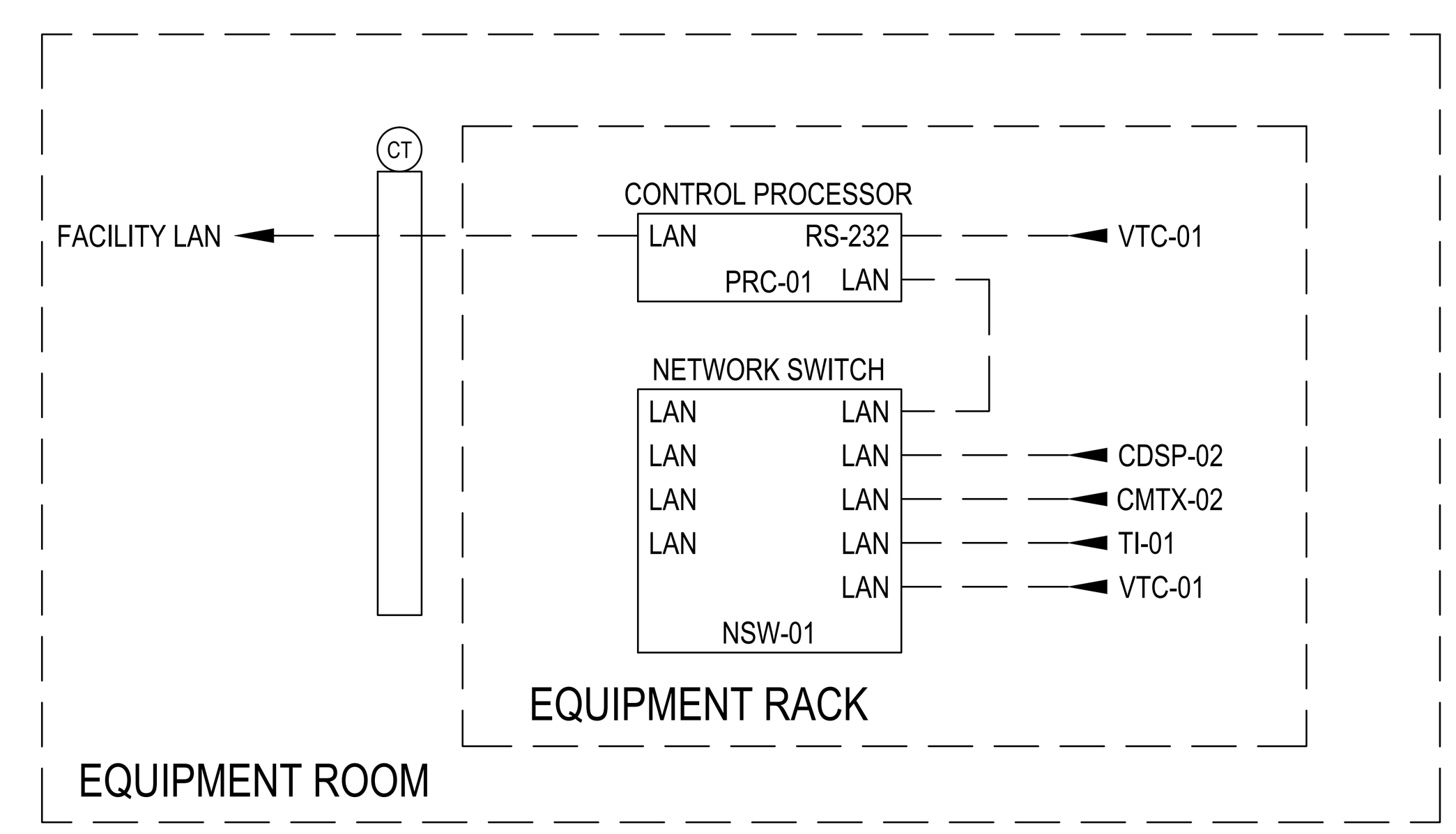
SCALE: NONE



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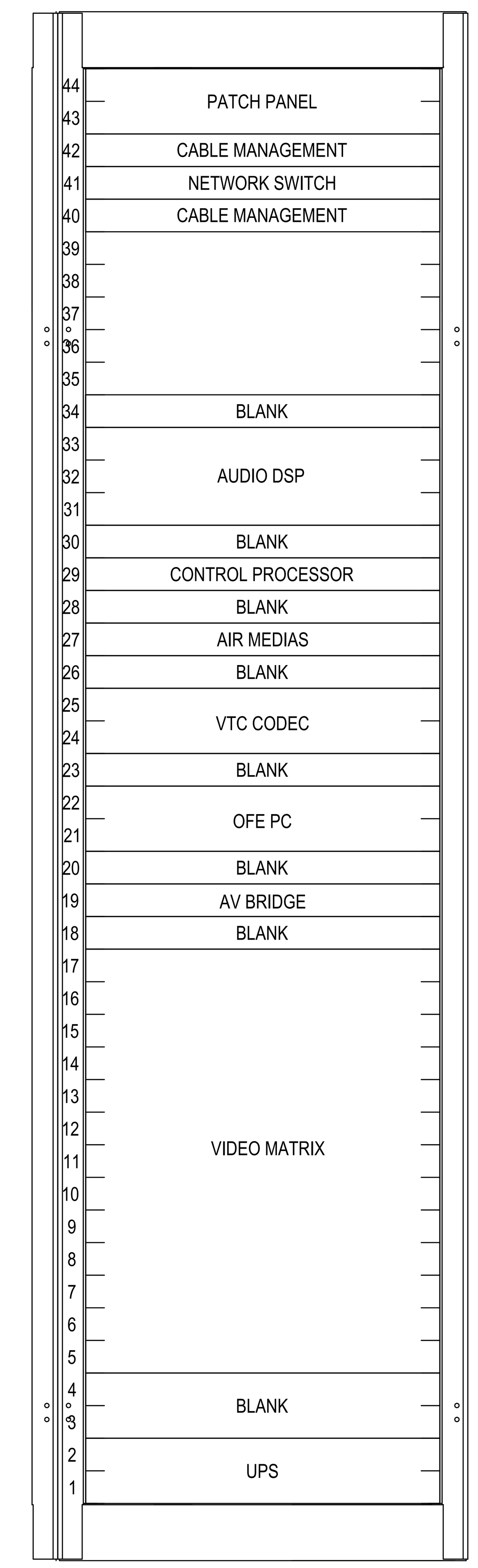

4 DISTANCE LEARNING CONTROL ROOM EQUIPMENT RACK ELEVATION
SCALE: NONE

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Key Plan

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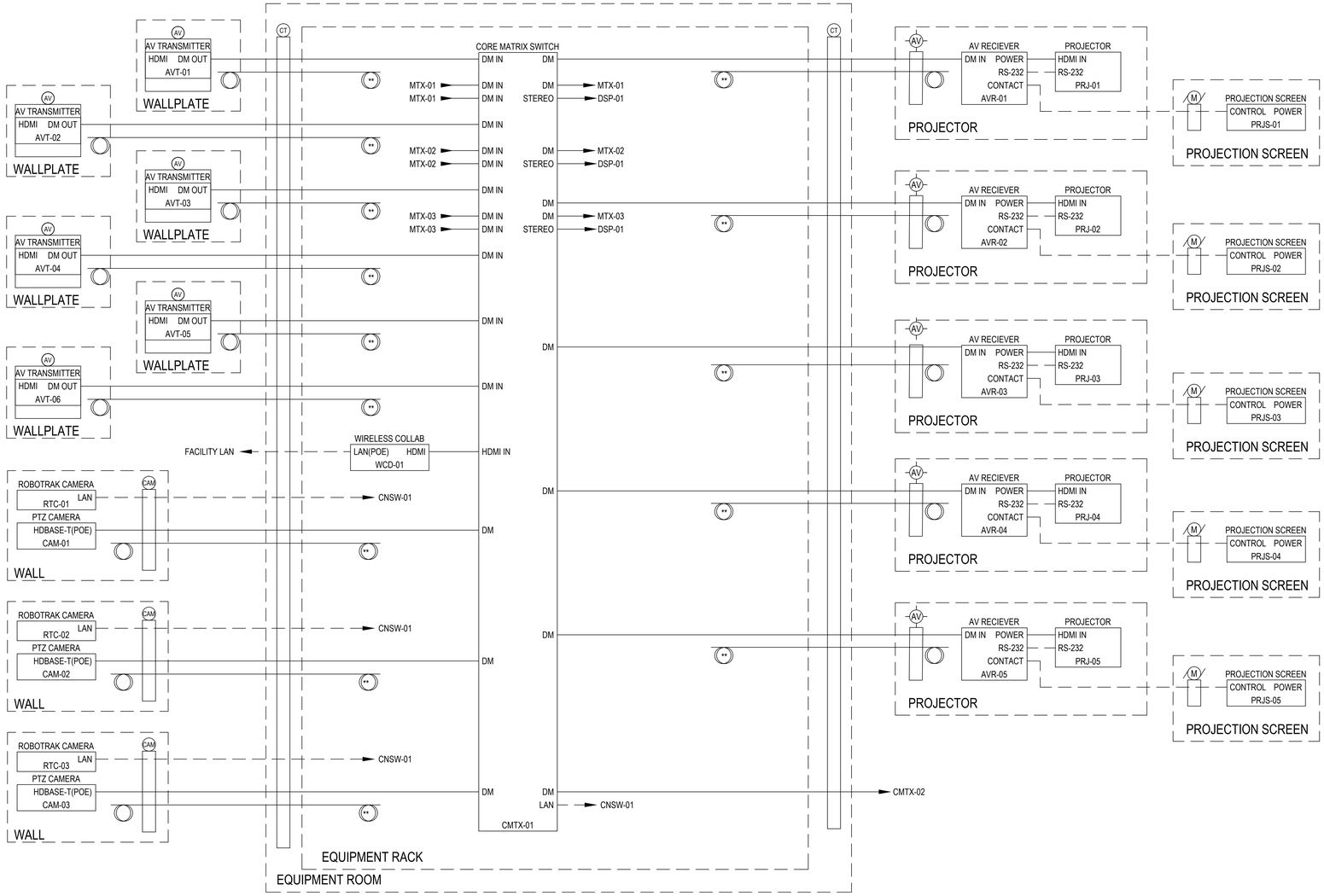
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
AUDIOVISUAL DESIGN
SYSTEMS DIAGRAMS

Date: April 10, 2012
Scale: NONE
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: AV-603



1 MULTIPURPOSE ROOM VIDEO SYSTEM DIAGRAM
SCALE: NONE

2 BAORDROOM ADUIO SYSTEM DIAGRAM
SCALE: NONE

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Key Plan

No.	Issue Name	Date
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Sheet Title
AUDIOVISUAL DESIGN SYSTEMS DIAGRAMS

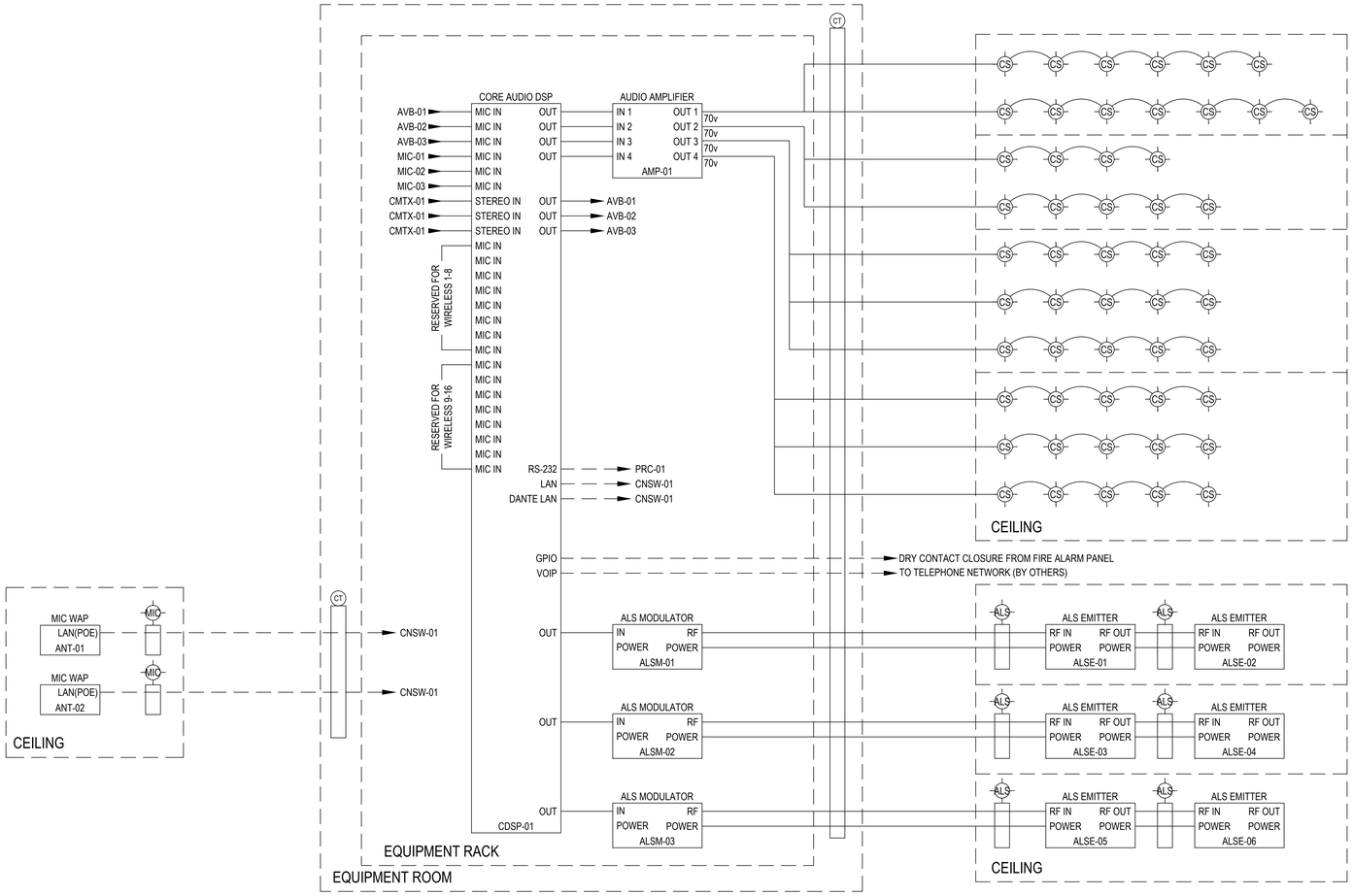
Date
April 10, 2012

Scale
NONE

SUCF Project Number
14A91

Ennead Project Number
0917

Sheet No.
AV-604



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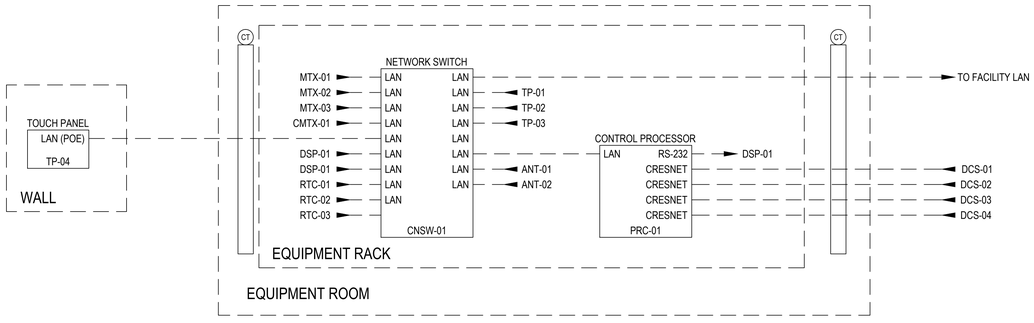
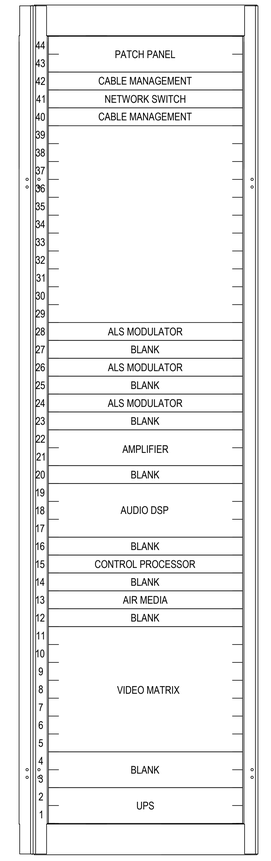
SCALE: NONE



2 MUTLIPURPOSE ROOM CONTROL SYSTEM DIAGRAM
SCALE: NONE



3 MUTLIPURPOSE ROOM EQUIPMENT RACK ELEVATION
SCALE: NONE

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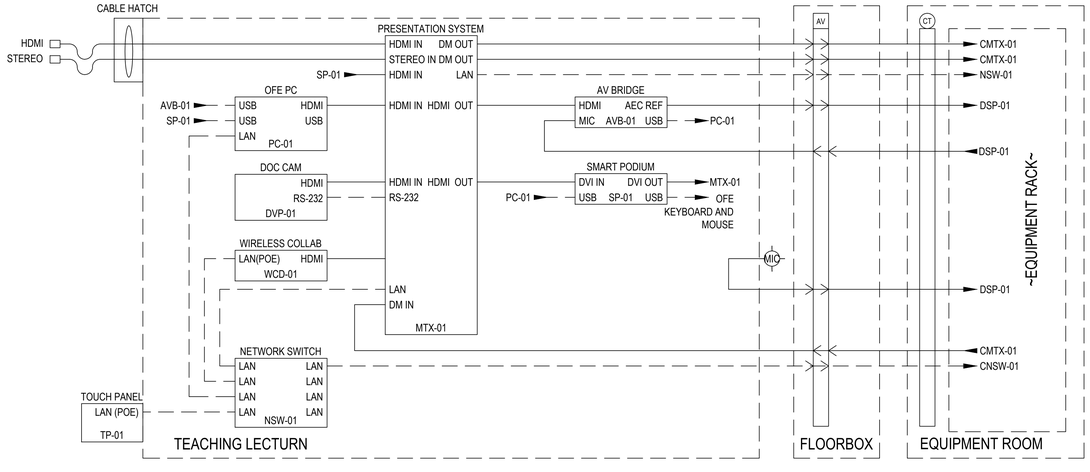
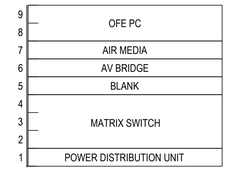
Sheet Title
AUDIOVISUAL DESIGN SYSTEMS DIAGRAMS

Date
April 10, 2012
Scale
NONE
SUCF Project Number
14A91
Ennead Project Number
0917
Sheet No.
AV-605



1 MULTIPURPOSE ROOM TYPICAL LECTURN A/V SYSTEM DIAGRAM
SCALE: NONE



2 MULTIPURPOSE ROOM TYPICAL LECTURN EQUIPMENT RACK ELEVATION
SCALE: NONE

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Sheet Title
AUDIOVISUAL DESIGN SYSTEMS DIAGRAMS

Date
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Scale
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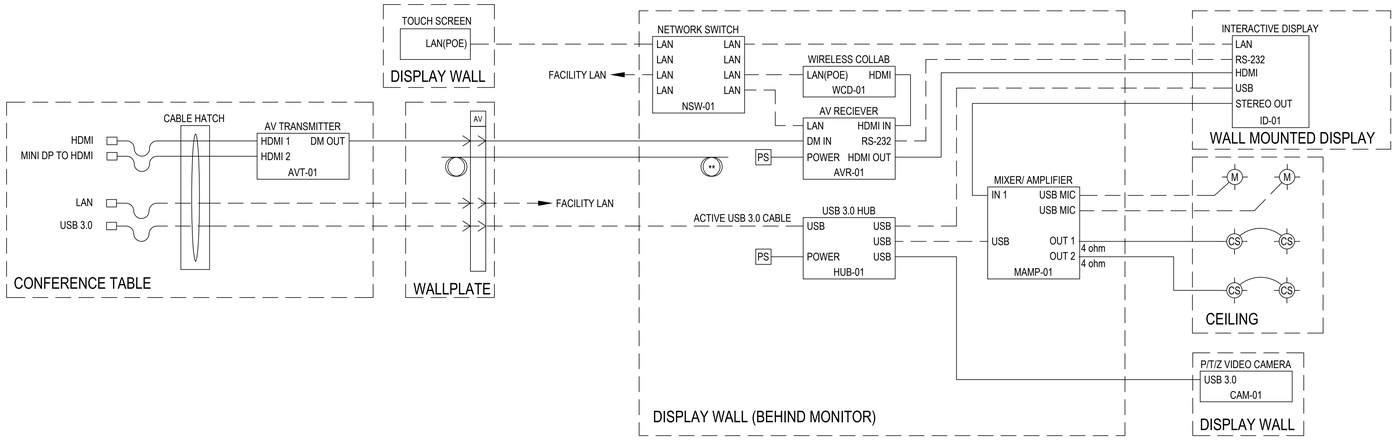
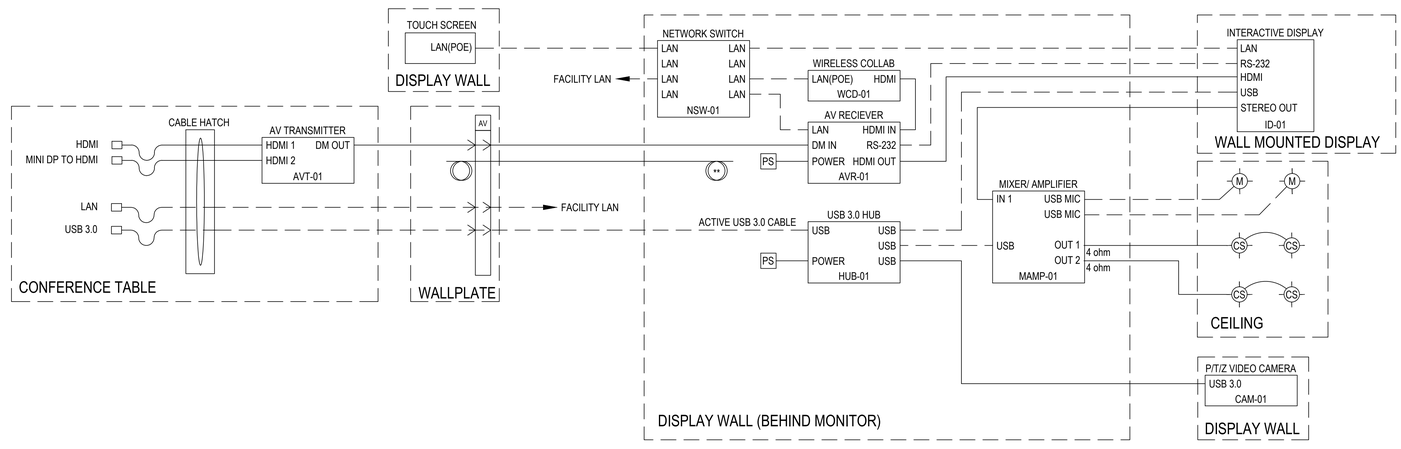
SUCF Project Number
14A91

Ennead Project Number
0917

Sheet No.
AV-606



1 LIBRARY A/V SYSTEM DIAGRAM
SCALE: NONE



2 CONFERENCE ROOM A/V SYSTEM DIAGRAM
SCALE: NONE

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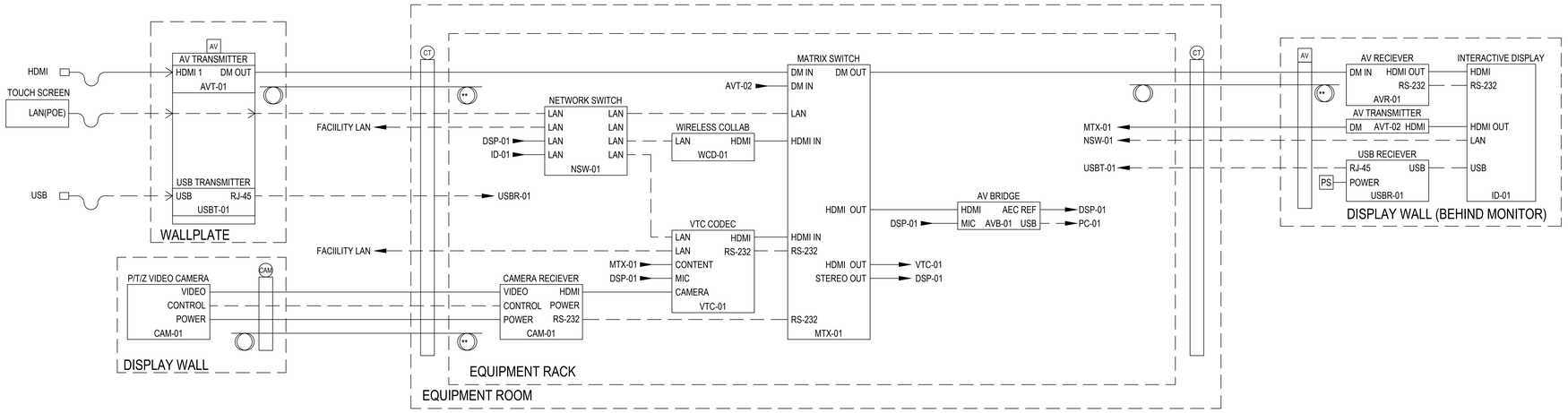
Key Plan

No.	Issue Name	Date
7	ISSUED FOR AV BID	12/16/16
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

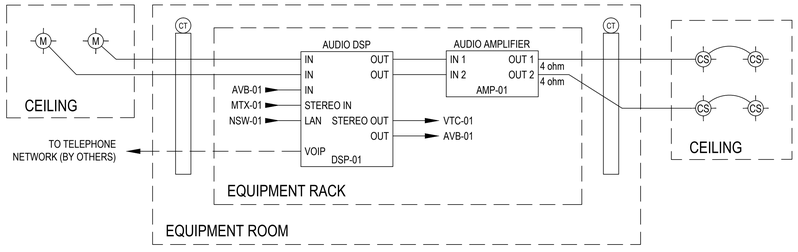
Sheet Title
AUDIOVISUAL DESIGN SYSTEMS DIAGRAMS

Date
April 10, 2012
Scale
NONE
SUCF Project Number
14A91
Ennead Project Number
0917

Sheet No.
AV-607



1 DEANS CONFERENCE ROOM VIDEO AND CONTROL SYSTEM DIAGRAM
SCALE: NONE



2 DEANS CONFERENCE ROOM AUDIO SYSTEM DIAGRAM
SCALE: NONE

14	BLANK
13	VTC CODEC
12	
11	AIR MEDIA
10	AMPLIFIER
9	AUDIO DSP
8	AV BRIDGE
7	BLANK
6	CAMERA CCU
5	BLANK
4	MATRIX SWITCH
3	
2	
1	POWER DISTRIBUTION UNIT

3 DEANS CONFERENCE ROOM EQUIPMENT RACK ELEVATION
SCALE: NONE

GLOBAL SHEET NOTE:
** *CONTRACTOR TO PROVIDE 10% SPARE CABLES (MINIMUM 1) OF EACH TYPE WITH SERVICE LOOPS FOR EVERY LOCATION - EXCEPT FOR ACTIVE TYPE CABLES.*

Project Title
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SUCF Project Number
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Ennead Project Number
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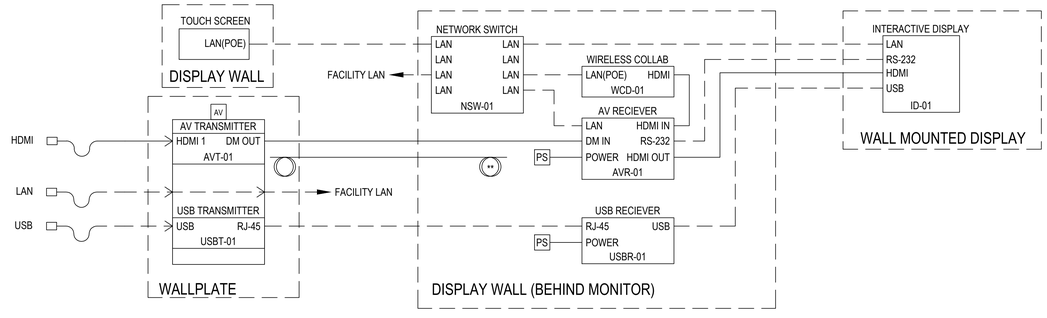
Sheet No.
AV-608



1 OPEN OFFICE AREA A/V SYSTEM DIAGRAM
SCALE: NONE

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SUCF Project Number
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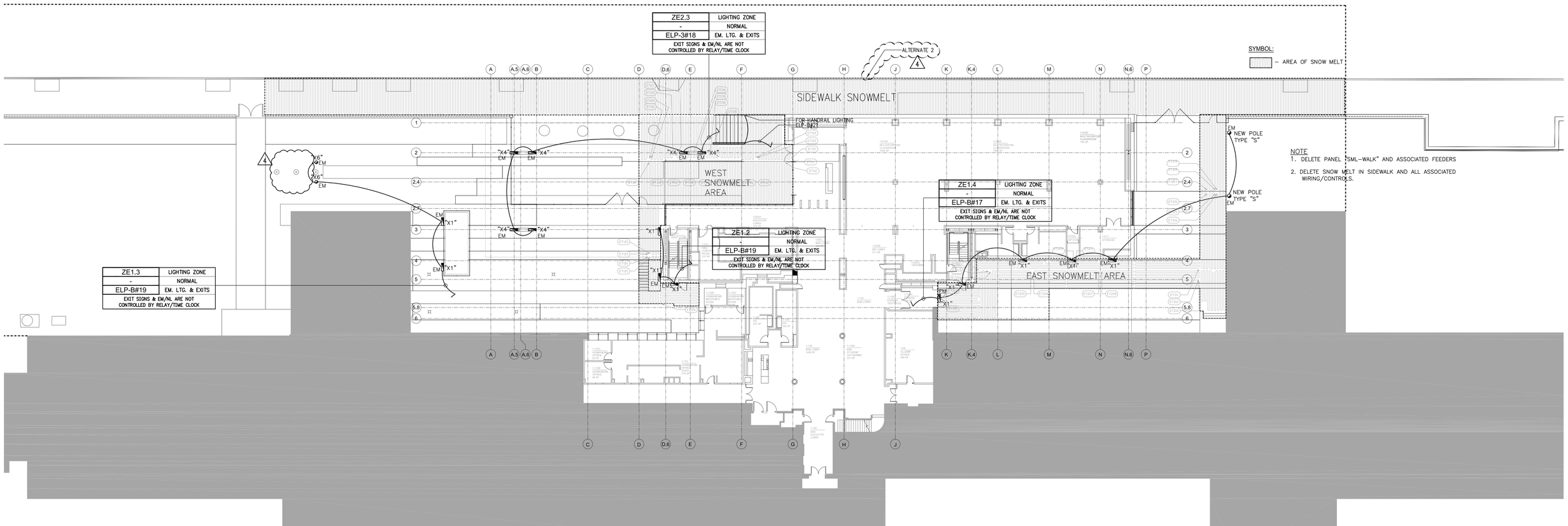
Sheet No.
AV-609



NOTE
1. DELETE PANEL "SML–WALK" AND ASSOCIATED FEEDERS
2. DELETE SNOW MELT IN SIDEWALK AND ALL ASSOCIATED WIRING/CONTROLS.

HEATER VOLTAGE - 265V - WEST SNOW MELT

CABLE TAG	CATALOG #				WATTS/ CABLE	WATTS/ FOOT	AMPS/ CABLE	BKR AMPS	WATTS/ FT² @ 8"
ET100	A	674K	175	XX	5453.4	31.2	19.7	26.7	46.7
ET101	A	693K	158	XX	4832.1	30.6	17.4	23.8	45.9
ET102	A	693K	161	XX	4742.1	29.5	17.1	23.1	44.2
ET103	A	693K	161	XX	4742.1	29.5	17.1	23.1	44.2
ET104	A	752K	68	XX	2158.7	31.7	7.8	9.9	47.6
ET105	A	693K	155	XX	4925.6	31.8	17.8	24.0	47.7
ET106	A	693K	155	XX	4925.6	31.8	17.8	24.0	47.7
ET107	A	693K	155	XX	4925.6	31.8	17.8	24.0	47.7
ET108	A	693K	156	XX	4894.1	31.4	17.7	23.8	47.1
ET109	A	715K	125	XX	3803.2	30.4	13.7	18.5	45.6
ET110	A	732K	89	XX	2682.4	30.1	9.7	12.2	45.2
ET111	A	752K	73	XX	2010.9	27.5	7.3	9.2	41.3
ET112	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET113	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET114	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET115	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET116	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET117	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET118	A	674K	183	XX	5215.0	28.5	18.8	25.5	42.7
ET119	A	674K	183	XX	5215.0	28.5	18.8	25.5	42.7
ET120	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET121	A	721K	110	XX	3239.8	29.5	11.7	14.8	44.2
ET122	A	715K	121	XX	3928.9	32.5	14.2	19.1	48.7
ET123	A	715K	121	XX	3928.9	32.5	14.2	19.1	48.7
ET124	A	715K	121	XX	3928.9	32.5	14.2	19.1	48.7
ET125	A	715K	121	XX	3928.9	32.5	14.2	19.1	48.7
ET126	A	674K	187	XX	5103.4	27.3	18.4	25.0	40.9

HEATER VOLTAGE - 265V - EAST SNOW MELT

CABLE TAG	CATALOG #				WATTS/ CABLE	WATTS/ FOOT	AMPS/ CABLE	BKR AMPS	WATTS/ FT² @ 8"
ET200	A	674K	170	XX	5613.8	33.0	20.3	27.5	49.5
ET201	A	658K	204	XX	6018.0	29.5	21.7	29.4	44.2
ET202	A	721K	106	XX	3362.1	31.7	12.1	15.4	47.6
ET203	A	715K	120	XX	3961.6	33.0	14.3	19.2	49.5
ET204	A	721K	100	XX	3563.8	35.6	12.9	16.3	53.5
ET205	A	693K	164	XX	4655.3	28.4	16.8	22.7	42.6
ET206	A	693K	164	XX	4655.3	28.4	16.8	22.7	42.6
ET207	A	693K	164	XX	4655.3	28.4	16.8	22.7	42.6
ET208	A	693K	164	XX	4655.3	28.4	16.8	22.7	42.6
ET209	A	712K	138	XX	4340.4	31.5	15.7	21.1	47.2
ET210	A	712K	138	XX	4340.4	31.5	15.7	21.1	47.2
ET211	A	693K	161	XX	4742.1	29.5	17.1	23.1	44.2
ET212	A	693K	161	XX	4742.1	29.5	17.1	23.1	44.2
ET213	A	693K	161	XX	4742.1	29.5	17.1	23.1	44.2
ET214	A	674K	190	XX	5022.8	26.4	18.1	24.6	39.7
ET215	A	693K	158	XX	4832.1	30.6	17.4	23.5	45.9
ET216	A	693K	158	XX	4832.1	30.6	17.4	23.5	45.9
ET217	A	693K	158	XX	4832.1	30.6	17.4	23.5	45.9
ET218	A	693K	158	XX	4832.1	30.6	17.4	23.5	45.9
ET219	A	674K	190	XX	5022.8	26.4	18.1	24.6	39.7

ALTERNATE 2
4

HEATER VOLTAGE - 265V - SIDEWALK SNOW MELT

CABLE TAG	CATALOG #				WATTS/ CABLE	WATTS/ FOOT	AMPS/ CABLE	BKR AMPS	WATTS/ FT² @ 8"
ET300	A	674K	175	XX	5453.4	31.2	19.7	26.7	46.7
ET301	A	693K	158	XX	4832.1	30.6	19.4	23.5	45.9
ET302	A	693K	161	XX	4742.1	29.5	17.1	23.1	44.2
ET303	A	693K	161	XX	4742.1	29.5	17.1	23.1	44.2
ET304	A	752K	68	XX	2158.7	31.7	7.8	9.9	47.6
ET305	A	693K	155	XX	4925.6	31.8	17.8	24.0	47.7
ET306	A	693K	155	XX	4925.6	31.8	17.8	24.0	47.7
ET307	A	693K	155	XX	4925.6	31.8	17.8	24.0	47.7
ET308	A	693K	156	XX	4894.1	31.4	17.7	23.8	47.1
ET309	A	715K	125	XX	3803.2	30.4	13.7	18.5	45.6
ET310	A	732K	89	XX	2682.4	30.1	9.7	12.2	45.2
ET311	A	752K	73	XX	2010.9	27.5	7.3	9.2	41.3
ET312	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET313	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET314	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET315	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET316	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET317	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET318	A	674K	183	XX	5215.0	28.5	18.8	25.5	42.7
ET319	A	674K	183	XX	5215.0	28.5	18.8	25.5	42.1
ET320	A	693K	165	XX	4627.1	28.0	16.7	22.5	42.1
ET321	A	721K	110	XX	3239.8	29.5	11.7	14.8	44.2
ET322	A	715K	121	XX	3928.9	31.5	14.2	19.1	48.7
ET323	A	715K	121	XX	3928.9	31.5	14.2	19.1	48.7
ET324	A	715K	121	XX	3928.9	31.5	14.2	19.1	48.7
ET325	A	715K	121	XX	3928.9	31.5	14.2	19.1	48.7
ET326	A	674K	187	XX	5103.4	27.3	18.4	25.0	40.9

SNOW MELTING NOTES

SNOW MELTING CABLES

1. PROVIDE AND INSTALL TWO CONDUCTOR' INCONEL SHEATHED HEATER CABLES IN THE AREAS INDICATED ON THE DRAWINGS. HEATERS TO BE NELSON HEAT TRACE OR APPROVED EQUAL. HEATING CABLES SHALL BE U.L. APPROVED FOR DIRECT BURIAL FOR SNOW MELTING.
2. SUBMIT DETAILED CABLE INSTALLATION DRAWINGS FOR APPROVAL IN AUTOCAD FORMAT, INCLUDING FINAL LOCATION OF JUNCTION BOXES AS VERIFIED IN THE FIELD. DRAWINGS SHALL INDICATE ROUTING OF HEATER CABLE ON 6" SPACING AND PROVIDE A WATT DENSITY OF 40 WATTS PER SQUARE FOOT. FIELD VERIFY PLANTING LOCATIONS FOR HEATER LAYOUT.
3. HEATER ASSEMBLIES SHALL CONSIST OF A TWO CONDUCTOR HEATING SECTION JOINED TO A COLD SECTION OF SUFFICIENT LENGTH TO REACH JUNCTION BOXES AS SHOWN ON DRAWINGS (SEE E–100). CONNECT HEATERS IN JUNCTION BOXES USING 1/2 INCH NPT THREADED COMPRESSION FITTING.
4. HEATING CABLES SHALL BE SECURED IN PLACE AT APPROXIMATELY 3–FOOT INTERVALS TO MAINTAIN DESIGN, USING PREPUNCHED STRAPPING. FASTEN STRAPPING USING AN APPROPRIATE FASTING METHOD. HEATER CABLE TO BE IMBEDDED IN CONCRETE TOPPING UNDER PAVERS AND NOT IN DIRECT CONTACT WITH THE MEMBRANE.
5. CABLE BENDS SHALL NOT BE MADE 6 INCHES OF SPLICE FITTINGS AND SHALL HAVE A MINIMUM RADIUS OF 2 INCHES. HOT SECTIONS SHALL NOT CROSS THEMSELVES.
6. JUNCTION BOXES SHALL BE OF WEATHERTIGHT CONSTRUCTION AND MOUNTED A MINIMUM OF 18 INCHES ABOVE GRADE OR A DRY AREA WITHIN BUILDING ENVELOPE. FINAL LOCATION OF JUNCTION BOXES TO BE DETERMINED BASED ON FIELD CONDITIONS AND SUBMITTED TO THE ENGINEER FOR APPROVAL. PROVIDE NON–HEATING LEADS OF SUFFICIENT LENGTH BASED ON JUNCTION BOX LOCATION, WITH A MINIMUM COLD LENGTH OF 7 FEET.
7. EACH HEATER SHALL HAVE A PERMANENT METAL TAG INDICATING LENGTH OF "HOT" SECTION, LENGTH OF "COLD" SECTION, AND MAXIMUM VOLTAGE.

SNOW MELTING CONTROLS

1. SNOW MELTING SYSTEM SHALL HAVE AN AUTOMATIC CONTROL CONSISTING OF TWO CONTOL/DISTRIBUTION PANELS, NELSON TYPE AP OR APPROVED BY ENGINEER, EACH WITH EUR–5A SNOW SWITCH, OIT–1 SNOW PROBE, AND SIT–6E SLAB PROBE. ONE PANEL FOR THE EAST SNOW MELT AREA, ONE PANEL FOR THE WEST SNOW MELT AREA AND ONE FOR THE SIDEWALK SNOW MELT AREA.

SNOW MELT:

1. CABLE LENGTH MAY BE LONGER THAN REQUIRED. LAYOUT MAY BE VARIED TO USE UP EXCESS.
1. DO NOT CROSS HOT OR COLD LENGTHS OVER EACH OTHER.
2. AVOID AREAS OF FUTURE PENETRATIONS, i.e. HANDRAIL SUPPORTS.
3. SEE MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION DETAILS.
4. INSTALL IN ACCORDANCE WITH NEC ARTICLE 426 "FIXED OUTDOOR ELECTRIC DEICING AND SNOW–MELTING EQUIPMENT".
6. DO NOT CROSS CONCRETE EXPANSION JOINTS.
7. "XX" INDICATES THAT FINAL LOCATIONS OF JUNCTION BOXES AND COLD LENGHTS HAVE NOT YET BEEN DETERMINED. COLD LENGTHS INDICATED GOING BELOW GRADE.

ALTERNATE NOTES:

1. PROVIDE SNOW MELT IN SIDEWALK AREA INCLUDING ALL ASSOCIATED CONTROLS AND POWER FEEDERS AS PART OF ALTERNATE 2.
2. PROVIDE SNOW MELT PANEL "SML–WALK" AND ALL ASSOCIATED FEEDERS AS PART OF ALTERNATE 2.

4

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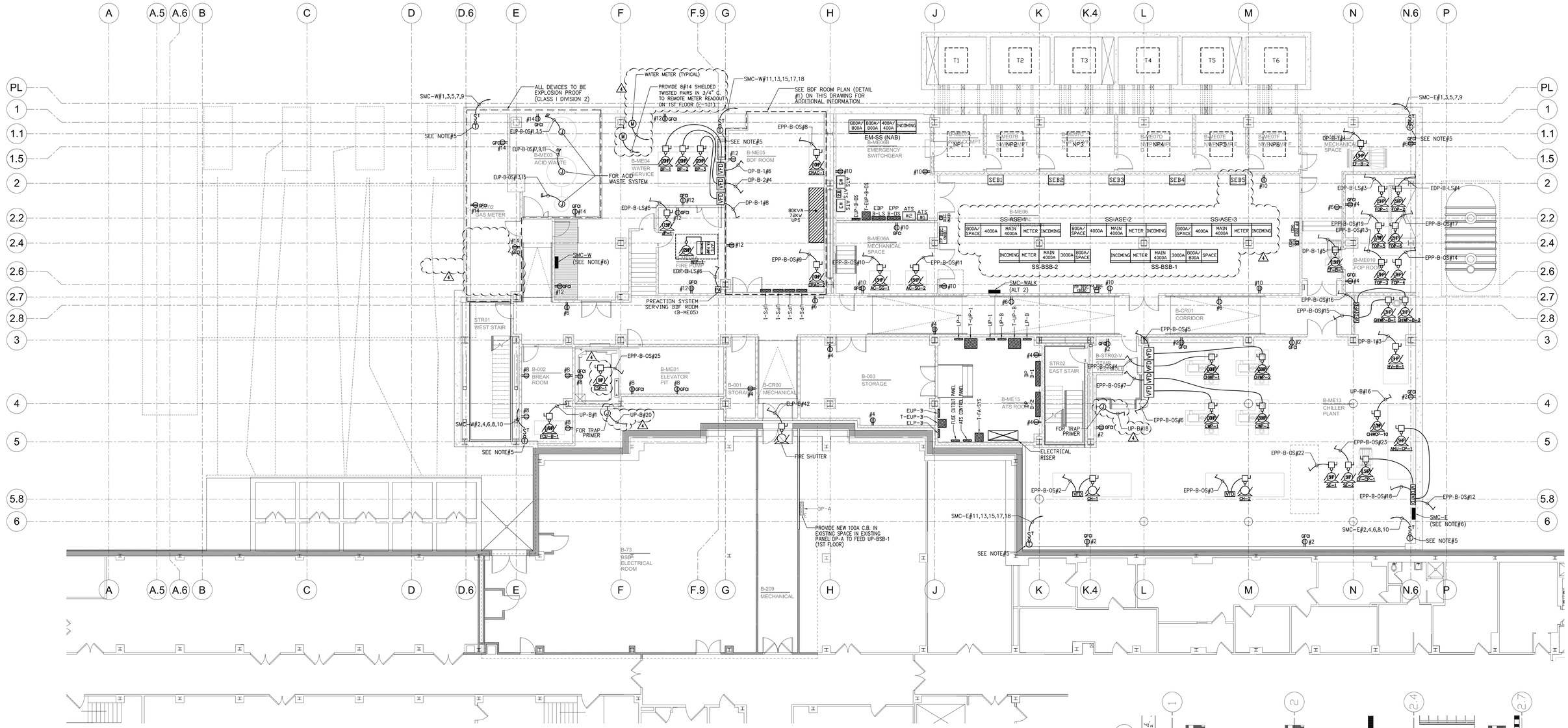
Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3 ⚠	5/18/12
1	BID DOCUMENTS	4/10/12

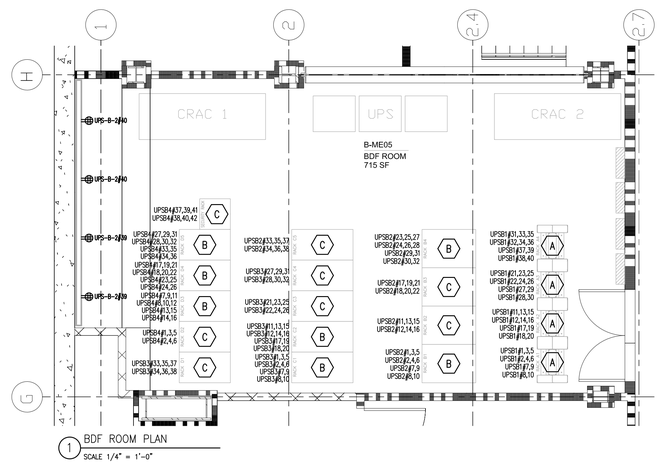
Sheet Title
ELECTRICAL SITE PLAN

Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	E-002
Scale	Ennead Project Number	
1/16" = 1'-0"	0917	
Phase		



NOTES:

1. FURNISH AND INSTALL ALL WIRING BETWEEN MOTORS AND ASSOCIATED VARIABLE FREQUENCY DRIVES. (TYPICAL FOR ALL MECHANICAL EQUIPMENT).
2. REFER TO PANEL SCHEDULES AND ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.
3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL RECEPTACLES.
4. SEE DRAWING E-300 FOR CIRCUITING INFORMATION
5. JUNCTION BOXES FOR SNOW MELT. COORDINATE EXACT NUMBER AND QUANTITY WITH SNOW MELT SYSTEM MANUFACTURER.
6. PROVIDE AUTOMATIC CONTROL/DISTRIBUTION PANEL FOR SNOW MELTING SYSTEM. NELSON TYPE AP OR AS APPROVED BY ENGINEER, EACH WITH EUP-SA SNOW SWITCH, CIT-1 SNOW PROBE AND SIT-6E SLAB PROBE. EACH PANEL SHALL BE 225A, C/B, 42 POLES, WITH 30A BRANCH CIRCUIT BREAKERS.
7. ALL NORMAL UTILITY CIRCUITS TO PANEL UP-B LOCATED IN B-ME15 (ATS ROOM) UNLESS OTHERWISE NOTED.



1 BDF ROOM PLAN
SCALE 1/4" = 1'-0"

NOTES:
1) SEE BDF/IDF ROOM WIRING LEGEND ON DRAWING E-402

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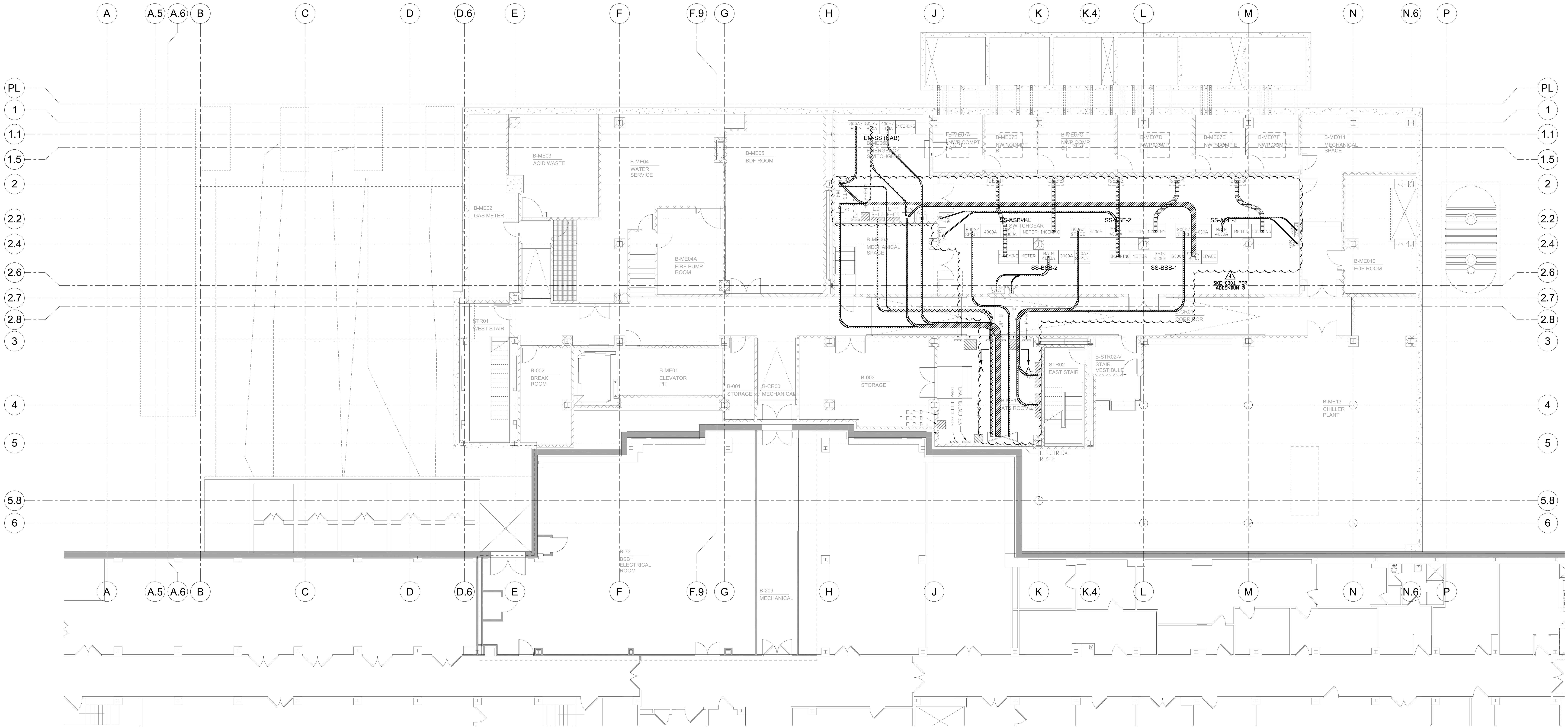
Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL BASEMENT POWER PLAN

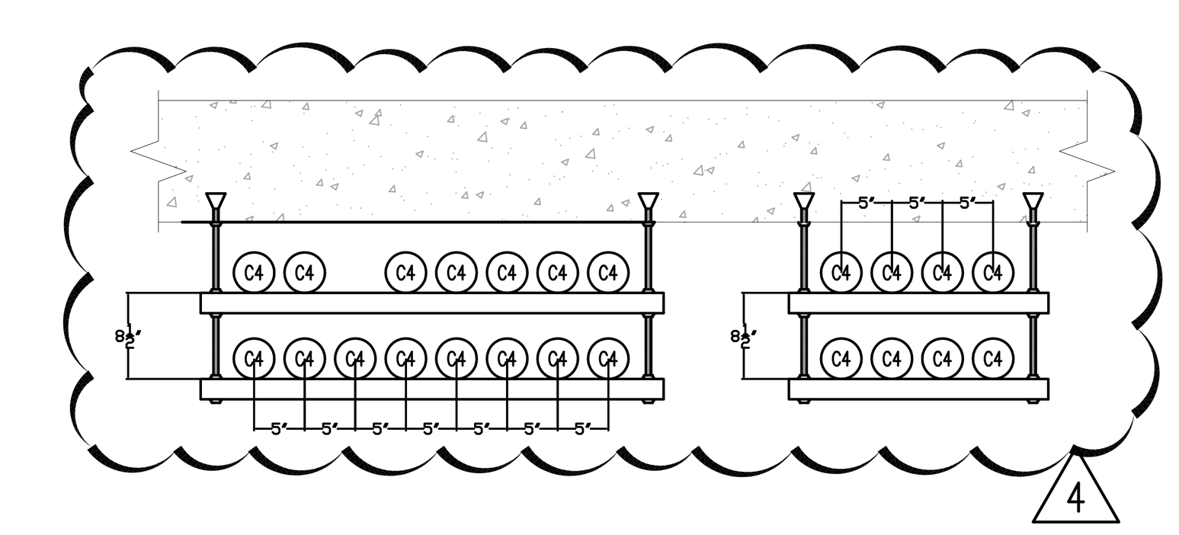
Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	E-100
Scale	Ennead Project Number	
1/8" = 1'-0"	0917	
Phase		



NOTES:
1. REFER TO PANEL SCHEDULES AND ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.
2. ALL DIMENSIONS ARE SHOWN FOR REFERENCE ONLY.

LEGEND	
▨	NAB NORMAL CONDUIT PATHWAY
▩	NAB EMERGENCY CONDUIT PATHWAY
▦	SPOT NETWORK INCOMING CONDUIT PATHWAY

CONDUIT SECTION LEGEND	
S	EMPTY 4" CONDUIT (SPARE)
C1	ACTIVE FEEDER – 1.25" CONDUIT (RGS).
C2	ACTIVE FEEDER – 2" CONDUIT (RGS).
C25	ACTIVE FEEDER – 2.5" CONDUIT (RGS).
C3	ACTIVE FEEDER – 3" CONDUIT (RGS).
C35	ACTIVE FEEDER – 3.5" CONDUIT (RGS).
C4	ACTIVE FEEDER – 4" CONDUIT (RGS).



