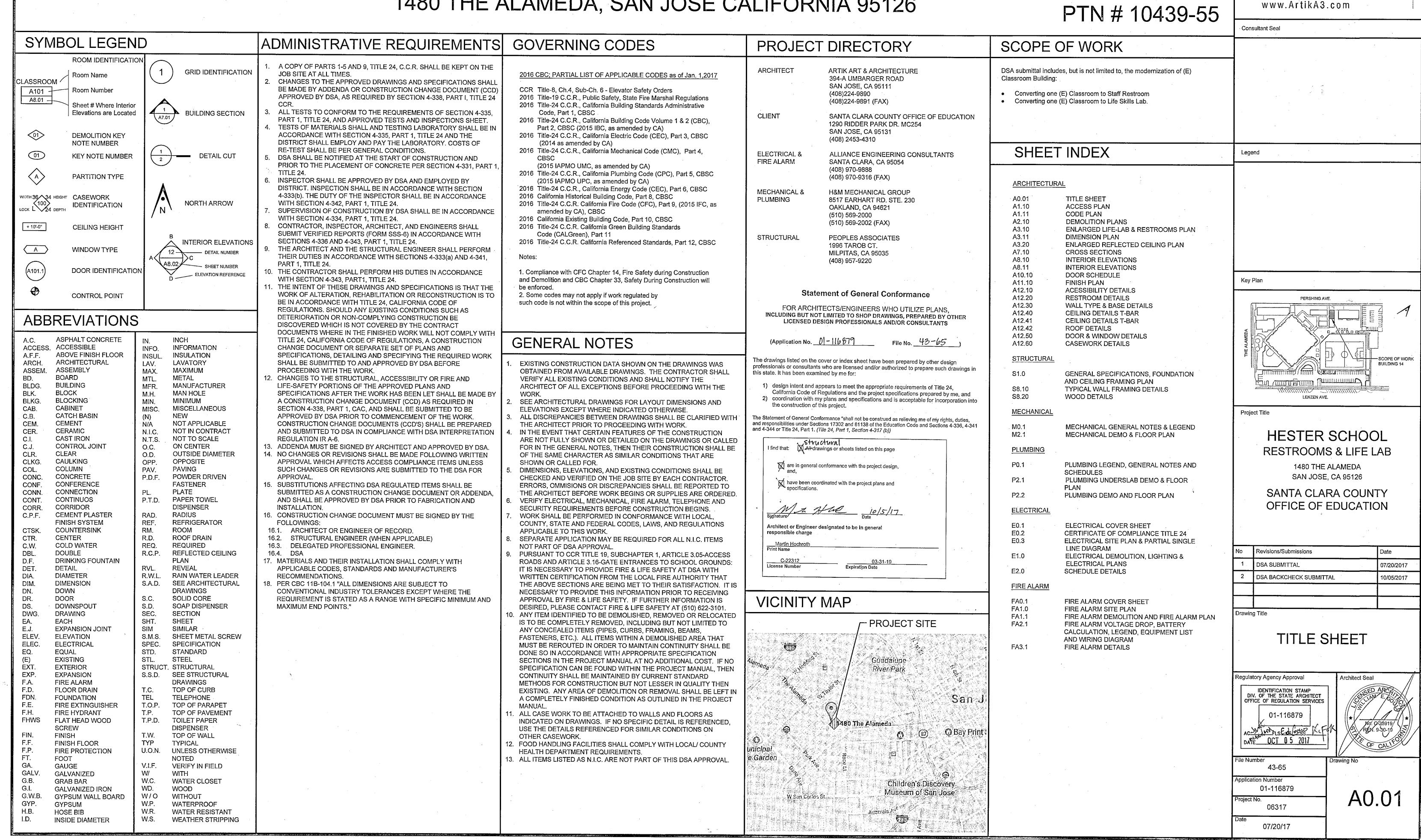
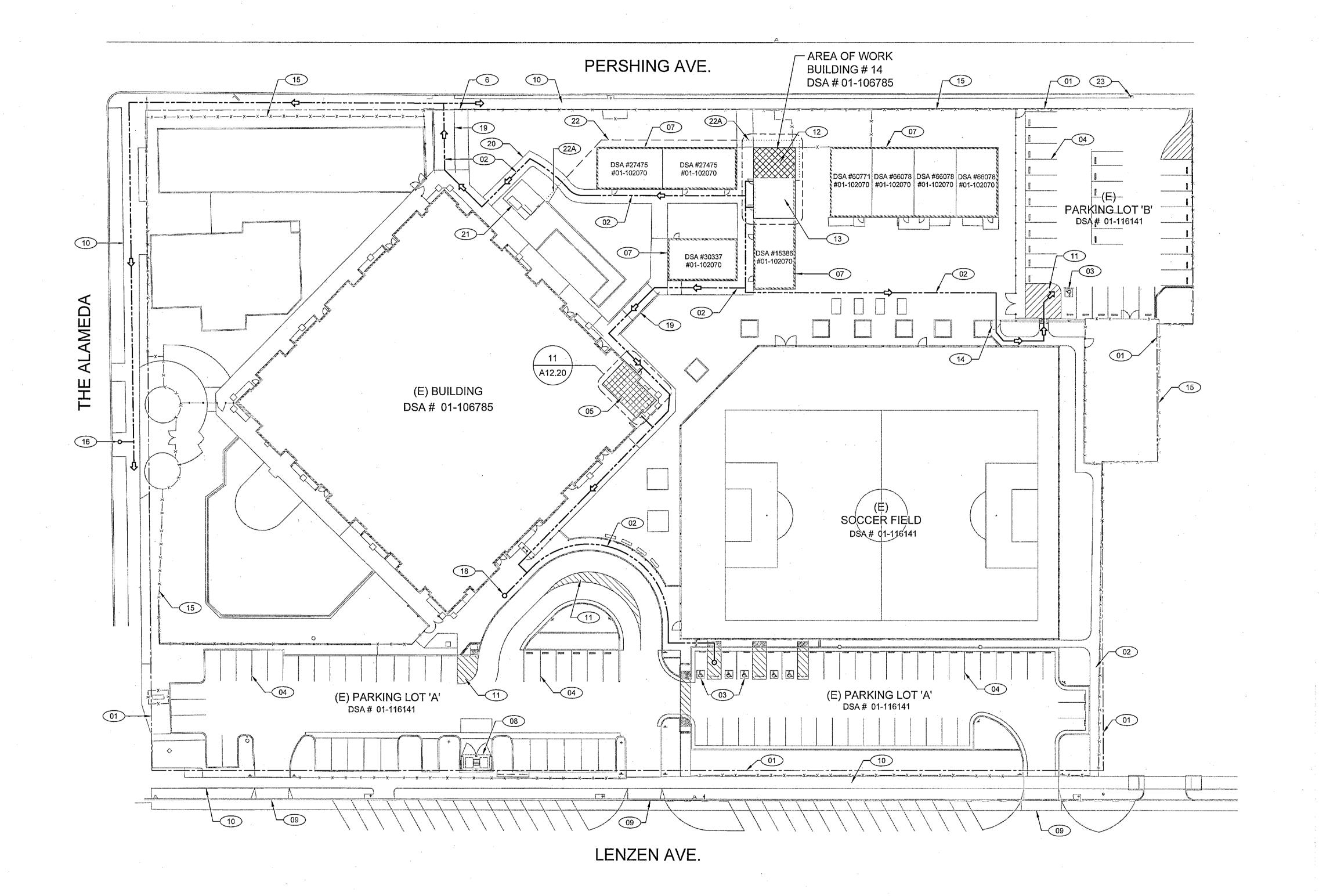
HESTER SCHOOL RESTROOMS & LIFE-LAB ALTERATIONS

SANTA CLARA COUNTY OFFICE OF EDUCATION 1480 THE ALAMEDA, SAN JOSE CALIFORNIA 95126









- TYPICAL, EXISTING TO REMAIN U.O.N.; PROTECT ALL WORK TO BE REINSTALLED. ANY DAMAGE SHALL BE REPAIRED/ REPLACED TO OWNER'S SATISFACTION.
- 2. SEE STRUCTURAL, MECHANICAL AND ELECTRICAL DWGS. FOR ADDITIONAL REQUIREMENTS.
- 3. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ACTUAL FIELD CONDITIONS PRIOR COMMENCEMENT OF WORK.
- CONTRACTOR TO FIELD VERIFY EXTENT OF ALL DEMOLITION REQUIRED TO ACCOMMODATE CONSTRUCTION.
- CONTRACTOR TO PROTECT ALL (E) SITE FEATURES FROM DAMAGE INCLUDING BUT NOT LIMITED TO, STRUCTURES, UTILITIES, TREES, LANDSCAPING, AND SITE WORK.
- 6. SAFE OFF ALL (E) EQUIPMENT AND DEVICES IN (E) BUILDING.
 DISCONNECT AND REMOVE ALL (E) CONDUITS AND WIRING OF (E)
 POWER AND LOW VOLTAGES SYSTEMS (FIRE ALARMS, SECURITY,
 TEL/DATA, CLOCK/PA) BACK TO THE SOURCE. ABANDONAND CAP
 UNDERGROUNDCONDUITS IN PLACE.
- 7. ALL WALKING SURFACES ALONG ACCESSIBLE ROUTE SHALL HAVE MAX. RUNNING SLOPE OF 1:20 (5%) & CROSS SLOPE OF 1:48 (2%) PER 11B-403.3.

PARKING ANALYSIS

(E) PARKING LOT 'A"

TOTAL PARKING SPACES: 75
ACCESSIBLE SPACES REQD.= 3
ACCESSIBLE SPACES PROVIDED = 5
3 (E) ACC., 2 (E) VAN ACC.

(E) PARKING LOT 'B'

TOTAL PARKING SPACES: 30 1 VAN ACCESSIBLE SPACE

KEYNOTES

- 01) (E) PROPERTY LINE
- 02 LINE INDICATES ACCESSIBLE ROUTE OF TRAVEL
- 03 (E) VAN STALL ACCESSIBLE PARKING PER DSA # 01-116141
- 04) (E) REGULAR PARKING STALLS
- 05 (E) ACCESSIBLE BOYS AND GIRLS RESTROOMS PER DSA# 01-106785
- 06 (E) SLIDING GATE
- 07 (E) PORTABLE BUILDINGS
- 08 (E) TRASH ENCLOSURE
- 09 (E) DRIVEWAY RAMPS
- (E) CONCRETE PUBLIC SIDEWALK
- (E) NO PARKING AREA
- 12 MEN & WOMEN STAFF RESTROOMS
- 13 LIFE-LAB ROOM

 14 (E) ACCESSIBLE GATE PER DSA # 01-116141
- 15 (E) FENCE
- 16 (E) PUBLIC BUS STOP

 (17) (E) STREET ANGLED PARKING STALLS
- 18 (E) DROP OFF AREA BYS
- (E) RAMP, SLOPE IN DIRECTION OF TRAVEL IS LESS THAN 8.33%
- 20 (E) SLOPED WALKWAY, SLOPE IS LESS THAN 4.9%
- 21 (E) ELECTRICAL MSB
- 22 ELECTRICAL POWER LINE SEE E0.3, (TRENCH, BACKFILL COMPACT AND PATCH TO MATCH EXISTING)
- SAWCUT (E) CONCRETE CURB, (E) ASPHALT OR (E) CONCRETE WALKWAY TRENCH, BACKFILL COMPACT AND PATCH TO MATCH EXISTING, SEE E0.3
- 23 TOW AWAY SIGN SEE, 15/A12.10

PATH OF TRAVEL NOTE

ACCESSIBLE PATH OF TRAVEL (P.O.T.) AS INDICATED ON PLAN IS A BARRIER-FREE ACCESS ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAX SLOPE, OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP RESISTENT. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5%, UNLESS OTHERWISE INDICATED. ACCESSIBLE ROUTE OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80". ARCHITECT SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE ROUTE OF TRAVEL.

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILTY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NON-COMPLIANT (A) HAVE BEEN IDENTIFIED, AND (B) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NON-COMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NON-CONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS PARTR OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.



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Legend

(E) .

(E) ACCESSIBLE RESTROOMS.

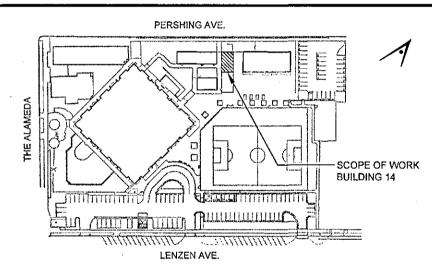
ACCESSIBLE STAFF RESTROOMS.

PROPERTY LINE

---- ACCESSIBLE ROUTE OF TRAVEL

-x--x--x- (E) FENCING TO REMAIN

Key Plan



Project Title

HESTER SCHOOL RESTROOMS & LIFE LAB

1480 THE ALAMEDA SAN JOSE, CA 95126

SANTA CLARA COUNTY OFFICE OF EDUCATION

No	Revisions/Submissions	Date
1	DSA SUBMITTAL	07/20/2017
2	DSA BACKCHECK SUBMITTAL	10/05/2017

Drawing Title

ile Number

ACCESS PLAN

Regulatory Agency Approval

DENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES

01-116879

AC FLS SS DATE

Drawing .

Drawing No

Architect Seal

No. C-23919 REN. 9-30-19

43-65
Application Number
01-116879

O6317 A1.10

07/20/17

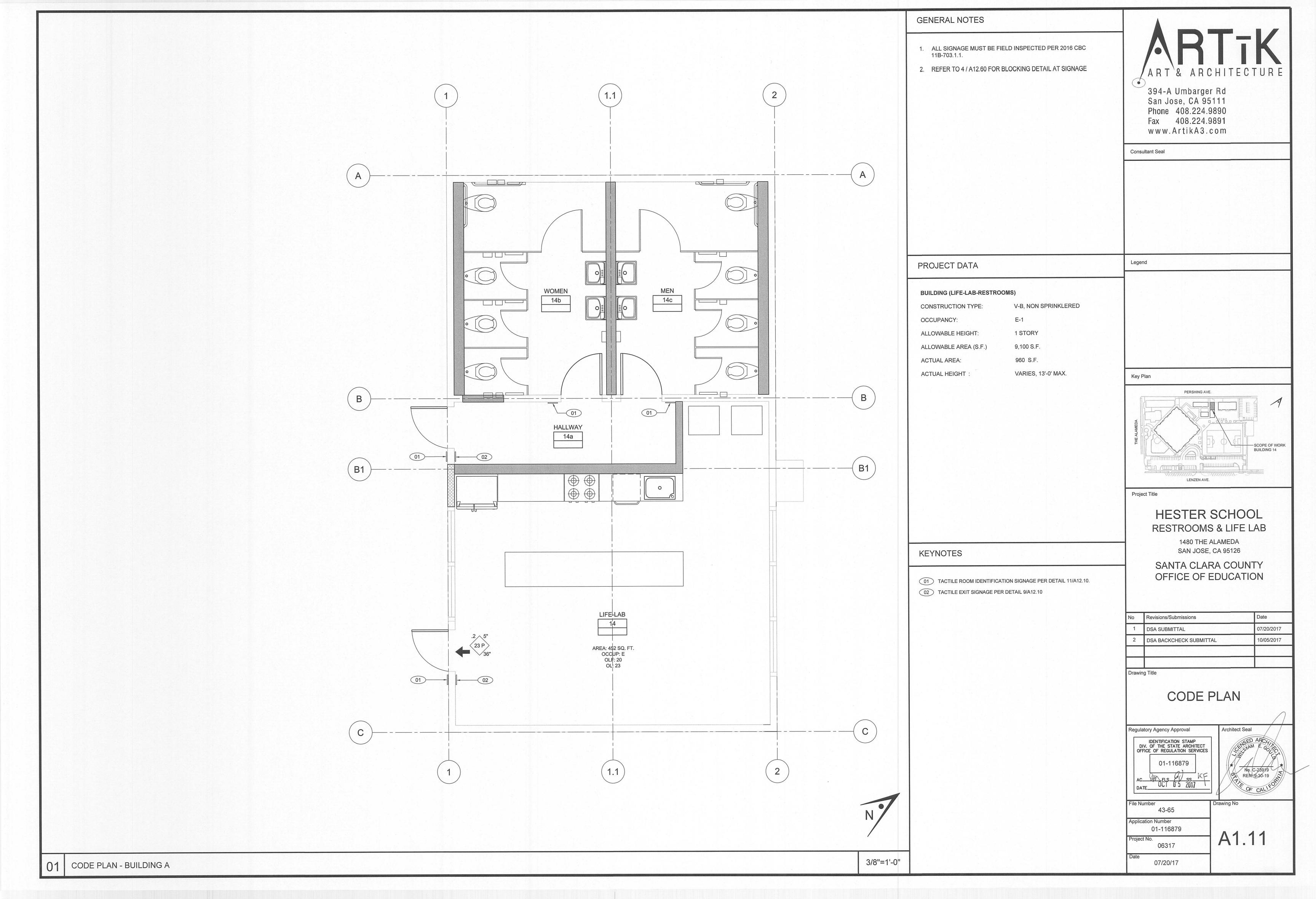
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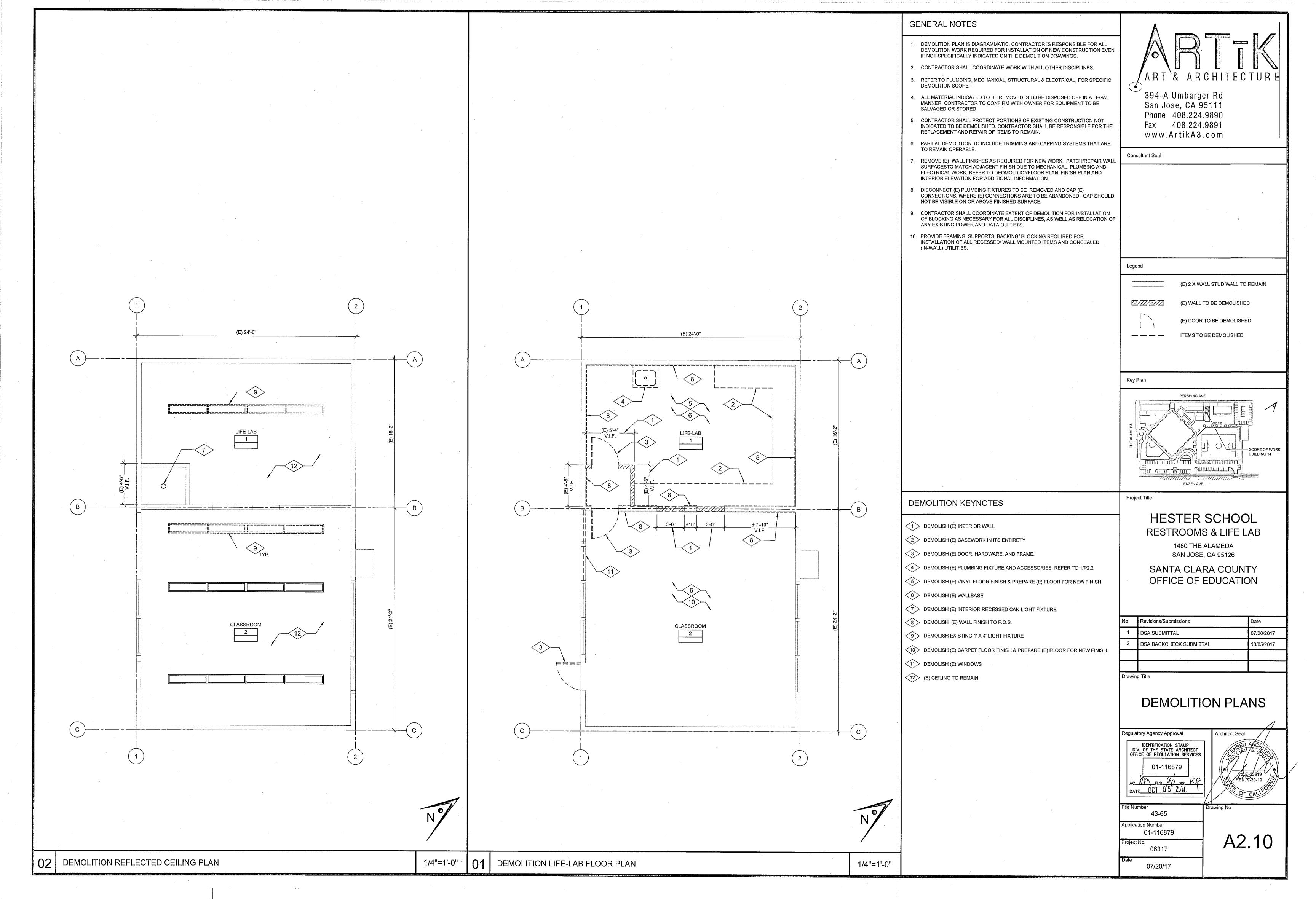
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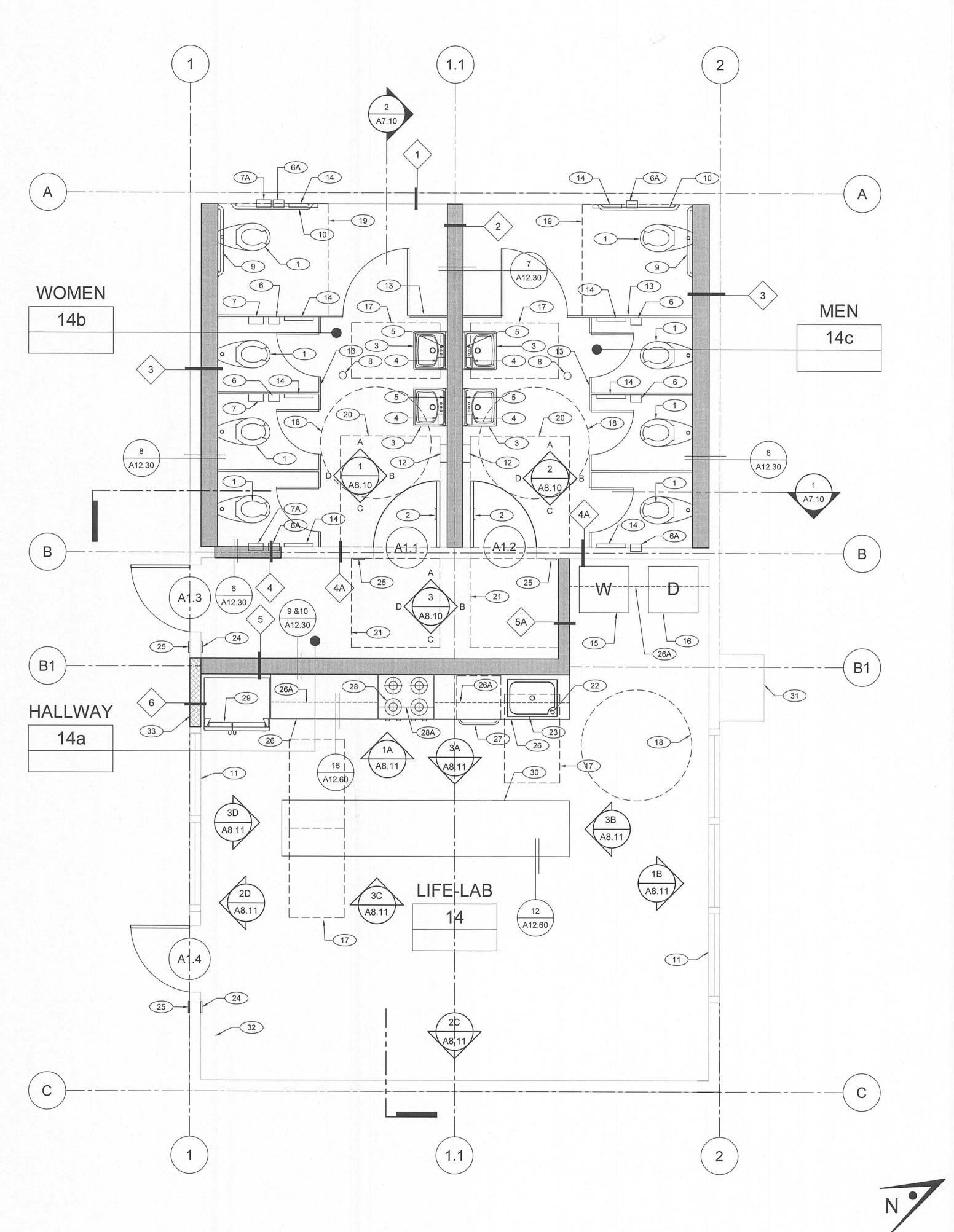
1'-0" = 1"

ACCESS PLAN

 $\frac{1}{32}$ 1'-0" = $\frac{1}{32}$ "







- 1. CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER DISCIPLINES.
- 2. CONTRACTOR TO REVIEW AS BUILT DRAWINGS FOR REFERENCE.
- 3. REFER TO 3/A7.10 FOR INTERIOR ELEVATIONS TYP.
- 4. REFER TO INTERIOR ELEVATIONS, REFLECTED CEILING PLAN, FINISH FLOOR PLAN, SCHEDULES AND DETAILS FOR ADDITIONAL INFORMATION.
- REFER TO DOOR SCHEDULE ON SHEET A10.10 AND SPECIFICATIONS FOR DOOR HARDWARE AND WINDOW SCHEDULE FOR ADDITIONAL NOTES AND INFORMATION.
- PROVIDE FRAMING, SUPPORTS, BACKING/ BLOCKING REQUIRED FOR INSTALLATION OF ALL RECESSED/ WALL MOUNTED ITEMS AND CONCEALED (IN-WALL) UTILITIES.
- ALL SIGNAGE MUST BE FIELD INSPECTED PER 2016 CBC 11B-703.1.1
- 8. FLOORING TRANSITIONS SHALL OCCUR AT THE CENTERLINE OF DOORS.
- 9. PAINT ALL NEW AND EXISTING INTERIOR SURFACES INCLUDING, BUT NOT LIMITED TO, WALLS DOORS AND TRIMS.
- 10. PROVIDE SOUND ATTENUATION BATT INSULATION IN CORRIDOR WALLL
- 11. NO EXPOSED CONDUITS ARE ALLOWED, ALL CONDUITS MUST BE INSIDE STUD WALLS, SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION



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Consultant Seal

Legend

(E) WALLS TO REMAIN

2X WALL WINDOW INFILL

WALL TYPE, REFER TO SHEET A12.30

DOOR TYPE, REFER TO SHEET A10.10

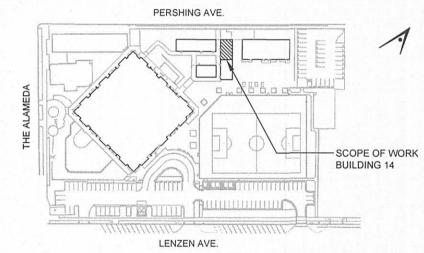
KEYNOTES

- 1 ACCESSIBLE WALL MOUNT WATER CLOSET SEE PLUMBING DWGS.
- 2 RESTROOM DOOR SIGN, SEE DETAIL 3/A12.10
- 3 ACCESSIBLE LAVATORY SEE DETAIL 2/A12.10, REFER TO PLUMBING DWGS.
- 4 SOAP DISPENSER SEE 9/A12.10
- 5 18"x36" MIRROR MOUNTED ABOVE LAVATORY MOUNT BOTTOM
- 6 SURFACE MOUNT TOILET PAPER DISPENSER.
- 6A SEMI-RECESSED TOILET PAPER DISPENSER.
- 7 SURFACE MOUNT SANITARY DISPOSAL 7A SEMI-RECESSED SANITARY DISPOSAL
- 8 EXISTING FLOOR DRAIN. SEE PLUMBING DWGS.
- 9 36" GRAB BAR, MAINTAIN 1-1/2" CLEAR BELOW GRAB BAR, SEE 8/A12.10
- 10 42" GRAB BAR, MAINTAIN 1-1/2" CLEAR BELOW GRAB BAR. SEE 8/A12.10
- (11) (E) WOOD FRAMED WINDOWS
- 12 ELECTRIC HAND DRYER
- 13 OVERHEAD BRACED TOILET COMPARTMENTS SEE DETAIL 1/A12.20
- 14 SEAT COVER DISPENSER
- 15 WASHER MACHINE, SEE 3/A10.10
- 16 DRYER MACHINE, SEE 3/A10.10
- 17 30" X 48" CLEAR SPACE 18 5'-0" CLEAR SPACE
- 19 60" X 60" CLEAR SPACE
- 20 60" X 54" CLEAR SPACE
- 21 48" X 48" CLEAR SPACE
- 22 ACCESSIBLE PUSH BUTTON BUBBLER DROPPED IN SINK, PROVIDE PAPER TOWEL & SOAP DISPENSERS SEE 16/A12.10
- (24) TACTILE EXIT SIGN SEE DETAIL 12 / A12.10
- 25 TACTILE ROOM SIGN SEE DETAIL 11 / A12.10
- 26 CASEWORK CABINETRY SEE SHEET 6/A12.60
- 27 UNDER COUNTER LOW PROFILE (ADA) DISH WASHER, SEE 3/A10.10
- 28 ELECTRIC RANGE WITH OVEN, SEE 3/A10.10

26A CASEWORK UPPER CABINETS SEE SHEET 6/A12.60

- 28A CEILING MOUNTED HOOD WITH EXHAUST FAN, SEE 3/A10.10
- 29 DOUBLE DOOR REFRIGERATOR SEE PLUMBING PLAN FOR WATER SUPPLY AND DRAIN. SEE 3/A10.10
- 30 ACCESSIBLE CASEWORK-CABINETRY ISLAND SEE 12/A12.60 & INTERIOR ELEVATIONS 3/A8.11
- (E) EXTERIOR WALL MOUNTED HVAC UNIT TO REMAIN REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
- 32 SURFACE MOUNTED FIRE EXTINGUISHER, 2A:10B:C, WITH VALID CERTIFICATION TAG ATTACHED. SEE DETAIL 9/A12.10
- 33 INFILL WINDOW ABOVE SEE DETAIL 9 / A12.50

Key Plan



Project Title

HESTER SCHOOL **RESTROOMS & LIFE LAB**

1480 THE ALAMEDA SAN JOSE, CA 95126

SANTA CLARA COUNTY OFFICE OF EDUCATION

No	Revisions/Submissions	Date
1	DSA SUBMITTAL	07/20/2017
2	DSA BACKCHECK SUBMITTAL	10/05/2017

Drawing Title

ENLARGED FLOOR PLAN

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES 01-116879 AC PM FLS EU SS DATE OCT 0 5 2017

Regulatory Agency Approval

Nø. C/23919 V REN. 9-30-19 FOF CALIFO

A3.10

Architect Seal

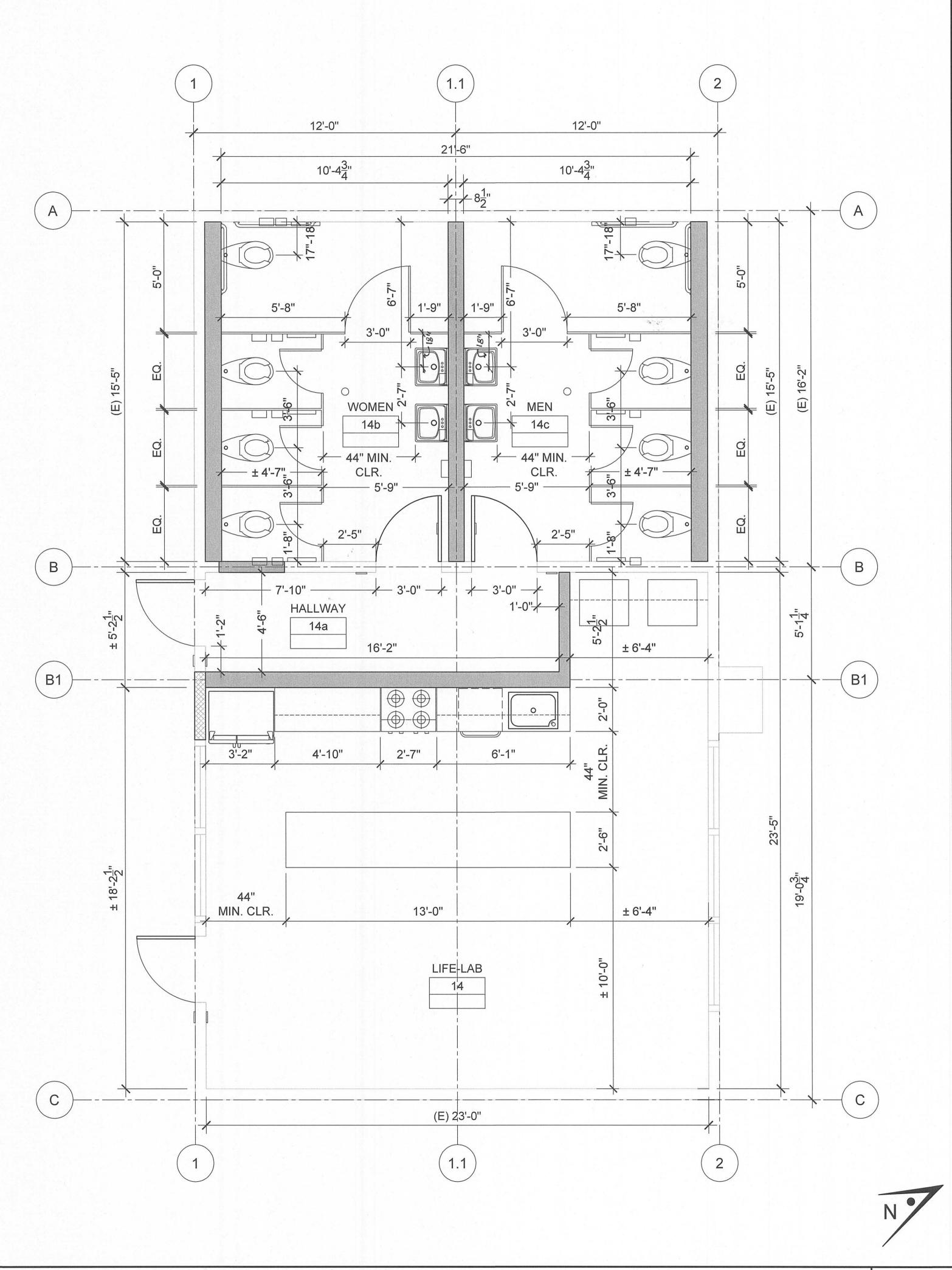
File Number Drawing No 43-65 Application Number

