ADDITIONAL INFORMATION

Project: Roosevelt Middle School Modernization
460 Arguello Boulevard, San Francisco, CA

Owner: San Francisco Unified School District
135 Van Ness Avenue
San Francisco, CA 94103

Date: February 20, 2014

DSA File No.: 38-1
DSA App. No.: 01-113229

Notice is hereby given to all prospective bidders that plans and specifications on the subject project are modified as hereinafter set forth. This Addendum shall be attached to and form a part of the plans and specifications. All bidders must acknowledge receipt of this addendum on the Bid Form. In case of difference with previous addenda or communications, this addendum takes precedence.

It is the responsibility of all bidders to notify all subcontractors from whom they request bids and from whom they accept bids of all changes contained in this addendum.

PROJECT MANUAL

1. Item No. AD2-1
   Reference: Table of Content Section 00010-5
   Description: Add section 1210 Allowance to table of content.

2. Item No. AD2-2
   Reference: Bid Form Section 400
   Description: Replace current Allowance Section 400 with the attached.

3. Item No. AD2-3
   Reference: Allowance Section 1210
   Description: Replace current Allowance Section 1210 with the attached.

4. Item No. AD2-4
   Reference: TELESOPIC BLEACHERS 12660
   Description: Replace language at 12660.2.01.A "Hussey Seating Co. "MAXAM26" Series or approved equal" with "Hussey Seating Co. "MAXAM26" Series, or Interkal Telescoping Bleachers or approved equal." Overall size, number of spectator seats and ADA seats, DSA PC approvals and engineering of fasteners shall match current specified unit. GC to provide all shop drawings and calcs, along with finishes options and other submittal items per the contract specifications requirements for architect review.
5. Item No. AD2-5
   Reference: EDUCATION INTERCOMMUNICATION & PROGRAM SYSTEMS 16860
   Description: Replace existing section 16860 with the attached.

6. Item No. AD2-6
   Reference: PRODUCTION LIGHTS 11061-10
   Description: Replace existing equipment schedule page 11061-10 with corrected
   11061-10 included in this addendum.

7. Item No. AD2-7
   Reference: PRODUCTION AUDIO 11131-6, 7, 9, 10, 11
   Description: Replace existing equipment schedules pages 11131-6, 7, 9, 10 and 11
   with corrected pages 11131-6, 7, 9, 10 and 11 included with this
   addendum.

8. Item No. AD2-8
   Reference: PRODUCTION AUDIO 11131
   Description: Delete all references to assisted listening device equipment including
   microphones, amps, antennae, etc.

DRAWINGS

1. Item No. AD2-5
   Reference: WHR Acoustic Ceiling Hangers
   Description: Provide Mason Industries WHR acoustic ceiling hanger units, 4" batt
   insulation, KINETICS KIA rubber bushings and wall mat, and sealant at
   Room 156 and 156E as shown in attached AD2-5.

2. Item No. AD2-6
   Reference: Stair 82-1, Drawing 1/A2.03
   Description: Refer to AD2-6 for clarifications of new handrails at (E) decorative
   guardrails at Stair. Note: New handrails occur at both flights of Stair 82-1
   all three floors.

3. Item No. AD2-7
   Reference: Sheet T7.1 Stage Thrust Sprung Floor
   Description: Refer to AD2-7 for clarifications of stage thrust metal transition strip.

4. Item No. AD2-8
   Reference: Toilet Room Accessories, Sheet IH2-A1.03
   Description: Refer to attached AD2-8 for revised floor plan noting toilet accessories.

5. Item No. AD2-9
   Reference: Drawing Index, Sheet A3.03 – Building Sections
   Description: See sketches for information regarding ship ladders and bird screen
   locations. See attached AD2-9
6. Item No. AD2-10  
   Reference: Drawing 2/A3.03 – Stair Section S-80, Bird Screen Detail  
   Description: Replace Detail 10 on Sheet A3.03 with attached AD2-10.

7. Item No. AD2-11  
   Reference: Drawing 2/A3.03 – Stair Section S-80, Ship's Ladder Detail  
   Description: Add Ship’s Ladder Detail 11 on Sheet A9.92, see attached AD2-11.

8. Item No. AD2-12  
   Reference: Site Striping Plan, Drawing 2/A2.00  
   Description: Refer to attached AD2-12 for revisions to play yard striping and basketball court layout.

9. Item No. AD2-13  
   Reference: Instrument Cabinet Blocking at Room #156 and #156E  
   Description: Refer to attached AD2-13 for revisions to metal blocking detail.

10. Item No. AD2-14  
    Reference: Production Audio, Sheet T4.1  
    Description: Revised details on sheet T4.1. See attached AD2-14A.

11. Item No. AD2-15  
    Reference: Production Audio, Sheet T4.2  
    Description: Revised details on sheet T4.2. See attached AD2-15A thru AD2-15D.

12. Item No. AD2-16  
    Reference: Production Audio, Sheet T4.3  
    Description: Revised details on sheet T4.3. See attached AD2-16A thru AD2-16D.

13. Item No. AD2-17  
    Reference: Interim Housing Grading and Utility Plans, Sheet C1  
    Description: See C1 sketches for revised Interim Housing grading and utilities. See attached AD2-17A and B.

14. Item No. AD2-18  
    Reference: Site Yard Demolition Plan, Sheet C2  
    Description: See C2 sketches for revised existing hardscape demolition. See attached AD2-18A.

15. Item No. AD2-19  
    Reference: Grading and Utility Plan, Sheet C3  
    Description: See C3 sketches for revised grading at play yard and related minor utilities scope. See attached sketches AD2-19A, B and C.

16. Item No. AD2-20  
    Reference: Erosion Control Pavement Structural Section & Layout Plan, Sht C4  
    Description: See C4 sketches for revised erosion control and pavement sections at play yard. See attached AD2-20A and B.
17. Item No. AD2-21
Reference: Bid Alternate 1 Modifications, Sheet C5
Description: See C5 sketches for revised Bid Alt 1 scope. See attached AD2-21A thru AD2-21E.

18. Item No. AD2-22
Reference: PA System Revisions
Description: See attached sketches for revised PA system scope. See attached AD2-22A thru AD2-22J.

19. Item No. AD2-23
Reference: Electrical Power Revisions at Room 107
Description: See attached sketch for revised outlets at Room 107. See attached AD2-23A and B.

20. Item No. AD2-24
Reference: WAP Addition at Shade Shelter
Description: See attached sketch for additional Wifi Antennae at the new Shade Shelter. See attached AD2-22C. (Note: AD2-22C includes scope from Item AD2-22 and AD2-24 in the sketch)

21. Item No. AD2-25
Reference: Fire Sprinkler Demolition at Room 156
Description: See attached sketch for additional existing Fire Sprinkler demolition scope at Room 156. See attached AD2-25.

GENERAL QUESTIONS

1. Item No. AD2-26
Question: Section 11063/1.01/D says to supply and install a motorized Video Screen. Sheet T2.1 indicates that the Video Screen is supplied by (what looks to be) Section 11133 and rigged by Section 11063. Please provide clarification.
Response: Video screen is provided and installed entirely per section 11063.

2. Item No. AD2-27
Question: Detail 3/T2.1 has information regarding the finish of the drywall cyclorama. However, section 11063 does not say anything about this wall in the summary of scope. Is this work to be done by the drywall contractor or the rigging contractor? Please provide clarification.
Response: The cyclorama wall at the stage is to be installed by the drywall contractor.
Question: On page A5.31 Toilet Elevations it shows keynote 10.28 which is Solid Surface product for the walls in the bathrooms. On the finish Schedule it shows Porcelain Tile. Which is correct? Please provide clarification.

Response: The ceramic tile is correct for all staff restroom walls. There is no porcelain tile scope (typo). The solid surface panels are correct for all student restroom walls.