SECTION A-A
NOT TO SCALE

SKE-030.1 PER
ADDENDUM 3

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Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL BASEMENT MAJOR OVERHEAD PATHWAYS

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-100.1

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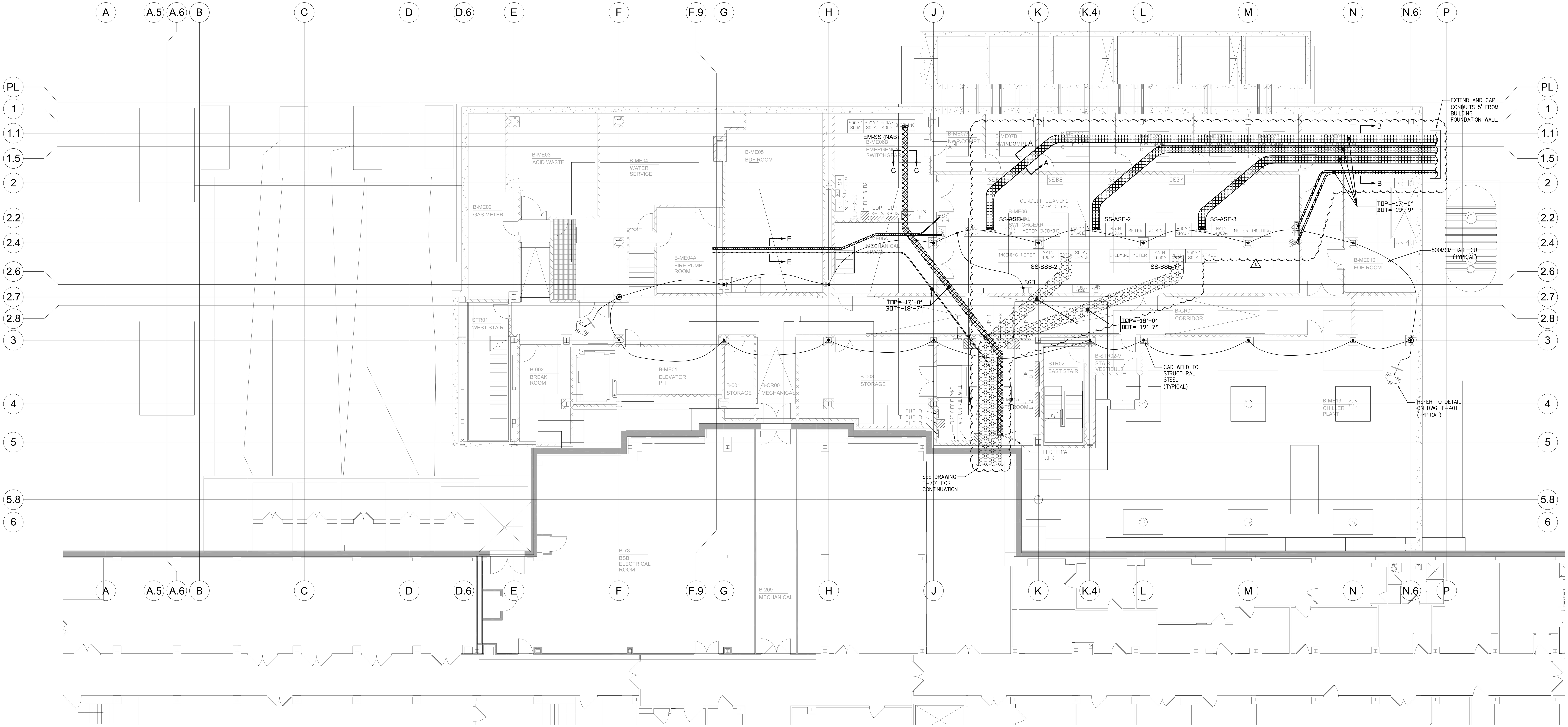

LEGEND	
▧	NAB NORMAL CONDUIT PATHWAY
▩	NAB EMERGENCY CONDUIT PATHWAY
⬡	BSB CONDUIT PATHWAY
▦	ASE CONDUIT PATHWAY

NOTES:

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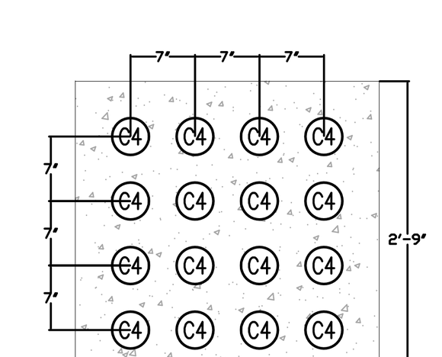
2. ALL DIMENSIONS ARE SHOWN FOR REFERENCE ONLY.
3. COORDINATE ALL ELEVATIONS AND ROUTING WITH ALL OTHER TRADES (CIVIL, STRUCTURAL, PLUMBING, ETC.)

CONDUIT SECTION LEGEND	
S	EMPTY 4" CONDUIT (SPARE)
C1	ACTIVE FEEDER – 1.25" CONDUIT (RGS).
C15	ACTIVE FEEDER – 1.5" CONDUIT (RGS).
C2	ACTIVE FEEDER – 2" CONDUIT (RGS).
C25	ACTIVE FEEDER – 2.5" CONDUIT (RGS).
C3	ACTIVE FEEDER – 3" CONDUIT (RGS).
C35	ACTIVE FEEDER – 3.5" CONDUIT (RGS).
C4	ACTIVE FEEDER – 4" CONDUIT (RGS).



SECTION A-A
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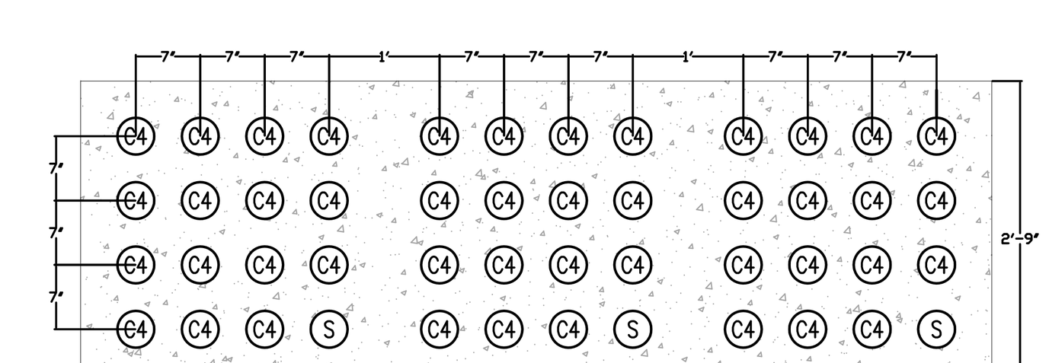

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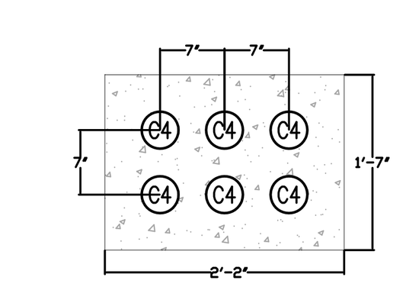
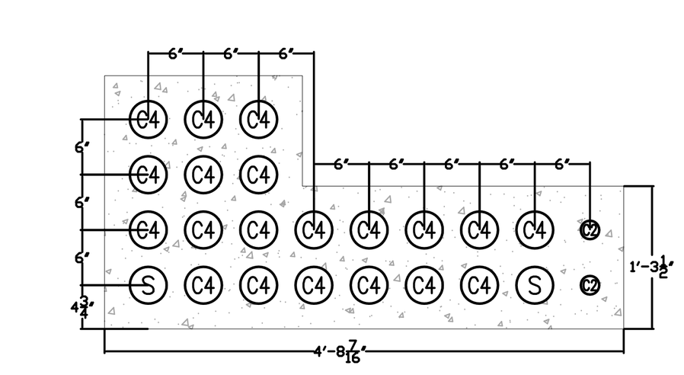
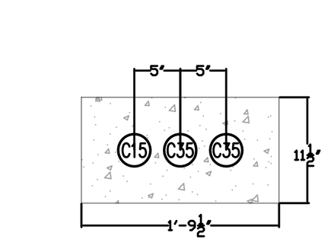


SECTION C-C
NOT TO SCALE



SECTION D-D
NOT TO SCALE



SECTION E-E
NOT TO SCALE

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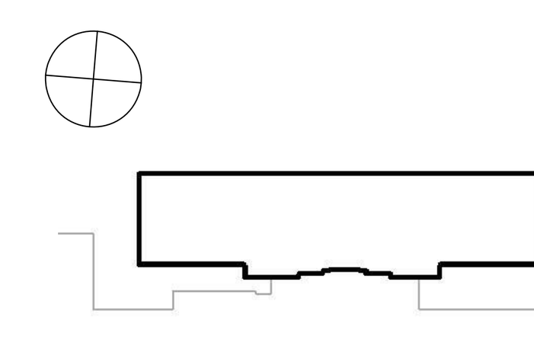
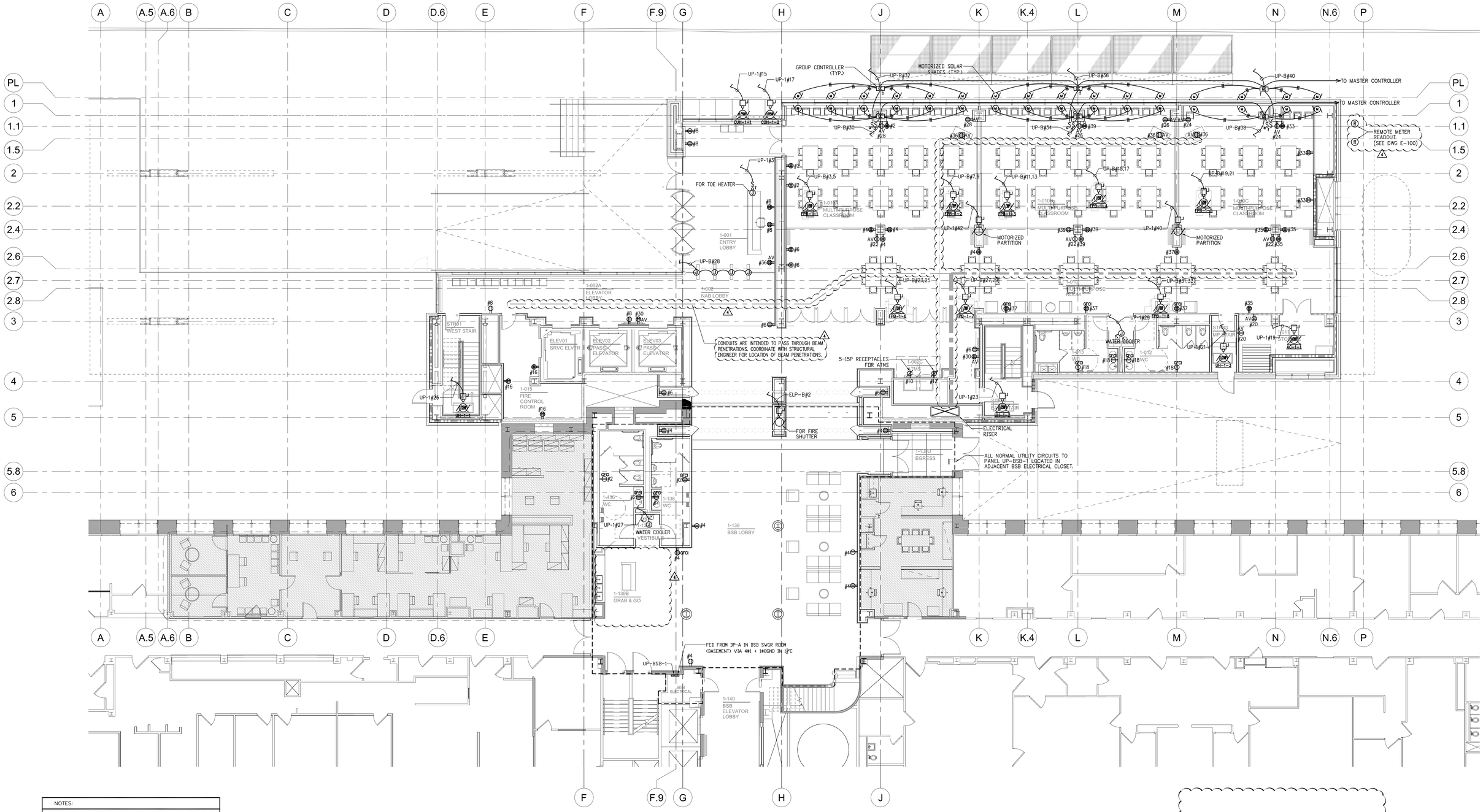

Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3 △4	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL UNDERGROUND PATHWAYS

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-100.2



NOTES:

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2. REFER TO PANEL SCHEDULES AND ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.
3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL RECEPTACLES.
4. ALL CONDUIT RUNS TO ELECTRICAL EQUIPMENT ON THE 1ST FLOOR, BEING SUPPLIED FROM ELECTRICAL PANELS IN THE BASEMENT, SHALL BE ROUTED/ENCASED IN THE 1ST FLOOR SLAB.
5. ALL NORMAL UTILITY CIRCUITS TO PANEL UP-1 LOCATED IN THE BASEMENT IN B-ME15 (ATS ROOM) UNLESS OTHERWISE NOTED.
6. PROVIDE STAINLESS STEEL COVER PLATES (TO MATCH ARCH DETAILING) FOR ALL ELECTRIC RECEPTACLES IN LOBBY AREA. COORDINATE EXACT LOCATIONS AND QUANTITIES WITH ARCHITECTURAL DRAWINGS. (4)

(4)

CONDUIT PATHWAY LEGEND	
	CONDUIT PATHWAY IN CEILING
	CONDUIT PATHWAY IN SLAB

NOTE: THICKNESS OF LINE INDICATES RELATIVE QUANTITY OF CONDUITS IN PATHWAY. LINES ARE NOT TO SCALE, AND ARE INDICATED FOR INFORMATION ONLY. COORDINATE FINAL LOCATION AND ROUTING OF CONDUIT PATHWAYS WITH ALL TRADES.

(4)

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Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3 (4)	5/18/12
1	BID DOCUMENTS	4/10/12

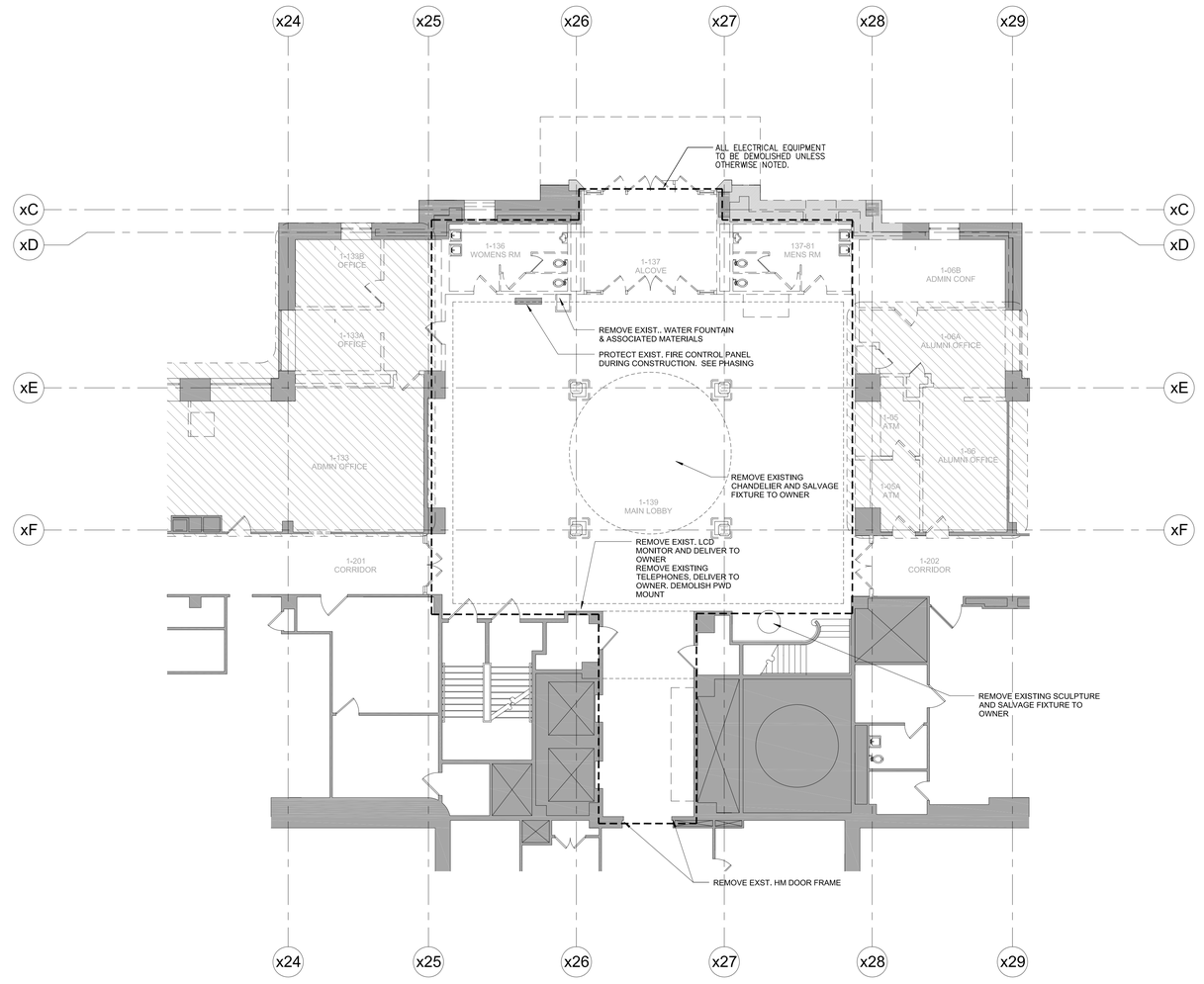
Sheet Title
ELECTRICAL 1ST FLOOR POWER PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-101

SKE-004.0 PER ADDENDUM 3

DEMOLITION NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION ON DEMOLITION TO BE PERFORMED.
2. ALL EXISTING WIRING TO WALL AND FLOOR MOUNTED RECEPTACLES, LIGHTING FIXTURES, OR OTHER EQUIPMENT AND ELECTRICAL DEVICES TO BE REMOVED UNDER THIS CONTRACT SHALL BE REMOVED BACK TO THE PANEL, AND THE CIRCUIT BREAKER LABELED AS SPARE ON THE EXISTING PANEL DIRECTORY.
3. ALL LIGHTS & POWER (RECEPTACLES, ETC. IN CORE AREA (ELEVATOR LOBBIES, STAIRS, BATHROOMS, ETC.) ARE EXISTING TO REMAIN.
4. CONVECTOR ENCLOSURES SHALL BE SUITABLE REPAIRED TO ELIMINATED ALL HOLE AND IRREGULARITIES FROM PREVIOUS CONDUIT AND BOXES.
5. EXISTING CIRCUITING THAT SERVES BASE BUILDING EQUIPMENT (MECHANICAL) EQUIPMENT ROOMS., ELEVATOR MACHINE ROOMS, STAIRS, LIFE SAFETY SYSTEM ETC. AND ALL OTHER LANDLORD CONTROLLED DEVICES, SHALL NOT BE REMOVED.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR REPROGRAMMING THE FIRE ALARM SYSTEM TO ACCOUNT FOR THE REMOVAL OF DEVICES FROM THE EXISTING FIRE ALARM SYSTEM.
7. DEMOLITION OR NEW BRANCHWORK SHALL NOT BE PERFORMED IN EXISTING BATHROOMS (AS WELL AS THEIR ASSOCIATED VESTIBULES) OR IN THE STAIR.
8. BEFORE REMOVING EXISTING BRANCH CIRCUITS, CONTRACTOR SHALL BE CERTAIN THAT THESE CIRCUITS DO NOT FEED OTHER TENANT SPACES OR LANDLORD SYSTEMS IN THE BUILDING.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL DEBRIS RELATED TO THE DEMOLITION AND CONSTRUCTION.
10. ALL RECEPTACLES IN AREAS NOT BEING DEMOLISHED WHICH ARE NOT SHOWN ARE EXISTING TO REMAIN (U.O.N.)
11. DURING DEMOLITION THE CONTRACTOR SHALL NOT INTERRUPT THE POWER SERVING OCCUPIED SECTIONS OF THE FLOOR, CONTRACTOR SHALL PROVIDE TEMPORARY FEEDS AS REQUIRED IN ORDER TO MAINTAIN CONTINUITY OF THESE ALL POWER SHUTDOWNS SHALL BE COORDINATED WITH THE OWNER.
12. ALL EXISTING BASE BUILDING SIGNALING SYSTEMS (FIRE ALARM PULL STATIONS, FIRE WARDEN STATIONS, HORNS, STROBES, SPEAKERS, STANDPIPE TELEPHONES, ETC.) SHALL BE EITHER RELOCATED AS SHOWN OR TEMPORARILY REMOVED AND REINSTALLED TO MATCH NEW SURFACE CONDITIONS. PROVIDE ADDITIONAL WIRING AND FIRE ALARM PROGRAMMING AS REQUIRED.
13. WHERE IT IS REQUIRED TO DISCONNECT OR ALTER ANY PART OF AN EXISTING CIRCUIT SERVING, IN PART, AN AREA OR EQUIPMENT NOT BEING DISTURBED, THE CIRCUIT SHALL BE RECONNECTED TO MAINTAIN CONTINUITY OF THE CIRCUIT.
14. ALL EXISTING EQUIPMENT AND MATERIALS BEING REMOVED SHALL BE STORED OR DISPOSED OF AT THE DIRECTION OF THE OWNER OR ARCHITECT.
15. BEFORE TEMPORARILY DISCONNECTING OR RELOCATING EXISTING FIRE ALARM EQUIPMENT THE CONTRACTOR SHALL NOTIFY THE BUILDING OWNER/MANAGER AND DISCONNECT AND RELOCATE AT THE OWNER'S DIRECTION.
16. INSULATION RESISTANCE TESTS SHALL BE CONDUCTED ON ALL EXISTING WIRING AND CONDUCTORS TO REMAIN IN THE AREA OF WORK. TESTS SHALL MEET THE NEMA (IPCEA) STANDARD REQUIREMENT FOR THE CONDUCTOR TYPE OR GOVERNING CODE, WHICHEVER IS MORE STRINGENT.



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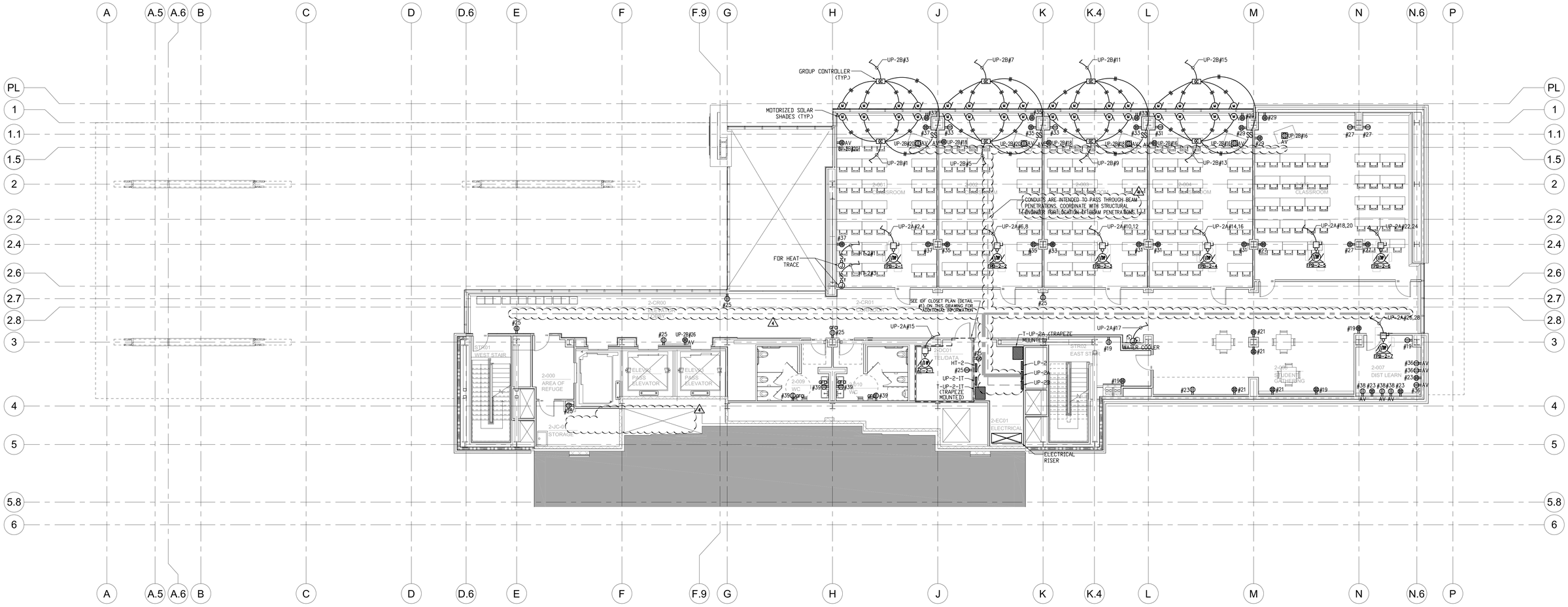
Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL 1ST FLOOR BSB DEMOLITION PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-101.1



NOTES:

1. FURNISH AND INSTALL ALL WIRING BETWEEN MOTORS AND ASSOCIATED VARIABLE FREQUENCY DRIVES. (TYPICAL FOR ALL MECHANICAL EQUIPMENT).
2. REFER TO PANEL SCHEDULES AND ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.
3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL RECEPTACLES.
4. ALL NORMAL UTILITY CIRCUITS TO PANEL UP-2A LOCATED IN 2-EC01 (ELECTRICAL) UNLESS OTHERWISE NOTED.

HEATING CABLE NOTES:

1. CONTROL ALL HEAT TRACING WITH AN AMBIENT CONTROL/DISTRIBUTION PANEL, NELSON TYPE AP OR EQUAL AS APPROVED BY THE ENGINEER. PANEL TO BE IN NEMA 4X STAINLESS STEEL ENCLOSURE FOR OUTDOOR INSTALLATION. PANEL TO INCLUDE 100A MAIN BREAKER, MAIN CONTRACTOR, AND 20 TYPE GFEPD BRANCH CIRCUIT BREAKER WITH 30 MA TRIP.
2. HEAT TRACE MONITORING SYSTEM TO BE NELSON TYPE CM-1 OR APPROVED EQUAL. SYSTEM SHALL MONITOR CONTROLLER STATUS (ON/OFF), VOLTAGE, CURRENT, AND CONTINUITY FOR EACH HEATER SEGMENT OR GROUP OF SEGMENTS, AS INDICATED ON THE TABLE. PROVIDE DIRECT MONITORING OF CONTINUITY OVER HEATER BUS WIRES WITH PLTCMD TYPE CONTINUITY MONITOR MOUNTED AT THE END OF EACH HEATER SEGMENT OR GROUP OF SEGMENTS. THE SYSTEM SHALL PROVIDE CONTACTS FOR REMOTE ALARM OR BMS NOTIFICATION. LOCAL DISPLAY SHALL SCAN HEATER SEGMENTS CONTINUALLY AND IDENTIFY ALARM CONDITIONS BY HEATER SEGMENT NUMBER AND ALARM TYPE.
3. AT THE BEGINNING OF EACH HEATER CIRCUIT, PROVIDE A COMPLETE TERMINATION KIT WITH JUNCTION BOX, NELSON ELECTRIC TYPE PLTBC OR APPROVED EQUAL. PROVIDE PIPE MOUNTED CONTINUITY MONITOR NELSON TYPE PLTCMD AT THE END OF EACH HEATER SEGMENT. HEATER GROUND BRAID TO BE CONNECTED TO THE PANELBOARD.
4. HEATER TO BE FASTENED IN A STRAIGHT LINE ALONG PIPE WITH FIBERGLASS TAPE ON 1' INTERVALS.
5. WARNING SIGNS TO BE AFFIXED TO OUTSIDE OF INSULATION ON 10' CENTERS.
6. CABLE TO BE MEGGER TESTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS ON RECEIPT ON MATERIAL, AFTER CABLE INSTALLATION, AND AFTER INSULATION INSTALLATION. A RECORD OF THESE TEST RESULTS SHALL BE PROVIDED TO THE ENGINEER.

SCHEDULE OF UTILITY PANELS 265/460V - 3 PHASE - 4 WIRE

PANEL DESIG.	No. OF POLES	MAIN C.B.	20A - 1P #12 WIRE ACT.	20A - 1P #12 WIRE SP.	20A - 2P #12 WIRE ACT.	20A - 2P #12 WIRE SP.	20A - 3P #12 WIRE ACT.	20A - 3P #12 WIRE SP.	30A - 1P #12 WIRE ACT.	30A - 1P #12 WIRE SP.	REMARKS	KAIC
HT-2	18	50	2	16								10
			1,3									

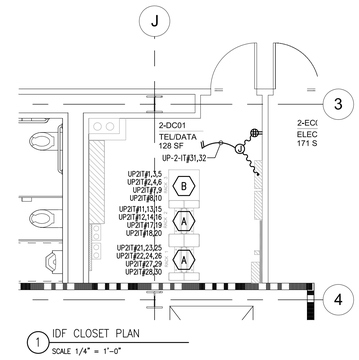
SCHEDULE OF HEATING CABLES

LINE NUMBER & SERVICE	HEATER CATALOG	VOLT	BREAKER AMPS	TOTAL HEATER LENGTH	HEATER WATTS/FT (MIN)	HEATER SEGMENT LENGTH	NUMBER OF PASSES	HEATER kW	PIPE DIAMETER	PIPE LENGTH	INSUL. THICKNESS
ET-001 3" WASTE PIPING	CLT23-JT	277	20	250'	4.00	250'	1	1.00	3"	250'	--
ET-002 4" SOIL PIPING	CLT23-JT	277	15	50'	4.00	50'	1	0.20	4"	50'	--

CONDUIT PATHWAY LEGEND

	CONDUIT PATHWAY IN CEILING
	CONDUIT PATHWAY IN SLAB

NOTE: THICKNESS OF LINE INDICATES RELATIVE QUANTITY OF CONDUITS IN PATHWAY. LINES ARE NOT TO SCALE, AND ARE INDICATED FOR INFORMATION ONLY. COORDINATE FINAL LOCATION AND ROUTING OF CONDUIT PATHWAYS WITH ALL TRADES.



1 IDF CLOSET PLAN
SCALE 1/4" = 1'-0"

NOTES:
1) SEE BDF/IDF ROOM WIRING LEGEND ON DRAWING E-402

Project Title
NEW ACADEMIC BUILDING
School of Public Health, State University of New York Health Science Center at Brooklyn
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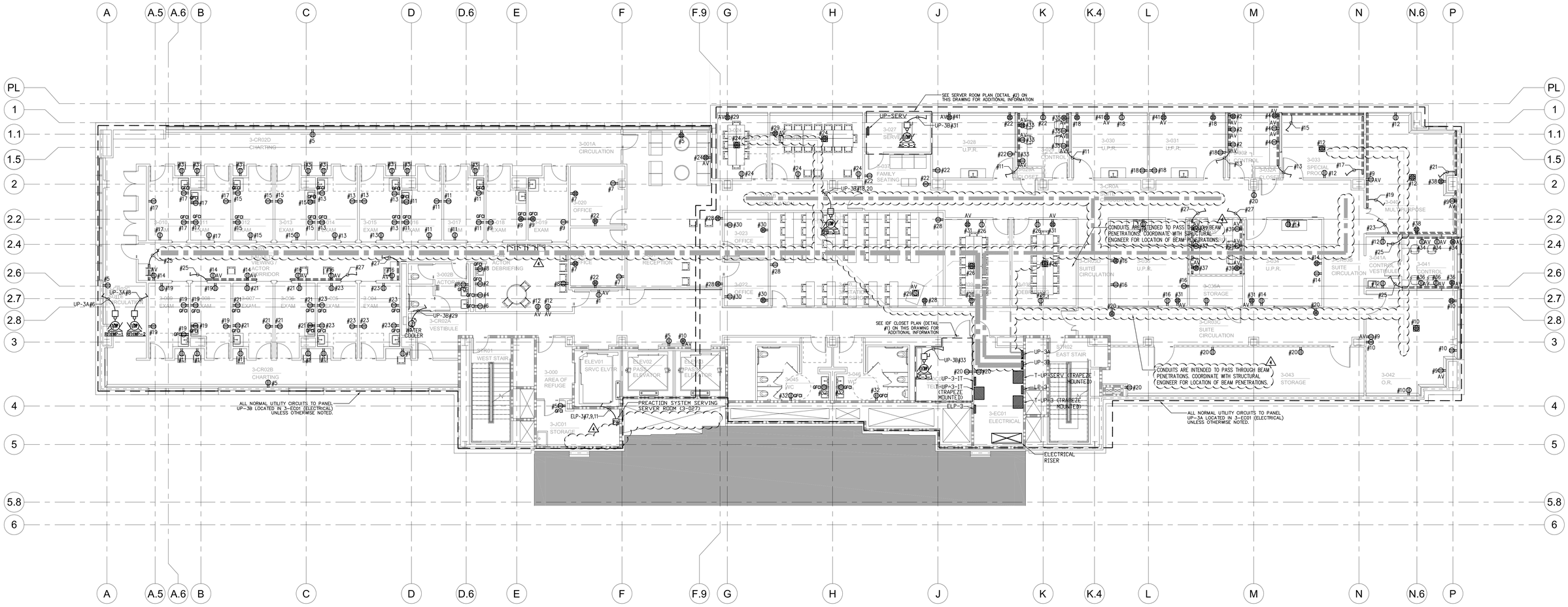
Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL 2ND FLOOR POWER PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-102



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4

CONDUIT PATHWAY LEGEND	
	CONDUIT PATHWAY IN CEILING
	CONDUIT PATHWAY IN SLAB

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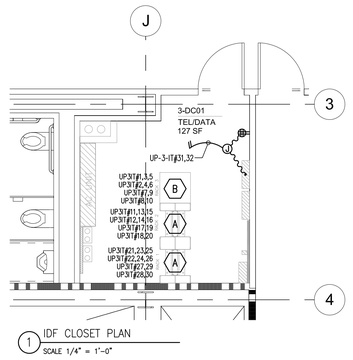

1 IDF CLOSET PLAN
SCALE 1/4" = 1'-0"

NOTES:
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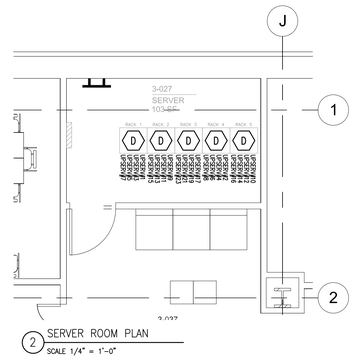

2 SERVER ROOM PLAN
SCALE 1/4" = 1'-0"

NOTES:
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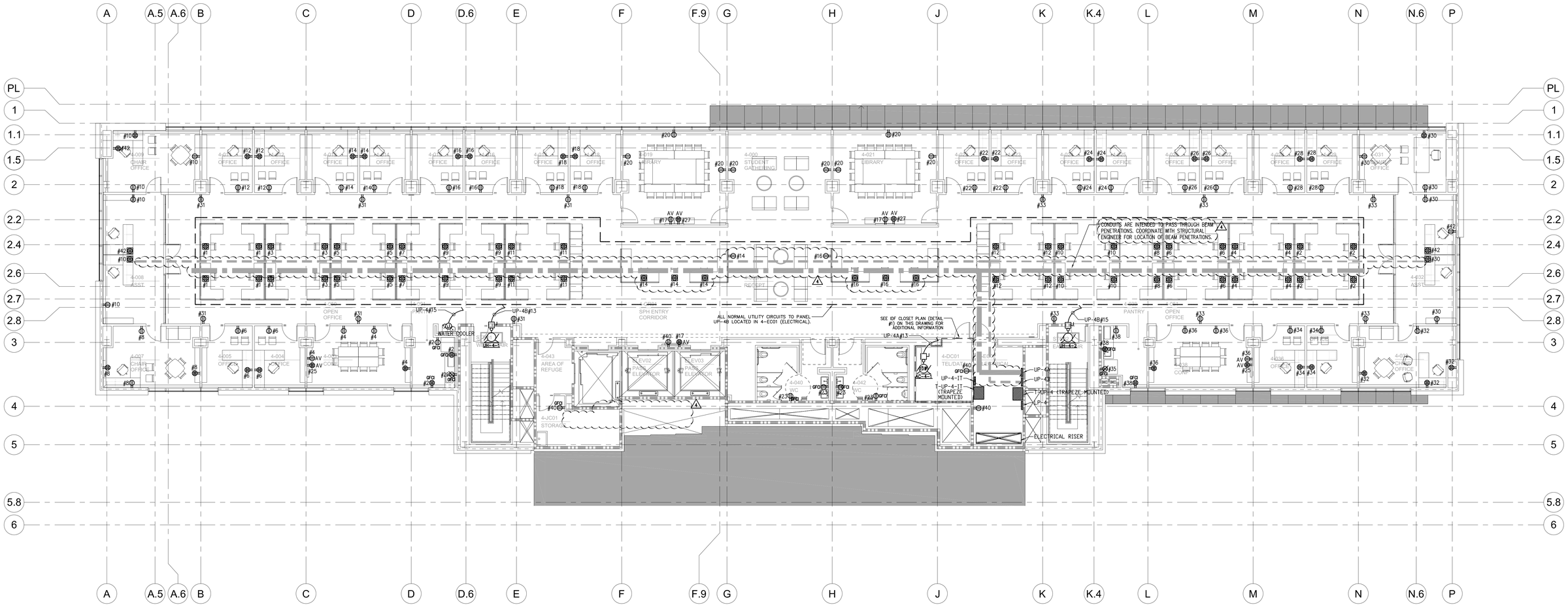
Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL 3RD FLOOR POWER PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-103



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4

CONDUIT PATHWAY LEGEND	
	CONDUIT PATHWAY IN CEILING
	CONDUIT PATHWAY IN SLAB

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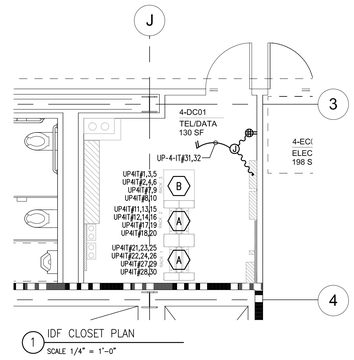

NOTES:
1) SEE BDF/IDF ROOM WIRING LEGEND ON DRAWING E-402

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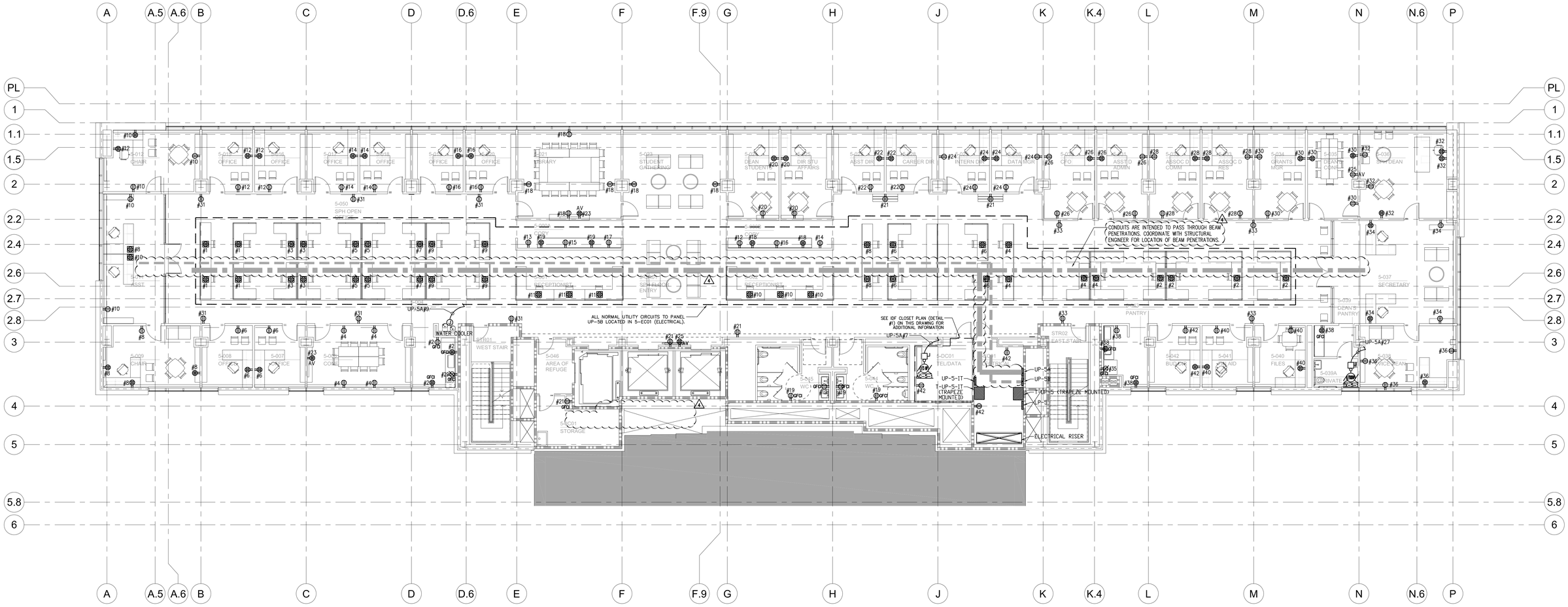
Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL 4TH FLOOR POWER PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-104



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CONDUIT PATHWAY LEGEND	
	CONDUIT PATHWAY IN CEILING
	CONDUIT PATHWAY IN SLAB

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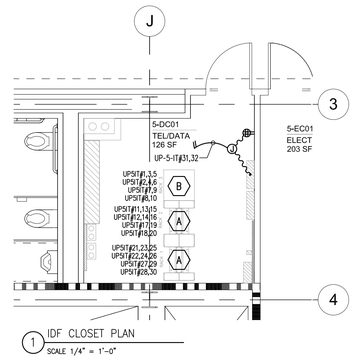

1 IDF CLOSET PLAN
SCALE 1/4" = 1'-0"

NOTES:
1) SEE BDF/IDF ROOM WIRING LEGEND ON DRAWING E-402

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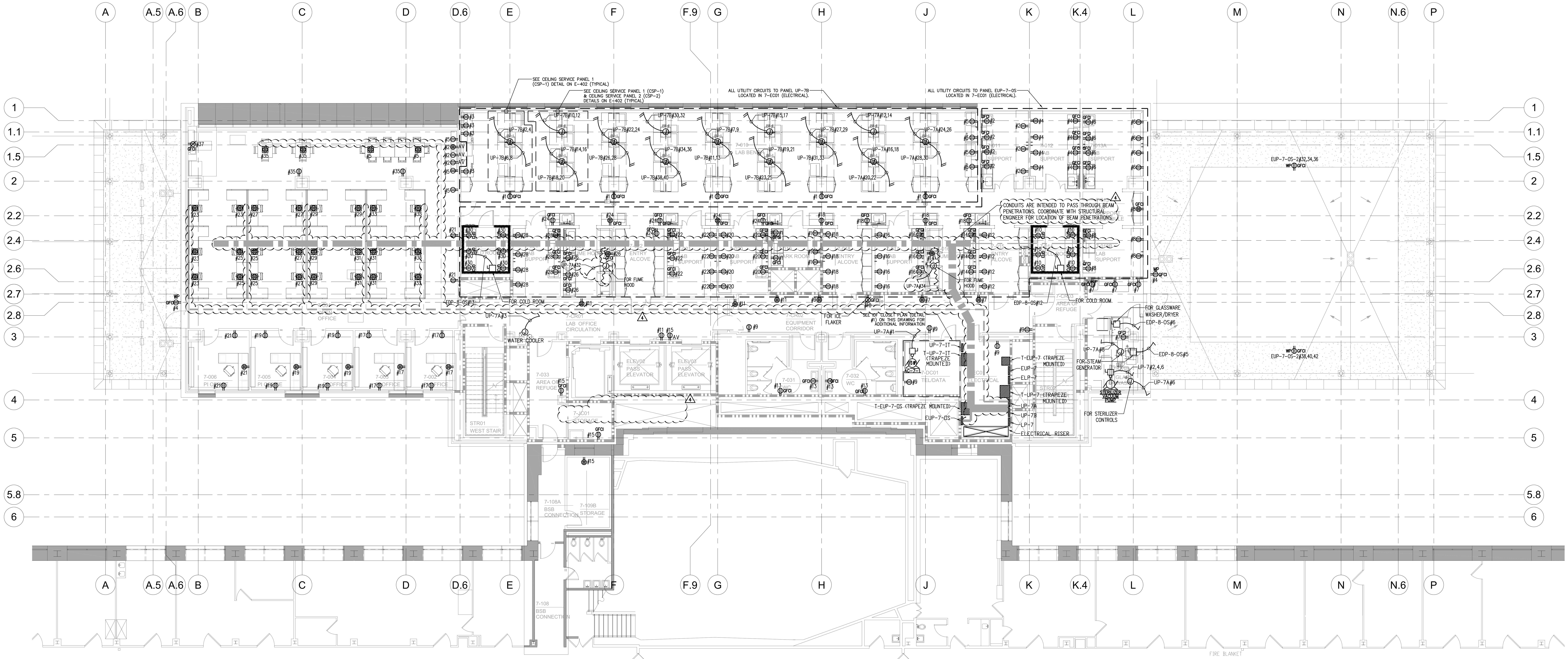
Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL 5TH FLOOR POWER PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-105



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CONDUIT PATHWAY LEGEND	
— · — · —	CONDUIT PATHWAY IN CEILING
— — — —	CONDUIT PATHWAY IN SLAB

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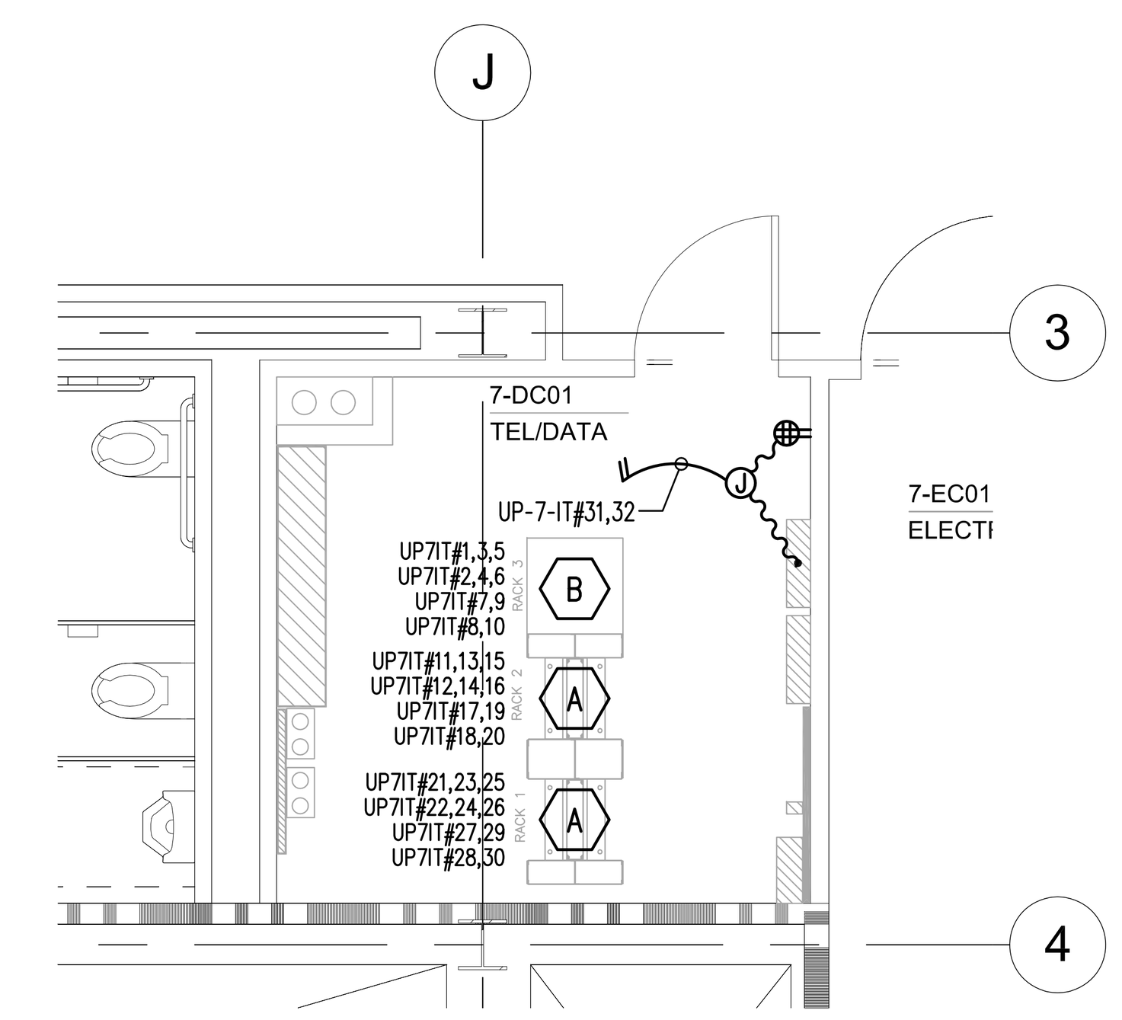

1 IDF CLOSET PLAN
SCALE 1/4" = 1'-0"

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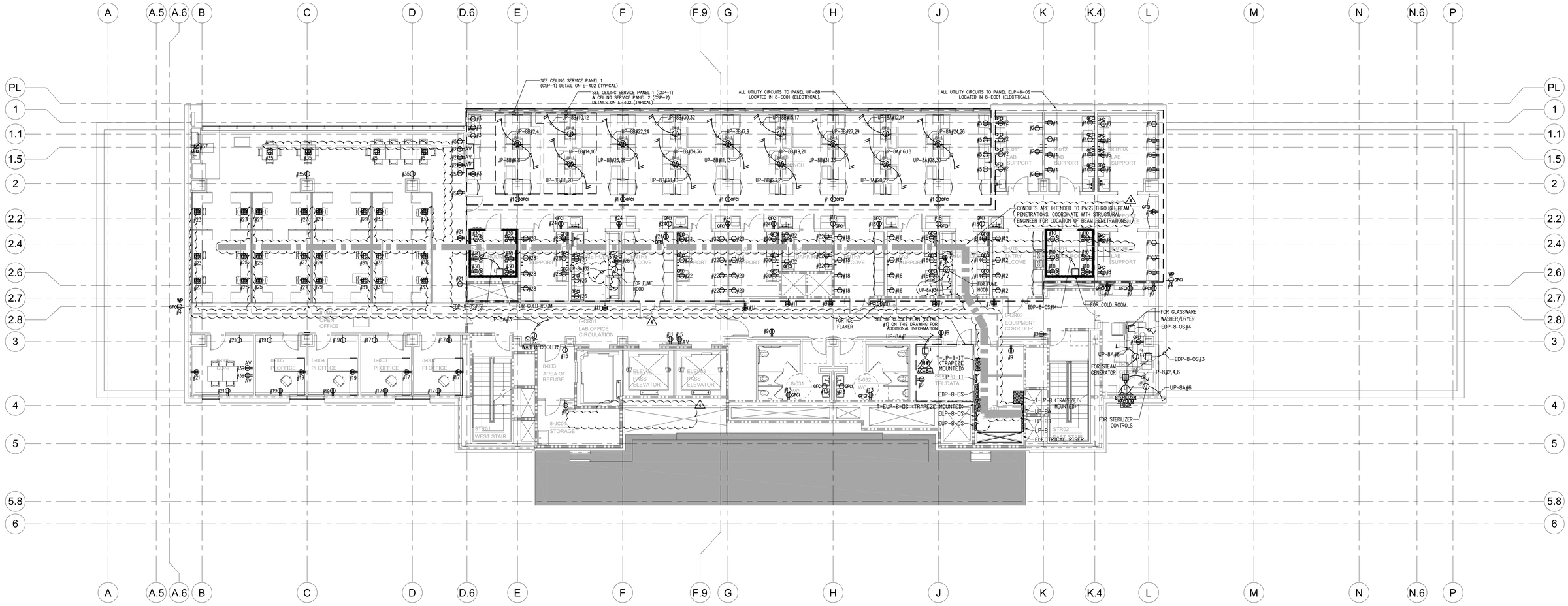
Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3 (4)	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL 7TH FLOOR POWER PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-107

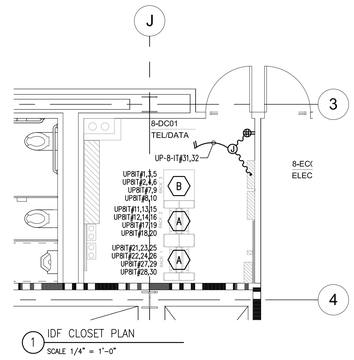


NOTES:

1. FURNISH AND INSTALL ALL WIRING BETWEEN MOTORS AND ASSOCIATED DRIVES/STARTERS. (TYPICAL FOR ALL MECHANICAL EQUIPMENT).
2. SEE LAB CONSULTANTS DRAWINGS FOR EXACT EQUIPMENT AND ADDITIONAL ELECTRICAL REQUIREMENTS
3. FINAL TERMINATION FOR ALL EQUIPMENT TO BE DETERMINED BY EQUIPMENT CUTS.
4. REFER TO PANEL SCHEDULES AND ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.
5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL RECEPTACLES.
6. ALL NORMAL UTILITY CIRCUITS TO PANEL UP-8A LOCATED IN 8-EC01 (ELECTRICAL) UNLESS OTHERWISE NOTED.

CONDUIT PATHWAY LEGEND	
	CONDUIT PATHWAY IN CEILING
	CONDUIT PATHWAY IN SLAB

NOTE: THICKNESS OF LINE INDICATES RELATIVE QUANTITY OF CONDUITS IN PATHWAY. LINES ARE NOT TO SCALE, AND ARE INDICATED FOR INFORMATION ONLY. COORDINATE FINAL LOCATION AND ROUTING OF CONDUIT PATHWAYS WITH ALL TRADES.