01-116879 06317

07/20/17

ENLARGED LIFE-LAB & RESTROOMS FLOOR PLAN

3/8"=1'-0"



- CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER DISCIPLINES.
- 2. CONTRACTOR TO REVIEW AS BUILT DRAWINGS FOR REFERENCE.
- 3. REFER TO 3/A7.10 FOR INTERIOR ELEVATIONS TYP.
- 4. REFER TO INTERIOR ELEVATIONS, REFLECTED CEILING PLAN, FINISH FLOOR PLAN, SCHEDULES AND DETAILS FOR ADDITIONAL INFORMATION.
- 5. REFER TO DOOR SCHEDULE ON SHEET A10.10 AND SPECIFICATIONS FOR DOOR HARDWARE AND WINDOW SCHEDULE FOR ADDITIONAL NOTES AND INFORMATION.
- 6. PROVIDE FRAMING, SUPPORTS, BACKING/ BLOCKING REQUIRED FOR INSTALLATION OF ALL RECESSED/ WALL MOUNTED ITEMS AND CONCEALED (IN-WALL) UTILITIES.
- 7. ALL SIGNAGE MUST BE FIELD INSPECTED PER 2016 CBC 11B-703.1.1
- 8. FLOORING TRANSITIONS SHALL OCCUR AT THE CENTERLINE OF DOORS.
- 9. PAINT ALL NEW AND EXISTING INTERIOR RESTROOMS SURFACES INCLUDING, BUT NOT LIMITED TO, WALLS DOORS AND TRIMS.
- 10. PROVIDE ACCESS DOORS IN HARDLID AREAS AND WHERE NEEDED PER CBC CODE AND SPECIFICATIONS. GC SHALL COORDINATE WITH MECHANICAL & PLUMBING DRAWINGS. EXACT LOCATION TO BE COORDINATED WITH ARCHITECT.
- 11. PROVIDE SOUND ATTENUATION BATT INSULATION IN (E) CEILING AND WALLS
- 12. NO EXPOSED CONDUITS ARE ALLOWED, ALL CONDUITS MUST BE INSIDE STUD WALLS, SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION

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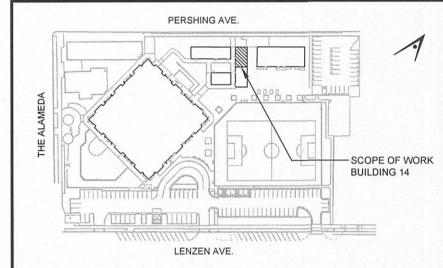
Consultant Seal

Legend

(E) WALLS TO REMAIN

2X WALL

Key Plan



Project Title

HESTER SCHOOL **RESTROOMS & LIFE LAB**

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SANTA CLARA COUNTY OFFICE OF EDUCATION

No	Revisions/Submissions	Date
1	DSA SUBMITTAL	07/20/2017
2	DSA BACKCHECK SUBMITTAL	10/05/2017
V		

Drawing Title

DIMENSION PLAN

Regulatory Agency Approval IDENTIFICATION STAMP
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OFFICE OF REGULATION SERVICES

06317

07/20/17

Application Number

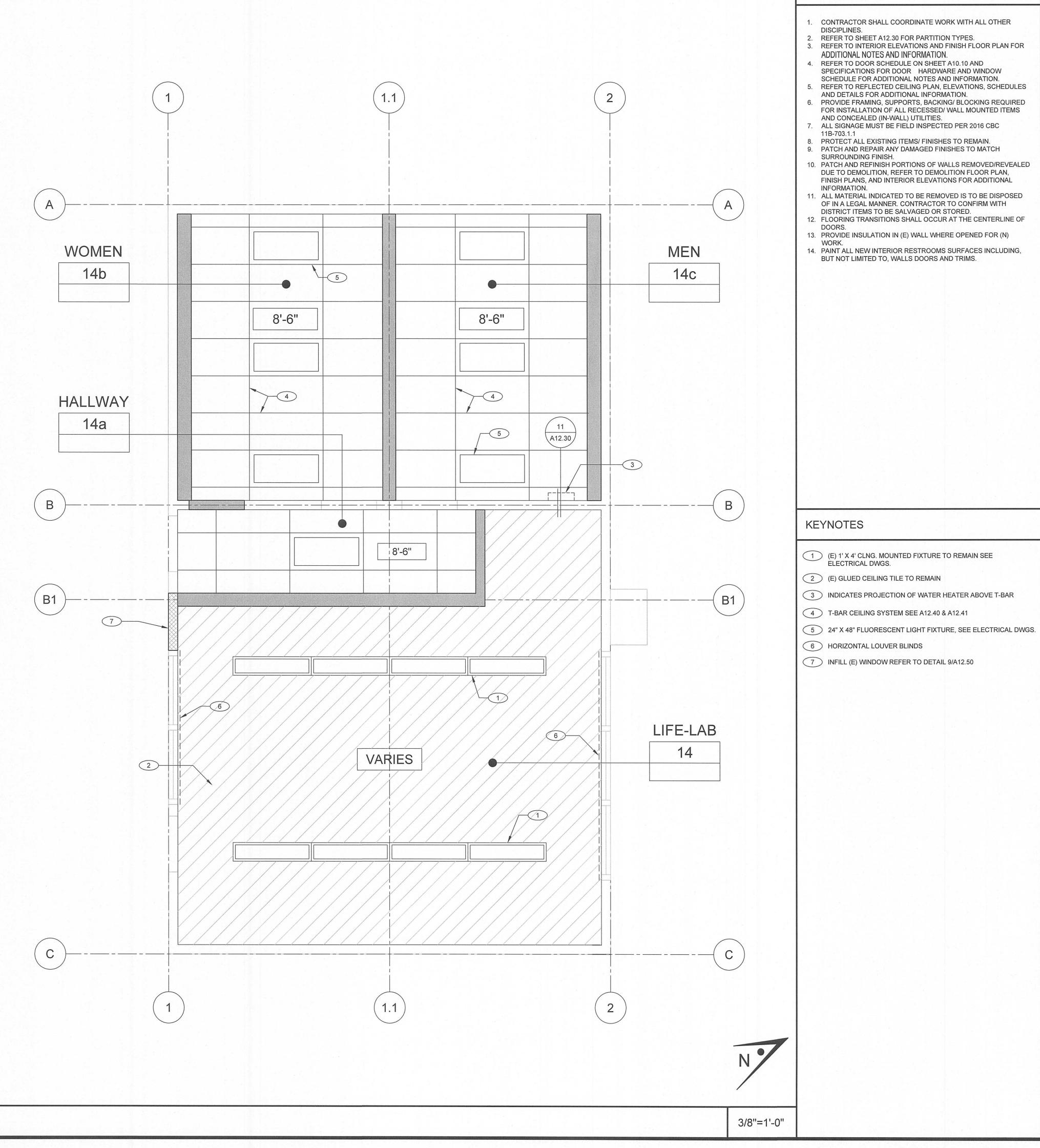
Architect Seal No. C-23919 REN. 9-30-19

DATE OCT 9 5 2017 43-65

01-116879

A3.11

3/8"=1'-0"



- REFER TO REFLECTED CEILING PLAN, ELEVATIONS, SCHEDULES
- FOR INSTALLATION OF ALL RECESSED/ WALL MOUNTED ITEMS

Consultant Seal

Legend

(E) GLUED CEILING TILE TO REMAIN

CEILING HEIGHT

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Phone 408.224.9890

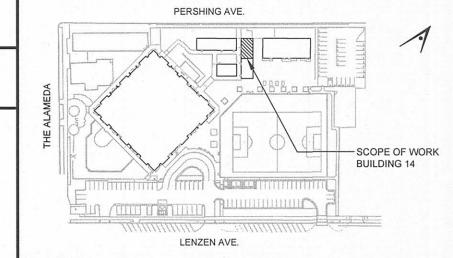
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4'-0" X 2'-0" T-BAR CEILING SYSTEM

Key Plan

0'-0"



Project Title

HESTER SCHOOL **RESTROOMS & LIFE LAB**

1480 THE ALAMEDA SAN JOSE, CA 95126

SANTA CLARA COUNTY OFFICE OF EDUCATION

1 DSA SUBMITTAL 07/	
	20/2017
2 DSA BACKCHECK SUBMITTAL 10/	05/2017

Drawing Title

REFLECTED **CEILING PLAN**

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Regulatory Agency Approval

Architect Seal N6/C-23919 REN. 9-30-19

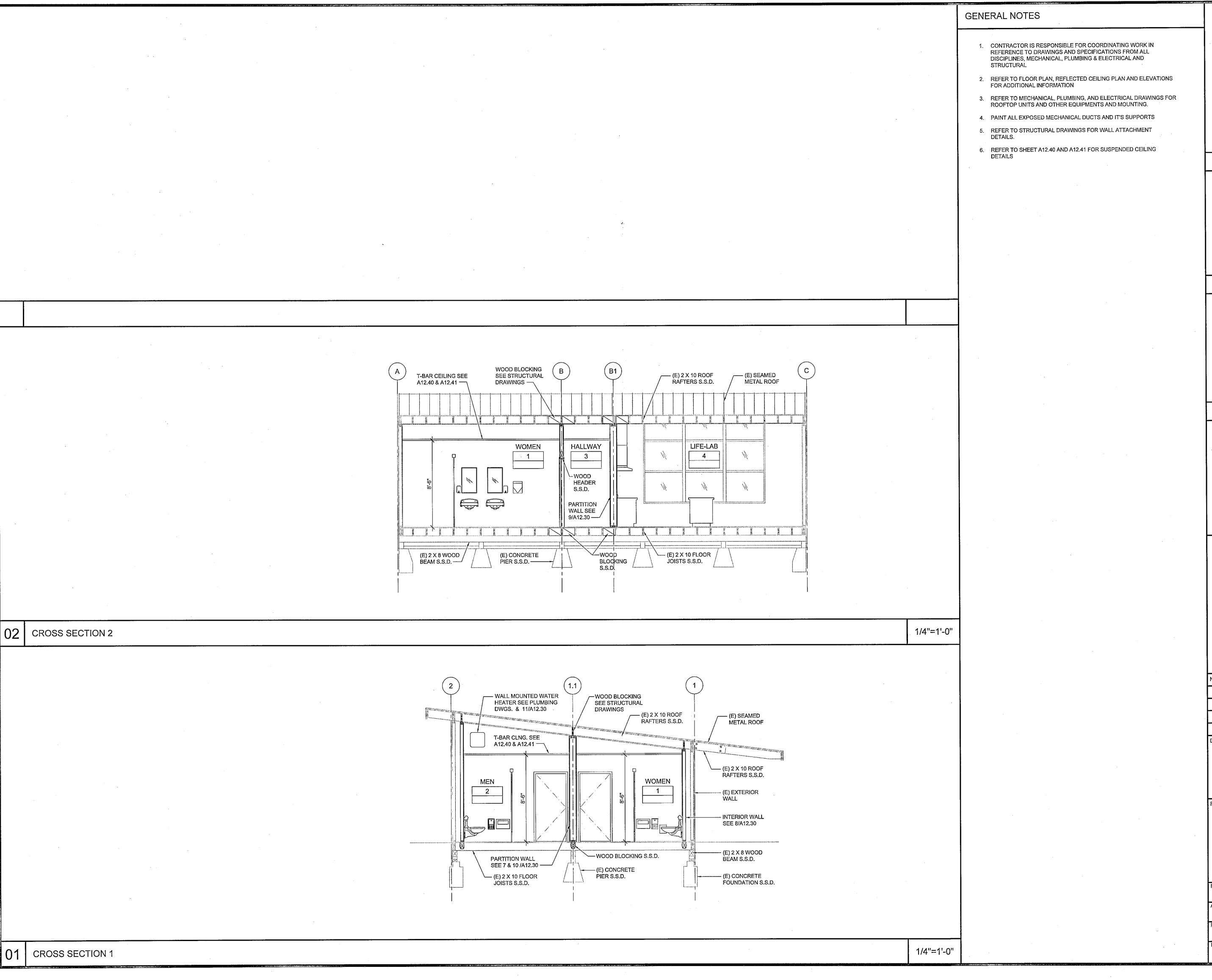
File Number 43-65 Application Number

01-116879 06317

07/20/17

A3.20

Brawing No

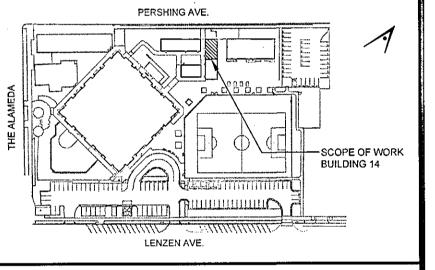


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Legend



Project Title

HESTER SCHOOL **RESTROOMS & LIFE LAB**

1480 THE ALAMEDA SAN JOSE, CA 95126

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0772072017
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Drawing Title

CROSS SECTIONS

Regulatory Agency Approval IDENTIFICATION STAMP
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OFFICE OF REGULATION SERVICES File Number

Drawing No 43-65

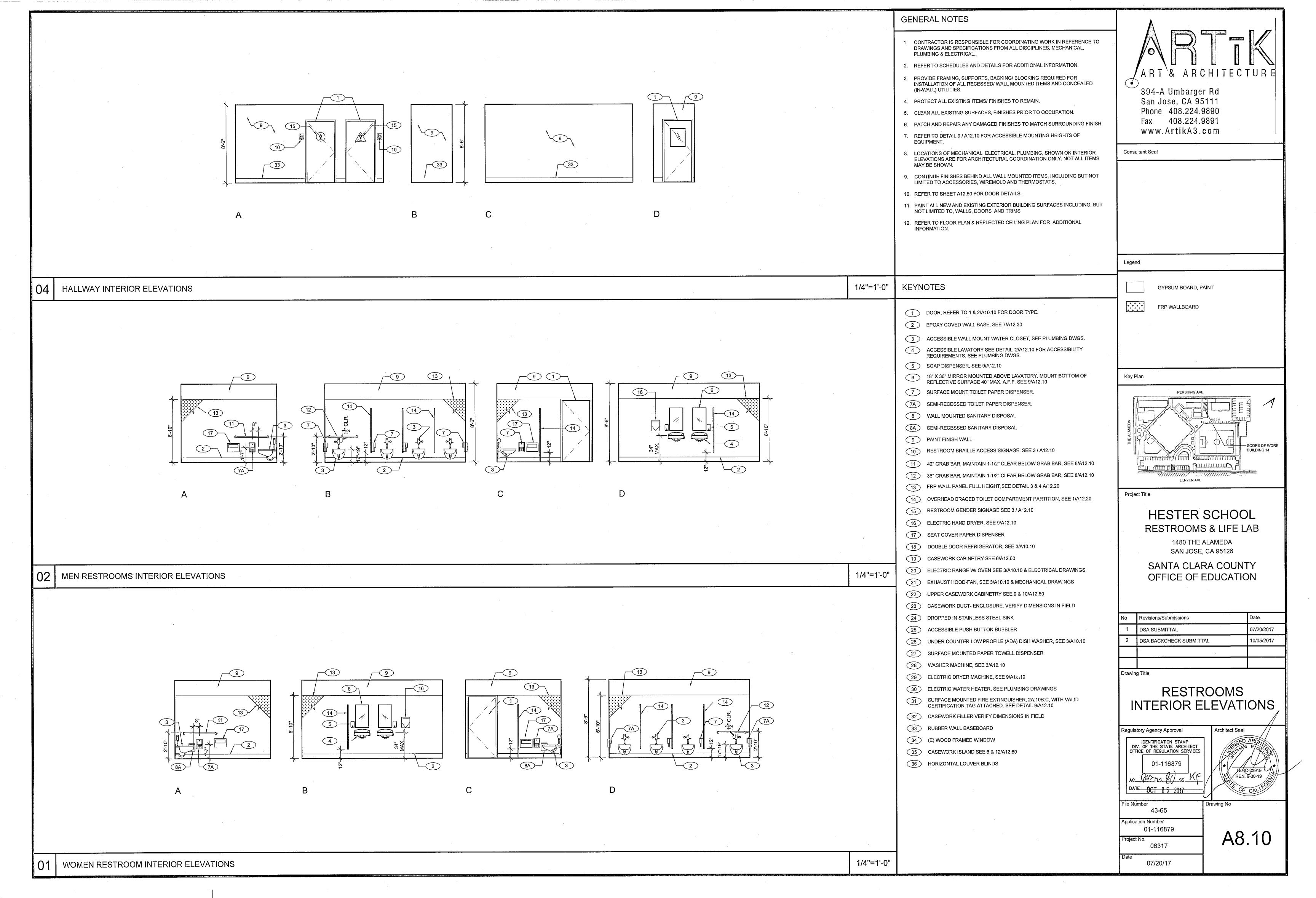
01-116879

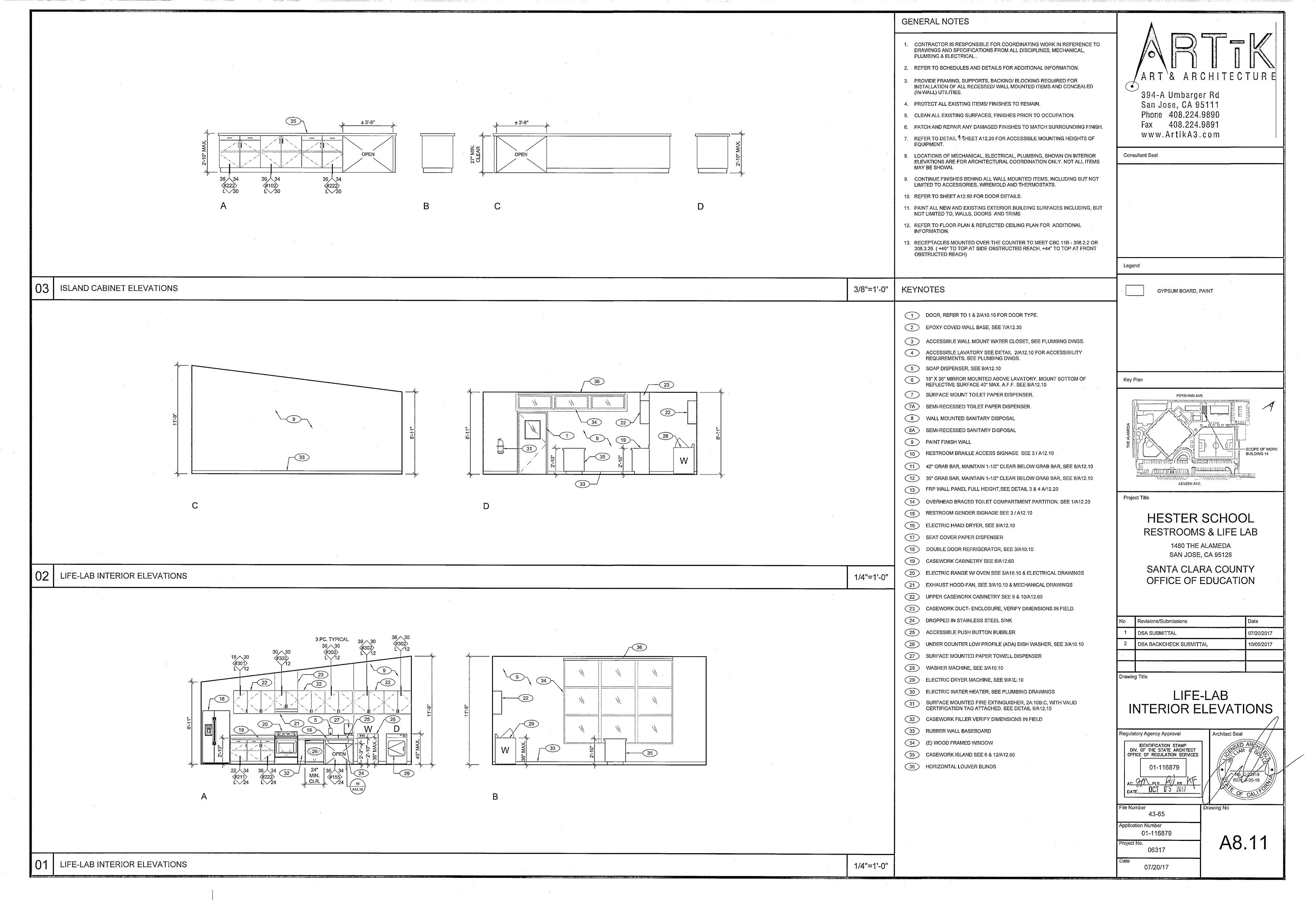
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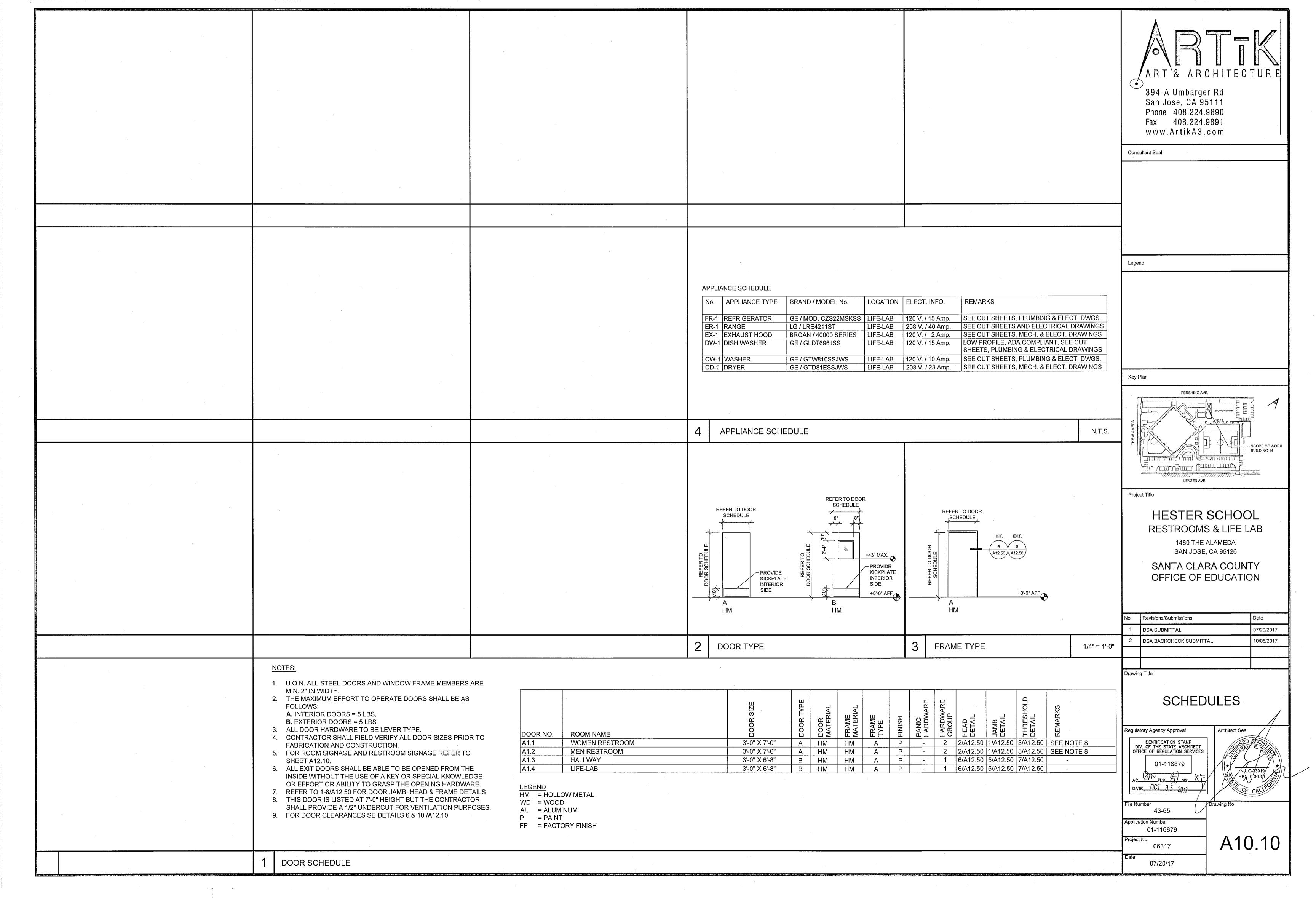
07/20/17

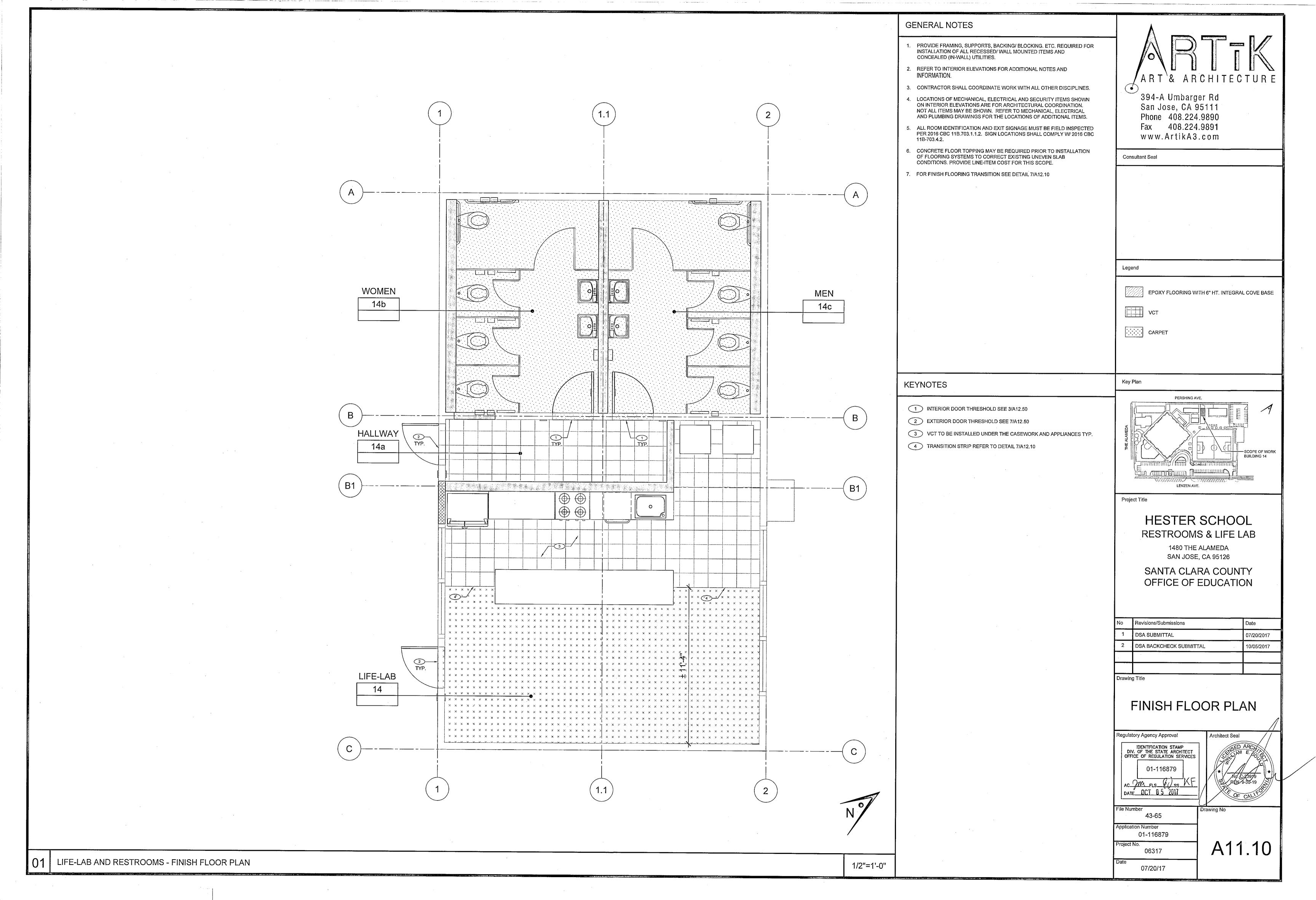
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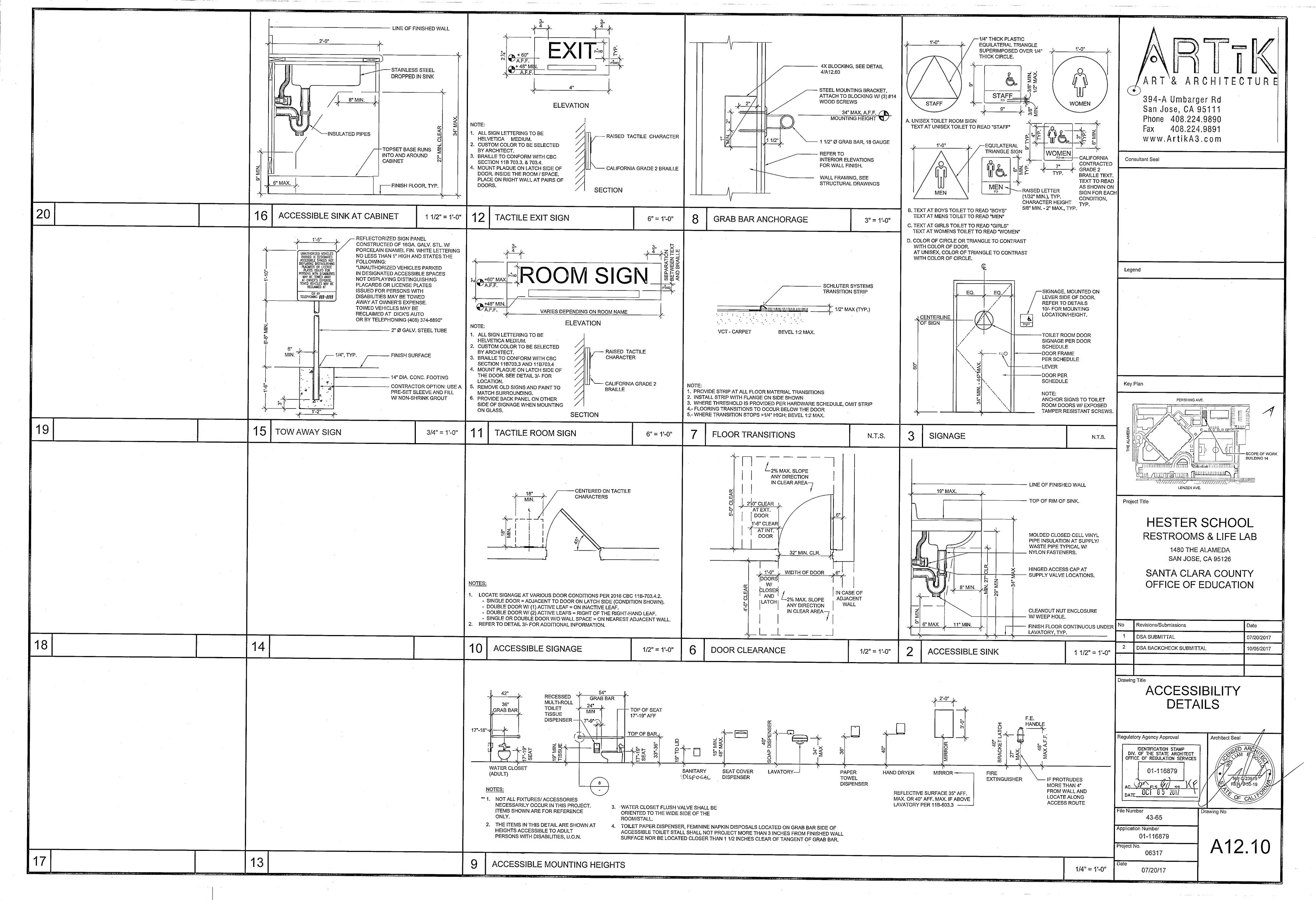
Architect Seal