ATTACHMENTS

Project Manual:
Section 16860 – EDUCATION INTERCOMMUNICATION & PROGRAM SYSTEMS
                        (11 pages)

Section 11061 - PRODUCTION LIGHTS
                    (1 page)

Section 11131 - PRODUCTION AUDIO - 6, 7, 9, 10, 11
                        (5 pages)

Drawings:
AD2-5               1 Page
AD2-6A and B        2 Pages
AD2-7               1 Page
AD2-8               1 Page
AD2-9               1 Page
AD2-10              1 Page
AD2-11              1 Page
AD2-12              1 Page
AD2-13              1 Page
AD2-14A             1 Page
AD2-15A thru D      4 Pages
AD2-16A and D       4 Pages
AD2-17A and B       2 Pages
AD2-18A             1 Page
AD2-19A, B and C    3 Pages
AD2-20A and B       2 Pages
AD2-21A thru D      5 Pages
AD2-22A thru J      10 Pages
AD2-23A and B       2 Pages
AD2-25              1 Page

END OF ADDENDUM ITEMS
SECTION 00400

BID FORM

Contractor: ____________________________

Bid Opening Date: ____________________

To the San Francisco Unified School District, Prop A Bond Program, second floor, room 209, 135 Van Ness Avenue, San Francisco, CA 94102. San Francisco Unified School District will date/time stamp each bid upon receipt at room 209. Bid proposal must be received and time stamped by: February 25, 2013. Bid for:

Project: Roosevelt Middle School Modernization

The undersigned hereby declares that he has fully investigated the existing conditions at the project site and carefully examined all of the Contract Documents as prepared by K2A Architecture and Interiors.

The undersigned has examined all Bidding Documents and the site for the above project and agrees to furnish and pay for all labor, material, equipment, plant, appurtenances, services, sales, consumer and use taxes required by law, and including utilities and transportation required to complete this project according to all the requirements of the Contract Documents, including all addenda, at and for the price(s) stated below regardless of any increase in wage scales or material prices. The Contractor in submitting its bid guarantees the following prices for Ninety (90) calendar days.

All General Contractors and Mechanical, Electrical and Plumbing Subcontractors must be Pre-Qualified by the District prior to submitting a bid proposal on this project.

By submitting a bid for Work for this Project, the Bidder and its Subcontractors agree to be bound by the terms of the Project Labor Agreement for Work on the Project.

BASE BID

$ ____________________________
Price in Figures

ADDITIVE ALTERNATE NO. 1, Lunch Shelter and Pad

$ ____________________________
Price in Figures

ADDITIVE ALTERNATE NO. 2, Boiler System

$ ____________________________
Price in Figures

ALLOWANCE NO. 1, PBX phone system

$ __80,000________________________
Price in Figures

TOTAL BASE BID (Base Bid + Alt. 1 + Alt. 2 + + All. 1 = Total Base Bid)

Price in Words

$ ____________________________
Price in Figures

0040C - 1
ADDITIVE ALTERNATE NO. 3, Refinish Auditorium Balcony Seating

Price in Words

Dollars $ Price in Figures

(Descriptions of alternates are primarily scope definitions and do not necessarily detail the full range of materials and processes needed to complete the construction).

Acknowledge receipt of Addenda Nos.

(Company)

(Signature of Bidder)

(Contractor License Number)

(Printed Name)

(License Expiration date)

(Title of Bidder)

(San Francisco Business Tax Certificate Number)

(Business Address)

If a Corporation, incorporated
In the State of:

(Telephone Number)

(Fax number)

By

(Officer)

(Printed name)

(Title)

END OF SECTION 00400
SECTION 01210
ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes administrative and procedural requirements governing allowances.

1. Certain materials and equipment are specified in the Contract Documents by allowances. In some cases, these allowances include installation. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.

B. Types of allowances include the following:

1. Lump-sum allowances.

C. Related Sections include the following:

1. Division 1 Section 00700 “General Conditions” for procedures for submitting and handling Change Orders.

1.3 SELECTION AND PURCHASE

A. At the earliest practical date after award of the Contract, advise District of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.

B. At District's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.

C. Purchase products and systems selected by District from the designated supplier.
1.4 SUBMITTALS

A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

B. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.

1.5 ALLOWANCES

A. Use the allowance only as directed by District for District's purposes and only by Change Orders that indicate amounts to be charged to the allowance.

B. Contractor's overhead, profit, and related costs for products and equipment ordered by District under the allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.

C. Change Orders authorizing use of funds from the allowance will include Contractor's related costs and reasonable overhead and profit margins.

D. At Project closeout, credit unused amounts remaining in the allowance to District by Change Order.

1.6 UNUSED MATERIALS

A. Return unused materials purchased under an allowance to manufacturer or supplier for credit to District, after installation has been completed and accepted.

1. If requested by District, prepare unused material for storage by District when it is not economically practical to return the material for credit. If directed by District, deliver unused material to District's storage space. Otherwise, disposal of unused material is Contractor's responsibility.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION
A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

A. Allowance No.1: include lump sum of $80,000 for Telbon PBX Phone system equipment pre District Standards. All related infrastructure is include in the base bid. Work to be installed as directed by the District. The phone system shall be installed in Phase 6B

END OF SECTION 01210
SECTION 16860

EDUCATIONAL INTERCOMMUNICATIONS AND PROGRAM SYSTEMS

PART 1 - GENERAL

1.01 SUMMARY

A. Furnish and install all equipment including, but not limited to, outlet boxes, conduit (with pull strings), wiring, telephones, announciators, speakers, and microphones as shown on the plans, and all other equipment necessary to provide a complete and operating system.

B. Equipment supplied by SimplexGrinnell (Referenced as the “Supplier”) to be considered as meeting these specifications and as the base bid. The specifying authority must approve any alternate system. Bidders supplying an alternate system must make the authority aware of their intentions and provide adequate information, including catalog cuts, working shop drawings and a demonstration of the proposed system at least 10 days prior to bid date. Any prior approval of an alternate system does not exempt the supplier from meeting the intent of these specifications. If the alternate system fails to provide all the requirements specified in this document, Contractor to be responsible for all costs associated with the removal and replacement of said equipment.

1.02 RELATED SECTIONS

A. Contents of Division 16, Electrical, and Division 1, General Requirements, apply to this Section.

1.03 REFERENCES AND STANDARDS

A. References and Standards as required by Section 16700, Communications Basic Requirements, and Division 1, General Requirements.

1.04 SUBMITTALS

A. Submittals as required by Section 16700, Communications Basic Requirements and Division 1, General Requirements.
B. In addition, provide:

1. Data sheets on all equipment being provided.
2. Internal control cabinet drawings showing internal block diagram connections.
3. Wiring diagrams showing typical field wiring connections.

1.05 QUALIFICATIONS

A. Contractor to be from an established and locally run business which has been operating in the area for a minimum of five years.

B. System Supplier to show evidence that he/she maintains a service organization and parts inventory to adequately support the supplied equipment.

1.06 QUALITY ASSURANCE

A. Quality assurance as required by Section 16700, Communications Basic Requirements, and Division 1, General Requirements.

B. In addition, meet the following:

1. Supplier to maintain a locally run business for a minimum of five years as authorized distributor of the supplied equipment with full warranty privileges.

2. Maintain the necessary spare parts in the proper proportion locally, as recommended by the equipment manufacturer, to maintain and service the equipment being supplied. This facility is to be available for inspection by the engineer.

3. System Supplier to have attended the manufacturer’s installation and service school.

4. System Supplier to furnish manufacturer’s manuals of the completed system including individual specification sheets, inter-panel and intra-panel wiring diagrams. Additionally, include all information necessary for the proper operation of the system. Any bidder using equipment other than what is specified must provide this information prior to bidding.
5. Upon completion of project, supply as-built drawings which include any changes to wiring, wiring designations, junction box labeling and any other pertinent information.

1.07 WARRANTY

A. Warranty of materials and workmanship as required by Section 16700, Communications Basic Requirements, and Division 01, General Requirements.

1.08 MAINTENANCE SERVICE

A. Provide a two-year guarantee of the installed system against defects in material and workmanship. Provide all labor and materials at no expense to the Owner. Guarantee period to begin on the date of acceptance by the Owner or engineer.

B. A maintenance contract offering continued factory authorized service of this system to be made available if requested by the Owner.

1.09 IN SERVICE TRAINING

A. System Supplier to furnish a minimum of four hours of in service training with the system. These sessions to be broken into segments that will facilitate the training of individuals in operating station equipment, administrative devices, user programming functions, and program distribution equipment. Provide operating manuals and users' guides at the time of the training.

1.10 WIRING

A. System wiring to be in accordance with good engineering practices as established by the EIA and NEC.

B. Wiring to meet all established state and local electrical codes.

C. All wiring to test free from grounds and shorts.

PART 2 - PRODUCTS

2.01 MANUFACTURER

A. Simplex 5100 Series BCS
A. General:

1. Include a comprehensive programmable microprocessor based communications system consisting of a central switching exchange capable of handling up to 120 remote stations.