1 IDF CLOSET PLAN
SCALE 1/4" = 1'-0"

NOTES:
1) SEE BDF/IDF ROOM WIRING LEGEND ON DRAWING E-402

Project Title
NEW ACADEMIC BUILDING
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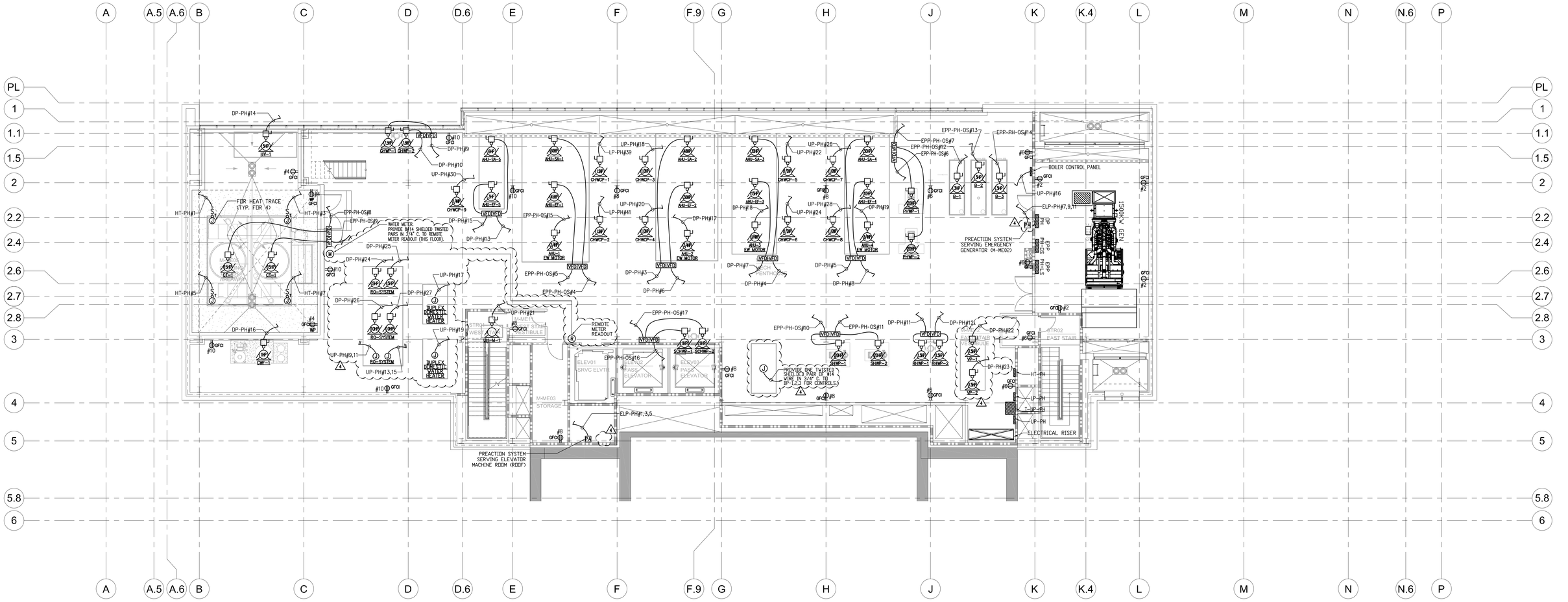
Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL 8TH FLOOR POWER PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-108



NOTES:

1. FURNISH AND INSTALL ALL WIRING BETWEEN MOTORS AND ASSOCIATED VARIABLE FREQUENCY DRIVES STARTERS. (TYPICAL FOR ALL MECHANICAL EQUIPMENT).
2. FINAL TERMINATION FOR ALL EQUIPMENT TO BE DETERMINED BY EQUIPMENT CUTS.
3. REFER TO PANEL SCHEDULES AND ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.
4. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL RECEPTACLES.
5. ALL NORMAL UTILITY CIRCUITS TO PANEL UP-PH UNLESS OTHERWISE NOTED.

HEATING CABLE NOTES:

1. CONTROL ALL HEAT TRACING WITH AN AMBIENT CONTROL/DISTRIBUTION PANEL, NELSON TYPE AP OR EQUAL AS APPROVED BY THE ENGINEER. PANEL TO BE IN NEMA 4X STAINLESS STEEL ENCLOSURE FOR OUTDOOR INSTALLATION. PANEL TO INCLUDE 100A MAIN BREAKER, MAIN CONTRACTOR, AND 20 TYPE GFEPD BRANCH CIRCUIT BREAKER WITH 30 MA TRIP.
2. HEAT TRACE MONITORING SYSTEM TO BE NELSON TYPE CM-1 OR APPROVED EQUAL. SYSTEM SHALL MONITOR CONTROLLER STATUS (ON/OFF), VOLTAGE, CURRENT, AND CONTINUITY FOR EACH HEATER SEGMENT OR GROUP OF SEGMENTS, AS INDICATED ON THE TABLE. PROVIDE DIRECT MONITORING OF CONTINUITY OVER HEATER BUS WIRES WITH PLTCMD TYPE CONTINUITY MONITOR MOUNTED AT THE END OF EACH HEATER SEGMENT OR GROUP OF SEGMENTS. THE SYSTEM SHALL PROVIDE CONTACTS FOR REMOTE ALARM OR BMS NOTIFICATION. LOCAL DISPLAY SHALL SCAN HEATER SEGMENTS CONTINUALLY AND IDENTIFY ALARM CONDITIONS BY HEATER SEGMENT NUMBER AND ALARM TYPE.
3. AT THE BEGINNING OF EACH HEATER CIRCUIT, PROVIDE A COMPLETE TERMINATION KIT WITH JUNCTION BOX, NELSON ELECTRIC TYPE PLTBC OR APPROVED EQUAL. PROVIDE PIPE MOUNTED CONTINUITY MONITOR NELSON TYPE PLTCMD AT THE END OF EACH HEATER SEGMENT. HEATER GROUND BRAID TO BE CONNECTED TO THE PANELBOARD.
4. HEATER TO BE FASTENED IN A STRAIGHT LINE ALONG PIPE WITH FIBERGLASS TAPE ON 1' INTERVALS.
5. WARNING SIGNS TO BE AFFIXED TO OUTSIDE OF INSULATION ON 10' CENTERS.
6. CABLE TO BE MEGGER TESTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS ON RECEIPT ON MATERIAL, AFTER CABLE INSTALLATION, AND AFTER INSULATION INSTALLATION. A RECORD OF THESE TEST RESULTS SHALL BE PROVIDED TO THE ENGINEER.
7. AS BUILT FIELD CONDITIONS TO BE VERIFIED BY HEAT TRACE MANUFACTURERS REPRESENTATIVE PRIOR TO RELEASE OF MATERIAL OR INSTALLATION. ADVISE ENGINEER IN WRITING OF ANY FIELD CONDITION CHANGES.
8. REFER TO THE MECHANICAL AND PLUMBING DRAWINGS FOR THE EXACT PIPE LOCATIONS.

SCHEDULE OF UTILITY PANELS 265/460V - 3 PHASE - 4 WIRE

PANEL DESIG.	No. OF POLES	MAIN C.B.	20A - 1P #12 WIRE ACT.	20A - 1P #12 WIRE SP.	20A - 2P #12 WIRE ACT.	20A - 2P #12 WIRE SP.	20A - 3P #12 WIRE ACT.	20A - 3P #12 WIRE SP.	30A - 1P #12 WIRE ACT.	30A - 1P #12 WIRE SP.	REMARKS	KAIC
HT-PH	18	50	8	8								10
			1-8									

SCHEDULE OF HEATING CABLES

LINE NUMBER & SERVICE	HEATER CATALOG	VOLT	BREAKER AMPS	TOTAL HEATER LENGTH	HEATER WATTS/FT (MIN)	HEATER SEGMENT LENGTH	NUMBER OF PASSES	HEATER kW	PIPE DIAMETER	PIPE LENGTH	INSUL. THICKNESS
ET-001 8" CWS/CWR	CLT25-JT	277	20	360'	4.00	180'	2	1.44	8"	180'	3"
ET-002 4" DRAIN	CLT25-JT	277	20	20'	4.00	20'	1	0.08	4"	16'	2"
ET-003 3" DRAIN	CLT23-JT	277	20	40'	4.00	40'	1	0.16	3"	40'	2"
ET-004 2" DRAIN	CLT23-JT	277	20	20'	4.00	20'	1	0.08	2"	20'	2"

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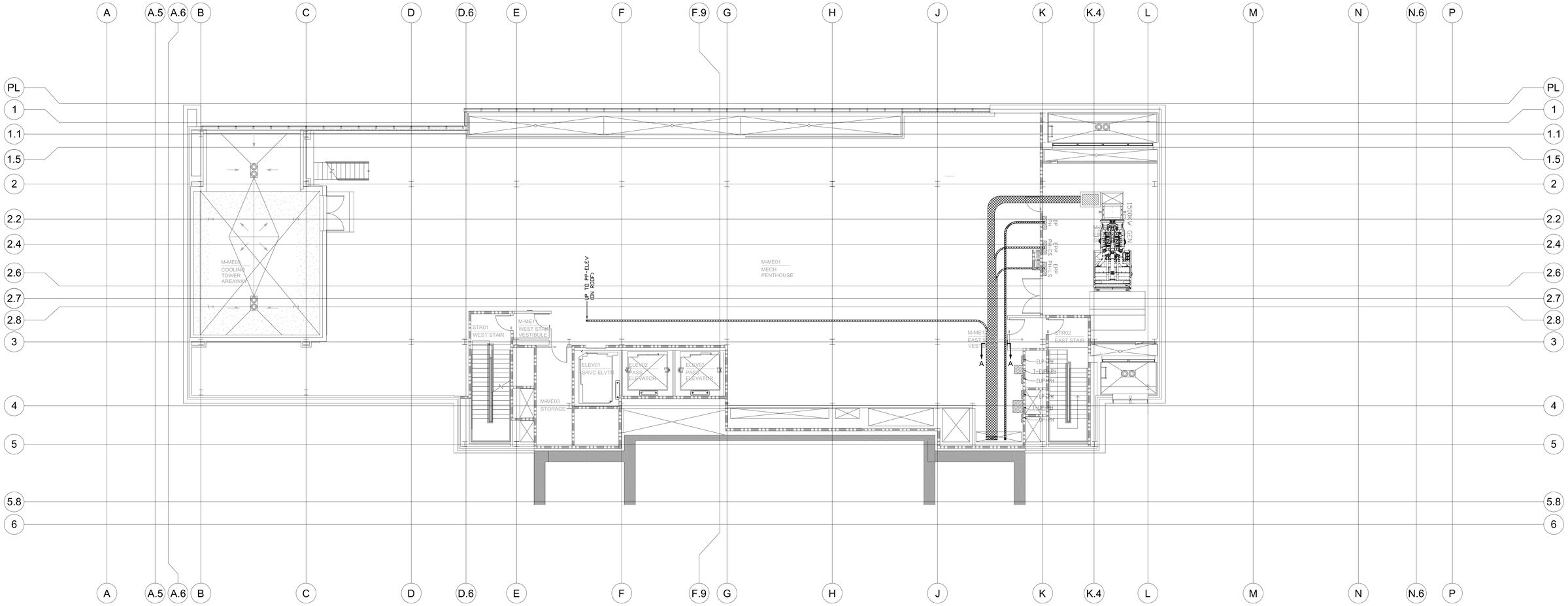
Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

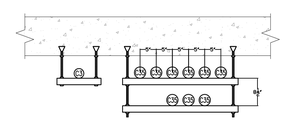
Sheet Title
ELECTRICAL MECHANICAL FLOOR POWER PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-109



LEGEND	
	NAB NORMAL CONDUIT PATHWAY
	NAB EMERGENCY CONDUIT PATHWAY

CONDUIT SECTION LEGEND	
S	EMPTY 4" CONDUIT (SPARE)
C1	ACTIVE FEEDER – 1.25" CONDUIT (RGS).
C2	ACTIVE FEEDER – 2" CONDUIT (RGS).
C2S	ACTIVE FEEDER – 2.5" CONDUIT (RGS).
C3	ACTIVE FEEDER – 3" CONDUIT (RGS).
C3S	ACTIVE FEEDER – 3.5" CONDUIT (RGS).
C4	ACTIVE FEEDER – 4" CONDUIT (RGS).



SECTION A-A

NOT TO SCALE

Project Title

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Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

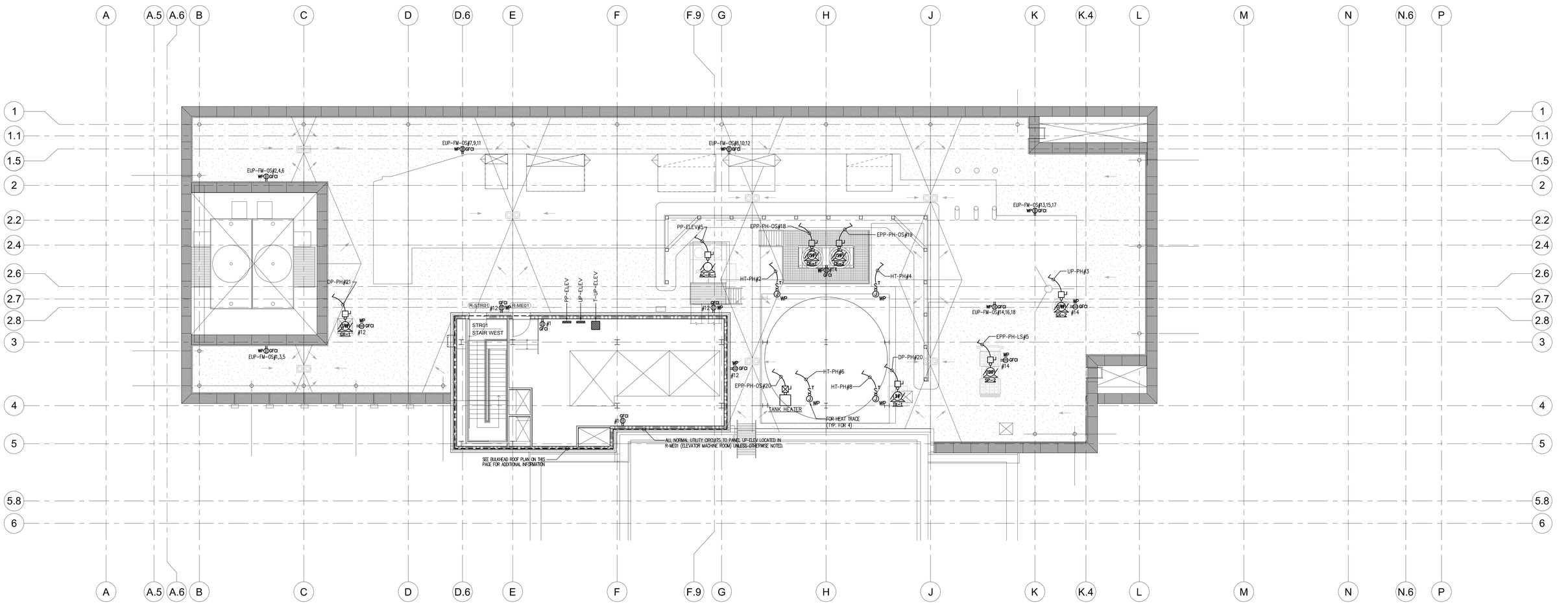
ELECTRICAL MECHANICAL FLOOR MAJOR OVERHEAD PATHWAYS

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:

SUCF Project Number: 14A91
Ennead Project Number: 0917

Sheet No.

E-109.1



NOTES:

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2. REFER TO PANEL SCHEDULES AND ONE-LINE DIAGRAMS FOR ADDITIONAL INFORMATION.

ELEVATOR MACHINE ROOM

3. PROVIDE (1) 120V-1P-20A CKT TO EACH GROUP CONTROLLER FOR SIGNAL POWER. PROVIDE LOCKABLE TYPE DISCONNECT.
4. PROVIDE (1) 120V-1P-20A CKT TO EACH CONTROLLER FOR CAR LIGHT AND FAN. PROVIDE LOCKABLE TYPE DISCONNECT.
5. ALL CIRCUITS IN ELEVATOR MACHINE ROOM SHALL BE CIRCUITED TO PANEL UP-ELEV
6. ALL NORMAL UTILITY CIRCUITS TO PANEL UP-PH LOCATED ON THE PENTHOUSE LEVEL, UNLESS OTHERWISE NOTED.

HEATING CABLE NOTES:

1. CONTROL ALL HEAT TRACING WITH AN AMBIENT CONTROL/DISTRIBUTION PANEL, NELSON TYPE AP OR EQUAL AS APPROVED BY THE ENGINEER. PANEL TO BE IN NEMA 4X STAINLESS STEEL ENCLOSURE FOR OUTDOOR INSTALLATION. PANEL TO INCLUDE 100A MAIN BREAKER, MAIN CONTRACTOR, AND 20 TYPE GFEPD BRANCH CIRCUIT BREAKER WITH 30 MA TRIP.
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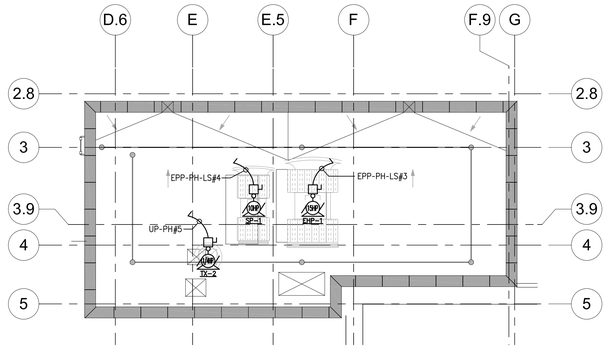
3. AT THE BEGINNING OF EACH HEATER CIRCUIT, PROVIDE A COMPLETE TERMINATION KIT WITH JUNCTION BOX, NELSON ELECTRIC TYPE PLTBC OR APPROVED EQUAL. PROVIDE PIPE MOUNTED CONTINUITY MONITOR NELSON TYPE PLTCMD AT THE END OF EACH HEATER SEGMENT. HEATER GROUND BRAID TO BE CONNECTED TO THE PANELBOARD.
4. HEATER TO BE FASTENED IN A STRAIGHT LINE ALONG PIPE WITH FIBERGLASS TAPE ON 1' INTERVALS.
5. WARNING SIGNS TO BE AFFIXED TO OUTSIDE OF INSULATION ON 10' CENTERS.
6. CABLE TO BE MEGGER TESTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS ON RECEIPT ON MATERIAL, AFTER CABLE INSTALLATION, AND AFTER INSULATION INSTALLATION. A RECORD OF THESE TEST RESULTS SHALL BE PROVIDED TO THE ENGINEER.
7. AS BUILT FIELD CONDITIONS TO BE VERIFIED BY HEAT TRACE MANUFACTURERS REPRESENTATIVE PRIOR TO RELEASE OF MATERIAL OR INSTALLATION. ADVISE ENGINEER IN WRITING OF ANY FIELD CONDITION CHANGES.
8. REFER TO THE MECHANICAL AND PLUMBING DRAWINGS FOR THE EXACT PIPE LOCATIONS.

SCHEDULE OF HEATING CABLES

LINE NUMBER & SERVICE	HEATER CATALOG	VOLT	BREAKER AMPS	TOTAL HEATER LENGTH	HEATER WATTS/FT (MIN)	HEATER SEGMENT LENGTH	NUMBER OF PASSES	HEATER kW	PIPE DIAMETER	PIPE LENGTH	INSUL. THICKNESS
ET-005 3" CWP	CLT23-JT	277	20	75'	4.00	75'	1	0.30	3"	75'	–
ET-006 3/4" CWP	CLT23-JT	277	20	30'	4.00	30'	1	0.12	3/4"	30'	–
ET-007 8" FIRE PIPING	CLT23-JT	277	20	150'	4.00	75'	2	0.60	8"	75'	–
ET-008 4" TANK DRAIN	CLT23-JT	277	20	10'	4.00	10'	1	0.04	4"	10'	–



1 BULKHEAD ROOF PART PLAN
SCALE 1/8" = 1'-0"

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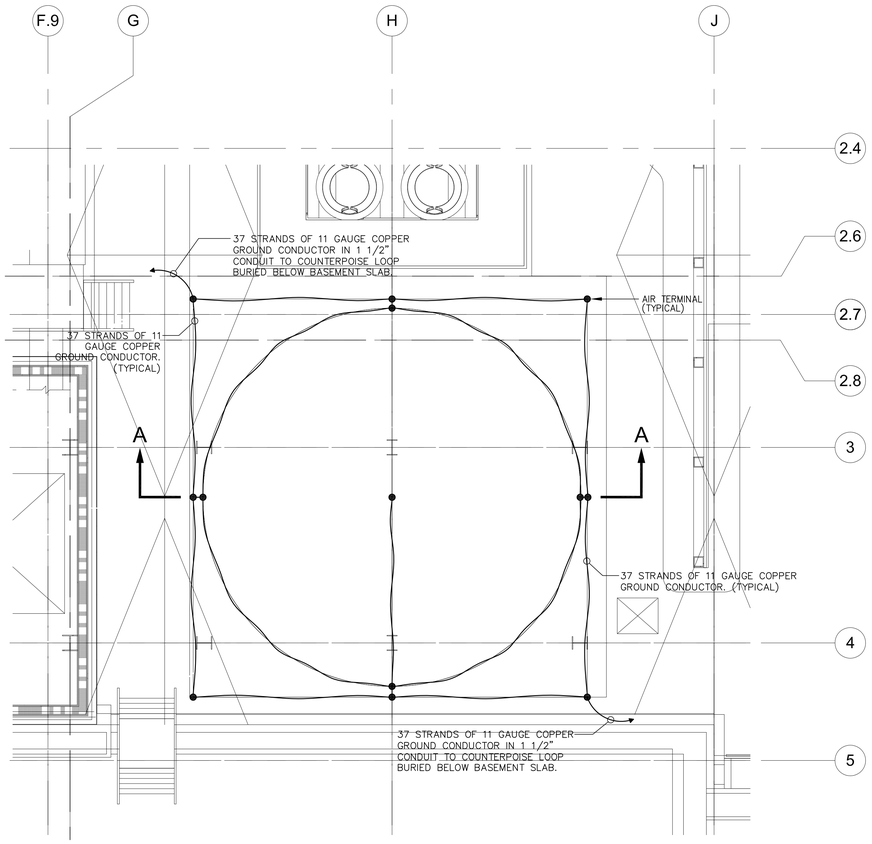
Key Plan

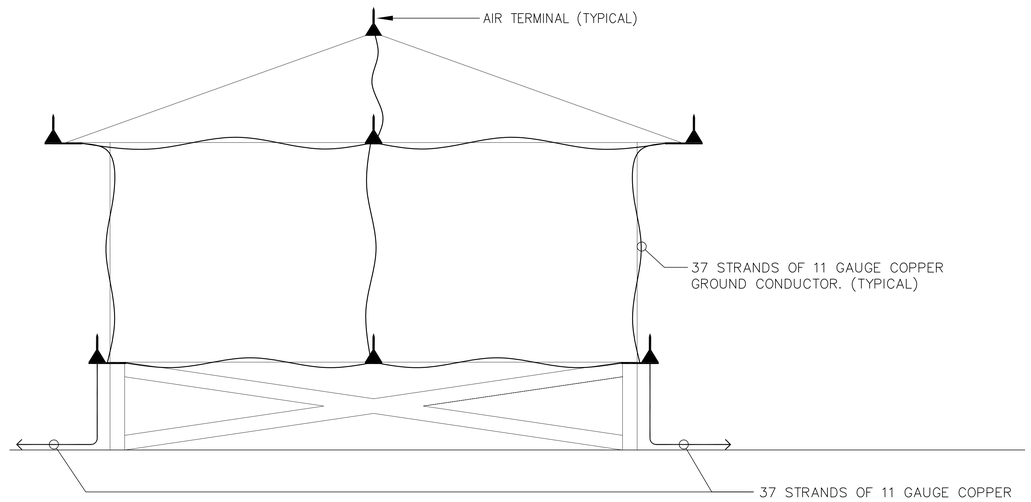
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL ROOF POWER PLAN

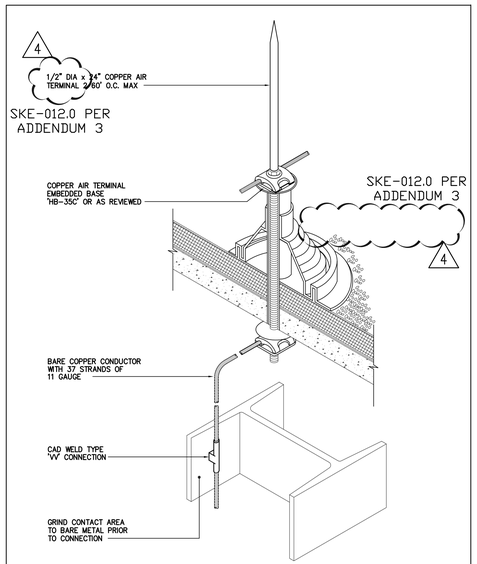
Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-110



1 ROOF WATER TANK PART PLAN
SCALE 1/4" = 1'-0"



2 SECTION A-A
N.T.S.



LIGHTNING PROTECTION DETAIL
(N.T.S.)

NOTES:

1. ALL LIGHTNING PROTECTION SYSTEM COMPONENTS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS, REQUIREMENTS AND RECOMMENDATIONS.
2. ALL LIGHTNING PROTECTION SYSTEM COMPONENTS SHALL BE CORROSION RESISTANT.
3. PROVIDE ALL REQUIRED COMPONENTS TO OBTAIN UL MASTER LABEL.
4. THIS DETAIL IS PROVIDED TO INDICATE SCOPE. PROVIDE COORDINATED DETAIL FOR ACTUAL MOUNTING CONDITIONS. ALL MOUNTING DETAILS SHALL BE REVIEWED BY ARCHITECT.

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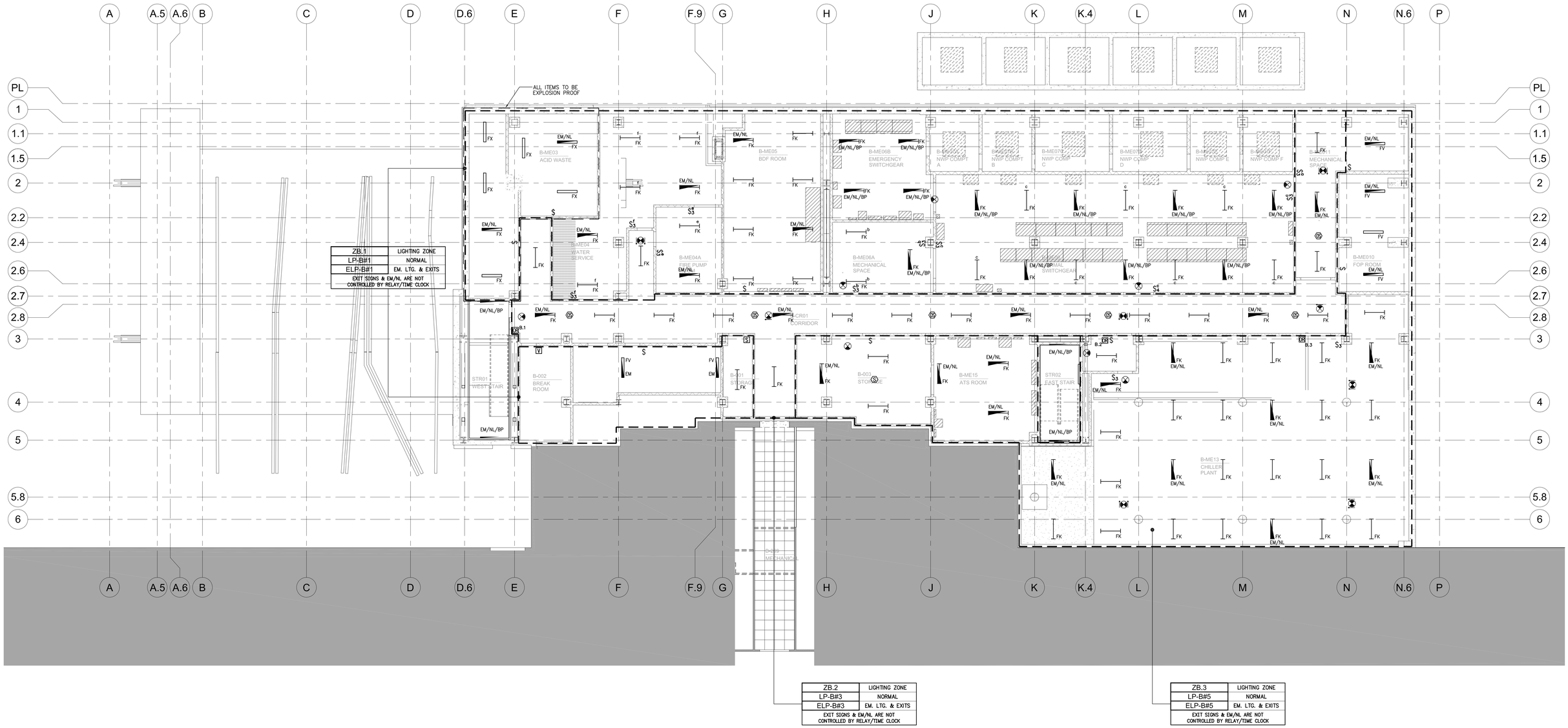
Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL ROOF LIGHTNING PROTECTION PLAN

Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	E-110.1
Scale	Ennead Project Number	
SCALED AS NOTED	0917	
Phase		



ZB.1	LIGHTING ZONE
LP-B#1	NORMAL
ELP-B#1	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

ZB.2	LIGHTING ZONE
LP-B#3	NORMAL
ELP-B#3	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

ZB.3	LIGHTING ZONE
LP-B#5	NORMAL
ELP-B#5	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

NOTES:

1. SEE LIGHTING CONSULTANTS AND ARCHITECTS DRAWINGS FOR FRONT OF HOUSE LIGHTING LAYOUTS, LIGHTING FIXTURE TYPE, ZONING, SPECIFICATIONS, DIMMING, ETC.
2. REFER TO DRAWING E-403 FOR LIGHTING FIXTURE SCHEDULES.
3. REFER TO DRAWINGS E-400 AND E-404 FOR LIGHTING CONTROL RISER DIAGRAM, RELAY PANEL SCHEDULES, AND DETAILS.

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Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

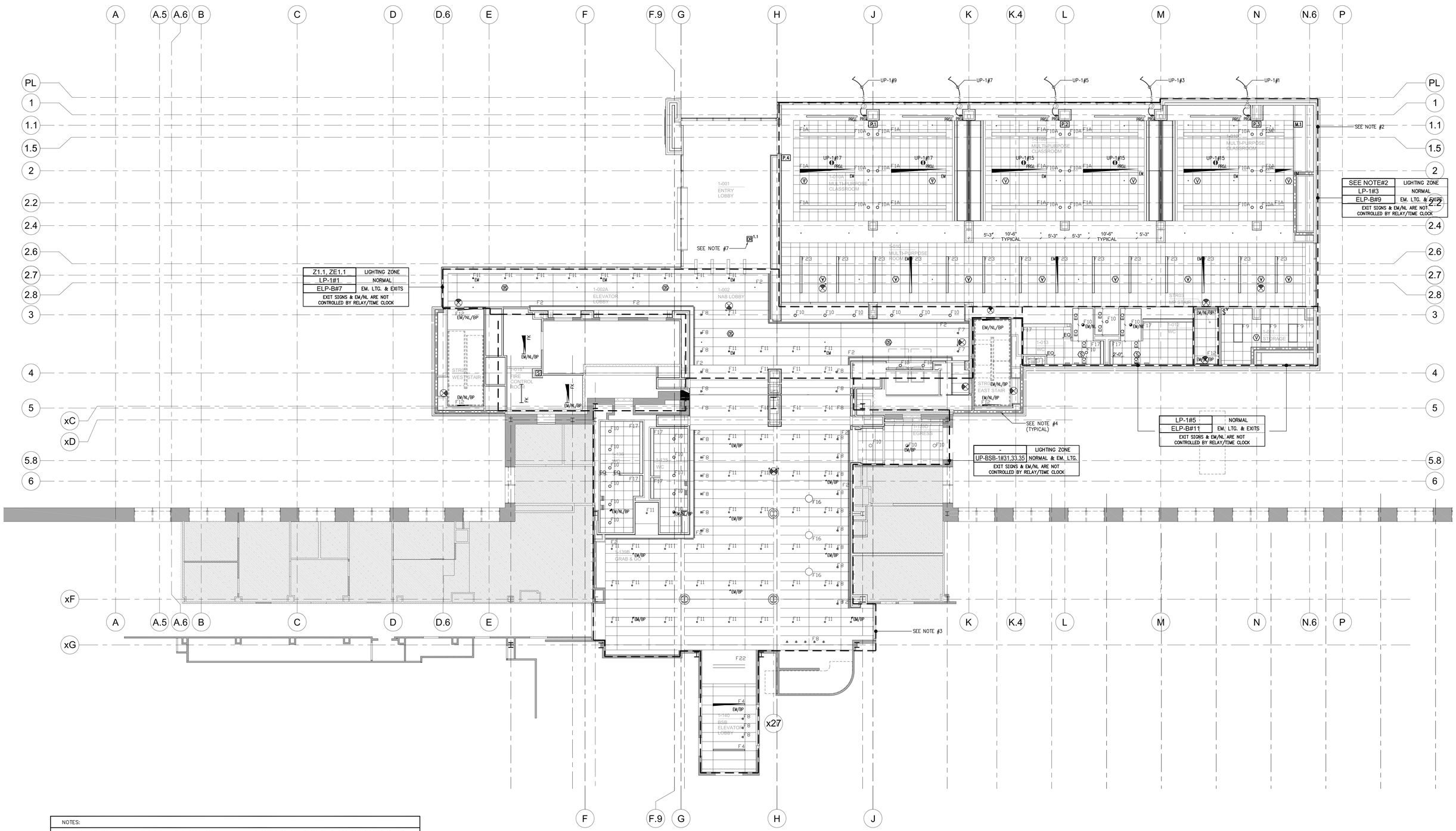
ELECTRICAL BASEMENT REFLECTED CEILING PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:

SUCF Project Number: 14A91
Ennead Project Number: 0917

Sheet No.

E-200



Z1.1, ZE1.1	LIGHTING ZONE
LP-1#1	NORMAL
ELP-B#7	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

SEE NOTE#2	LIGHTING ZONE
LP-1#3	NORMAL
ELP-B#9	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

LP-1#5	NORMAL
ELP-B#11	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

-	LIGHTING ZONE
UP-BSB-1#31,33,35	NORMAL & EM. LTG.
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

NOTES:

1. SEE LIGHTING CONSULTANTS AND ARCHITECTS DRAWINGS FOR FRONT OF HOUSE LIGHTING LAYOUTS, LIGHTING FIXTURE TYPE, ZONING, SPECIFICATIONS, DIMMING, ETC.
2. CONNECT LIGHTING CONTROL TO DIMMING SYSTEM SPECIFIED BY ARCHITECT/LIGHTING CONSULTANT. PROVIDE ONE (1) 120V–20A, CIRCUIT FOR EACH LIGHTING CONTROL SYSTEM POWER SUPPLY (SIX (6) CIRCUITS TOTAL) FROM PANEL UP–2B. COORDINATE EXACT QUANTITY AND LOCATION OF POWER SUPPLIES WITH DIMMING SYSTEM DESIGN DOCUMENTS.
3. PROVIDE NEW TORK DGM–100 TIMECLOCK, AND ASCO 917 CONTACTOR WITH (1) OVERRIDE SWITCH TO CONTROL LIGHTING LOADS.
4. REFER TO SITE PLAN ON E–002 FOR CIRCUITING AND CONTROLS FOR EXTERIOR LIGHT FIXTURES.
5. REFER TO DRAWING E–403 FOR LIGHTING FIXTURE SCHEDULES.
6. REFER TO DRAWINGS E–400 AND E–404 FOR LIGHTING CONTROL RISER DIAGRAM, RELAY PANEL SCHEDULES, AND DETAILS.
7. RELAY PANEL OVERRIDE SWITCH LOCATED BEHIND SECURITY DESK.

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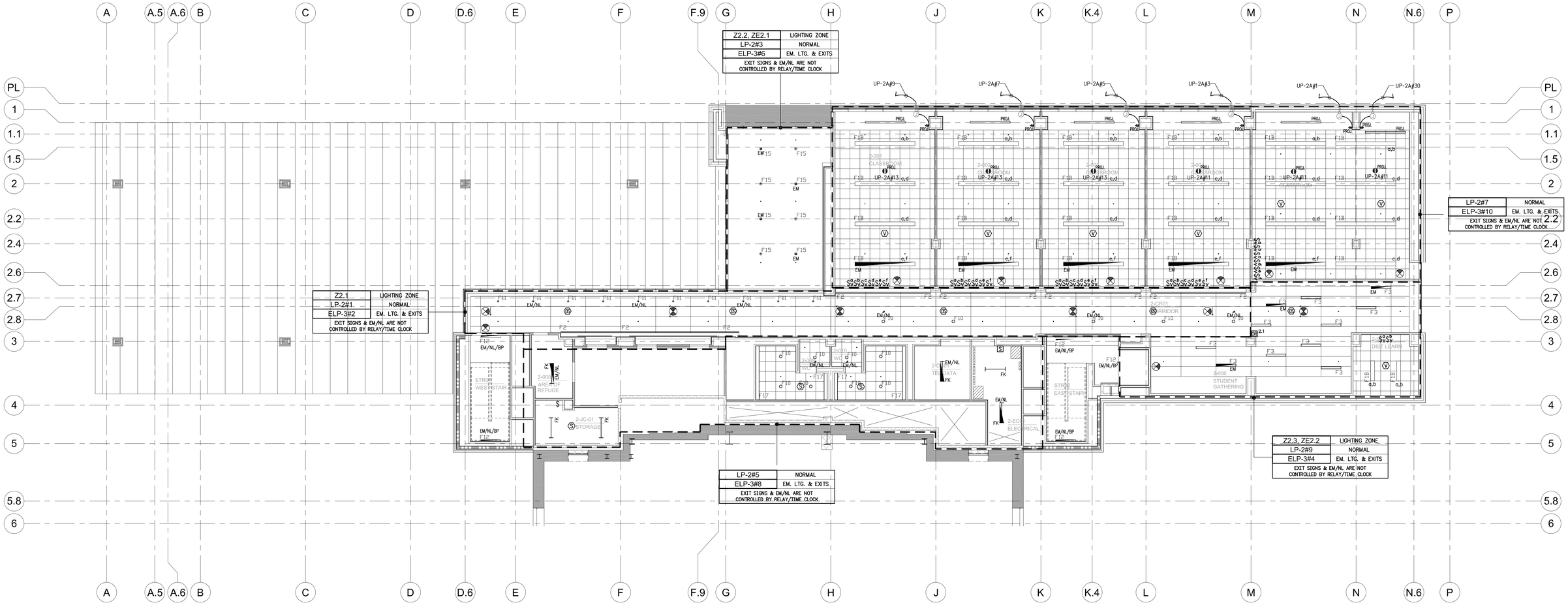
Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL 1ST FLOOR REFLECTED CEILING PLAN

Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	E-201
Scale	Ennead Project Number	
1/8" = 1'-0"	0917	
Phase		



NOTES:

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Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

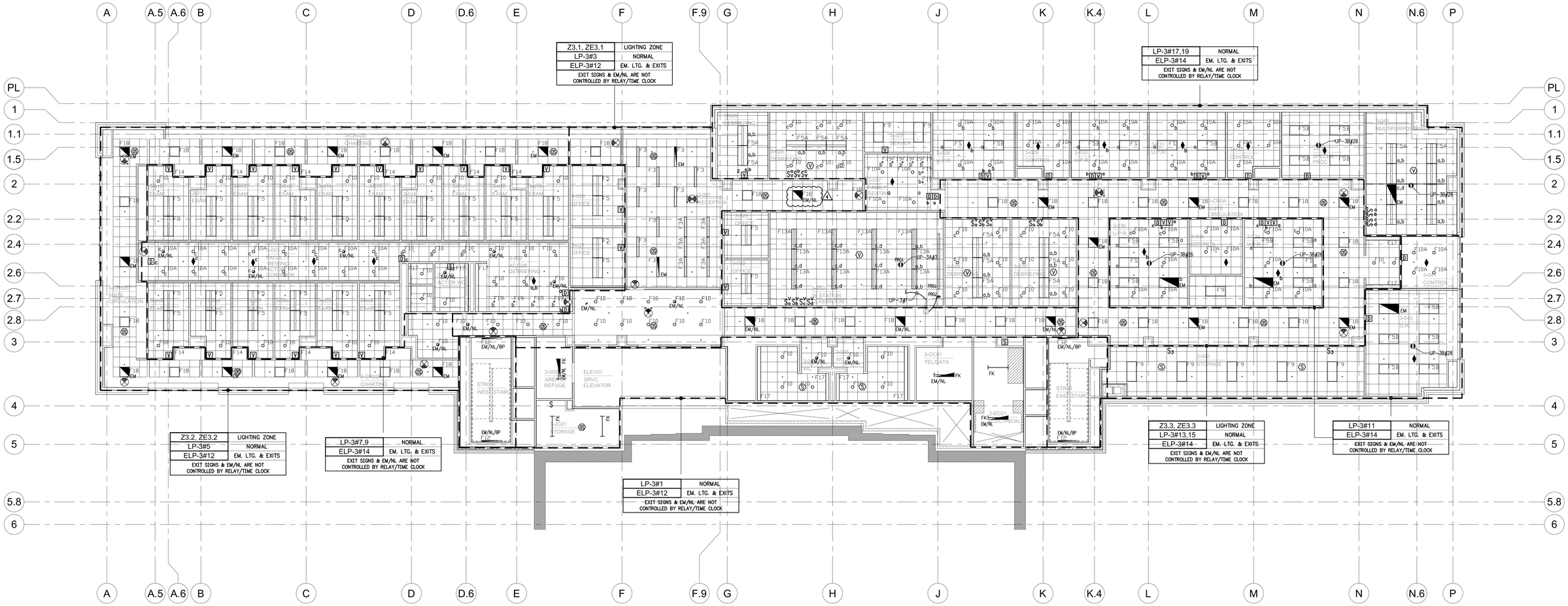
Sheet Title

ELECTRICAL 2ND FLOOR REFLECTED CEILING PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:

SUCF Project Number: 14A91
Ennead Project Number: 0917

Sheet No.: E-202



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Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

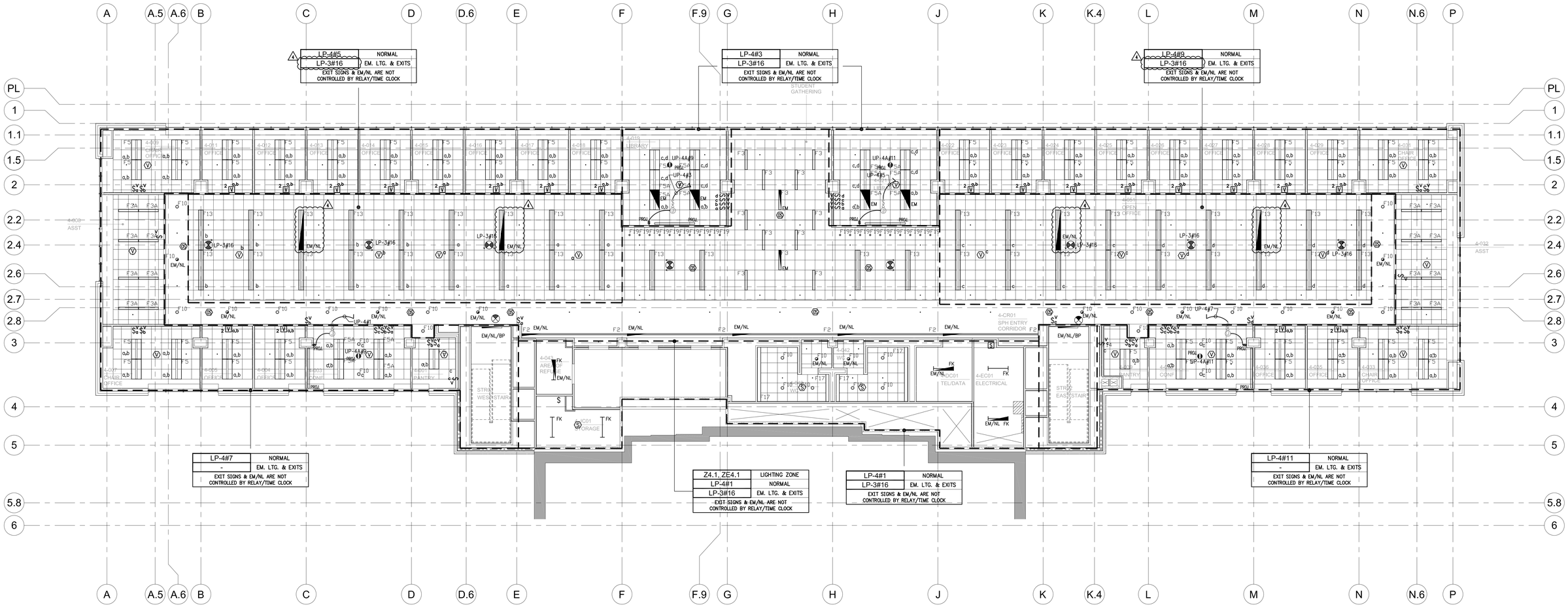
Sheet Title

ELECTRICAL 3RD FLOOR REFLECTED CEILING PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:

SUCF Project Number: 14A91
Ennead Project Number: 0917

Sheet No.: E-203



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Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

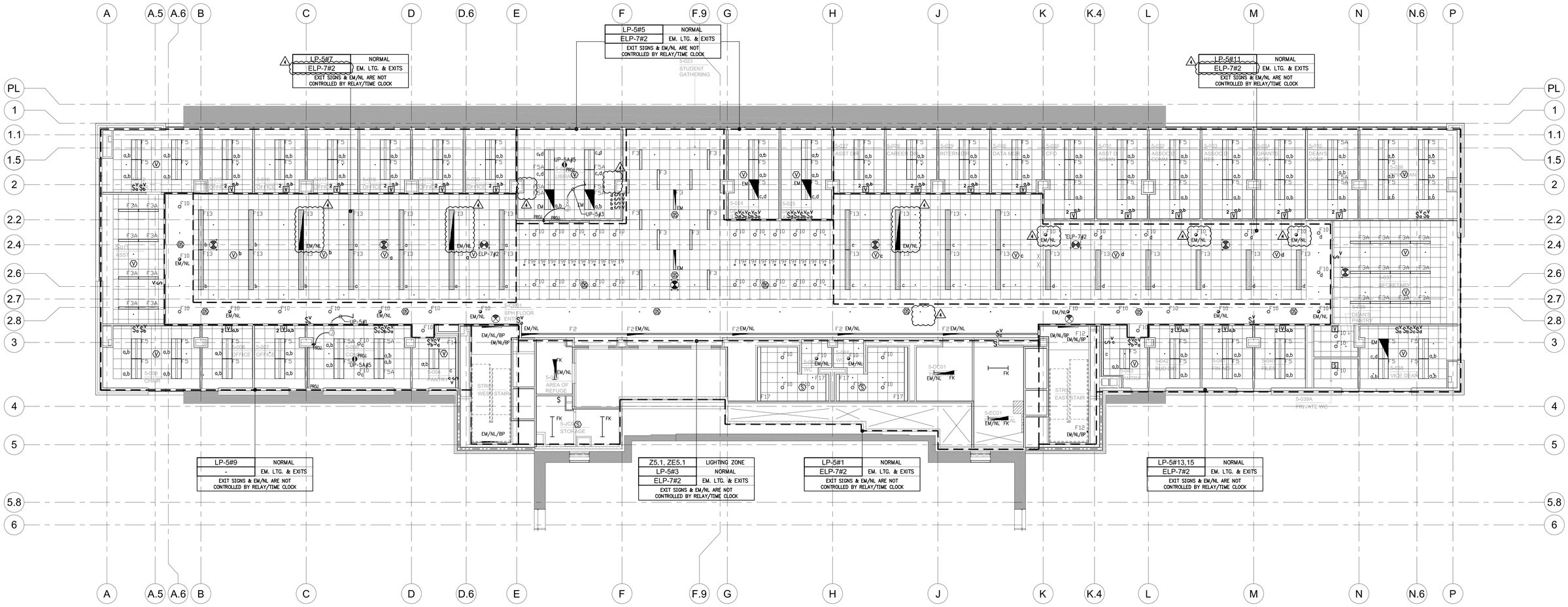
Sheet Title

ELECTRICAL 4TH FLOOR REFLECTED CEILING PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:

SUCF Project Number: 14A91
Ennead Project Number: 0917

Sheet No.: E-204



NOTES:

1. SEE LIGHTING CONSULTANTS AND ARCHITECTS DRAWINGS FOR FRONT OF HOUSE LIGHTING LAYOUTS, LIGHTING FIXTURE TYPE, ZONING, SPECIFICATIONS, DIMMING, ETC.
2. REFER TO DRAWING E-404 FOR LIGHTING FIXTURE SCHEDULES.
3. REFER TO DRAWINGS E-400 AND E-403 FOR LIGHTING CONTROL RISER DIAGRAM, RELAY PANEL SCHEDULES, AND DETAILS.

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Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL 5TH FLOOR REFLECTED CEILING PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:

SUCF Project Number: 14A91
Ennead Project Number: 0917

Sheet No.: E-205

LP-7#9	NORMAL
ELP-7#4	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

LP-7#7	NORMAL
ELP-7#4	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

LP-7#5	NORMAL
ELP-7#4	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

Z7.3	LIGHTING ZONE
LP-7#11	NORMAL
-	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

Z7.1	LIGHTING ZONE
LP-7#3	NORMAL
ELP-7#4	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

LP-7#9	NORMAL
-	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

LP-7#1	NORMAL
ELP-7#4	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

Z7.2	LIGHTING ZONE
LP-7#3	NORMAL
ELP-7#4	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

Z7.4	LIGHTING ZONE
LP-7#13	NORMAL
-	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

NOTES:

1. SEE LIGHTING CONSULTANTS AND ARCHITECTS DRAWINGS FOR FRONT OF HOUSE LIGHTING LAYOUTS, LIGHTING FIXTURE TYPE, ZONING, SPECIFICATIONS, DIMMING, ETC.
2. REFER TO DRAWING E-404 FOR LIGHTING FIXTURE SCHEDULES.
3. REFER TO DRAWINGS E-400 AND E-403 FOR LIGHTING CONTROL RISER DIAGRAM, RELAY PANEL SCHEDULES, AND DETAILS.

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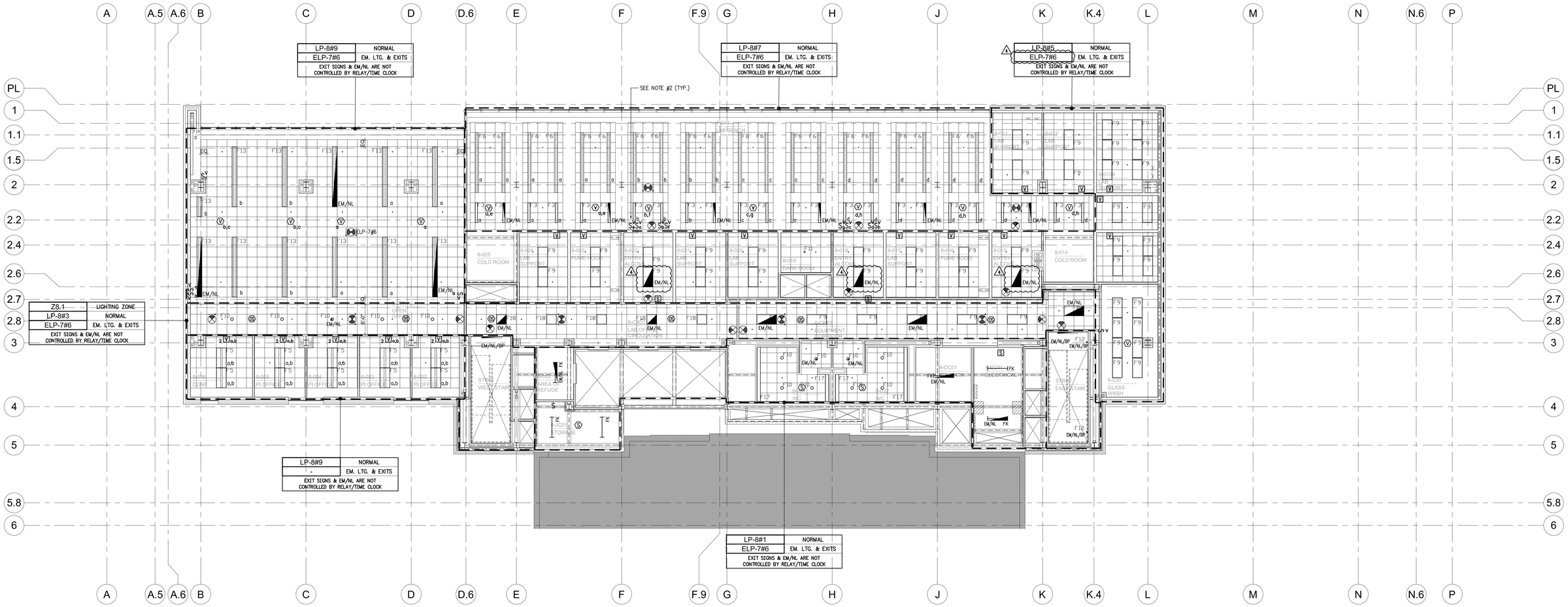
Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL 7TH FLOOR REFLECTED CEILING PLAN

Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	E-207
Scale	Ennead Project Number	
1/8" = 1'-0"	0917	
Phase		



NOTES:

1. SEE LIGHTING CONSULTANTS AND ARCHITECTS DRAWNGS FOR FRONT OF HOUSE LIGHTING LAYOUTS, LIGHTING FIXTURE TYPE, ZONING, SPECIFICATIONS, DIMMING, ETC.
2. LIGHTING CONTROL ZONES 'e', 'f', 'g' AND 'h' ARE FOR CONTROL OF TASKLIGHTS INTEGRAL TO LAB BENCHES.
3. REFER TO DRAWING E-404 FOR LIGHTING FIXTURE SCHEDULES.
4. REFER TO DRAWINGS E-400 AND E-403 FOR LIGHTING CONTROL RISER DIAGRAM, RELAY PANEL SCHEDULES, AND DETAILS.