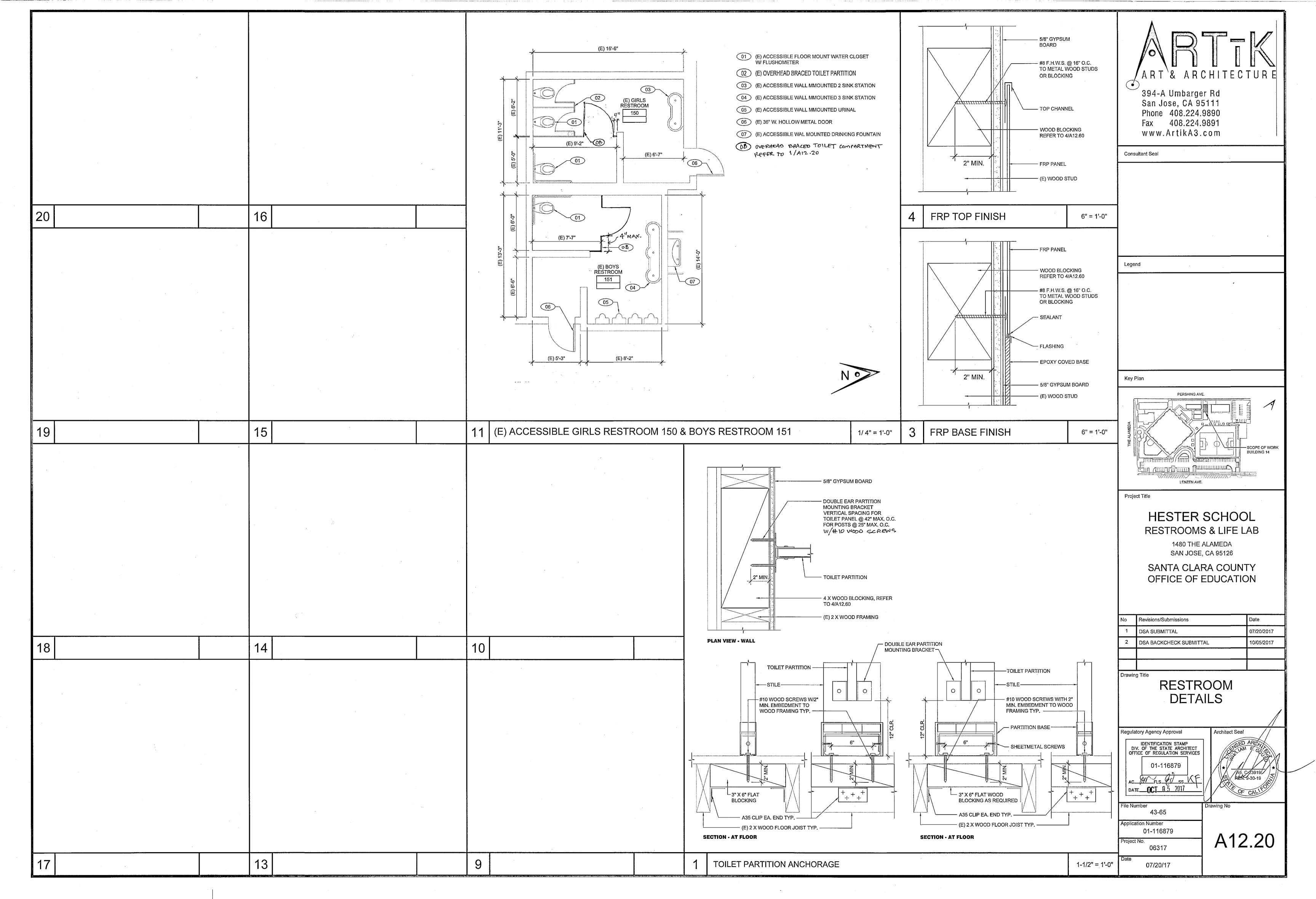


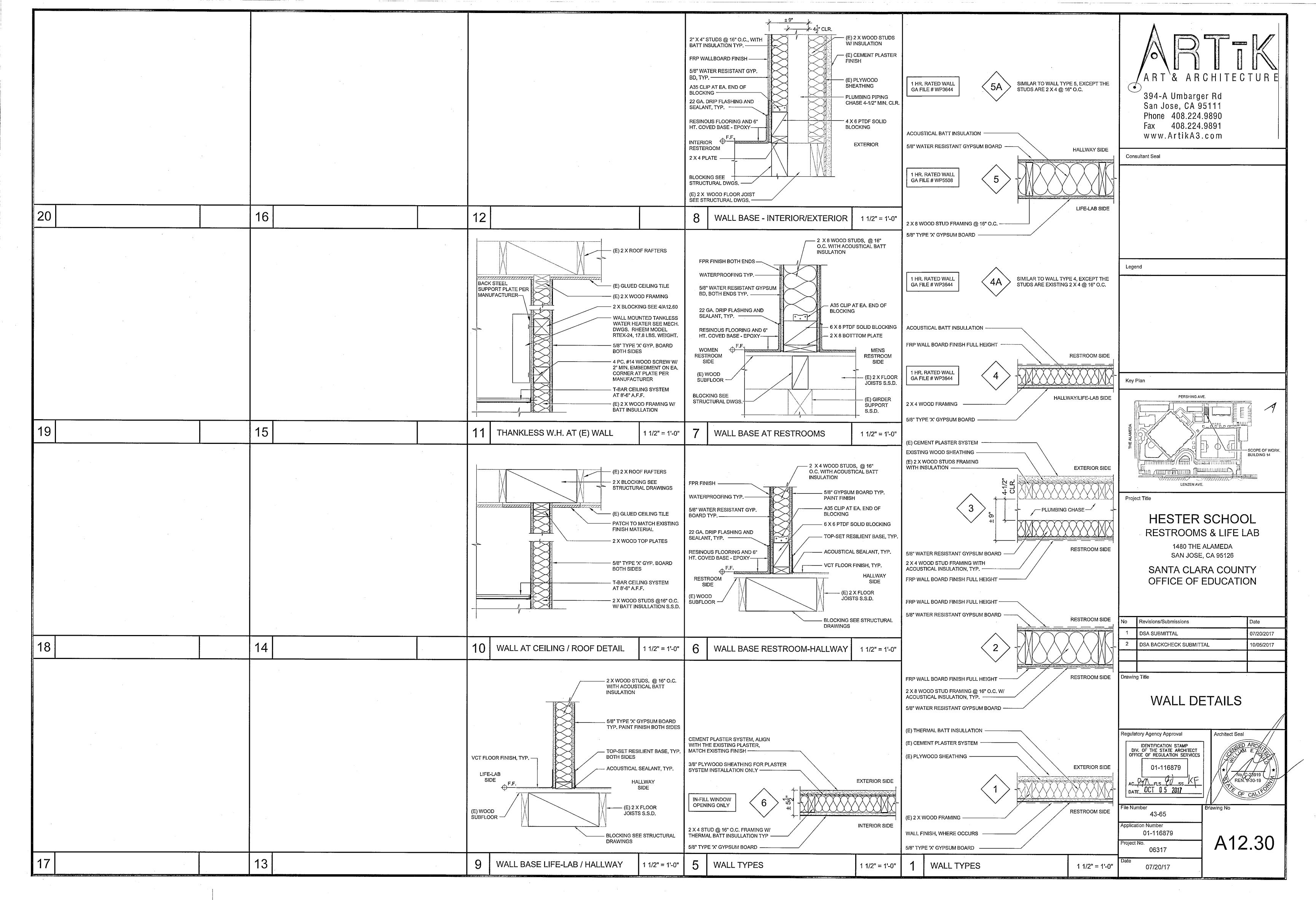


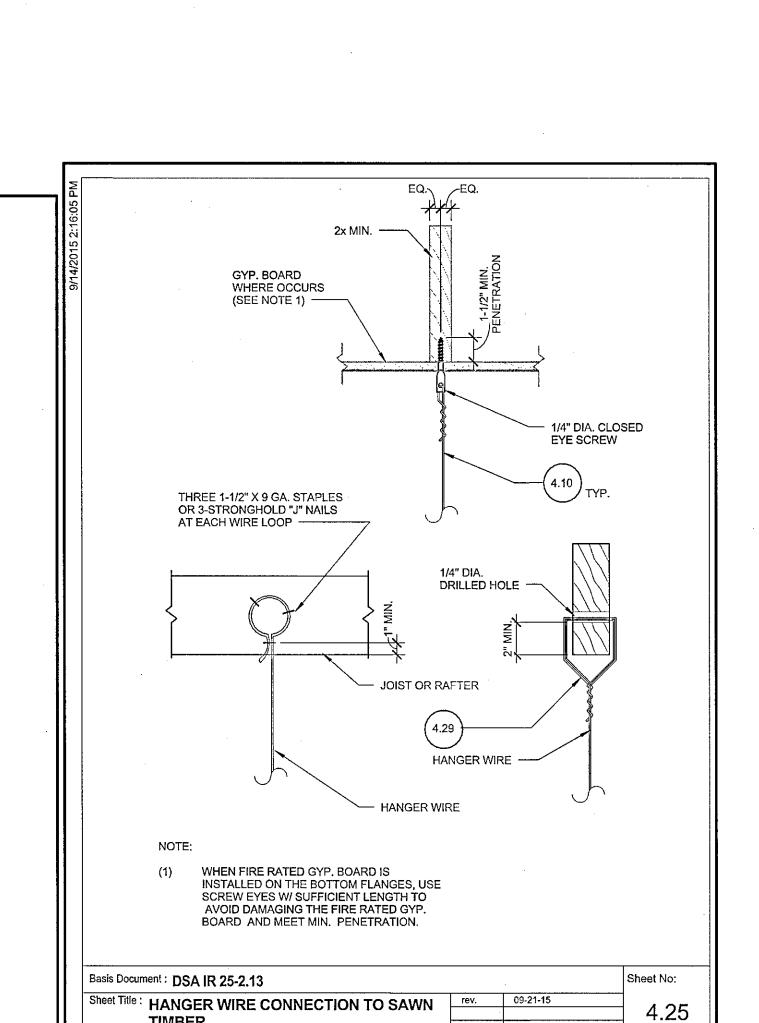


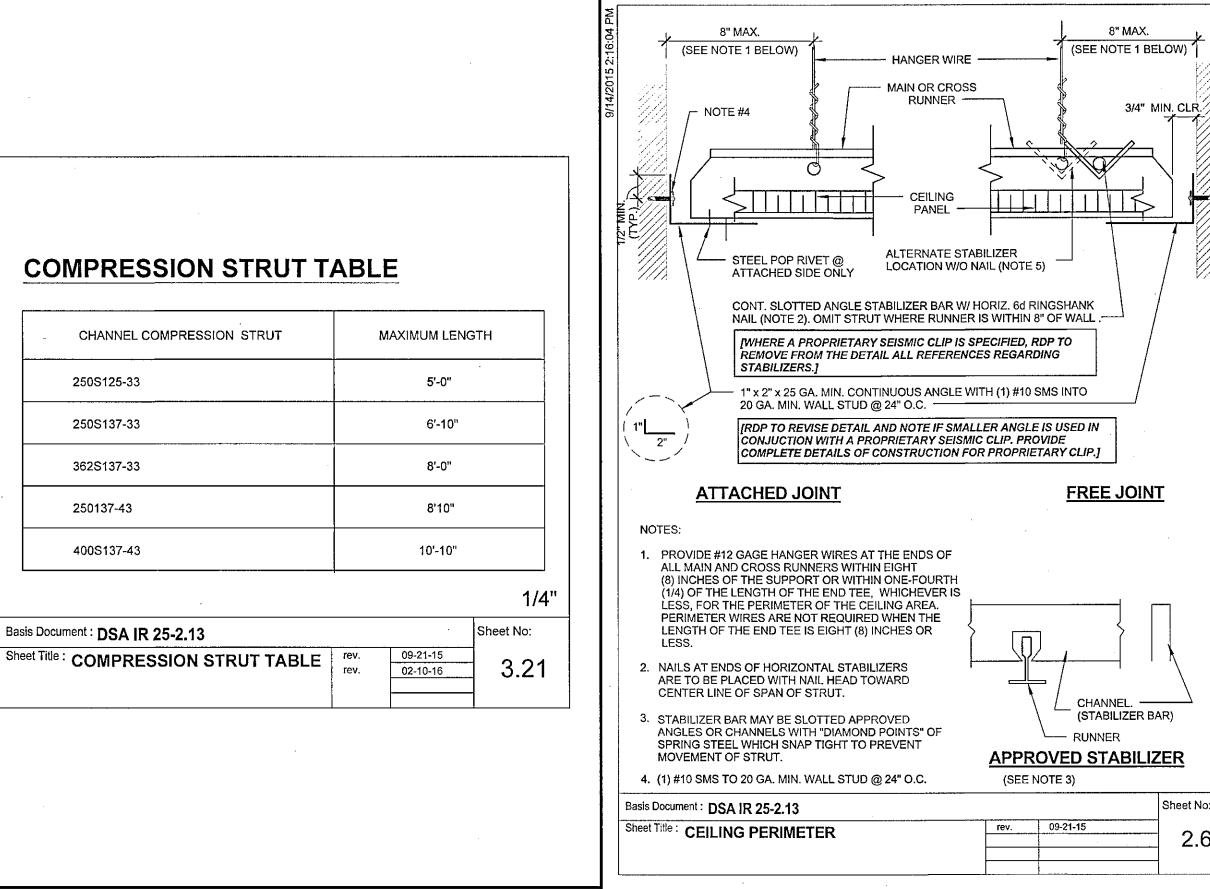


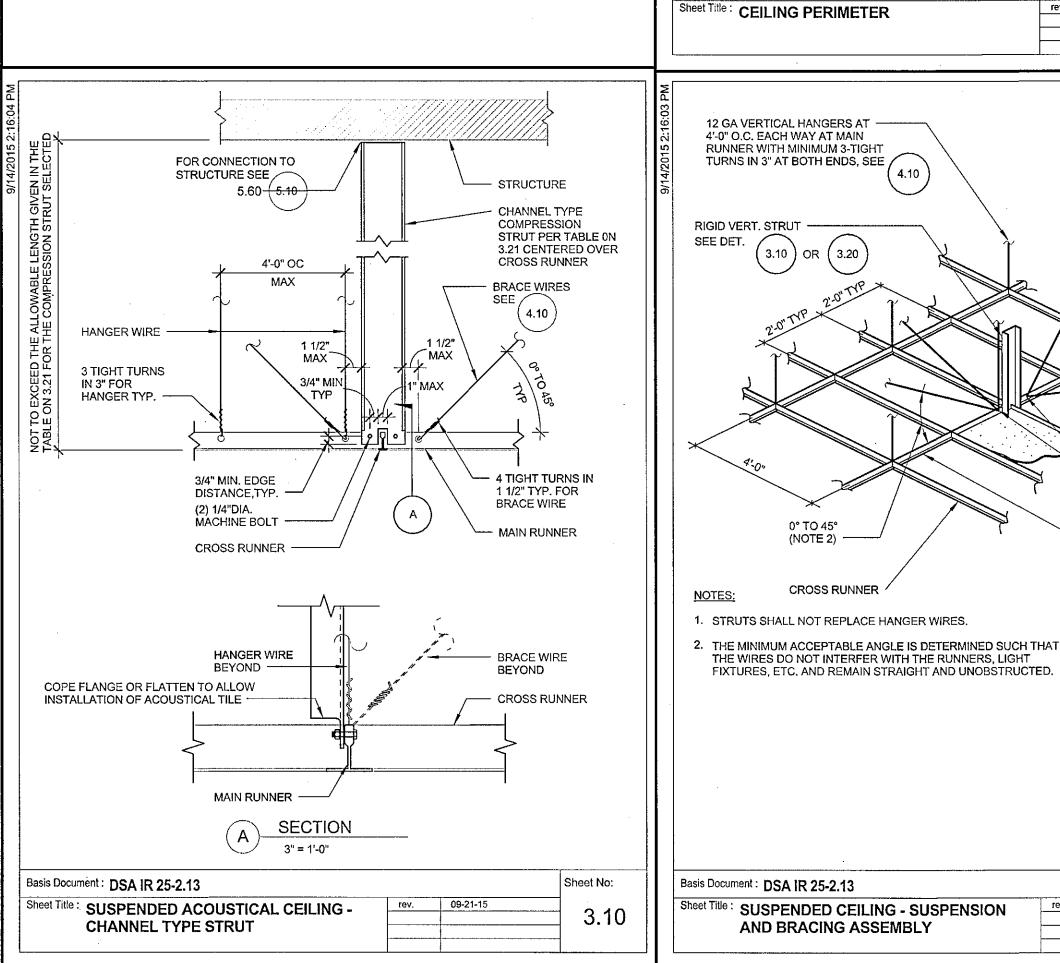


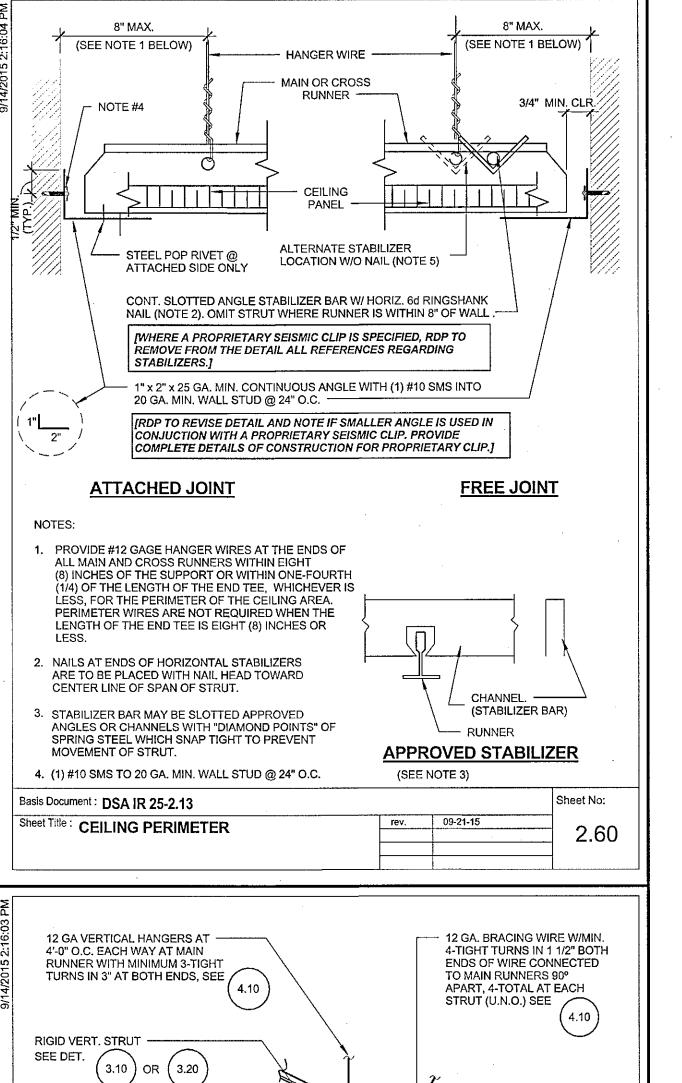












SDS <u>≤</u> 1.15

THE FULL BUILDING HEIGHT.

FOR LAY-IN PANEL CEILING: 2013 CBC

1. REFER TO DSA IR 25-2.13: METAL SUSPENSION SYSTEMS

TABLE 1, LATERAL FORCE BRACE ASSEMBLY SPACING

Design Spectral Acceleration Parameter, SDS Spacing (ft.)

a. WHERE, AS DEFINED IN ASCE 7, SECTION 13.3.1:

SDS USED: 1.0 (PER STRUCTURAL PRAWINGS 3 PAGE \$1.0)

SEE DETAIL 3.10 & 3.20

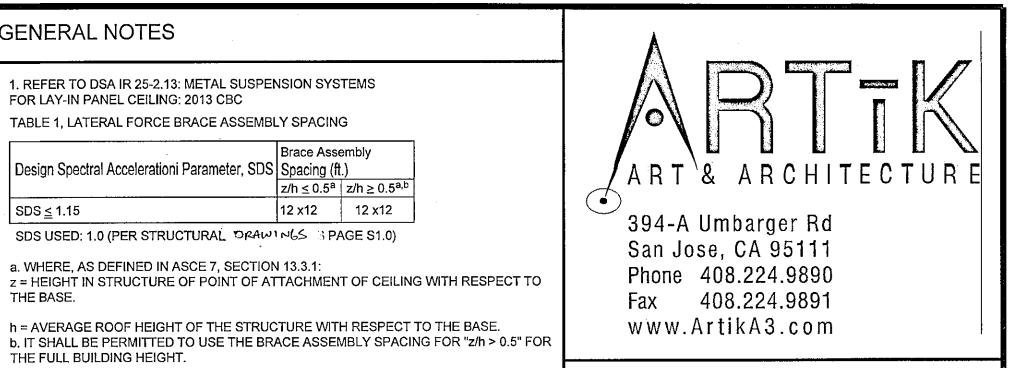
FOR LOCATION OF

BRACING WIRES AND

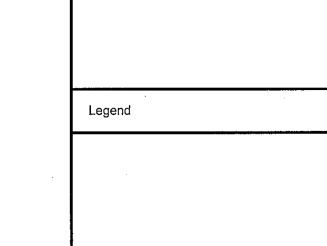
Sheet No:

h = AVERAGE ROOF HEIGHT OF THE STRUCTURE WITH RESPECT TO THE BASE.

 $z/h \le 0.5^a$ $z/h \ge 0.5^{a,b}$ 12 x12 12 x12



Consultant Seal



PERSHING AVE BUILDING 14

Project Title

Key Plan

HESTER SCHOOL **RESTROOMS & LIFE LAB**

1480 THE ALAMEDA SAN JOSE, CA 95126

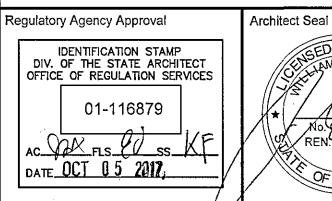
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No	Revisions/Submissions	Date
1	DSA SUBMITTAL	07/20/2017
2	DSA BACKCHECK SUBMITTAL	10/05/2017

Drawing Title

File Number

CEILING **DETAILS**

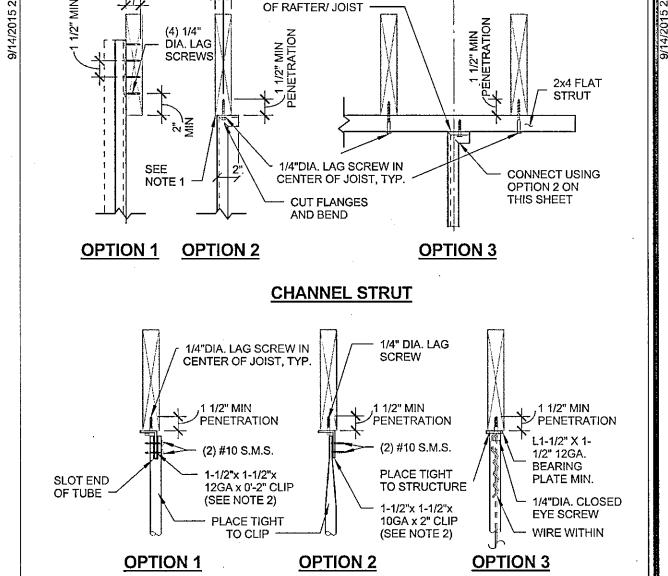


No. G-23919 REN. 9-30-19 Drawing No

Application Number 01-116879

07/20/17

A12.40



TUBE STRUT

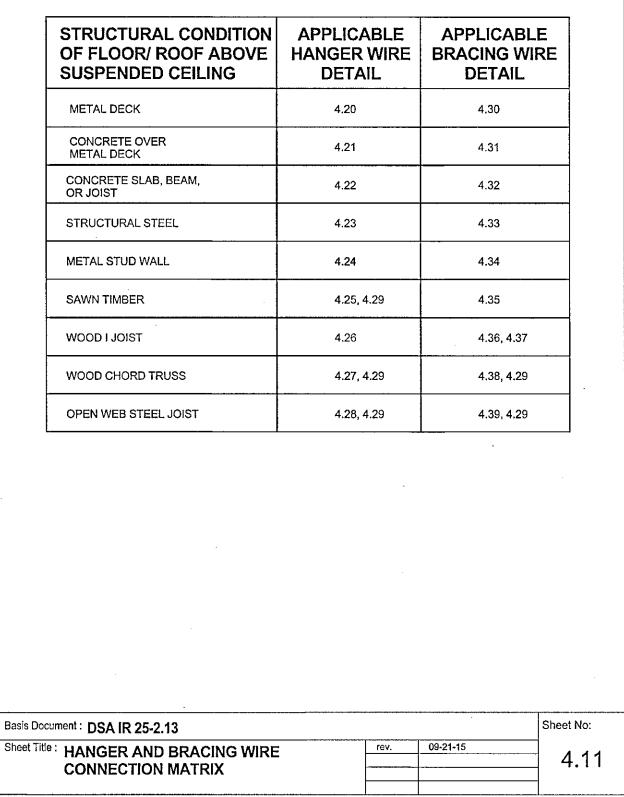
2. VERTICAL LEG OF MEMBER TO FALL WITHIN THE WIDTH OF THE WOOD MEMBER.

1. WEB OF CHANNEL TO BEAR WITHIN WIDTH OF WOOD MEMBER.

3. SEE PAGE 5.50 FOR ADDITIONAL INFORMATION.

Sheet Title: STRUT CONNECTION TO SAWN TIMBER

WITHOUT GYPSUM BOARD



0° TO 45°

(NOTE 2)

CROSS RUNNER

THE WIRES DO NOT INTERFER WITH THE RUNNERS, LIGHT

FIXTURES, ETC. AND REMAIN STRAIGHT AND UNOBSTRUCTED.

Basis Document: DSA IR 25-2.13

MDSA

CEILING: 2013 CBC

ASCE 7, Section 13.5.6.

2.1 Ceiling System Components:

this IR and will require special design and details.

2. CEILING DESIGN & INSTALLATION REQUIREMENTS.

Disciplines: Structural

METAL SUSPENSION SYSTEMS FOR LAY-IN PANEL

PURPOSE: The purpose of this Interpretation of Regulations (IR) is to provide guidelines for the design and installation of metal suspension systems for lay-in ceilings on projects submitted

GENERAL REQUIREMENTS: CBC Section 1616A.1.20 (1616.10.16*) requires the

Note: Amendments in CBC Section 1616A.1.20 (16161.10.16*) replace and append

design and installation to be in compliance with ASTM C635, C636, and E580, Section 5, with

The requirements in this IR apply to flat and level ceiling systems whose total weight, including

ceiling mounted air terminals, services and light fixtures, does not exceed four (4) psf. Heavier

systems, systems that are not flat and level, those supporting lateral loads from partitions, and

free floating ceilings supported by chains or cables, are beyond the minimum requirements of

b) The ceiling grid system must be rated heavy duty as defined by ASTM C635.

c) Main runners, cross runners, splices, expansion devices, and intersection connectors

shall be designed to carry a mean ultimate test load of not less than 180 lbs. in

d) Ceiling wire shall be Class 1 zinc coated (galvanized) carbon steel conforming to

ASTM A641. Wire shall be #12 gage (0.106" diameter) with soft temper and

Four (4) turns of the wire within 1.5" will develop the wire allowable load.

• Three (3) turns of the wire within 3" is assumed to develop no more than 50

b) #12 gage hanger wires may be used for up to and including a 4 foot by 4 foot grid

c) Provide #12 gage hanger wires at the ends of all main and cross runners within eight (8) inches of the support or within one-fourth (1/4) of the length of the end tee,

whichever is least, for the perimeter of the ceiling area. Perimeter wires are not

IR 25-2.13 (rev 02-10-16) Page 1 of 11
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA

required when the length of the end tee is eight (8) inches or less.

spacing and shall be attached to main runners. Splices in hanger wires shall develop

& STRUT

Sheet No:

5.60

minimum tensile strength = 70 ksi. The maximum allowable (ASD) tension load for

a) Shall comply with ASTM C635 and Section 5.1 of ASTM E580.

compression and tension per ASTM E580 Section 5.1.2.

a) Shall comply with ASTM C636 and Section 5.2 of ASTM E580.

wire meeting this specification is 350 pounds.

percent of wire allowable load.

50 percent of the wire allowable load.

1 3/8" EQ. FASTEN STRUT TO 2x4 IN LIEU

2.2 Suspension System Installation:

under the 2013 California Building Code (CBC). For projects submitted to the Division of the

State Architect (DSA) for review under the 2007 or 2010 CBC, see IR 25-2.07 or IR 25-2.10,

IR 25-2.13

Revised in its entirety 09-21-15 Revised in its entirety 05-18-11

Revised 04-08-14

Revised 12-21-12

PER DSA IR 25-2.13 METAL SUSPENSION SYSTEMS FOR LAY-IN PANEL CEILINGS: FOR ADDITIONAL INFORMATION, REFER TO DSA IR 25-2.13, REVISED 04-10-17

NOTE: THE FOLLOWING REQUIREMENTS APPLY TO CEILING SYSTEMS WHOSE TOTAL WEIGHT, INCLUDING CEILING MOUNTED AIR TERMINALS, SERVICES AND LIGHT FIXTURES, DOES NOT EXCEED FOUR (4) PSF. HEAVY SYSTEMS, SYSTEMS THAT ARE NOT FLAT AND LEVEL, THOSE SUPPORTING LATERAL LOADS FROM PARTITIONS, AND FREE FLOATING CEILINGS SUPPORTED BY CHAINS OR CABLES, ARE BEYOND THE REQUIREMENTS OF THIS IR AND WILL REQUIRE SPECIAL DESIGN AND DETAILS.

1. CEILING SYSTEM GENERAL NOTES

- 1.1. CEILING SYSTEM COMPONENTS SHALL COMPLY WITH ASTM C635-07 AND SECTION 5.1 OF ASTM E580-10A.
- 1.2. THE CEILING GRID SYSTEM MUST BE RATED HEAVY DUTY AS DEFINED BY ASTM
- 1.3. CEILING SYSTEMS: THE FOLLOWING CEILING SYSTEM(S) IS/ARE PART OF THE SCOPE OF THIS PROJECT.

MANUFACTURER'S NAME: USG INTERIORS

PROJECT EVALUATION REPORT TYPE AND NUMBER: ESR-1222 MANUFACTURER'S MODEL NUMBER - MAIN RUNNER: DX26

MANUFACTURER'S MODEL NUMBER - CROSS RUNNER: DXO-216

1.4. SEISMIC WALL CLIP (IF USED) MANUFACTURER'S MODEL: NOT USED

1.5. CEILING PANELS SHALL NOT SUPPORT ANY LIGHT FIXTURES, AIR TERMINALS OR

1.6. FOR CEILING INSTALLATIONS UTILIZING ACOUSTICAL TILE PANELS OF MINERAL OR GLASS FIBER, IT IS NOT MANDATORY TO PROVIDE 3/4" CLEARANCE BETWEEN THE ACOUSTICAL TILE PANELS AND THE WALL ON THE SIDES OF THE CEILING WHICH ARE FREE TO SLIP. FOR ALL OTHER CEILING PANEL TYPES, PROVIDE 3/4" CLEARANCE BETWEEN THE ACOUSTICAL TILE PANELS AND THE WALL ON THE SIDES OF THE CEILING WHICH ARE FREE TO SLIP.

MATERIALS:

2.1. CEILING WIRE SHALL BE CLASS 1 ZINC COATED (GALVANIZED) CARBON STEEL CONFORMING TO ASTM A641-09A. WIRE SHALL BE #12 GAGE (0.106" DIAMETER) WITH SOFT TEMPER AND MINIMUM TENSILE STRENGTH = 70 KSI.

2.2. GALVANIZED SHEET STEEL (INCLUDING THAT USED FOR METAL STUD AND TRACK COMPRESSION STRUTS/POST) SHALL CONFORM TO ASTM A653-11, OR OTHER EQUIVALENT SHEET STEEL LISTED IN SECTION A2.1 OF THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS 2012, ... (AISI S100-12), MATERIAL 43 MIL (18 GAGE) AND LIGHTER SHALL HAVE A MINIMUM YIELD STRENGTH OF 33 KSI. MATERIAL 54 MIL (16 GAGE) AND HEAVIER SHALL HAVE A MINIMUM YIELD STRENGTH OF 50 KSI.

2.3. ELECTRICAL METTALIC TUBE (EMT) SHALL HAVE ANSI C80.3/UL 797 CARBON STEEL WITH G90 GALVANIZING. EMT SHALL HAVE MINIMUM YIELD STRENGTH (FY) OF 30 KSI AND MINIMUM ULTIMATE STRENGTH (FU) OF 48 KSI.

3. ATTACHMENT OF HANGER AND BRACING WIRES:

3.1. SEPARATE ALL CEILING HANGER AND BRACING WIRES AT LEAST SIX (6) INCHES FROM ALL UNBRACED DUCTS, PIPES, CONDUITS, ETC.