2. Locate all programmable functions in battery backed ram to prevent loss in a power failure condition.

3. System to have provisions for battery back-up and charger specifically designed for use with system power supplies. Systems that use an uninterruptible AC power supply (UPS) system will not be accepted.

4. Provide eight internal relays which can be activated manually from any administrative phone or automatically via an optional integral Master Time Control Center.

5. Provide provisions for program distribution of three audio program sources simultaneously to any one or group of staff stations. Base bid must support a minimum of two active programs.

6. Provide nine built in software definable signaling tones for signal distribution.

B. Central Switch:

1. The central switch to utilize standard dual tone multi-frequency type decoding (DTMF) for conformance with standard telephone practices.

2. Central switch to provide an RS-232 port to accommodate on or off site optional system management software for programming and/or diagnostic operations. Software to be Microsoft Windows based, compatible with Windows 95, 98, 2000 or NT, and loaded on a user's Personal Computer (PC). The user will have the ability to access and change all system parameters as necessary and to save the complete system architecture on its storage medium. It will be possible to connect the central switch directly to the PC via serial cable (supplied with the software), optional telephony-based modem, or optional LAN/WAN device server using industry standard TCP/IP addressing over an Ethernet or Token-Ring networking environment. When using telephony-based modem or LAN/WAN connection schemes, it must be possible to program and/or run diagnostics for multiple systems.
C. Amplification:

1. Provide individual, independent amplification for each remote station to allow absolute flexibility for simultaneous paging, program distribution and tone schedules. Equipment requiring a single power amp for these functions shall size such an amp as to deliver a minimum of (1.5) watt per station to compensate for inherent transformer losses.

2. Additional power will be required for hallway speakers, outside horns and common areas.

D. Printers:

1. Provide facilities for a printer output to create a log of system activity.

2. If supplied with TCP/IP addressing, the system to provide real time industry standard SMDR formatted event logging that can be stored at a PC with system management software.

E. Phones:

1. Provide system with four multifunction ports for connection of administrative phones and/or any loop start trunk port of a key or PBX telephone system. All communication between administrative phones to be non-blocking. Provide a minimum of one PBX port interface as part of this basic bid specification.

2. Provide capabilities of zoning incoming calls from any staff station location to any of four multifunction ports.

3. Provide four telephonic links between DTMF telephone locations.

4. Provide eight unrestricted audio paths for private communication between administrative phones, administrative phones and staff stations, program or tone tone distribution and paging.

F. Intercom:

1. Provide one direct dialing, two-way voice amplified intercom link with automatic gain control for every twenty-four stations allowing multiple open voice conversations.
G. Time-Tone Schedules:
1. Provide eight separate time-tone schedules with a minimum of 1024 events.
2. Individual events of each schedule to be capable of sounding one of nine user defined tone types. These schedules can be run individually or simultaneously.

H. Paging Zones:
1. Provide twenty-four paging zones with two priority levels of all call capability. Paging into any one zone is not to interrupt any program(s) previously distributed.
2. If the areas receiving program are part of the page zone the program will be interrupted during the page and returned automatically when the page is completed.

I. Clock:
1. Provide integral internal program clock for time tone distribution and other time related functions.
2. Provide capability to synchronize the program clock from an external GPS Wireless Clock Controller.

J. Voice Synthesized Call-In:
1. Provide system with voice synthesized call-in, which provides any administrative telephone audible annunciation of the calling party's architectural room number.
2. Optional hand-sets or call stations are required for this feature.
3. Provide two, three, or four-digit programmable architectural room numbers for administrative and staff station locations.

K. Caller ID:
1. Provide optional Caller ID information for use with specific administrative phones and PBX interface port as part of base system.
L. Ring Tones:

1. Provide discriminating ringing to distinguish different priority levels of incoming calls.

2. Optional hand-sets or call stations are required for this feature.

3. Provide selective pre-announce tones:
   a. Single Chime-Page
   b. Dual Chime-Intercom Call

M. Call Tones

1. General:
   a. Provide call confirmation tone at the intercom speaker location when a call is placed. This tone verifies that the call has been placed into the system queue.
   b. Optional hand-sets or call stations are required for this feature.

2. Emergency Calls:
   a. A second confirmation tone to be activated if the call is upgraded to an emergency call.
   b. Equipment which does not notify the caller that the system has accepted the upgraded call will require the use of a supplemental LED indicator at each calling location.
   c. After a user-determined time, unanswered emergency calls will have their architectural room number automatically announced over any one or group of speakers. This automatic page notifies nearby staff of an emergency condition and ensures immediate response. Simply answering the call will restore system to normal.
   d. Optional hand-sets or call stations are required for this feature.

2.03 ADMINISTRATIVE TELEPHONE:

A. Administrative telephone to be a standard DTMF set, which may be equipped with an optional 4 x 20 LCD display for visual display of incoming calls.

B. Provide the following features by the administrative telephone: Simplex 5120 Series.

1. Three Levels of System Access:
   a. Level 1: Dialing of any administrative or speaker station, all call, emergency all call, zone paging, school/erase call waiting queue, transfer and conference.
b. Level 2: Same as Level 1 with select and distribute program capabilities, set/reset alarm and relay functions.

c. Level 3: Same as Level 2 plus the capability to bump or join a conversation in progress and to access system set-up menu for all programming features.

C. General:

1. Provide speaker and microphone for hands-free communication. Administrative phones requiring a push to talk switch will not be accepted.

2. Provide sixteen single-touch programmable function buttons for frequently dialed functions, page groups, bell schedules, program distribution, etc.

3. Provide three emergency programmable buttons for alert and evacuation tones.

4. Provide mute function for privacy.

5. Provide selective monitoring of program sources being distributed to staff locations.

6. Provide facilities to transfer or hold calls.

7. Provide adjustable ringer volume.

8. Provide hands-free speaker volume control.

D. Operator's Display:

1. Provide an operator's display at each designated administrative phone. This 4 x 20 LCD display will continually show time, day, date and current operating time schedule(s) unless it is in the programming mode. Programming menus, time schedules and complete system architecture can also be displayed when in the programming mode.

   a. Simplex 5130 Series.

2. Additionally, show up to three incoming calls (the fourth line shows how many additional calls are in the queue).

3. Optional hand-sets or call stations are required for this feature.
2.04 STAFF STATION CALL-IN ASSEMBLY

A. General:

1. The staff station call-in assembly to be a momentary contact spring return type switch and an integral volume control mounted to a stainless steel single gang plate. This volume control will compensate for varying room sizes and acoustical conditions.

2. The call-in switch will be capable of 6 different access levels.

3. Optional hand-sets or call stations are required for these features:
   a. Level 0 - Normal: Normal calls are initiated when activated.
   b. Level 1 - Security: Allows activation of a common system relay.
   c. Level 2 - Normal/Emergency: Normal calls are initiated by simply depressing the call-in switch. These stations can initiate an emergency call by depressing the call-in switch four times within five seconds. Emergency calls will display "HELP" on administrative displays and provide a special ring signal. This emergency call can be programmed to ring a special emergency phone.
   d. Level 3 - Urgent/Emergency: Same as Level 2 except depressing the call switch once will initiate an "URGENT" call, which would be a higher priority than a "NORMAL" call.
   e. Level 4 - Night: Allows for the ringing of the proper Administrative Telephone as well as all speakers in the building.
   f. Level 5 - Emergency: Depressing the call switch will immediately place an emergency call.
   g. Level 6 - Ignore: Allows the call switch to be bypassed while not affecting the staff station speaker.

4. Provide an 8-inch dual cone design staff station speaker with a minimum frequency response of 30Hz-18kHz. It is to have a minimum voice coil diameter of 3/4-inch, a 5.0 ounce magnet and be capable of handling 10 watts of program power:
   a. Simplex 5120 Series.

5. Weatherproof outside paging loudspeakers to have a minimum power rating of five watts. Speaker to have a minimum frequency response of 275-14kHz and a dispersion angle of 120 x 60 degrees.
   a. Simplex 5120 Series.
6. Provide provisions for the automatic distribution of paging announcements from an optional remote microphone. Keying the microphone will automatically mute all other audio sources and transmit the microphone signal to all rooms or specific groups of rooms as programmed into the system software.

7. Optional Program sources for distribution to be a combination Cassette Tape/AM-FM Radio. Provide Program Monitor Assembly to preview audio material prior to distribution. Provide a roof top antenna to ensure proper reception on the FM band. Provide appropriate wall or desk rack mounting of this device as shown on drawings.