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Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3 (3)	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL 8TH FLOOR REFLECTED CEILING PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-208

ZPH.1	LIGHTING ZONE
LP-PH#1	NORMAL
ELP-PH#2	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

ZPH.2, ZEPH.1	LIGHTING ZONE
LP-PH#1	NORMAL
ELP-PH#2	EM. LTG. & EXITS
EXIT SIGNS & EM/NL ARE NOT CONTROLLED BY RELAY/TIME CLOCK	

M-ME05 COOLING TOWER ARCHWAY

M-ME01 MECH PENTHOUSE

M-ME02 EMERGENCY GENERATOR

STR01 WEST STAIR

M-ME03 STORAGE

STR02 EAST STAIR

LSWB-1 10'-0" A.F.F.

PH.1 PH.2 PH.3

NOTES:

1. SEE LIGHTING CONSULTANTS AND ARCHITECTS DRAWINGS FOR FRONT OF HOUSE LIGHTING LAYOUTS, LIGHTING FIXTURE TYPE, ZONING, SPECIFICATIONS, DIMMING, ETC.
2. REFER TO DRAWING E-403 FOR LIGHTING FIXTURE SCHEDULES.
3. REFER TO DRAWINGS E-400 AND E-404 FOR LIGHTING CONTROL RISER DIAGRAM, RELAY PANEL SCHEDULES, AND DETAILS.

Project Title

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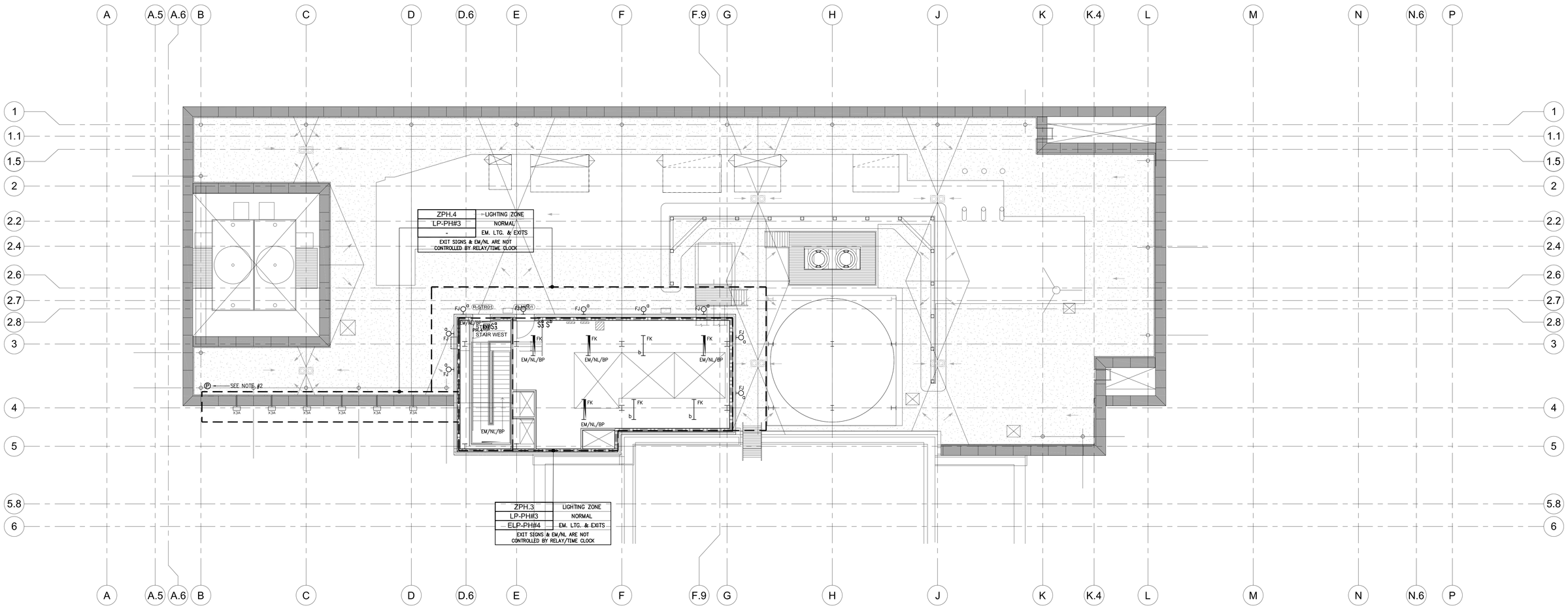
Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL MECHANICAL FLOOR REFLECTED CEILING PLAN

Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	E-209
Scale	Ennead Project Number	
1/8" = 1'-0"	0917	
Phase		



NOTES:

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2. EXTERIOR PHOTOSENSOR CONNECTED TO RELAY PANEL SYSTEM. EXACT LOCATION AND MOUNTING TO BE COORDINATED WITH ARCHITECT AND MANUFACTURERS RECOMMENDATIONS.
3. REFER TO DRAWING E-403 FOR LIGHTING FIXTURE SCHEDULES.
4. REFER TO DRAWINGS E-400 AND E-404 FOR LIGHTING CONTROL RISER DIAGRAM, RELAY PANEL SCHEDULES, AND DETAILS.

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Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL ROOF REFLECTED CEILING PLAN

Date: April 10, 2012
Scale: 1/8" = 1'-0"
Phase:

SUCF Project Number: 14A91
Ennead Project Number: 0917

Sheet No.: E-210

ROOF
MECHANICAL
8TH FLOOR
7TH FLOOR
5TH FLOOR
4TH FLOOR
3RD FLOOR
2ND FLOOR
1ST FLOOR
BASEMENT

EMR
UP ELEV
PP ELEV
T1
T-UP-ELEV
FROM ATS #1

EMERGENCY SWGR ROOM
GENERATOR ROOM
RADIATOR MOUNTED LOAD BANK, LOAD BANK C.B. PROVIDED BY GEN SET MANUFACTURER
TO ATS #4 PUMP (FIRE PUMP)
TO ATS #4 (7A SYS)
TO EM-SS
100A
100A
2500A
8 4#600MCM + 1#2/0(CU)GND-2 HR RATED RHH - 3½"C
1500KW 265/460V, 3P, 4W

EUP FM-OS
EPP PH-OS
UP PH
LP PH
T-UP-PH
FROM ATS#2
TO EDP-8-OS
LIGHTING PANEL FEEDER ROUTED THROUGH ELECTRICAL CLOSET CONDUIT SHAFT (TYP.)
ELECTRIC CLOSET
HT PH
DP PH
ELP PH
EPP PH-LS
TO LP-PH,7,5
FROM SS-BSB-1#2
TO EP-PH-LS
FROM ATS#3

T-EUP-8-DS
T-UP-8-IT
T-UP-8
EUP 8-OS
EDP 8-OS
UP 8-IT
UP 8B
UP 8A
LP 8
400A 4P SW
FROM EPP-PH-OS#2
T-EUP-7-DS
T-UP-7-IT
T-UP-7
EUP 7-OS
UP 7-IT
UP 7B
UP 7A
LP 7
T-EUP-7
ELP 7
EUP 7
FROM EPP-PH-4#2
T-UP-5-IT
T-UP-5
UP 5-IT
UP 5B
UP 5A
LP 5
CABLE SUPPORT BOX WITH BARRIERS AS REQUIRED BY CODE (TYPICAL)
12#12-3/4"C
T-UP-4-IT
T-UP-4
UP 4-IT
UP 4B
UP 4A
LP 4
9#12-3/4"C
T-UP-SERV
T-UP-3-IT
T-UP-3
UP SERV
UP 3-IT
UP 3B
UP 3A
LP 3
ELP 3
FROM EPP-PH-4#2
CIRCUITS ROUTED THROUGH ELECTRICAL CLOSET CONDUIT SHAFT (TYP.)
T-UP-2-IT
T-UP-2
HT 2
UP 2-IT
UP 2B
UP 2A
LP 2
CIRCUITS FOR FUTURE EQUIPMENT (TYP.)
1-3#3 + 1#8 GND - 1½"C
LIGHTING PANEL FEEDER ROUTED THROUGH ELECTRICAL CLOSET CONDUIT SHAFT (TYP.)

PRIMARY SWGR ROOM
T-UP-1
UP 1
LP 1
UP B
LP B
T-UP-B
1-3#3 + 1#8 GND - 1 1/4"C
460V INPUT-120/208V OUTPUT UPS WITH MINIMUM 15 MINUTE BATTERY BACKUP AND BUILT-IN TRANSFORMER
UPS B-4
UPS B-3
UPS B-2
UPS B-1
UNINTERRUPTIBLE POWER SUPPLY 80KVA/72KW
2-3#600MCM + 1#600MCM GND - 4"C
3-4#600MCM + 1#600MCM GND - 4"C
3-4#600MCM + 1#600MCM GND - 4"C
EDP B-LS
ELP B
EUP B
T-EUP-B
T1
T2
EPP B-OS
EUP B-OS
T-EUP-B-DS
ATS #5
ATS #1
ATS #2
ATS #3
FROM EP-PH-LS#2
FROM EP-PH-4#2
FROM EP-PH-5#2
FROM EP-PH-1#2
FROM SS-BSB-1#2
FROM SS-BSB-2#2
FROM SS-ASE-1#2
FROM SS-ASE-2#2
FROM SS-ASE-3#2
TO EP-PH-LS#2
TO EP-PH-4#2
TO EP-PH-5#2
TO EP-PH-1#2
TO ATS#1 (EL-PP)
FROM EP-B-2#2
TO SMC-W
TO SMC-E
DP B-1
DP B-2
FIRE PUMP DISCONNECT 600AS 600AF
TO BSB
60AS 60AF FIRE ALARM DISCONNECT
TO ASE
1 3#500MCM + 1#2/0(CU)-2 HR RATED RHH - 3½"C
1 3#2 + 1#8(CU-RHH) - 1½"C
TO FA SYSTEM
FUSE CUTOUT PANEL
T-FA-SYS
45KVA 460V/208-120V
ATS #4
ATS FA PUMP
FROM EMRG. GEN.
FIRE PUMP AFP-1
SMC WALK
SMC W
SMC E
FROM EP-PH-4#2
FROM EP-PH-5#2
FROM EP-PH-1#2
FROM SMRG. GEN.

SERVICE END BOX (TYPICAL)
1 SET OF 3#3 + 1#8(CU-RHH) - 1½"C (TYP.)
1 3#400MCM + 1#2/0(CU)-2 HR RATED RHH - 3"C
T1 T2 T3 T4 T5 T6
SPOT NETWORK BY CON ED
FREE STANDING SWITCH (TYPICAL)
FIRE PUMP DISCONNECT
FIRE ALARM DISCONNECT
TO ATS #4 (FA SYS)
TO ATS FA PUMP (FIRE PUMP)
TAP AHEAD OF MAIN
(FUSE CUT OUT)
TO SMRD-H-A (BSB)
TO SMRD-H-B (BSB)
4000 AMP BUS 265/460V/3P/4W 200 KAIC
SS-BSB-1
SS-BSB-2
SS-ASE-1
SS-ASE-2
SS-ASE-3
EM-SS
2500 AMP BUS 265/460V/3P/4W 150 KAIC
1-3#3 + 1#8(CU-RHH) - 1½"C
1 3#400MCM + 1#2/0(CU)-2 HR RATED RHH - 3½"C

TRANSFORMER FEEDERS (U.O.N.)

XFMR	XFMR SIZE	PRIMARY	SECONDARY	GROUNDING ELECTRODE
T1	15KVA	3#10(CU)-3/4"C	3#6+1#2(CU)-1"C	1#8(CU)
T2	30KVA	3#8(CU)-3/4"C	3#2+1#4/0(CU)-1 1/2"C	1#8(CU)
T3	75KVA	3#2(CU)-1 1/4"C	4-250MCM(CU)-2 1/2"C	1#4(CU)

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Seal

Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

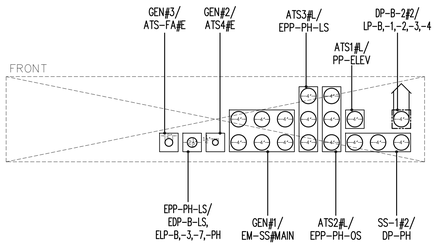
Sheet Title
ELECTRICAL RISER DIAGRAM

Date: April 10, 2012
Scale: N.T.S.
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-300

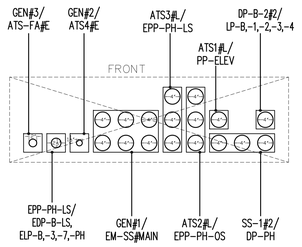
SYMBOL LIST	
SYMBOL	DESCRIPTION
	CONDUIT EXITING RISER
	CONDUIT ENTERING RISER
	CONDUIT THRU FLOOR

NOTSE:

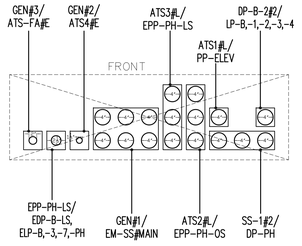
1. CIRCUIT NUMBERS AND CONDUIT ARRANGEMENT SHOWN FOR REFERENCE ONLY.
2. CONDUITS 1" AND SMALLER IN SIZE ARE NOT INDICATED. THE MAIN ELECTRICAL RISER SHALL BE UTILIZED FOR ROUTING OF BRANCH CIRCUITS BETWEEN FLOORS.



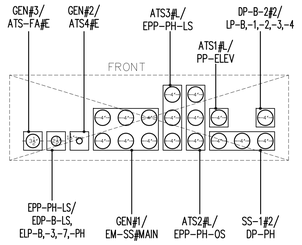
4TH FLOOR



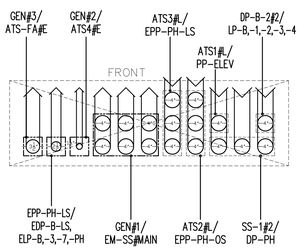
3RD FLOOR



2ND FLOOR

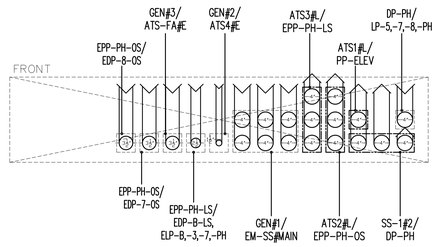


1ST FLOOR

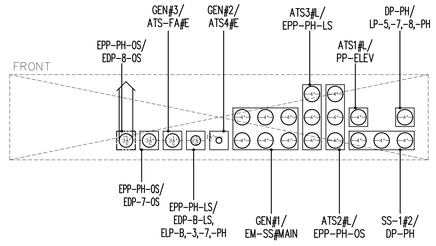


BASEMENT

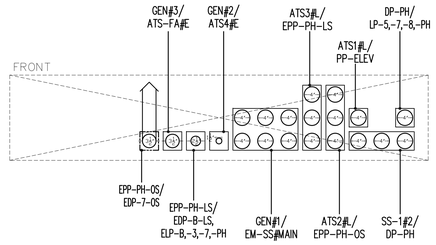
ELECTRICAL RISER A



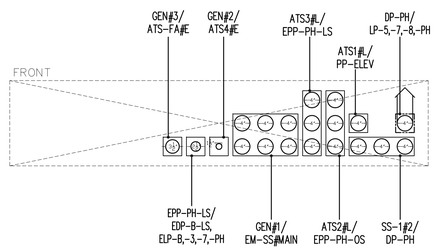
MECHANICAL



8TH FLOOR



7TH FLOOR



5TH FLOOR

ELECTRICAL RISER A

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Key Plan

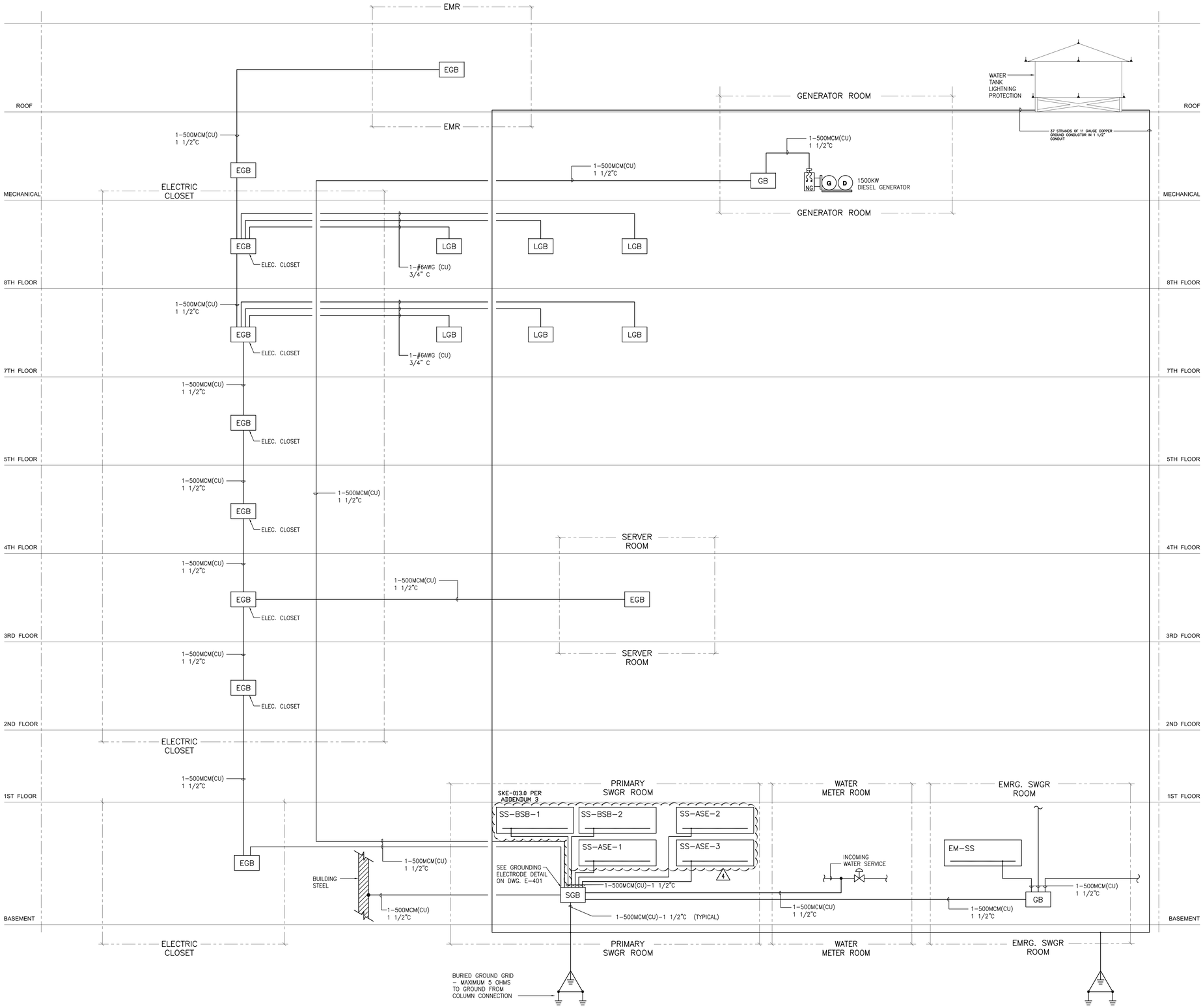
6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL CONDUIT SHAFT DIAGRAM

Date
April 10, 2012
Scale
N.T.S.
Phase

SUCF Project Number
14A91
Ennead Project Number
0917

Sheet No.
E-301



NOTE:
SEE IT DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL GROUNDING REQUIREMENTS.

LEGEND

SYMBOL	DESCRIPTION
GB	GROUND BUS 72"x4"x1/4"
SGB	SERVICE GROUND BUS 72"x4"x1/4"
EGB	ELECTRICAL CLOSET GROUND BUS 18"x4"x1/4"
LGB	LABORATORY MODULE GROUND BUS 12"x4"x1/4" IN NEMA1 ENCLOSURE

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Key Plan

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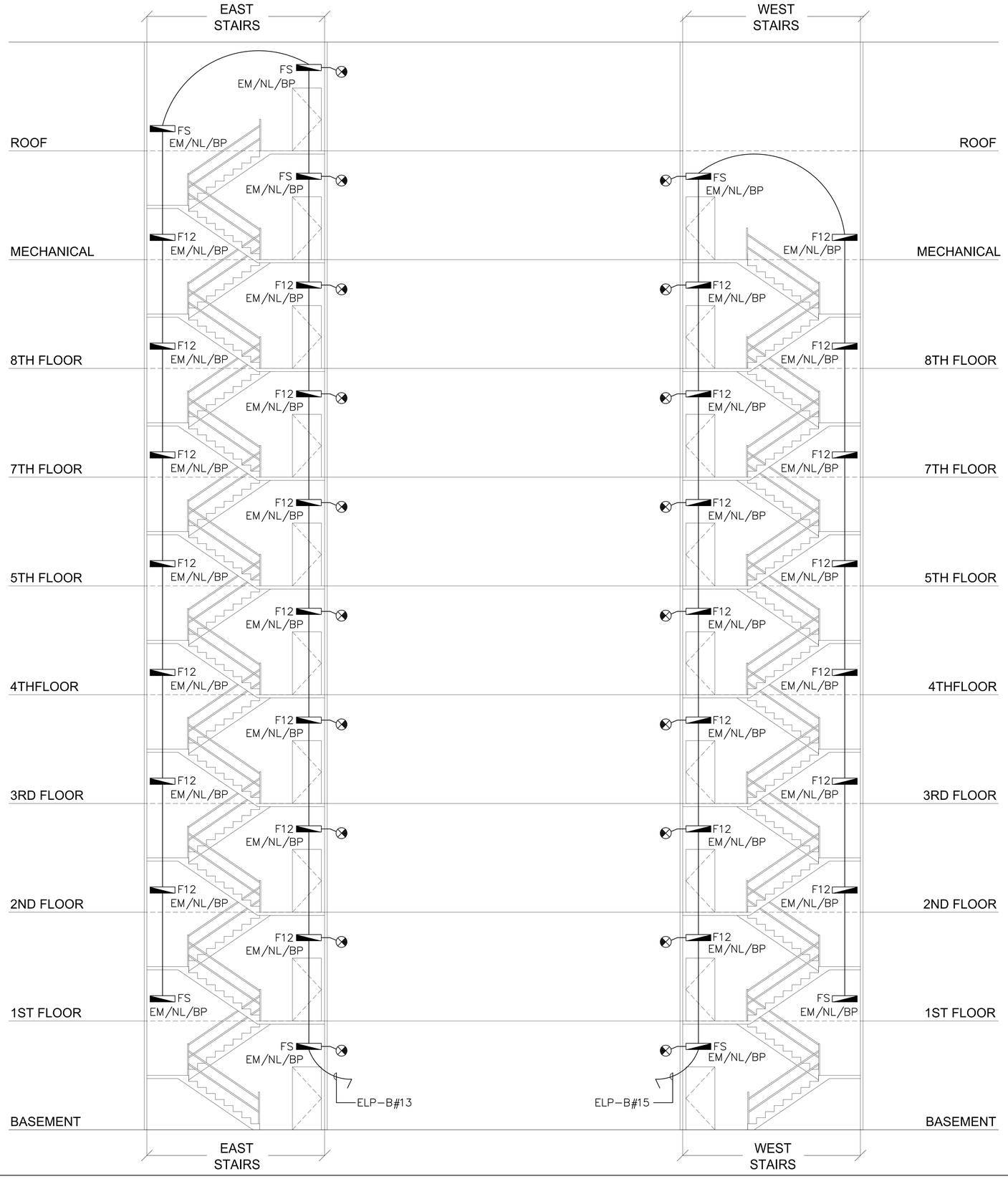
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL GROUNDING RISER DIAGRAM

Date: April 10, 2012
Scale: N.T.S.
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-302



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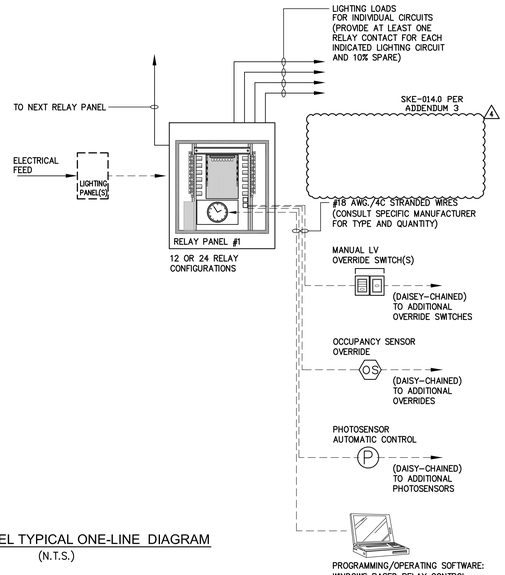
Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL STAIR EXIT RISER DIAGRAM

Date: April 10, 2012
Scale: N.T.S.
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-303

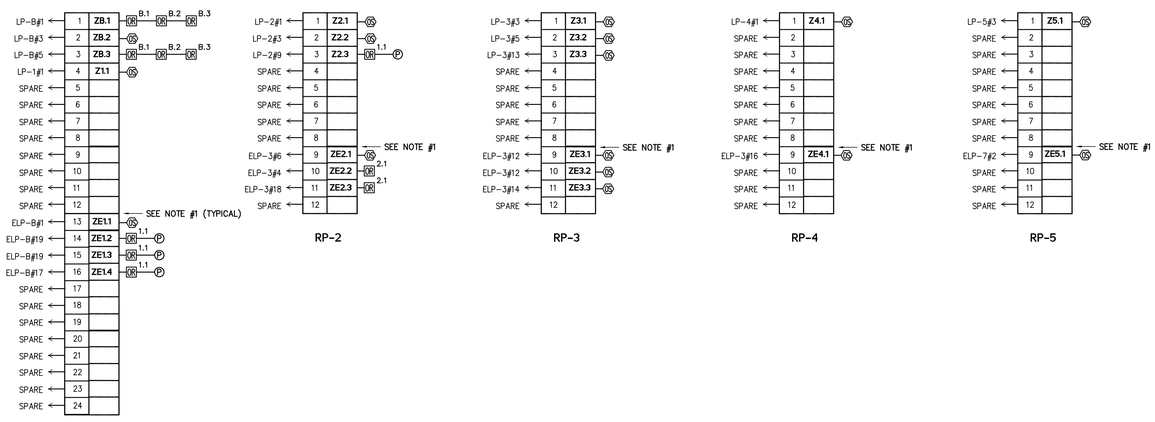


RELAY PANEL TYPICAL ONE-LINE DIAGRAM
(N.T.S.)

RELAY PANEL NOTES:

1. PROVIDE FOR EACH FLOOR WITH LIGHTING POWER PANEL(S) A MODULAR TIME BASED AUTOMATIC AND MANUAL RELAY PANEL.
2. PANEL: EACH PANEL TO BE A COMBINATION OF ONE OR TWO 12 RELAY PANELS, QUANTITY AS INDICATED ON THE ELECTRICAL DRAWINGS. PANEL SHALL CONSIST OF A COMPLETE POWER SUPPLY ASSEMBLY, SURGE PROTECTION, ELECTRICAL TUB AND DOOR, TRANSFORMER AND POWER TERMINATIONS. PROVIDE INDIVIDUAL PANEL. POWER SUPPLY CAN BE UNPLUGGED FOR MAINTENANCE. PROVIDE BARRIER WHERE 120 AND 277 VOLT CIRCUITS ARE USED IN THE SAME PANEL. POSITIVE ACTION, STATUS PILOT LIGHT, RELAY SHALL HAVE A MAINTAINED CONTACT CLOSURE WITH RELAY POSITIONS DICTATED BY THE LAST SIGNAL. RELAYS SHALL OPERATE 50,000 CYCLES AT FULL LOAD(MIN.) RELAYS SHALL BE PROVIDED WITH A 5 PIN FEMALE CONNECTOR FOR EASE OF MAINTENANCE, SNAP-IN-PLACE ASSEMBLY. RELAYS TO HAVE SPST MECHANICAL LATCHING, SPLIT COIL 20 AMP TUNGSTEN 125 VAC LAMP LOAD. PROVIDE A MINIMUM OF SIX SPARE RELAY SLOTS PER FLOOR.
3. TIME CLOCK: SYSTEM SHALL HAVE AN LCD DISPLAY, EEPROM STORAGE, 10 YEAR INTEGRAL ASTRONOMICAL TIME CLOCK, PROVIDING CONTROL 365 DAYS PER YEAR, WITH DAILY AND WEEKLY TIME SCHEDULES OF ON/OFF EVENTS. OVERRIDES OF TIME CLOCK EVENTS SHALL BE MAINTAINED FOR A MAXIMUM OF (2) HOURS, FOLLOWED BY A SWEEP THROUGH OF ALL RELAY ZONES. A CHANGE IN AN 'ON' EVENT SHALL BE A FLASH (BLINK) WARNING FIVE MINUTES PRIOR TO TURNING OFF LIGHT WITHIN A PARTICULAR ZONE. TIME CLOCK SHALL HAVE THE ABILITY TO BE OVERRIDDEN VIA LOCAL OVERRIDE SWITCH(ES) OR PHONE ACTIVATED DIAL-UP CONTROL. PROVIDE MASTER/SLAVE CONTROL FROM CENTRAL TIME CLOCK (FOR ALL FLOORS). LOCATION (FLOOR) OF CENTRAL TIME CLOCK TO BE DETERMINED. TIME CLOCK TO OPERATE ALL LOGICAL CARDS WITHIN EACH PANEL VIA LOW VOLTAGE CONTROL WIRE.
4. OPERATION: PANEL SHALL HAVE THE FOLLOWING CAPABILITIES:
   A) SYSTEM TO HAVE THE ABILITY TO SEPARATE EACH CONTROL ZONE AND INDEPENDENTLY OPERATE ASSOCIATED RELAY.
   B) EACH LIGHTING ZONE CAN BE INDEPENDENTLY CONTROLLED VIA LOCAL OVERRIDE, PHONE OR CENTRAL TIME CLOCK SEQUENCING.
5. OVERRIDE SWITCHES: PROVIDE, AS INDICATED ON THE DRAWING, OVERRIDE SWITCHES MOUNTED WITHIN STANDARD 4" BOX. EXACT LOCATION AND FINISH OF SWITCHES TO BE COORDINATED WITH THE ARCHITECT AND FIELD CONDITIONS. PROVIDE A MINIMUM OF (2) 4-ZONES RELAY SWITCH LOCATIONS PER FLOOR. SWITCH WIRE SHALL BE 18 AWG (2) TWISTED PAIR BLACK/RED. BLUE/WHITE FROM PANEL TO EACH SWITCH LOCATION (1, 2, 4, OR 8 SWITCH). ALL SWITCHES SHALL HAVE NAMEPLATE CAPABILITY USING 9MM CLEAR LAMINATED TAPE. SWITCH COVERS SHALL HAVE NO EXPOSED SCREWS. COLORS TO BE ALMOND, GRAY, IVORY OR WHITE AS SPECIFIED BY ARCHITECT. SWITCH SHALL HAVE BUILT IN LOCATOR LIGHT. SWITCHES SHALL BE UNLIT, COLOR PER ARCHITECT. SWITCH OPERATION SHALL PROVIDE MANUAL OVERRIDE OF TIME-OFF SEQUENCE ONLY. DURING PROGRAMMED HOURS OF AN OPERATION, SWITCHES SHALL REMAIN INACTIVE PROVIDING NO REMOTE CONTROL ON OR OFF OF THE ASSOCIATED RELAYS.
6. OCCUPANCY SENSORS: PROVIDE, AS INDICATED ON THE DRAWINGS, CEILING-MOUNTED OCCUPANCY SENSORS CAPABLE OF PROVIDING AUTOMATIC OVERRIDE OF TIME-OFF SEQUENCE ONLY. REFER TO SPECIFICATIONS FOR OCCUPANCY SENSOR DETAILS.
7. PHOTOSENSORS: PROVIDE, AS INDICATED ON THE DRAWINGS EXTERIOR PHOTOSENSOR(S) CAPABLE OF PROVIDING AUTOMATIC SWITCHED CONTROL OF MULTIPLE LIGHTING RELAYS. REFER TO SPECIFICATION FOR PHOTOSENSOR DETAILS.
8. SUBMISSION: SUBMIT A ONE-LINE DIAGRAM INDICATING ALL DEVICES AND WIRING BETWEEN THEM. SUBMIT SCHEDULE OF CIRCUITS WITH CORRECT ZONES AND LOADS AS INDICATED ON ELECTRICAL DRAWINGS. SUBMIT SAMPLE GRAY AND WHITE FACEPLATE FINISHES OR CUSTOM COLOR FINISH PER ARCHITECT'S REQUEST. SUBMIT CHARACTER MAP FOR EACH FACEPLATE AND PRESET LOCATION.
9. SERVICE: PROVIDE TWO FULL DAYS OF ON-SITE STARTUP AND INSTRUCTION PERIOD. INSPECTION AND SIGN-OFF TO BE ONE WEEK PRIOR TO FLOOR COMMISSIONING AND CLIENT MOVE-IN, OR WITHIN TWO WEEKS OF CLIENT OCCUPATION OF SPACE (TO BE COORDINATED WITH CLIENT).
10. MANUFACTURER TO BE: GENERAL ELECTRIC – PROSYS LM, LUTRON, COOPER, WATT-STOPPER OR DOUGLAS.

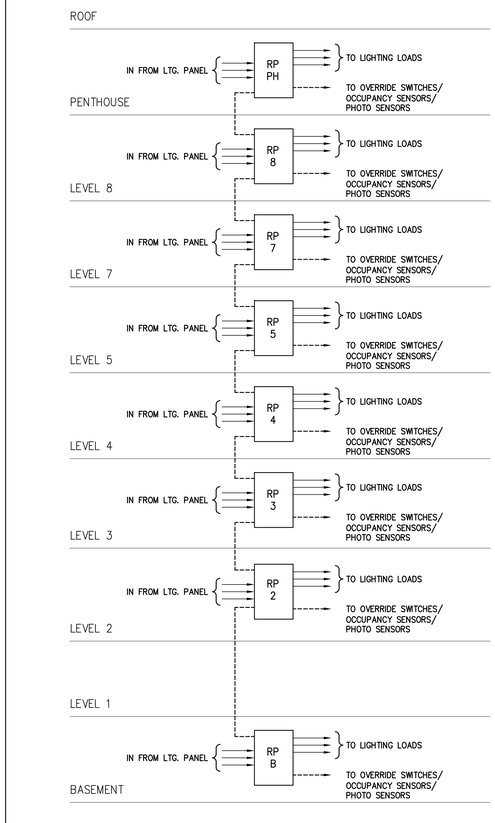
SKE-014.0 PER ADDENDUM 3



RELAY PANEL SCHEDULES
(N.T.S.)

NOTES

1. PROVIDE BARRIER BETWEEN 120V/265V CIRCUITS AND NORMAL/EMERGENCY CIRCUITS.



LEGEND:

——— LINE VOLTAGE WIRING

- - - - - - - - LOW VOLTAGE WIRING IN 1"ø CONDUIT. CONSULT SPECIFIC MANUFACTURER FOR TYPE AND QUANTITY OF CONDUCTORS.

RELAY PANEL RISER
(N.T.S.)

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80 Pine Street, 12th Floor
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Civil
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www.hlblighting.com

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Buro Happold Consulting Engineers, PC
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www.burohappold.com

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405 Fifth Avenue
New York, New York 10018
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www.ceramilassociates.com

Healthcare Simulation
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www.stantec.com

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Hughes Associates, Inc.
2 Mount Royal Avenue
Suite 420
Marlborough, MA 01752
508.624.7766 tel
www.haifire.com

Signage
Two Twelve Associates
902 Broadway
Floor 20
New York, NY 10010
212.254.6670 tel
212.254.6614 fax
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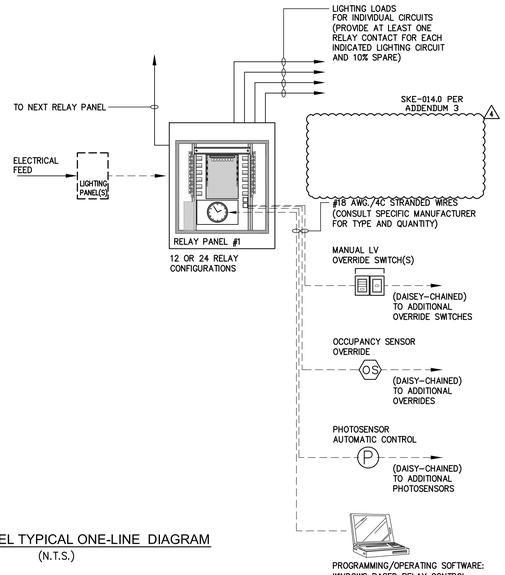
Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL DETAIL SHEET 1

Date: April 10, 2012
Scale: N.T.S.
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-400

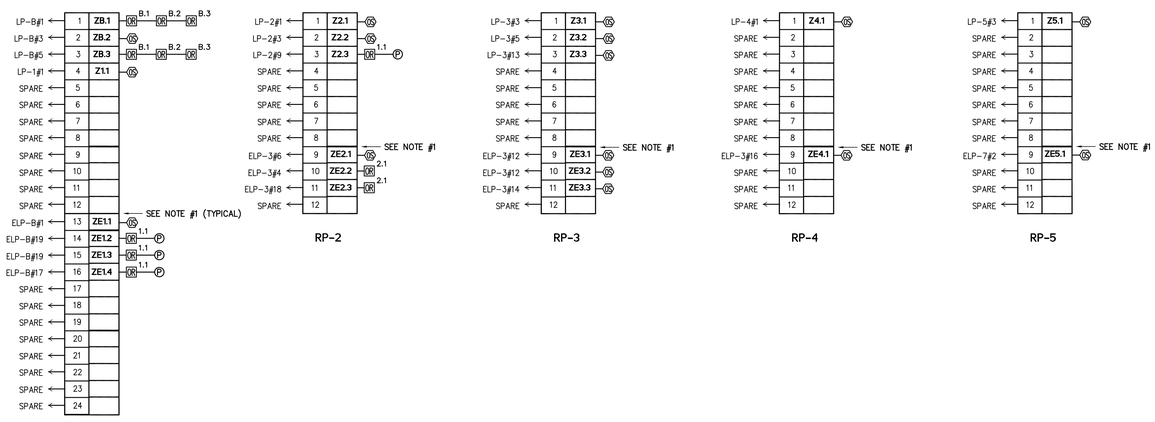


RELAY PANEL TYPICAL ONE-LINE DIAGRAM
(N.T.S.)

RELAY PANEL NOTES:

1. PROVIDE FOR EACH FLOOR WITH LIGHTING POWER PANEL(S) A MODULAR TIME BASED AUTOMATIC AND MANUAL RELAY PANEL.
2. PANEL: EACH PANEL TO BE A COMBINATION OF ONE OR TWO 12 RELAY PANELS, QUANTITY AS INDICATED ON THE ELECTRICAL DRAWINGS. PANEL SHALL CONSIST OF A COMPLETE POWER SUPPLY ASSEMBLY, SURGE PROTECTION, ELECTRICAL TUB AND DOOR, TRANSFORMER AND POWER TERMINATIONS. PROVIDE INDIVIDUAL PANEL. POWER SUPPLY CAN BE UNPLUGGED FOR MAINTENANCE. PROVIDE BARRIER WHERE 120 AND 277 VOLT CIRCUITS ARE USED IN THE SAME PANEL. POSITIVE ACTION, STATUS PILOT LIGHT, RELAY SHALL HAVE A MAINTAINED CONTACT CLOSURE WITH RELAY POSITIONS DICTATED BY THE LAST SIGNAL. RELAYS SHALL OPERATE 50,000 CYCLES AT FULL LOAD(MIN.) RELAYS SHALL BE PROVIDED WITH A 5 PIN FEMALE CONNECTOR FOR EASE OF MAINTENANCE, SNAP-IN-PLACE ASSEMBLY. RELAYS TO HAVE SPST MECHANICAL LATCHING, SPLIT COIL 20 AMP TUNGSTEN 125 VAC LAMP LOAD. PROVIDE A MINIMUM OF SIX SPARE RELAY SLOTS PER FLOOR.
3. TIME CLOCK: SYSTEM SHALL HAVE AN LCD DISPLAY, EEPROM STORAGE, 10 YEAR INTEGRAL ASTRONOMICAL TIME CLOCK, PROVIDING CONTROL 365 DAYS PER YEAR, WITH DAILY AND WEEKLY TIME SCHEDULES OF ON/OFF EVENTS. OVERRIDES OF TIME CLOCK EVENTS SHALL BE MAINTAINED FOR A MAXIMUM OF (2) HOURS, FOLLOWED BY A SWEEP THROUGH OF ALL RELAY ZONES. A CHANGE IN AN 'ON' EVENT SHALL BE A FLASH (BLINK) WARNING FIVE MINUTES PRIOR TO TURNING OFF LIGHT WITHIN A PARTICULAR ZONE. TIME CLOCK SHALL HAVE THE ABILITY TO BE OVERRIDDEN VIA LOCAL OVERRIDE SWITCH(ES) OR PHONE ACTIVATED DIAL-UP CONTROL. PROVIDE MASTER/SLAVE CONTROL FROM CENTRAL TIME CLOCK (FOR ALL FLOORS). LOCATION (FLOOR) OF CENTRAL TIME CLOCK TO BE DETERMINED. TIME CLOCK TO OPERATE ALL LOGICAL CARDS WITHIN EACH PANEL VIA LOW VOLTAGE CONTROL WIRE.
4. OPERATION: PANEL SHALL HAVE THE FOLLOWING CAPABILITIES:
   A) SYSTEM TO HAVE THE ABILITY TO SEPARATE EACH CONTROL ZONE AND INDEPENDENTLY OPERATE ASSOCIATED RELAY.
   B) EACH LIGHTING ZONE CAN BE INDEPENDENTLY CONTROLLED VIA LOCAL OVERRIDE, PHONE OR CENTRAL TIME CLOCK SEQUENCING.
5. OVERRIDE SWITCHES: PROVIDE, AS INDICATED ON THE DRAWING, OVERRIDE SWITCHES MOUNTED WITHIN STANDARD 4" BOX. EXACT LOCATION AND FINISH OF SWITCHES TO BE COORDINATED WITH THE ARCHITECT AND FIELD CONDITIONS. PROVIDE A MINIMUM OF (2) 4-ZONES RELAY SWITCH LOCATIONS PER FLOOR. SWITCH WIRE SHALL BE 18 AWG (2) TWISTED PAIR BLACK/RED. BLUE/WHITE FROM PANEL TO EACH SWITCH LOCATION (1, 2, 4, OR 8 SWITCH). ALL SWITCHES SHALL HAVE NAMEPLATE CAPABILITY USING 9MM CLEAR LAMINATED TAPE. SWITCH COVERS SHALL HAVE NO EXPOSED SCREWS. COLORS TO BE ALMOND, GRAY, IVORY OR WHITE AS SPECIFIED BY ARCHITECT. SWITCH SHALL HAVE BUILT IN LOCATOR LIGHT. SWITCHES SHALL BE UNLIT, COLOR PER ARCHITECT. SWITCH OPERATION SHALL PROVIDE MANUAL OVERRIDE OF TIME-OFF SEQUENCE ONLY. DURING PROGRAMMED HOURS OF AN OPERATION, SWITCHES SHALL REMAIN INACTIVE PROVIDING NO REMOTE CONTROL ON OR OFF OF THE ASSOCIATED RELAYS.
6. OCCUPANCY SENSORS: PROVIDE, AS INDICATED ON THE DRAWINGS, CEILING-MOUNTED OCCUPANCY SENSORS CAPABLE OF PROVIDING AUTOMATIC OVERRIDE OF TIME-OFF SEQUENCE ONLY. REFER TO SPECIFICATIONS FOR OCCUPANCY SENSOR DETAILS.
7. PHOTOSENSORS: PROVIDE, AS INDICATED ON THE DRAWINGS EXTERIOR PHOTOSENSOR(S) CAPABLE OF PROVIDING AUTOMATIC SWITCHED CONTROL OF MULTIPLE LIGHTING RELAYS. REFER TO SPECIFICATION FOR PHOTOSENSOR DETAILS.
8. SUBMISSION: SUBMIT A ONE-LINE DIAGRAM INDICATING ALL DEVICES AND WIRING BETWEEN THEM. SUBMIT SCHEDULE OF CIRCUITS WITH CORRECT ZONES AND LOADS AS INDICATED ON ELECTRICAL DRAWINGS. SUBMIT SAMPLE GRAY AND WHITE FACEPLATE FINISHES OR CUSTOM COLOR FINISH PER ARCHITECT'S REQUEST. SUBMIT CHARACTER MAP FOR EACH FACEPLATE AND PRESET LOCATION.
9. SERVICE: PROVIDE TWO FULL DAYS OF ON-SITE STARTUP AND INSTRUCTION PERIOD. INSPECTION AND SIGN-OFF TO BE ONE WEEK PRIOR TO FLOOR COMMISSIONING AND CLIENT MOVE-IN, OR WITHIN TWO WEEKS OF CLIENT OCCUPATION OF SPACE (TO BE COORDINATED WITH CLIENT).
10. MANUFACTURER TO BE: GENERAL ELECTRIC – PROSYS LM, LUTRON, COOPER, WATT-STOPPER OR DOUGLAS.

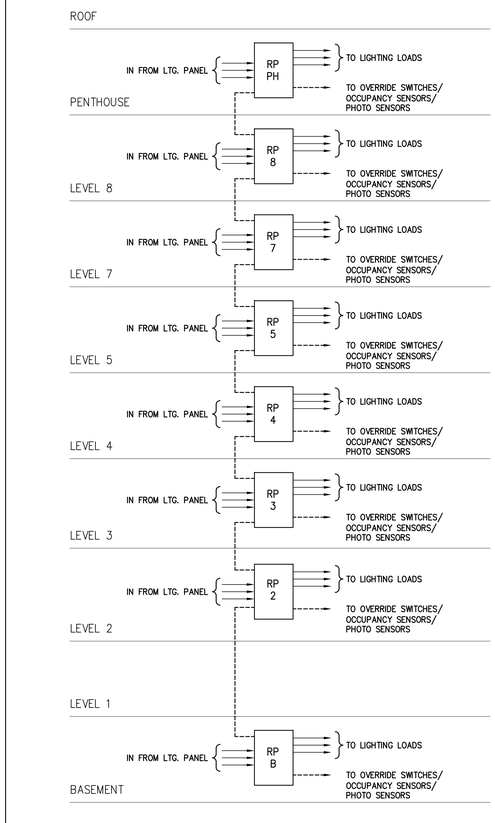
SKE-014.0 PER ADDENDUM 3



RELAY PANEL SCHEDULES
(N.T.S.)

NOTES

1. PROVIDE BARRIER BETWEEN 120V/265V CIRCUITS AND NORMAL/EMERGENCY CIRCUITS.



LEGEND:

——— LINE VOLTAGE WIRING

- - - - - - - - LOW VOLTAGE WIRING IN 1"ø CONDUIT. CONSULT SPECIFIC MANUFACTURER FOR TYPE AND QUANTITY OF CONDUCTORS.

RELAY PANEL RISER
(N.T.S.)

Project Title
NEW ACADEMIC BUILDING
School of Public Health, State University of New York Health Science Center at Brooklyn
450 Clarkson Avenue Brooklyn, NY 11203

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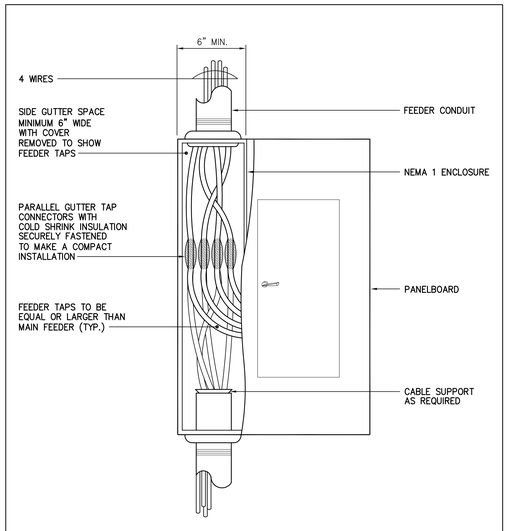
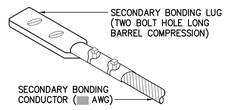


SPLICE DETAIL
(PANEL ON COMMON RISER FEEDER)
(N.T.S.)

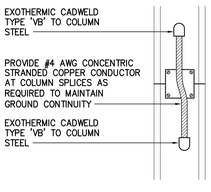
1



GROUND BONDING LUG DETAIL
(N.T.S.)

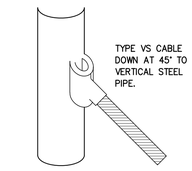
NOTE:
1. SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

2



GROUNDING COLUMN
JUMPER CONDUCTOR DETAIL
(N.T.S.)

3



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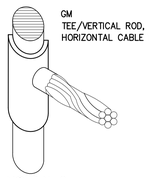

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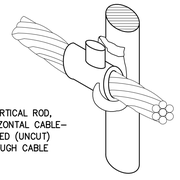

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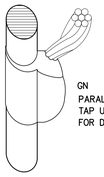

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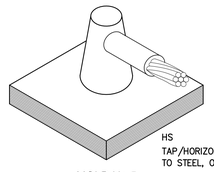

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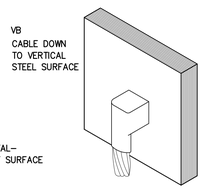
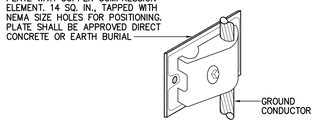


MOLD No.6

CAD WELD GROUNDING
CONNECTION DETAILS
(N.T.S.)

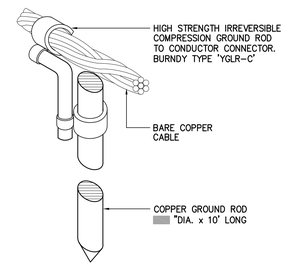
4



TYPICAL GROUND PLATE DETAIL
(N.T.S.)

NOTE:
1. SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

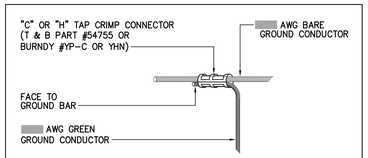
5



GROUND ROD
COMPRESSION CONNECTION DETAIL
(N.T.S.)

NOTES:
1. INSTALLATION SHALL BE APPROVED FOR DIRECT CONCRETE OR EARTH BURIAL.
2. ALL WORK SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS, REQUIREMENTS AND RECOMMENDATIONS.

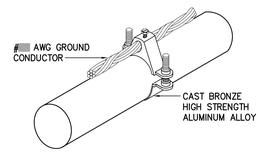
6



GROUND TAP OR LAP
SPLICE CONNECTOR DETAIL
(N.T.S.)

NOTES:
1. ALL MATERIAL SHALL BE APPROVED FOR DIRECT CONCRETE OR EARTH BURIAL.
2. PROVIDE OXIDE INHIBITING JOINT COMPOUND ON ALL POINTS OF CONNECTIVITY.
3. ALL WORK SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS, REQUIREMENTS AND RECOMMENDATIONS.

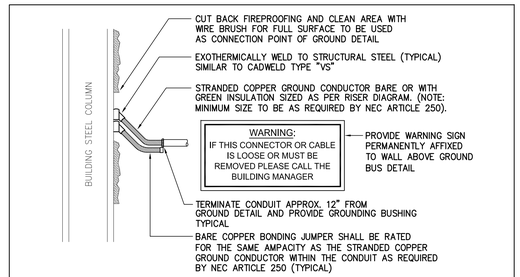
7



PIPE GROUND CLAMP DETAIL
(N.T.S.)

NOTES:
1. ALL SCREWS AND NUTS SHALL BE ZINC PLATED.
2. DETAIL IS APPLICABLE FOR COPPER, GALVANIZED AND STEEL PIPE ONLY.
3. UTILIZE OXIDE INHIBITING JOINT COMPONENTS ON ALL POINTS OF CONNECTIVITY.
4. ALL WORK SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS, REQUIREMENTS AND RECOMMENDATIONS.

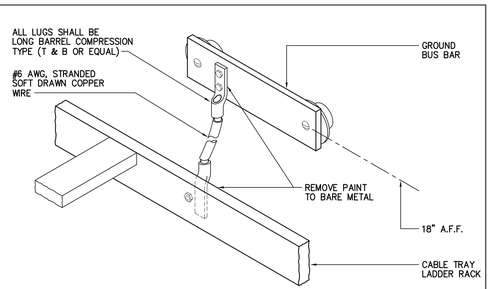
8



GROUNDING TYPE
(SINGLE GROUND CONNECTION)
TO BUILDING STEEL DETAIL
(N.T.S.)

NOTE:
1. ALL LUGS, CONNECTORS, BUSHINGS, ETC. SHALL BE LISTED FOR GROUNDING.

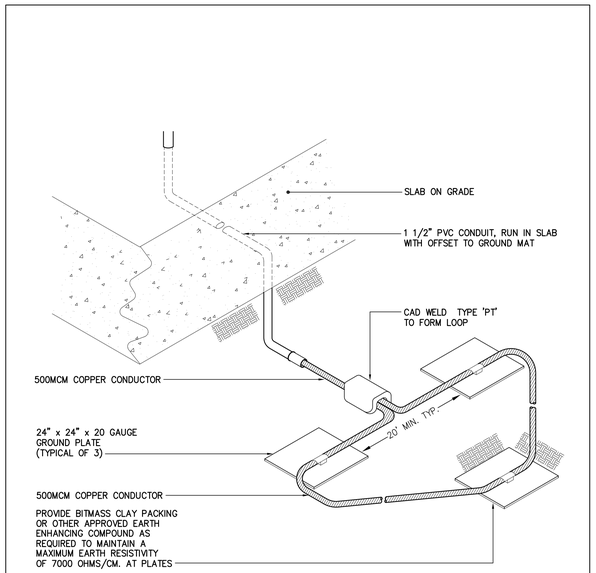
9



GROUNDING JUMPER DETAIL
(N.T.S.)

NOTE:
1. GROUND CABLES SHALL NOT BE RUN THROUGH THE RUNGS OF THE CABLE LADDER.