3.2. HANGER AND BRACING WIRES SHALL NOT ATTACH TO OR BEND AROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO: PIPING, DUCTWORK, CONDUITS, 9. OTHER DEVICES WITHIN THE CEILING:

3.3. HANGER WIRES THAT ARE MORE THAN ONE (HORIZONTAL) IN SIX (VERTICAL) OUT OF PLUMB SHALL HAVE COUNTER-SLOPING WIRES.

3.4. SLACK SAFETY WIRES SHALL BE CONSIDERED HANGER WIRES FOR INSTALLATION AND TESTING REQUIREMENTS.

3.5. HANGER AND BRACING WIRE ATTACHMENT TO THE STRUCTURE SHALL BE INSTALLED IN SUCH A MANNER THAT THE DIRECTION OF THE ANCHORAGE ALIGNS CLOSELY WITH THE DIRECTION OF THE WIRE. (E.G. BRACING WIRE CEILING CLIPS MUST BE BENT AS SHOWN IN THE DETAILS AND ROTATED AS REQUIRED TO ALIGN CLOSELY WITH THE DIRECTION OF THE WIRE, SCREW EYES IN WOOD MUST BE INSTALLED SO THEY ALIGN CLOSELY WITH THE DIRECTION OF THE WIRE, ETC.).

4. FASTENERS AND WELDING

4.1. SHEET METAL SCREWS SHALL COMPLY WITH ASTM C1513-10, ASME B18.6.4-89 (R2005). PENETRATION OF SCREWS THROUGH JOINED MATERIAL SHALL NOT BE LESS THAN 3 EXPOSED THREADS.

4.2. EXPANSION ANCHORS SHALL BE: HILTI KWIK BOLT TZ 3/8" Ø X 3" MC; ESR-1917 4.3. POWER-ACTIVATED FASTENERS SHALL BE: HILTI X-U P8; ESR-2269 SHANK PDF .157"Ø

4.4. IF NOT OTHERWISE SPECIFIED IN THE EVALUATION REPORT, POWER-ACTUATED FASTENERS INSTALLED IN THE STEEL SHALL BE INSTALLED SO THE ENTIRE POINTED END OF THE FASTENER IS DRIVEN THROUGH THE STEEL MEMBER.

4.5. POWER-ACTUATED FASTENERS IN CONCRETE ARE NOT PERMITTED FOR BRACING WIRES.

4.6. CONCRETE REINFORCEMENT AND PRESTRESSING TENDONS SHALL BE LOCATED BY NON-DESTRUCTIVE MEANS PRIOR TO INSTALLATION OF POST-INSTALLED ANCHORS.

4.7. WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 USING E60XX SERIES ELECTRODES.

5. TESTING: ALL FIELD TESTING MUST BE PERFORMED IN THE PRESENCE OF THE PROJECT INSPECTOR

5.1. POST INSTALLED ANCHORS IN CONCRETE USED TO SUPPORT HANGER WIRES SHALL BE TESTED AT A FREQUENCY OF 10 PERCENT. POWER ACTUATED FASTENERS IN CONCRETE SHALL BE FIELD TESTED FOR 200 LB. IN TENSION. ALL OTHER POST-INSTALLED ANCHORS IN CONCRETE SHALL BE TESTED IN ACCORDANCE WITH CBC SECTION 1910A.5.

5.2. POST-INSTALLED ANCHORS IN CONCRETE USED TO ATTACH BRACING WIRES SHALL BE TESTED AT A FREQUENCY OF 50 PERCENT IN ACCORDANCE WITH CBC SECTION 1910A.5

7.1. ALL LIGHT FIXTURES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEM BY MECHANICAL MEANS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURE. A MINIMUM OF TWO SCREWS OR APPROVED FASTENERS ARE REQUIRED AT EACH LIGHT FIXTURE, PER ASTM E580, SCETION 5.3.1

7.2. SURFACE-MOUNTED LIGHT FIXTURES SHALL BE ATTACHED TO THE MAIN RUNNER WITH ATLEAST TWO POSITIVE CLAMPING DEVICES. THE CLAMPING DEVICE SHALL COMPLETELY SURROUND THE SUPPORTING CEILING RUNNER AND BE MADE OF STEEL WITH A MINIMUM THICKNESS OF #14 GAGE. ROTATIONAL SPRING CLIPS DO NOT COMPLY. A #12 GAGE SLACK SAFETY WIRE SHALL BE CONNECTED FROM EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE. PROVIDE ADDITIONAL SUPPORTS WHEN THE LIGHT FIXTURES ARE EIGHT (8) FEET OR LONGER OR EXCEEDS 56 LB. MAXIMUM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED EIGHT (8) FEET.

7.3. LIGHT FIXTURES WEIGHING LESS THAN OR EQUAL TO 10 LB. SHALL HAVE A MINIMUM OF ONE (1) #12 GAGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE.

7.4. NOT USED.

7.5. LIGHT FIXTURES WEIGHING GREATER THAN 10 LB. BUT LESS THAN OR EQUAL TO 56 LB. MAY BE DIRECTLY SUPPORTED ON THE CEILING RUNNERS, BUT THEY SHALL HAVE A MINIMUM OF TWO (2) #12 GAGE SLACK SAFETY WIRES CONNECTED FROM THE FIXTURE HOUSING AT DIAGONAL CORNERS TO THE STRUCTURE

EXCEPTION: ALL LIGHT FIXTURES GREATER THAN 2 BY FOUR FEET WEIGHING LESS THAN 56 LB. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE AT EACH

7.6. ALL LIGHT FIXTURES WEIGHING GREATER THAN 56 LB. SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR (4) TAUT #12 GAGE HANGER WIRES (ONE AT EACH CORNER) ATTACHED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE OR OTHER APPROVED HANGERS. THE FOUR (4) TAUT #12 GAGE WIRES OR OTHER APPROVED HANGERS, INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE, SHALL BE CAPABLE OF SUPPORTING FOUR (4) TIMES THE WEIGHT OF THE FIXTURE.

8. SERVICES WITHIN THE CEILING:

8.1. ALL FLEXIBLE SPRINKLER HOSE FITTING MOUNTIING BRACKETS, CEILING MOUNTED AIR TERMINALS, OR OTHER SERVICES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEM BY MECHANICAL MEANS. SCREWS OR APPROVED FASTENERS ARE REQUIRED. A MINIMUM OF TWO (2) ATTACHMENTS ARE REQUIRED AT EACH COMPONENT.

8.2. CEILING MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING LESS THAN OR EQUAL TO 20 LB. SHALL HAVE ONE (1) #12 GAGE SLACK SAFETY WIRE ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE

8.3. FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS, OR OTHER DEVICES WEIGHING MORE THAN 20 LB. BUT LESS THAN OR EQUAL TO 56 LB. SHALL HAVE TWO (2) #12 GAGE SLACK SAFETY WIRES (AT DIAGONAL CORNERS) CONNECTED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.

8.4. FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS, OR OTHER SERVICES WEIGHING MORE THAN 56 LB. SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE BY NOT LESS THAN FOUR (4) TAUT #12 GAGE HANGER WIRES ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE OR OTHER APPROVED HANGERS.

9.1. ALL LIGHT WEIGHT MISCELLANEOUS DEVICES, SUCH AS STROBE LIGHTS, OCCUPANCY SENSORS, SPEAKERS, EXIT SIGNS, ETC., SHALL BE ATTACHED TO THE CEILING GRID. IN ADDITION, DEVICES WEIGHING MORE THAN 10 LB. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE ANCHORED TO THE STRUCTURE ABOVE. DEVICES WEIGHING MORE THAN 20 LB. SHALL BE SUPPORTED INDEPENDENTLY FROM THE STRUCTURE ABOVE.

GENERAL NOTES

1. REFER TO DSA IR 25-2.13: METAL SUSPENSION SYSTEMS

TABLE 1, LATERAL FORCE BRACE ASSEMBLY SPACING

Brace Assembly Design Spectral Accelerationi Parameter, SDS Spacing (ft.) $|z/h| \le 0.5^a |z/h| \ge 0.5^{a,b}$ 12 x12 12 x12

a. WHERE, AS DEFINED IN ASCE 7. SECTION 13.3.1. z = HEIGHT IN STRUCTURE OF POINT OF ATTACHMENT OF CEILING WITH RESPECT TO

h = AVERAGE ROOF HEIGHT OF THE STRUCTURE WITH RESPECT TO THE BASE. b. IT SHALL BE PERMITTED TO USE THE BRACE ASSEMBLY SPACING FOR "z/h > 0.5" FOR

- ATTACHED

CROSS RUNNERS TYP.

MAIN RUNNERS

BRACING WIRE

LOCATION-TYP

STABILIZER BARS.

CROSS TEES OR

STRUTS 8" MAX.

FROM WALL TYP

WHERE A PROPRIETARY

STABILIZER BARS SHOWN

ON THE PLAN AND THE

ABOVE STABILIZER BAR

Sheet No:

Sheet No:

Sheet Title: HANGER AND BRACING WIRE

CONNECTION - TYPICAL WIRE TURNS

4.35

2.12

RDP TO REMOVE THE

SEISMIC CLIP IS SPECIFIED

ALONG FREE

JOINTS

NOTE1

394-A Umbarger Rd San Jose, CA 95111 Phone 408.224.9890 408.224.9891 Fax www.ArtikA3.com

Consultant Seal

Legend

Key Plan

PERSHING AVE. — SCOPE OF WORL BUILDING 14 LENZEN AVE.

Project Title

HESTER SCHOOL **RESTROOMS & LIFE LAB**

1480 THE ALAMEDA SAN JOSE, CA 95126

SANTA CLARA COUNTY OFFICE OF EDUCATION

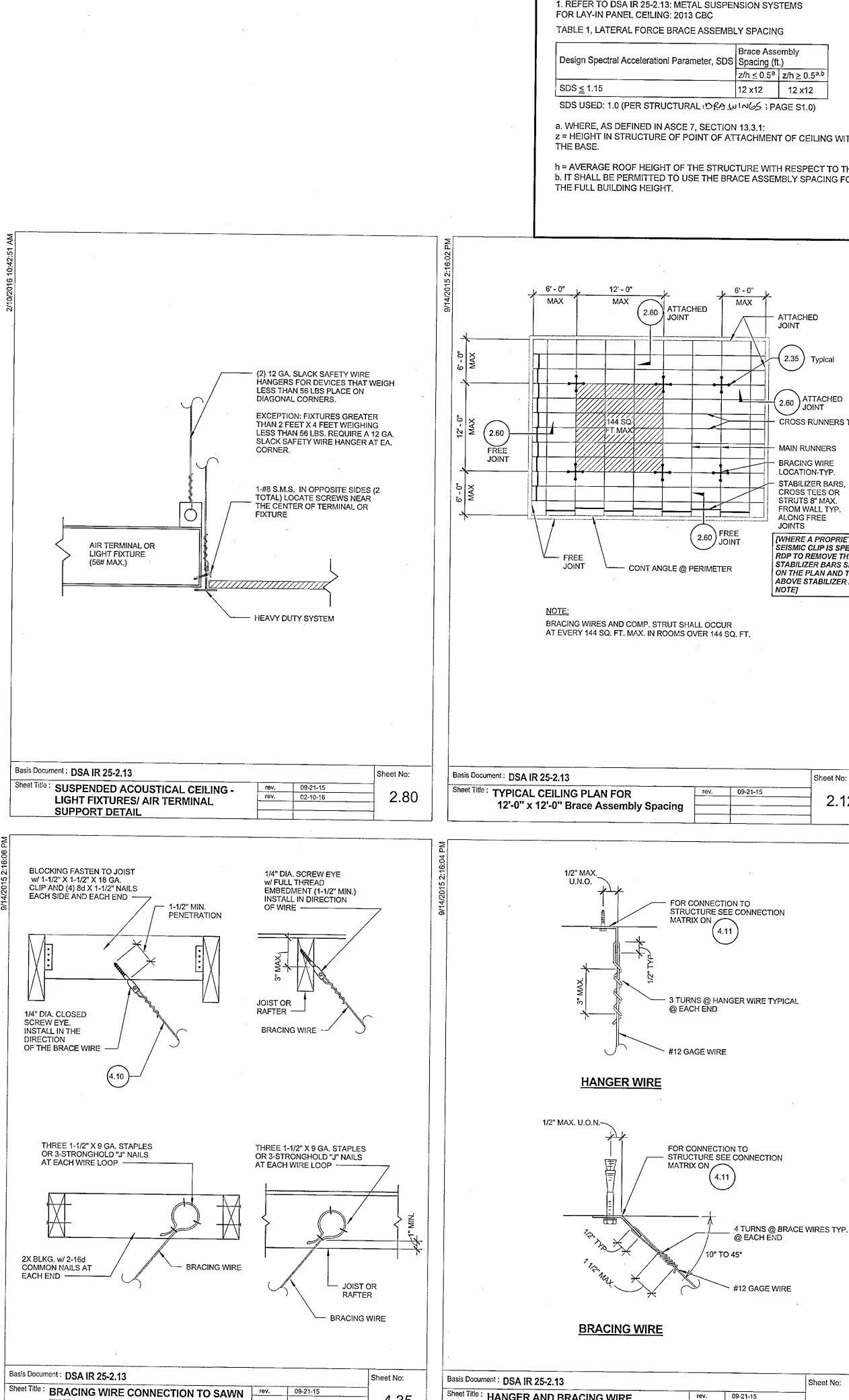
Revisions/Submissions DSA SUBMITTAL 07/20/2017 DSA BACKCHECK SUBMITTAL 10/05/2017

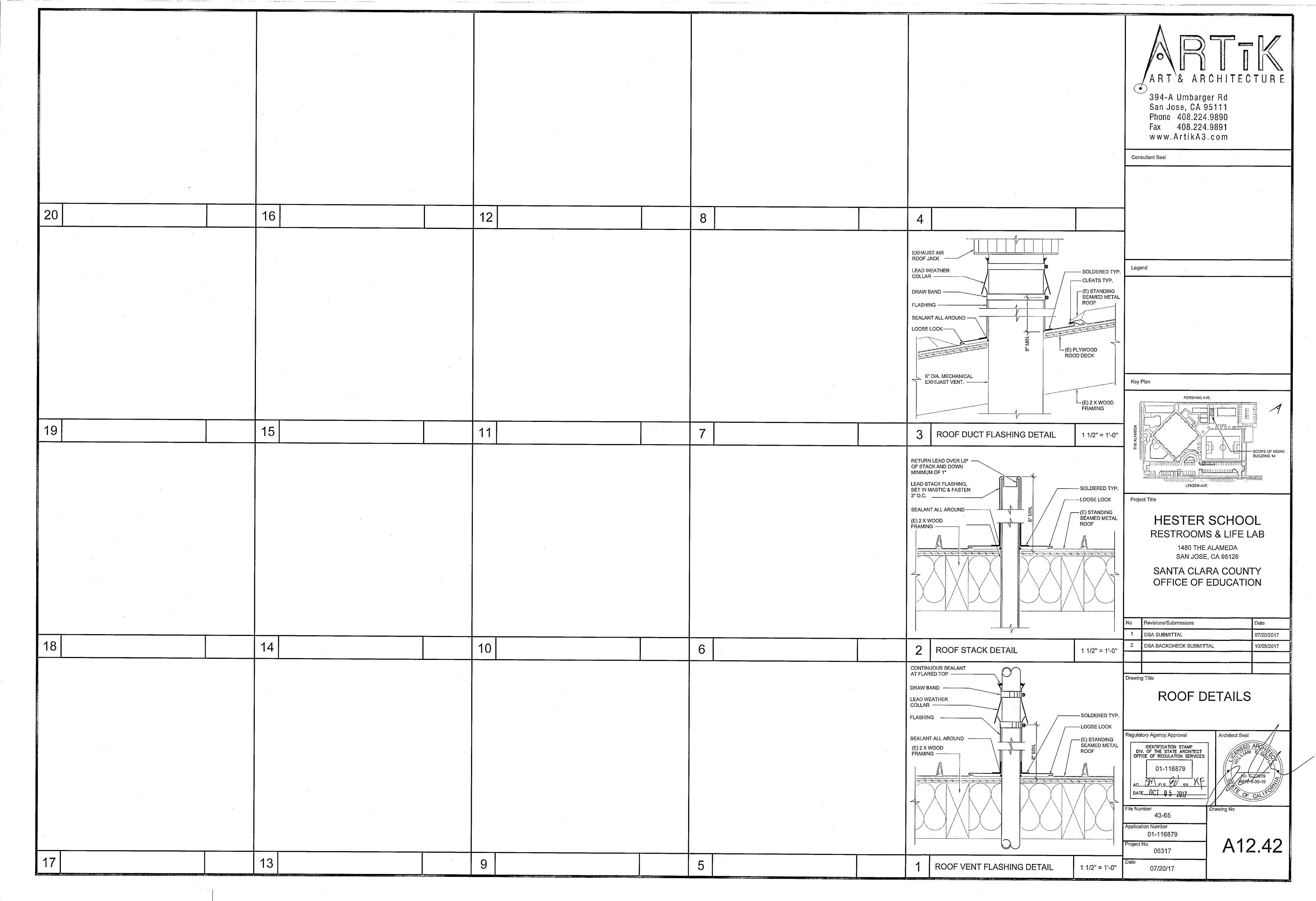
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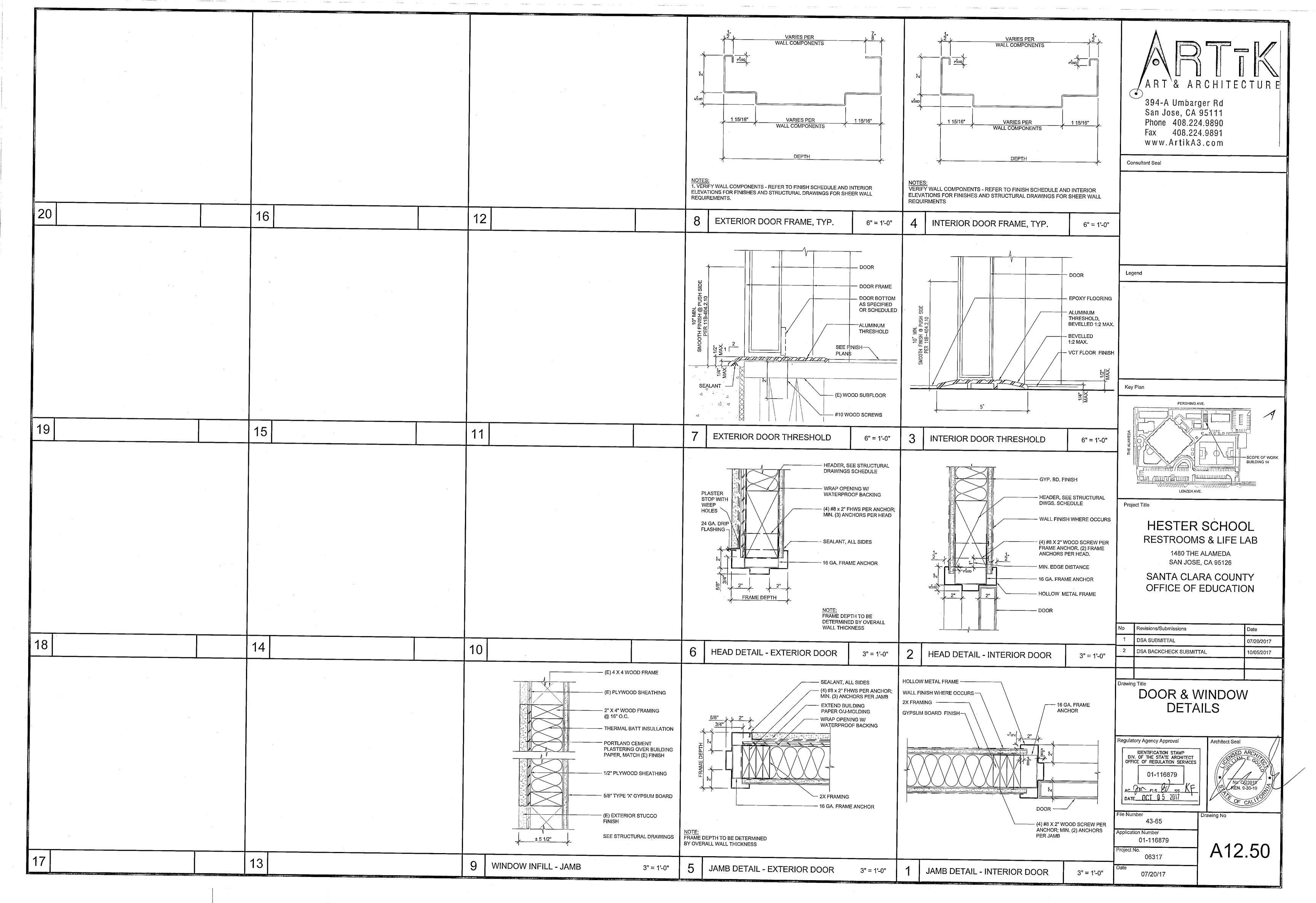
CEILING **DETAILS**

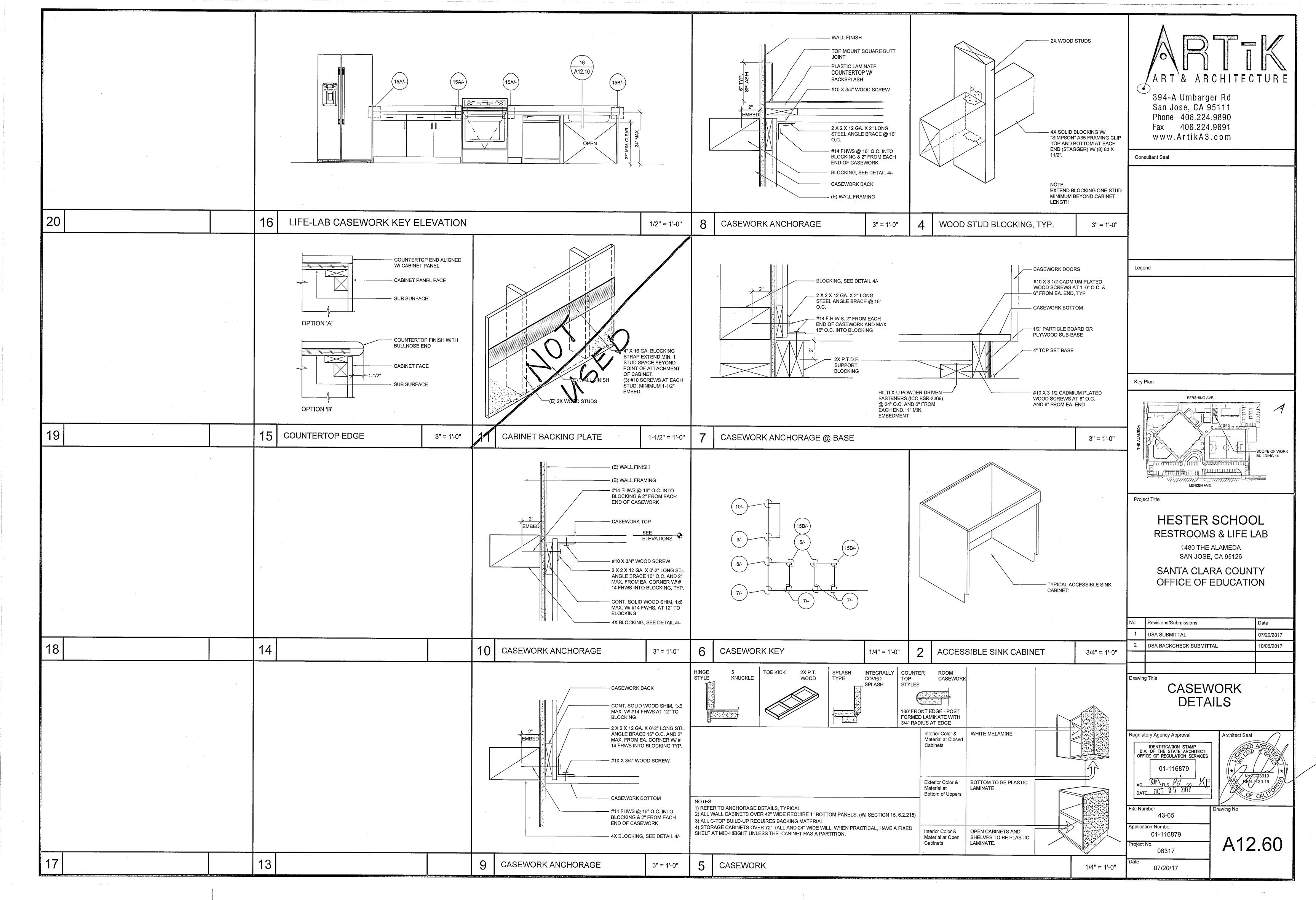
Regulatory Agency Approval Architect Seal IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES

DATE OCT 0.5 2007 File Number Drawing No 43-65 **Application Number** 01-116879 A12.41 06317 07/20/17









STRUCTURAL SPECIFICATIONS

- WOOD
- A. FRAMING LUMBER DOUGLAS FIR U.N.O.:
- JOIST AND RAFTERS: NO.1, U.N.O. BEAMS, POST AND HEADERS: NO.1, U.N.O.
- STUDS, PLATES, BLOCKS, LIGHT FRAMING AND MISC: NO.1, U.N.O. 4. THE MOISTURE CONTENT OF ALL LUMBER 4X OR GREATER SHALL BE VERIFIED BY PROJECT INSPECTOR AT THE TIME OF FRAMING.
- 5. MOISTURE CONTENT SHALL NOT EXCEED 15% FOR WALL STRUCTURAL MEMBERS (i.e. HEADERS, TOP PLATES, SILL AND STUDS). 2X MEMBERS SHALL BE STAMPED "S-DRY"
- C. PROVIDE LATERAL SUPPORT FOR BEAMS, JOIST AND RAFTERS PER CBC SECTION 2308.4.6
- D. FRAMING HARDWARE: ALL LIGHT GAUGE METAL CONNECTORS SHALL BE MANUFACTURED BY "SIMPSON STRONG TIE", OR ALTERNATE APPROVED BY THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT. SIMPSON DESIGNATIONS ARE REFERENCED. INSTALL PER MANUFACTURER'S RECOMMENDATIONS, U.N.O. ON DRAWINGS. FINISH OF CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT DIPPED ZINC COATED GALVANIZED.
- . COMMON WIRE GAGE U.N.O. NAILING TO CONFORM TO CBC TABLE 2304.10.1 U.N.O. 2. MACHINE APPLIED NAILS: MACHINE NAILING OF 5/16" PLYWOOD WILL NOT BE APPROVED. USE OF MACHINE NAILING IS SUBJECT TO A
- JOB SITE DEMONSTRATION FOR EACH PROJECT, THE APPROVAL BY THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT. THE APPROVAL IS SUBJECT
- TO CONTINUED SATISFACTORY PERFORMANCE. IF NAIL HEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR HAND HAMMERED OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY. MACHINE NAILING IS PROHIBITED AT DOUBLE SHEATHED PLYWOOD WALLS OR OTHER APPLICATIONS WHERE THE PRESENCE OF "SHINERS" CAN NOT BE VERIFIED BY VISUAL OBSERVATION. FOR DOUBLE SIDED PLYWOOD SHEAR WALLS, USE HAND NAILING FOR SECOND SIDE
- 3. GALVANIZED NAILS WHERE THEY OCCUR SHALL BE HOT-DIPPED ZINC COATED.
- F. LAG SCREWS PER ANSI/ASME STANDARD B18.2.1 PROVIDE LEAD HOLE SAME DIAMETER AND DEPTH AS SHANK AND THEN DRILL HOLE 60%-70% OF SHANK DIAMETER FOR THREADED PORTIONS.

DRAWING INDEX GENERAL SPECIFICATIONS, FOUNDATION AND CEILING FRAMING PLAN TYPICAL WALL FRAMING DETAILS WOOD DETAILS

JOIST

KIP (1,000 LBS.)

LIVE LOAD

MID-DEPTH

MATERIAL

MAXIMUM

MINIMUM

NUMBER

MECHANICAL

MANUFACTURER

MISCELLANEOUS

NEUTRAL AXIS

NOT TO SCALE

OPPOSITE HAND

OUTSIDE FACE

O.W.S.J. OPEN WEB STEEL JOIST

ROOF DRAIN

REFERENCE

REQUIRED

SEAONC STRUCTURAL ENGINEERS

CALIFORNIA

SLAB JOINT

STANDARD

STRIAGHT

TOP

SYMMETRICAL

тор & воттом

STRUCTURAL TUBE

SLAB ON GRADE

SPECIFICATIONS

SECTION

SIMILAR

P.S.I.

R.D.

S.O.G.

SPECS.

STD.

(T)

PROPERTY LINE, PLATE

POUND PER SQUARE INCH

ROUGHEN CONTROL JOINT

REINFORCE(D)/REINFORCING

SEE ARCHITECTURAL DRAWINGS

ASSOCIATION OF NORTHERN

POUND PER SQUARE

ON CENTER

MACHINE BOLT

ABBREVIATIONS

Ø AT JT. A.B. ANCHOR BOLT K. A.C.I. AMERICAN CONCRETE INSTITUTE K/FT.,K/' KIP PER FOOT A.I.S.C. AMERICAN INSTITUTE OF STEEL CONSTRUCTION ALT. ALTERNATE ARCH. ARCHITECTURAL M.D. A.S.T.M. AMERICAN STANDARD FOR TESTING AND MATERIALS A.W.S. AMERICAN WELDING SOCIETY MAX. воттом BLDG. BUILDING C.G.S. CENTROID OF TENDON C.I.P. CAST-IN-PLACE CONCRETE CONSTRUCTION JOINT C.J. CENTERLINE CLG. CEILING CLR. CLEAR

N.A. NO., # o.c. C.M.U. CONCRETE MASONRY UNIT O.F. O.W.J. OPEN WEB JOIST

COL. COLUMN CONC. CONCRETE CONT. CONTINUOUS CTR. CENTER CU FT. CUBIC FOOT CU. IN. CUBIC INCH CU. YD. CUBIC YARD BAR DIAMETER DOUBLE DBL. DET.

DETAIL DIA. Ø DIAMETER DIAGONAL DIMENSION DEAD LOAD

DIAG. DIM. DN. DOWN DWG.(S) DRAWING(S) EA. EACH FACE **ELEVATION**

ELEV. **ELEVATOR** EQ. EQUAL(LY) E.S. EACH SIDE F.D. FLOOR DRAIN FDN. FOUNDATION FINISH FLOOR FINISH GRADE

FLR. FLOOR FTG. **FOOTING** GAGE GRADE BEAM HORIZONTAL INCH(ES) INSIDE FACE

INFORMATION

UNLESS NOTED OTHERWISE VERT. VERTICAL V.T. VALLEY TRUSS WELDED WIRE FABIRC

SYMBOLS

FOUNDATION PLAN

DENOTES (N) TYPICAL WOOD NON-STRUCTURAL PARITITION WALL

DENOTES (E) CONTINUOUS WALL FOOTING TYPICAL

DENOTES (E) ISOLATED SPREAD FOOTING

ROOF PLAN

DENOTES (N) TYPICAL WOOD NON-STRUCTURAL PARITITION WALL DENOTES (E) WOOD WALL BELOW ROOF FRAMING LEVEL DENOTES (E) CEILING JOIST TYP. DENOTES (N) WOOD STRUCTURAL MEMBER TYP.