8. Time Tone Units: Simplex 6331 Series, as indicated on drawings.


10. Provide low power digital clocks compatible with Simplex 5120 Series BCS integral Master Clock for a completely synchronized clock and bell system.

PART 3 - EXECUTION

3.01 CABLES

A. System Wiring: All wiring to be in accordance with current new construction wiring guidelines published by the manufacturer, including telephones, displays, staff speaker and call switches.

B. Obtain written instruction from Communications Systems Manufacturer regarding the appropriate wire/cable to be used for this installation. Do not deviate from the written instruction without prior written approval of the Communications Systems Manufacturer.

C. Transient suppression is required on all wiring leaving the building.

D. All cables run in underground conduits must be rated as suitable for wet locations.

3.02 INSTALLATION

A. Install complete system in strict accordance with manufacturer’s recommendations.

B. Install all wiring in raceways where routed through plenum ceiling areas.
3.03 INSPECTION AND TESTING UPON COMPLETION

A. Check-out and final connections to the system to be made by a factory trained technician in the employ of a manufacturer of the products installed. In addition, factory trained technicians to demonstrate operation of the complete system and each major component to the Owner.

B. Provide system field wiring diagrams to this subcontractor by the system manufacturer prior to installation.

C. Guarantee all materials and installation to be free of defects in material and workmanship for one year after final acceptance of installation and test.

D. Upon completion of the installation, furnish four copies of complete operational instructions, complete with record drawings. Include part numbers and names, addresses, and telephone numbers of parts source. Final payment will not be made until operational manuals have been received.

E. Upon completion of the installation of the equipment, the electrical contractor to provide to the engineer a signed statement from the equipment supplier stating the system has been wired, tested, and functions properly according to the specifications.

F. If requested by the owner and recommended by the engineer, a one-time occupancy adjustment service will be made by the contractor within 90 days after system acceptance. This service to include the re-tapping of amplified speakers and all amplifier adjustments as identified by the engineer to provide the owner with a well-balanced public address system. All materials required, which includes any specialty tools, lifts, etc., will be provided by the contractor at time of service. The system supplier will accompany the contractor to assist with the testing of all occupancy adjustments.

G. Nothing contained in these specifications is to be construed to relieve the Contractor from furnishing a complete and acceptable electrical wiring system in all its categories. The engineer will condemn and reject any materials or labor which are or may become detrimental to the accomplishment of the intentions of these specifications.

END OF SECTION
### Digital Dimming & Control
#### 1. Dimmers & Processors

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ETC</td>
<td>DRd12-24-120</td>
<td>Unison 12 Dual Module Rack: 200A 2.4kW/dimmer</td>
</tr>
<tr>
<td>1</td>
<td>ETC</td>
<td>P-ACP</td>
<td>Unison Paradigm Architectural Control Processor</td>
</tr>
<tr>
<td>1</td>
<td>ETC</td>
<td>P-SPM</td>
<td>Unison Paradigm Station Power Module</td>
</tr>
<tr>
<td>1</td>
<td>ETC</td>
<td>DRd12-24-120</td>
<td>Unison 12 Dual Module Rack: 200A 2.4kW/dimmer</td>
</tr>
<tr>
<td>1</td>
<td>ETC</td>
<td>S-ACP</td>
<td>Unison SmartLink Architectural Control Processor</td>
</tr>
<tr>
<td>19</td>
<td>ETC</td>
<td>D20</td>
<td>Dual 20A 2.4kW DIMMER module: 350 microsec choke</td>
</tr>
<tr>
<td>2</td>
<td>ETC</td>
<td>R20</td>
<td>Dual 20A 2.4kW RELAY module: switched load</td>
</tr>
<tr>
<td>3</td>
<td>ETC</td>
<td>ELV10</td>
<td>Dual 10A 1.2kW Lo-Volt DIMMER module: LED load</td>
</tr>
<tr>
<td>12</td>
<td>Mason</td>
<td>RBA-Black</td>
<td>Acoustical Isolation Pads: wall-mount</td>
</tr>
</tbody>
</table>

#### 2. Control Console & Accessories

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ETC</td>
<td>LMNT-60-250</td>
<td>Element 250-channel 60-fader Control Console w. vinyl dust cover</td>
</tr>
<tr>
<td></td>
<td>Net3</td>
<td>RFR</td>
<td>Net3 Radio Focus Remote complete</td>
</tr>
<tr>
<td>1</td>
<td>Contractor</td>
<td>Keyboard</td>
<td>Mouse</td>
</tr>
<tr>
<td>1</td>
<td>Littlite</td>
<td>LL-18XR-Hl</td>
<td>18&quot; XLR3M Gooseneck: right-angle plug, hi-intensity</td>
</tr>
<tr>
<td>2</td>
<td>Kingston</td>
<td>DT160/4GB</td>
<td>Data Traveler USB Flash Drive, retractable capless</td>
</tr>
<tr>
<td>1</td>
<td>Samsung</td>
<td></td>
<td>Ultra Sharp 20&quot; Flat Panel Monitor: 1600x1200 pixels</td>
</tr>
<tr>
<td>6</td>
<td>ETC</td>
<td>CD-DMX 25'</td>
<td>DMX512 digital control cable, 5-pin, labeled</td>
</tr>
<tr>
<td>22</td>
<td>ETC</td>
<td>CD-DMX 10'</td>
<td>DMX512 digital control cable, 5-pin, labeled</td>
</tr>
<tr>
<td>6</td>
<td>ETC</td>
<td>CD-ETC Net 25'</td>
<td>Ethernet Category 5 M-M cable, labeled</td>
</tr>
<tr>
<td>6</td>
<td>ETC</td>
<td>CD-ETC Net 10'</td>
<td>Ethernet Category 5 M-M cable, labeled</td>
</tr>
<tr>
<td>16</td>
<td>ETC</td>
<td>CD-ETC Net 2'</td>
<td>Ethernet Category 5 M-M patch cable, labeled</td>
</tr>
</tbody>
</table>

**Items Below: MATTE BLACK w. engraved white fill epoxy letters**

### 3. Production Control Panel (PCP)

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>DWR-24-17</td>
<td>24 RU hinged 2-piece rack: 49&quot; H x 23.4&quot; W x 17&quot; D Right-Hand Swing as user faces rack</td>
</tr>
<tr>
<td>1</td>
<td>Littlite</td>
<td>RL10D</td>
<td>Dual 12&quot; 110V gooseneck racklights</td>
</tr>
<tr>
<td>1</td>
<td>ESE</td>
<td>572/M</td>
<td>Digital clock &amp; timer</td>
</tr>
<tr>
<td>1</td>
<td>ETC</td>
<td>U61011 rack mt</td>
<td>Unison 10-fader/11-button take-control, lockout panel</td>
</tr>
<tr>
<td>1</td>
<td>ETC</td>
<td>U10002 rack mt</td>
<td>Unison 2-button work light station (mt on panel above)</td>
</tr>
<tr>
<td>1</td>
<td>ETC</td>
<td>Custom</td>
<td>Script platform w. keylock handle</td>
</tr>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>SB2</td>
<td>Flanged blank steel panel: black</td>
</tr>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>SB3</td>
<td>Flanged blank steel panel: black</td>
</tr>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>SB3 w Cutouts</td>
<td>Flanged blank steel panel: black, laser cut per 'T' dwg</td>
</tr>
<tr>
<td>1</td>
<td>ETC</td>
<td>Console Input Panel</td>
<td>Inputs: 2 DMX In (XLR5M) / 1 ETCNet (Ethernet F)</td>
</tr>
<tr>
<td>1</td>
<td>ETC</td>
<td>4-Gang/4-Duplex Box</td>
<td>Incl. dedicated neutrals &amp; full-size insulated ground @ rear of rack</td>
</tr>
</tbody>
</table>