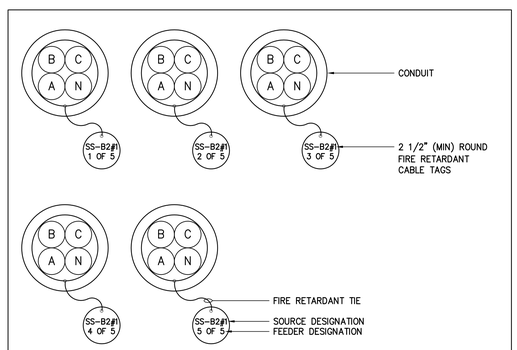
10



GROUNDING ELECTRODE DETAIL
(N.T.S.)

NOTE:
1. ALL CONDUIT RUN IN CONCRETE OR BELOW GRADE SHALL BE SCHEDULE 80 PVC WITH RGS ELBOWS.

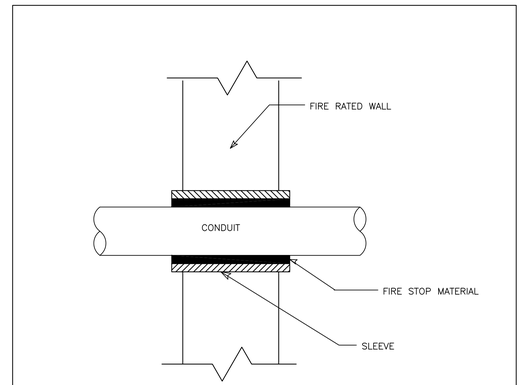
11



CABLE IDENTIFICATION DETAIL
(N.T.S.)

NOTES:
1. TYPICAL FOR ALL CABLING WITHIN ELECTRICAL EQUIPMENT. INCLUDING BUT NOT LIMITED TO, CABLE IN SWITCHBOARDS, PANELBOARDS, JUNCTION BOXES, SUPPORT BOXES, ATS'S STS'S, DISCONNECT SWITCHES, CIRCUIT BREAKERS.
2. ENSURE THAT FEEDER '1 OF 5' IS SAME IN EACH LOCATION.

12



CONDUIT PENETRATION THRU FIRE RATED WALL

NOT TO SCALE

13

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NEW ACADEMIC BUILDING
School of Public Health, State University of New York Health Science Center at Brooklyn
450 Clarkson Avenue Brooklyn, NY 11203

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Sheet Title
ELECTRICAL
DETAIL SHEET 2

Date: April 10, 2012
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Phase:
SUCF Project Number: 14A91
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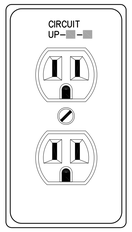
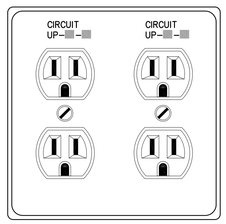
Sheet No.: E-401



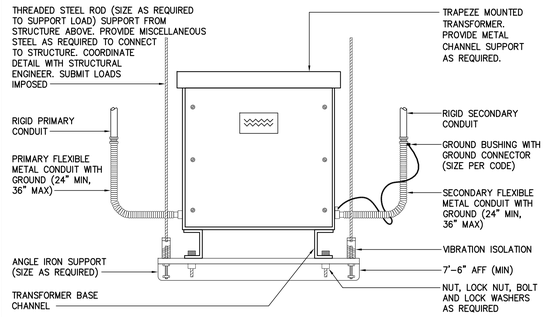
DUPLEX ENGRAVED
RECEPTACLE DETAIL
(N.T.S.)

14



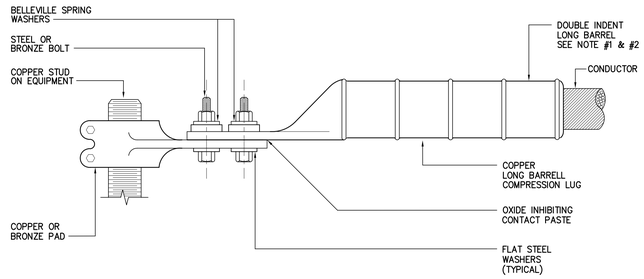
QUAD ENGRAVED
RECEPTACLE DETAIL
(N.T.S.)

15



TRANSFORMER TRAPEZE MOUNTING DETAIL
N.T.S.

17

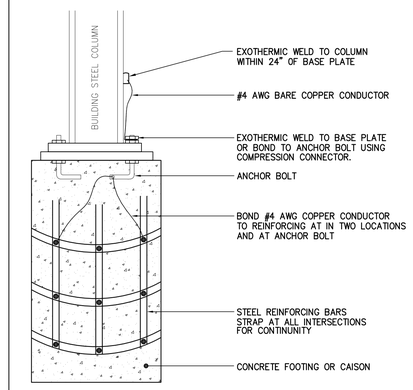


CONNECTION OF CONDUCTORS TO
EQUIPMENT STUDS OR COPPER TERMINAL PADS DETAIL
(N.T.S.)

NOTES:

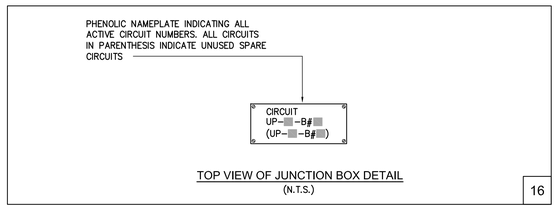
1. LUGS SHALL BE DOUBLE INDENT, 2 BOLT HOLE AND LONG BARREL. PROVIDE DOUBLE INDENT "HEXAGONAL" COMPRESSION DIES AND TOOL ('T' AND 'B', BURNDY OR AS REVIEWRED). SINGLE INDENT COMPRESSION TOOLS AND UNIVERSAL DIES SHALL NOT BE PERMITTED. ALL COMPRESSION TOOLS AND DIES SHALL BE MANUFACTURED BY THE LUG VENDOR.
2. BARREL SHOWN IS FOR 500MCM CABLE. BARREL LENGTH AND QUANTITY OF CRIMPS REQUIRED WILL VARY WITH CONDUCTOR SIZE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

18



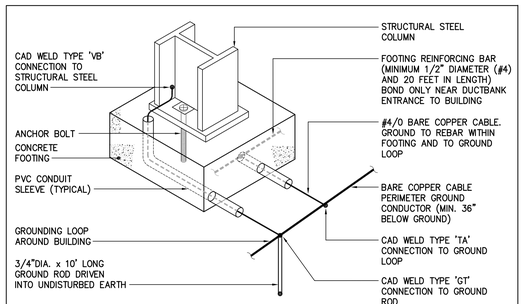
COLUMN GROUNDING ELECTRODE DETAIL
(N.T.S.)

19



TOP VIEW OF JUNCTION BOX DETAIL
(N.T.S.)

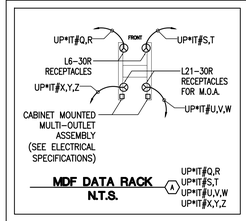
16



TYPICAL COLUMN
AND REINFORCING BAR
GROUNDING DETAIL
(N.T.S.)

20

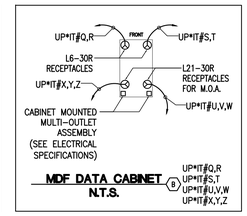
BDF/IDF ROOM WIRING LEGEND



MDF DATA RACK
N.T.S.

A

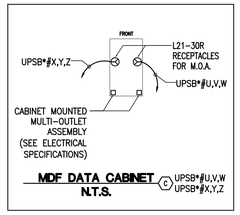
UP*T#Q,R
UP*T#S,T
UP*T#U,V,W
UP*T#X,Y,Z



MDF DATA CABINET
N.T.S.

B

UP*T#Q,R
UP*T#S,T
UP*T#U,V,W
UP*T#X,Y,Z



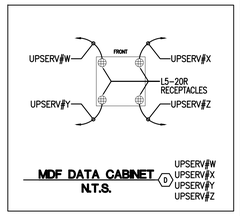
MDF DATA CABINET
N.T.S.

C

UPSB*#U,V,W
UPSB*#X,Y,Z

IDF WIRING LEGEND NOTES:
1. CIRCUITS ARE DENOTED AS FOLLOWS:

UP-*-IT#X — CIRCUIT NUMBER(S), PANEL NUMBER
UPS-B-*#X — CIRCUIT NUMBER(S), PANEL NUMBER
UPS-SERV#X — CIRCUIT NUMBER(S)

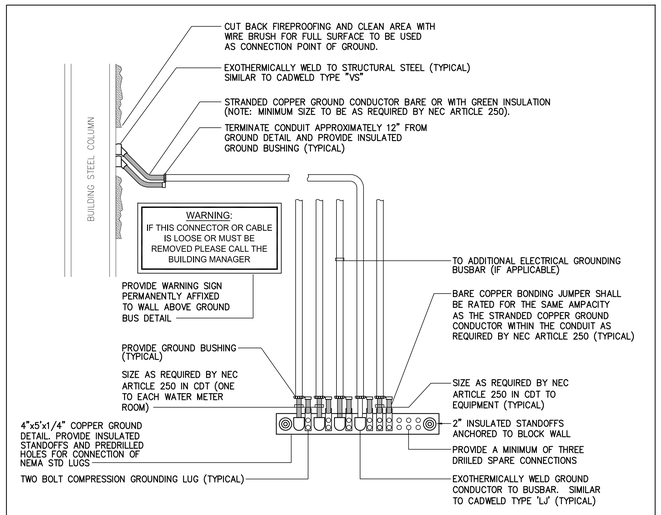


MDF DATA CABINET
N.T.S.

D

UPSERV#W
UPSERV#X
UPSERV#Y
UPSERV#Z

23

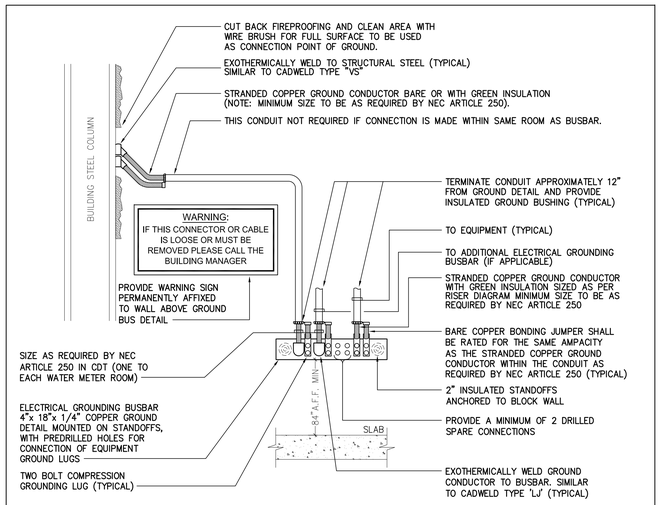


MAIN GROUND CONNECTION DETAIL
(N.T.S.)

NOTE:

1. ALL LUGS, CONNECTORS, BUSHINGS, ETC. SHALL BE LISTED FOR GROUNDING.

21

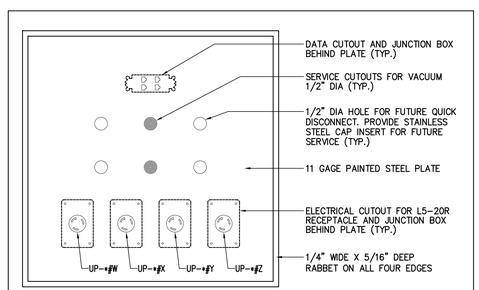


GROUND CONNECTION
IN ELECTRICAL CLOSETS
(N.T.S.)

NOTES:

1. TYPICAL FOR EACH ELECTRICAL CLOSET.
2. ALL LUGS, CONNECTORS, BUSHINGS, ETC. SHALL BE LISTED FOR GROUNDING.

22



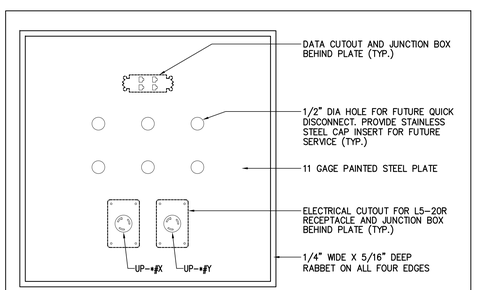
CEILING SERVICE PANEL 1 (CSP-1)
(N.T.S.)

NOTES:
1. PROVIDE CUT-OFF/COVER PLATE TO UNUSED SERVICE/DATA CUTOUT(S).

LAB BENCH WIRING LEGEND NOTES:
2. CIRCUITS ARE DENOTED AS FOLLOWS:

UP-*#X — CIRCUIT NUMBER(S), PANEL NUMBER

24



CEILING SERVICE PANEL 2 (CSP-2)
(N.T.S.)

NOTES:
1. PROVIDE CUT-OFF/COVER PLATE TO UNUSED SERVICE/DATA CUTOUT(S).

LAB BENCH WIRING LEGEND NOTES:
2. CIRCUITS ARE DENOTED AS FOLLOWS:

UP-*#X — CIRCUIT NUMBER(S), PANEL NUMBER

25

Project Title

NEW ACADEMIC BUILDING

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Seal

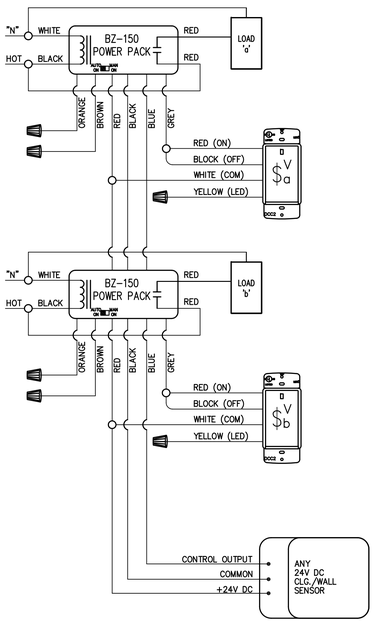
Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL DETAIL SHEET 3

Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	E-402
Scale	Ennead Project Number	
N.T.S.	0917	
Phase		

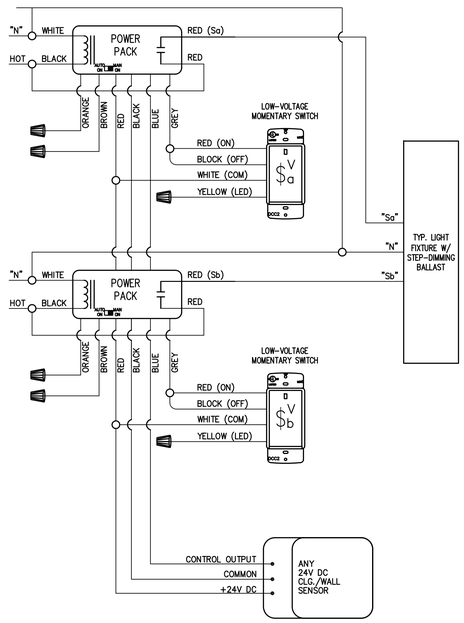


DETAIL 1: "MANUAL-ON" SENSOR CONTROL
FOR MULTIPLE ZONES
(N.T.S.)

NOTES:

1. ALL WIRING SHALL BE CONDUIT.
2. DIAGRAM IS SCHEMATIC TO INDICATE DESIGN INTENT. COORDINATE EXACT WIRING REQUIREMENTS WITH EQUIPMENT VENDOR.
3. PROVIDE ADDITIONAL POWER PACK(S) AND "DCC2" MOMENTARY SWITCH FOR EACH ADDITIONAL CONTROL ZONE. EXACT QTY. TO BE COORDINATED WITH ELECTRICAL DRAWINGS AND EQUIPMENT VENDOR.

30

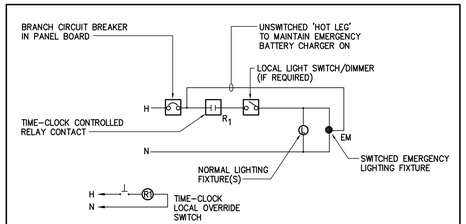


DETAIL 2: "MANUAL-ON" SENSOR CONTROL
TO STEP-DIMMING BALLAST
(N.T.S.)

NOTES:

1. ALL WIRING SHALL BE IN CONDUIT.
2. DIAGRAM IS SCHEMATIC TO INDICATE DESIGN INTENT. COORDINATE EXACT WIRING REQUIREMENTS WITH EQUIPMENT VENDOR.
3. PROVIDE ADDITIONAL "BZ-150" POWER PACK(S) AND "DCC2" MOMENTARY SWITCH FOR EACH ADDITIONAL CONTROL ZONE. EXACT QTY. TO BE COORDINATED WITH ELECTRICAL DRAWINGS AND EQUIPMENT VENDOR.

31

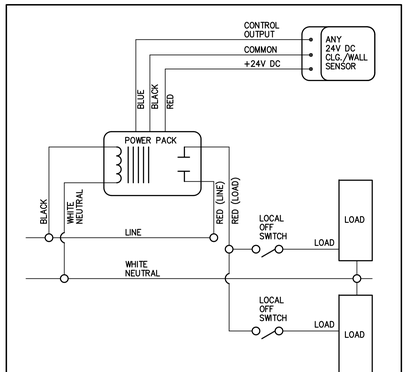


SWITCHED EMERGENCY LIGHTING
FIXTURE WIRING DIAGRAM
(N.T.S.)

NOTES:

1. COORDINATE EXACT SWITCH TYPE FOR TIME CLOCK OVERRIDE (MAINTAINED, MOMENTARY ETC.) WITH TIME CLOCK VENDOR.
2. ALL WIRING SHALL BE IN CONDUIT.

32

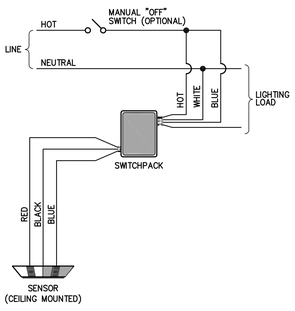


CEILING/WALL SENSOR CONTROLLING
DUAL LEVEL LIGHTING
(N.T.S.)

NOTES:

1. ALL WIRING SHALL BE CONDUIT.
2. DIAGRAM IS SCHEMATIC TO INDICATE DESIGN INTENT. COORDINATE EXACT WIRING REQUIREMENTS WITH EQUIPMENT VENDOR.

33

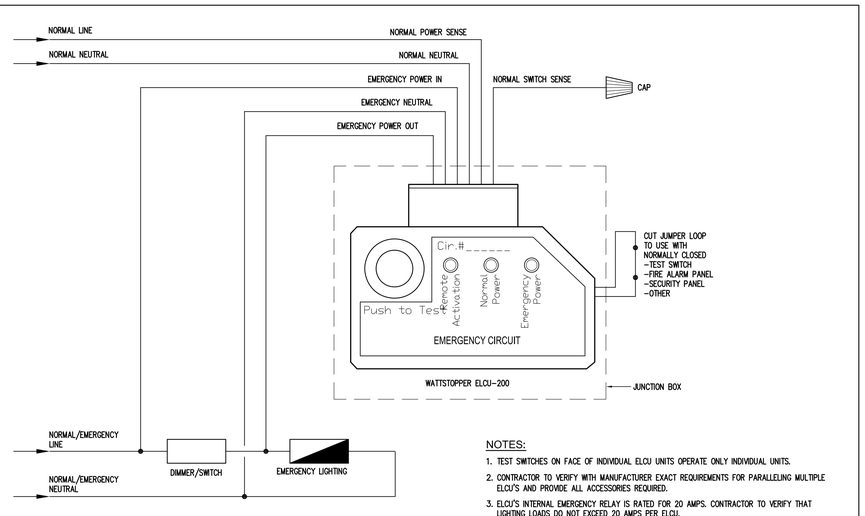


DETAIL 3: TYPICAL CEILING MOUNTED
OCCUPANCY SENSOR WIRING DIAGRAM
(N.T.S.)

NOTES:

1. ALL WIRING SHALL BE CONDUIT.
2. DIAGRAM IS SCHEMATIC TO INDICATE DESIGN INTENT. COORDINATE EXACT WIRING REQUIREMENTS WITH EQUIPMENT VENDOR.

34

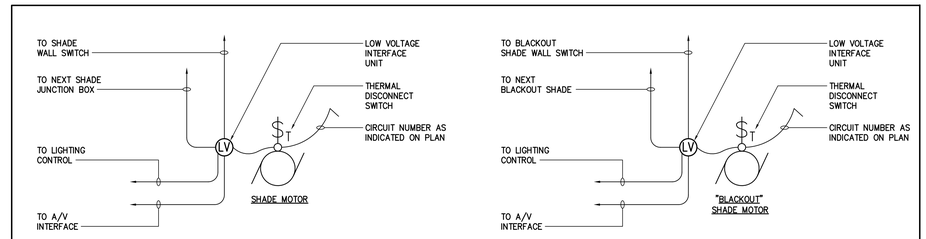


DETAIL 4: TYPICAL EMERGENCY CONTROL
WITH REMOTE OVERRIDE WIRING DIAGRAM
(N.T.S.)

NOTES:

1. TEST SWITCHES ON FACE OF INDIVIDUAL ELCU UNITS OPERATE ONLY INDIVIDUAL UNITS.
2. CONTRACTOR TO VERIFY WITH MANUFACTURER EXACT REQUIREMENTS FOR PARALLELING MULTIPLE ELCU'S AND PROVIDE ALL ACCESSORIES REQUIRED.
3. ELCU'S INTERNAL EMERGENCY RELAY IS RATED FOR 20 AMPS. CONTRACTOR TO VERIFY THAT LIGHTING LOADS DO NOT EXCEED 20 AMPS PER ELCU.
4. PROVIDE ONE ELCU FOR EACH EMERGENCY CIRCUIT OR ZONE. CONTRACTOR TO VERIFY EXACT QUANTITY OF ELCU DEVICES REQUIRED.
5. MANUFACTURER TO BE WATTSTOPPER (ELCU-200) OR BODINE. UNIT TO BE UL 924 LISTED FOR EMERGENCY USE.
6. ELCU TO BE MOUNTED TO STANDARD JUNCTION BOX.

35



MOTORIZED SHADE DETAILS
(N.T.S.)

NOTES:

1. COORDINATE QUANTITY OF MOTORS AND LV INTERFACE MODULES WITH SHADE VENDOR.
2. ALL WORK SHALL BE IN CONDUIT.
3. COORDINATE QUANTITY OF CONDUCTORS WITH SHADE VENDOR.

36

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Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL LIGHTING DETAIL SHEET 1

Date: April 10, 2012
Scale: N.T.S.
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-403

LUMINAIRE SCHEDULE - FRONT OF HOUSE - NAB

TYPE	DESCRIPTION	LAMP QTY	LAMP TYPE	TOTAL VA	INPUT VOLTAGE	LUMINAIRE MANUFACTURER, "CATALOG SERIES"	NOTES
F1A	CONTINUOUS LINEAR FLUORESCENT SEMI-INDIRECT PENDANT	2	T8 @32W	60 PER 4'	277	LEDALITE VERGE # 7606-T02-Q-N-LENGTH-1-VOLTAGE-1% DIMMING BALLAST FINISH-DUST COVER ACCESSORY	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F1B	CONTINUOUS LINEAR FLUORESCENT SEMI-INDIRECT PENDANT	2	T8 @32W	60 PER 4'	277	LEDALITE VERGE # 7606-T02-Q-N-LENGTH-1-VOLTAGE-50% STEP BALLAST FINISH-DUST COVER ACCESSORY	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F2	SURFACE MOUNTED SINGLE LAMP FLUORESCENT STRIP MOUNTED IN 3' & 4' LENGTHS	1	T8 @32W	7 PER 1'	277	BIRCHWOOD LIGHTING # WP-T8-1STSTAGGER-VOLT-EBFIXTURE RUN-FINISH	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F3	4' X 6" RECESSED LINEAR FLUORESCENT FIXTURE	1	T8 @32W	28	277	FOCAL POINT # FSM6-FL-1T8-1C-VOLTS-CEILING TYPE VARIES-*-FINISH-4'	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F3A	4' X 6" RECESSED LINEAR FLUORESCENT FIXTURE	2	T8 @32W	55	277	FOCAL POINT # FSM6-FL-2T8-1C-VOLTS-CEILING TYPE VARIES-*-FINISH-4'	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F4	6" WIDE CONTINUOUS RECESSED LINEAR FLUORESCENT FIXTURE. LENGTH DENOTED ON PLAN	1	T8 @32W	7 PER 1'	277	FOCAL POINT # FSM6-FL-1T8-1CVOLTS-S-CEILING TYPE-*-FINISH LENGTH DENOTED ON PLAN	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F5	2' X 4' RECESSED LINEAR FLUORESCENT TROFFER	2	T8 @32W	55	277	LEDALITE # 3324-*-*-T232-HOUSING-1-VOLT-E	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F5A	2' X 4' RECESSED LINEAR FLUORESCENT TROFFER	2	T8 @32W	60	277	LEDALITE # 3324-*-*-T232-HOUSING-1-VOLT-50% STEP BALLAST N-2-VOLTAGE-E	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F5B	2' X 4' RECESSED LINEAR FLUORESCENT TROFFER	2	T8 @32W	60	277	LEDALITE # 3324-*-*-T232-HOUSING-1-VOLT-1% DIMMING BALLAST	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F6	CONTINUOUS LINEAR FLUORESCENT PENDANT. LENGTH DENOTED ON PLAN	2	T8 @32W	7 PER 1'	277	PEERLESS # BRM4-1-32-40/60-SPR-*-SSP-RUN LENGTH-*-VOLTAGE-GEB10-*-*-SCT-LP835-MOUNTING SUSPENSION-FINISH	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F7	2 1/2" APERTURE ROUND LENSED RECESSED CERAMIC METAL HALIDE WALL WASH FIXTURE	1	T4.5 @20W	24	277	USA ILLUMINATION # N10RWT-WM-G852-TRIM FINISH-BHOUSING-VOLT-*	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F8	2 1/2" APERTURE ROUND LENSED RECESSED CERAMIC METAL HALIDE WALL WASH FIXTURE	1	T4.5 @20W	24	277	USA ILLUMINATION # N10RWT-WM-G852-RNT20-TRIM FINISH-BHOUSING-VOLT-*	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F9	2' X 4' RECESSED ACRYLIC LENSED CLEANROOM TROFFER	2	T8 @32W	55	277	LITHONIA LIGHTING # 2SRT-CEILING-2-32-FW-A12125V LENS VOLTAGE-GEB10PS-*	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F10	6" ROUND APERTURE ACRYLIC LENSED RECESSED COMPACT FLUORESCENT DOWNLIGHT	1	CFL @32W	36	277	LIGHTOLIER # 8091PCCDW-S6132BU	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F10A	6" ROUND APERTURE ACRYLIC LENSED RECESSED COMPACT FLUORESCENT DOWNLIGHT	1	CFL @32W	36	277	LIGHTOLIER # 8091PCCDW-S6132BU-5% DIMMING BALLAST	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F11	2 1/2" APERTURE ROUND LENSED RECESSED CERAMIC METAL HALIDE DOWNLIGHT	1	T4.5 @20W	24	277	USA ILLUMINATION # N10RDT-WM-G852-RNT435-TRIM FINISHB-HOUSING-VOLT-* VOLTAGE	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F12	4' X 4" WALL MOUNTED LINEAR FLUORESCENT LENSED WRAP LIGHT	2	T8 @32W	55	277	AXIS LIGHTING # ARWS-4-T8-2-FINISHVOLT-BALLAST-2-*-OS-*	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F13	1' X 4' RECESSED LINEAR FLUORESCENT TROFFER	2	T8 @32W	55	277	LEDALITE SHINE # 3314-D1-*-T232-N-1-VOLT-E	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F13A	1' X 4' RECESSED LINEAR FLUORESCENT TROFFER	2	T8 @32W	60	277	LEDALITE SHINE # 3314-D1-*-T232-N-1-VOLT-50% STEP DIMMING BALLAST	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F14	SURFACE MOUNTED FLUORESCENT TASK LIGHT. LENGTH DENOTED ON PLAN	1	T8 @32W	7 PER 1'	277	ALKCO LIGHTING # LINCS150O48-150O36-VOLTAGE-FINISHRSW PER RUN-OF RSW-OF	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F15	CABLE MOUNTED LINEAR FLUORESCENT PENDANT DOWNLIGHT	2 1	T8 @32W CMH @39W	97	277	VISA SEQUENCE # CP5205-CBL-2FHP32-1PH39PAR30-TMBFINISH-MOD LOWERING DEVICE	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F16	13" DIAMETER CABLE MOUNTED DECORATIVE CFL PENDANT	1	CFL @26W	30	277	FLOS LIGHTING #GLO-BALL-S	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F17	RECESSED CONTINUOUS LINEAR FLUORESCENT ASYMMETRIC WALLWASHER. LENGTH DENOTED ON PLAN	1	T8 @32W	7 PER 1'	277	FOCAL POINT #FW4-NS-1T8-1C-VOLTAGE-SRC-*-WH-CONTINUOUS LENGTH PER ARCH DWG-*-	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F18	2' X 2' RECESSED LINEAR FLUORESCENT TROFFER	2	T8 @17W	40	277	LEDALITE # 3324-*-ST-T217-N-1-VOLT-E N-2-VOLTAGE-E	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F19	6" ROUND APERTURE ACRYLIC LENSED RECESSED COMPACT FLUORESCENT WALLWASHER	1	CFL @32W	35	277	LIGHTOLIER # 8046CCDLW-S6132BU	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F20	2 1/2" APERTURE ROUND LENSED RECESSED CERAMIC METAL HALIDE DOWNLIGHT	1	T4.5 @39W	42	277	USA ILLUMINATION # N10RDT-WM-G853-RNT420-TRIM FINISHHOUSING-VOLT-* VOLTAGE	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F21	2 1/2" APERTURE ROUND RECESSED LENSED CERAMIC METAL HALIDE DOWNLIGHT	1	T4.5 @39W	42	277	USA ILLUMINATION # N10RWT-WM-G853-RNT20-TRIM FINISHHOUSING-VOLT-*	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F22	CUSTOM CONTINUOUS WHITE ACRYLIC LENSED FLUORESCENT FIXTURE. LENGTH DENOTED ON PLAN	2	T8 @32W	55 PER 4'	277	FOCAL POINT # CUSTOM	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F23	6" WIDE CONTINUOUS RECESSED LINEAR FLUORESCENT. LENGTH DENOTED ON PLAN	2	T8 @32W	16 PER 1'	277	FOCAL POINT # FSM6-FL-2T8-1CVOLTS-1% DIM BALLAST-CEILING TYPE-*-FINISHLENGTH PER ARCH DWG	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
S1	POST MOUNTED ASYMMETRICAL TYPE II FULL-CUTOFF LED LUMINAIRE	1	LED @39W	44	277	BEGA # 9002-K3	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
X1	LINEAR 4' X 4" LENSED FLUORESCENT WET LOCATION WALL-MOUNTED DOWNLIGHT	1	T8 @32W	32	277	AXIS # WBW-F-4-T8-1-FINISH-VOLT ELECTRONIC COLD WEATHER-*	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
X2	9" X 5.5" CERAMIC METAL HALIDE ADJUSTABLE ASYMMETRIC FLOODLIGHT	1	T6 CMH @70W	77	277	ELLIPTIPAR # M159-070G-S-FINISH-VOLTMOD PIPE MOUNTAST*S10-AVG*0D0	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
X3	10.5" CERAMIC METAL HALIDE YOKE-MOUNTED ADJUSTABLE DIE-CAST ALUMINUM FLOODLIGHT	1	T6 CMH @70W	77	277	WE-EF # 667-4351-667-9242-MOD 667-932*-667-8241	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
X3A	10.5" CERAMIC METAL HALIDE YOKE-MOUNTED ADJUSTABLE DIE-CAST ALUMINUM FLOODLIGHT	1	T6 CMH @150W	165	277	WE-EF # 667-*151-667-8241-667-8242-MOD667-9320-667-81**	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
X3B	10.5" CERAMIC METAL HALIDE YOKE-MOUNTED ADJUSTABLE DIE-CAST ALUMINUM FLOODLIGHT	1	T6 CMH @70W	77	277	WE-EF # 667-4151-667-8241-667-8242-MOD667-9320-667-81**	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
X4	CONTINUOUS SURFACE MOUNTED FIELD STAGGERED PROFILE WET LOCATION LENSED STRIP IN 3' & 4' LENGTHS	1	T8 @32W	8 PER 1'	277	BIRCHWOOD LIGHTING # BRA-T8-TDEC-ACCVOLT-COLD WEATHER BALLAST CONTINUOUS LENGTH-*-WRW	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
X5	CERAMIC METAL HALIDE YOKE-MOUNTED ADJUSTABLE DIE-CAST ALUMINUM FLOODLIGHT	1	T6 CMH @70W	77	277	WE-EF # 667-4151-667-8241-667-9242-MOD667-9320	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
X6	CERAMIC METAL HALIDE ADJUSTABLE INGRADE UPLIGHT WITH SPOT BEAM SYMMETRICAL DISTRIBUTION	1	T6 CMH @150W	160	277	BK LIGHTING # *-TY2-T6150-SP-139-FINISH-*-150W ELECTRONIC COLD WEATHER-VOLTGS-ICEE-TC	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
X7	EXTERIOR RATED HANDRAIL WITH INTEGRATED WHITE HIGH OUTPUT 24V LED LIGHT SOURCE	1	LED	8 PER 1'	277	IO LIGHTING # 06-FINISH-SIZEMOUNITNG-INFILL-45-3KHO-LENGTH-VOLTDRIVER	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
EX	RECESSED/SURFACE WALL/CEILING MOUNTED, SINGLE/DOUBLE FACED EDGE-LIT EXIT SIGN	–	LED	10	277	ATLITE - S-C/W/SCM/SEM/SBM/SPM-1/2-6-RC-SA-X	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.

LUMINAIRE SCHEDULE - FRONT OF HOUSE - BSB LOBBY

TYPE	DESCRIPTION	LAMP QTY	LAMP TYPE	TOTAL VA	INPUT VOLTAGE	LUMINAIRE MANUFACTURER, "CATALOG SERIES"	NOTES
F2B	SURFACE MOUNTED SINGLE LAMP FLUORESCENT STRIP MOUNTED IN 3' & 4' LENGTHS	1	T8 @32W	7 PER 1'	120	BIRCHWOOD LIGHTING # WP-T8-1STSTAGGER-VOLT-EBFIXTURE RUN-FINISH	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F4B	6" WIDE CONTINUOUS RECESSED LINEAR FLUORESCENT FIXTURE. LENGTH DENOTED ON PLAN	1	T8 @32W	7 PER 1'	120	FOCAL POINT # FSM6-FL-1T8-1CVOLTS-S-CEILING TYPE-*-FINISH LENGTH DENOTED ON PLAN	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F8B	2 1/2" APERTURE ROUND LENSED RECESSED CERAMIC METAL HALIDE WALL WASH FIXTURE	1	T4.5 @20W	24	120	USA ILLUMINATION # N10RWT-WM-G852-RNT20-TRIM FINISH-BHOUSING-VOLT-*	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F10B	6" ROUND APERTURE ACRYLIC LENSED RECESSED COMPACT FLUORESCENT DOWNLIGHT	1	CFL @32W	36	120	LIGHTOLIER # 8091PCCDW-S6132BU	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F11B	2 1/2" APERTURE ROUND LENSED RECESSED CERAMIC METAL HALIDE DOWNLIGHT	1	T4.5 @20W	24	120	USA ILLUMINATION # N10RDT-WM-G852-RNT435-TRIM FINISHB-HOUSING-VOLT-* VOLTAGE	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F16B	13" DIAMETER CABLE MOUNTED DECORATIVE CFL PENDANT	1	CFL @26W	30	120	FLOS LIGHTING #GLO-BALL-S	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.
F17B	RECESSED CONTINUOUS LINEAR FLUORESCENT ASYMMETRIC WALLWASHER. LENGTH DENOTED ON PLAN	1	T8 @32W	7 PER 1'	120	FOCAL POINT #FW4-NS-1T8-1C-VOLTAGE-SRC-*-WH-CONTINUOUS LENGTH PER ARCH DWG-*-	FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS & SPECS FOR COMPLETE LUMINAIRE SCHEDULE.

LUMINAIRE SCHEDULE - BACK OF HOUSE

TYPE	DESCRIPTION	LAMP QTY	LAMP TYPE	TOTAL VA	INPUT VOLTAGE	LUMINAIRE MANUFACTURER, "CATALOG SERIES"	NOTES
FJ	8-1/2" X 4-1/2" SURFACE/WALL/PENDANT MOUNTED JELLY JAR FIXTURE	1	CFL@32W	64	277	EXCELINE - RLW/RLP/32PLT/HF/L/G/C/X/ OR EQUAL BY STONCO, GUTH OR RAB.	–
FK	14" WIDE X 7" HIGH X 4' LONG SURFACE OR PENDANT MOUNTED INDUSTRIAL FIXTURE	2	32W T8	64	277	NATIONAL - 1248/A/RS/X/T8EB/ OR EQUAL BY METALUX, LIGHTOLIER, LEGION, OR CROWNLITE.	–
FS	SURFACE MOUNTED 4' X 4.25" 2-LAMP LINEAR FLUORESCENT LENSED WRAPAROUND FIXTURE	1	32W T8	64	277	LEGION - 4306-132-ACP-EBO-DL	–
FV	6" X 4' SURFACE/PENDANT MOUNTED, ENCLOSED AND GASKETED FLUORESCENT FIXTURE	2	32W T8	64	277	NATIONAL - DTF/232/RS/EG/T8/COLDWEATHER/ OR EQUAL BY METALUX, LIGHTOLIER, OR LEGION.	–
FX	SURFACE/PENDANT MOUNTED, ENCLOSED AND GASKETED EXPLOSIONPROOF FLUORESCENT FIXTURE	2	32W T8	64	277	APPLETON - ARS232/MOD/ OR EQUAL BY HUBBELL OR GUTH.	–
EX	RECESSED/SURFACE WALL/CEILING MOUNTED, SINGLE/DOUBLE FACED EDGE-LIT EXIT SIGN	–	LED	10	277	ATLITE - S-C/W/SCM/SEM/SBM/SPM-1/2-6-RC-SA-X	–

LUMINAIRE SCHEDULE NOTES:

1) LUMINAIRE SCHEDULE SHOWN FOR INFORMATION ONLY. COORDINATE ALL FIXTURE TYPES. QUANTITIES AND LOCATIONS WITH ARCHITECTURAL DRAWINGS.

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27 West 20th Street , Suite 1001
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Stantec
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Philadelphia, PA 19130
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Two Twelve Associates
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212.254.6614 fax
www.twotwelve.com

Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL LIGHTING SCHEDULE

Date: April 10, 2012
Scale: N.T.S.
Phase:

SUCF Project Number: 14A91
Ennead Project Number: 0917

Sheet No.
E-404

SERVICE SWITCHBOARD SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 200 KAIC

SWITCHBAORD DESIGNATION	BUS RATING	SWITCHBOARD OPTIONS						SWITCH / FUSE					LOAD DESCRIPTION	LOAD				QUANTITY OF FEEDERS (SETS)	FEEDER (EACH)								REMARKS
		GND BUS	ISO GND BUS	3 PHASE VOLT METER	SPD	GFI	POWER METER	DEVICE	FRAME	TRIP	TYPE	POLES		CONNECTED		DEMAND			PHASE LEGS		NEUTRAL		GROUND		INSULATION TYPE	CONDUIT	
														FLA	KVA	FLA	KVA		No.	SIZE	No.	SIZE	No.	SIZE			
SS-BSB-1	4000A	YES	N/A	YES	YES	YES	YES		4000	4000	ELEC TRIP	3	MAIN	–	–	–	–	10	3	600MCM	1	600MCM	1	600MCM	THHN	4"	–
								1	3000	3000	ELEC TRIP	3	SWBD-H-A	–	–	–	–	–	–	–	–	–	–	–	–	4"	REFERR TO E-700 SERIES DRAWINGS FOR FEEDER SIZING
								2	800	800	ELEC TRIP	3	EPP-B-OS (ATS #5 NRML)	453.8	374.0	340.4	280.5	2	3	600MCM	1	600MCM	1	600MCM	THHN	4"	–
								3	800	800	ELEC TRIP	3	EPP-PH-LS (ATS #3 NRML)	104.2	95.1	91.5	82.0	3	3	600MCM	1	600MCM	1	600MCM	THHN	4"	–
								4	–	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

SERVICE SWITCHBOARD SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 200 KAIC

SWITCHBAORD DESIGNATION	BUS RATING	SWITCHBOARD OPTIONS						SWITCH / FUSE					LOAD DESCRIPTION	LOAD				QUANTITY OF FEEDERS (SETS)	FEEDER (EACH)								REMARKS
		GND BUS	ISO GND BUS	3 PHASE VOLT METER	SPD	GFI	POWER METER	DEVICE	FRAME	TRIP	TYPE	POLES		CONNECTED		DEMAND			PHASE LEGS		NEUTRAL		GROUND		INSULATION TYPE	CONDUIT	
														FLA	KVA	FLA	KVA		No.	SIZE	No.	SIZE	No.	SIZE			
SS-BSB-2	4000A	YES	N/A	YES	YES	YES	YES		4000	4000	ELEC TRIP	3	MAIN	–	–	–	–	10	3	600MCM	1	600MCM	1	600MCM	THHN	4"	–
								1	3000	3000	ELEC TRIP	3	SWBD-H-B	–	–	–	–	–	–	–	–	–	–	–	–	4"	REFERR TO E-700 SERIES DRAWINGS FOR FEEDER SIZING
								2	800	800	ELEC TRIP	3	EPP-PH-OS (ATS #2 NRML)	762.1	673.1	522.0	465.3	3	3	600MCM	1	600MCM	1	600MCM	THHN	4"	–
								3	–	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

SERVICE SWITCHBOARD SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 200 KAIC

SWITCHBAORD DESIGNATION	BUS RATING	SWITCHBOARD OPTIONS						SWITCH / FUSE					LOAD DESCRIPTION	LOAD				QUANTITY OF FEEDERS (SETS)	FEEDER (EACH)								REMARKS
		GND BUS	ISO GND BUS	3 PHASE VOLT METER	SPD	GFI	POWER METER	DEVICE	FRAME	TRIP	TYPE	POLES		CONNECTED		DEMAND			PHASE LEGS		NEUTRAL		GROUND		INSULATION TYPE	CONDUIT	
														FLA	KVA	FLA	KVA		No.	SIZE	No.	SIZE	No.	SIZE			
SS-ASE-1	4000A	YES	N/A	YES	YES	YES	YES		4000	4000	ELEC TRIP	3	MAIN	–	–	–	–	10	3	600MCM	1	600MCM	1	600MCM	THHN	4"	–
								1	4000	4000	ELEC TRIP	3	ASE	–	–	–	–	–	–	–	–	–	–	–	–	4"	REFERR TO ASE DESIGN DOCUMENTS FOR FEEDER SIZING
								2	800	800	ELEC TRIP	3	DP-PH	742.0	646.9	462.6	410.4	3	3	600MCM	1	600MCM	1	600MCM	THHN	4"	–
								3	–	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

SERVICE SWITCHBOARD SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 200 KAIC

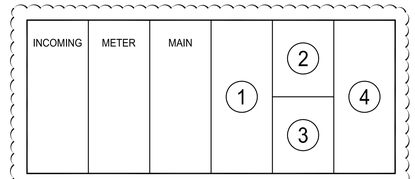
SWITCHBAORD DESIGNATION	BUS RATING	SWITCHBOARD OPTIONS						SWITCH / FUSE					LOAD DESCRIPTION	LOAD				QUANTITY OF FEEDERS (SETS)	FEEDER (EACH)								REMARKS
		GND BUS	ISO GND BUS	3 PHASE VOLT METER	SPD	GFI	POWER METER	DEVICE	FRAME	TRIP	TYPE	POLES		CONNECTED		DEMAND			PHASE LEGS		NEUTRAL		GROUND		INSULATION TYPE	CONDUIT	
														FLA	KVA	FLA	KVA		No.	SIZE	No.	SIZE	No.	SIZE			
SS-ASE-2	4000A	YES	N/A	YES	YES	YES	YES		4000	4000	ELEC TRIP	3	MAIN	–	–	–	–	10	3	600MCM	1	600MCM	1	600MCM	THHN	4"	–
								1	4000	4000	ELEC TRIP	3	ASE	–	–	–	–	–	–	–	–	–	–	–	–	4"	REFERR TO ASE DESIGN DOCUMENTS FOR FEEDER SIZING
								2	800	800	ELEC TRIP	3	DP-B-1	340.2	398.4	250.4	295.0	2	3	600MCM	1	600MCM	1	600MCM	THHN	4"	–
								3	–	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

SERVICE SWITCHBOARD SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 200 KAIC

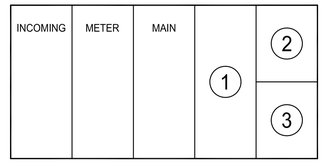
SWITCHBAORD DESIGNATION	BUS RATING	SWITCHBOARD OPTIONS						SWITCH / FUSE					LOAD DESCRIPTION	LOAD				QUANTITY OF FEEDERS (SETS)	FEEDER (EACH)								REMARKS
		GND BUS	ISO GND BUS	3 PHASE VOLT METER	SPD	GFI	POWER METER	DEVICE	FRAME	TRIP	TYPE	POLES		CONNECTED		DEMAND			PHASE LEGS		NEUTRAL		GROUND		INSULATION TYPE	CONDUIT	
														FLA	KVA	FLA	KVA		No.	SIZE	No.	SIZE	No.	SIZE			
SS-ASE-3	4000A	YES	N/A	YES	YES	YES	YES		4000	4000	ELEC TRIP	3	MAIN	–	–	–	–	10	3	600MCM	1	600MCM	1	600MCM	THHN	4"	–
								1	4000	4000	ELEC TRIP	3	ASE	–	–	–	–	–	–	–	–	–	–	–	–	4"	REFERR TO ASE DESIGN DOCUMENTS FOR FEEDER SIZING
								2	800	800	ELEC TRIP	3	DP-B-2	479.8	396.9	259.9	218.0	2	3	600MCM	1	600MCM	1	600MCM	THHN	4"	–
								3	–	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

SERVICE SWITCHBOARD SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 150 KAIC

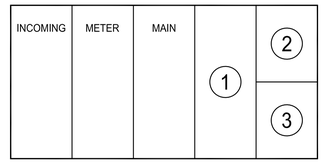
SWITCHBAORD DESIGNATION	BUS RATING	SWITCHBOARD OPTIONS						SWITCH / FUSE					LOAD DESCRIPTION	LOAD				QUANTITY OF FEEDERS (SETS)	FEEDER (EACH)								REMARKS
		GND BUS	ISO GND BUS	3 PHASE VOLT METER	SPD	GFI	POWER METER	DEVICE	FRAME	TRIP	TYPE	POLES		CONNECTED		DEMAND			PHASE LEGS		NEUTRAL		GROUND		INSULATION TYPE	CONDUIT	
														FLA	KVA	FLA	KVA		No.	SIZE	No.	SIZE	No.	SIZE			
EM-SS	2500A	YES	N/A	YES	YES	YES	YES		–	–	–	–	INCOMING	–	–	–	–	8	3	600MCM	1	600MCM	1	600MCM	THHN	4"	–
								1	400	400	ELEC TRIP	3	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
								2	400	400	ELEC TRIP	3	PP-ELEV (ATS #1 EMRG)	151.3	262.0	113.3	196.4	1	3	600MCM	–	–	1	600MCM	THHN	4"	EMERGENCY CONDITION LOAD ONLY
								3	800	800	ELEC TRIP	3	EPP-PH-OS (ATS #2 EMRG)	762.1	673.1	522.0	465.3	2	3	600MCM	1	600MCM	1	600MCM	THHN	4"	
								4	800	800	ELEC TRIP	3	EPP-PH-LS (ATS #3 EMRG)	104.2	95.1	91.5	82.0	2	3	600MCM	1	600MCM	1	600MCM	THHN	4"	
								5	800	800	ELEC TRIP	3	EPP-B-OS (ATS #5 EMRG)	453.8	374.0	340.4	280.5	2	3	600MCM	1	600MCM	1	600MCM	THHN	4"	
								6	800	800	ELEC TRIP	3	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–



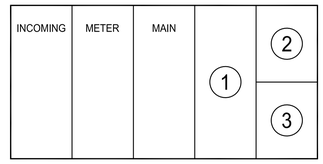
SS-BSB-1



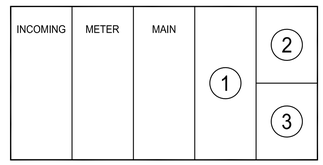
SS-BSB-2



SS-ASE-1



SS-ASE-2



SS-ASE-3

ATS SCHEDULE

No.	AMPS	VOLTS	POLES	FEEDS	BYPASS	PRIORITY
1	400A	460V	3	PP-ELEV	YES	2
2	800A	460V/265V	4	EPP-PH-OS	YES	3
3	800A	460V/265V	4	EPP-PH-LS	YES	1
4	100A	460V	3	FA SYSTEM	YES	1
5	800A	460V/265V	4	EPP-B-OS	YES	3

Project Title
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Seal

Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL SCHEDULE SHEET 1

Date: April 10, 2012
Scale: N.T.S.
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-500

DISTRIBUTION SWITCHBOARD SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 200 KAIC

DESIGNATION	BUS RATING	SWITCHBOARD OPTIONS: GND BUS	SWITCHBOARD OPTIONS: ISO GND BUS	SWITCHBOARD OPTIONS: 3 PHASE VOLT METER	SWITCHBOARD OPTIONS: SPD	SWITCHBOARD OPTIONS: POWER METER	CIRCUIT BREAKER: DEVICE	CIRCUIT BREAKER: FRAME	CIRCUIT BREAKER: TRIP	CIRCUIT BREAKER: TYPE	CIRCUIT BREAKER: POLES	LOAD DESCRIPTION	LOAD: CONNECTED FLA	LOAD: CONNECTED KVA	LOAD: DEMAND FLA	LOAD: DEMAND KVA	QUANTITY OF FEEDERS (SETS)	FEEDER (EACH): PHASE LEGS No.	PHASE LEGS SIZE	NEUTRAL No.	NEUTRAL SIZE	GROUND No.	GROUND SIZE	INSULATION TYPE	CONDUIT	REMARKS
DP-B-1	800A	YES	N/A	YES	YES	NO	1	800	800	ELEC TRIP	3	MAIN	–	–	–	–	2	3	600MCM	–	–	1	#1/0	THHN	3 1/2"	–
							2	400	400	ELEC TRIP	3	PP-ELEV (ATS #1 NRML)	151.3	262.0	113.3	196.4	2	3	600MCM	–	–	1	#3	THHN	3 1/2"	–
							3	20	20	ELEC TRIP	3	HV-B-1	7.6	7.1	5.7	5.3	1	3	#12	–	–	1	#12	THHN	3/4"	–
							4	20	15	ELEC TRIP	3	EF-B-2	4.8	4.5	3.6	3.4	1	3	#12	–	–	1	#12	THHN	3/4"	–
							5	20	15	ELEC TRIP	3	EF-B-1	3.0	2.8	2.3	2.1	1	3	#12	–	–	1	#12	THHN	3/4"	–
							6	60	60	ELEC TRIP	3	BP-1	15.5	27.0	11.6	20.3	1	3	#6	–	–	1	#10	THHN	1"	–
							7	225	225	ELEC TRIP	3	SMC-E	18.8	15.0	9.4	7.5	1	3	#4/0	1	#4/0	1	#4	THHN	2 1/2"	WINTER LOAD
							8	60	60	ELEC TRIP	3	BP-3	–	–	–	–	1	3	#6	–	–	1	#10	THHN	1"	STANDBY
							9	150	150	ELEC TRIP	3	UNINTERRUPTIBLE POWER SUPPLY	139.2	80.0	104.4	60.0	1	3	#1/0	–	–	1	#6	THHN	2"	–
							10	200	200	ELEC TRIP	3	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							11	200	200	ELEC TRIP	3	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							12	200	200	ELEC TRIP	3	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

DISTRIBUTION SWITCHBOARD SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 200 KAIC

DESIGNATION	BUS RATING	SWITCHBOARD OPTIONS: GND BUS	SWITCHBOARD OPTIONS: ISO GND BUS	SWITCHBOARD OPTIONS: 3 PHASE VOLT METER	SWITCHBOARD OPTIONS: SPD	SWITCHBOARD OPTIONS: POWER METER	CIRCUIT BREAKER: DEVICE	CIRCUIT BREAKER: FRAME	CIRCUIT BREAKER: TRIP	CIRCUIT BREAKER: TYPE	CIRCUIT BREAKER: POLES	LOAD DESCRIPTION	LOAD: CONNECTED FLA	LOAD: CONNECTED KVA	LOAD: DEMAND FLA	LOAD: DEMAND KVA	QUANTITY OF FEEDERS (SETS)	FEEDER (EACH): PHASE LEGS No.	PHASE LEGS SIZE	NEUTRAL No.	NEUTRAL SIZE	GROUND No.	GROUND SIZE	INSULATION TYPE	CONDUIT	REMARKS
DP-B-2	800A	YES	N/A	YES	YES	NO	1	800	800	ELEC TRIP	3	MAIN	–	–	–	–	2	3	600MCM	–	–	1	#1/0	THHN	3 1/2"	–
							2	400	400	ELEC TRIP	3	LP-B,1,2,3,4	426.6	339.9	229.4	182.8	1	3	600MCM	1	600MCM	1	#3	THHN	4"	–
							3	225	225	ELEC TRIP	3	SMC-W	18.8	15.0	9.4	7.5	1	3	#4/0	1	#4/0	1	#4	THHN	2 1/2"	WINTER LOAD
							4	60	60	ELEC TRIP	3	BP-2	15.5	27.0	11.6	20.3	1	3	#6	–	–	1	#10	THHN	1"	–
							5	225	225	ELEC TRIP	3	SMC-WALK	18.8	15.0	9.4	7.5	1	3	#4/0	1	#4/0	1	#4	THHN	2 1/2"	WINTER LOAD
							6	100	100	ELEC TRIP	3	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							7	60	60	ELEC TRIP	3	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							8	60	60	ELEC TRIP	3	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

DISTRIBUTION SWITCHBOARD SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 100 KAIC