DENOTES (N) WOOD POST BELOW

PROJECT DESIGN DATA

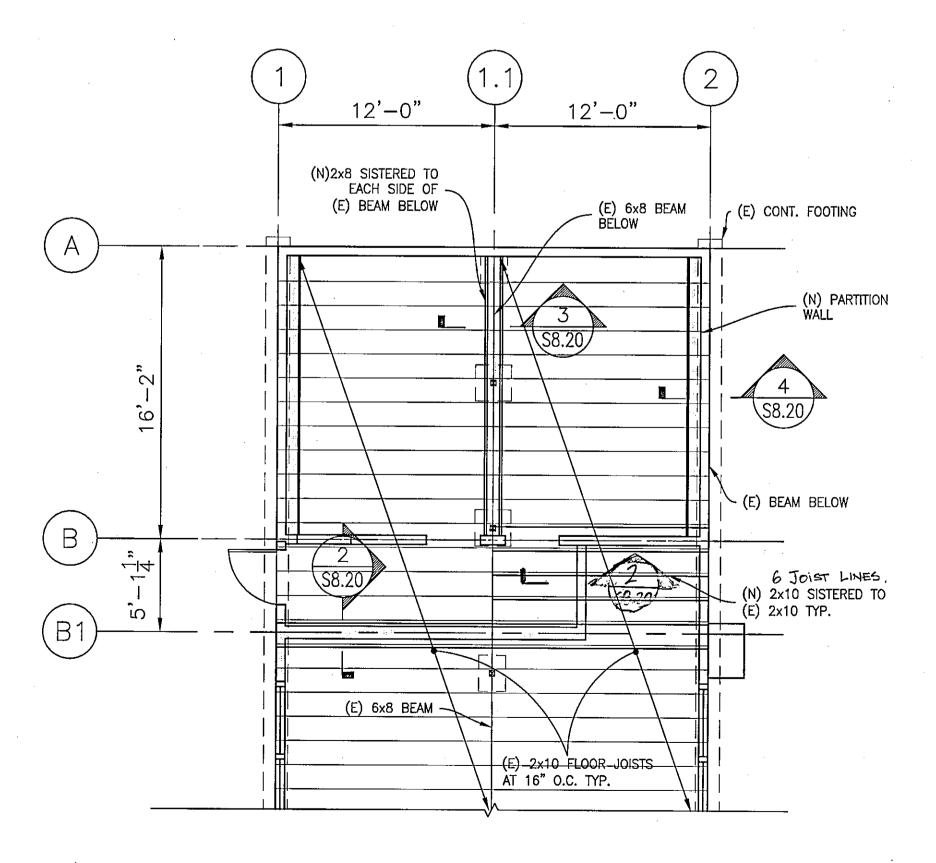
GOVERNING CODE: 2016 CALIFORNIA BUILDING CODE

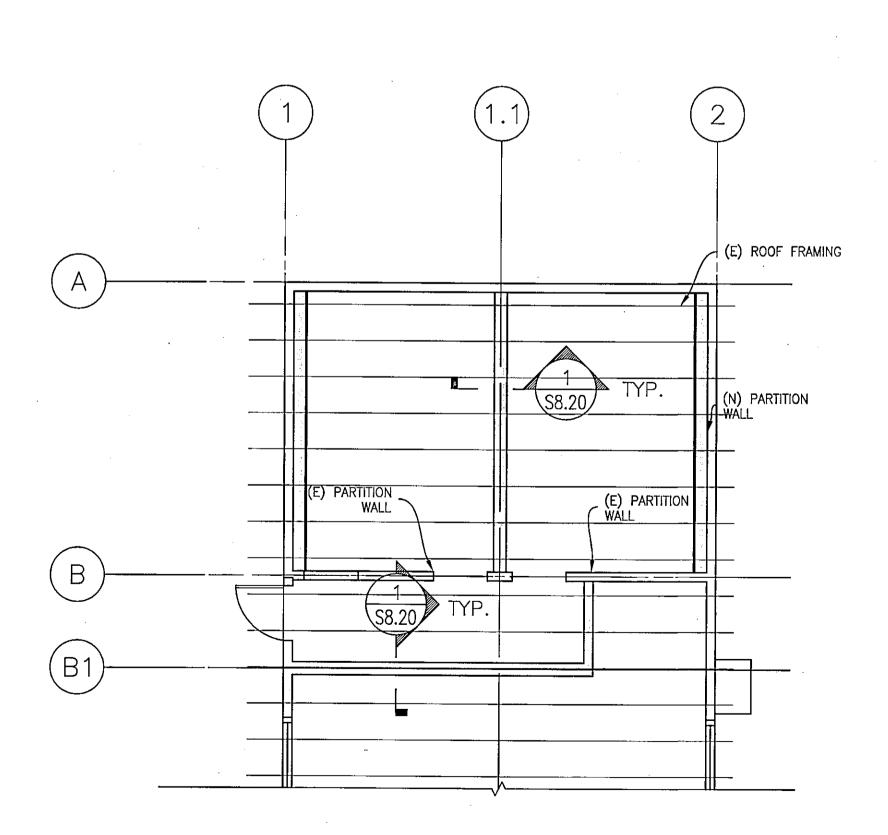
DESIGN LOADS CEILING DEAD LOAD = 11 psf CEILING LIVE LOAD = 20 psf SEISMIC DESIGN SITE CLASS D $S_{DC} = D$ Ss = 1.50Fa = 1.0 $S_1 = 0.60$

Fv = 1.5 $S_{D1} = 0.60$ $a_P = 1.0$, $R_P = 2.5$ (ALL OTHER WALLS AND PARTITIONS) I = 1.25

PROJECT STRUCTURAL SCOPE

THE SCOPE OF THIS PROJECT APPLIES TO THE REMODEL OF THE EXISTING SCHOOL BUILDING. THE REMODEL DOES NOT INCLUDE ANY MODIFICATIONS TO THE EXISTING BUILDING LATERAL FORCE RESISTING SYSTEM AND THEREFORE ONLY THE BUILDINGS GRAVITY SYSTEM IS APPLICABLE TO THE SCOPE OF WORK. INCLUDED IN THE THE BATHROOM REMODEL IS REMOVING AND REPLACING NON-STRUCTURAL PARTITION WALLS AND FLOOR BEAMS.





(E) ROOF FRAMING PLAN
3/16"=1'-0"



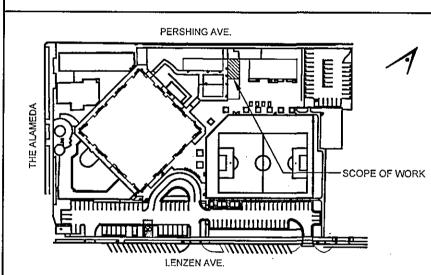
394-A Umbarger Rd San Jose, CA 95111 Phone 408.224.9890 408.224.9891 Fax www.ArtikA3.com

Consultant Seal



Legend

Key Plan



Project Title

HESTER SCHOOL **RESTROOMS & LIFE LAB**

1480 THE ALAMEDA SAN JOSE, CA 95126

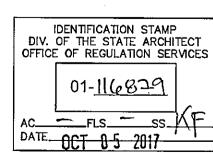
SANTA CLARA COUNTY OFFICE OF EDUCATION

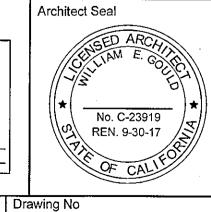
No Revisions/Submissions

Drawing Title

GENERAL SPECIFICATIONS, FOUNDATION AND CEILING FRAMING PLANS

Regulatory Agency Approval





Date

File Number

Project No.

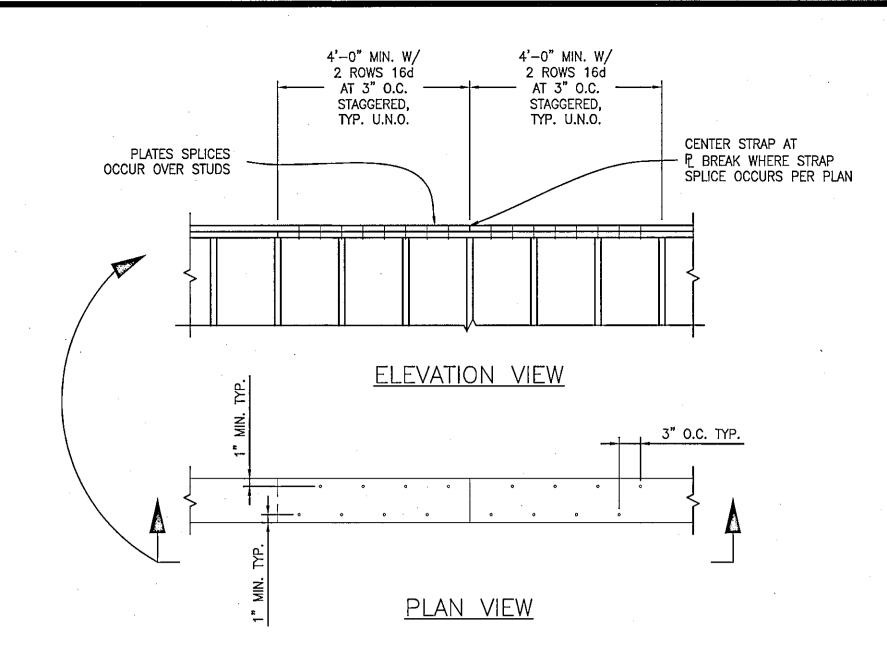
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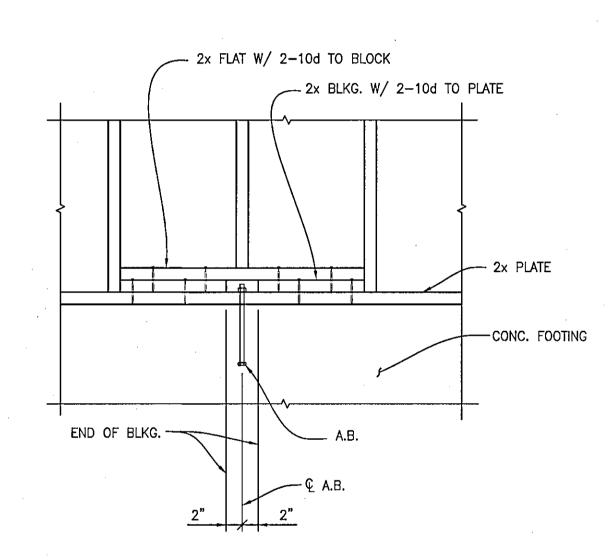
03/15/17

S1.0

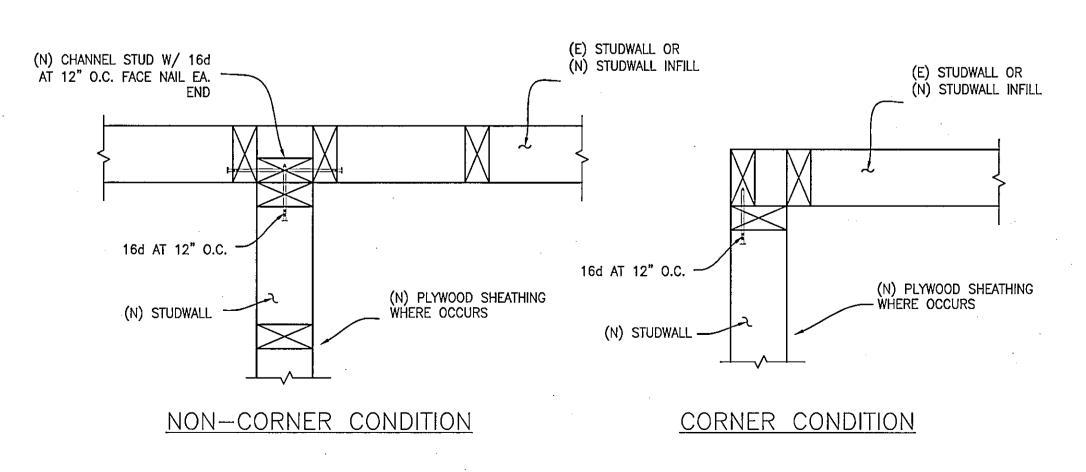
(E) FLOOR FRAMING PLAN 1



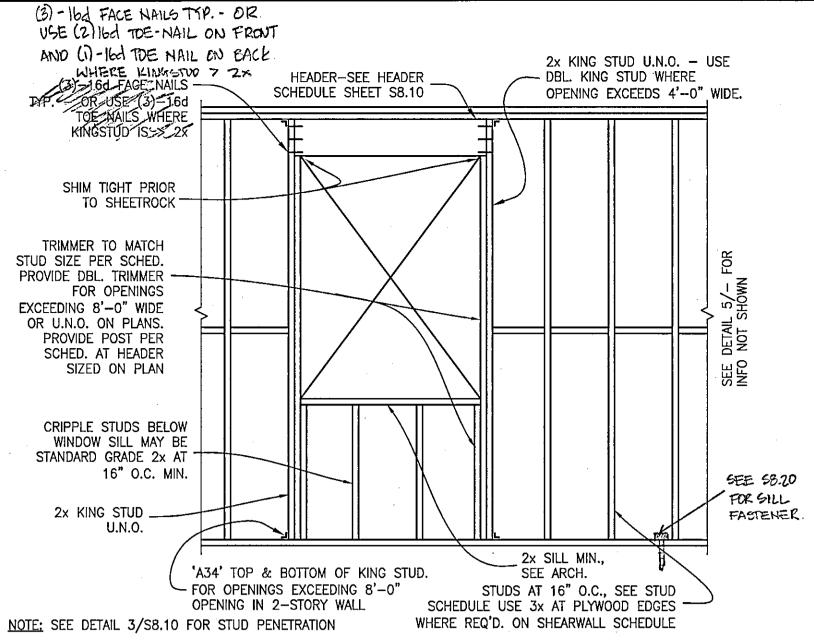
DETAIL - TOP PLATE SPLICE



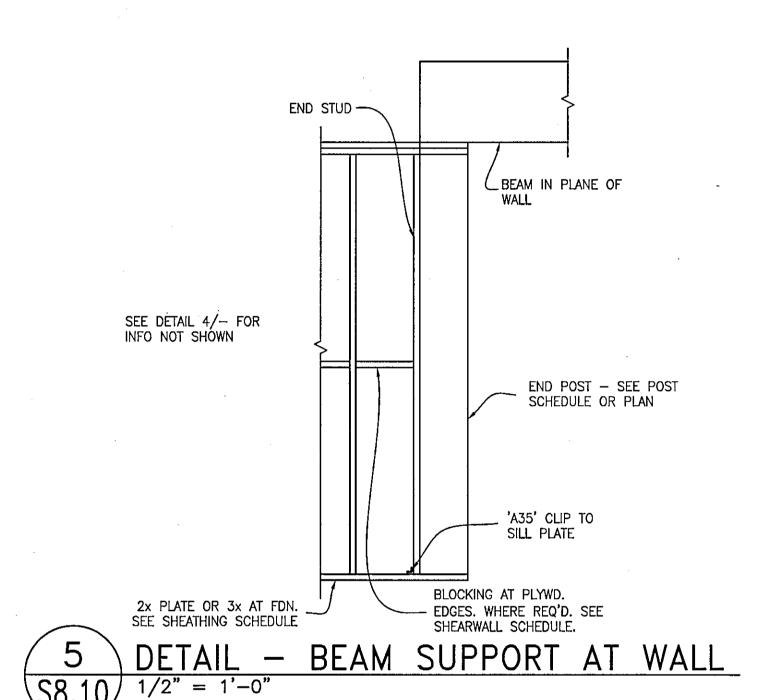
DETAIL - FRAMING WHERE STUD CONFLICTS W/ A.B.



DETAIL - (N) WALL PERP. TO (E) OR (N) WALL



DETAIL - TYP. WALL FRAMING



HEADER	SCHEDULE			
ODENING SIZE	MINIMUM HEADER UNO ON PLAN			
OPENING SIZE	2x4 STUDWALL	2x6 STUDWALL		
0 - 3'	4x6	6×6		
3.1' - 6'	4x8	6x6		
6.1' - 8'	4x10	6×8		
8.1' - 11'	4x12	6x10		
NOTE: SEE DETAIL BELOW FOR 2x6 STUDWALL HE OL	EADER, FLUSH TO	HEADER, FLUSH TO OUTSIDE		

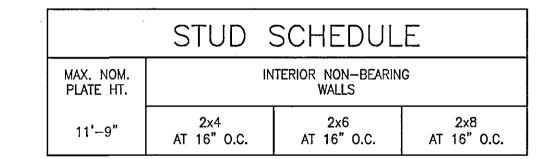
DETAIL - HEADER SCHEDULE

TYPICAL	NAILING SCHEDULE
CONNECTION	NAILING
JOIST OR RAFTER TO TOP PLATE	3-8d TOENAILS
TOP PLATE TO STUD, END NAIL	2-16d
STUD TO 2x SOLE PLATE	4—8d, TOENAIL OR 2—16d, END NAIL
STUD TO 3x SOLE PLATE	4-8d, TOENAIL OR 2-20d (PRE-DRILL), END NAIL
DOUBLE STUDS, FACE NAIL	16d AT 24" O.C.
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	3– 8d
RIM JOIST TO TOP PLATE, TOENAIL	8d AT 6" O.C.
CONTINUOUS HEADER TO STUD, TOENAIL	4-8d

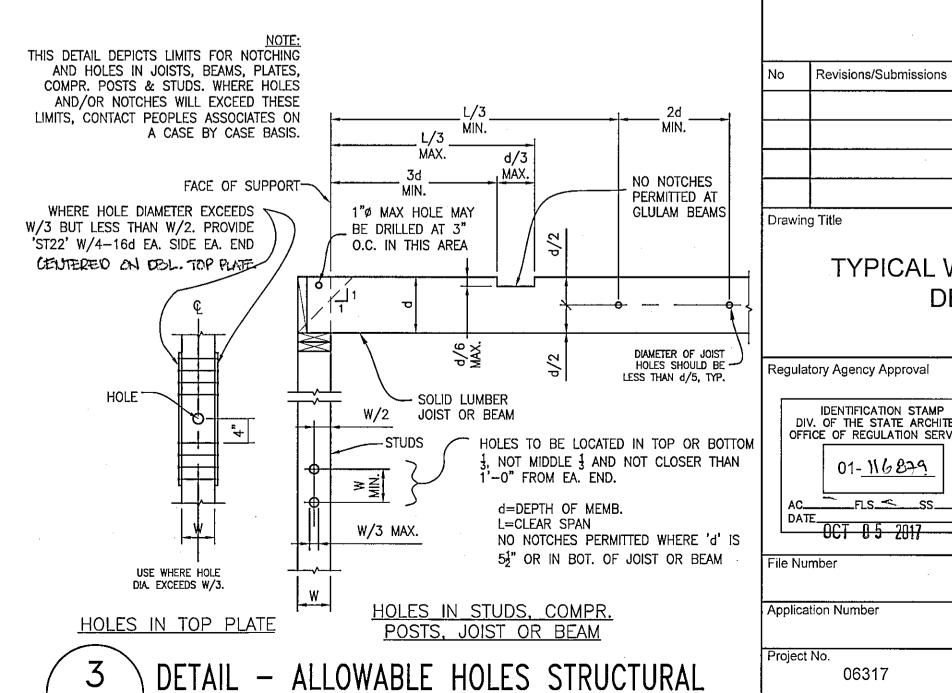
NAILING REQUIREMENTS SHOWN HERE ARE SUPERCEDED WHERE REQUIREMENTS OF THE STRUCTURAL DRAWINGS INDICATE DIFFERENT ATTACHMENT.

THE REQUIREMENTS ABOVE ARE DERIVED FROM THE 2016 CALIFORNIA BUILDING CODE CHAPTER 23, TABLE 2304.10.1. ATTACHMENTS NOT INDICATED OF THE STRUCTURAL DRAWINGS SHALL BE IN CONFORMANCE TO THESE MINIMUM REQUIREMENTS.

DETAIL - NAILING SCHEDULE S8.10 N.T.S.



- STUD SCHEDULE DETAIL NON-STRUCTURAL PARTITION WALLS



SAWN LUMBER MEMBERS

\S8.10/



Key Plan PERSHING AVE. SCOPE OF WORK

Project Title

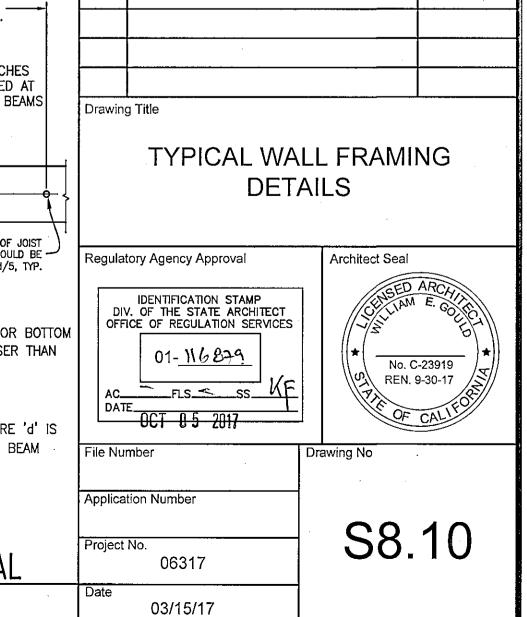
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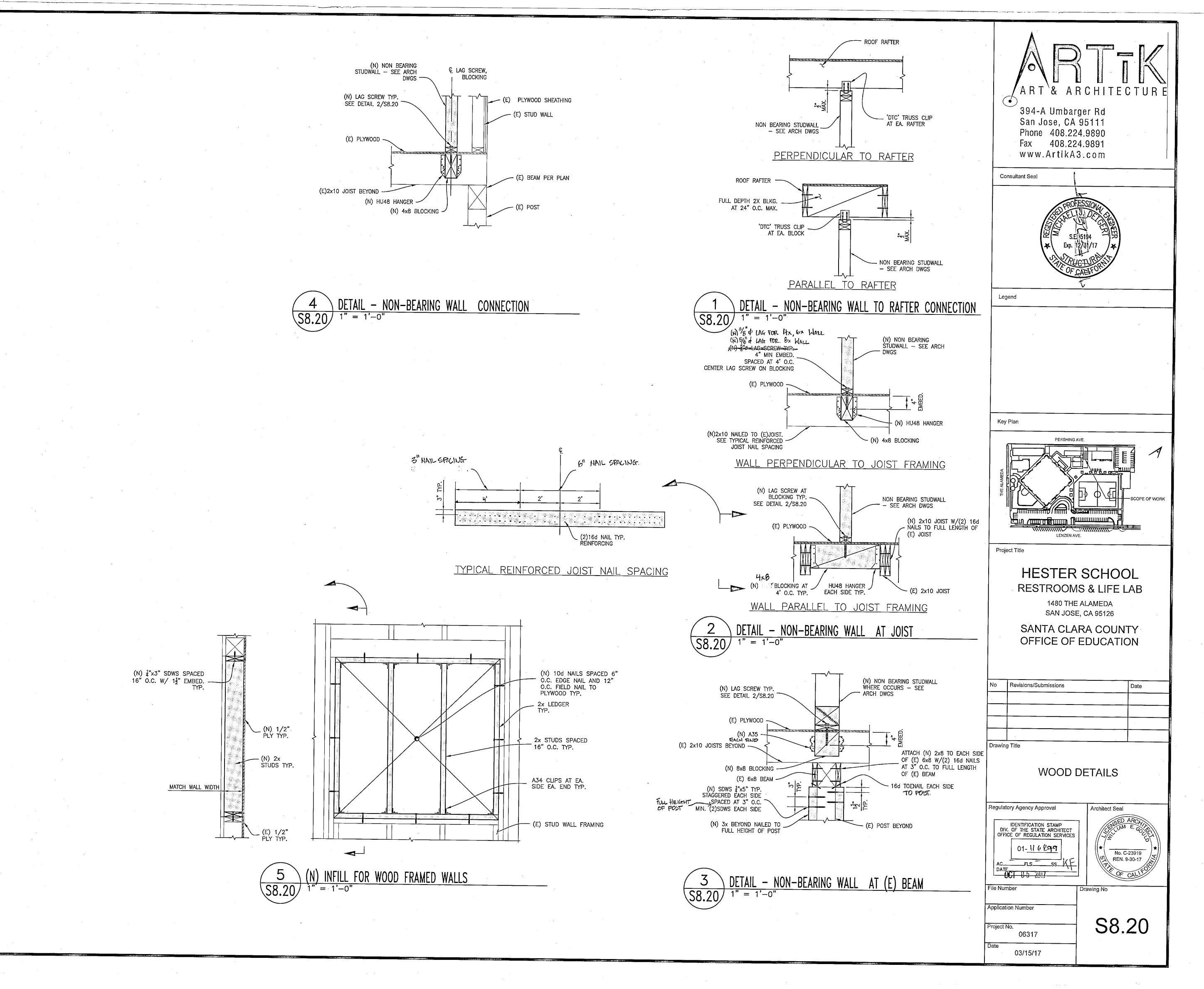
HESTER SCHOOL **RESTROOMS & LIFE LAB**

1480 THE ALAMEDA SAN JOSE, CA 95126

SANTA CLARA COUNTY OFFICE OF EDUCATION

Date





MECHANICAL NOTES

- ENTIRE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE 2016 EDITION OF CALIFORNIA BUILDING CODES AND ALL OTHER APPLICABLE CODES AND REGULATIONS, INCLUDING 2016 CALIFORNIA GREEN BUILDING STANDARDS (PART 11) AND 2016 CALIFORNIA ENERGY CODES (PART 6).
- 2. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED FEES, PERMITS AND INSPECTIONS.
- 3. COORDINATE ENTIRE INSTALLATION OF THE HVAC SYSTEM(S) WITH THE WORK OF ALL OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION. PROVIDE ALL FITTINGS, OFFSETS, AND TRANSITIONS AS REQUIRED FOR A COMPLETE AND WORKABLE INSTALLATION. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ITEMS TO BE PROVIDED BY OTHER TRADES WHERE MENTIONED IN THE CONTRACT DOCUMENTS PRIOR TO BID - NO EXCEPTIONS. THEY SHALL BE RESPONSIBLE FOR A COMPLETE WORKING SYSTEM PER CONTRACT DOCUMENTS.
- CONTRACTOR TO FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING EQUIPMENT, DUCTWORK, AND REGISTERS PRIOR TO INSTALLATION OF ANY NEW EQUIPMENT, DUCTWORK OR REGISTERS. IF THE EXISTING DUCTWORK SIZE IS SMALLER THAN THE NEW DUCTWORK SIZE, AND/OR THE EXISTING DUCTWORK IS NOT IN THE NOTED LOCATION, THE CONTRACTOR IS TO NOTIFY OWNER IMMEDIATELY AND NO NEW DUCTWORK IS TO BE INSTALLED UNTIL THE ISSUE IS RESOLVED.
- THESE DRAWINGS AND NOTES SHALL BE READ IN CONJUNCTION WITH AND BE CONSIDERED TO BE PART OF A SEPARATE AND COMPLETE MECHANICAL SPECIFICATION.
- 6. COORDINATE THE LOCATIONS OF ALL CEILING DIFFUSERS, REGISTERS, AND GRILLES WITH THE ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL LIGHTING LAYOUT, FIRE SPRINKLER SYSTEM, AND ARCHITECTURAL ROOM ELEVATIONS. THE ARCHITECT AND ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY CONFLICTS PRIOR TO FABRICATION AND INSTALLATION.
- EQUIPMENT, DUCTS, PIPING, AND OTHER DEVICES AND MATERIALS INSTALLED OUTSIDE OF THE BUILDING OR OTHERWISE EXPOSED TO THE WEATHER SHALL BE COMPLETELY WEATHER PROOFED AND PAINTED TO MATCH. COORDINATE WITH ARCHITECT PRIOR TO PAINTING.
- 8. DIMENSIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND MUST BE CONFIRMED ON SITE.
- 9. PRIOR TO OCCUPANCY THE ENTIRE HVAC SYSTEMS SHALL BE BALANCED BY AN INDEPENDENT AIR BALANCE CONTRACTOR FOR AIR IN ACCORDANCE AND PROCEDURES WITH (AABC) ASSOCIATED AIR BALANCE COUNCIL STANDARDS, (NEBB) NATIONAL ENVIRONMENTAL BALANCING BUREAU, OR (TABB) TESTING ADJUSTING AND BALANCING BUREAU. SYSTEMS SHALL BE BALANCED AS INDICATED ON PLANS INCLUDING OUTSIDE AIR VENTILATION. FINAL BALANCING SHALL BE WITHIN 10% FOR SUPPLY, RETURN AND OUTSIDE AIR QUANTITIES INDICATED. WHERE THERE IS A CONFLICT IN PLANS, THE AIR BALANCE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO BALANCING OF SYSTEM. IF NOT DONE SO THE AIR BALANCE CONTRACTOR SHALL BEAR ALL COSTS INCURRED FOR WORK THAT MUST BE RE-BALANCED DUE TO CONFLICTS ON CONTRACT DOCUMENTS. CONTRACTOR SHALL PROVIDE THREE COPIES OF THE AIR BALANCE REPORT TO THE ENGINEER FOR APPROVAL. PROVIDE PROCEDURES AND REPORTING PER CAL GREEN CODES SECTION 5.410.4.3, SECTION 5.410.4.3.1 AND SECTION 5.410.4.4.
- 11. CONTROLS CONTRACTOR AND AIR BALANCE CONTRACTOR SHALL COORDINATE WORK AND PERFORM NECESSARY TASKS AS REQUIRED TO OBTAIN AIR FLOW QUANTITIES FOR SYSTEMS SHOWN HEREIN.
- 12. PROVIDE TO BUILDING OWNER, PER CAL GREEN CODE SECTION 5.410.4.5, AND CMC 514.0, OPERATING PROCEDURES FOR THE USE, INSPECTION, TESTING, AND MAINTENANCE OF EQUIPMENT MANUAL INCLUDING INSPECTION AND REPORTS AS APPLICABLE.
- 13. PROVIDE OPERATING PROCEDURES FOR COOKING EQUIPMENT PER CMC SECTION 514.1.
- 14. COORDINATE THE LOCATION OF ALL ROOF OPENINGS AND THE LOCATION OF ALL ROOF MOUNTED EQUIPMENT WITH THE STRUCTURAL AND ARCHITECTURAL PLANS PRIOR TO ANY FABRICATION AND INSTALLATION.
- 15. PLATFORMS, CURBS, AND FLASHING FOR MECHANICAL EQUIPMENT SHALL BE AS INDICATED ON THE STRUCTURAL AND ARCHITECTURAL PLANS, UNLESS NOTED OTHERWISE. WHERE THERE IS A CONFLICT WITH THE MECHANICAL PLANS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND INSTALLATION.
- EQUIPMENT, ACCESSORIES AND RELATED PIPING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FITTINGS, TRANSITIONS, DAMPERS, VALVES, AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
- 17. MAINTENANCE LABEL SHALL BE AFFIXED TO ALL MECHANICAL EQUIPMENT AND A MAINTENANCE MANUAL SHALL BE PROVIDED FOR THE OWNER'S USE. LABEL SHALL IDENTIFY THE UNIT DESIGNATION PER PLANS AND THE SPACE IT SERVES.
- 17.1. EQUIPMENT: 4-1/2"X1-1/2" ENGRAVED PLASTIC-LAMIANTE SIGN WITH 1/2" WHITE LETTERS ON BLACK BACKGROUND. 17.2. VALVES: 1-1/2" DIAMETER BRASS DISC STAMPED WITH 3/8" HIGH LETTERS IDENTIFYING TYPE OF SERVICE AND VALVE
- 17.3. PIPING: SELF-STICKING PIPE MARKERS CONSISTING OF PIPE SERVICE WORDING AND ARROW INDICATING DIRECTION OF FLOW ON A.S.A. COLOR BACKGROUND. MAXIMUM SPACING OF 50 FEET APART. SECURE MARKER WITH 2-1/4" WIDE SELF-STICKING CLEAR TAPE AROUND PERIPHERY OF MARKER.
- 18. PROVIDE MANUAL VOLUME DAMPERS AND BACKDRAFT DAMPERS FOR OUTSIDE AIR INTAKES ON ALL AIR HANDLING EQUIPMENT AND EXHAUST FANS SERVING CONDITIONED SPACES. EXCEPTION: EQUIPMENT WITH FACTORY AIR ECONOMIZERS
- 19. OUTSIDE AIR INTAKES SHALL MEET AS A MINIMUM CODE REQUIRED CLEARANCES FROM EXHAUST, FLUE, FUEL BURNING APPLIANCES AND PLUMBING VENT OUTLETS. FOR GAS/ELECTRIC AIR CONDITIONING UNITS WHERE THE CODE REQUIRED CLEARANCES ARE NOT MET, A FACTORY FLUE GAS DEFLECTOR AND EXTENSION SHALL BE USED TO MINIMIZE THESE CLEARANCES. CONTRACTOR SHALL DETERMINE LOCATIONS WHERE REQUIRED PRIOR TO BID. THIS SHALL BE PROVIDED AT NO ADDITIONAL
- 20. ALL HVAC EQUIPMENT SERVING NORMALLY OCCUPIED SPACES SHALL HAVE MERV 8 FILTERS UNLESS OTHERWISE NOTED.
- 21. AIR FILTERS SHALL BE STATE FIRE MARSHALL APPROVED AND LISTED, PREFORMED FILTERS HAVING COMBUSTIBLE FRAMING SHALL BE TESTED AS A COMPLETE ASSEMBLY. INSTALLED FILTERS SHALL BE CLEARLY LABELED BY THE MANUFACTURE INDICATING THE MERV RATING, AND THE FILTER SPECIFICATION SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL. AIR FILTERS SHALL BE ACCESSIBLE FOR CLEANING OR REPLACEMENT.
- 22. EQUIPMENT WITH MOVING PARTS, FIXED OR FLEXIBLY MOUNTED, SHALL BE PROVIDED WITH FLEXIBLE DUCT AND PIPE CONNECTIONS AND SHALL BE BRACED OR ANCHORED TO COMPLY WITH THE REQUIREMENTS OF TITLE 24.
- 23. HVAC EQUIPMENT SHALL BE CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION TO COMPLY WITH THE LATEST EFFICIENCY STANDARDS.
- 24. AIR HANDLING EQUIPMENT SERVING CONDITIONED SPACES SHALL PROVIDE CONTINUOUS OUTSIDE AIR TO SPACES IN OCCUPIED MODE. CONTROLS SHALL BE PROVIDED TO PROVIDE THE MINIMUM RATE OF OUTDOOR AIR REQUIRED BY THE STATE ENERGY
- 25. CONTRACTOR SHALL VERIFY ALL CLEARANCES AND AVAILABLE SPACE FOR DUCTWORK PRIOR TO ORDERING AND/OR
- 26. CONTRACTOR TO SUBMIT ALL EQUIPMENT, DUCTWORK, AIR DISTRIBUTION DEVICES, AND OTHER ACCESSORIES TO THE ENGINEER FOR APPROVAL PRIOR TO ANY ORDERING OF SUCH ITEMS.
- 27. CONTRACTOR SHALL BE RESPONSIBLE FOR ORDERING AIR CONDITIONING EQUIPMENT WITH THE THRU-BASE POWER, CONTROL, AND GAS CONNECTIONS. VERIFY ALL CONNECTION LOCATIONS WITH UNIT MANUFACTURER AND COORDINATE WITH OTHER TRADES AS NECESSARY.
- 28. COORDINATE ALL WORK WITH THE ARCHITECTURAL, STRUCTURAL DRAWINGS AND DRAWINGS OF OTHER TRADES. INSTALL ALL WORK TO CLEAR NEW AND EXISTING ARCHITECTURAL WORK, STRUCTURAL MEMBERS AND WORK OF OTHER TRADES. NO ITEM SUCH AS PIPE, DUCT, ETC. SHALL BE IN CONTACT WITH ANY EQUIPMENT. ANY ERRORS, OMISSIONS, DISCREPANCIES, DEFICIENCIES, OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR, THE ARCHITECT AND THE ENGINEER PRIOR TO PROCEEDING WITH ANY AFFECTED WORK.
- 29. DUCTWORK, PIPING, CONDUIT, ETC. PENETRATING FIRE RATED CONSTRUCTION SHALL HAVE APPROVED FIRE STOPPING.
- 30. CONTROL SCHEMATICS ARE FOR REFERENCE ONLY. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ELECTRICAL DEVICES REQUIRED AND SEQUENCE OF OPERATION.
- 31. LINE VOLTAGE WIRING SHALL BE INSTALLED IN CONDUIT. ALL LINE VOLTAGE CONDUIT AND WIRING, INCLUDING FINAL CONNECTIONS, SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AS INDICATED ON THE ELECTRICAL DRAWINGS OR SPECIFIED IN THE ELECTRICAL SECTION OF THE SPECIFICATIONS. ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS OF GOVERNING BODIES HAVING JURISDICTION THEREOF.
- 32. ELECTRICAL CONTRACTOR SHALL PROVIDE REQUIRED RELAY ACCESSORIES FOR CONNECTION OF 120V/1Ø VENTILATION EQUIPMENT TO 277V/1Ø LIGHTING AS APPLICABLE.
- 33. DUCTWORK CONSTRUCTION SHALL MEET THE FOLLOWING SYSTEM PRESSURE REQUIREMENTS: 33.1. ALL OTHER DUCTWORK - 2 INCH WATER COLUMN
- 34. ALL SUPPLY, RETURN AND EXHAUST DUCT JOINTS SHALL BE SEALED PER CALIFORNIA MECHANICAL CODE CHAPTER 6 REQUIREMENTS. SEAL CLASS B.
- 35. RECTANGULAR DUCTWORK SHALL BE SHEET METAL CONSTRUCTED OR SPIRAL ROUND, ERECTED, AND TESTED IN ACCORDANCE WITH THE MOST RESTRICTIVE OF LOCAL REGULATIONS, PROCEDURES DETAILED IN THE ASHRAE HANDBOOK OF FUNDAMENTALS. CHAPTER 6 OF THE CALIFORNIA MECHANICAL CODES, OR THE APPLICABLE STANDARDS ADOPTED BY (SMACNA) SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION.
- 36. ALL FLEXIBLE DUCT SHALL NOT EXCEED SEVEN FEET IN LENGTH TO RESPECTIVE DIFFUSERS, GRILLES, OR OTHER AIR DEVICES.
- 37. INSTALL DRYER VENT DUCTWORK IN CONFORMANCE TO CMC SECTION 504.4.3.
- 38. AT THE TIME OF ROUGH INSPECTION AND DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENTS, OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR OTHER METHODS TO REDUCE THE AMOUNT OF DEBRIS WHICH MAY

COLLECT IN THE SYSTEM.