**Items Below: MATTE BLACK w. engraved white fill epoxy letters**

---

Roosevelt Middle School  
460 Arguello Blvd, San Francisco, CA 94118  
CSDA Architects  
475 Sansome, Suite 800, San Francisco, CA 94111  
t: 415.693.9800  ff: 415.693.9830  
Production Light Dimming & Control  
THEATER SYSTEMS DESIGN  
Sunsaura, Inc.  
724 EUCLID AVENUE, BERKELEY, CA 94708  
PH: 510.527.6349  
Date: 02/20/2014  
Sheet:  
Addendum 2  
11061-10
<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Listen</td>
<td>LT-800-072-1</td>
<td>Share cable w. Microphone section that follows.</td>
<td>Control Booth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stationary Transmitter (8&quot; W x 8&quot;D x 1.75&quot; H) w. 1/2-rack ears or 1/2-rack shelf &amp; 1/2 blank cover</td>
<td>1 RU@Src Rak</td>
</tr>
<tr>
<td>1</td>
<td>Listen</td>
<td>LA-326</td>
<td>Rack-Mount Brackets for single transmitter</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Listen</td>
<td>LA-201</td>
<td>Wall transformer (power supply)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Listen</td>
<td>LA-123</td>
<td>72 MHz Right-Angle Helical Antenna (90 dg mount)</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Listen</td>
<td>LR-300-072</td>
<td>17-Ch Digital Receiver w. belt clip loop &amp; earbuds</td>
<td>4% of 800 seats</td>
</tr>
<tr>
<td>2</td>
<td>Listen</td>
<td>LA-311</td>
<td>16-slot Ni-MH charger/carrying case w. power supply</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Listen</td>
<td>LA-362</td>
<td>Pair NiMH Re-chargeable AA batteries</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Listen</td>
<td>LA-165</td>
<td>Stereo &quot;walkman style&quot; Headset</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Listen</td>
<td>LA-167</td>
<td>Pack of 10 LA-165 Replacement Headset Ear Cushions</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Listen</td>
<td>LA-166</td>
<td>Neck Loop (for use w. tele-coil hearing aids)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Listen</td>
<td>LA-304</td>
<td>ADA Compliance Sticker Kit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Symetrix</td>
<td>528E</td>
<td>Voice Processor</td>
<td>1 RU@Src Rak</td>
</tr>
<tr>
<td>1</td>
<td>Symetrix</td>
<td>581E</td>
<td>4 x 4 Audio Distribution Amplifier</td>
<td>1 RU@Src Rak</td>
</tr>
<tr>
<td>1</td>
<td>Audio-Technica</td>
<td>AT8035</td>
<td>Shotgun Mic w. remote phantom pwr, supplied &amp; rigged</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Audio-Technica</td>
<td>AT8415</td>
<td>Mic Shock Mt, supplied &amp; rigged</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Whirlwind</td>
<td>WPX2B/1NC3FP-1-BAG</td>
<td>Mic Outlet: Neutrik Chassis XLR3F (2G face plate) .125&quot; black face plate</td>
<td>Label &quot;ADA Mic #&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Box F: 1 Mic outlet, centered behind overhead Array Surface-Mt on Center Array steel (by others)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Note: One 2-gang surface-mt 3-1/2&quot; D masonry box, Raco #696 or equal, supplied/installed by EC</td>
<td></td>
</tr>
</tbody>
</table>

Production Intercom

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Clear-Com</td>
<td>MS-702</td>
<td>2-Ch rack-mt Encore Main Station &amp; power supply</td>
<td>1 RU@Src Rak</td>
</tr>
<tr>
<td>8</td>
<td>Clear-Com</td>
<td>RS-701</td>
<td>Single-Channel Belt Pack w. call light</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Clear-Com</td>
<td>CC-95</td>
<td>Single-Muff Intercom Headset</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Clear-Com</td>
<td>WP-2 or equal</td>
<td>Face Plate: 2-Ch Select w 2XLR3M, 1-gang black Attach 1 to 3RU rack panel w. cutout @ Stage PCP Attach 3 as horizontal flush-mt under CB windows Attach 3 as vertical flush-mt @ Stage walls +48&quot; AFF Attach 1 as vertical pedestal-mt @ center Balcony</td>
<td>Label &quot;Com #&quot;</td>
</tr>
<tr>
<td>1</td>
<td>Contractor</td>
<td>Custom</td>
<td>Face Plate: 2-Ch Select w 2XLR3M, 1-gang bk bx Attach connectors to FB plate w. cutouts 1 @ Flr Box 'C': Center Main House Tech position [Flr Box 'C' supplied by 11061 &amp; installed by EC]</td>
<td>Label &quot;Com #&quot;</td>
</tr>
<tr>
<td>10</td>
<td>Whirlwind</td>
<td>MK4-25</td>
<td>1pr 22ga low Z hi-flex Str TC braid shld; XLR3M-3F 25 Ft.</td>
<td>See 11061-11</td>
</tr>
<tr>
<td>3</td>
<td>West Penn</td>
<td>77292</td>
<td>1K' reel: 2 TP 20ga Str TC, OS+20ga DW, PVC jkt [WP 292 uses bare copper &amp; is NOT acceptable.]</td>
<td>+/- Ft; field verify</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or Belden</td>
<td>8762 or 9464</td>
<td>See T4 Dwgs</td>
</tr>
</tbody>
</table>

Roosevelt Middle School
460 Arguello Blvd, San Francisco, CA 94118

CSDA
ARCHITECTS
475 Sansome, Suite 800, San Francisco, CA 94111
t: 415.693.9800 f: 415.693.9830

Production Audio
THEATER SYSTEMS DESIGN
Sunsaura, Inc.
724 EUCLID AVENUE, BERKELEY, CA 94708
PH: 510.527.6349

Date: 02/20/2014
Sheet: Addendum 2

11131-6
<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AV Source &amp; Patch Rack</td>
<td></td>
<td><strong>Distribute load among dedicated audio AC circuits.</strong></td>
<td>40 RU / Rack</td>
</tr>
</tbody>
</table>
| UAS | Middle Atlantic | SR-40-22  | **40RU/70" Pivoting Floor Rk 90.25"H x 22"W x 22"D  
**Left-Hand Hinge, as user faces rack front****  |                |
| 1   | Middle Atlantic | DWR-RR40  | **40RU Rear Rail Kit 11-gage, 10-32 threaded, black**  | Black Finish   |
| 1   | BSS Audio      | SW London BLU-800 | **Soundweb 16-Ch I/O DSP: EQ, Xovr, Delay complete**  | 1 RU           |
|     |                |           | Inputs: Manual + Automix, Assisted Listening  
Include all I/O cards, controllers, expanders required.  |                |
|     |                |           | **See Assisted Listening Transmitter (11131-6)**  | 1 RU           |
|     |                |           | **See Assisted Listening Voice Processor (11131-6)**  | 1 RU           |
|     |                |           | **See Assisted Listening Distribution Amp (11131-6)**  | 1 RU           |
|     |                |           | **See Video Transmitter & Receivers (11133-6)**  | 2 RU           |
|     |                |           | **See WL Mic Antenna/Pwr Distribution (11131-12)**  | 1 RU           |
|     |                |           | **See WL Mic Dual Channel Receivers (11131-12)**  | 3 RU           |
| 1   | Middle Atlantic | USC-6R    | **Universal Sequencing Controller for 12 modules**  | 1 RU           |
|     |                |           | **See Intercom Main Station (11131-6)**  | 1 RU           |
|     |                |           | **See Video Control-Plug-Keyswitch Panel (11133-6)**  | 3 RU           |
|     |                |           | **See Video Switchers (11133-6)**  | 2 RU           |
| 1   | Extron         | 70-090-12 Adapted | **1 RU 1/2 rack panel w AAP blank cut for Volume Insert**  |                |
| 1   | Contractor     | Attenuator | **Lectern Gooseneck Mic #17 Remote Volume Control**  |                |
| 1   | Tascam         | SS-CDR200 | **See DVD Recorder/Player (11133-6)**  | 2 RU           |
|     |                |           | **CD-MP3-WAV Recorder to CF, SD/SDHC, USB, CD**  | 1 RU           |
|     |                |           | **XLR Bal+RCA Unbal+Coax+Digital I/O w RS-232C**  |                |
|     |                |           | **Size: 19"W x 1.75"H x 11.9" D   Wt: 8.16 lb**  |                |
| 1   | Tascam         | CD-200SB  | **SD/SDHC,USB,CD Player w MP2-3,WAV,WM,AAC**  | 2 RU           |
|     |                |           | **XLR Bal+RCA Unbal+Coax+Digital I/O**  |                |
|     |                |           | **Size: 18.94"W x 3.72"H x 11.73" D   Wt: 10.36 lb**  |                |
| 3   | Middle Atlantic | SB1       | **Flanged blank steel panel, black, 1 RU ea**  | 3 RU           |
| 3   | Middle Atlantic | VTB2      | **Flanged vented steel panel, black, 2 RU ea**  | 6 RU           |
| 3   | ADC via Whirlwind | PP-A314 MKII 26NO BG AVP | **Analog Patch Bay: longframe 1/4" jacks, 14"D**  |                |
|     |                |           | **QCP individual insulators, quick connect punchdown normals out, bussed grounds, 2x26 jack array**  | Full Normal    |
|     |                |           | **#1 Top: Mic Outputs / Bottom: Mixer Mic Inputs**  |                |
|     |                |           | **#2 Top: Mic Outputs / Bottom: Processor Inputs**  |                |
|     |                |           | **#3 Top: Processor Outputs / Bottom: Speaker Inputs**  |                |
|     |                |           | **2 pack ea color: Green-Full Normal, Yellow-Half, Red-No**  |                |
| 6   | AVP            | CIA-60-R + Y + G | **Patch Cable Wall Hanger - 6 slot min.**  |                |
| 12  | Whirlwind      | PLF-B-Q-24 | **Longframe Patch Cable: black quad 24-inch**  |                |
| 1   | Contractor     | Patch Hgr | **Mass Punch Panel: 28-Ch W6CRP output**  | 3 RU           |
| 1   | Whirlwind      | MPP-28-W6CRP-1(O) | **Mass Hinged Angle Adapter: attach to MPP above**  | Mt Right Side  |
| 1   | Whirlwind      | W5W6AK    | **500 pc. 3/4" x 10-32 thread captive washer screws**  | As Required    |
| 1   | Middle Atlantic | HW-500    | **Supply/install RDL converter(s) as needed.**  |                |