DESIGNATION	BUS RATING	SWITCHBOARD OPTIONS: GND BUS	SWITCHBOARD OPTIONS: ISO GND BUS	SWITCHBOARD OPTIONS: 3 PHASE VOLT METER	SWITCHBOARD OPTIONS: SPD	SWITCHBOARD OPTIONS: POWER METER	CIRCUIT BREAKER: DEVICE	CIRCUIT BREAKER: FRAME	CIRCUIT BREAKER: TRIP	CIRCUIT BREAKER: TYPE	CIRCUIT BREAKER: POLES	LOAD DESCRIPTION	LOAD: CONNECTED FLA	LOAD: CONNECTED KVA	LOAD: DEMAND FLA	LOAD: DEMAND KVA	QUANTITY OF FEEDERS (SETS)	FEEDER (EACH): PHASE LEGS No.	PHASE LEGS SIZE	NEUTRAL No.	NEUTRAL SIZE	GROUND No.	GROUND SIZE	INSULATION TYPE	CONDUIT	REMARKS
DP-PH	800A	YES	N/A	YES	YES	NO	1	800	800	ELEC TRIP	3	MAIN	–	–	–	–	3	3	600MCM	–	–	1	#1/0	THHN	3 1/2"	–
							2	400	400	ELEC TRIP	3	LP-PH,8,7,5	425.0	338.7	224.9	179.2	1	3	600MCM	1	600MCM	1	#3	THHN	4"	–
							3	150	150	ELEC TRIP	3	AHU-SA-2	63.0	59.1	47.3	44.3	1	3	#1/0	–	–	1	#6	THHN	2"	–
							4	70	70	ELEC TRIP	3	AHU-SA-3	40.0	37.5	30.0	28.1	1	3	#4	–	–	1	#8	THHN	1 1/4"	–
							5	70	70	ELEC TRIP	3	AHU-SA-4	40.0	37.5	30.0	28.1	1	3	#4	–	–	1	#8	THHN	1 1/4"	–
							6	70	70	ELEC TRIP	3	AHU-EF-2	40.0	37.5	30.0	28.1	1	3	#4	–	–	1	#8	THHN	1 1/4"	–
							7	50	50	ELEC TRIP	3	AHU-EF-3	21.0	19.7	15.8	14.8	1	3	#8	–	–	1	#10	THHN	3/4"	–
							8	50	50	ELEC TRIP	3	AHU-EF-4	14.0	13.1	10.5	9.8	1	3	#8	–	–	1	#10	THHN	3/4"	–
							9	30	30	ELEC TRIP	3	GHWP-1	11.0	10.3	8.3	7.7	1	3	#10	–	–	1	#10	THHN	3/4"	–
							10	30	30	ELEC TRIP	3	GHWP-2	–	–	–	–	1	3	#10	–	–	1	#10	THHN	3/4"	STANDBY
							11	20	20	ELEC TRIP	3	RHWP-1	3.0	2.8	2.3	2.1	1	3	#12	–	–	1	#12	THHN	3/4"	–
							12	20	20	ELEC TRIP	3	RHWP-2	–	–	–	–	1	3	#12	–	–	1	#12	THHN	3/4"	STANDBY
							13	20	20	ELEC TRIP	3	AHU-SA-5	9.0	8.4	6.8	6.3	1	3	#12	–	–	1	#12	THHN	3/4"	–
							14	20	20	ELEC TRIP	3	HV-1	7.6	7.1	5.7	5.3	1	3	#12	–	–	1	#12	THHN	3/4"	–
							15	20	20	ELEC TRIP	3	AHU-EF-5	4.8	4.5	3.6	3.4	1	3	#12	–	–	1	#12	THHN	3/4"	–
							16	15	15	ELEC TRIP	3	CWF-1	2.1	2.0	1.6	1.5	1	3	#12	–	–	1	#12	THHN	3/4"	–
							17	15	15	ELEC TRIP	3	AHU-2 EW MOTOR	1.6	1.5	1.2	1.1	1	3	#12	–	–	1	#12	THHN	3/4"	–
							18	15	15	ELEC TRIP	3	AHU-3 EW MOTOR	1.6	1.5	1.2	1.1	1	3	#12	–	–	1	#12	THHN	3/4"	–
							19	15	15	ELEC TRIP	3	AHU-4 EW MOTOR	1.6	1.5	1.2	1.1	1	3	#12	–	–	1	#12	THHN	3/4"	–
							20	15	15	ELEC TRIP	3	TX-1	2.2	2.9	1.7	2.2	1	3	#12	–	–	1	#12	THHN	3/4"	–
							21	15	15	ELEC TRIP	3	GX-1	0.6	0.8	0.4	0.6	1	3	#12	–	–	1	#12	THHN	3/4"	–
							22	30	30	ELEC TRIP	3	VP-1	6.3	11.0	4.7	8.3	1	3	#10	–	–	1	#10	THHN	3/4"	–
							23	30	30	ELEC TRIP	3	VP-2	–	–	–	–	1	3	#10	–	–	1	#10	THHN	3/4"	STANDBY
							24	30	30	ELEC TRIP	3	RO SYSTEM	4.4	7.6	3.3	5.7	1	3	#10	–	–	1	#10	THHN	3/4"	–
							25	30	30	ELEC TRIP	3	RO SYSTEM	–	–	–	–	1	3	#10	–	–	1	#10	THHN	3/4"	STANDBY
							26	30	30	ELEC TRIP	3	RO SYSTEM	8.1	14.0	6.0	10.5	1	3	#10	–	–	1	#10	THHN	3/4"	–
							27	30	30	ELEC TRIP	3	RO SYSTEM	–	–	–	–	1	3	#10	–	–	1	#10	THHN	3/4"	STANDBY
							28	100	100	ELEC TRIP	3	HT-PH	35.1	28.0	26.4	21.0	1	3	#3	–	–	1	#8	THHN	1 1/4"	–
							29	100	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							30	100	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							31	60	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							32	60	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

DISTRIBUTION PANEL SCHEDULE 460V - 3 PHASE - 3 WIRES - 100 KAIC

DESIGNATION	BUS RATING	PANEL OPTIONS: GND BUS	PANEL OPTIONS: ISO GND BUS	PANEL OPTIONS: 3 PHASE VOLT METER	PANEL OPTIONS: SPD	PANEL OPTIONS: POWER METER	SWITCH/FUSE: DEVICE	SWITCH/FUSE: SWITCH	SWITCH/FUSE: FUSE	SWITCH/FUSE: TYPE	SWITCH/FUSE: POLES	LOAD DESCRIPTION	LOAD: CONNECTED FLA	LOAD: CONNECTED KVA	LOAD: DEMAND FLA	LOAD: DEMAND KVA	QUANTITY OF FEEDERS (SETS)	FEEDER (EACH): PHASE LEGS No.	PHASE LEGS SIZE	NEUTRAL No.	NEUTRAL SIZE	GROUND No.	GROUND SIZE	INSULATION TYPE	CONDUIT	REMARKS
PP-ELEV	400A	YES	N/A	I	I	I	1	400	400	LPJ	3	MAIN	–	–	–	–	1	3	600MCM	–	–	1	#3	THHN	3 1/2"	–
							2	100	100	LPJ	3	CAB 1	44.7	80.2	33.5	60.2	1	3	#3	–	–	1	#8	THHN	1 1/4"	–
							3	100	100	LPJ	3	CAB 2	44.7	80.2	33.5	60.2	1	3	#3	–	–	1	#8	THHN	1 1/4"	–
							4	100	100	LPJ	3	CAB 3	44.7	80.2	33.5	60.2	1	3	#3	–	–	1	#8	THHN	1 1/4"	–
							5	100	70	LPJ	3	AC-R-1	16.7	21.0	12.5	15.8	1	3	#4	–	–	1	#8	THHN	1 1/4"	–
							6	100	100	LPJ	3	UP-ELEV	0.5	0.4	0.2	0.2	1	3	#3	–	–	1	#8	THHN	1 1/4"	–
							7	100	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

DISTRIBUTION PANEL SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 100 KAIC

DESIGNATION	BUS RATING	PANEL OPTIONS: GND BUS	PANEL OPTIONS: ISO GND BUS	PANEL OPTIONS: 3 PHASE VOLT METER	PANEL OPTIONS: SPD	PANEL OPTIONS: POWER METER	CIRCUIT BREAKER: DEVICE	CIRCUIT BREAKER: FRAME	CIRCUIT BREAKER: TRIP	CIRCUIT BREAKER: TYPE	CIRCUIT BREAKER: POLES	LOAD DESCRIPTION	LOAD: CONNECTED FLA	LOAD: CONNECTED KVA	LOAD: DEMAND FLA	LOAD: DEMAND KVA	QUANTITY OF FEEDERS (SETS)	FEEDER (EACH): PHASE LEGS No.	PHASE LEGS SIZE	NEUTRAL No.	NEUTRAL SIZE	GROUND No.	GROUND SIZE	INSULATION TYPE	CONDUIT	REMARKS
EDP-B-LS	200A	YES	N/A	I	I	I	1	200	200	ELEC TRIP	3	MAIN	–	–	–	–	1	3	#3/0	–	–	1	#6	THHN	2"	–
							2	100	100	ELEC TRIP	3	ELP-B	13.7	10.9	13.7	10.9	1	3	#3	1	#3	1	#8	THHN	1 1/4"	–
							3	20	20	ELEC TRIP	3	FOP-1	7.6	7.1	5.7	5.3	1	3	#12	–	–	1	#12	THHN	3/4"	–
							4	20	20	ELEC TRIP	3	FOP-2	–	–	–	–	1	3	#12	–	–	1	#12	THHN	3/4"	STANDBY
							5	20	20	ELEC TRIP	3	JP-1	6.3	11.0	4.7	8.3	1	3	#12	–	–	1	#12	THHN	3/4"	–
							6	20	20	ELEC TRIP	3	PREACTION SYSTEM	0.9	1.6	0.7	1.2	1	3	#12	1	#12	1	#12	THHN	3/4"	–
							7	100	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							8	60	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

NOTES:

1. THE POWER PANEL FOR ELEVATORS SHALL BE POWER MODULE PANEL. AS MANUFACTURED BY BUSSMAN. POWER MODULE PANEL SHALL HAVE:
   a) CONTROL POWER TRANSFORMER WITH FUSES AND BLOCKS
   b) FIRE SAFETY INTERFACE RELAY (WITH FIRE ALARM CONTACT/OR MULTIPLE F.A. CONTACTS 5A REMOTE TEMPERATURE SENSOR, SHUNT TRIP)
   c) SOLENOID FOR REMOTE TRIP OF SWITCH ACTIVATED BY CLOSING OF FIRE ALARM SENSOR OR KEY TEST SWITCH) (RELAY–NORMALLY CLOSED (1NC) AND (1NO) NORMALLY OPENED FOR REMOTE SIGNAL)
   d) KEY TO TEST SWITCH (KEY OPERATED TEST BUTTON)
   e) PILOT LIGHT "ON"
   f) ISOLATED NEUTRAL LUG
   g) MECHANICAL INTERLOCK AUXILIARY CONTACT FOR HYDRAULIC ELEVATORS WITH AUTOMATIC RECALL (5AMP 120VAC RATED)
   h) PHASE FAILURE AND UNDER–VOLTAGE RELAY
2. SHUNT TRIP TYPE SWITCH
   a) TIED TO FIRE ALARM SYSTEM VIA SHUNT TRIP SWITCH

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SCAPE
Landscape Architecture PLLC
27 West 20th Street , Suite 1001
New York, NY 10011
212.462.2628 tel
212.462.4164 fax
www.scapestudio.com

Lighting
Horton Lees Brogden Lighting Design
200 Park Ave South
Suite 1401
New York, NY 10003
212.674.5580 tel
212.254.2712 fax
www.hblighting.com

Sustainability
Buro Happold Consulting Engineers, PC
100 Broadway
New York, NY 10005
212.334.2025 tel
212.334.5528 fax
www.burohappold.com

AV / Acoustics
Cerami & Associates
405 Fifth Avenue
New York, New York 10018
212.370.1776 tel
www.ceramiassociates.com

Healthcare Simulation
Stantec
1500 Spring Garden
Suite 1100
Philadelphia, PA 19130
215.665.7065 tel
www.stantec.com

Code
Hughes Associates, Inc.
2 Mount Royal Avenue
Suite 420
Martborough, MA 01752
508.624.7766 tel
www.hailfire.com

Signage
Two Twelve Associates
902 Broadway
Floor 20
New York, NY 10010
212.254.6670 tel
212.254.6614 fax
www.twotwelve.com

Seal

Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL SCHEDULE SHEET 2

Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	E-501
Scale	Ennead Project Number	
N.T.S.	0917	
Phase		

DISTRIBUTION PANEL SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 100 KAIC

DESIGNATION	BUS RATING	PANEL OPTIONS: GND BUS	ISO GND BUS	3 PHASE VOLT METER	SPD	POWER METER	CIRCUIT BREAKER: DEVICE	FRAME	TRIP	TYPE	POLES	LOAD DESCRIPTION	LOAD: CONNECTED FLA	CONNECTED KVA	DEMAND FLA	DEMAND KVA	QUANTITY OF FEEDERS (SETS)	FEEDER (EACH): PHASE LEGS No.	PHASE LEGS SIZE	NEUTRAL No.	NEUTRAL SIZE	GROUND No.	GROUND SIZE	INSULATION TYPE	CONDUIT	REMARKS
EDP-B-OS	400A	YES	N/A	I	I	I	1	400	400	ELEC TRIP	3	MAIN	–	–	–	–	1	3	600MCM	–	–	1	#3	THHN	3 1/2"	–
							2	100	100	ELEC TRIP	3	EUP-7-OS	32.6	26.0	13.8	11.0	1	3	#3	–	–	1	#8	THHN	1 1/4"	–
							3	125	125	ELEC TRIP	3	STEAM STERILIZER GENERATOR (8 FL)	90.0	88.0	67.5	66.0	1	3	#1	–	–	1	#6	THHN	1 1/2"	–
							4	60	60	ELEC TRIP	3	GLASSWARE WASHER/DRYER (8 FL)	27.0	14.6	20.3	11.0	1	3	#6	–	–	1	#10	THHN	1"	–
							5	125	125	ELEC TRIP	3	STEAM STERILIZER GENERATOR (7 FL)	90.0	88.0	67.5	66.0	1	3	#1	–	–	1	#6	THHN	1 1/2"	–
							6	60	60	ELEC TRIP	3	GLASSWARE WASHER/DRYER (7 FL)	27.0	14.6	20.3	11.0	1	3	#6	–	–	1	#10	THHN	1"	–
							7	100	100	ELEC TRIP	3	EUP-8-OS	20.1	16.0	10.0	8.0	1	3	#3	–	–	1	#8	THHN	1 1/4"	–
							8	20	20	ELEC TRIP	3	7-014 COLD ROOM REFRIG (x1)	1.4	1.7	1.1	1.3	1	3	#12	–	–	1	#12	THHN	3/4"	–
							9	20	20	ELEC TRIP	3	7-025 COLD ROOM REFRIG (x1)	1.4	1.7	1.1	1.3	1	3	#12	–	–	1	#12	THHN	3/4"	–
							10	20	20	ELEC TRIP	3	8-014 COLD ROOM REFRIG (x1)	1.4	1.7	1.1	1.3	1	3	#12	–	–	1	#12	THHN	3/4"	–
							11	20	20	ELEC TRIP	3	8-025 COLD ROOM REFRIG (x1)	1.4	1.7	1.1	1.3	1	3	#12	–	–	1	#12	THHN	3/4"	–
							12	60	60	ELEC TRIP	3	7-014 COLD ROOM	30.0	27.0	22.5	20.3	1	3	#6	–	–	1	#10	THHN	1"	–
							13	60	60	ELEC TRIP	3	7-025 COLD ROOM	30.0	27.0	22.5	20.3	1	3	#6	–	–	1	#10	THHN	1"	–
							14	60	60	ELEC TRIP	3	8-014 COLD ROOM	30.0	27.0	22.5	20.3	1	3	#6	–	–	1	#10	THHN	1"	–
							15	60	60	ELEC TRIP	3	8-025 COLD ROOM	30.0	27.0	22.5	20.3	1	3	#6	–	–	1	#10	THHN	1"	–
							16	100	100	ELEC TRIP	3	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							17	100	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							18	60	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

DISTRIBUTION PANEL SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 100 KAIC

DESIGNATION	BUS RATING	PANEL OPTIONS: GND BUS	ISO GND BUS	3 PHASE VOLT METER	SPD	POWER METER	CIRCUIT BREAKER: DEVICE	FRAME	TRIP	TYPE	POLES	LOAD DESCRIPTION	LOAD: CONNECTED FLA	CONNECTED KVA	DEMAND FLA	DEMAND KVA	QUANTITY OF FEEDERS (SETS)	FEEDER (EACH): PHASE LEGS No.	PHASE LEGS SIZE	NEUTRAL No.	NEUTRAL SIZE	GROUND No.	GROUND SIZE	INSULATION TYPE	CONDUIT	REMARKS
EPP-B-OS	800A	YES	N/A	I	I	I	1	800	800	ELEC TRIP	3	MAIN	–	–	–	–	2	3	600MCM	–	–	1	#1/0	THHN	3 1/2"	–
							2	500	500	ELEC TRIP	3	CH-1	311.0	238.0	233.3	178.5	2	3	250MCM	–	–	1	#2	THHN	2 1/2"	–
							3	500	500	ELEC TRIP	3	CH-2	–	–	–	–	2	3	250MCM	–	–	1	#2	THHN	2 1/2"	STANDBY
							4	70	70	ELEC TRIP	3	CHWP-1	40.0	37.5	30.0	28.1	1	3	#4	–	–	1	#8	THHN	1 1/4"	–
							5	70	70	ELEC TRIP	3	CHWP-2	–	–	–	–	1	3	#4	–	–	1	#8	THHN	1 1/4"	STANDBY
							6	70	70	ELEC TRIP	3	CWP-1	40.0	37.5	30.0	28.1	1	3	#4	–	–	1	#8	THHN	1 1/4"	–
							7	70	70	ELEC TRIP	3	CWP-2	–	–	–	–	1	3	#4	–	–	1	#8	THHN	1 1/4"	STANDBY
							8	30	30	ELEC TRIP	3	CRAC-1	14.0	13.1	10.5	9.8	1	3	#10	–	–	1	#10	THHN	3/4"	–
							9	30	30	ELEC TRIP	3	CRAC-2	–	–	–	–	1	3	#10	–	–	1	#10	THHN	3/4"	STANDBY
							10	20	20	ELEC TRIP	3	AC-SG-1	7.6	7.1	5.7	5.3	1	3	#12	–	–	1	#12	THHN	3/4"	–
							11	20	20	ELEC TRIP	3	AC-SG-2	–	–	–	–	1	3	#12	–	–	1	#12	THHN	3/4"	STANDBY
							12	20	20	ELEC TRIP	3	AHU-CP-1	7.6	7.1	5.7	5.3	1	3	#12	–	–	1	#12	THHN	3/4"	–
							13	15	15	ELEC TRIP	3	FOP-3	4.8	4.5	3.6	3.4	1	3	#12	–	–	1	#12	THHN	3/4"	–
							14	15	15	ELEC TRIP	3	FOP-4	–	–	–	–	1	3	#12	–	–	1	#12	THHN	3/4"	STANDBY
							15	15	15	ELEC TRIP	3	GHWP-B-1	4.8	4.5	3.6	3.4	1	3	#12	–	–	1	#12	THHN	3/4"	–
							16	15	15	ELEC TRIP	3	GHWP-B-2	–	–	–	–	1	3	#12	–	–	1	#12	THHN	3/4"	STANDBY
							17	15	15	ELEC TRIP	3	FOP-6	3.4	3.2	2.6	2.4	1	3	#12	–	–	1	#12	THHN	3/4"	–
							18	15	15	ELEC TRIP	3	EF-CP-1	3.0	2.8	2.3	2.1	1	3	#12	–	–	1	#12	THHN	3/4"	–
							19	15	15	ELEC TRIP	3	FOP-5	1.1	1.0	0.8	0.8	1	3	#12	–	–	1	#12	THHN	3/4"	–
							20	30	30	ELEC TRIP	3	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							21	30	30	ELEC TRIP	3	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							22	30	30	ELEC TRIP	3	SE-1	4.4	7.6	3.3	5.7	1	3	#10	–	–	1	#10	THHN	3/4"	–
							23	30	30	ELEC TRIP	3	SE-2	–	–	–	–	1	3	#10	–	–	1	#10	THHN	3/4"	STANDBY
							24	50	50	ELEC TRIP	3	EUP-B-OS	10.0	8.0	7.5	6.0	1	3	#8	–	–	1	#10	THHN	1"	–
							25	30	30	ELEC TRIP	3	ESP-1	2.1	2.0	1.6	1.5	1	3	#10	–	–	1	#10	THHN	3/4"	–
							26	200	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							27	100	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							28	60	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

DISTRIBUTION PANEL SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 100 KAIC

DESIGNATION	BUS RATING	PANEL OPTIONS: GND BUS	ISO GND BUS	3 PHASE VOLT METER	SPD	POWER METER	CIRCUIT BREAKER: DEVICE	FRAME	TRIP	TYPE	POLES	LOAD DESCRIPTION	LOAD: CONNECTED FLA	CONNECTED KVA	DEMAND FLA	DEMAND KVA	QUANTITY OF FEEDERS (SETS)	FEEDER (EACH): PHASE LEGS No.	PHASE LEGS SIZE	NEUTRAL No.	NEUTRAL SIZE	GROUND No.	GROUND SIZE	INSULATION TYPE	CONDUIT	REMARKS
EPP-PH-LS	800A	YES	N/A	I	I	I	1	800	800	ELEC TRIP	3	MAIN	–	–	–	–	2	3	600MCM	–	–	1	#1/0	THHN	3 1/2"	–
							2	250	250	ELEC TRIP	3	EDP-B-LS, ELP-PH,7,3,B	78.1	62.2	71.9	57.3	1	3	250MCM	–	–	1	#4	THHN	2 1/2"	–
							3	40	40	ELEC TRIP	3	EHP-1	11.2	14.1	8.4	10.6	1	3	#8	–	–	1	#10	THHN	3/4"	–
							4	30	30	ELEC TRIP	3	SP-1	7.5	9.4	5.6	7.1	1	3	#10	–	–	1	#10	THHN	3/4"	–
							5	30	30	ELEC TRIP	3	SP-2	7.5	9.4	5.6	7.1	1	3	#10	–	–	1	#10	THHN	3/4"	–
							6	100	100	ELEC TRIP	3	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							7	200	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							8	100	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

DISTRIBUTION PANEL SCHEDULE 265V/460V - 3 PHASE - 4 WIRES - 100 KAIC

DESIGNATION	BUS RATING	PANEL OPTIONS: GND BUS	ISO GND BUS	3 PHASE VOLT METER	SPD	POWER METER	CIRCUIT BREAKER: DEVICE	FRAME	TRIP	TYPE	POLES	LOAD DESCRIPTION	LOAD: CONNECTED FLA	CONNECTED KVA	DEMAND FLA	DEMAND KVA	QUANTITY OF FEEDERS (SETS)	FEEDER (EACH): PHASE LEGS No.	PHASE LEGS SIZE	NEUTRAL No.	NEUTRAL SIZE	GROUND No.	GROUND SIZE	INSULATION TYPE	CONDUIT	REMARKS
EPP-PH-OS	800A	YES	N/A	I	I	I	1	800	800	ELEC TRIP	3	MAIN	–	–	–	–	2	3	600MCM	–	–	1	#1/0	THHN	3 1/2"	–
							2	400	400	ELEC TRIP	3	EDP-8-OS	412.3	362.0	293.5	259.0	1	3	600MCM	–	–	1	#3	THHN	3 1/2"	–
							3	100	100	ELEC TRIP	3	SPARE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							4	150	150	ELEC TRIP	3	AHU-SA-1	77.0	72.2	57.8	54.1	1	3	#1/0	–	–	1	#6	THHN	2"	–
							5	100	100	ELEC TRIP	3	AHU-EF-1	57.0	53.4	42.8	40.1	1	3	#3	–	–	1	#8	THHN	1 1/4"	–
							6	50	50	ELEC TRIP	3	PHWP-1	27.0	25.3	20.3	19.0	1	3	#8	–	–	1	#10	THHN	3/4"	–
							7	50	50	ELEC TRIP	3	PHWP-2	–	–	–	–	1	3	#8	–	–	1	#10	THHN	3/4"	STANDBY
							8	40	40	ELEC TRIP	3	CT-1	21.0	19.7	15.8	14.8	1	3	#8	–	–	1	#10	THHN	3/4"	–
							9	40	40	ELEC TRIP	3	CT-1	–	–	–	–	1	3	#8	–	–	1	#10	THHN	3/4"	STANDBY
							10	40	40	ELEC TRIP	3	SHWP-1	27.0	25.3	20.3	19.0	1	3	#8	–	–	1	#10	THHN	3/4"	–
							11	40	40	ELEC TRIP	3	SHWP-2	–	–	–	–	1	3	#8	–	–	1	#10	THHN	3/4"	STANDBY
							12	20	20	ELEC TRIP	3	B-1	4.8	4.5	3.6	3.4	1	3	#12	–	–	1	#12	THHN	3/4"	–
							13	20	20	ELEC TRIP	3	B-2	4.8	4.5	3.6	3.4	1	3	#12	–	–	1	#12	THHN	3/4"	–
							14	20	20	ELEC TRIP	3	B-3	4.8	4.5	3.6	3.4	1	3	#12	–	–	1	#12	THHN	3/4"	–
							15	15	15	ELEC TRIP	3	AHU-1 EW MOTOR	1.6	1.5	1.2	1.1	1	3	#12	–	–	1	#12	THHN	3/4"	–
							16	15	15	ELEC TRIP	3	SCHWP-1	2.1	2.0	1.6	1.5	1	3	#12	–	–	1	#12	THHN	3/4"	–
							17	15	15	ELEC TRIP	3	SCHWP-2	–	–	–	–	1	3	#12	–	–	1	#12	THHN	3/4"	STANDBY
							18	40	40	ELEC TRIP	3	CF-1	11.2	14.1	8.4	10.6	1	3	#8	–	–	1	#10	THHN	3/4"	–
							19	40	40	ELEC TRIP	3	CF-2	11.2	14.1	8.4	10.6	1	3	#8	–	–	1	#10	THHN	3/4"	–
							20	50	50	ELEC TRIP	3	TANK HEATER	25.0	10.0	18.8	7.5	1	3	#8	–	–	1	#10	THHN	3/4"	–
							21	100	100	ELEC TRIP	3	EUP-FM-OS	75.3	60.0	22.6	18.0	1	3	#3	–	–	1	#8	THHN	1 1/4"	–
							22	100	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							23	100	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							24	60	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–
							25	60	–	–	–	SPACE	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Project Title

NEW ACADEMIC BUILDING

School of Public Health, State University of New York Health Science Center at Brooklyn

450 Clarkson Avenue Brooklyn, NY 11203

Owner
State University Construction Fund
353 Broadway
Albany, NY 12246
518.320.3200 tel
www.sucf.suny.edu

SUNY Downstate Medical Center
450 Clarkson Avenue
Brooklyn, NY 11203
718.270.1000 tel
www.downstate.edu

Architect
Ennead Architects, LLP
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New York, NY 10014-1278
212.807.7171 tel
212.807.5917 fax
www.ennead.com

Structural
Leslie E. Robertson Associates RLLP
30 Broad Street, 47-48th Floor
New York, NY 10004-2304
212.750.9000 tel
212.750.9002 fax
www.lera.com

MEP
Jaros, Baum & Bolles
80 Pine Street, 12th Floor
New York, NY 10005
212.530.9300 tel
212.269.5980 fax
www.jbb.com

Civil
Langan Engineering & Environmental Services
21 Penn Plaza
360 West 31st Street
New York, NY 10001
212.479.5400 tel
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www.langan.com

Lab Planning
Jacobs Consultancy
303 South Broadway, Suite G20
Tarrytown, NY 10591
914.333.1110 tel
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www.jacobsconsultancy.com

Landscape
SCAPE
Landscape Architecture PLLC
27 West 20th Street , Suite 1001
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212.462.2628 tel
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200 Park Ave South
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212.254.2712 fax
www.hblighting.com

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Buro Happold Consulting Engineers, PC
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2 Mount Royal Avenue
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Seal

Key Plan

6	CONFORMANCE SET	7/18/12
4	ADDENDUM 3 ⚠	5/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL SCHEDULE SHEET 3

Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	E-502
Scale	Ennead Project Number	
N.T.S.	0917	
Phase		

LP-B

KVA | PANEL DESIGNATIONS **LP-B** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
2.05	2.05	1	BASEMENT LIGHTING	20A	A	20A	SPARE	2	0.00	0.00
0.85	0.85	3	CORRIDOR LIGHT FIXTURES	20A	B	20A	SPARE	4	0.00	0.00
1.50	1.50	5	BASEMENT LIGHTING	20A	C	20A	SPARE	6	0.00	0.00
0.00	0.00	7	SPARE	20A	A	20A	SPARE	8	0.00	0.00
0.00	0.00	9	SPARE	20A	B	20A	SPARE	10	0.00	0.00
0.00	0.00	11	SPARE	20A	C	20A	SPARE	12	0.00	0.00
0.00	0.00	13	SPARE	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.40	4.40	265/460	3 Ø	4 W					0.00	0.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND WIRE

SUB-FEED C/B FEEDING UP-B

MAIN: BUS 225 AMPS; BRKR 225 AMPS
- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS
- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☑ SUB-FEED MAIN C/B (3P) QTY: 1 AMPS: 50A
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

TOTAL 0.00 | TOTAL 0.00

LP-1

KVA | PANEL DESIGNATIONS **LP-1** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
1.40	1.40	1	CORRIDOR LIGHTING	20A	A	20A	SPARE	2	0.00	0.00
3.00	3.00	3	MULTIPURPOSE AREA LIGHTING	20A	B	20A	SPARE	4	0.00	0.00
1.00	1.00	5	BATHROOM/STORAGE LIGHTING	20A	C	20A	SPARE	6	0.00	0.00
0.00	0.00	7	SPARE	20A	A	20A	SPARE	8	0.00	0.00
0.00	0.00	9	SPARE	20A	B	20A	SPARE	10	0.00	0.00
0.00	0.00	11	SPARE	20A	C	20A	SPARE	12	0.00	0.00
0.00	0.00	13	SPARE	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	30A	1-010B/C MOTORIZED PARTITION	40	1.00	0.50
0.00	0.00	41	SPARE	20A	C	30A	1-010A/B MOTORIZED PARTITION	42	1.00	0.50
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
5.40	5.40	265/460	3 Ø	4 W					2.00	1.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND WIRE

SUB-FEED C/B FEEDING UP-1

MAIN: BUS 225 AMPS; BRKR 225 AMPS
- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS
- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☑ SUB-FEED MAIN C/B (3P) QTY: 1 AMPS: 50A
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

TOTAL 2.00 | TOTAL 1.00

LP-2

KVA | PANEL DESIGNATIONS **LP-2** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	0.50	1	2ND FL CORRIDOR LIGHTING	20A	A	20A	SPARE	2	0.00	0.00
0.50	0.50	3	2ND FL LOBBY LIGHTING	20A	B	20A	SPARE	4	0.00	0.00
0.50	0.50	5	2ND FL CORE LIGHTING	20A	C	20A	SPARE	6	0.00	0.00
1.10	1.10	7	2ND FL CLASSROOM LIGHTING	20A	A	20A	SPARE	8	0.00	0.00
1.00	1.00	9	2ND FL STUDENT GATHERING AREA LIGHTING	20A	B	20A	SPARE	10	0.00	0.00
0.00	0.00	11	SPARE	20A	C	20A	SPARE	12	0.00	0.00
0.00	0.00	13	SPARE	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
		37			A			38		
3.50	7.00	39	HT-2		50A 3P B	50A 3P	UP-2-IT	40	17.00	8.50
		41			C			42		
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
7.10	10.60	265/460	3 Ø	4 W					17.00	8.50

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND WIRE

SUB-FEED C/B FEEDING UP-2A & UP-2B

MAIN: BUS 225 AMPS; BRKR 225 AMPS
- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS
- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☑ SUB-FEED MAIN C/B (3P) QTY: 1 AMPS: 100A
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

TOTAL 17.00 | TOTAL 8.50

LP-3

KVA | PANEL DESIGNATIONS **LP-3** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	0.50	1	3RD FL CORE LIGHTING	20A	A	20A	SPARE	2	0.00	0.00
1.80	1.80	3	3RD FL CORRIDOR & RECEPTION	20A	B	20A	SPARE	4	0.00	0.00
1.00	1.00	5	3RD FL WEST CIRCULATION LIGHTING	20A	C	20A	SPARE	6	0.00	0.00
2.00	2.00	7	3RD FL CENTER WEST LIGHTING	20A	A	20A	SPARE	8	0.00	0.00
2.00	2.00	9	3RD FL CENTER WEST LIGHTING	20A	B	20A	SPARE	10	0.00	0.00
0.90	0.90	11	3RD FL SOUTH EAST LIGHTING	20A	C	20A	SPARE	12	0.00	0.00
1.50	1.50	13	3RD FL CENTER EAST LIGHTING	20A	A	20A	SPARE	14	0.00	0.00
1.50	1.50	15	3RD FL CENTER EAST LIGHTING	20A	B	20A	SPARE	16	0.00	0.00
2.00	2.00	17	3RD FL NORTH EAST LIGHTING	20A	C	20A	SPARE	18	0.00	0.00
2.00	2.00	19	3RD FL NORTH EAST LIGHTING	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A			38		
0.00	0.00	39	SPARE	20A	B	50A 3P	UP-3-IT	40	17.00	8.50
0.00	0.00	41	SPARE	20A	C			42		
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
15.20	15.20	265/460	3 Ø	4 W					17.00	8.50

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND WIRE

SUB-FEED C/B FEEDING UP-3A & UP-3B

MAIN: BUS 225 AMPS; BRKR 225 AMPS
- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS
- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☑ SUB-FEED MAIN C/B (3P) QTY: 1 AMPS: 100A
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

TOTAL 17.00 | TOTAL 8.50

LP-4

KVA | PANEL DESIGNATIONS **LP-4** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
3.50	3.50	1	4TH FL CORE, CORRIDOR, LOBBY LTG	20A	A	20A	SPARE	2	0.00	0.00
0.35	0.35	3	4TH FL LIBRARY LTG	20A	B	20A	SPARE	4	0.00	0.00
1.00	1.00	5	4TH FL WEST OPEN OFFICE LTG	20A	C	20A	SPARE	6	0.00	0.00
2.60	2.60	7	4TH FL WEST PRIVATE OFFICE LTG	20A	A	20A	SPARE	8	0.00	0.00
1.00	1.00	9	4TH FL EAST OPEN OFFICE LTG	20A	B	20A	SPARE	10	0.00	0.00
2.60	2.60	11	4TH FL EAST PRIVATE OFFICE LTG	20A	C	20A	SPARE	12	0.00	0.00
0.00	0.00	13	SPARE	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A			38		
0.00	0.00	39	SPARE	20A	B	50A 3P	UP-4-IT	40	17.00	8.50
0.00	0.00	41	SPARE	20A	C			42		
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
11.05	11.05	265/460	3 Ø	4 W					17.00	8.50

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND WIRE

SUB-FEED C/B FEEDING UP-4A & UP-4B

MAIN: BUS 225 AMPS; BRKR 225 AMPS
- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS
- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☑ SUB-FEED MAIN C/B (3P) QTY: 1 AMPS: 100A
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

TOTAL 17.00 | TOTAL 8.50

LP-5

KVA | PANEL DESIGNATIONS **LP-5** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	0.50	1	5TH FL CORE LIGHTING	20A	A	20A	SPARE	2	0.00	0.00
3.50	3.50	3	5TH FL CORRIDOR AND LOBBY LIGHTING	20A	B	20A	SPARE	4	0.00	0.00
0.80	0.80	5	5TH FL LIBRARY AND DEAN LIGHTING	20A	C	20A	SPARE	6	0.00	0.00
0.80	0.80	7	5TH FL WEST OPEN OFFICE LIGHTING	20A	A	20A	SPARE	8	0.00	0.00
3.08	3.08	9	5TH FL WEST PRIVATE OFFICE LIGHTING	20A	B	20A	SPARE	10	0.00	0.00
0.80	0.80	11	5TH FL EAST OPEN OFFICE LIGHTING	20A	C	20A	SPARE	12	0.00	0.00
2.80	2.80	13	5TH FL EAST PRIVATE OFFICE LIGHTING	20A	A	20A	SPARE	14	0.00	0.00
1.00	1.00	15	5TH FL SECRETARY AREA LIGHTING	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A			38		
0.00	0.00	39	SPARE	20A	B	50A 3P	UP-5-IT	40	17.00	8.50
0.00	0.00	41	SPARE	20A	C			42		
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
13.28	13.28	265/460	3 Ø	4 W					17.00	8.50

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND WIRE

SUB-FEED C/B FEEDING UP-5A & UP-5B

MAIN: BUS 225 AMPS; BRKR 225 AMPS
- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS
- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☑ SUB-FEED MAIN C/B (3P) QTY: 1 AMPS: 100A
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

TOTAL 17.00 | TOTAL 8.50

Project Title
NEW ACADEMIC BUILDING
School of Public Health, State University of New York Health Science Center at Brooklyn
450 Clarkson Avenue Brooklyn, NY 11203

Owner
State University Construction Fund
353 Broadway
Albany, NY 12246
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www.sucf.suny.edu

SUNY Downstate Medical Center
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Ennead Architects, LLP
320 West 13th Street
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www.ennead.com

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Leslie E. Robertson Associates RLLP
30 Broad Street, 47-48th Floor
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212.750.9002 fax
www.lera.com

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Jaros, Baum & Bolles
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New York, NY 10005
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212.269.5980 fax
www.jbb.com

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Langan Engineering & Environmental Services
21 Penn Plaza
360 West 31st Street
New York, NY 10001
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212.479.5444 fax
www.langan.com

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Jacobs Consultancy
303 South Broadway, Suite G20
Tarrytown, NY 10591
914.333.1110 tel
914.333.1109 fax
www.jacobsconsultancy.com

Landscape
SCAPE
Landscape Architecture PLLC
27 West 20th Street , Suite 1001
New York, NY 10011
212.462.2628 tel
212.462.4164 fax
www.scapestudio.com

Lighting
Horton Lees Brogden Lighting Design
200 Park Ave South
Suite 1401
New York, NY 10003
212.674.5580 tel
212.254.2712 fax
www.hlblighting.com

Sustainability
Buro Happold Consulting Engineers, PC
100 Broadway
New York, NY 10005
212.334.2025 tel
212.334.5528 fax
www.burohappold.com

AV / Acoustics
Cerami & Associates
405 Fifth Avenue
New York, New York 10018
212.370.1776 tel
www.ceramiassociates.com

Healthcare Simulation
Stantec
1500 Spring Garden
Suite 1100
Philadelphia, PA 19130
215.665.7065 tel
www.stantec.com

Code
Hughes Associates, Inc.
2 Mount Royal Avenue
Suite 420
Marlborough, MA 01752
508.624.7766 tel
www.haifire.com

Signage
Two Twelve Associates
902 Broadway
Floor 20
New York, NY 10010
212.254.6670 tel
212.254.6614 fax
www.twotwelve.com

Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL SCHEDULE SHEET 4

Date: April 10, 2012
Scale: N.T.S.
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: **E-503**

LP-7

KVA		PANEL DESIGNATIONS	LP-7	AIC	14K		POLES	42		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	0.50	1	7TH FL CORE LIGHTING	20A	A	30A 3P	STEAM STERILIZER VACUUM PUMP	2	1.62	0.81
1.00	1.00	3	7TH FL CORRIDOR LIGHTING	20A	B			4		
1.50	1.50	5	7TH FL LAB SUPPORT LIGHTING	20A	C			6		
2.50	2.50	7	7TH FL LAB LIGHTING	20A	A	20A	SPARE	8	0.00	0.00
2.00	2.00	9	7TH FL OFFICE LIGHTING	20A	B	20A	SPARE	10	0.00	0.00
1.00	1.00	11	7TH FL ROOF LIGHTING WEST	20A	C	20A	SPARE	12	0.00	0.00
1.00	1.00	13	7TH FL ROOF LIGHTING EAST	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	50A 3P	UP-7-IT	38	17.00	8.50
0.00	0.00	39	SPARE	20A	B			40		
0.00	0.00	41	SPARE	20A	C			42		
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
9.50	9.50	265/460	3 Ø	4 W					18.62	9.31

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND WIRE

SUB-FEED C/B FEEDING UP-7A & UP-7B

MAIN

BUS 225 AMPS
BRKR 225 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☑ SUB-FEED MAIN C/B (3P)
  QTY: 1 AMPS: 100A
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

LP-8

KVA		PANEL DESIGNATIONS	LP-8	AIC	14K		POLES	42		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	0.50	1	8TH FL CORE LIGHTING	20A	A	30A 3P	STEAM STERILIZER VACUUM PUMP	2	1.62	0.81
1.00	1.00	3	8TH FL CORRIDOR LIGHTING	20A	B			4		
1.50	1.50	5	8TH FL LAB SUPPORT LIGHTING	20A	C			6		
2.50	2.50	7	8TH FL LAB LIGHTING	20A	A	20A	SPARE	8	0.00	0.00
2.00	2.00	9	8TH FL OFFICE LIGHTING	20A	B	20A	SPARE	10	0.00	0.00
1.00	1.00	11	8TH FL ROOF LIGHTING WEST	20A	C	20A	SPARE	12	0.00	0.00
1.00	1.00	13	8TH FL ROOF LIGHTING EAST	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	50A 3P	UP-8-IT	38	17.00	8.50
0.00	0.00	39	SPARE	20A	B			40		
0.00	0.00	41	SPARE	20A	C			42		
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
9.50	9.50	265/460	3 Ø	4 W					18.62	9.31

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND WIRE

SUB-FEED C/B FEEDING UP-8A & UP-8B

MAIN

BUS 225 AMPS
BRKR 225 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☑ SUB-FEED MAIN C/B (3P)
  QTY: 1 AMPS: 100A
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

LP-PH

KVA		PANEL DESIGNATIONS	LP-PH	AIC	14K		POLES	42		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
3.08	3.08	1	PENTHOUSE LIGHTING	20A	A	20A	SPARE	2	0.00	0.00
2.00	2.00	3	ROOF AND EMR LIGHTING	20A	B	20A	SPARE	4	0.00	0.00
0.00	0.00	5	SPARE	20A	C	20A	SPARE	6	0.00	0.00
0.00	0.00	7	SPARE	20A	A	20A	SPARE	8	0.00	0.00
0.00	0.00	9	SPARE	20A	B	20A	SPARE	10	0.00	0.00
0.00	0.00	11	SPARE	20A	C	20A	SPARE	12	0.00	0.00
0.00	0.00	13	SPARE	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
1.88	2.50	39	CHWCP-1	30A	B	20A	SPARE	40	0.00	0.00
1.88	2.50	41	CHWCP-2	30A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
8.83	10.08	265/460	3 Ø	4 W					0.00	0.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND WIRE

MAIN

BUS 225 AMPS
BRKR 225 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☑ SUB-FEED MAIN C/B (3P)
  QTY: 1 AMPS: 50A
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

ELP-B

KVA		PANEL DESIGNATIONS	ELP-B	AIC	14K		POLES	42		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
1.40	1.40	1	BASEMENT LIGHTING	20A	A	30A	FIRE SHUTTER	2	1.00	1.00
0.40	0.40	3	BASEMENT CORRIDOR LIGHTING	20A	B	20A	SPARE	4	0.00	0.00
1.00	1.00	5	BASEMENT LIGHTING	20A	C	20A	SPARE	6	0.00	0.00
0.50	0.50	7	1ST FLOOR CORRIDOR LIGHTING	20A	A	20A	SPARE	8	0.00	0.00
0.25	0.25	9	1ST FLOOT MULTIPURPOSE AREA LIGHTING	20A	B	20A	SPARE	10	0.00	0.00
0.25	0.25	11	1ST FLOOR BATHROOM/STORAGE LIGHTING	20A	C	20A	SPARE	12	0.00	0.00
1.30	1.30	13	EAST STAIR LIGHTING	20A	A	20A	SPARE	14	0.00	0.00
1.30	1.30	15	WEST STAIR LIGHTING	20A	B	20A	SPARE	16	0.00	0.00
0.50	0.50	17	SITE LIGHTING EAST	20A	C	20A	SPARE	18	0.00	0.00
2.00	2.00	19	SITE LIGHTING WEST	20A	A	20A	SPARE	20	0.00	0.00
1.00	1.00	21	ENTRANCE HANDRAIL LIGHTING	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	7-033 FIRE SHUTTER	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
9.90	9.90	265/460	3 Ø	4 W					1.00	1.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND WIRE

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☐ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☐ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

ELP-3

KVA		PANEL DESIGNATIONS	ELP-3	AIC	14K		POLES	42		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.00	0.00	1	SPARE	20A	A	20A	2ND FLOOR CORRIDOR LIGHTING	2	0.40	0.40
0.00	0.00	3	SPARE	20A	B	20A	2ND FL STUDENT GATHERING AREA LIGHTING	4	0.40	0.40
0.00	0.00	5	SPARE	20A	C	20A	LOBBY LIGHTING	6	0.40	0.40
1.00	1.00	7	3RD FLOOR PREACTION SYSTEM	20A	A	20A	2ND FLOOR CORE LIGHTING	8	0.50	0.50
		9		20A 3P	B	20A	2ND FLOOR CLASSROOM LIGHITNG	10	0.50	0.50
		11			C	20A	3RD FLOOR CORE , RECEPT., W. CIRC. LTG	12	2.00	2.00
0.00	0.00	13	SPARE	20A	A	20A	3RD FLOOR EAST/WEST CENTER LIGHTING	14	1.00	1.00
0.00	0.00	15	SPARE	20A	B	20A	4TH FL LIGHTING	16	2.00	2.00
0.00	0.00	17	SPARE	20A	C	20A	COLUMN LIGHTING	18	2.00	2.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
1.00	1.00	265/460	3 Ø	4 W					9.20	9.20

SKE-015.0 PER ADDENDUM 3

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND WIRE

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☐ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☐ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

ELP-7

KVA		PANEL DESIGNATIONS	ELP-7	AIC	14K		POLES	42		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.00	0.00	1	SPARE	20A	A	20A	5TH FL LIGHTING	2	2.00	2.00
0.00	0.00	3	SPARE	20A	B	20A	7TH FL LIGHTING	4	2.00	2.00
0.00	0.00	5	SPARE	20A	C	20A	8TH FL LIGHTING	6	2.00	2.00
0.00	0.00	7	SPARE	20A	A	20A	SPARE	8	0.00	0.00
0.00	0.00	9	SPARE	20A	B	20A	SPARE	10	0.00	0.00
0.00	0.00	11	SPARE	20A	C	20A	SPARE	12	0.00	0.00
0.00	0.00	13	SPARE	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
0.00	0.00	265/460	3 Ø	4 W					6.00	6.00

SKE-015.1 PER ADDENDUM 3

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND WIRE

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☐ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☐ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

Project Title

NEW ACADEMIC BUILDING

School of Public Health, State University of New York Health Science Center at Brooklyn

450 Clarkson Avenue Brooklyn, NY 11203

Owner
State University Construction Fund
353 Broadway
Albany, NY 12246
518.320.3200 tel
www.sucf.suny.edu

SUNY Downstate Medical Center
450 Clarkson Avenue
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Architect
Ennead Architects, LLP
320 West 13th Street
New York, NY 10014-1278
212.807.7171 tel
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Structural
Leslie E. Robertson Associates RLLP
30 Broad Street, 47-48th Floor
New York, NY 10004-2304
212.750.9000 tel
212.750.9002 fax
www.lera.com

MEP
Jaros, Baum & Bolles
80 Pine Street, 12th Floor
New York, NY 10005
212.530.9300 tel
212.269.5980 fax
www.jbb.com

Civil
Langan Engineering & Environmental Services
21 Penn Plaza
360 West 31st Street
New York, NY 10001
212.479.5400 tel
212.479.5444 fax
www.langan.com

Lab Planning
Jacobs Consultancy
303 South Broadway, Suite G20
Tarrytown, NY 10591
914.333.1110 tel
914.333.1109 fax
www.jacobsconsultancy.com

Landscape
SCAPE
Landscape Architecture PLLC
27 West 20th Street , Suite 1001
New York, NY 10011
212.462.2628 tel
212.462.4164 fax
www.scapestudio.com

Lighting
Horton Lees Brogden
Lighting Design
200 Park Ave South
Suite 1401
New York, NY 10003
212.674.5580 tel
212.254.2712 fax
www.hlblighting.com

Sustainability
Buro Happold Consulting Engineers, PC
100 Broadway
New York, NY 10005
212.334.2025 tel
212.334.5528 fax
www.burohappold.com

AV / Acoustics
Cerami & Associates
405 Fifth Avenue
New York, New York 10018
212.370.1776 tel
www.ceramiassociates.com

Healthcare Simulation
Stantec
1500 Spring Garden
Suite 1100
Philadelphia, PA 19130
215.665.7065 tel
www.stantec.com

Code
Hughes Associates, Inc.
2 Mount Royal Avenue
Suite 420
Marlborough, MA 01752
508.624.7766 tel
www.hailfire.com

Signage
Two Twelve Associates
902 Broadway
Floor 20
New York, NY 10010
212.254.6670 tel
212.254.6614 fax
www.twotwelve.com

Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL SCHEDULE SHEET 5

Date	SUCF Project Number	Sheet No.
April 10, 2012	14A91	E-504
Scale	Ennead Project Number	
N.T.S.	0917	
Phase		

PANEL DESIGNATIONS: ELP-PH

KVA | AIC: 14K | POLES: 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
1.00	1.00	1	PENTHOUSE PREACTION SYSTEM	20A 3P	A	20A	PENTHOUSE LIGHTING	2	2.00	2.00
		3			B	20A	EMR LIGHTING	4	0.50	0.50
		5			C	20A	SPARE	6	0.00	0.00
1.00	1.00	7	PENTHOUSE PREACTION SYSTEM	20A 3P	A	20A	SPARE	8	0.00	0.00
		9			B	20A	SPARE	10	0.00	0.00
		11			C	20A	SPARE	12	0.00	0.00
0.00	0.00	13	SPARE	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
2.00	2.00	265/460	3 Ø	4 W					2.50	2.50

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND WIRE

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☐ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☐ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS: UP-B

KVA | AIC: 14K | POLES: 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.31	0.62	1	FCU-B-1	20A	A	20A	B-ME13 CONV (x7)	2	1.26	0.44
0.48	0.96	3	FPB-1-1	20A, 1ϕ	B	20A	B-001, B-003, B-ME10, B-ME15 CONV (x7)	4	1.26	0.44
		5			C	20A	COORIDOR CONV (x6)	6	1.08	0.38
0.48	0.96	7	FPB-1-2	20A, 1ϕ	A	20A	B-002, ELEVATOR PIT CONV (x7)	8	1.26	0.44
		9			B	20A	B-ME06, B-ME06B CONV (x8)	10	1.44	0.50
0.48	0.96	11	FPB-1-3	20A, 1ϕ	C	20A	B-ME04, B-ME05 CONV (x7)	12	1.26	0.44
		13			A	20A	B-ME03 CONV (x5)	14	0.90	0.32
0.48	0.96	15	FPB-1-4	20A, 1ϕ	B	20A	CHWCP-10	16	1.38	0.69
		17			C	15A	TRAP PRIMER	18	1.00	0.50
0.66	1.32	19	FPB-1-5	20A, 1ϕ	A	15A	TRAP PRIMER	20	1.00	0.50
		21			B	20A	SPARE	22	0.00	0.00
0.48	0.96	23	FPB-1-6	20A, 1ϕ	C	20A	SPARE	24	0.00	0.00
		25			A	20A	SPARE	26	0.00	0.00
0.66	1.32	27	FPB-1-7	20A, 1ϕ	B	20A	1ST FLOOR TURNSTYLES	28	1.00	0.50
		29			C	20A	1-010A MOTORIZED SHADES (x6)	30	1.00	0.50
0.66	1.32	31	FPB-1-8	20A, 1ϕ	A	20A	1-010A MOTORIZED SHADES (x6)	32	1.00	0.50
		33			B	20A	1-010B MOTORIZED SHADES (x6)	34	1.00	0.50
0.00	0.00	35	SPARE	20A	C	20A	1-010B MOTORIZED SHADES (x6)	36	1.00	0.50
0.00	0.00	37	SPARE	20A	A	20A	1-010C MOTORIZED SHADES (x4)	38	1.00	0.50
0.00	0.00	39	SPARE	20A	B	20A	1-010C MOTORIZED SHADES (x4)	40	1.00	0.50
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.69	9.38	120/208	3 Ø	4 W					18.84	8.15

SKE-016.0 PER ADDENDUM 3

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS: UP-1

KVA | AIC: 14K | POLES: 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	PROJECTOR SCREEN 1-010C (x1)	20A	A	20A	1-010A CONV (x6)	2	1.08	0.38
0.50	1.00	3	PROJECTOR SCREEN 1-010B (x1)	20A	B	20A	1-010A CONV (x8)	4	1.44	0.50
0.50	1.00	5	PROJECTOR SCREEN 1-010B (x1)	20A	C	20A	1-002, 1-002B CONV (x8)	6	1.44	0.50
0.50	1.00	7	PROJECTOR SCREEN 1-010A (x1)	20A	A	20A	1-002, 1-002A CONV (x8)	8	1.44	0.50
0.50	1.00	9	PROJECTOR SCREEN 1-010A (x1)	20A	B	20A	1-002C ATM (x1)	10	1.00	0.50
0.50	1.00	11	PROJECTOR 1-010C, 1-010B (x3)	20A	C	20A	1-002C ATM (x1)	12	1.00	0.50
0.50	1.00	13	PROJECTOR 1-010A (x2)	20A	A	20A	SPARE	14	0.00	0.00
0.18	0.35	15	CUH-1-1	15A	B	20A	1-015 CONV (x6)	16	1.08	0.38
0.18	0.35	17	CUH-1-2	15A	C	20A	1-WC CONV (x4)	18	0.72	0.25
0.69	1.38	19	AC-1-1	15A	A	20A	1-011 AV EQUIP (x2)	20	1.00	0.50
0.18	0.35	21	UH-1-3	15A	B	20A	1-010C, 1-010B, 1-010A AV EQUIP (x3)	22	1.00	0.50
0.18	0.35	23	UH-1-2	15A	C	20A	1-010C AV EQUIP (x2)	24	1.00	0.50
0.18	0.35	25	UH-1-1	15A	A	20A	1-010B AV EQUIP (x2)	26	1.00	0.50
0.38	0.75	27	WATER COOLER	20A	B	20A	1-010A AV EQUIP (x2)	28	1.00	0.50
0.38	0.75	29	WATER COOLER	20A	C	20A	1-002A, 1-002B AV EQUIP (x4)	30	1.00	0.50
0.50	1.00	31	TOE HEATER	20A	A	20A	SPARE	32	0.00	0.00
0.38	1.08	33	1-010C CONV (x6)	20A	B	20A	SPARE	34	0.00	0.00
0.50	1.44	35	1-010C CONV (x8)	20A	C	20A	1-002, 1-010A, 1-010B, 1-010C AV EQUIP (x4)	36	1.00	0.50
0.50	1.44	37	1-010B CONV (x8)	20A	A	20A	SPARE	38	0.00	0.00
0.50	1.44	39	1-010B CONV (x8)	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
8.21	18.03	120/208	3 Ø	4 W					16.20	7.02