- 39. LIMIT USE OF PERMANENT HVAC SYSTEMS DURING CONSTRUCTION TO CONDITIONING NECESSARY FOR MATERIAL AND EQUIPMENT INSTALLATION. IF PERMANENT HVAC IS USED DURING CONSTRUCTION, INSTALL MERV-8 FILTERS ON RETURNS, AND REPLACE ALL FILTERS IMMEDIATELY PRIOR TO OCCUPANCY, OR ,IF THE BUILDING IS OCCUPIED DURING ALTERATION, AT THE
- 40. PROVIDE SEISMIC RESTRAINTS TO ALL DUCTWORK, PIPE, AND EQUIPMENT SUPPORTS IN ACCORDANCE WITH THE LATEST SMACNA GUIDELINES FOR SEISMIC RESTRAINT OF MECHANICAL SYSTEMS. SUSPENDED EQUIPMENT SHALL BE PROVIDED WITH SEISMIC ANCHORAGE AND ISOLATION SUPPORTS.
- 41. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OR THE FIELD REPRESENTATIVE OF THE OFFICE OF THE SATE ARCHITECT.
- 42. RECTANGULAR DUCT TURNS IN SUPPLY, RETURN, AND EXHAUST DUCTS SHALL HAVE TURNING VANES UNLESS OTHERWISE NOTED, OR SHALL HAVE A INNER RADIUS TURN OF NO LESS THAN THE WIDTH OF THE DUCT.
- 43. DUCTWORK HANDLING CONDITIONED AIR SHALL BE INSULATED OR LINED. INTERIOR DUCTWORK SHALL BE INSULATED WITH A NON-FIBEROUS MATERIAL, R=4.2. ALL SUPPLY AND RETURN DUCTWORK EXPOSED TO WEATHER SHALL BE INTERNALLY LINED WITH 2" THICK DUCT LINER UNLESS OTHERWISE INDICATED OR SPECIFIED. ALL DUCT SIZES INDICATED ON PLANS ARE NET INSIDE DIMENSIONS, ALL INSULATION SHALL HAVE A FLAME SPREAD OF NOT MORE THAN 25 AND A SMOKE DENSITY NOT EXCEEDING 50.
- 44. CONTRACTORS OPTIONS: WHERE ROUND LINED DUCTWORK IS INDICATED, CONTRACTOR MAY USE RECTANGULAR DUCTWORK OF EQUIVALENT NET FREE AREA OR PRESSURE DROP (WHICHEVER IS MOST RESTRICTIVE).
- 45. MANUAL VOLUME DAMPERS SHALL BE PROVIDED IN ALL DUCT BRANCHES TO INDIVIDUAL DIFFUSERS, GRILLES, AND REGISTERS, AS WELL AS OUTSIDE AIR INTAKE DUCTS. DAMPERS SHALL BE LOCATED AT THE BRANCH DUCT LOCATIONS. THE MECHANICAL CONTRACTOR SHALL COORDINATE LOCATIONS OF DAMPERS WITH THE AIR BALANCING CONTRACTOR PRIOR TO BID. SO AS TO ENSURE ACCESSIBILITY AFTER INSTALLATION. IN LOCATIONS WHERE THESE DAMPERS ARE INACCESSIBLE, CABLE OPERATED ADJUSTMENT CONTROLS SHALL BE PROVIDED AT NO ADDITIONAL COST. OPPOSED BLADE DAMPERS SHALL NOT BE PERMITTED
- 46. HVAC CONTRACTOR TO REMOVE ALL LEFT OVER DUCTWORK SCRAPES, ETC. (IF ANY) AND LEAVE PREMISES CLEAN AND FREE OF ANY TRASH OR DEBRIS DUE TO THEIR WORK

M/E/P COMPONENT ANCHORAGE NOTES

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCED AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN 2016 CBC, SECTIONS 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7-10 CHAPTER 13, 26 AND 30.

- 1. ALL PERMANENT EQUIPMENT AND COMPONENTS
- 2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.
- 3. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT THE ATTACHMENT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT.

- A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
- B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND THE DSA DISTRICT STRUCTURAL ENGINEER. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

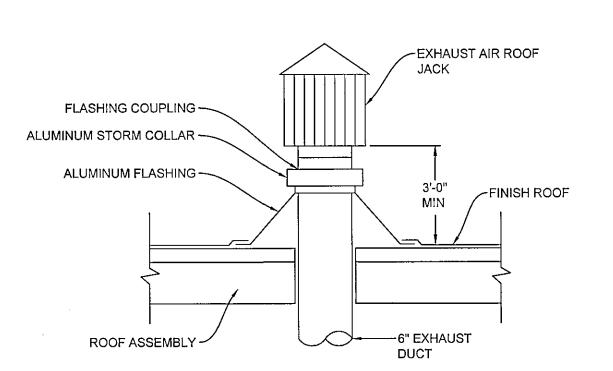
DUCTWORK AND PIPING DISTRIBUTION BRACING NOTES

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-10 SECTION 13.6.5.6. 13.6.7. 13.6.8, AND 2016 CBC SECTION 1616A.1.23, 1616A.1.24, 1616A.1.25 AND 1616A.1.26

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PRE-APPROVED INSTALLATION GUIDE (E.G., SMACNA OR OSHPD OPM) COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND THE BRACE LOADS.

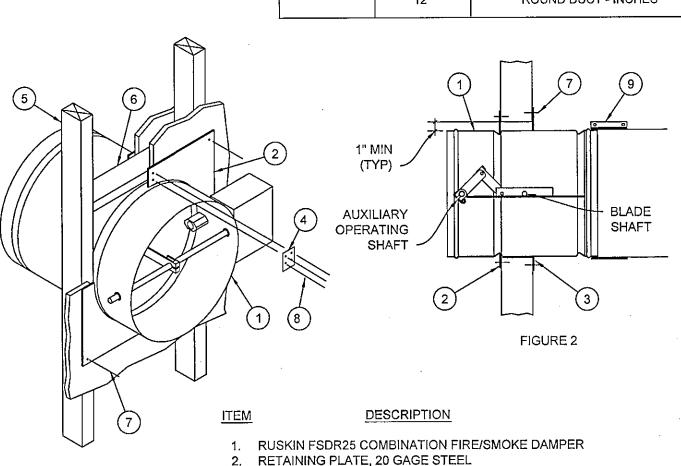
MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION (E)

MP ☑ MD ☑ PP ☐ E ☐ OPTION 1: DETAILED ON THE APPROVED DRAWINGS AND PROJECT SPECIFIC NOTES AND DETAILS



N.T.S DUCT THRU ROOF

MECHANIC	AL LEGEND	
SYMBOL	ABBREVIATION	DESCRIPTION
	AFF	ABOVE FINISHED FLOOR
	AL	ACOUSTICALLY LINED
	BOD	BOTTOM OF DUCT
	CFM	CUBIC FEET PER MINUTE
<u> </u>	BDD	DAMPER: BACKDRAFT
	FSD	DAMPER: FIRE/SMOKE
	FD	DAMPER: FIRE
	MVD	DAMPER: MANUAL VOLUME
	Ø	DIAMETER
	DN	DOWN
	DS	DISCONNECT SWITCH
<u>\$</u>		DUCT SMOKE DETECTOR
	EER	ENERGY EFFICIENCY RATIO
	EA	EXHAUST AIR
	F	FAN
	FLA	FULL LOAD AMPS
		FLEXIBLE DUCT
	НР	HORSEPOWER
	MCA	MINIMUM CIRCUIT AMPACITY
	МОСР	MAXIMUM OVERCURRENT PROTECTION
	MS	MOTOR STARTER
	RL	REFRIGERANT LIQUID
	RS	REFRIGERANT SUCTION
	OA	OUTSIDE AIR
	POC	POINT OF CONNECTION
	POD	POINT OF DISCONNECTION
	RA	RETURN AIR
	SA	SUPPLY AIR
	TA	TRANSFER AIR
	TP	RATED THRU PENETRATION
	SEER	SEASONAL EER
-	SAD	SEE ARCHITECTURAL DRAWING
	SSD	SEE STRUCTURAL DRAWING
	ල්	SENSOR: CARBON DIOXIDE
	Ð	THERMOSTAT
	TYP	TYPICAL
	UON	UNLESS OTHERWISE NOTED
	WT	WEIGHT
	24x12	RECTANGULAR DUCT - INCHES
	12"	ROUND DUCT - INCHES



3. DAMPER PLATE, 20 GAGE PLATE

#10 X 1/2" SHEET METAL SCREW

WOOD STUD WOOD FRAME

9. DRAW BAND

4. SPLICE PLATE, 20 GAGE STEEL, TYP BOTH PLATES

FIGURE 1

1. FOLLOW DAMPER MANUFACTURER'S INSTRUCTIONS, INCLUDING FASTENER OPTIONS AND GAGES FOR SLEEVE AND PERIMETER ANGLES. FIRE/SMOKE DAMPERS MUST BE INSTALLED IN THE PARTITION, NOT OUTSIDE THE PENETRATION 2. GALVANIZED SLEEVE: GAGE NOT LESS THAN CONNECTING DUCT. FASTEN SLEEVE

1/2"X2" WOOD SCREW

TO DAMPER FRAME AND TO PERIMETER ANGLES. 3. BREAKAWAY DUCT CONNECTION: CONTRACTOR'S OPTIONS OF TYPES SHOWN IN

SMACNA LPDS, FIG. 2-13. SEAL JOINTS. 4. LINE OPENING WITH MINIMUM 5/8" DRYWALL

CSFM APPROVED, UL 555 FIRE RESISTANCE RATING, UL555S CLASS II, 250°F LEAKAGE AND ELEVATED TEMPERATURE RATING, FAIL CLOSE ON LOSS OF POWER, POWER OPEN-FAIL ACTUATOR FOR AUTOMATIC RESET.

6. SMOKE DETECTOR SHALL BE FURNISHED BY DIVISION 26 AND INSTALLED BY DIVISION 23.

7. ACTIVATION OF DUCT SMOKE DETECTOR SHALL CLOSE RESPECTIVE FIRE/SMOKE

DAMPER, POWER AND SIGNAL WIRING BY DIVISION 26. FIRE/SMOKE DAMPER DETAIL FOR REFERENCE ONLY

9. FIRE/SMOKE DAMPER(S) SHALL BE CALIFORNIA STATE FIRE MARSHALL APPROVED AND INSTALLED STRICTLY PER MANUFACTURER'S PRINTED INSTRUCTIONS. 10. MANUFACTURER'S INSTRUCTION SHALL BE MADE AVAILABLE TO THE INSPECTING

11. PROVIDE DUCT ACCESS PANEL FOR FIRE/SMOKE DAMPER.

FIRE SMOKE DAMPER DETAIL

N.T.S

394-A Umbarger Rd San Jose, CA 95111 www.ArtikA3.com

Consultant Seal

8517 Earhart Rd. Suite 230 Oakland, CA 94621 510-569-2000



Legend

Key Plan PERSHING AVE -SCOPE OF WORK

Project Title

HESTER SCHOOL **RESTROOMS & LIFE LAB**

SAN JOSE, CA 95126 SANTA CLARA COUNTY

OFFICE OF EDUCATION

1480 THE ALAMEDA

Date Revisions/Submissions 07/20/2017 DSA SUBMITTAL 0/05/2017 DSA BACKCHECK SUBMITTAL

Drawing Title **MECHANICAL GENERAL NOTES** AND LEGEND

Regulatory Agency Approval Architect Seal DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES 01-116879 REN. 9-30-19 P/\FLS C/ SS K DATE OCT 0 5 2017 File Number Drawing No.

Application Number

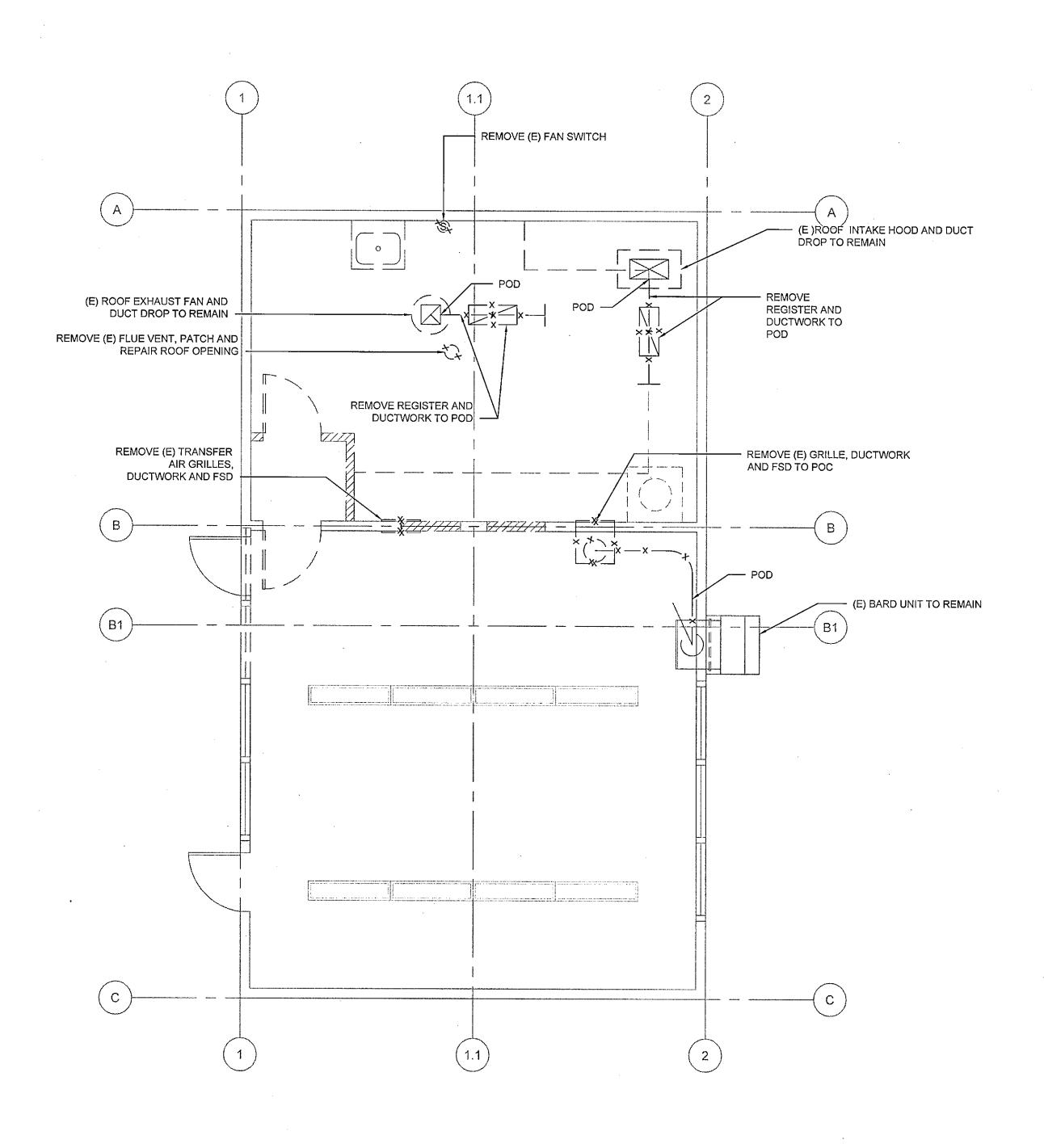
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07/20/17

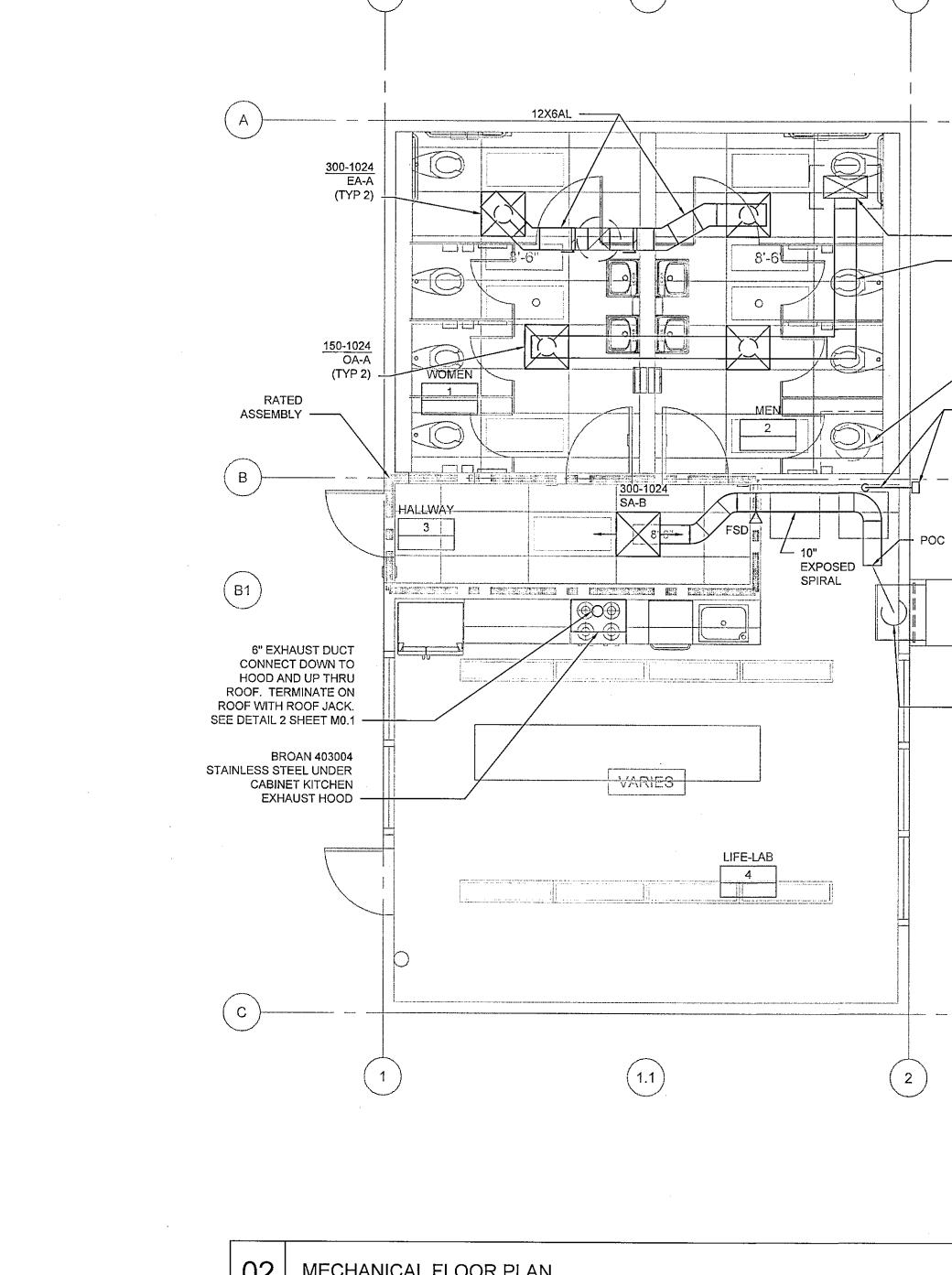
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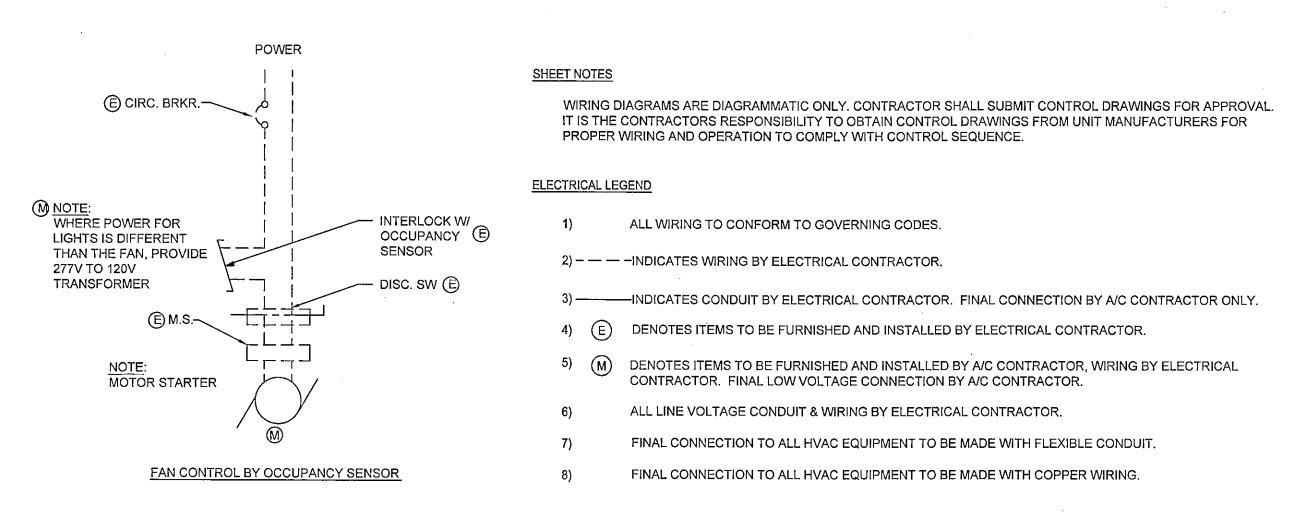
TYLE	MFR	MODEL NO	APPLICATION	DESCRIPTION			
Α	TITUS	50F	T-BAR MOUNT EXHAUST/INTAKE	EGG CRATE FACE, WHITE FINISH, NO DAMPER			
В	11105	TDC	T-BAR MOUNT SUPPLY CEILING REGISTER	LOUVERED FACE, 2 WAY DISCHARGE PATTERN, STEEL WITH WHITE FINISH			
			CEILING DIFFUSER CALL OUT DESCRIPTION: 200-10X10 EA-A - STYL	E			



1/4"=1'-0"

MECHANICAL FLOOR PLAN - DEMO





FAN CONTROL WIRING DIAGRAM 1/4"=1'-0"



394-A Umbarger Rd San Jose, CA 95111 Phone 408.224.9890 Fax 408.224.9891 www.ArtikA3.com

Consultant Seal

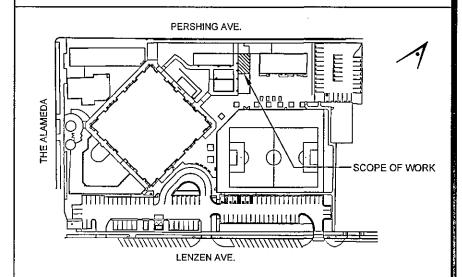


510-569-2000



Legend

Key Plan



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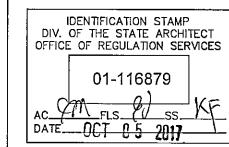
OFFICE OF EDUCATION Revisions/Submissions Date

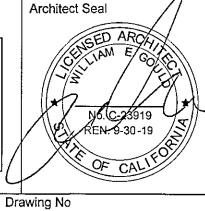
DSA SUBMITTAL

2 DSA BACKCHECK SUBMITTAL

MECHANICAL DEMO & FLOOR PLAN, SCHEDULE & DETAIL

Regulatory Agency Approval





07/20/2017

10/05/2017

File Number

Application Number Project No.

06307

07/20/17

M2.1

MECHANICAL FLOOR PLAN

1/4"=1'-0"

- WATER HEATER SEE

4" DRYER VENT CONNECT TO DRYER AND

TERMINATED ON WALL WITH SIDEWALL CAP

(B1)

- ROTATE (E) DUCTWORK

AS INDICATED

PLUMBING DRAWING

FIXTURE CALCULATION SHEET Waste Quantity Fixture Description Symbol Units* Total Units* Total Units Total Water Closet (FV) WC 40 4 32 Lavatories 0.75 4 WM lothes washer 3 3 4 4 1.125 1.125 ink, Kitchen KS 1.5 1.5 DF Drinking Fountain 0.5 0.5 1 Dishwasher, Domestic DW 1.125 | 1.125 1.5 1.5 3 2 Floor drain, 2" FD 4 8 Total | 8.25 | Total 52 Total 53 GPM 7 GPM 52 |Size 2% | 4"

Based on 2016 CPC

		ELECTR	RIC WA	TER H	EAT	ER S	СН	EDULE			
ITEM	MANUFACTURER	MODEL NO.	SERVICE	STORAGE (GAL.)	VOLT	PHASE	KW	TEMP RISE	INLET TEMP (°F)	OUTLET TEMP (°F)	OPERATING WEIGHT (LBS)
<u>EWH-1</u>	CHRONOMITE	E-90L / 240 - LLP	DOMESTIC WATER	0	240	1	9	61°F @1 GPM	60	105	8 .
EWH-2	RHEEM	RTEX27	DOMESTIC WATER	0	240	. 1	27	55°F @3.0 GPM	60	105	17.8

3/4" | Size

1 1/2"

Size 1% 4"

Size

GENERAL NOTES

- BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
- EXACT LOCATIONS AND MOUNTING HEIGHTS OF PLUMBING FIXTURES SHALL BE OBTAINED FROM THE ARCHITECTURAL DRAWINGS.
- SEE ARCHITECTURAL DRAWINGS FOR ADA FIXTURE LOCATIONS AND MOUNTING HEIGHTS. (INSULATE ALL EXPOSED HOT AND COLD WATER AND DRAIN PIPING BELOW ADA LAVATORIES AND SINKS AND OFFSET P-TRAP AGAINST WALL. ALSO, ALL FLUSH VALVES SHALL BE TO WIDE SIDE OF STALL.)
- I TRAPS FOR ALL LAVATORIES AND SINKS SHALL TRAP STRAIGHT BACK TO WALL WITH ALL REQUIRED OFFSETS HAPPENING WITHIN THE WALL.
- THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS WITH UTILITY COMPANIES FOR SERVICE IN THE NAME OF THE OWNER AND SHALL PAY ALL MATERIAL AND LABOR COSTS INCIDENTAL TO AN OPERABLE UTILITY SERVICE AS REQUIRED BY THE DESIGNATED GOVERNING AUTHORITIES OF THE
- ALL PLUMBING WORK SHALL BE INSTALLED SO AS TO AVOID INTERFERENCE WITH ELECTRICAL AND MECHANICAL EQUIPMENT AND STRUCTURAL
- THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL CEILING ACCESS PANELS WITH THE ARCHITECTURAL REFLECTED CEILING PLANS AND THE ELEC. LIGHTING LAYOUT.
- THE PLUMBING CONTRACTOR SHALL PROVIDE THE WATER, SEWER AND STORM DRAIN SYSTEMS TO A POINT OF CONNECTION SHOWN ON FLOOR PLANS AND SHALL MEET THE INVERT ELEVATION AS FIELD VERIFIED WHILE MAINTAINING REQUIRED PIPE GRADE.
- ANY ALTERATIONS TO A STRUCTURAL MEMBER, SUCH AS CUTTING, BORING, BRAZING, DRILLING, WELDING, ETC. SHALL HAVE PRIOR WRITTEN APPROVAL OF ARCHITECT AND STRUCTURAL ENGINEER.
- ALL CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONTRACTOR SHALL COORDINATE ALL CLEANOUT LOCATIONS WITH EQUIPMENT, CABINETS, ETC., AND THE ARCHITECT PRIOR TO ANY INSTALLATION.
- CONTRACTOR TO PROVIDE WATER HAMMER ARRESTORS AS MANUFACTURED BY JAY R. SMITH. WATER HAMMER ARRESTORS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS ON ALL DOMESTIC WATER BRANCH LINES SERVING FIXTURES.
- 12 ALL PLUMBING FIXTURE VENTS TO TERMINATE A MIN. OF 12 INCHES FROM ANY VERTICAL SURFACE AND 10 FEET FROM ANY OUTSIDE AIR INTAKES.
- CONTRACTOR SHALL COORDINATE LAYOUT OF ALL BELOW GRADE PIPING AND COMPONENTS WITH GENERAL CONTRACTOR PRIOR TO BID TO 4 DETERMINE EXTENT OF REQUIRED SAW CUTTING, EXCAVATION, AND SUBSEQUENT REPAIR/RESTORATION OF ALL AFFECTED HARDSCAPE AND
- BEFORE FABRICATION OR INSTALLATION THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT AND EQUIPMENT PROVIDED UNDER ANOTHER SECTION OF SPECIFICATIONS. EXACT ROUGH-IN LOCATIONS AND REQUIREMENTS SHALL BE COORDINATED IN FIELD.
- 16 ALL POINTS OF CONNECTION SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR PRIOR TO BID.

13 ALL VALVES, UNIONS, ETC. TO BE SAME SIZE AS PIPE UNLESS OTHERWISE INDICATED ON DRAWINGS.

17 ALL WASTE AND VENT PIPING SHALL SLOPE AT 2% UNLESS OTHERWISE INDICATED.

SOFTSCAPE SURFACES. ALL SUCH ITEMS SHALL BE INCLUDED IN BID.