**NOTE: BALANCE all audio outputs.**

+/1 RDL FP-UBC6 6-ch UNbalanced RCA to BALANCED XLR Converter

---

**Roosevelt Middle School**
460 Arguello Blvd, San Francisco, CA 94118

**CSDA ARCHITECTS**
475 Sansome, Suite 800, San Francisco, CA 94111
t: 415.693.9800 f: 415.693.9830

**Production Audio**
THEATER SYSTEM DESIGN

**Sunsaura, Inc.**
724 EUCLID AVENUE, BERKELEY, CA 94708
PH: 510 . 527.6349

Date: 02/20/2014
Sheet:

Addendum 2

11131-7
## Sound Reinforcement / Effects System

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>DWR-24-22</td>
<td>24RU/42” Swing-out Wall Rk 49&quot;H x 22&quot;W x 22&quot;D</td>
<td>24 Units / Rack</td>
</tr>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>DWR-RR24</td>
<td>24RU Rear Rail Kit 11-gage, 10-32 threaded, black</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Mason</td>
<td>RBA-Black</td>
<td>Acoustical Isolation Pads: wall-mount</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>QTFP-2</td>
<td>Dual Fan Panel Assembly: &lt;33dBA 4.5” 95CFM 115V</td>
<td>3 RU</td>
</tr>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>USC-6R</td>
<td>Universal Sequencing Controller for 12 modules</td>
<td>1 RU</td>
</tr>
<tr>
<td>1</td>
<td>BSS Audio</td>
<td>SW London BLU-32</td>
<td>16-Ch I/O Expander w CobraNet for amplifier outputs</td>
<td>1 RU</td>
</tr>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>SB1</td>
<td>Flanged blank steel panel, black, 1 RU ea</td>
<td>1 RU</td>
</tr>
</tbody>
</table>

### Center Array Reinforcement

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Crown</td>
<td>CTS 600</td>
<td>Main: Hi Freq Amp</td>
<td>1 Soundweb Out</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>300W/ch @ 8 ohm - dual 27.7 lb typ</td>
<td>2 RU</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ch 1: Left Hi Freq Driver. Ch 2: Right Hi Freq Driver</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19” W x 3.5” H x 14.25”</td>
<td>Typ All Amps</td>
</tr>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>VTB2</td>
<td>Flanged vented steel panel, black, 2 RU ea</td>
<td>2 RU</td>
</tr>
</tbody>
</table>

### Center Array Reinforcement

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Crown</td>
<td>CTS 3000</td>
<td>Main: Low &amp; Mid Freq Amp</td>
<td>1 Soundweb Out</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1200W/ch @ 8 ohm - dual 32.7 lb typ</td>
<td>2 RU</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ch 1: Center LF 15” Sub. Ch 2: L&amp;R Mid Freq Drivers</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>VTB1</td>
<td>Flanged vented steel panel, black, 1 RU ea</td>
<td>1 RU</td>
</tr>
</tbody>
</table>

### Playback

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Crown</td>
<td>CTS 600</td>
<td>Stereo Left &amp; Right: Hi Freq Amp</td>
<td>2 Soundweb Out</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>300W/ch @ 8 ohm - stereo 27.7 lb typ</td>
<td>2 RU</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ch 1: Left Hi Freq Driver. Ch 2: Right Hi Freq Driver</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>VTB1</td>
<td>Flanged vented steel panel, black, 1 RU ea</td>
<td>1 RU</td>
</tr>
</tbody>
</table>

### Playback

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Crown</td>
<td>CTS 2000</td>
<td>Stereo Left &amp; Right: Low &amp; Mid Freq Amp</td>
<td>2 Soundweb Out</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1000W/ch @ 8 ohm - stereo 32 lb typ</td>
<td>2 RU</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ch 1: Left Low-Mid Driver. Ch 2: Right Low-Mid Driver</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>VTB1</td>
<td>Flanged vented steel panel, black, 1 RU ea</td>
<td>1 RU</td>
</tr>
</tbody>
</table>

### Over/Under Balcony Fill w Delay

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Crown</td>
<td>CTS 600</td>
<td>Over Balcony w L+R Spkrs in Parallel</td>
<td>1 Soundweb Out</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Under Balcony w L/R + C Spkrs in Parallel</td>
<td>1 Soundweb Out</td>
</tr>
<tr>
<td>1</td>
<td>Middle Atlantic</td>
<td>VTB1</td>
<td>Flanged vented steel panel, black, 1 RU ea</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Place vent panel in between CTS 600 Fill amps</td>
<td></td>
</tr>
</tbody>
</table>

---

**Roosevelt Middle School**
460 Arguello Blvd, San Francisco, CA 94118

**CSDA ARCHITECTS**
475 Sansome, Suite 800, San Francisco, CA 94111
t: 415.693.9800  f: 415.693.9830

**Production Audio**
THEATER SYSTEMS DESIGN

**Sunsaura, Inc.**
724 EUCLID AVENUE, BERKELEY, CA 94708
PH: 510 . 527.6349

Date: 02/20/2014
Sheet: Addendum 2
**11131-9**
## Sound Reinforcement / Effects System

### Speakers

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>JBL</td>
<td>AM7200-95</td>
<td>90 Dg Horiz x 50 Dg Vert Rotatable Waveguide</td>
<td>See T4 Dwgs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Main Outer Speakers: 8 ohm Mid-High Freq Hi Power</td>
<td>Speakon</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>350W 8&quot; CMCD-82H Mid Freq Differential driver</td>
<td>2 x NL4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>100W 1.5&quot; 2432H Hi Freq Compression driver</td>
<td>Active Xover</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AL7115</td>
<td>Main Center Speaker: 8 ohm Low Freq Hi Power</td>
<td>Speakon</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1000W single 15&quot; 2265H Differential driver</td>
<td>2 x NL4</td>
</tr>
<tr>
<td>1</td>
<td>JBL</td>
<td>PAF-3K</td>
<td>Planar Array Frame Kit complete:</td>
<td>50 lb.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pan &amp; Tilt Flyware affixed to steel support (steel UAS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contractor</td>
<td>Custom Flyware</td>
<td>Detailed shop dwg required.</td>
<td></td>
</tr>
</tbody>
</table>

### Stereo Left & Right Playback

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>JBL</td>
<td>AM7215-26</td>
<td>120 Dg Horiz x 60 Dg Vert Rotatable Waveguide</td>
<td>Speakon</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 ohm 2-Way Full-Range Hi Power</td>
<td>Speakon</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1000W 15&quot; 2265H Lo Freq Differential driver</td>
<td>2 x NL4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>100W 1.5&quot; 2432H Hi Freq Compression driver</td>
<td>Active Xover</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30.8&quot; H x 16.5&quot; W x 19.8&quot; D, 60 lb, ea.</td>
<td></td>
</tr>
</tbody>
</table>