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS: UP-2A

KVA | AIC: 14K | POLES: 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	PROJECTOR SCREEN 2-005 (x1)	20A	A	20A, 1ϕ	FPB-2-1	2	1.32	0.66
0.50	1.00	3	PROJECTOR SCREEN 2-004 (x1)	20A	B			4		
0.50	1.00	5	PROJECTOR SCREEN 2-003 (x1)	20A	C	20A, 1ϕ	FPB-2-2	6	1.32	0.66
0.50	1.00	7	PROJECTOR SCREEN 2-002 (x1)	20A	A			8		
0.50	1.00	9	PROJECTOR SCREEN 2-001 (x1)	20A	B	20A, 1ϕ	FPB-2-3	10	1.32	0.66
0.50	1.00	11	PROJECTOR 2-005, 2-004 (x3)	20A	C			12		
0.50	1.00	13	PROJECTOR 2-003, 2-002, 2-001 (x3)	20A	A	20A, 1ϕ	FPB-2-4	14	1.32	0.66
0.51	1.02	15	AC-2-1	15A	B			16		
0.38	0.75	17	WATER COOLER	20A	C	20A, 1ϕ	FPB-2-5	18	0.98	0.49
0.50	1.44	19	2-006 CONV (x8)	20A	A			20		
0.50	1.44	21	2-006 CONV (x8)	20A	B	20A, 1ϕ	FPB-2-6	22	0.98	0.49
0.50	1.44	23	2-006, 2-007 CONV (x8)	20A	C			24		
0.50	1.44	25	2-CR01, 2-DC01, 2-EC01, 2-JC-01 CONV (x8)	20A	A	20A, 1ϕ	FPB-2-7	26	1.32	0.66
0.50	1.44	27	2-005 CONV (x8)	20A	B			28		
0.50	1.44	29	2-004, 2-005 CONV (x8)	20A	C	20A	SPARE	30	0.00	0.00
0.44	1.26	31	2-003, 2-004 CONV (x7)	20A	A	20A	SPARE	32	0.00	0.00
0.50	1.44	33	2-002, 2-003 CONV (x8)	20A	B	20A	SPARE	34	0.00	0.00
0.50	1.44	35	2-002 CONV (x8)	20A	C	20A	SPARE	36	0.00	0.00
0.50	1.44	37	2-001 CONV (x8)	20A	A	20A	SPARE	38	0.00	0.00
0.25	0.72	39	2-009, 2-010 CONV (x4)	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
9.61	23.71	120/208	3 Ø	4 W					8.56	4.28

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS: UP-2B

KVA | AIC: 14K | POLES: 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	MOTORIZED SHADES (x4)	20A	A	20A	SPARE	2	0.00	0.00
0.50	1.00	3	MOTORIZED SHADES (x4)	20A	B	20A	SPARE	4	0.00	0.00
0.50	1.00	5	MOTORIZED SHADES (x4)	20A	C	20A	SPARE	6	0.00	0.00
0.50	1.00	7	MOTORIZED SHADES (x4)	20A	A	20A	SPARE	8	0.00	0.00
0.50	1.00	9	MOTORIZED SHADES (x4)	20A	B	20A	SPARE	10	0.00	0.00
0.50	1.00	11	MOTORIZED SHADES (x4)	20A	C	20A	2-005 AV EQUIP (x1)	12	1.00	0.50
0.50	1.00	13	MOTORIZED SHADES (x4)	20A	A	20A	2-005 AV EQUIP (x1)	14	1.00	0.50
0.50	1.00	15	MOTORIZED SHADES (x4)	15A	B	20A	2-005, 2-004 AV EQUIP (x4)	16	1.00	0.50
0.50	1.00	17	1ST FLOOR MULTIPURPOSE RM LIGHT CONTROL	20A	C	20A	2-003, 2-002 AV EQUIP (x5)	18	1.00	0.50
0.50	1.00	19	1ST FLOOR MULTIPURPOSE RM LIGHT CONTROL	20A	A	20A	2-002, 2-001 AV EQUIP (x4)	20	1.00	0.50
0.50	1.00	21	1ST FLOOR MULTIPURPOSE RM LIGHT CONTROL	20A	B	20A	2-007 AV EQUIP (x3)	22	1.00	0.50
0.50	1.00	23	1ST FLOOR MULTIPURPOSE RM LIGHT CONTROL	20A	C	20A	2-007 AV EQUIP (x3)	24	1.00	0.50
0.50	1.00	25	1ST FLOOR MULTIPURPOSE RM LIGHT CONTROL	20A	A	20A	2-CR01 AV EQUIP (x2)	26	1.00	0.50
0.50	1.00	27	1ST FLOOR MULTIPURPOSE RM LIGHT CONTROL	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
7.00	14.00	120/208	3 Ø	4 W					8.00	4.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS: UP-2-IT

KVA | AIC: 14K | POLES: 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.75	1.50	1	RACK 3	30A 3ϕ	A	30A 3ϕ	RACK 3	2	1.50	0.75
		3			B			4		
		5			C			6		
0.50	1.00	7	RACK 3	30A, 1ϕ	A	30A, 1ϕ	RACK 3	8	1.00	0.50
		9			B			10		
0.75	1.50	11	RACK 2	30A 3ϕ	C	30A 3ϕ	RACK 2	12	1.50	0.75
		13			A			14		
		15			B			16		
0.50	1.00	17	RACK 2	30A, 1ϕ	C	30A, 1ϕ	RACK 2	18	1.00	0.50
		19			A			20		
0.75	1.50	21	RACK 1	30A 3ϕ	B	30A 3ϕ	RACK 1	22	1.50	0.75
		23			C			24		
		25			A			26		
0.50	1.00	27	RACK 1	30A, 1ϕ	B	30A, 1ϕ	RACK 1	28	1.00	0.50
		29			C			30		
0.50	1.00	31	ADT PANEL	20A	A	20A	IDF CONV	32	1.00	0.50
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.25	8.50	120/208	3 Ø	4 W					8.50	4.25

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 50 AMPS; BRKR 50 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

Project Title

NEW ACADEMIC BUILDING

School of Public Health, State University of New York Health Science Center at Brooklyn

450 Clarkson Avenue Brooklyn, NY 11203

Owner
State University Construction Fund
353 Broadway
Albany, NY 12246
518.320.3200 tel
www.sucf.suny.edu

SUNY Downstate Medical Center
450 Clarkson Avenue
Brooklyn, NY 11203
718.270.1000 tel
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Architect
Ennead Architects, LLP
320 West 13th Street
New York, NY 10014-1278
212.807.7171 tel
212.807.5917 fax
www.ennead.com

Structural
Leslie E. Robertson Associates RLLP
30 Broad Street, 47-48th Floor
New York, NY 10004-2304
212.750.9000 tel
212.750.9002 fax
www.lera.com

MEP
Jaros, Baum & Bolles
80 Pine Street, 12th Floor
New York, NY 10005
212.530.9300 tel
212.269.5980 fax
www.jbb.com

Civil
Langan Engineering & Environmental Services
21 Penn Plaza
360 West 31st Street
New York, NY 10001
212.479.5400 tel
212.479.5444 fax
www.langan.com

Lab Planning
Jacobs Consultancy
303 South Broadway, Suite G20
Tarrytown, NY 10591
914.333.1110 tel
914.333.1109 fax
www.jacobsconsultancy.com

Landscape
SCAPE
Landscape Architecture PLLC
27 West 20th Street , Suite 1001
New York, NY 10011
212.462.2628 tel
212.462.4164 fax
www.scapestudio.com

Lighting
Horton Lees Brogden Lighting Design
200 Park Ave South
Suite 1401
New York, NY 10003
212.674.5580 tel
212.254.2712 fax
www.hlblighting.com

Sustainability
Buro Happold Consulting Engineers, PC
100 Broadway
New York, NY 10005
212.334.2025 tel
212.334.5528 fax
www.burohappold.com

AV / Acoustics
Cerami & Associates
405 Fifth Avenue
New York, New York 10018
212.370.1776 tel
www.ceramiassociates.com

Healthcare Simulation
Stantec
1500 Spring Garden
Suite 1100
Philadelphia, PA 19130
215.665.7065 tel
www.stantec.com

Code
Hughes Associates, Inc.
2 Mount Royal Avenue
Suite 420
Marlborough, MA 01752
508.624.7766 tel
www.hailfire.com

Signage
Two Twelve Associates
902 Broadway
Floor 20
New York, NY 10010
212.254.6670 tel
212.254.6614 fax
www.twotwelve.com

Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL SCHEDULE SHEET 6

Date: April 10, 2012
Scale: N.T.S.
Phase:

SUCF Project Number: 14A91
Ennead Project Number: 0917

Sheet No.: E-505

PANEL DESIGNATIONS UP-3A

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	PROJECTOR SCREEN 3-050 (x1)	20A	A	20A	3-032 AV EQUIP (x4)	2	1.00	0.50
0.50	1.00	3	PROJECTOR 3-050 (x1)	20A	B	20A	3-032 AV EQUIP (x4)	4	1.00	0.50
0.00	0.00	5	SPARE	15A	C	15A	RFHWP-1	6	1.38	0.69
0.00	0.00	7	SPARE	15A	A	15A	RFHWP-2 (STAND-BY)	8	0.00	0.00
0.50	1.00	9	3-040, 3-042 AV EQUIP (x4)	20A	B	20A	3-042 O.R. EQUIP (x6)	10	1.00	0.50
0.50	1.00	11	3-029 CONV M.O.A.	20A	C	20A	3-033, 3-040, 3-041 CONV (x8)	12	1.44	0.72
0.50	1.00	13	3-032 CONV M.O.A.	20A	A	20A	3-034 U.P.R. EQUIP (x5)	14	1.00	0.50
0.50	1.00	15	3-033 CONV M.O.A.	20A	B	20A	3-036 U.P.R. EQUIP (x6)	16	1.00	0.50
0.50	1.00	17	3-033 CONV M.O.A.	20A	C	20A	3-030, 3-031 U.P.R. EQUIP (x8)	18	1.00	0.50
0.50	1.00	19	3-040 CONV M.O.A.	20A	A	20A	3-043, 3-044, 3-044B CONV (x8)	20	1.44	0.72
0.50	1.00	21	3-040 CONV M.O.A.	20A	B	20A	3-028, 3-037 EQUIP/CONV (x6)	22	1.00	0.50
0.50	1.00	23	3-040 CONV M.O.A.	20A	C	20A	3-024, 3-025 CONV (x7)	24	1.26	0.63
0.50	1.00	25	3-041 CONV M.O.A.	20A	A	20A	3-038, 3-039 CONV (x8)	26	1.44	0.72
0.50	1.00	27	3-035 CONV M.O.A.	20A	B	20A	3-001, 3-050 CONV (x8)	28	1.44	0.72
0.50	1.00	29	3-024, 3-025, 3-050 AV EQUIP (x5)	20A	C	20A	3-033, 3-023 PC/CONV (x6)	30	1.08	0.54
0.50	1.00	31	3-034, 3-036, 3-038, 3-039 AV EQUIP (x8)	20A	A	20A	3-045, 3-046 WC CONV (x4)	32	0.72	0.36
0.50	1.00	33	3-029 AV EQUIP (x4)	20A	B	20A	3-041 AV EQUIP (x4)	34	1.00	0.50
0.50	1.00	35	3-029 AV EQUIP (x4)	20A	C	20A	3-041 AV EQUIP (x4)	36	1.00	0.50
0.50	1.00	37	3-035 AV EQUIP (x4)	20A	A	20A	3-040 CONV (x4)	38	0.72	0.36
0.50	1.00	39	3-035 AV EQUIP (x4)	20A	B	20A	SPARE	40	0.00	0.00
0.50	1.00	41	3-028, 3-030, 3-031 AV EQUIP (x6)	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
9.50	19.00	120/208	3 Ø	4 W					19.92	9.96

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-3B

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.63	1.26	1	3-CR01, 3-CR02B CONV (x7)	20A	A	15A	3-002 PANTRY EQUIP (x1)	2	1.00	0.50
0.72	1.44	3	3-CR02D CONV (x8)	20A	B	15A	3-002 PANTRY EQUIP (x1)	4	1.00	0.50
0.54	1.08	5	3-CR02B, 3-CR02C, 3-CR02D, 3-JC01 CONV (x6)	15A	C	15A	3-002 PANTRY EQUIP (x1)	6	1.00	0.50
0.54	1.08	7	3-020, 3-021 PC/CONV (x6)	15A	A	15A	3-002, 3-002B CONV (x3)	8	0.54	0.27
0.50	1.00	9	3-018, 3-019 CONV/EQUIP (x6)	20A	B	20A	3-CR01 TV (x2)	10	1.00	0.50
0.50	1.00	11	3-016, 3-017 CONV/EQUIP (x8)	20A	C	20A	3-002 AV EQUIP (x2)	12	1.00	0.50
0.50	1.00	13	3-014, 3-015 CONV/EQUIP (x8)	20A	A	20A	3-003 AV EQUIP (x3)	14	1.00	0.50
0.50	1.00	15	3-012, 3-013 CONV/EQUIP (x8)	20A	B	20A	3-003 AV EQUIP (x3)	16	1.00	0.50
0.50	1.00	17	3-010, 3-011 CONV/EQUIP (x8)	20A	C	20A, 1ϕ	FPB-3-1	18	0.98	0.49
0.50	1.00	19	3-008, 3-009 CONV/EQUIP (x8)	20A	A			20		
0.50	1.00	21	3-006, 3-007 CONV/EQUIP (x8)	20A	B	20A	3-020, 3-021 CONV (x4)	22	0.72	0.36
0.50	1.00	23	3-004, 3-005 CONV/EQUIP (x8)	20A	C	20A	SPARE	24	0.00	0.00
0.50	1.00	25	3-003 CONV M.O.A.	20A	A	20A	SPARE	26	0.00	0.00
0.50	1.00	27	3-003 CONV M.O.A.	20A	B	20A	SPARE	28	0.00	0.00
0.38	0.75	29	WATER COOLER	20A	C	20A	SPARE	30	0.00	0.00
0.69	1.38	31	AC-3-2	15A	A	20A	SPARE	32	0.00	0.00
0.51	1.02	33	AC-3-1	15A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
9.01	18.01	120/208	3 Ø	4 W					9.24	4.62

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR _____ AMPS

- ☐ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☑ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-3-IT

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.75	1.50	1	RACK 3	30A 3ϕ	A	30A 3ϕ	RACK 3	2	1.50	0.75
		3			B			4		
		5			C			6		
0.50	1.00	7	RACK 3	30A, 1ϕ	A	30A, 1ϕ	RACK 3	8	1.00	0.50
		9			B			10		
0.75	1.50	11	RACK 2	30A 3ϕ	C	30A 3ϕ	RACK 2	12	1.50	0.75
		13			A			14		
		15			B			16		
0.50	1.00	17	RACK 2	30A, 1ϕ	C	30A, 1ϕ	RACK 2	18	1.00	0.50
		19			A			20		
0.75	1.50	21	RACK 1	30A 3ϕ	B	30A 3ϕ	RACK 1	22	1.50	0.75
		23			C			24		
		25			A			26		
0.50	1.00	27	RACK 1	30A, 1ϕ	B	30A, 1ϕ	RACK 1	28	1.00	0.50
		29			C			30		
0.50	1.00	31	ADT PANEL	20A	A	20A	IDF CONV	32	1.00	0.50
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.25	8.50	120/208	3 Ø	4 W					8.50	4.25

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 50 AMPS
BRKR 50 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-4A

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	PROJECTOR SCREEN 4-003 (x1)	20A	A	20A	4-001 PANTRY CONV (x5)	2	0.90	0.32
0.50	1.00	3	PROJECTOR SCREEN 4-019 (x1)	20A	B	20A	4-003 CONV/AV EQUIP (x5)	4	1.00	0.50
0.50	1.00	5	PROJECTOR SCREEN 4-021 (x1)	20A	C	20A	4-004, 4-005 PC/CONV (x6)	6	1.08	0.54
0.50	1.00	7	PROJECTOR SCREEN 4-038 (x1)	20A	A	20A	4-006 PC/CONV (x6)	8	1.08	0.54
0.50	1.00	9	PROJECTOR 4-003, 4-019 (x2)	20A	B	20A	4-008, 4-009 PC/CONV (x8)	10	1.44	0.72
0.50	1.00	11	PROJECTOR 4-021, 4-038 (x2)	20A	C	20A	4-011, 4-012 PC/CONV (x6)	12	1.08	0.54
0.51	1.02	13	AC-4-1	15A	A	20A	4-013, 4-014 PC/CONV (x6)	14	1.08	0.54
0.38	0.75	15	WATER COOLER	20A	B	20A	4-015, 4-016 PC/CONV (x6)	16	1.08	0.54
0.50	1.00	17	4-000A, 4-019, 4-021 AV EQUIP (x4)	20A	C	20A	4-017, 4-018 PC/CONV (x6)	18	1.08	0.54
0.00	0.00	19	SPARE	20A	A	20A	4-000, 4-019, 4-021 CONV (x8)	20	1.44	0.50
0.00	0.00	21	SPARE	20A	B	20A	4-022, 4-023 PC/CONV (x6)	22	1.08	0.54
0.25	0.72	23	4-040, 4-042 WC CONV (x4)	20A	C	20A	4-024, 4-025 PC/CONV (x6)	24	1.08	0.54
0.50	1.00	25	4-003, 4-038 AV EQUIP (x4)	20A	A	20A	4-026, 4-027 PC/CONV (x6)	26	1.08	0.54
0.50	1.00	27	4-019, 4-021 AV EQUIP (x4)	20A	B	20A	4-028, 4-029 PC/CONV (x6)	28	1.08	0.54
0.50	1.00	29	4-001 PANTRY REFRIGERATOR (x1)	20A	C	20A	4-031, 4-032 PC/CONV (x8)	30	1.44	0.72
0.38	1.08	31	4-050 OPEN OFF CONV (x6)	20A	A	20A	4-033 PC/CONV (x6)	32	1.08	0.54
0.38	1.08	33	4-051 OPEN OFF CONV (x6)	20A	B	20A	4-035, 4-036 PC/CONV (x6)	34	1.08	0.54
0.50	1.00	35	4-001 PANTRY REFRIGERATOR (x1)	20A	C	20A	4-038 CONV/AV EQUIP (x5)	36	1.00	0.50
0.00	0.00	37	SPARE	20A	A	20A	4-039 PANTRY CONV (x5)	38	1.00	0.35
0.00	0.00	39	SPARE	20A	B	20A	4-DC01, 4-EC01, 4-JC01, 4-000A CONV (x4)	40	0.72	0.25
0.00	0.00	41	SPARE	20A	C	20A	4-008, 4-009, 4-032 CONV (x7)	42	1.26	0.44
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
7.39	15.65	120/208	3 Ø	4 W					23.16	10.78

SKE-017.0 PER ADDENDUM 3

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-4B

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.72	1.44	1	OPEN OFFICE PC/CONV (x8)	20A	A	20A	OPEN OFFICE PC/CONV (x8)	2	1.44	0.72
0.72	1.44	3	OPEN OFFICE PC/CONV (x8)	20A	B	20A	OPEN OFFICE PC/CONV (x8)	4	1.44	0.72
0.72	1.44	5	OPEN OFFICE PC/CONV (x8)	20A	C	20A	OPEN OFFICE PC/CONV (x8)	6	1.44	0.72
0.36	0.72	7	OPEN OFFICE PC/CONV (x4)	20A	A	20A	OPEN OFFICE PC/CONV (x4)	8	0.72	0.36
0.72	1.44	9	OPEN OFFICE PC/CONV (x8)	20A	B	20A	OPEN OFFICE PC/CONV (x8)	10	1.44	0.72
0.72	1.44	11	OPEN OFFICE PC/CONV (x8)	20A	C	20A	OPEN OFFICE PC/CONV (x8)	12	1.44	0.72
0.05	0.10	13	UH-4-1	15A	A	20A	OPEN OFFICE PC/CONV (x7)	14	1.26	0.44
0.05	0.10	15	UH-4-2	20A	B	20A	OPEN OFFICE PC/CONV (x7)	16	1.26	0.44
0.00	0.00	17	SPARE	20A	C	20A	SPARE SKE-017.1 PER 4	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE ADDENDUM 3	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.06	8.12	120/208	3 Ø	4 W					10.44	4.84

SKE-017.1 PER ADDENDUM 3

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-4-IT

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.75	1.50	1	RACK 3	30A 3ϕ	A	30A 3ϕ	RACK 3	2	1.50	0.75
		3			B			4		
		5			C			6		
0.50	1.00	7	RACK 3	30A, 1ϕ	A	30A, 1ϕ	RACK 3	8	1.00	0.50
		9			B			10		
0.75	1.50	11	RACK 2	30A 3ϕ	C	30A 3ϕ	RACK 2	12	1.50	0.75
		13			A			14		
		15			B			16		
0.50	1.00	17	RACK 2	30A, 1ϕ	C	30A, 1ϕ	RACK 2	18	1.00	0.50
		19			A			20		
0.75	1.50	21	RACK 1	30A 3ϕ	B	30A 3ϕ	RACK 1	22	1.50	0.75
		23			C			24		
		25			A			26		
0.50	1.00	27	RACK 1	30A, 1ϕ	B	30A, 1ϕ	RACK 1	28	1.00	0.50
		29			C			30		
0.50	1.00	31	ADT PANEL	20A	A	20A	IDF CONV	32	1.00	0.50
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.25	8.50	120/208	3 Ø	4 W					8.50	4.25

SKE-017.1 PER ADDENDUM 3

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 50 AMPS
BRKR 50 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

Project Title

NEW ACADEMIC BUILDING

School of Public Health, State University of New York Health Science Center at Brooklyn

450 Clarkson Avenue Brooklyn, NY 11203

Owner
State University Construction Fund
353 Broadway
Albany, NY 12246
518.320.3200 tel
www.sucf.suny.edu

SUNY Downstate Medical Center
450 Clarkson Avenue
Brooklyn, NY 11203
718.270.1000 tel
www.downstate.edu

Architect
Ennead Architects, LLP
320 West 13th Street
New York, NY 10014-1278
212.807.7171 tel
212.807.5917 fax
www.ennead.com

Structural
Leslie E. Robertson Associates RLLP
30 Broad Street, 47-48th Floor
New York, NY 10004-2304
212.750.9000 tel
212.750.9002 fax
www.lera.com

MEP
Jaros, Baum & Bolles
80 Pine Street, 12th Floor
New York, NY 10005
212.530.9300 tel
212.269.5980 fax
www.jbb.com

Civil
Langan Engineering & Environmental Services
21 Penn Plaza
360 West 31st Street
New York, NY 10001
212.479.5400 tel
212.479.5444 fax
www.langan.com

Lab Planning
Jacobs Consultancy
303 South Broadway, Suite G20
Tarrytown, NY 10591
914.333.1110 tel
914.333.1109 fax
www.jacobsconsultancy.com

Landscape
SCAPE
Landscape Architecture PLLC
27 West 20th Street , Suite 1001
New York, NY 10011
212.462.2628 tel
212.462.4164 fax
www.scapestudio.com

Lighting
Horton Lees Brogden
Lighting Design
200 Park Ave South
Suite 1401
New York, NY 10003
212.674.5580 tel
212.254.2712 fax
www.hlblighting.com

Sustainability
Buro Happold Consulting
Engineers, PC
100 Broadway
New York, NY 10005
212.334.2025 tel
212.334.5528 fax
www.burohappold.com

AV / Acoustics
Cerami & Associates
405 Fifth Avenue
New York, New York 10018
212.370.1776 tel
www.ceramiassociates.com

Healthcare Simulation
Stantec
1500 Spring Garden
Suite 1100
Philadelphia, PA 19130
215.665.7065 tel
www.stantec.com

Code
Hughes Associates, Inc.
2 Mount Royal Avenue
Suite 420
Marlborough, MA 01752
508.624.7766 tel
www.hailfire.com

Signage
Two Twelve Associates
902 Broadway
Floor 20
New York, NY 10010
212.254.6670 tel
212.254.6614 fax
www.twotwelve.com

Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL
SCHEDULE SHEET 7

Date: April 10, 2012
Scale: N.T.S.
Phase:

SUCF Project Number: 14A91
Ennead Project Number: 0917

Sheet No.

E-506

PANEL DESIGNATIONS UP-5A

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	PROJECTOR SCREEN 5-006 (x1)	20A	A	20A	5-004 PANTRY CONV (x5)	2	1.00	0.35
0.50	1.00	3	PROJECTOR SCREEN 5-021 (x1)	20A	B	20A	5-006 CONV/AV EQUIP (x4)	4	1.00	0.50
0.50	1.00	5	PROJECTOR 5-006, 5-021 (x2)	20A	C	20A	5-007, 5-008 PC/CONV (x6)	6	1.08	0.54
0.51	1.02	7	AC-5-1	15A	A	20A	5-009, 5-011 PC/CONV (x8)	8	1.44	0.72
0.38	0.75	9	WATER COOLER	20A	B	20A	5-010, 5-012 PC/CONV (x8)	10	1.44	0.72
0.50	1.00	11	5-000A, 5-019, 5-021 AV EQUIP (x3)	20A	C	20A	5-012, 5-015, 5-016 PC/CONV (x8)	12	1.44	0.72
0.63	1.26	13	OPEN OFFICE PC/CONV (x7)	20A	A	20A	5-017, 5-018 PC/CONV (x6)	14	1.08	0.54
0.63	1.26	15	OPEN OFFICE PC/CONV (x7)	20A	B	20A	5-019, 5-020 PC/CONV (x6)	16	1.08	0.54
0.25	0.72	17	5-040, 5-042 WC CONV (x4)	20A	C	20A	5-021 CONV (x6)	18	1.08	0.38
0.25	0.72	19	5-044, 5-045 WC CONV (x4)	20A	A	20A	5-024, 5-025 PC/CONV (x6)	20	1.08	0.54
0.50	1.00	21	5-CR01, 5-JC01 CONV/AV EQUIP (x5)	20A	B	20A	5-027, 5-028 PC/CONV (x6)	22	1.08	0.54
0.50	1.00	23	5-006, 5-021 AV EQUIP (x4)	20A	C	20A	5-029, 5-026 PC/CONV (x8)	24	1.44	0.72
0.50	1.00	25	5-CR01, 5-035 AV EQUIP (x3)	20A	A	20A	5-030, 5-031 PC/CONV (x8)	26	1.44	0.72
0.13	0.25	27	TX-5-1	15A	B	20A	5-032, 5-033 PC/CONV (x8)	28	1.44	0.72
0.50	1.00	29	5-004 PANTRY REFRIGERATOR (x1)	20A	C	20A	5-034, 5-035 PC/CONV (x9)	30	1.62	0.81
0.38	1.08	31	5-050 OPEN OFF CONV (x6)	20A	A	20A	5-036 PC/CONV (x8)	32	1.44	0.72
0.25	0.72	33	5-051 OPEN OFF CONV (x4)	20A	B	20A	5-037 PC/CONV (x6)	34	1.08	0.54
0.50	1.00	35	4-001 PANTRY REFRIGERATOR (x1)	20A	C	20A	5-038 PC/CONV (x5)	36	0.90	0.45
0.00	0.00	37	SPARE	20A	A	20A	5-043, 5-039, 5-039A PANTRY/WC CONV (x7)	38	1.26	0.44
0.00	0.00	39	SPARE	20A	B	20A	5-040, 5-041 PC/CONV (x6)	40	1.08	0.54
0.00	0.00	41	SPARE	20A	C	20A	5-042, 5-DC01, 5-EC01 PC/CONV (x6)	42	1.08	0.54
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
7.90	16.78	120/208	3 Ø	4 W					25.58	12.29

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-5B

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.72	1.44	1	OPEN OFFICE PC/CONV (x8)	20A	A	20A	OPEN OFFICE PC/CONV (x8)	2	1.44	0.72
0.72	1.44	3	OPEN OFFICE PC/CONV (x8)	20A	B	20A	OPEN OFFICE PC/CONV (x8)	4	1.44	0.72
0.72	1.44	5	OPEN OFFICE PC/CONV (x8)	20A	C	20A	OPEN OFFICE PC/CONV (x8)	6	1.44	0.72
0.36	0.72	7	OPEN OFFICE PC/CONV (x4)	20A	A	20A	OPEN OFFICE PC/CONV (x4)	8	0.72	0.36
0.72	1.44	9	OPEN OFFICE PC/CONV (x8)	20A	B	20A	OPEN OFFICE PC/CONV (x6)	10	1.08	0.54
0.54	1.08	11	OPEN OFFICE PC/CONV (x6)	20A	C	20A	5-000B COPY EQUIP (x1)	12	1.00	0.50
0.50	1.00	13	5-000A COPY EQUIP (x1)	15A	A	20A	5-000B COPY EQUIP (x1)	14	1.00	0.50
0.50	1.00	15	5-000A COPY EQUIP (x1)	20A	B	20A	5-000B COPY EQUIP (x1)	16	1.00	0.50
0.50	1.00	17	5-000A COPY EQUIP (x1)	20A	C	20A	5-000B COPY CONV (x4)	18	0.72	0.36
0.36	0.72	19	5-000A COPY CONV (x4)	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
5.64	11.28	120/208	3 Ø	4 W					9.84	4.92

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-5-IT

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
		1			A			2		
0.75	1.50	3	RACK 3	30A 3ϕ	B	30A 3ϕ	RACK 3	4	1.50	0.75
		5			C			6		
0.50	1.00	7	RACK 3	30A, 1ϕ	A	30A, 1ϕ	RACK 3	8	1.00	0.50
		9			B			10		
		11			C			12		
0.75	1.50	13	RACK 2	30A 3ϕ	A	30A 3ϕ	RACK 2	14	1.50	0.75
		15			B			16		
0.50	1.00	17	RACK 2	30A, 1ϕ	C	30A, 1ϕ	RACK 2	18	1.00	0.50
		19			A			20		
		21			B			22		
0.75	1.50	23	RACK 1	30A 3ϕ	C	30A 3ϕ	RACK 1	24	1.50	0.75
		25			A			26		
0.50	1.00	27	RACK 1	30A, 1ϕ	B	30A, 1ϕ	RACK 1	28	1.00	0.50
		29			C			30		
0.50	1.00	31	ADT PANEL	20A	A	20A	IDF CONV	32	1.00	0.50
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.25	8.50	120/208	3 Ø	4 W					8.50	4.25

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 50 AMPS; BRKR 50 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-7A

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.51	1.02	1	AC-7-1	15A	A	20A	OPEN OFFICE AV EQUIP (x4)	2	1.00	0.50
0.38	0.75	3	WATER COOLER	20A	B	20A	EXTERNAL CONV (x2)	4	0.36	0.18
0.50	1.44	5	OPEN OFFICE CONV (x8)	20A	C	20A	STEAM STERILIZER CONTROLS	6	0.28	0.14
0.50	1.44	7	7-030, 7-CR02 CONV (x8)	20A	A	20A	STEAM STERILIZER GENERATOR	8	2.12	1.06
0.44	1.26	9	7-DC01, 7-EC01, 7-CR02 CONV (x7)	20A	B	20A	ICE FLAKER	10	0.65	0.33
0.44	1.26	11	7-CR01, 7-CR02 CONV (x7)	20A	C	20A	7-010 LAB BENCH (x1)	12	1.00	0.50
0.25	0.72	13	7-031, 7-032 WC CONV (x4)	20A	A	20A	7-010 LAB BENCH (x1)	14	1.00	0.50
0.50	1.00	15	7-CR01, 7-JC01, 7-033, 7-108A, 7-109B CONV/AV (x3)	20A	B	20A	7-010 LAB BENCH (x1)	16	1.00	0.50
0.72	1.44	17	7-002, 7-003 PC/CONV (x8)	20A	C	20A	7-010 LAB BENCH (x1)	18	1.00	0.50
0.72	1.44	19	7-004, 7-005 PC/CONV (x8)	20A	A	20A	7-010 LAB BENCH (x1)	20	1.00	0.50
0.54	1.08	21	7-006, OPEN OFFICE PC/CONV (x6)	20A	B	20A	7-010 LAB BENCH (x1)	22	1.00	0.50
0.72	1.44	23	OPEN OFFICE PC/CONV (x8)	20A	C	20A	7-010 LAB BENCH (x1)	24	1.00	0.50
0.72	1.44	25	OPEN OFFICE PC/CONV (x8)	20A	A	20A	7-010 LAB BENCH (x1)	26	1.00	0.50
0.72	1.44	27	OPEN OFFICE PC/CONV (x8)	20A	B	20A	7-010 LAB BENCH (x1)	28	1.00	0.50
0.72	1.44	29	OPEN OFFICE PC/CONV (x8)	20A	C	20A	7-010 LAB BENCH (x1)	30	1.00	0.50
0.72	1.44	31	OPEN OFFICE PC/CONV (x8)	20A	A	20A	7-023 FUME HOOD	32	1.00	0.50
0.72	1.44	33	OPEN OFFICE PC/CONV (x8)	20A	B	20A	7-016 FUME HOOD	34	1.00	0.50
0.44	1.26	35	OPEN OFFICE CONV (x7)	20A	C	20A	SPARE	36	0.00	0.00
0.50	1.00	37	PANTRY REFRIGERATOR (x1)	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
10.77	23.75	120/208	3 Ø	4 W					16.41	8.21

4 SKE-018.0 PER ADDENDUM 3

SKE-018.0 PER ADDENDUM 3

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-7B

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.32	0.90	1	7-010 OPEN LAB CONV (x5)	15A	A	20A	7-010 LAB BENCH (x1)	2	1.00	0.40
0.25	0.72	3	7-010 OPEN LAB CONV (x4)	20A	B	20A	7-010 LAB BENCH (x1)	4	1.00	0.40
0.25	0.72	5	7-010 OPEN LAB CONV (x4)	20A	C	20A	7-010 LAB BENCH (x1)	6	1.00	0.40
0.40	1.00	7	7-010 LAB BENCH (x1)	20A	A	20A	7-010 LAB BENCH (x1)	8	1.00	0.40
0.40	1.00	9	7-010 LAB BENCH (x1)	20A	B	20A	7-010 LAB BENCH (x1)	10	1.00	0.40
0.40	1.00	11	7-010 LAB BENCH (x1)	20A	C	20A	7-010 LAB BENCH (x1)	12	1.00	0.40
0.40	1.00	13	7-010 LAB BENCH (x1)	20A	A	20A	7-010 LAB BENCH (x1)	14	1.00	0.40
0.40	1.00	15	7-010 LAB BENCH (x1)	20A	B	20A	7-010 LAB BENCH (x1)	16	1.00	0.40
0.40	1.00	17	7-010 LAB BENCH (x1)	20A	C	20A	7-010 LAB BENCH (x1)	18	1.00	0.40
0.40	1.00	19	7-010 LAB BENCH (x1)	20A	A	20A	7-010 LAB BENCH (x1)	20	1.00	0.40
0.40	1.00	21	7-010 LAB BENCH (x1)	20A	B	20A	7-010 LAB BENCH (x1)	22	1.00	0.40
0.40	1.00	23	7-010 LAB BENCH (x1)	20A	C	20A	7-010 LAB BENCH (x1)	24	1.00	0.40
0.40	1.00	25	7-010 LAB BENCH (x1)	20A	A	20A	7-010 LAB BENCH (x1)	26	1.00	0.40
0.40	1.00	27	7-010 LAB BENCH (x1)	20A	B	20A	7-010 LAB BENCH (x1)	28	1.00	0.40
0.40	1.00	29	7-010 LAB BENCH (x1)	20A	C	20A	7-010 LAB BENCH (x1)	30	1.00	0.40
0.40	1.00	31	7-010 LAB BENCH (x1)	20A	A	20A	7-010 LAB BENCH (x1)	32	1.00	0.40
0.40	1.00	33	7-010 LAB BENCH (x1)	20A	B	20A	7-010 LAB BENCH (x1)	34	1.00	0.40
0.00	0.00	35	SPARE	20A	C	20A	7-010 LAB BENCH (x1)	36	1.00	0.40
0.00	0.00	37	SPARE	20A	A	20A	7-010 LAB BENCH (x1)	38	1.00	0.40
0.00	0.00	39	SPARE	20A	B	20A	7-010 LAB BENCH (x1)	40	1.00	0.40
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
6.42	16.34	120/208	3 Ø	4 W					20.00	8.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-7-IT

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
		1			A			2		
0.75	1.50	3	RACK 3	30A 3ϕ	B	30A 3ϕ	RACK 3	4	1.50	0.75
		5			C			6		
0.50	1.00	7	RACK 3	30A, 1ϕ	A	30A, 1ϕ	RACK 3	8	1.00	0.50
		9			B			10		
		11			C			12		
0.75	1.50	13	RACK 2	30A 3ϕ	A	30A 3ϕ	RACK 2	14	1.50	0.75
		15			B			16		
0.50	1.00	17	RACK 2	30A, 1ϕ	C	30A, 1ϕ	RACK 2	18	1.00	0.50
		19			A			20		
		21			B			22		
0.75	1.50	23	RACK 1	30A 3ϕ	C	30A 3ϕ	RACK 1	24	1.50	0.75
		25			A			26		
0.50	1.00	27	RACK 1	30A, 1ϕ	B	30A, 1ϕ	RACK 1	28	1.00	0.50
		29			C			30		
0.50	1.00	31	ADT PANEL	20A	A	20A	IDF CONV	32	1.00	0.50
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.25	8.50	120/208	3 Ø	4 W					8.50	4.25

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 50 AMPS; BRKR 50 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

Project Title

NEW ACADEMIC BUILDING

School of Public Health, State University of New York Health Science Center at Brooklyn

450 Clarkson Avenue Brooklyn, NY 11203

Owner
State University Construction Fund
353 Broadway
Albany, NY 12246
518.320.3200 tel
www.sucf.suny.edu

SUNY Downstate Medical Center
450 Clarkson Avenue
Brooklyn, NY 11203
718.270.1000 tel
www.downstate.edu

Architect
Ennead Architects, LLP
320 West 13th Street
New York, NY 10014-1278
212.807.7171 tel
212.807.5917 fax
www.ennead.com

Structural
Leslie E. Robertson Associates RLLP
30 Broad Street, 47-48th Floor
New York, NY 10004-2304
212.750.9000 tel
212.750.9002 fax
www.lera.com

MEP
Jaros, Baum & Bolles
80 Pine Street, 12th Floor
New York, NY 10005
212.530.9300 tel
212.269.5980 fax
www.jbb.com

Civil
Langan Engineering & Environmental Services
21 Penn Plaza
360 West 31st Street
New York, NY 10001
212.479.5400 tel
212.479.5444 fax
www.langan.com

Lab Planning
Jacobs Consultancy
303 South Broadway, Suite G20
Tarrytown, NY 10591
914.333.1110 tel
914.333.1109 fax
www.jacobsconsultancy.com

Landscape
SCAPE
Landscape Architecture PLLC
27 West 20th Street , Suite 1001
New York, NY 10011
212.462.2628 tel
212.462.4164 fax
www.scapestudio.com

Lighting
Horton Lees Brogden Lighting Design
200 Park Ave South
Suite 1401
New York, NY 10003
212.674.5580 tel
212.254.2712 fax
www.hlblighting.com

Sustainability
Buro Happold Consulting Engineers, PC
100 Broadway
New York, NY 10005
212.334.2025 tel
212.334.5528 fax
www.burohappold.com

AV / Acoustics
Cerami & Associates
405 Fifth Avenue
New York, New York 10018
212.370.1776 tel
www.ceramiassociates.com

Healthcare Simulation
Stantec
1500 Spring Garden
Suite 1100
Philadelphia, PA 19130
215.665.7065 tel
www.stantec.com

Code
Hughes Associates, Inc.
2 Mount Royal Avenue
Suite 420
Marlborough, MA 01752
508.624.7766 tel
www.haifire.com

Signage
Two Twelve Associates
902 Broadway
Floor 20
New York, NY 10010
212.254.6670 tel
212.254.6614 fax
www.twotwelve.com

Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL SCHEDULE SHEET 8

Date: April 10, 2012
Scale: N.T.S.
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-507

PANEL DESIGNATIONS UP-5A

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	PROJECTOR SCREEN 5-006 (x1)	20A	A	20A	5-004 PANTRY CONV (x5)	2	1.00	0.35
0.50	1.00	3	PROJECTOR SCREEN 5-021 (x1)	20A	B	20A	5-006 CONV/AV EQUIP (x4)	4	1.00	0.50
0.50	1.00	5	PROJECTOR 5-006, 5-021 (x2)	20A	C	20A	5-007, 5-008 PC/CONV (x6)	6	1.08	0.54
0.51	1.02	7	AC-5-1	15A	A	20A	5-009, 5-011 PC/CONV (x8)	8	1.44	0.72
0.38	0.75	9	WATER COOLER	20A	B	20A	5-010, 5-012 PC/CONV (x8)	10	1.44	0.72
0.50	1.00	11	5-000A, 5-019, 5-021 AV EQUIP (x3)	20A	C	20A	5-012, 5-015, 5-016 PC/CONV (x8)	12	1.44	0.72
0.63	1.26	13	OPEN OFFICE PC/CONV (x7)	20A	A	20A	5-017, 5-018 PC/CONV (x6)	14	1.08	0.54
0.63	1.26	15	OPEN OFFICE PC/CONV (x7)	20A	B	20A	5-019, 5-020 PC/CONV (x6)	16	1.08	0.54
0.25	0.72	17	5-040, 5-042 WC CONV (x4)	20A	C	20A	5-021 CONV (x6)	18	1.08	0.38
0.25	0.72	19	5-044, 5-045 WC CONV (x4)	20A	A	20A	5-024, 5-025 PC/CONV (x6)	20	1.08	0.54
0.50	1.00	21	5-CR01, 5-JC01 CONV/AV EQUIP (x5)	20A	B	20A	5-027, 5-028 PC/CONV (x6)	22	1.08	0.54
0.50	1.00	23	5-006, 5-021 AV EQUIP (x4)	20A	C	20A	5-029, 5-026 PC/CONV (x8)	24	1.44	0.72
0.50	1.00	25	5-CR01, 5-035 AV EQUIP (x3)	20A	A	20A	5-030, 5-031 PC/CONV (x8)	26	1.44	0.72
0.13	0.25	27	TX-5-1	15A	B	20A	5-032, 5-033 PC/CONV (x8)	28	1.44	0.72
0.50	1.00	29	5-004 PANTRY REFRIGERATOR (x1)	20A	C	20A	5-034, 5-035 PC/CONV (x9)	30	1.62	0.81
0.38	1.08	31	5-050 OPEN OFF CONV (x6)	20A	A	20A	5-036 PC/CONV (x8)	32	1.44	0.72
0.25	0.72	33	5-051 OPEN OFF CONV (x4)	20A	B	20A	5-037 PC/CONV (x6)	34	1.08	0.54
0.50	1.00	35	4-001 PANTRY REFRIGERATOR (x1)	20A	C	20A	5-038 PC/CONV (x5)	36	0.90	0.45
0.00	0.00	37	SPARE	20A	A	20A	5-043, 5-039, 5-039A PANTRY/WC CONV (x7)	38	1.26	0.44
0.00	0.00	39	SPARE	20A	B	20A	5-040, 5-041 PC/CONV (x6)	40	1.08	0.54
0.00	0.00	41	SPARE	20A	C	20A	5-042, 5-DC01, 5-EC01 PC/CONV (x6)	42	1.08	0.54
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
7.90	16.78	120/208	3 Ø	4 W					25.58	12.29

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-5B

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.72	1.44	1	OPEN OFFICE PC/CONV (x8)	20A	A	20A	OPEN OFFICE PC/CONV (x8)	2	1.44	0.72
0.72	1.44	3	OPEN OFFICE PC/CONV (x8)	20A	B	20A	OPEN OFFICE PC/CONV (x8)	4	1.44	0.72
0.72	1.44	5	OPEN OFFICE PC/CONV (x8)	20A	C	20A	OPEN OFFICE PC/CONV (x8)	6	1.44	0.72
0.36	0.72	7	OPEN OFFICE PC/CONV (x4)	20A	A	20A	OPEN OFFICE PC/CONV (x4)	8	0.72	0.36
0.72	1.44	9	OPEN OFFICE PC/CONV (x8)	20A	B	20A	OPEN OFFICE PC/CONV (x6)	10	1.08	0.54
0.54	1.08	11	OPEN OFFICE PC/CONV (x6)	20A	C	20A	5-000B COPY EQUIP (x1)	12	1.00	0.50
0.50	1.00	13	5-000A COPY EQUIP (x1)	15A	A	20A	5-000B COPY EQUIP (x1)	14	1.00	0.50
0.50	1.00	15	5-000A COPY EQUIP (x1)	20A	B	20A	5-000B COPY EQUIP (x1)	16	1.00	0.50
0.50	1.00	17	5-000A COPY EQUIP (x1)	20A	C	20A	5-000B COPY CONV (x4)	18	0.72	0.36
0.36	0.72	19	5-000A COPY CONV (x4)	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
5.64	11.28	120/208	3 Ø	4 W					9.84	4.92

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-5-IT

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
		1			A			2		
0.75	1.50	3	RACK 3	30A 3ϕ	B	30A 3ϕ	RACK 3	4	1.50	0.75
		5			C			6		
0.50	1.00	7	RACK 3	30A, 1ϕ	A	30A, 1ϕ	RACK 3	8	1.00	0.50
		9			B			10		
		11			C			12		
0.75	1.50	13	RACK 2	30A 3ϕ	A	30A 3ϕ	RACK 2	14	1.50	0.75
		15			B			16		
0.50	1.00	17	RACK 2	30A, 1ϕ	C	30A, 1ϕ	RACK 2	18	1.00	0.50
		19			A			20		
		21			B			22		
0.75	1.50	23	RACK 1	30A 3ϕ	C	30A 3ϕ	RACK 1	24	1.50	0.75
		25			A			26		
0.50	1.00	27	RACK 1	30A, 1ϕ	B	30A, 1ϕ	RACK 1	28	1.00	0.50
		29			C			30		
0.50	1.00	31	ADT PANEL	20A	A	20A	IDF CONV	32	1.00	0.50
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.25	8.50	120/208	3 Ø	4 W					8.50	4.25

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 50 AMPS; BRKR 50 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-7A

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.51	1.02	1	AC-7-1	15A	A	20A	OPEN OFFICE AV EQUIP (x4)	2	1.00	0.50
0.38	0.75	3	WATER COOLER	20A	B	20A	EXTERNAL CONV (x2)	4	0.36	0.18
0.50	1.44	5	OPEN OFFICE CONV (x8)	20A	C	20A	STEAM STERILIZER CONTROLS	6	0.28	0.14
0.50	1.44	7	7-030, 7-CR02 CONV (x8)	20A	A	20A	STEAM STERILIZER GENERATOR	8	2.12	1.06
0.44	1.26	9	7-DC01, 7-EC01, 7-CR02 CONV (x7)	20A	B	20A	ICE FLAKER	10	0.65	0.33
0.44	1.26	11	7-CR01, 7-CR02 CONV (x7)	20A	C	20A	7-010 LAB BENCH (x1)	12	1.00	0.50
0.25	0.72	13	7-031, 7-032 WC CONV (x4)	20A	A	20A	7-010 LAB BENCH (x1)	14	1.00	0.50
0.50	1.00	15	7-CR01, 7-JC01, 7-033, 7-108A, 7-109B CONV/AV (x3)	20A	B	20A	7-010 LAB BENCH (x1)	16	1.00	0.50
0.72	1.44	17	7-002, 7-003 PC/CONV (x8)	20A	C	20A	7-010 LAB BENCH (x1)	18	1.00	0.50
0.72	1.44	19	7-004, 7-005 PC/CONV (x8)	20A	A	20A	7-010 LAB BENCH (x1)	20	1.00	0.50
0.54	1.08	21	7-006, OPEN OFFICE PC/CONV (x6)	20A	B	20A	7-010 LAB BENCH (x1)	22	1.00	0.50
0.72	1.44	23	OPEN OFFICE PC/CONV (x8)	20A	C	20A	7-010 LAB BENCH (x1)	24	1.00	0.50
0.72	1.44	25	OPEN OFFICE PC/CONV (x8)	20A	A	20A	7-010 LAB BENCH (x1)	26	1.00	0.50
0.72	1.44	27	OPEN OFFICE PC/CONV (x8)	20A	B	20A	7-010 LAB BENCH (x1)	28	1.00	0.50
0.72	1.44	29	OPEN OFFICE PC/CONV (x8)	20A	C	20A	7-010 LAB BENCH (x1)	30	1.00	0.50
0.72	1.44	31	OPEN OFFICE PC/CONV (x8)	20A	A	20A	7-023 FUME HOOD	32	1.00	0.50
0.72	1.44	33	OPEN OFFICE PC/CONV (x8)	20A	B	20A	7-016 FUME HOOD	34	1.00	0.50
0.44	1.26	35	OPEN OFFICE CONV (x7)	20A	C	20A	SPARE	36	0.00	0.00
0.50	1.00	37	PANTRY REFRIGERATOR (x1)	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
10.77	23.75	120/208	3 Ø	4 W					16.41	8.21

4 SKE-018.0 PER ADDENDUM 3

SKE-018.0 PER ADDENDUM 3

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-7B

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.32	0.90	1	7-010 OPEN LAB CONV (x5)	15A	A	20A	7-010 LAB BENCH (x1)	2	1.00	0.40
0.25	0.72	3	7-010 OPEN LAB CONV (x4)	20A	B	20A	7-010 LAB BENCH (x1)	4	1.00	0.40
0.25	0.72	5	7-010 OPEN LAB CONV (x4)	20A	C	20A	7-010 LAB BENCH (x1)	6	1.00	0.40
0.40	1.00	7	7-010 LAB BENCH (x1)	20A	A	20A	7-010 LAB BENCH (x1)	8	1.00	0.40
0.40	1.00	9	7-010 LAB BENCH (x1)	20A	B	20A	7-010 LAB BENCH (x1)	10	1.00	0.40
0.40	1.00	11	7-010 LAB BENCH (x1)	20A	C	20A	7-010 LAB BENCH (x1)	12	1.00	0.40
0.40	1.00	13	7-010 LAB BENCH (x1)	20A	A	20A	7-010 LAB BENCH (x1)	14	1.00	0.40
0.40	1.00	15	7-010 LAB BENCH (x1)	20A	B	20A	7-010 LAB BENCH (x1)	16	1.00	0.40
0.40	1.00	17	7-010 LAB BENCH (x1)	20A	C	20A	7-010 LAB BENCH (x1)	18	1.00	0.40
0.40	1.00	19	7-010 LAB BENCH (x1)	20A	A	20A	7-010 LAB BENCH (x1)	20	1.00	0.40
0.40	1.00	21	7-010 LAB BENCH (x1)	20A	B	20A	7-010 LAB BENCH (x1)	22	1.00	0.40
0.40	1.00	23	7-010 LAB BENCH (x1)	20A	C	20A	7-010 LAB BENCH (x1)	24	1.00	0.40
0.40	1.00	25	7-010 LAB BENCH (x1)	20A	A	20A	7-010 LAB BENCH (x1)	26	1.00	0.40
0.40	1.00	27	7-010 LAB BENCH (x1)	20A	B	20A	7-010 LAB BENCH (x1)	28	1.00	0.40
0.40	1.00	29	7-010 LAB BENCH (x1)	20A	C	20A	7-010 LAB BENCH (x1)	30	1.00	0.40
0.40	1.00	31	7-010 LAB BENCH (x1)	20A	A	20A	7-010 LAB BENCH (x1)	32	1.00	0.40
0.40	1.00	33	7-010 LAB BENCH (x1)	20A	B	20A	7-010 LAB BENCH (x1)	34	1.00	0.40
0.00	0.00	35	SPARE	20A	C	20A	7-010 LAB BENCH (x1)	36	1.00	0.40
0.00	0.00	37	SPARE	20A	A	20A	7-010 LAB BENCH (x1)	38	1.00	0.40
0.00	0.00	39	SPARE	20A	B	20A	7-010 LAB BENCH (x1)	40	1.00	0.40
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
6.42	16.34	120/208	3 Ø	4 W					20.00	8.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

PANEL DESIGNATIONS UP-7-IT

KVA | AIC 14K | POLES 42 | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
		1			A			2		
0.75	1.50	3	RACK 3	30A 3ϕ	B	30A 3ϕ	RACK 3	4	1.50	0.75
		5			C			6		
0.50	1.00	7	RACK 3	30A, 1ϕ	A	30A, 1ϕ	RACK 3	8	1.00	0.50
		9			B			10		
		11			C			12		
0.75	1.50	13	RACK 2	30A 3ϕ	A	30A 3ϕ	RACK 2	14	1.50	0.75
		15			B			16		
0.50	1.00	17	RACK 2	30A, 1ϕ	C	30A, 1ϕ	RACK 2	18	1.00	0.50
		19			A			20		
		21			B			22		
0.75	1.50	23	RACK 1	30A 3ϕ	C	30A 3ϕ	RACK 1	24	1.50	0.75
		25			A			26		
0.50	1.00	27	RACK 1	30A, 1ϕ	B	30A, 1ϕ	RACK 1	28	1.00	0.50
		29			C			30		
0.50	1.00	31	ADT PANEL	20A	A	20A	IDF CONV	32	1.00	0.50
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.25	8.50	120/208	3 Ø	4 W					8.50	4.25

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 50 AMPS; BRKR 50 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

Project Title

NEW ACADEMIC BUILDING

School of Public Health, State University of New York Health Science Center at Brooklyn

450 Clarkson Avenue Brooklyn, NY 11203

Owner
State University Construction Fund
353 Broadway
Albany, NY 12246
518.320.3200 tel
www.sucf.suny.edu

SUNY Downstate Medical Center
450 Clarkson Avenue
Brooklyn, NY 11203
718.270.1000 tel
www.downstate.edu

Architect
Ennead Architects, LLP
320 West 13th Street
New York, NY 10014-1278
212.807.7171 tel
212.807.5917 fax
www.ennead.com

Structural
Leslie E. Robertson Associates RLLP
30 Broad Street, 47-48th Floor
New York, NY 10004-2304
212.750.9000 tel
212.750.9002 fax
www.lera.com

MEP
Jaros, Baum & Bolles
80 Pine Street, 12th Floor
New York, NY 10005
212.530.9300 tel
212.269.5980 fax
www.jbb.com