- ALL VALVES, WATER HAMMER ARRESTORS OR OTHER EQUIPMENT SHOWN IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS SHALL BE INSTALLED
- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH AND BE CONSIDERED TO BE A PART OF SEPARATE AND COMPLETE MECHANICAL SPECIFICATIONS.
- CONNECTION BETWEEN INCOMPATIBLE MATERIALS ABOVE GRADE AND INSIDE BUILDING SHALL BE MADE WITH TWO (2) DIELECTRIC UNIONS SEPARATED BY A SIX INCH (6") SECTION OF RED BRASS PIPE.
- ALL EXTERIOR GAS COCKS, WATER SHUT OFF VALVES AND/OR SEWER CLEANOUTS BELOW GROUND SHALL BE INSTALLED IN YARD BOXES WITH THE COVERS CONSPICUOUSLY MARKED "GAS", "WATER", AND "SEWER" RESPECTIVELY.
- THE CONTRACTOR SHALL VERIFY THE EXACT ELEVATIONS AND LOCATION OF EXISTING DRAINAGE SYSTEM PIPING PRIOR TO CONNECTION OF ANY
- ALL HORIZONTAL PIPING LINES EXTENDED AND CONNECTED TO EQUIPMENT SHALL BE RUN AT THE HIGHEST POSSIBLE ELEVATIONS AND NOT LESS 23 THAN 6" ABOVE THE FLOOR TO PROVIDE CLEARANCE FOR CLEANING. AT WALL OR COLUMN LOCATIONS, PIPING ROUGH-IN SHALL BE STUBBED IN
- WALLS WHENEVER POSSIBLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND REPAIRING ALL AREAS WHICH ARE DAMAGED BY HIS OPERATIONS. IN ADDITION, THE 24 CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION ALL EXISTING TO REMAIN STRUCTURE AND NEW CONSTRUCTION DAMAGED BY HIS
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND REPAIRING ALL PAVED AREAS WHICH ARE EXCAVATED AND/OR DAMAGED BY HIS
- OPERATIONS. IN ADDITION, THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION ALL PLANTED AREAS DAMAGED BY HIS OPERATIONS.
- 26 ALL PATCHING AND REPAIRING OF CONCRETE PAVING AND/OR WALKS SHALL BE UNDER ANOTHER SECTION OF THE SPECIFICATIONS.
- ALL EXISTING PIPING DAMAGED DURING EXCAVATION SHALL BE REPAIRED WITH MATERIALS TO MATCH EXISTING BY THE CONTRACTOR AT NO COST TO THE OWNER.
- ALL CUTTING OF EXISTING PAVING, WALKS AND/OR FLOORS SHALL BE BY MACHINE SAW CUTTING. HOLES FOR PIPES IN CONCRETE WALLS OR FLOORS SHALL BE DONE BY CORE DRILLING EQUIPMENT.
- ALL PIPING, EXCEPT PIPING OF NONFERROUS MATERIAL, INSTALLED WITHIN THE GROUND SHALL BE PROTECTED AGAINST CORROSION BY A
- ALL PENETRATIONS AND OPENINGS IN PARTY WALLS AND ROOF/FLOOR/CEILING ASSEMBLIES DUE TO PLUMBING WORK SHALL BE SEALED LINED. INSULATED OR OTHERWISE TREATED TO MAINTAIN THE REQUIRED FIRE AND SOUND RATING.
- 31 FOR BACKFILLING AND TRENCHING SEE SPECIFICATION 22 00 00 SECTION 3.18

			PL	UMBIN	NG FIX	TURE SCHEDULE			
FIXTURE	MARK	ROUGH IN CONNECTIONS			S	DESCRIPTION			
•		HW	cw	WASTE	VENT				
WATER CLOSET	WC-1		1"	4"	2"	KOHLER K-4325 KINGSTON WALL MOUNTED, VITREOUS CHINA, ELONGATED BOWL, SIPHON JET, 1 1/2" TOP SPUD. SEAT COVER: KOHLER K-4731-C STRONGEHOLD OPEN FRONT LESS COVER ELONGATED, SOLID POLYPROPYLENE PLASTIC. FLUSH VALVE: KOHLER K-13517 EXPOSED FLUSHOMETER 1.28 GPF, BRASS CONSTRUCTION, 1 1/2" SPUD COUPLING, NON-HOLD OPEN PISTON. TOILET SEAT: OPEN FRONT BEMIS OR EQUAL. CARRIER: SEE SECTION 22 00 00.			
LAVATORY (ADA)	<u>L-1</u>	1/2"	1/2"	2"	2"	KOHLER K-2007-R KINGSTON 21 1/4" X 18 1/8", VITREOUS CHINA, SINGLE HOLE WITH OVERFLOW AND OPTIONAL SOAP DISPENSER HOLE ON RIGHT SIDE. FAUCET: CHICAGO MODEL MVP807-E2805-665PSHCP SIGNAL SELF-CLOSING METERING VALVE, BRASS CONSTRUCTION 4 1/8" SPOUT AND PUSH BUTTON. ANGLE/STOPS/P-TRAP/PIPE WRAP: SEE SECTION 22 00 00.			
FLOOR DRAIN	FD-1	-	-	2"	2"	JAY R SMITH 2005Y 6"Ø FLOOR DRAIN, TYPE "B" NICKEL BRONZE STRAINER WITH ADJUSTABLE STRAINER HEADS, VANDAL PROOF SCREWS.			
WASHING MACHINE BOX	<u>WM-1</u>	1/2"	1/2"	2"	2"	OATEY 38747 CENTER DRAIN WASHING MACHINE OUTLET BOX, HIGH IMPACT POLYETYRENE, 1/4" TURN BRASS HAMMER BALL, COPPER SWEAT, 6" STAINLESS HOSE.			
SINK	<u>S-1</u>	,	1/2"	2"	2"	ELKAY DRKAD3119-4 30" X 22" 4 HOLE, #18 GAUGE, TYPE 304 NICKEL BEARING STAINLESS STEEL, FAUCET: CHICAGO FAUCET 786-E35ABCP CHROME PLATED SOLID BRASS CONSTRUCTION, 5-1/4" CENTER TO CENTER RIGID/SWING GOOSENECK SPOUT, 4" METAL WRISTBLADE HANDLES, 1.5 GPM PRESSURE COMPENSATING SOFTFLO AERATOR. BUBBLER: ELKAY LK1141A PUSH BUTTON, SELF CLOSING, ADJUSTABLE VOLUME CONTROL. ANGLE STOPS/P-TRAP/PIPE WRAP: SEE SECTION 22 00 00			
TRAP PRIMER	<u>TP-1</u>		1/2"			PRECISION PLUMBING PRODUCTS PR-500 TRAP PRIMER, CORROSION RESISTANT BRASS, PISTON OPERATED. PRIME FOR TWO DRAINS WITH DU-U CONNECTION			

. ITEM DESCRIPTIONS INCLUDED IN THIS SCHEDULE ARE INTENDED TO DESCRIBE GENERAL FIXTURE CONFIGURATIONS, AND DO NOT INCLUDE ALL REQUIREMENTS. REFER TO SPECIFICATION SECTION 22 00 00 FOR ADDITIONAL REQUIREMENTS.

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LEGEND, GENERAL NOTES, CALCS & SCHEDULES

PLUMBING UNDERSLAB DEMO AND FLOOR PLAN

PLUMBING DEMO AND FLOOR PLAN

PLUMBING LEGEND										
SYMBOL	ABBREVIATION	DESCRIPTION								
	W	SANITARY WASTE/SEWER PIPING								
——— GW ———	GW	GREASE WASTE PIPING								
SD	SD	STORM DRAIN PIPING								
OFD	OFD	OVERFLOW DRAIN PIPING								
	V	WASTE/SANITARY VENT PIPING								
GV	GV	GREASE VENT PIPING								
		DEMO PIPING								
·	(E)W	EXISTING SANITARY SEWER PIPING								
	(E)V	EXISTING SANITARY VENT PIPING								
	cw	DOMESTIC COLD WATER PIPING								
	HW	DOMESTIC HOT WATER PIPING								
	HWR	DOMESTIC HOT WATER RETURN PIPING								
	(E)CW	EXISTING COLD WATER PIPING								
	(E)HW	EXISTING HOT WATER PIPING								
	(E)HWR	EXISTING HOT WATER RETURN PIPING								
——————————————————————————————————————	 G	NATURAL GAS PIPING								
MPG	MPG	MEDIUM PRESSURE NATURAL GAS PIPING								
G	(E)G	EXISTING NATURAL GAS PIPING								
MPG	(E)MPG	EXISTING MEDIUM PRESSURE NATURAL GAS PIPING								
	CD	CONDENSATE DRAIN PIPING								
С										
	,	PIPE GOING DOWN								
0		PIPE GOING UP								
C		TEE								
Φ.Θ.	FCO	FLOOR CLEANOUT/CLEANOUT TO GRADE								
· cc		P-TRAP								
•	POC	POINT OF CONNECTION								
<u>[</u> []	WCO	WALL CLEANOUT								
	· · · · · · · · · · · · · · · · · · ·	PIPE CAP								
-	НВ	HOSE BIBB								
M	SOV	SHUT-OFF VALVE								
M	SOVAP	SHUT-OFF VALVE IN ACCESS PANEL								
\otimes	SOVYB	SHUT-OFF VALVE IN YARD BOX								
101~		PLUG VALVE								
Å		GAS COCK VALVE								
И		CHECK VALVE								
0	FD	FLOOR DRAIN								
	. FS	FLOOR SINK								
XX-X		EQUIPMENT OR FIXTURE								
	CONT.	CONTINUED/CONTINUATION								
	DFM	DISTANCE FROM METER								
	FR.	FROM								
	BEL.	BELOW								
	DN.	DOWN								
	VTR	VENT THROUGH ROOF								
	AP									
		ACCESS DOOR								
	NIC .	NOT IN CONTRACT								
	REF.	REFERENCE								
77	S.A.D.	SEE ARCHITECTURAL DRAWINGS								
	S.M.D.	SEE MECHANICAL DRAWINGS								
	S.C.D.	SEE CIVIL DRAWINGS								
	S.S.D.	SEE STRUCTURAL DRAWINGS								
·	SF	SQUARE FEET								

LIST OF APPLICABLE CODES

LIST OF CODES AND STANDARDS MODEL CODE EDITIONS EFFECTIVE JANUARY 1, 2011

2016 CA PLUMBING CODE TITLE 24 PART 5

2016 CA BUILDING STANDARDS TITLE 24 PART 9

2016 CA BUILDING CODE TITLE 24 PART 2 VOLUME #1 AND #2

2016 CA ELECTRICAL CODE TITLE 24 PART 3 2016 CA MECHANICAL CODE TITLE 24 PART 4

2016 CA FIRE CODE TITLE 24 PART 9

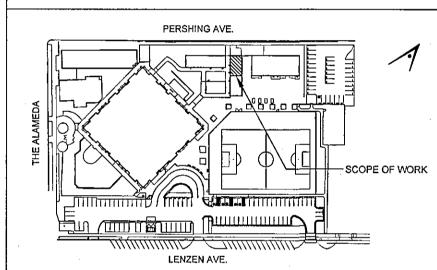
394-A Umbarger Rd San Jose, CA 95111 Phone 408.224.9890 408.224.9891 www.ArtikA3.com Consultant Seal

8517 Earhart Rd, Suite 230 Oakland, CA 94621

510-569-2000

Key Plan

Legend



Project Title

HESTER SCHOOL **RESTROOMS & LIFE LAB**

1480 THE ALAMEDA SAN JOSE, CA 95126

SANTA CLARA COUNTY OFFICE OF EDUCATION

07/20/2017
10/05/2017
-

PLUMBING **GENERAL NOTES** LEGEND & SCHEDULE

Regulatory Agency Approval IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES

DATE OCT 0 5 2017 File Number

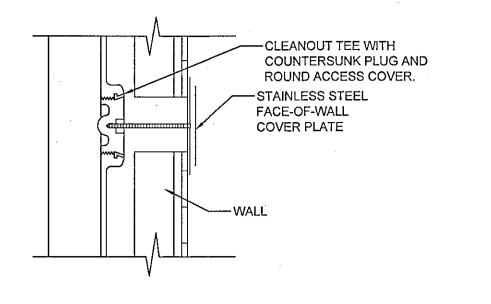
Drawing No

Application Number

Project No. 06307

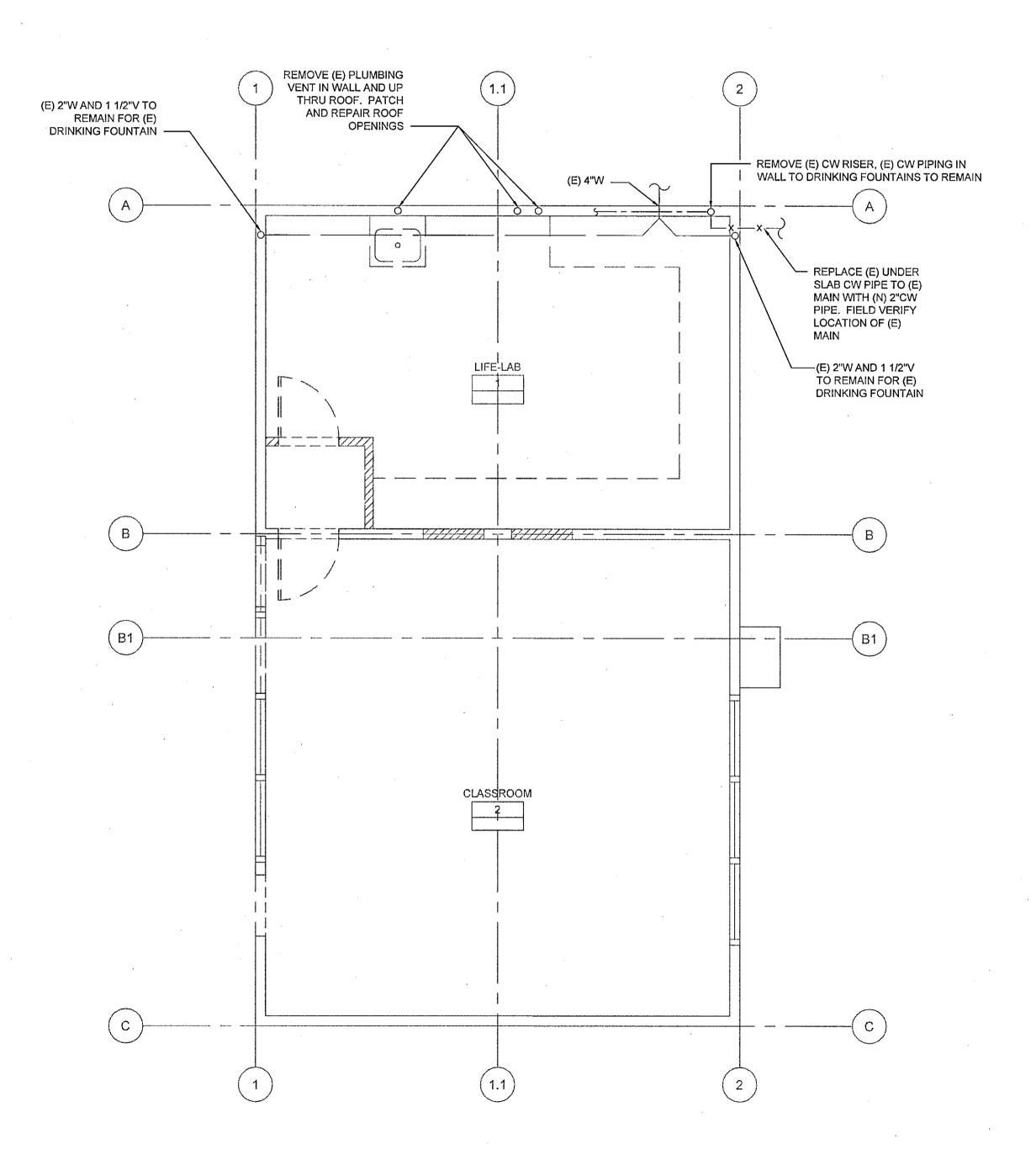
07/20/17

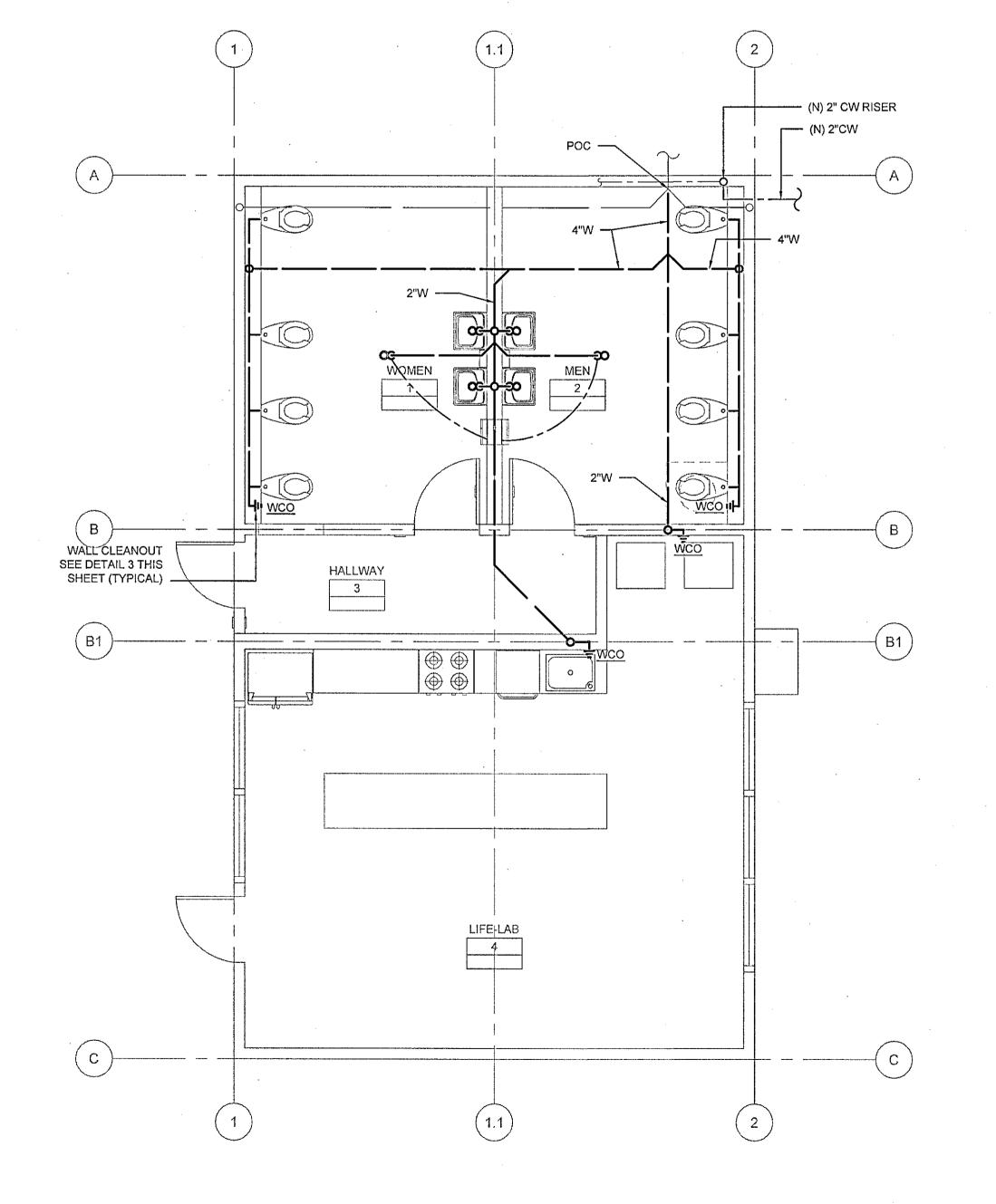
P0.1



03 WALL CLEAN OUT DETAIL

N.T.S





02 PLUMBING UNDER SLAB PLAN 1/4"=1'-0"



San Jose, CA 95111 Phone 408.224.9890 Fax 408.224.9891 www.ArtikA3.com

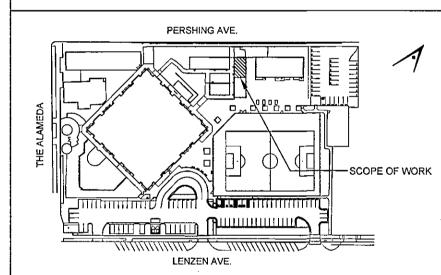
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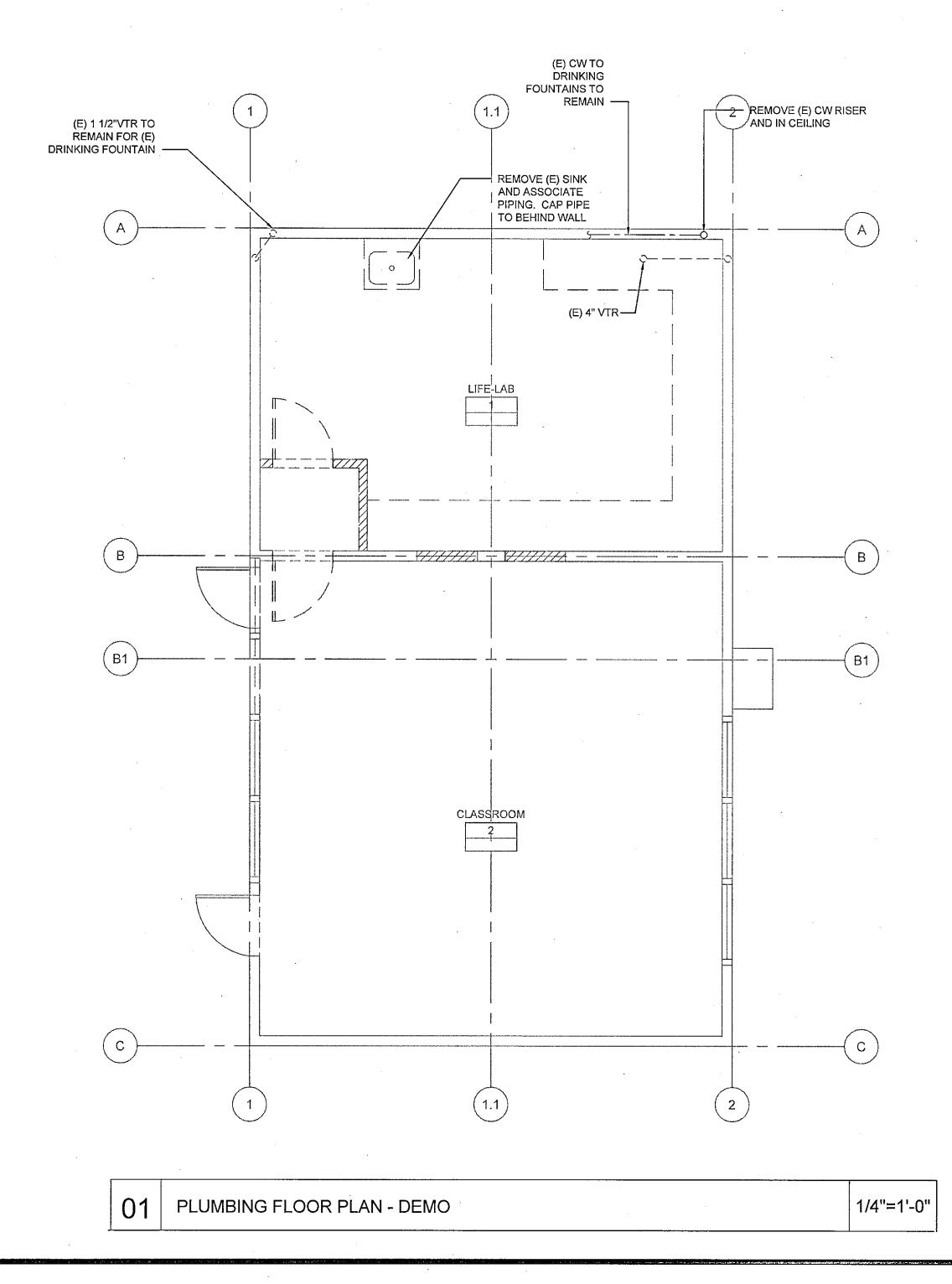
No	Revisions/Submissions	Date
1	DSA SUBMITTAL	07/20/2017
2	DSA BACKCHECK SUBMITTAL	10/05/2017

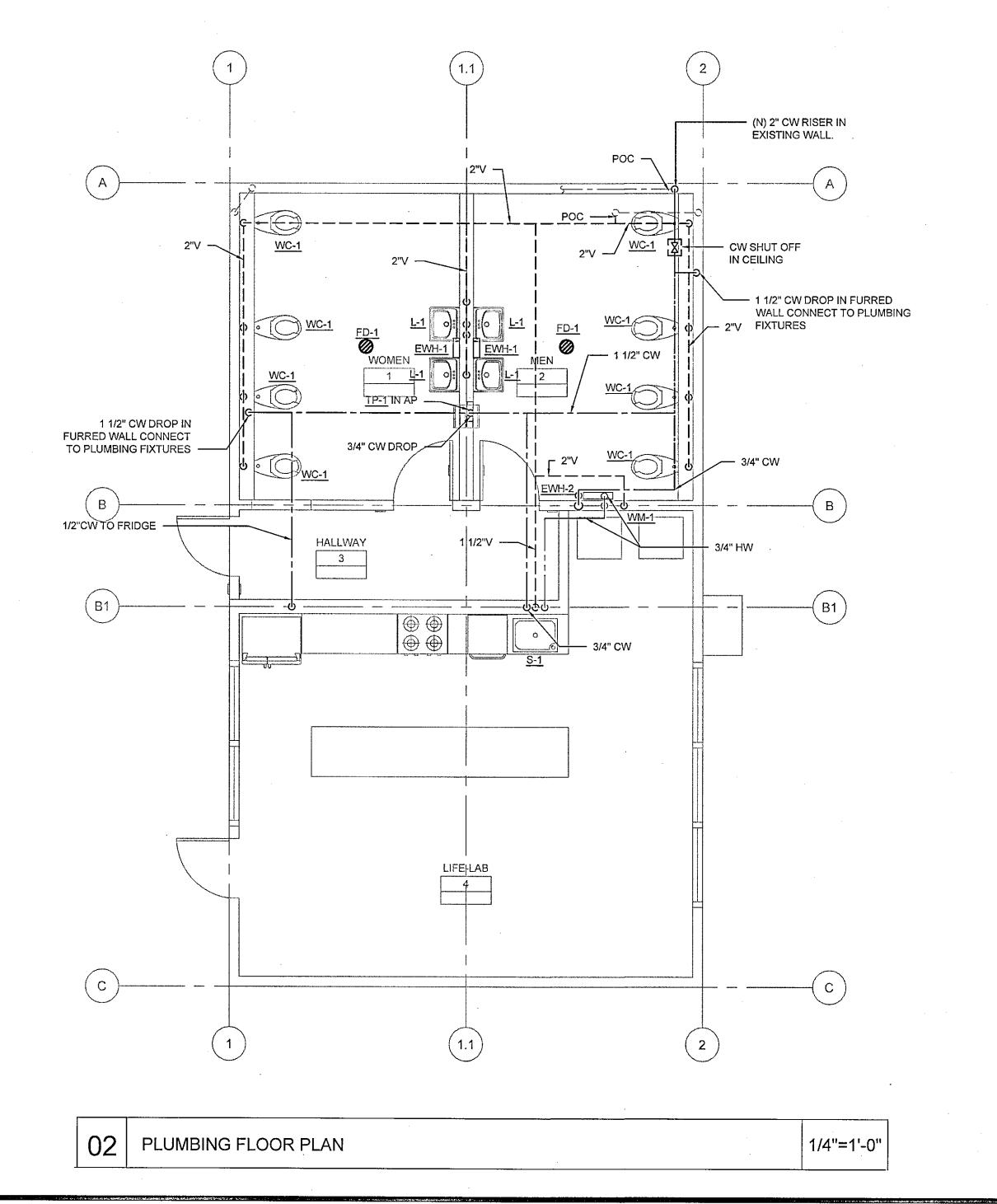
Drawing Title PLUMBING UNDERSLAB DEMO AND FLOOR PLAN



Project No. 06307 07/20/17

1 WATER PIPING AND VENT INDICATED IS ROUTED IN CEILING SPACE UNLESS OTHERWISE NOTED.







394-A Umbarger Rd San Jose, CA 95111 Phone 408.224.9890 Fax 408.224.9891 www.ArtikA3.com

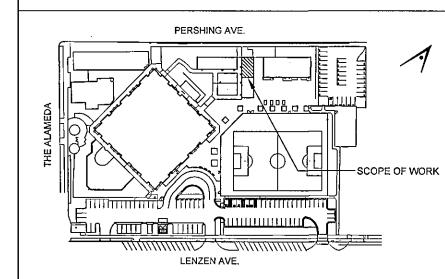
Consultant Seal





Legend

Key Plan



Project Title

HESTER SCHOOL RESTROOMS & LIFE LAB

1480 THE ALAMEDA SAN JOSE, CA 95126

SANTA CLARA COUNTY OFFICE OF EDUCATION

No	Revisions/Submissions	Date
1	DSA SUBMITTAL	07/20/2017
2	DSA BACKCHECK SUBMITTAL	10/05/2017
-		

Drawing Title

PLUMBING DEMO AND FLOOR PLAN

Regulatory Agency Approval

IDENTIFICATION STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES

01-116879

AC FLS SS KP
DATE OCT 8 5 2017.

rawing No

Architect Seal

Application Number

File Number

Project No. 06307

07/20/17

P2.2

GENERAL NOTES THE COMPLETE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED

- EDITION OF THE CALIFORNIA ELECTRICAL CODE. SPECIFICATIONS AND STANDARD. THE LATEST RULES AND REGULATIONS OF THE SAFETY ORDERS ISSUED BY THE DIVISION OF INDUSTRIAL SAFETY, THE NATIONAL BOARD OF FIRE UNDERWRITERS AND ALL APPLICABLE STATE AND LOCAL CODES ISSUED BY AUTHORITIES HAVING JURISDICTION.
- PRIOR TO SUBMITTING PROPOSAL, BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS. VISIT CONSTRUCTION SITE AND ATTEND THE PRE-BID MEETING TO BE FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL HAVE TO OPERATE AND WHICH WILL IN ANYWAY AFFECT THE WORK UNDER THIS CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.
- THIS CONTRACTOR SHALL INCLUDE ALL CONTINGENCIES WHICH MAY ARISE AND WHICH MAY BE REQUIRED BY ALTERATION AND DEMOLITION WORK. THIS IS TO INCLUDE ALL REMOVAL, RELOCATION AND REWORKING OF ELECTRICAL OUTLETS, CONDUITS, WIRING AND ITEMS FOR ELECTRICAL EQUIPMENT REQUIRED AND ANY NECESSARY SPLICING OR EXTENSION OF EXISTING CONDUIT AND WIRING SYSTEMS. THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND DETERMINE EXTENT OF THE WORK.
- FIELD VERIFY TO CONFIRM ALL FIRE RESISTIVE CEILINGS AND WALLS. PROVIDE FIRE STOP SEALS PER UNIFORM BUILDING CODE FOR CONDUIT PENETRATION THROUGH FIRE RESISTIVE FLOORS, WALLS AND CEILINGS.
- ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED BY UNDERWRITER'S LABORATORIES AND BEAR THEIR LABEL.
- CONDUIT ROUTING SHOWN IS ESSENTIALLY DIAGRAMMATIC. CONTRACTOR SHALL LAYOUT RUNS TO SUIT FIELD CONDITIONS AND THE COORDINATION REQUIREMENTS OF OTHER TRADES. ALL EXPOSED CONDUIT, BOXES, FITTINGS, SUPPORT, ETC. SHALL BE PAINTED TO MATCH ADJACENT SURFACES.
- THE CONTRACTOR SHALL CONSULT THE ARCHITECTURAL AND OTHER DRAWINGS RELATED TO THIS PROJECT FOR ADDITIONAL WORK TO BE PROVIDED.
- THE OWNER RETAINS FIRST SALVAGE RIGHTS TO ALL EXISTING EQUIPMENT REMOVED UNDER THIS CONTRACT. THE ELECTRICAL CONTRACTOR SHALL CONSULT WITH THE OWNER FOR DISPOSITION OF THE EXISTING EQUIPMENT TO BE REMOVED BY HIM. THE CONTRACTOR SHALL INCLUDE IN HIS BID PROPOSAL ALL COSTS RELATED TO THE DISPOSAL OF EXISTING EQUIPMENT REMOVED UNDER THIS CONTRACT.
- ANY POWER SHUTDOWN SHALL BE COORDINATED WITH SCHOOL DISTRICT CONSTRUCTION COORDINATOR. A SHUTDOWN SCHEDULE SHALL BE PRESENTED TO SCHOOL DISTRICT FOR APPROVAL TWO WEEKS PRIOR TO COMMENCEMENT OF WORK. SHUTDOWN SHALL BE PERFORMED IN OVERTIME HOURS IF SO DIRECTED BY SCHOOL DISTRICT.
- 10. ALL FEEDER AND BRANCH CIRCUIT CONDUITS SHALL BE INSTALLED CONCEALED IN FINISHED AREA, UNLESS OTHERWISE NOTED. CUT AND PATCH (E) WALL OR CEILING AS REQUIRED. SURFACE TYPE RACEWAY MAY BE PROVIDE IN LIEU OF CONCEALED CONDUITS. SEE NOTES 34, 35 AND 36 FOR REQUIREMENTS.
- ALL PENETRATIONS THROUGH FIRE RESISTIVE WALLS SHALL BE TOTALLY SEALED TO PREVENT THE SPREAD OF SMOKE, FIRE, TOXIC GASES, AND WATER THROUGH THE PENETRATION BEFORE, DURING AND AFTER A FIRE CONDITION. THE FIRE RATING OF THE SEALED PENETRATION SHALL BE AT LEAST THAT OF THE WALL INTO WHICH IT IS INSTALLED. THE SEAL SHALL PERMIT THE VIBRATION. EXPANSION AND/OR CONTRACTION OF THE CONDUIT PASSING THROUGH THE PENETRATION WITHOUT THE SEAL CRACKING OR CRUMBLING.
- 12. PROVIDE FLEXIBLE CONDUIT AT BUILDING SEISMIC JOINTS.
- 13. UNLESS OTHERWISE INDICATED. THE MINIMUM SIZE OF CONDUCTORS SHALL BE 12 AWG THWN STRANDED COPPER ONLY.
- 14. UNLESS OTHERWISE INDICATED, THE MINIMUM SIZE OF CONDUIT SHALL BE 3/4".
- 15. GREEN INSULATED GROUND CONDUCTORS SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUIT WIRING.
- 16. PROVIDE LABELS ON ALL EQUIPMENT AND DEVICES. LABELS SHALL BE SELF-ADHESIVE PHENOLIC TYPE AND WHITE LETTER ON BLACK BACKGROUND, PROVIDE BRADY OR DYMO TYPE LABELS (CIRCUIT IDENTIFICATION) FOR ALL SWITCHES AND RECEPTACLES.
- 7. THE CONTRACTOR SHALL PROVIDE TYPEWRITTEN DIRECTORIES FOR ALL ELECTRICAL PANELS INVOLVED IN THIS PROJECT. THE PANEL DIRECTORIES SHALL REFLECT THE AS-BUILT CIRCUITS. ONE COPY OF THE SCHEDULE SHALL BE TAPED TO THE INSIDE OF THE PANEL DOOR, AND ONE COPY SHALL BE SUBMITTED TO THE ENGINEER AS AN "AS-BUILT" DRAWING.
- 18. ALL ELECTRICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION PER CBC REQUIREMENTS.
- 19. THE CONTRACTOR SHALL EMPLOY QUALIFIED AND EXPERIENCED WORKMEN FOR THIS WORK. ALL RESTORATION WORK SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT AND/OR OWNER AND IOR.
- 20. THE CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR THE PROPER RESTORATION OF ALL EXISTING SURFACES REQUIRING PATCHING, PLASTERING PAINTING AND/OR OTHER REPAIRS DUE TO THE INSTALLATION OF ELECTRICAL WORK UNDER THE TERMS OF THIS SPECIFICATION, CLOSE ALL OPENINGS, REPAIR ALL SURFACES, ETC., AS REQUIRED. THIS SHALL INCLUDE ALL WALLS, CEILINGS, ROOFS, PAVEMENT, PLANTERS, ETC.
- 21. WHERE CONDUIT IS ROUTED ON ROOF STRUCTURES. PROVIDE SUPPORT AT 10'-0" O.C. MAXIMUM.
- 22. ALL EXPOSED CONDUIT BELOW 7'-0" SHALL BE RSC AND ALL EXPOSED HARDWARE SHALL BE "HOT DIPPED" GALVANIZED. ALL INTERIOR CONDUITS MAY BE EMT. UNLESS OTHERWISE
- 23. WHERE SURFACE WIRING IS CALLED FOR IN A FINISHED AREA, SURFACE TYPE RACEWAY SYSTEM SHALL BE INSTALLED COMPLETE WITH ALL PROPER FITTINGS, ADAPTERS, OUTLETS, DEVICES COVERS. END CAPS. ETC. AS MANUFACTURED BY PANDUIT OR AN APPROVED EQUAL AND SHALL BE PAINTED TO MATCH COLOR OF ADJACENT WALL OR CEILING. ALL EXPOSED CONDUITS. BOXES AND CABINETS SHALL ALSO BE PAINTED TO MATCH COLOR OF ADJACENT WALL OR
- 24. SURFACE TYPE RACEWAY SYSTEM SHALL BE INSTALLED PARALLEL TO, OR AT RIGHT ANGLES TO BUILDING LINES AND ROUTE AROUND SURFACE MOUNTED ITEMS, SUCH AS TACK BOARDS, ETC.
- 25. ALL WIRES SHALL BE IN CONDUIT U.O.N.
- 26. GENERALLY, HORIZONTAL RUNS SHALL BE INSTALLED ON THE CORNER BELOW CEILING LINE AS APPROVED BY THE ENGINEER.