### Over/Under Balcony Fill w/ Delay

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>JBL</td>
<td>AC 18-95</td>
<td>Compact Speakers</td>
<td>Speakon</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 ohm, 250W 1 x 8&quot; LF, 1&quot; HF, 90H x 50V coverage</td>
<td>2 x NL4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>18.5&quot; L x 9.4&quot; W x 10.0&quot; D, 28.2 lb ea.</td>
<td>Pipe Mt</td>
</tr>
<tr>
<td>2</td>
<td>JBL</td>
<td>MTU-18</td>
<td>U-Bracket complete w all required hardware</td>
<td></td>
</tr>
</tbody>
</table>

### Safety Cable

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>AmerWireRope</td>
<td>7x19 Extra Flexible</td>
<td>1/8&quot; Safety galv. wire rope: 2 nicopress terminated thimble eyes; 1 Saflok self-closing/locking carabiner</td>
<td>Black Finish</td>
</tr>
</tbody>
</table>

### Control Rm Monitors

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>JBL</td>
<td>LSR6325 Powered</td>
<td>8 ohm 100W 5.25&quot; LF, 4 ohm 50W 1&quot; HF, vol. control</td>
<td>XLR3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10.6&quot; H x 6.8&quot; W x 9.5&quot; D, 17 lb. ea.</td>
<td>Integral bi-amp</td>
</tr>
<tr>
<td>2</td>
<td>Allen</td>
<td>WP-16</td>
<td>Wall Plate Stud Adapter</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Allen</td>
<td>MM-016</td>
<td>Pan-Tilt Speaker Multi-Mt complete, compatible w. four 1/4&quot;-20 threaded sockets, 4.25&quot; H &amp; 2.0&quot; V O.C.</td>
<td></td>
</tr>
</tbody>
</table>

### Show Monitor/SFX Speakers

<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>JBL</td>
<td>EON510</td>
<td>100 Dg Horiz x 60 Dg Vert Waveguide</td>
<td>Balanced XLR &amp; 1/4&quot; TRS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2-Way Self-Powered &amp; Portable w Top &amp; Side Handles</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>220W 10&quot; Lo Freq Differential driver</td>
<td>Integral Amp</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>60W 1&quot; Hi Freq Compression driver</td>
<td>Passive Xover</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19.3&quot; H x 12.3 W x 10.3&quot; D, 17 lb. ea.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Telelock</td>
<td>27-3615</td>
<td>Speaker Stand: single tripod, black w. bag</td>
<td></td>
</tr>
</tbody>
</table>

### Roosevelt Middle School

460 Arguello Blvd, San Francisco, CA 94118

### CSDA

ARCHITECTS

475 Sansome, Suite 800, San Francisco, CA 94111

t: 415.693.9800  f: 415.693.9830

### Sunsaura, Inc.

724 EUCLID AVENUE, BERKELEY, CA 94708

PH: 510 . 527.6349

---

**Production Audio**

THEATER SYSTEMS DESIGN

Date: 02/20/2014

Sheet: Addendum 2

**Sunsaura, Inc.**

11131-10
<table>
<thead>
<tr>
<th>Qty</th>
<th>Manufacturer</th>
<th>Model No.</th>
<th>Item Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Installed Speakers w. Remote Amplifiers</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Whirlwind</td>
<td>WPX2B/3NL4MP</td>
<td>Spk Plate: 2-gang, .125&quot; black, 3 Neutrik Speakeon Surface-Mt 1 @ Main Array steel support by others</td>
<td>Label &quot;Spk #&quot;</td>
</tr>
<tr>
<td>7</td>
<td>Whirlwind</td>
<td>WPX2B/1NL4MP</td>
<td>Spk Plate: 2-gang, .125&quot; black, 1 Neutrik Speakeon Flush-Mt 2 @ Proscenium Face for Playback</td>
<td>Label &quot;Spk #&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pipe-Mt 2 @ Balcony Towers L&amp;R for Delay/Fill Flush-Mt 3 under Balcony L-C-R for Delay/Fill</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>West Penn</td>
<td>25210</td>
<td>1K' reel: 1 TP 10AWG Str BC Unshielded, PVC Jkt</td>
<td>+/- Ft; field verify</td>
</tr>
<tr>
<td>5</td>
<td>Whirlwind</td>
<td>NL4-5</td>
<td>#12, Speakon NL4FC to Same, 5 Ft speaker cable</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Whirlwind</td>
<td>NL4-10</td>
<td>#12, Speakon NL4FC to Same, 10 Ft speaker cable</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Powered Speakers w. Integral Amplifiers</strong></td>
<td>See pg 11131-12 for mic outlets on plates.</td>
</tr>
<tr>
<td>2</td>
<td>Whirlwind</td>
<td>FP-3</td>
<td>Flush-Mt Floor Assembly w.</td>
<td>Deliver assembly to EC to install</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lid: 12&quot; Sq steel plate w. formed rim, black</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inner Box Frame: holds 2 outlet plates</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Plates: 1 bottom &amp; 1 side, custom punched/drilled</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Whirlwind</td>
<td>FP-3 BB8</td>
<td>Flush-Mt Floor Back Box 10&quot; Sq x 8&quot; D</td>
<td>Label box to EC</td>
</tr>
<tr>
<td>4</td>
<td>Neutrik</td>
<td>NC3MP-BAG</td>
<td>Power Speaker Outlet: Neutrik Chassis XLR3M Attach outlets to Floor Box plate noted above.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Box A: 2 Pwr Spk outlet, Downstage Left (SE)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Box B: 2 Pwr Spk outlet, Downstage Right (SW)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Neutrik</td>
<td>NC3MP-BAG</td>
<td>Power Speaker Outlet: Neutrik Chassis XLR3M Attach outlets to 3-gang black 0.125&quot; punched plate.</td>
<td>Label &quot;Pwr Spk #&quot;</td>
</tr>
<tr>
<td>2</td>
<td>Whirlwind</td>
<td>WPX3B/4</td>
<td>Box D: 2 Pwr Spk outlet, Upstage Left [NE] Wing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Box E: 2 Pwr Spk outlet, Upstage Right [NW] Wing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EC supplies/installs 3-gang surface-mt 3-1/2&quot; D boxes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Raco #697 or equal</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Neutrik</td>
<td>NC3MP-BAG</td>
<td>Power Speaker Outlet: Neutrik Chassis XLR3M Attach outlet to 1-gang black 0.125&quot; punched plate.</td>
<td>Label &quot;Pwr Spk #&quot;</td>
</tr>
<tr>
<td>2</td>
<td>Whirlwind</td>
<td>WPX1B/1</td>
<td>Horizontal Box: 1 Pwr Spk outlet, above counter</td>
<td>Control Booth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EC supplies/installs 1-gang flush-mt 3-1/2&quot; D boxes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Raco #695 or equal</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>West Penn</td>
<td>DA2402</td>
<td>1K' reel: 2pr 24ga. Str TC, foil shield+DW, PVC jkt</td>
<td>+/- Ft; field verify</td>
</tr>
<tr>
<td>6</td>
<td>Whirlwind</td>
<td>MK4-25</td>
<td>1pr 22ga. low Z hi-flex Str TC braid shld: XLR3M to 3F</td>
<td>25 Ft.</td>
</tr>
</tbody>
</table>

**Roosevelt Middle School**
460 Arguello Blvd, San Francisco, CA 94118

**CSDA Architects**
475 Sansome, Suite 800, San Francisco, CA 94111
t. 415.693.9800 f. 415.693.9830

**Production Audio**
THEATER SYSTEMS DESIGN
Sunsaura, Inc.
724 EUCLID AVENUE, BERKELEY, CA 94708
PH: 510 . 527.6349

Date: 02/20/2014
Sheet: Addendum 2

11131-11
Access tower spare through:

Provide new ships ladder (Typical 3)