Civil
Langan Engineering & Environmental Services
21 Penn Plaza
360 West 31st Street
New York, NY 10001
212.479.5400 tel
212.479.5444 fax
www.langan.com

Lab Planning
Jacobs Consultancy
303 South Broadway, Suite G20
Tarrytown, NY 10591
914.333.1110 tel
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www.jacobsconsultancy.com

Landscape
SCAPE
Landscape Architecture PLLC
27 West 20th Street , Suite 1001
New York, NY 10011
212.462.2628 tel
212.462.4164 fax
www.scapestudio.com

Lighting
Horton Lees Brogden Lighting Design
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Suite 1401
New York, NY 10003
212.674.5580 tel
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www.hlblighting.com

Sustainability
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100 Broadway
New York, NY 10005
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www.burohappold.com

AV / Acoustics
Cerami & Associates
405 Fifth Avenue
New York, New York 10018
212.370.1776 tel
www.ceramiassociates.com

Healthcare Simulation
Stantec
1500 Spring Garden
Suite 1100
Philadelphia, PA 19130
215.665.7065 tel
www.stantec.com

Code
Hughes Associates, Inc.
2 Mount Royal Avenue
Suite 420
Marlborough, MA 01752
508.624.7766 tel
www.haifire.com

Signage
Two Twelve Associates
902 Broadway
Floor 20
New York, NY 10010
212.254.6670 tel
212.254.6614 fax
www.twotwelve.com

Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL SCHEDULE SHEET 8

Date: April 10, 2012
Scale: N.T.S.
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-507

UP-8A

KVA | PANEL DESIGNATIONS **UP-8A** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.51	1.02	1	AC-8-1	15A	A	20A	OPEN OFFICE AV EQUIP (x4)	2	1.00	0.50
0.38	0.75	3	WATER COOLER	20A	B	20A	EXTERNAL CONV (x2)	4	1.00	0.50
0.50	1.44	5	OPEN OFFICE CONV (x8)	20A	C	20A	STEAM STERILIZER CONTROLS	6	0.28	0.14
0.50	1.44	7	8-030, 8-CR02 CONV (x8)	20A	A	20A	STEAM STERILIZER GENERATOR	8	2.12	1.06
0.44	1.26	9	8-DC01, 8-EC01, 8-CR02 CONV (x7)	20A	B	20A	ICE FLAKER	10	0.65	0.33
0.44	1.26	11	8-CR01, 8-CR02 CONV (x7)	20A	C	20A	8-010 LAB BENCH (x1)	12	1.00	0.40
0.25	0.72	13	8-031, 8-032 WC CONV (x4)	20A	A	20A	8-010 LAB BENCH (x1)	14	1.00	0.40
0.35	1.00	15	8-CR01, 8-CR03, 8-JC01, CONV/AV (x3)	20A	B	20A	8-010 LAB BENCH (x1)	16	1.00	0.40
0.72	1.44	17	8-002, 8-003 PC/CONV (x8)	20A	C	20A	8-010 LAB BENCH (x1)	18	1.00	0.40
0.72	1.44	19	8-004, 8-005 PC/CONV (x8)	20A	A	20A	8-010 LAB BENCH (x1)	20	1.00	0.40
0.54	1.08	21	8-006, OPEN OFFICE PC/CONV (x6)	20A	B	20A	8-010 LAB BENCH (x1)	22	1.00	0.40
0.72	1.44	23	OPEN OFFICE PC/CONV (x8)	20A	C	20A	8-010 LAB BENCH (x1)	24	1.00	0.40
0.72	1.44	25	OPEN OFFICE PC/CONV (x8)	20A	A	20A	8-010 LAB BENCH (x1)	26	1.00	0.40
0.72	1.44	27	OPEN OFFICE PC/CONV (x8)	20A	B	20A	8-010 LAB BENCH (x1)	28	1.00	0.40
0.72	1.44	29	OPEN OFFICE PC/CONV (x8)	20A	C	20A	8-010 LAB BENCH (x1)	30	1.00	0.40
0.72	1.44	31	OPEN OFFICE PC/CONV (x8)	20A	A	20A	8-023 FUME HOOD	32	1.00	0.50
0.72	1.44	33	OPEN OFFICE PC/CONV (x8)	20A	B	20A	8-016 FUME HOOD	34	1.00	0.50
0.44	1.26	35	OPEN OFFICE CONV (x7)	20A	C	20A	SPARE	36	0.00	0.00
0.50	1.00	37	PANTRY REGRIGERATOR (x1)	20A	A	20A	SPARE	38	0.00	0.00
0.50	1.00	39	8-006 AV EQUIP (x2)	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
11.12	24.75	120/208	3 Ø	4 W					17.05	7.53

4 SKE-019.0 PER ADDENDUM 3

4 SKE-019.0 PER ADDENDUM 3

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

UP-8B

KVA | PANEL DESIGNATIONS **UP-8B** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.45	0.90	1	8-010 OPEN LAB CONV (x5)	15A	A	20A	8-010 LAB BENCH (x1)	2	1.00	0.40
0.36	0.72	3	8-010 OPEN LAB CONV (x4)	20A	B	20A	8-010 LAB BENCH (x1)	4	1.00	0.40
0.36	0.72	5	8-010 OPEN LAB CONV (x4)	20A	C	20A	8-010 LAB BENCH (x1)	6	1.00	0.40
0.40	1.00	7	8-010 LAB BENCH (x1)	20A	A	20A	8-010 LAB BENCH (x1)	8	1.00	0.40
0.40	1.00	9	8-010 LAB BENCH (x1)	20A	B	20A	8-010 LAB BENCH (x1)	10	1.00	0.40
0.40	1.00	11	8-010 LAB BENCH (x1)	20A	C	20A	8-010 LAB BENCH (x1)	12	1.00	0.40
0.40	1.00	13	8-010 LAB BENCH (x1)	20A	A	20A	8-010 LAB BENCH (x1)	14	1.00	0.40
0.40	1.00	15	8-010 LAB BENCH (x1)	20A	B	20A	8-010 LAB BENCH (x1)	16	1.00	0.40
0.40	1.00	17	8-010 LAB BENCH (x1)	20A	C	20A	8-010 LAB BENCH (x1)	18	1.00	0.40
0.40	1.00	19	8-010 LAB BENCH (x1)	20A	A	20A	8-010 LAB BENCH (x1)	20	1.00	0.40
0.40	1.00	21	8-010 LAB BENCH (x1)	20A	B	20A	8-010 LAB BENCH (x1)	22	1.00	0.40
0.40	1.00	23	8-010 LAB BENCH (x1)	20A	C	20A	8-010 LAB BENCH (x1)	24	1.00	0.40
0.40	1.00	25	8-010 LAB BENCH (x1)	20A	A	20A	8-010 LAB BENCH (x1)	26	1.00	0.40
0.40	1.00	27	8-010 LAB BENCH (x1)	20A	B	20A	8-010 LAB BENCH (x1)	28	1.00	0.40
0.40	1.00	29	8-010 LAB BENCH (x1)	20A	C	20A	8-010 LAB BENCH (x1)	30	1.00	0.40
0.40	1.00	31	8-010 LAB BENCH (x1)	20A	A	20A	8-010 LAB BENCH (x1)	32	1.00	0.40
0.40	1.00	33	8-010 LAB BENCH (x1)	20A	B	20A	8-010 LAB BENCH (x1)	34	1.00	0.40
0.00	0.00	35	SPARE	20A	C	20A	8-010 LAB BENCH (x1)	36	1.00	0.40
0.00	0.00	37	SPARE	20A	A	20A	8-010 LAB BENCH (x1)	38	1.00	0.40
0.00	0.00	39	SPARE	20A	B	20A	8-010 LAB BENCH (x1)	40	1.00	0.40
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
6.77	16.34	120/208	3 Ø	4 W					20.00	8.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

UP-8-IT

KVA | PANEL DESIGNATIONS **UP-8-IT** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.75	1.50	1	RACK 3	30A 3ϕ	A	30A 3ϕ	RACK 3	2	1.50	0.75
		3			B			4		
		5			C			6		
0.50	1.00	7	RACK 3	30A, 1ϕ	A	30A, 1ϕ	RACK 3	8	1.00	0.50
		9			B			10		
0.75	1.50	11	RACK 2	30A 3ϕ	C	30A 3ϕ	RACK 2	12	1.50	0.75
		13			A			14		
		15			B			16		
0.50	1.00	17	RACK 2	30A, 1ϕ	C	30A, 1ϕ	RACK 2	18	1.00	0.50
		19			A			20		
0.75	1.50	21	RACK 1	30A 3ϕ	B	30A 3ϕ	RACK 1	22	1.50	0.75
		23			C			24		
		25			A			26		
0.50	1.00	27	RACK 1	30A, 1ϕ	B	30A, 1ϕ	RACK 1	28	1.00	0.50
		29			C			30		
0.50	1.00	31	ADT PANEL	20A	A	20A	IDF CONV	32	1.00	0.50
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.25	8.50	120/208	3 Ø	4 W					8.50	4.25

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 50 AMPS; BRKR 50 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

UP-PH

KVA | PANEL DESIGNATIONS **UP-PH** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	BOILER CONTROL PANEL	20A	A	20A	GENERATOR ROOM CONV (x4)	2	0.72	0.25
0.10	0.20	3	GX-2	20A	B	20A	EXTERNAL CONV (x3)	4	0.54	0.19
0.10	0.20	5	TX-2	20A	C	20A	CONV (x6)	6	1.08	0.38
0.38	0.75	7	WATER COOLER	20A	A	20A	CONV (x6)	8	1.08	0.38
0.50	1.00	9	RO SYSTEM	20A	B	20A	CONV (x5)	10	0.90	0.32
0.50	1.00	11	RO SYSTEM	20A	C	20A	ROOF EXTERNAL CONV (x4)	12	0.72	0.25
0.50	1.00	13	RO SYSTEM	20A	A	20A	ROOF EXTERNAL CONV (x3)	14	0.54	0.19
0.50	1.00	15	RO SYSTEM	20A	B	20A	BOILER CONTROL PANEL	16	1.00	0.50
0.50	1.00	17	DUPLEX DOMESTIC WATER HEATERS	20A	C	20A	CHWCP-3	18	1.38	1.04
0.50	1.00	19	DUPLEX DOMESTIC WATER HEATERS	20A	A	20A	CHWCP-4	20	1.38	1.04
0.05	0.10	21	UH-M-1	20A	B	20A	CHWCP-5	22	1.38	1.04
0.00	0.00	23	SPARE	20A	C	20A	CHWCP-6	24	1.38	1.04
0.00	0.00	25	SPARE	20A	A	20A	CHWCP-7	26	1.38	1.04
0.00	0.00	27	SPARE	20A	B	20A	CHWCP-8	28	1.38	1.04
0.00	0.00	29	SPARE	20A	C	20A	CHWCP-9	30	0.82	0.62
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.13	8.25	120/208	3 Ø	4 W					15.68	9.28

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

UP-ELEV

SKE-019.1 PER ADDENDUM 3

KVA | PANEL DESIGNATIONS **UP-ELEV** | AIC **14K** | POLES **24** (4) | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.18	0.36	1	CONV (x2)	20A	A	20A	SPARE	2	0.00	0.00
0.00	0.00	3	SPARE	20A	B	20A	SPARE	4	0.00	0.00
0.00	0.00	5	SPARE	20A	C	20A	SPARE	6	0.00	0.00
0.00	0.00	7	SPARE	20A	A	20A	SPARE	8	0.00	0.00
0.00	0.00	9	SPARE	20A	B	20A	SPARE	10	0.00	0.00
0.00	0.00	11	SPARE	20A	C	20A	SPARE	12	0.00	0.00
0.00	0.00	13	SPARE	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
0.18	0.36	120/208	3 Ø	4 W					0.00	0.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 50 AMPS; BRKR 50 AMPS (4)

SKE-019.1 PER ADDENDUM 3

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

SKE-019.1 PER ADDENDUM 3

4

EUP-B

KVA | PANEL DESIGNATIONS **EUP-B** | AIC **10K** | POLES **24** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.00	0.00	1	SPARE	20A	A	20A	SPARE	2	0.00	0.00
0.00	0.00	3	SPARE	20A	B	20A	SPARE	4	0.00	0.00
0.00	0.00	5	SPARE	20A	C	20A	SPARE	6	0.00	0.00
0.00	0.00	7	SPARE	20A	A	20A	SPARE	8	0.00	0.00
0.00	0.00	9	SPARE	20A	B	20A	SPARE	10	0.00	0.00
0.00	0.00	11	SPARE	20A	C	20A	SPARE	12	0.00	0.00
0.00	0.00	13	SPARE	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
0.00	0.00	120/208	3 Ø	4 W					0.00	0.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 50 AMPS; BRKR 50 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

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Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL SCHEDULE SHEET 9

Date: April 10, 2012
Scale: N.T.S.
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-508

UP-8A

KVA | PANEL DESIGNATIONS **UP-8A** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.51	1.02	1	AC-8-1	15A	A	20A	OPEN OFFICE AV EQUIP (x4)	2	1.00	0.50
0.38	0.75	3	WATER COOLER	20A	B	20A	EXTERNAL CONV (x2)	4	1.00	0.50
0.50	1.44	5	OPEN OFFICE CONV (x8)	20A	C	20A	STEAM STERILIZER CONTROLS	6	0.28	0.14
0.50	1.44	7	8-030, 8-CR02 CONV (x8)	20A	A	20A	STEAM STERILIZER GENERATOR	8	2.12	1.06
0.44	1.26	9	8-DC01, 8-EC01, 8-CR02 CONV (x7)	20A	B	20A	ICE FLAKER	10	0.65	0.33
0.44	1.26	11	8-CR01, 8-CR02 CONV (x7)	20A	C	20A	8-010 LAB BENCH (x1)	12	1.00	0.40
0.25	0.72	13	8-031, 8-032 WC CONV (x4)	20A	A	20A	8-010 LAB BENCH (x1)	14	1.00	0.40
0.35	1.00	15	8-CR01, 8-CR03, 8-JC01, CONV/AV (x3)	20A	B	20A	8-010 LAB BENCH (x1)	16	1.00	0.40
0.72	1.44	17	8-002, 8-003 PC/CONV (x8)	20A	C	20A	8-010 LAB BENCH (x1)	18	1.00	0.40
0.72	1.44	19	8-004, 8-005 PC/CONV (x8)	20A	A	20A	8-010 LAB BENCH (x1)	20	1.00	0.40
0.54	1.08	21	8-006, OPEN OFFICE PC/CONV (x6)	20A	B	20A	8-010 LAB BENCH (x1)	22	1.00	0.40
0.72	1.44	23	OPEN OFFICE PC/CONV (x8)	20A	C	20A	8-010 LAB BENCH (x1)	24	1.00	0.40
0.72	1.44	25	OPEN OFFICE PC/CONV (x8)	20A	A	20A	8-010 LAB BENCH (x1)	26	1.00	0.40
0.72	1.44	27	OPEN OFFICE PC/CONV (x8)	20A	B	20A	8-010 LAB BENCH (x1)	28	1.00	0.40
0.72	1.44	29	OPEN OFFICE PC/CONV (x8)	20A	C	20A	8-010 LAB BENCH (x1)	30	1.00	0.40
0.72	1.44	31	OPEN OFFICE PC/CONV (x8)	20A	A	20A	8-023 FUME HOOD	32	1.00	0.50
0.72	1.44	33	OPEN OFFICE PC/CONV (x8)	20A	B	20A	8-016 FUME HOOD	34	1.00	0.50
0.44	1.26	35	OPEN OFFICE CONV (x7)	20A	C	20A	SPARE	36	0.00	0.00
0.50	1.00	37	PANTRY REGRIGERATOR (x1)	20A	A	20A	SPARE	38	0.00	0.00
0.50	1.00	39	8-006 AV EQUIP (x2)	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
11.12	24.75	120/208	3 Ø	4 W					17.05	7.53

4 SKE-019.0 PER ADDENDUM 3

4 SKE-019.0 PER ADDENDUM 3

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

UP-8B

KVA | PANEL DESIGNATIONS **UP-8B** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.45	0.90	1	8-010 OPEN LAB CONV (x5)	15A	A	20A	8-010 LAB BENCH (x1)	2	1.00	0.40
0.36	0.72	3	8-010 OPEN LAB CONV (x4)	20A	B	20A	8-010 LAB BENCH (x1)	4	1.00	0.40
0.36	0.72	5	8-010 OPEN LAB CONV (x4)	20A	C	20A	8-010 LAB BENCH (x1)	6	1.00	0.40
0.40	1.00	7	8-010 LAB BENCH (x1)	20A	A	20A	8-010 LAB BENCH (x1)	8	1.00	0.40
0.40	1.00	9	8-010 LAB BENCH (x1)	20A	B	20A	8-010 LAB BENCH (x1)	10	1.00	0.40
0.40	1.00	11	8-010 LAB BENCH (x1)	20A	C	20A	8-010 LAB BENCH (x1)	12	1.00	0.40
0.40	1.00	13	8-010 LAB BENCH (x1)	20A	A	20A	8-010 LAB BENCH (x1)	14	1.00	0.40
0.40	1.00	15	8-010 LAB BENCH (x1)	20A	B	20A	8-010 LAB BENCH (x1)	16	1.00	0.40
0.40	1.00	17	8-010 LAB BENCH (x1)	20A	C	20A	8-010 LAB BENCH (x1)	18	1.00	0.40
0.40	1.00	19	8-010 LAB BENCH (x1)	20A	A	20A	8-010 LAB BENCH (x1)	20	1.00	0.40
0.40	1.00	21	8-010 LAB BENCH (x1)	20A	B	20A	8-010 LAB BENCH (x1)	22	1.00	0.40
0.40	1.00	23	8-010 LAB BENCH (x1)	20A	C	20A	8-010 LAB BENCH (x1)	24	1.00	0.40
0.40	1.00	25	8-010 LAB BENCH (x1)	20A	A	20A	8-010 LAB BENCH (x1)	26	1.00	0.40
0.40	1.00	27	8-010 LAB BENCH (x1)	20A	B	20A	8-010 LAB BENCH (x1)	28	1.00	0.40
0.40	1.00	29	8-010 LAB BENCH (x1)	20A	C	20A	8-010 LAB BENCH (x1)	30	1.00	0.40
0.40	1.00	31	8-010 LAB BENCH (x1)	20A	A	20A	8-010 LAB BENCH (x1)	32	1.00	0.40
0.40	1.00	33	8-010 LAB BENCH (x1)	20A	B	20A	8-010 LAB BENCH (x1)	34	1.00	0.40
0.00	0.00	35	SPARE	20A	C	20A	8-010 LAB BENCH (x1)	36	1.00	0.40
0.00	0.00	37	SPARE	20A	A	20A	8-010 LAB BENCH (x1)	38	1.00	0.40
0.00	0.00	39	SPARE	20A	B	20A	8-010 LAB BENCH (x1)	40	1.00	0.40
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
6.77	16.34	120/208	3 Ø	4 W					20.00	8.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

UP-8-IT

KVA | PANEL DESIGNATIONS **UP-8-IT** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.75	1.50	1	RACK 3	30A 3ϕ	A	30A 3ϕ	RACK 3	2	1.50	0.75
		3			B			4		
		5			C			6		
0.50	1.00	7	RACK 3	30A, 1ϕ	A	30A, 1ϕ	RACK 3	8	1.00	0.50
		9			B			10		
0.75	1.50	11	RACK 2	30A 3ϕ	C	30A 3ϕ	RACK 2	12	1.50	0.75
		13			A			14		
		15			B			16		
0.50	1.00	17	RACK 2	30A, 1ϕ	C	30A, 1ϕ	RACK 2	18	1.00	0.50
		19			A			20		
0.75	1.50	21	RACK 1	30A 3ϕ	B	30A 3ϕ	RACK 1	22	1.50	0.75
		23			C			24		
		25			A			26		
0.50	1.00	27	RACK 1	30A, 1ϕ	B	30A, 1ϕ	RACK 1	28	1.00	0.50
		29			C			30		
0.50	1.00	31	ADT PANEL	20A	A	20A	IDF CONV	32	1.00	0.50
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.25	8.50	120/208	3 Ø	4 W					8.50	4.25

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 50 AMPS; BRKR 50 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

UP-PH

KVA | PANEL DESIGNATIONS **UP-PH** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	BOILER CONTROL PANEL	20A	A	20A	GENERATOR ROOM CONV (x4)	2	0.72	0.25
0.10	0.20	3	GX-2	20A	B	20A	EXTERNAL CONV (x3)	4	0.54	0.19
0.10	0.20	5	TX-2	20A	C	20A	CONV (x6)	6	1.08	0.38
0.38	0.75	7	WATER COOLER	20A	A	20A	CONV (x6)	8	1.08	0.38
0.50	1.00	9	RO SYSTEM	20A	B	20A	CONV (x5)	10	0.90	0.32
0.50	1.00	11	RO SYSTEM	20A	C	20A	ROOF EXTERNAL CONV (x4)	12	0.72	0.25
0.50	1.00	13	RO SYSTEM	20A	A	20A	ROOF EXTERNAL CONV (x3)	14	0.54	0.19
0.50	1.00	15	RO SYSTEM	20A	B	20A	BOILER CONTROL PANEL	16	1.00	0.50
0.50	1.00	17	DUPLEX DOMESTIC WATER HEATERS	20A	C	20A	CHWCP-3	18	1.38	1.04
0.50	1.00	19	DUPLEX DOMESTIC WATER HEATERS	20A	A	20A	CHWCP-4	20	1.38	1.04
0.05	0.10	21	UH-M-1	20A	B	20A	CHWCP-5	22	1.38	1.04
0.00	0.00	23	SPARE	20A	C	20A	CHWCP-6	24	1.38	1.04
0.00	0.00	25	SPARE	20A	A	20A	CHWCP-7	26	1.38	1.04
0.00	0.00	27	SPARE	20A	B	20A	CHWCP-8	28	1.38	1.04
0.00	0.00	29	SPARE	20A	C	20A	CHWCP-9	30	0.82	0.62
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.13	8.25	120/208	3 Ø	4 W					15.68	9.28

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 100 AMPS; BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

UP-ELEV

SKE-019.1 PER ADDENDUM 3

KVA | PANEL DESIGNATIONS **UP-ELEV** | AIC **14K** | POLES **24** (4) | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.18	0.36	1	CONV (x2)	20A	A	20A	SPARE	2	0.00	0.00
0.00	0.00	3	SPARE	20A	B	20A	SPARE	4	0.00	0.00
0.00	0.00	5	SPARE	20A	C	20A	SPARE	6	0.00	0.00
0.00	0.00	7	SPARE	20A	A	20A	SPARE	8	0.00	0.00
0.00	0.00	9	SPARE	20A	B	20A	SPARE	10	0.00	0.00
0.00	0.00	11	SPARE	20A	C	20A	SPARE	12	0.00	0.00
0.00	0.00	13	SPARE	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
0.18	0.36	120/208	3 Ø	4 W					0.00	0.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 50 AMPS; BRKR 50 AMPS (4)

SKE-019.1 PER ADDENDUM 3

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

SKE-019.1 PER ADDENDUM 3

4

EUP-B

KVA | PANEL DESIGNATIONS **EUP-B** | AIC **10K** | POLES **24** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.00	0.00	1	SPARE	20A	A	20A	SPARE	2	0.00	0.00
0.00	0.00	3	SPARE	20A	B	20A	SPARE	4	0.00	0.00
0.00	0.00	5	SPARE	20A	C	20A	SPARE	6	0.00	0.00
0.00	0.00	7	SPARE	20A	A	20A	SPARE	8	0.00	0.00
0.00	0.00	9	SPARE	20A	B	20A	SPARE	10	0.00	0.00
0.00	0.00	11	SPARE	20A	C	20A	SPARE	12	0.00	0.00
0.00	0.00	13	SPARE	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
0.00	0.00	120/208	3 Ø	4 W					0.00	0.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN: BUS 50 AMPS; BRKR 50 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P) QTY: AMPS:
- ☐ CONTRACTOR CONTROLLED AMPS: CKT'S CONTROLLED:
- ☐ OTHER:

Project Title
NEW ACADEMIC BUILDING
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450 Clarkson Avenue Brooklyn, NY 11203

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www.langan.com

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SCAPE
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27 West 20th Street , Suite 1001
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200 Park Ave South
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212.254.2712 fax
www.hblighting.com

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www.burohappold.com

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www.ceramiassociates.com

Healthcare Simulation
Stantec
1500 Spring Garden
Suite 1100
Philadelphia, PA 19130
215.665.7065 tel
www.stantec.com

Code
Hughes Associates, Inc.
2 Mount Royal Avenue
Suite 420
Marlborough, MA 01752
508.624.7766 tel
www.haifire.com

Signage
Two Twelve Associates
902 Broadway
Floor 20
New York, NY 10010
212.254.6670 tel
212.254.6614 fax
www.twotwelve.com

Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title
ELECTRICAL SCHEDULE SHEET 9

Date: April 10, 2012
Scale: N.T.S.
Phase:
SUCF Project Number: 14A91
Ennead Project Number: 0917
Sheet No.: E-508

KVA		PANEL DESIGNATIONS	EUP-B-OS	AIC	10K	POLES	30		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	ACID WASTE	20A	A	20A	SPARE	2	0.00	0.00
0.50	1.00	3	ACID WASTE	20A	B	20A	SPARE	4	0.00	0.00
0.50	1.00	5	ACID WASTE	20A	C	20A	SPARE	6	0.00	0.00
0.50	1.00	7	ACID WASTE	20A	A	20A	SPARE	8	0.00	0.00
0.50	1.00	9	ACID WASTE	20A	B	20A	SPARE	10	0.00	0.00
0.50	1.00	11	ACID WASTE	20A	C	20A	SPARE	12	0.00	0.00
0.50	1.00	13	ACID WASTE	20A	A	20A	SPARE	14	0.00	0.00
0.50	1.00	15	ACID WASTE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES	MAIN		OPTIONS		TOTAL	TOTAL
4.00	8.00	120/208	3 Ø	4 W					0.00	0.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

KVA		PANEL DESIGNATIONS	EUP-7	AIC	14K	POLES	42		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.00	0.00	1	SPARE	20A	A	20A	SPARE	2	0.00	0.00
0.00	0.00	3	SPARE	20A	B	20A	SPARE	4	0.00	0.00
0.00	0.00	5	SPARE	20A	C	20A	SPARE	6	0.00	0.00
0.00	0.00	7	SPARE	20A	A	20A	SPARE	8	0.00	0.00
0.00	0.00	9	SPARE	20A	B	20A	SPARE	10	0.00	0.00
0.00	0.00	11	SPARE	20A	C	20A	SPARE	12	0.00	0.00
0.00	0.00	13	SPARE	20A	A	20A	SPARE	14	0.00	0.00
0.00	0.00	15	SPARE	20A	B	20A	SPARE	16	0.00	0.00
0.00	0.00	17	SPARE	20A	C	20A	SPARE	18	0.00	0.00
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES	MAIN		OPTIONS		TOTAL	TOTAL
0.00	0.00	120/208	3 Ø	4 W					0.00	0.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

KVA		PANEL DESIGNATIONS	EUP-7-OS	AIC	14K	POLES	42		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	7-019 DARK ROOM EQUIP (x5)	20A	A	20A	7-011 LAB EQUIP (x7)	2	1.00	0.50
0.00	0.00	3	SPARE	20A	B	20A	7-012 LAB EQUIP (x8)	4	1.00	0.50
0.00	0.00	5	SPARE	20A	C	20A	7-013A LAB EQUIP (x8)	6	1.00	0.50
0.00	0.00	7	SPARE	20A	A	20A	7-013, 7-013B LAB EQUIP (x7)	8	1.00	0.50
0.00	0.00	9	SPARE	20A	B	20A	7-014 COLD ROOM EQUIP (x6)	10	1.00	0.50
0.00	0.00	11	SPARE	20A	C	20A	7-015 ENTRY EQUIP (x4)	12	1.00	0.50
0.00	0.00	13	SPARE	20A	A	20A	7-016 FUME EQUIP (x5)	14	1.00	0.50
0.00	0.00	15	SPARE	20A	B	20A	7-017 LAB EQUIP (x7)	16	1.00	0.50
0.00	0.00	17	SPARE	20A	C	20A	7-018, OPEN LAB EQUIP (x8)	18	1.00	0.50
0.00	0.00	19	SPARE	20A	A	20A	7-020, LAB EQUIP (x7)	20	1.00	0.50
0.00	0.00	21	SPARE	20A	B	20A	7-021, LAB EQUIP (x7)	22	1.00	0.50
0.00	0.00	23	SPARE	20A	C	20A	7-022, OPEN LAB EQUIP (x7)	24	1.00	0.50
0.00	0.00	25	SPARE	20A	A	20A	7-023, FUME EQUIP (x5)	26	1.00	0.50
0.00	0.00	27	SPARE	20A	B	20A	7-024, LAB EQUIP (x7)	28	1.00	0.50
0.00	0.00	29	SPARE	20A	C	20A	7-025 COLD ROOM EQUIP (x6)	30	1.00	0.50
0.00	0.00	31	SPARE	20A	A	30A 3ϕ	FAÇADE MAINTENANCE CONV (x1)	32	10.00	3.00
0.00	0.00	33	SPARE	20A	B			34		
0.00	0.00	35	SPARE	20A	C			36		
0.00	0.00	37	SPARE	20A	A	30A 3ϕ	FAÇADE MAINTENANCE CONV (x1)	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B			40		
0.00	0.00	41	SPARE	20A	C			42		
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES	MAIN		OPTIONS		TOTAL	TOTAL
0.50	1.00	120/208	3 Ø	4 W					25.00	10.50

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

KVA		PANEL DESIGNATIONS	EUP-8-OS	AIC	14K	POLES	42		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.00	0.00	1	SPARE	20A	A	20A	8-011 LAB EQUIP (x7)	2	1.00	0.50
0.00	0.00	3	SPARE	20A	B	20A	8-012 LAB EQUIP (x8)	4	1.00	0.50
0.00	0.00	5	SPARE	20A	C	20A	8-013A LAB EQUIP (x8)	6	1.00	0.50
0.00	0.00	7	SPARE	20A	A	20A	8-013, 8-013B LAB EQUIP (x7)	8	1.00	0.50
0.00	0.00	9	SPARE	20A	B	20A	8-014 COLD ROOM EQUIP (x6)	10	1.00	0.50
0.00	0.00	11	SPARE	20A	C	20A	8-015 ENTRY EQUIP (x4)	12	1.00	0.50
0.00	0.00	13	SPARE	20A	A	20A	8-016 FUME EQUIP (x5)	14	1.00	0.50
0.00	0.00	15	SPARE	20A	B	20A	8-017 LAB EQUIP (x7)	16	1.00	0.50
0.00	0.00	17	SPARE	20A	C	20A	8-018, OPEN LAB EQUIP (x8)	18	1.00	0.50
0.00	0.00	19	SPARE	20A	A	20A	8-020, LAB EQUIP (x7)	20	1.00	0.50
0.00	0.00	21	SPARE	20A	B	20A	8-021, LAB EQUIP (x7)	22	1.00	0.50
0.00	0.00	23	SPARE	20A	C	20A	8-022, OPEN LAB EQUIP (x7)	24	1.00	0.50
0.00	0.00	25	SPARE	20A	A	20A	8-023, FUME EQUIP (x5)	26	1.00	0.50
0.00	0.00	27	SPARE	20A	B	20A	8-024, LAB EQUIP (x7)	28	1.00	0.50
0.00	0.00	29	SPARE	20A	C	20A	8-025 COLD ROOM EQUIP (x6)	30	1.00	0.50
0.00	0.00	31	SPARE	20A	A	20A	8-019 DARK ROOM EQUIP (x5)	32	1.00	0.50
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES	MAIN		OPTIONS		TOTAL	TOTAL
0.00	0.00	120/208	3 Ø	4 W					16.00	8.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

KVA		PANEL DESIGNATIONS	EUP-FM-OS	AIC	14K	POLES	42		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
		1			A			2		
3.00	10.00	3	FAÇADE MAINTENANCE CONV (x1)	30A 3ϕ	B	30A 3ϕ	FAÇADE MAINTENANCE CONV (x1)	4	10.00	3.00
		5			C			6		
		7			A			8		
3.00	10.00	9	FAÇADE MAINTENANCE CONV (x1)	30A 3ϕ	B	30A 3ϕ	FAÇADE MAINTENANCE CONV (x1)	10	10.00	3.00
		11			C			12		
		13			A			14		
3.00	10.00	15	FAÇADE MAINTENANCE CONV (x1)	30A 3ϕ	B	30A 3ϕ	FAÇADE MAINTENANCE CONV (x1)	16	10.00	3.00
		17			C			18		
0.00	0.00	19	SPARE	20A	A	20A	SPARE	20	0.00	0.00
0.00	0.00	21	SPARE	20A	B	20A	SPARE	22	0.00	0.00
0.00	0.00	23	SPARE	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES	MAIN		OPTIONS		TOTAL	TOTAL
9.00	30.00	120/208	3 Ø	4 W					30.00	9.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

KVA		PANEL DESIGNATIONS	UPS-B-1	AIC	14K	POLES	42		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
		1			A			2		
0.60	1.20	3	RACK A1	30A 3ϕ	B	30A 3ϕ	RACK A1	4	1.20	0.60
		5			C			6		
		7			A			8		
0.40	0.80	9	RACK A1	30A, 1ϕ	B	30A, 1ϕ	RACK A1	10	0.80	0.40
		11			C			12		
0.60	1.20	13	RACK A2	30A 3ϕ	A	30A 3ϕ	RACK A2	14	1.20	0.60
		15			B			16		
		17			C			18		
0.40	0.80	19	RACK A2	30A, 1ϕ	A	30A, 1ϕ	RACK A2	20	0.80	0.40
		21			B			22		
0.60	1.20	23	RACK A3	30A 3ϕ	C	30A 3ϕ	RACK A3	24	1.20	0.60
		25			A			26		
		27			B			28		
0.40	0.80	29	RACK A3	30A, 1ϕ	C	30A, 1ϕ	RACK A3	30	0.80	0.40
		31			A			32		
0.60	1.20	33	RACK A4	30A 3ϕ	B	30A 3ϕ	RACK A4	34	1.20	0.60
		35			C			36		
		37			A			38		
0.40	0.80	39	RACK A4	30A, 1ϕ	B	30A, 1ϕ	RACK A4	40	0.80	0.40
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES	MAIN		OPTIONS		TOTAL	TOTAL
4.00	8.00	120/208	3 Ø	4 W					8.00	4.00

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

Project Title

NEW ACADEMIC BUILDING

School of Public Health, State University of New York Health Science Center at Brooklyn

450 Clarkson Avenue Brooklyn, NY 11203

Owner
State University Construction Fund
353 Broadway
Albany, NY 12246
518.320.3200 tel
www.sucf.suny.edu

SUNY Downstate Medical Center
450 Clarkson Avenue
Brooklyn, NY 11203
718.270.1000 tel
www.downstate.edu

Architect
Ennead Architects, LLP
320 West 13th Street
New York, NY 10014-1278
212.807.7171 tel
212.807.5917 fax
www.ennead.com

Structural
Leslie E. Robertson Associates RLLP
30 Broad Street, 47-48th Floor
New York, NY 10004-2304
212.750.9000 tel
212.750.9002 fax
www.lera.com

MEP
Jaros, Baum & Bolles
80 Pine Street, 12th Floor
New York, NY 10005
212.530.9300 tel
212.269.5980 fax
www.jbb.com

Civil
Langan Engineering & Environmental Services
21 Penn Plaza
360 West 31st Street
New York, NY 10001
212.479.5400 tel
212.479.5444 fax
www.langan.com

Lab Planning
Jacobs Consultancy
303 South Broadway, Suite G20
Tarrytown, NY 10591
914.333.1110 tel
914.333.1109 fax
www.jacobsconsultancy.com

Landscape
SCAPE
Landscape Architecture PLLC
27 West 20th Street , Suite 1001
New York, NY 10011
212.462.2628 tel
212.462.4164 fax
www.scapestudio.com

Lighting
Horton Lees Brogden Lighting Design
200 Park Ave South
Suite 1401
New York, NY 10003
212.674.5580 tel
212.254.2712 fax
www.hlblighting.com

Sustainability
Buro Happold Consulting Engineers, PC
100 Broadway
New York, NY 10005
212.334.2025 tel
212.334.5528 fax
www.burohappold.com

AV / Acoustics
Cerami & Associates
405 Fifth Avenue
New York, New York 10018
212.370.1776 tel
www.ceramiassociates.com

Healthcare Simulation
Stantec
1500 Spring Garden
Suite 1100
Philadelphia, PA 19130
215.665.7065 tel
www.stantec.com

Code
Hughes Associates, Inc.
2 Mount Royal Avenue
Suite 420
Marlborough, MA 01752
508.624.7766 tel
www.haifire.com

Signage
Two Twelve Associates
902 Broadway
Floor 20
New York, NY 10010
212.254.6670 tel
212.254.6614 fax
www.twotwelve.com

Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL SCHEDULE SHEET 10

Date: April 10, 2012
Scale: N.T.S.
Phase:

SUCF Project Number: 14A91
Ennead Project Number: 0917

Sheet No.: E-509

UPS-B-2

KVA | PANEL DESIGNATIONS **UPS-B-2** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.45	0.90	1	RACK B1	30A 3ϕ	A	30A 3ϕ	RACK B1	2	0.90	0.45
		3			B			4		
		5			C			6		
0.30	0.60	7	RACK B1	30A, 1ϕ	A	30A, 1ϕ	RACK B1	8	0.60	0.30
		9			B			10		
0.75	1.50	11	RACK B2	30A 3ϕ	C	30A 3ϕ	RACK B2	12	1.50	0.75
		13			A			14		
		15			B			16		
0.75	1.50	17	RACK B3	30A 3ϕ	C	30A 3ϕ	RACK B3	18	1.50	0.75
		19			A			20		
		21			B			22		
0.45	0.90	23	RACK B4	30A 3ϕ	C	30A 3ϕ	RACK B4	24	0.90	0.45
		25			A			26		
		27			B			28		
0.30	0.60	29	RACK B4	30A, 1ϕ	C	30A, 1ϕ	RACK B4	30	0.60	0.30
		31			A			32		
0.75	1.50	33	RACK C5	30A 3ϕ	B	30A 3ϕ	RACK C5	34	1.50	0.75
		35			C			36		
		37			A			38		
0.50	1.00	39	TELECOM (x2)	20A	B	20A	TELECOM (x2)	40	1.00	0.50
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.25	8.50	120/208	3 Ø	4 W					8.50	4.25

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

UPS-B-3

KVA | PANEL DESIGNATIONS **UPS-B-3** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.45	0.90	1	RACK C1	30A 3ϕ	A	30A 3ϕ	RACK C1	2	0.90	0.45
		3			B			4		
		5			C			6		
0.30	0.60	7	RACK C1	30A, 1ϕ	A	30A, 1ϕ	RACK C1	8	0.60	0.30
		9			B			10		
0.45	0.90	11	RACK C2	30A 3ϕ	C	30A 3ϕ	RACK C2	12	0.90	0.45
		13			A			14		
		15			B			16		
0.30	0.60	17	RACK C2	30A, 1ϕ	C	30A, 1ϕ	RACK C2	18	0.60	0.30
		19			A			20		
0.75	1.50	21	RACK C3	30A 3ϕ	B	30A 3ϕ	RACK C3	22	1.50	0.75
		23			C			24		
		25			A			26		
0.75	1.50	27	RACK C4	30A 3ϕ	B	30A 3ϕ	RACK C4	28	1.50	0.75
		29			C			30		
		31			A			32		
0.50	1.00	33	RACK D1	30A 3ϕ	B	30A 3ϕ	RACK D1	34	1.00	0.50
		35			C			36		
		37			A			38		
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
3.50	7.00	120/208	3 Ø	4 W					7.00	3.50

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

UPS-B-4

KVA | PANEL DESIGNATIONS **UPS-B-4** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	RACK D2	30A 3ϕ	A	30A 3ϕ	RACK D2	2	1.00	0.50
		3			B			4		
		5			C			6		
0.30	0.60	11	RACK D3	30A 3ϕ	A	30A 3ϕ	RACK D3	12	0.60	0.30
		13			B			14		
		15			C			16		
0.20	0.40	17	RACK D3	30A, 1ϕ	A	30A, 1ϕ	RACK D3	18	0.40	0.20
		19			B			20		
0.30	0.60	11	RACK D4	30A 3ϕ	C	30A 3ϕ	RACK D4	12	0.60	0.30
		13			A			14		
		15			B			16		
0.20	0.40	17	RACK D4	30A, 1ϕ	C	30A, 1ϕ	RACK D4	18	0.40	0.20
		19			A			20		
0.30	0.60	11	RACK D5	30A 3ϕ	B	30A 3ϕ	RACK D5	12	0.60	0.30
		13			C			14		
		15			A			16		
0.20	0.40	17	RACK D5	30A, 1ϕ	B	30A, 1ϕ	RACK D5	18	0.40	0.20
		19			C			20		
0.38	0.76	37	SECURITY RACK	30A 3ϕ	A	30A 3ϕ	SECURITY RACK	38	0.76	0.38
		39			B			40		
		41			C			42		
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
2.38	4.76	120/208	3 Ø	4 W					4.76	2.38

REMARKS:

ALL CIRCUITS SHALL HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

UP-SERV

KVA | PANEL DESIGNATIONS **UP-SERV** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	AV RACK 1	20A	A	20A	AV RACK 4	2	1.00	0.50
0.50	1.00	3	AV RACK 1	20A	B	20A	AV RACK 4	4	1.00	0.50
0.50	1.00	5	AV RACK 1	20A	C	20A	AV RACK 4	6	1.00	0.50
0.50	1.00	7	AV RACK 1	20A	A	20A	AV RACK 4	8	1.00	0.50
0.50	1.00	9	AV RACK 2	20A	B	20A	AV RACK 5	10	1.00	0.50
0.50	1.00	11	AV RACK 2	20A	C	20A	AV RACK 5	12	1.00	0.50
0.50	1.00	13	AV RACK 2	20A	A	20A	AV RACK 5	14	1.00	0.50
0.50	1.00	15	AV RACK 2	20A	B	20A	AV RACK 5	16	1.00	0.50
0.50	1.00	17	AV RACK 3	20A	C	20A	SPARE	18	0.00	0.00
0.50	1.00	19	AV RACK 3	20A	A	20A	SPARE	20	0.00	0.00
0.50	1.00	21	AV RACK 3	20A	B	20A	SPARE	22	0.00	0.00
0.50	1.00	23	AV RACK 3	20A	C	20A	SPARE	24	0.00	0.00
0.00	0.00	25	SPARE	20A	A	20A	SPARE	26	0.00	0.00
0.00	0.00	27	SPARE	20A	B	20A	SPARE	28	0.00	0.00
0.00	0.00	29	SPARE	20A	C	20A	SPARE	30	0.00	0.00
0.00	0.00	31	SPARE	20A	A	20A	SPARE	32	0.00	0.00
0.00	0.00	33	SPARE	20A	B	20A	SPARE	34	0.00	0.00
0.00	0.00	35	SPARE	20A	C	20A	SPARE	36	0.00	0.00
0.00	0.00	37	SPARE	20A	A	20A	SPARE	38	0.00	0.00
0.00	0.00	39	SPARE	20A	B	20A	SPARE	40	0.00	0.00
0.00	0.00	41	SPARE	20A	C	20A	SPARE	42	0.00	0.00
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
6.00	12.00	120/208	3 Ø	4 W					8.00	4.00

REMARKS:

ALL CIRCUITS TO HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

UP-BSB-1

KVA | PANEL DESIGNATIONS **UP-BSB-1** | AIC **14K** | POLES **42** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.00	0.00	1	SPARE	30A	A	20A	1-136, 1-138 CONV (x4)	2	0.72	0.36
0.00	0.00	3	SPARE	30A	B	20A	1-139 CONV (x7)	4	1.26	0.63
0.00	0.00	5	SPARE	20A	C	20A	SPARE	6	0.00	0.00
0.00	0.00	7	SPARE	20A	A	20A	BSB ADMIN CONV (x7)	8	1.26	0.63
0.00	0.00	9	SPARE	20A	B	20A	BSB ADMIN CONV (x6)	10	1.08	0.54
0.00	0.00	11	SPARE	20A	C	20A	BSB ADMIN CONV (x8)	12	1.44	0.72
0.00	0.00	13	SPARE	20A	A	20A	BSB ADMIN PC (x8)	14	1.44	0.72
0.00	0.00	15	SPARE	20A	B	20A	BSB ADMIN PC (x8)	16	1.44	0.72
0.00	0.00	17	SPARE	20A	C	20A	BSB ADMIN PC (x8)	18	1.44	0.72
0.00	0.00	19	SPARE	20A	A	20A	BSB ADMIN PC (x8)	20	1.44	0.72
0.00	0.00	21	SPARE	20A	B	20A	BSB ADMIN CONV (x6)	22	1.08	0.54
0.00	0.00	23	SPARE	20A	C	20A	BSB 1-06, 1-06B PC (x8)	24	1.44	0.72
0.00	0.00	25	SPARE	20A	A	20A	BSB 1-06, 1-06B CONV (x6)	26	1.08	0.54
0.00	0.00	27	SPARE	20A	B	20A	BSB 1-06A PRT (x1)	28	1.00	0.50
0.00	0.00	29	SPARE	20A	C	20A	BSB 1-06A CONFR CONV (x4)	30	0.72	0.36
0.70	1.40	31	BSB LOBBY LIGHTING	20A	A	30A 3P	BSB ADMIN AC-1-132A	32	6.82	3.41
0.70	1.40	33	BSB LOBBY LIGHTING	20A	B			34		
0.00	0.00	35	BSB LOBBY LIGHTING	20A	C			36		
0.00	0.00	37	SPARE	20A	A	30A 3P	BSB ALUMNI AC-1-06	38	6.82	3.41
0.00	0.00	39	SPARE	20A	B			40		
0.00	0.00	41	SPARE	20A	C			42		
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
1.40	2.80	120/208	3 Ø	4 W					30.48	15.24

SKE-020.0 PER ADDENDUM 3

REMARKS:

ALL CIRCUITS TO HAVE A GROUND

MAIN

BUS 100 AMPS
BRKR 100 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

SMC-E

KVA | PANEL DESIGNATIONS **SMC-E** | AIC **14K** | POLES **18** | KVA

DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	BASEMENT SIDEWALK ICE MELT	20A	A	20A	BASEMENT SIDEWALK ICE MELT	2	1.00	0.50
0.50	1.00	3	BASEMENT SIDEWALK ICE MELT	30A	B	20A	BASEMENT SIDEWALK ICE MELT	4	1.00	0.50
0.50	1.00	5	BASEMENT SIDEWALK ICE MELT	20A	C	20A	BASEMENT SIDEWALK ICE MELT	6	1.00	0.50
0.50	1.00	7	BASEMENT SIDEWALK ICE MELT	20A	A	20A	BASEMENT SIDEWALK ICE MELT	8	1.00	0.50
0.50	1.00	9	BASEMENT SIDEWALK ICE MELT	20A	B	20A	BASEMENT SIDEWALK ICE MELT	10	1.00	0.50
0.50	1.00	11	BASEMENT SIDEWALK ICE MELT	20A	C	20A	SPARE	12	0.00	0.00
0.50	1.00	13	BASEMENT SIDEWALK ICE MELT	20A	A	20A	SPARE	14	0.00	0.00
0.50	1.00	15	BASEMENT SIDEWALK ICE MELT	20A	B	20A	SPARE	16	0.00	0.00
0.50	1.00	17	BASEMENT SIDEWALK ICE MELT	20A	C	20A	BASEMENT SIDEWALK ICE MELT	18	1.00	0.50
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES					TOTAL	TOTAL
4.50	9.00	265/460	3 Ø	4 W					6.00	3.00

REMARKS:

ALL CIRCUITS TO HAVE A GROUND

MAIN

BUS 225 AMPS
BRKR 225 AMPS

- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS

- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

Project Title

NEW ACADEMIC BUILDING

School of Public Health, State University of New York Health Science Center at Brooklyn

450 Clarkson Avenue Brooklyn, NY 11203

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State University Construction Fund
353 Broadway
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518.320.3200 tel
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Suite 1100
Philadelphia, PA 19130
215.665.7065 tel
www.stantec.com

Code
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2 Mount Royal Avenue
Suite 420
Marlborough, MA 01752
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Two Twelve Associates
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Floor 20
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212.254.6614 fax
www.twotwelve.com

Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL SCHEDULE SHEET 11

Date: April 10, 2012
Scale: N.T.S.
Phase:

SUCF Project Number: 14A91
Ennead Project Number: 0917

Sheet No.: **E-510**

KVA		PANEL DESIGNATIONS	SMC-W	AIC	14K	POLES	18		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	BASEMENT SIDEWALK ICE MELT	20A	A	20A	BASEMENT SIDEWALK ICE MELT	2	1.00	0.50
0.50	1.00	3	BASEMENT SIDEWALK ICE MELT	30A	B	20A	BASEMENT SIDEWALK ICE MELT	4	1.00	0.50
0.50	1.00	5	BASEMENT SIDEWALK ICE MELT	20A	C	20A	BASEMENT SIDEWALK ICE MELT	6	1.00	0.50
0.50	1.00	7	BASEMENT SIDEWALK ICE MELT	20A	A	20A	BASEMENT SIDEWALK ICE MELT	8	1.00	0.50
0.50	1.00	9	BASEMENT SIDEWALK ICE MELT	20A	B	20A	BASEMENT SIDEWALK ICE MELT	10	1.00	0.50
0.50	1.00	11	BASEMENT SIDEWALK ICE MELT	20A	C	20A	SPARE	12	0.00	0.00
0.50	1.00	13	BASEMENT SIDEWALK ICE MELT	20A	A	20A	SPARE	14	0.00	0.00
0.50	1.00	15	BASEMENT SIDEWALK ICE MELT	20A	B	20A	SPARE	16	0.00	0.00
0.50	1.00	17	BASEMENT SIDEWALK ICE MELT	20A	C	20A	BASEMENT SIDEWALK ICE MELT	18	1.00	0.50
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES	MAIN		OPTIONS		TOTAL	TOTAL
4.50	9.00	265/460	3 Ø	4 W					6.00	3.00

REMARKS:

ALL CIRCUITS TO HAVE A GROUND

MAIN:
- BUS 225 AMPS
- BRKR 225 AMPS
- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS:
- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

KVA		PANEL DESIGNATIONS	SMC-WALK	AIC	14K	POLES	18		KVA	
DEMAND LOAD	CONN. LOAD	CKT No.	DESCRIPTION	C/B RATING	Ø	C/B RATING	DESCRIPTION	CKT No.	CONN. LOAD	DEMAND LOAD
0.50	1.00	1	BASEMENT SIDEWALK ICE MELT	20A	A	20A	BASEMENT SIDEWALK ICE MELT	2	1.00	0.50
0.50	1.00	3	BASEMENT SIDEWALK ICE MELT	30A	B	20A	BASEMENT SIDEWALK ICE MELT	4	1.00	0.50
0.50	1.00	5	BASEMENT SIDEWALK ICE MELT	20A	C	20A	BASEMENT SIDEWALK ICE MELT	6	1.00	0.50
0.50	1.00	7	BASEMENT SIDEWALK ICE MELT	20A	A	20A	BASEMENT SIDEWALK ICE MELT	8	1.00	0.50
0.50	1.00	9	BASEMENT SIDEWALK ICE MELT	20A	B	20A	BASEMENT SIDEWALK ICE MELT	10	1.00	0.50
0.50	1.00	11	BASEMENT SIDEWALK ICE MELT	20A	C	20A	SPARE	12	0.00	0.00
0.50	1.00	13	BASEMENT SIDEWALK ICE MELT	20A	A	20A	SPARE	14	0.00	0.00
0.50	1.00	15	BASEMENT SIDEWALK ICE MELT	20A	B	20A	SPARE	16	0.00	0.00
0.50	1.00	17	BASEMENT SIDEWALK ICE MELT	20A	C	20A	BASEMENT SIDEWALK ICE MELT	18	1.00	0.50
TOTAL	TOTAL	VOLTAGE	PHASE	WIRES	MAIN		OPTIONS		TOTAL	TOTAL
4.50	9.00	265/460	3 Ø	4 W					6.00	3.00

REMARKS:

ALL CIRCUITS TO HAVE A GROUND

MAIN:
- BUS 225 AMPS
- BRKR 225 AMPS
- ☑ MAIN BREAKER
- ☑ TOP FEED
- ☐ FLUSH MOUNTED
- ☐ LUGS ONLY
- ☐ BOTTOM FEED
- ☑ SURFACE MOUNTED
- ☐ EXISTING PANEL

OPTIONS:
- ☐ 200% NEUTRAL
- ☑ GROUND BUS
- ☐ ISOLATED GROUND BUS
- ☑ DOOR-IN-DOOR CONSTR.
- ☐ STAINLESS STEEL COVER
- ☐ NEMA 3R PANEL
- ☐ SUB-FEED MAIN C/B (3P)
  QTY: _____ AMPS: _____
- ☐ CONTRACTOR CONTROLLED
  AMPS:
  CKT'S CONTROLLED:
- ☐ OTHER:

Project Title

NEW ACADEMIC BUILDING

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Horton Lees Brogden Lighting Design
200 Park Ave South
Suite 1401
New York, NY 10003
212.674.5580 tel
212.254.2712 fax
www.hblighting.com

Sustainability
Buro Happold Consulting Engineers, PC
100 Broadway
New York, NY 10005
212.334.2025 tel
212.334.5528 fax
www.burohappold.com

AV / Acoustics
Ceramì & Associates
405 Fifth Avenue
New York, New York 10018
212.370.1776 tel
www.ceramiassociates.com

Healthcare Simulation
Stantec
1500 Spring Garden
Suite 1100
Philadelphia, PA 19130
215.665.7065 tel
www.stantec.com

Code
Hughes Associates, Inc.
2 Mount Royal Avenue
Suite 420
Martborough, MA 01752
508.624.7766 tel
www.haifire.com

Signage
Two Twelve Associates
902 Broadway
Floor 20
New York, NY 10010
212.254.6670 tel
212.254.6614 fax
www.twotwelve.com

Seal

Key Plan

6	CONFORMANCE SET	7/18/12
1	BID DOCUMENTS	4/10/12

Sheet Title

ELECTRICAL SCHEDULE SHEET 12

Date: April 10, 2012
Scale: N.T.S.
Phase:

SUCF Project Number: 14A91
Ennead Project Number: 0917

Sheet No.: E-511