Provide stainless steel framed glass

Replace roof hatch and roof

See AD2-10

See AD2-11

See AD2-12

See AD2-13

See AD2-14

See AD2-15

See AD2-16

See AD2-17

See AD2-18

See AD2-19

See AD2-20

See AD2-21

See AD2-22

See AD2-23

See AD2-24

See AD2-25

See AD2-26

See AD2-27

See AD2-28

See AD2-29

See AD2-30

See AD2-31

See AD2-32

See AD2-33

See AD2-34

See AD2-35

See AD2-36

See AD2-37

See AD2-38

See AD2-39

See AD2-40

See AD2-41

See AD2-42

See AD2-43

See AD2-44

See AD2-45

See AD2-46

See AD2-47

See AD2-48

See AD2-49

See AD2-50

See AD2-51

See AD2-52

See AD2-53

See AD2-54

See AD2-55

See AD2-56

See AD2-57

See AD2-58

See AD2-59

See AD2-60

See AD2-61

See AD2-62

See AD2-63

See AD2-64

See AD2-65

See AD2-66

See AD2-67

See AD2-68

See AD2-69

See AD2-70

See AD2-71

See AD2-72

See AD2-73

See AD2-74

See AD2-75

See AD2-76

See AD2-77

See AD2-78

See AD2-79

See AD2-80

See AD2-81

See AD2-82

See AD2-83

See AD2-84

See AD2-85

See AD2-86

See AD2-87

See AD2-88

See AD2-89

See AD2-90

See AD2-91

See AD2-92

See AD2-93

See AD2-94

See AD2-95

See AD2-96

See AD2-97

See AD2-98

See AD2-99

See AD2-100
AD2-13  WALL FURRING AT MUSIC ROOM

MURPHY BURR CURRY, INC.
CONSULTING STRUCTURAL ENGINEERS
85 SECOND STREET, SUITE 501 • SAN FRANCISCO, CA 94105
PHONE: (415) 546-0431 • FAX: (415) 882-7257

DENTAL WALL - 2 LAYERS - ALIGN WITH ADJACENT WALL S.A.D.

NOTE:
- CONDITION ONLY OCCURS BEHIND INSTRUMENT CABINETS IN ROOMS 136 AND 156 A.
- USE TYP. BACKING DETAIL 9/54.7 AT PROTRUDING STUD FOR CABINET.

WALL STUD PER PLAN (S.A.D.)

METAL STUD, SIZE TO MATCH WALL STUDS.
SECURE W/ 2-#10 @ 6" O.C. STUPE TO BE CONTINUOUS @ EA STUD EXCEPT @ BRIDGING.

DRAWING DATE: 2/18/14  BY: BSW
10 SPEAKER ARRAY CENTER MOUNT

- JBL Center Speaker Array
- Working Load Limit: 500 LB
- Top 2 on Top of Speakers 8" or Bottom
- 2 x 3 K-Frame Plate
- 3/8" x 1-1/4" FAGED Steel Bolt
- CROSSBOLT S-279 Shoulder Eye Bolt
- CROSSBOLTS H-828 Dual Jaw Turnbuckles
- Eye Bolt, TYP.
- Cable to Top Rear Attachment Safety
- Structural Steel Speaker Support

Direction of Force:
- Apply Force to Shoulder Eye Bolt In Line With All Cables, Orient Backbone (Spin)
- Working Load Limit: 1550 LB
- 3/8" x 1-1/4" FAGED Steel Bolt
- CROSSBOLT S-279 Shoulder Eye Bolt

Reference:
- 3/8" Nutlock Nut & Flat Washers
- Rust-Resistant Primer & Top Coat
- Matte Black Finish
- 1/8" Artist Cable #26480 & Top Rear All Speakers
- ALL DETAILS IL-25/4.0

References:
- 1/2" x 6" Galv. Steel, Lock Nut 6/4 x End
- CROSSBOLTS H-828 Dual Jaw Turnbuckles
- Eye Bolt, TYP.
TIE PAGING SYSTEM INTO AUDITORIUM SOUND SYSTEM. UTILIZE SHIELDED, TWISTED PAIR CABLE. COORDINATE WITH SOUND SYSTEM CONTRACTOR.
11. Wireless access point connection to be installed on underside of roof. Install in Oberon 1026-12106 weatherproof box and terminate in Leviton Duraport outlet kit.

12. 1" C. underground to support beam, transition up beam with rigid conduit to outlet location.

13. Install weatherproof pull box for penetration into building.
# Panel 'K1'

120/240V, 3Ph., 4W.; 100A Bus with 100A Main Circuit Breaker Flush Mounted Panelboard with a minimum Available Fault rating of 10833A RMS

<table>
<thead>
<tr>
<th>Ckt. No.</th>
<th>Description</th>
<th>Load (VA) Type</th>
<th>C.B. A/Pole</th>
<th>C.B. Note</th>
<th>Ph. A/Pole</th>
<th>Load (VA) Type</th>
<th>Description / Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>K-1</td>
<td>1,920 K</td>
<td>20/1</td>
<td>A</td>
<td>30/1</td>
<td>2,520 K</td>
<td>K-18</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>2,762 K</td>
<td>30/3</td>
<td>C</td>
<td>20/1</td>
<td>1,440 K</td>
<td>K-20</td>
</tr>
<tr>
<td>5</td>
<td>K-9</td>
<td>2,762 K</td>
<td>30/3</td>
<td>C</td>
<td>20/1</td>
<td>1,440 K</td>
<td>K-21</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>2,762 K</td>
<td>--</td>
<td>A</td>
<td>20/1</td>
<td>100 R</td>
<td>TELEVISION</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>2,762 K</td>
<td>--</td>
<td>B</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>K-9</td>
<td>2,762 K</td>
<td>30/3</td>
<td>C</td>
<td>20/1</td>
<td>600 R</td>
<td>K-24</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>2,762 K</td>
<td>--</td>
<td>A</td>
<td>20/1</td>
<td>100 R</td>
<td>TELEVISION</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>2,762 K</td>
<td>--</td>
<td>B</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>K-9</td>
<td>2,762 K</td>
<td>30/3</td>
<td>C</td>
<td>20/1</td>
<td>540 R</td>
<td>CONVENIENCE RECEPT</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>2,762 K</td>
<td>--</td>
<td>A</td>
<td>20/1</td>
<td>400 K</td>
<td>REFRIGERATOR</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>2,762 K</td>
<td>--</td>
<td>B</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>K-7</td>
<td>480 K</td>
<td>20/1</td>
<td>O</td>
<td>20/1</td>
<td>--</td>
<td>SPARE</td>
</tr>
<tr>
<td>25</td>
<td>K-19</td>
<td>2,520 K</td>
<td>30/1</td>
<td>A</td>
<td>20/1</td>
<td>--</td>
<td>SPARE</td>
</tr>
<tr>
<td>27</td>
<td></td>
<td>2,520 K</td>
<td>--</td>
<td>B</td>
<td>20/1</td>
<td>825 K</td>
<td>EWH-3</td>
</tr>
<tr>
<td>29</td>
<td>K-22</td>
<td>480 K</td>
<td>20/1</td>
<td>O</td>
<td>20/1</td>
<td>825 K</td>
<td>--</td>
</tr>
<tr>
<td>31</td>
<td>SPARE</td>
<td>--</td>
<td>20/1</td>
<td>A</td>
<td>20/1</td>
<td>506 M</td>
<td>HWCP-3</td>
</tr>
<tr>
<td>33</td>
<td></td>
<td>--</td>
<td>--</td>
<td>B</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>HWCP-3</td>
<td>858 K</td>
<td>20/1</td>
<td>O</td>
<td>20/1</td>
<td>100 R</td>
<td>TELEVISION</td>
</tr>
<tr>
<td>37</td>
<td>CAFETERIA</td>
<td>500 R</td>
<td>20/1</td>
<td>A</td>
<td>20/1</td>
<td>360 R</td>
<td>CONVENIENCE RECEPT</td>
</tr>
<tr>
<td>39</td>
<td></td>
<td>--</td>
<td>--</td>
<td>B</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>SPARE</td>
<td>--</td>
<td>20/1</td>
<td>C</td>
<td>20/1</td>
<td>--</td>
<td>SPARE</td>
</tr>
</tbody>
</table>

Total Connected Load: Ph. A 18,552 VA 155 Amps  Panel Connected Load: 40.9 KVA 113.7 Amps
Total Connected Load: Ph. B 9,111 VA 76 Amps  Sub-Fed Connected Load: 0.0 KVA 0.0 Amps
Total Connected Load: Ph. C 13,257 VA 110 Amps  Total Demand Load: 27.7 KVA 76.9 Amps

Date Signed: 2/18/2014
The main legend for Room 106:

- Other holes are supposed to see only non-shrink grout.
- Holes in ceiling slab with patch for non-shrink grout.
- Note: approximate location of existent water heater.

Existing fire sprinkler pipe:

- Pipe heads, hangers, etc. to be removed.
- Vent in head that isreed other room shown in location to remain.