GENERAL NOTES (CONTINUATION)

- 27. ALL UNDERGROUND CONDUIT SHALL HAVE #12 TRACER WIRE WITH THWN INSULATION UNDER EACH RUN OF THE UNDERGROUND CONDUIT DUCTBAMK AND 6" FOIL MARKER IN TRENCH. TRACE WIRE SHALL EXTEND AT TERMINATION POINTS A MIN. OF 3 FT FROM SUCH SURFACE AND SHALL BE TRAPPED SECURED TO CONDUIT OR ACCEPTABLE EQUIVALENT.
- 28. UPON COMPLETION OF CONSTRUCTION, PAINT ALL EXPOSED ELECTRICAL CONDUITS, DEVICES AND BOXES (UNLESS DEVICES OR BOXES ARE ALREADY PRE-FINISHED) PER SPECIFICATION SECTION 09900, PARAGRAPH 2.3 PAINTING SCHEDULE, PAINT COLOR SHALL MATCH THE EXISTING SURFACES.
- 29. THE CONTRACTOR SHALL MAINTAIN AT THE JOB SITE, AN UP TO DATE "AS BUILT" DRAWING SET. THE "AS BUILT" DRAWING SET SHALL REFLECT ALL APPROVED CHANGES TO THE DESIGN DRAWINGS. THE "AS BUILT" DRAWING SET SHALL BE KEPT CLEAN AND IN GOOD CONDITION AND SHALL BE TURNED OVER TO THE OWNER AT THE COMPLETION OF THE PROJECT THESE DRAWINGS SHALL BE UPDATED DAILY AND BE CHECKED WEEKLY BY IOR. THE PROGRESS PAYMENT IS TIED TO THEIR COMPLETION.
- 30. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL SCHEDULE AND PERFORM A COMPLETE FUNCTIONAL TEST IN THE PRESENCE OF DSA IOR TO DEMONSTRATE TO THE OWNER THAT THE NEW INSTALLATION IS OPERATING AS INTENDED TEST RESULTS SHALL BE SENT TO DISTRICT FOR IOR AND AOR. ANY DEFECTS OR DEFICIENCIES IN THE MATERIALS OR WORK SHALL BE CORRECTED IMMEDIATELY BY AND AT THE CONTRACTOR'S EXPENSE.

LEGEND

HOMERUN TO PANEL, HASHMARKS INDICATE NUMBER OF #12 AWG WIRES IF MORE THAN (3): (1) INDICATES GROUND.

———— CONDUIT AND CONDUCTORS CONCEALS IN WALL OR CEILING ———— CONDUIT AND WIRES CONCEALED IN FLOOR OR UNDERGROUND

CONDUIT STUBBED OUT IN ACCESSIBLE LOCATION, CAP AND MARK LOCATION

———— CONDUIT RISER

SURFACE MOUNTED ELECTRICAL PANELBOARD, 277/480V

SURFACE MOUNTED ELECTRICAL PANELBOARD, 120/208V

RECESSED MOUNTED ELECTRICAL PANELBOARD, 120/208V

REMOVED INCLUDING WIRES AND CONDUIT UP TO THE NEXT JUNCTION BOX WHICH IS TO REMAIN.

1x4 LIGHT FIXTURE

- DUPLEX RECEPTACLE NEMA 5-20R, 20 AMP, 120V, +18" A.F.F U.O.N.
- FOURPLEX RECEPTACLE NEMA 5-20R, 20 AMP, 120V, +18" A.F.F U.O.N.
- CEILING MOUNTED DUPPLEX RECEPTACLE, NEMA 5-20R, 20 AMP, 120V
- SINGLE RECEPTACLE, 40A/250V (TWISTLOCK)
- SPEAKER
- 2-PORT DATA OUTLET IN (E) SURFACE RACEWAY
- 2-PORT DATA WIRELESS ACCESS POINT (CEILING MOUNTED)
- SECURITY MOTION SENSOR
- ❷,⊗ EXIT LIGHT FIXTURE
 - EXIT LIGHT WITH EMERGENCY TWIN HEAD LIGHTING
 - SENSOR SWITCH nLIGHT DIGITAL POWER PACK WITH INTEGRAL 16A RELAY, 120/277 VAC. CHASE NIPPLE MOUNT. PROVIDE UP TO 40mA BUS CURRENT PER PORT.
 - nCM PDT 9 SENSORSWITCH nLIGHT CEILING MOUNT LOW VOLTAGE STANDARD RANGE / HIGH SENSITIVITY 360° DUAL TECHNOLOGY (DIGITAL PIR + MICROPHONICS) OCCUPANCY SENSOR.
 - HORSEPOWER RATED MANUAL SWITCH, SQUARE "D" CLASS 2510
 - **(** JUNCTION BOX OR PULL BOX, SIZE PER CODE.
 - SHEET NOTE REFERENCE, SEE NOTE 1
 - DETAIL TAG. REFER TO DETAIL 1 ON SHEET NUMBER E3.1

LIST OF APPLICABLE CODES

- 2016 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR)
- 2016 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 & 2 (PART 2. TITLE 24. CCR)
- 2016 CALIFORNIA ELECTRICAL CODE (PART 3, TITLE 24, CCR)
- 2016 CALIFORNIA MECHANICAL CODE (PART 4, TITLE 24, CCR)
- 2016 CALIFORNIA PLUMBING CODE (PART 5, TITLE 24, CCR)
- 2016 CALIFORNIA ENERGY CODE (PART 6, TITLE 24, CCR)
- 2016 CALIFORNIA FIRE CODE (PART 9, TITLE 24, CCR)
- 2016 CALIFORNIA REFERENCED STANDARDS CODE (PART 12, TITLE 24, CCR)
- NFPA 13, 2016 EDITION, THE INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS. AS AMENDED
- NFPA 14, 2016 EDITION, THE INSTALLATION OF STANDPIPE, PRIVATE HYDRANT AND HOSE SYSTEMS
- NFPA 24, 2016 EDITION, THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES
- NFPA 72, 2016 EDITION, NATIONAL FIRE ALARM CODE,
- 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.

MEP COMPONENT ANCHORAGE NOTES

MEP COMPONENT ANCHORAGE NOTES:

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENT PRESCRIBED IN THE 2016 CBC, SECTION 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7-10 CHAPTER 13, 26 AND 30.

- 1. ALL PERMANENT EQUIPMENT AND COMPONENTS. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH
- AS ELECTRICITY, GAS OR WATER MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY
- ATTACHMENTS. THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE BUT THE ATTACHMENT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.
- COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
- COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS. THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER AND THE DSA DISTRICT STRUCTURAL ENGINEER. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE: PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED

TO COMPLY WITH THE FORCES AND DISPLACEMENT PRESCRIBED IN ASCE 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-10 SECTION 13.6.5.6, 13.6.7, 13.6.8 AND 2016 CBC, SECTIONS 1616A.1.23, 1616A.1.24, 1616A.1.25 AND 1616A.1.26. THE METHOD OF SHOWING BRACING AND

ATTACHMENT TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (e.g., SMACNA OR OSHPD OPM), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START POSITIVELY ATTACHED TO THE STRUCTURE AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION

> SYSTEMS (E): $MP \square MD \square PP \square E \boxtimes$ OPTION 1: DETAILED ON THE APPROVED DWGS WITH PROJECT SPECIFIC NOTES AND DETAILS MP□MD□PP□E⊠ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVED (OPM#); (I.E. OPM# == 0043-13 MASON INDUSTRIES INC., AND OPM#

0203-13 M.W. SAUSSE & CO. INC.)

AND CONDITIONS.

MP[]MD[]PP[] OPTION 3: SHALL COMPLY WITH THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION (2009), INCLUDING ANY ADDENDA, FASTENERS AND OTHER ATTACHMENTS NOT SPECIFICALLY IDENTIFIED IN THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION, ARE DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS. THE DETAILS SHALL ACCOUNT FOR THE APPLICABLE SEISMIC HAZARD LEVEL _____ AND CONNECTION CONNECTION LEVEL _____ FOR THE PROJECT

E0.1 ELECTRICAL COVER SHEET

EO.2 CERTIFICATE OF COMPLIANCE TITLE 24

ELECTRICAL SITE PLAN AND PARTIAL SINGLE LINE DIAGRAM

DEMOLITION PLAN, LIGHTING AND ELECTRICAL PLAN

DRAWING INDEX

SCHEDULE AND DETAILS

ABBREVIATIONS

A AMP AFF	AMPERE ABOVE FINISHED FLOOR	o.c.	ON CENTER
AP	ACCESS POINT	PA PH, ø	PUBLIC ADDRESS PHASE
BRKR	BREAKER	PNL	PANEL
C CATV CBC	CONDUIT, CLOCK CABLE TELEVISION CALIFORNIA BUILDING CODE	(R) RECEPT.	RELOCATED RECEPTACLE
CCTV CEC CKT	CLOSED CIRCUIT TELEVISION CALIFORNIA ELECTRIC CODE CIRCUIT	SAD	SEE ARCHITECTURAL DRAWINGS
CO CPS	CONDUIT ONLY WITH PULL ROPE CURRICULUM AND PRESENTATION SYSTEM	STC	SATELLITE TERMINAL CABINET
CSC	CLOCK/SPEAKER CABINET	TRANSF.	TRANSFORMER
(E)	EXISTING	TB TC	TELEPHONE BOARD TERMINAL CAN
FU	FUSE	TYP	TYPICAL
G	GROUND, GUARD	UON	UNLESS OTHERWISE
IDF	INTERMEDIATE DISTRIBUTION FRAME		NOTED
MAX	MAXIMUM	V	VOLT
MDF MIN	MAIN DISTRIBUTION FRAME MINIMUM	W	WATT
MPOE	MAIN POINT OF ENTRY	WG WP	WIRE GUARD WEATHERPROOF
MSTC	MAIN SIGNAL TELEPHONE CABINET	₹¥ F	HLATFIENTIOUT

XFMR TRANSFORMER

MAIN TELEPHONE BOARD

NIGHT LIGHT

NOT TO SCALE

NATIONAL ELECTRICAL CODE

AS MODIFIED TO SATISFY ANCHORAGE

REQUIREMENTS FOR ACT 318, CHAPTER 17.

ART'& ARCHITECTURE

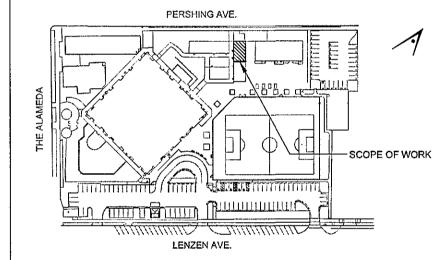
394-A Umbarger Rd San Jose, CA 95111 Phone 408.224.9890 Fax 408.224.9891 www.ArtikA3.com

Consultant Seal





Key Plan



Project Title

HESTER SCHOOL RESTROOMS & LIFE LAB

1480 THE ALAMEDA SAN JOSE, CA 95126

SANTA CLARA COUNTY OFFICE OF EDUCATION

	_	
No	Revisions/Submissions	Date
1	DSA SUBMITTAL	07/20/2017
2	DSA BACKCHECK SUBMITTAL	10/05/2017
		-

Drawing Title

ELECTRICAL COVER SHEET

Regulatory Agency Approval IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES 01-116879 AC THE FLS PU SS DATE OF REAL

Architect Seal Nd. C-23919 REN. 9-30 -19

Drawing No

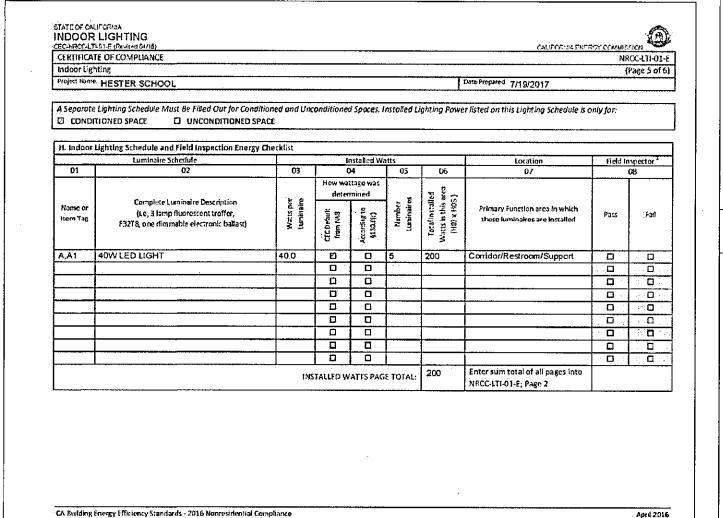
File Number

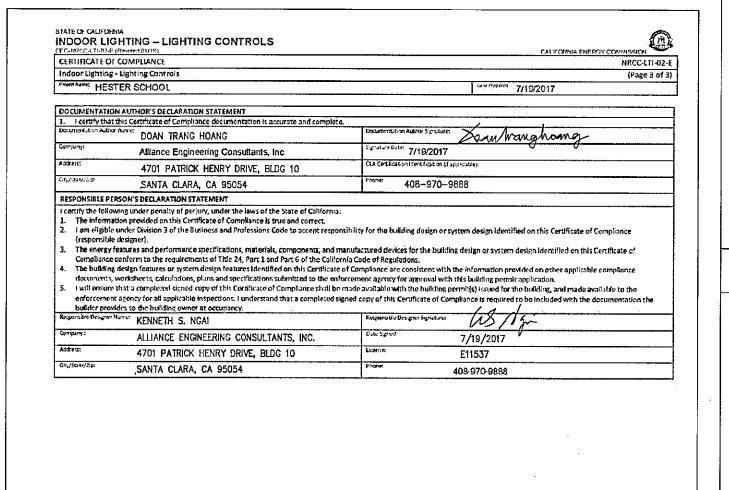
07/20/17

Application Number Project No.

E0. 06317

STATE OF CALIFORNIA INDOOR LIGHTING CEC-PROCELIBRE (Physical Dates) CEKTIFICATE OF COMPLIANCE ORCC-ATI-01-E	STATE OF CALIFORNIA INDOOR LIGHTING CEC.MECCATROLE (Provent OUTS) CERTIFICATE OF COMPLIANCE	CÁLIFOCUIA ÉNERGY COMMISSION NRCC-LTI-01-E	STATE OF CALIFORNIA INDOOR LIGHTING CEC-HRCCLTIALE (Parked 84/16) CERTIFICATE OF COMPLIANCE	CALIFORNIA ENERGY COMMISSION
Indoor Lighting (Page 1 of 6) Project Name: HESTER SCHOOL Date Propared 7/19/2017	Indoor Lighting Project Name: HESTER SCHOOL	(Page 2 of 6) Date Propared: 7/19/2017	Indoor Lighting Project Name: HESTER SCHOOL	NRCC-UTI-03 (Page 3 of Date Prepared 7/19/2017
A. General Information Cirrate Zone: Conditioned Floor Area: 458 3 Unconditioned (Goor Area: 0) Building Type: Discretize that Discretize that Discretize that Discretize the Unit Conditioned Spaces Discretize the Unit Conditioned Spaces Discretize the Unit Conditioned Spaces Discretize that Discretize the Unit Conditioned Spaces Discretize the Unit Conditioned Spaces Discretize that Discretize the Unit Conditioned Spaces Discretize that Discretize the Unit Condition Discretize that Discretize the Unit Conditioned Spaces Discretize that Discretize that Discretize that Discretize the Unit Conditioned Spaces Discretize that Di	C. Summary of Allowed Lighting Power Conditioned and Unconditioned space Lighting must not be combined for compliance of the complete of the	Indoor Ughting Power for Unconditioned Spaces Its	E. Declaration of Required Certificates of Acceptance Declare by selecting yes for all of the Certificates that will be submitted. {Retain copies and verificates that will be submitted for occupancy sensors and automatic distribution of the submitted for occupancy sensors and automatic distribution.	fy forms are completed and signed.) Itime switch controls. □ Field Inspector ols. □ Field Inspector ment factor (PAF). □ Field Inspector alled Lighting Power listed on this Lighting Schedule is only for: and planned portable lighting systems. e on separate lines. type of luminaire by each different function area on separate lines
CA Building Energy Efficiency Standards - 2016 Honrosidential Compliance April 2016	compliance. CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance	April 2016	CA Building Energy Efficiency Standards - 2016 Nonrestdential Compliance	Apríl 201
INDOOR LIGHTING PROJECTION INDOOR LIGHTING PROJECTION INDOOR LIGHTING PROJECTION INDOOR LIGHTING RECORDANCE INDOOR STATEMENT	Efficiency Regulations in accordance with Section 110.9. Lighting shall be controlled by a lighting control system or energy be submitted in accordance with Section 130.4(b). One or more Track Lighting Integral Current Limiters shall be ins \$130.0. Additionally, an installation Certificate shall be submitted. A Track Lighting Supplementary Overcurrent Protection Panel structation in Certificate shall be installed in accordance with Section 130.1. All lighting controls and equipment shall comply with the application tructions in accordance with Section 130.1. All luminaires shall be functionally controlled with manually swith and special effects lighting shall each be separately controlled or ornamental, and special effects lighting shall each be separately controlled or ornamental, and special effects lighting shall each be separately. The general lighting of any enclosed area 100 square feet or large multi-level lighting control requirements in accordance with Section 130.1 (e). All Installed Indoor lighting shall be equipped with controls that tighting in all Daylit Zones shall be controlled in accordance with accordance with Section 130.1(e). Before an occupancy permit is granted for a newly constructed it normal use, indoor lighting controls serving the building, area, o	wices which are certified to the Energy Commission according to the Title 20 Appliance by management control system in accordance with §110.9. An installation Certificate shall tailed which have been certified to the Energy Commission in accordance with §110.9 and and in accordance with Section 130.4(b). Tailed which have been certified to the Energy Commission in accordance with §110.9 and and in accordance with Section 130.4(b). Tailed in accordance with Section 110.9 and Section 130.0, Additionally, an tion 130.4(b). Table requirements in §110.9 and shall be installed in accordance with the manufacturer's active ON and OFF lighting controls in accordance with Section 130.1(a). Tailing systems in an area. Floor and wall display, window display, case display, ornamental, in circulits that are 20 amps or less. When track lighting is used, general, display, controlled; in accordance with Section 130.1(a)4. Sec, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the	Lighting Control Schedule O1	PAF Credit Calculation 9 9 9 10
INDOOR LIGHTING POWER ALLOWANCE CONDITION TO SHAPE parameters CONDITION TO SHAPE PARAMETERS	INDOOR LIGHTING POWER ALLOWANCE GRANCEL TIPSE (Biokised July) CERTIFICATE OF COMPLIANCE Certificate of Compliance - Indoor Lighting Power Allowance PURITHEM HESTER SCHOOL A separate page must be filled out for Conditioned and Unconditioned Spaces. TI CONDITIONED spaces C-2 AREA CATEGORY METHOD GENERAL LIGHTING POWER ALLOWANCE Do not include portable lighting for offices. Portable lighting for offices shall be separately list lighting for each primary function area as defined in \$100.1 of to 101 ARFA CATEGORY (from \$140.5 Table 140.5-C) Location in Building Primary Function Area per RESTROOMS, HALLWAY, CLOSET Corridor/Restroom/Support Enter sum total Area Category allowed watts into	e documented only in Section G of NRCC-LTI-01-E. the Standards. 02 03 04 WATTS ALLOWED	Company: Alliance Engineering Consultants, Inc Signature Dat. Assertin: 4701 PATRICK HENRY DRIVE, BLDG 10 CDA Certified City/Gate/Ziji: SANTA CLARA, CA 95054 RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of per; ury, under the laws of the State of Colifornia: 1. The information provided on this Certificate of Compliance is true and correct. 2. I am eligible under Otivision 3 of the Business and Professions Code to accept responsibility for the built responsible designer). 3. The energy features and performance specifications, materials, components, and manufactured device Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the Colifornia Code of Regular Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the Colifornia Code of Regular design features or system design features identified on this Certificate of Compliance are documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Contificate of Compliance shall be made available will enforcement agency for all applicable inspections. I understand that a completed signed copy of this Contificate of Compliance.	es for the building design or system design identified on this Certificate of titons. consistent with the information provided on other applicable compliance or approval with this building permit application. In the building pomits is lessed for the building sometime for the building permits application.







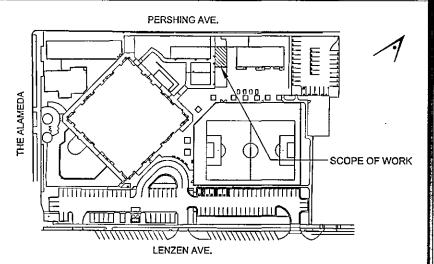
394-A Umbarger Rd San Jose, CA 95111 Phone 408.224.9890 Fax 408.224.9891 www.ArtikA3.com

Consultant Seal

Alliance Engineering Consultants, Inc. 4701 Patrick Henry Drive, Bldg. 10 phone (408) 970-9888 Santa Clara, CA 95054 phone (408) 970-9316 PROJECT NO. 175-17-05 www.dec-engineers.com



Key Plan



Project Title

HESTER SCHOOL RESTROOMS & LIFE LAB

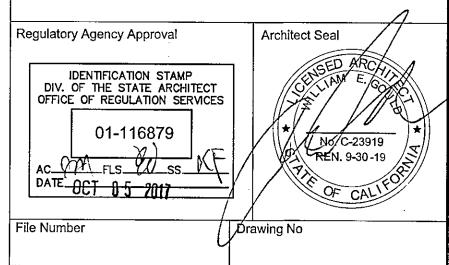
1480 THE ALAMEDA SAN JOSE, CA 95126

SANTA CLARA COUNTY OFFICE OF EDUCATION

No	Revisions/Submissions	Date
1	DSA SUBMITTAL	07/20/2017
2	DSA BACKCHECK SUBMITTAL	10/05/2017

Drawing Title

CERTIFICATE OF COMPLIANCE TITLE 24

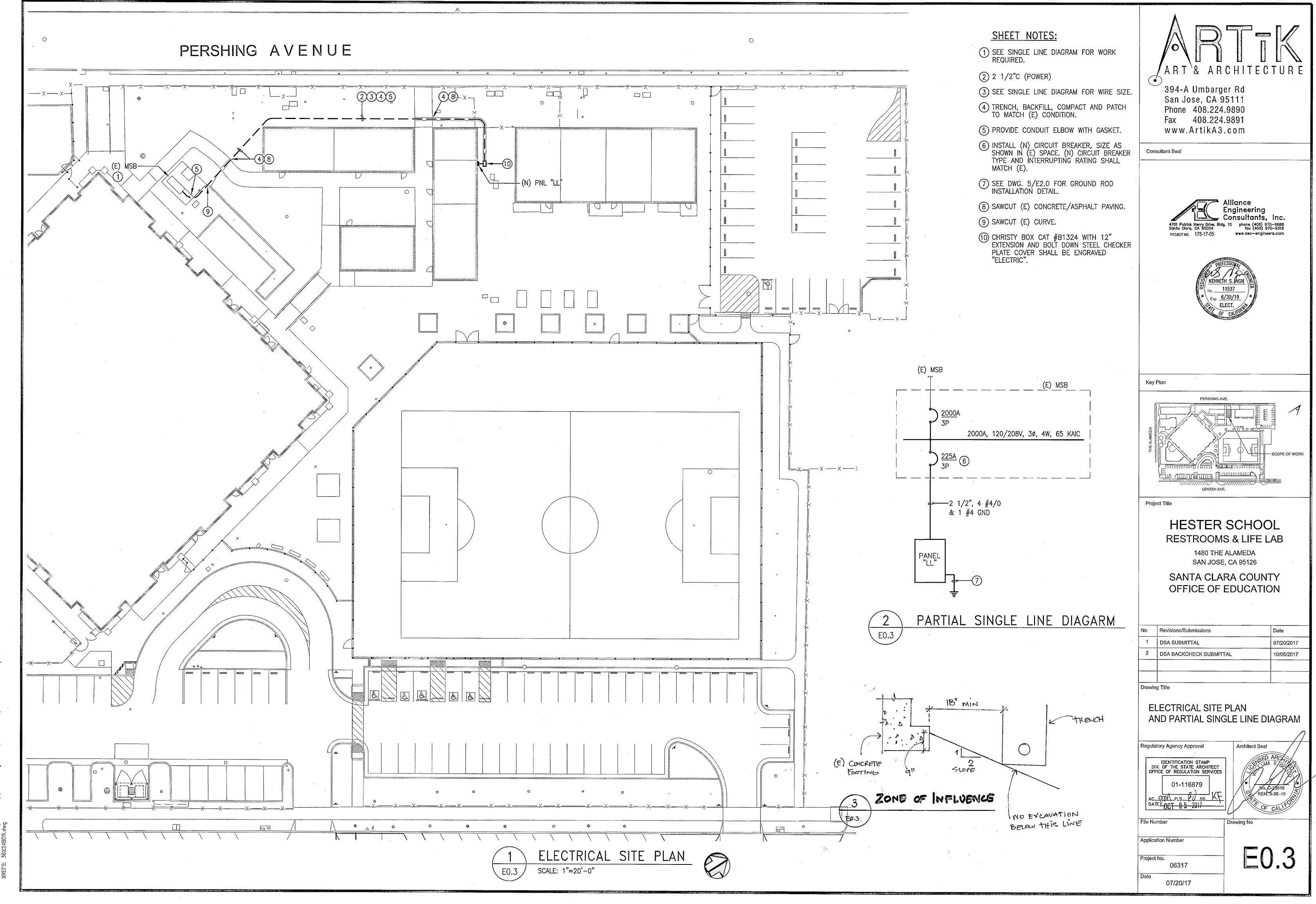


E0.2

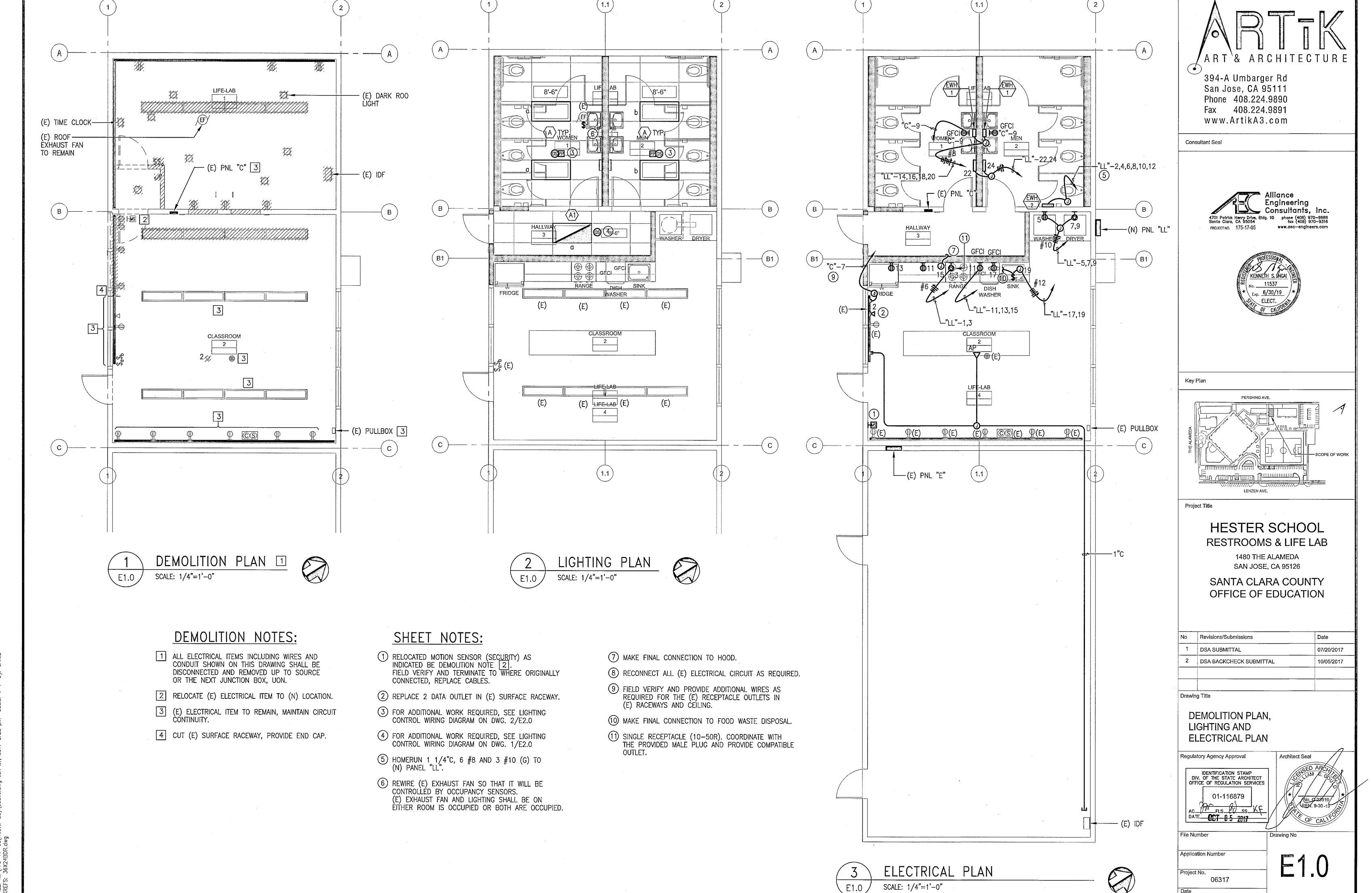
Application Number

Project No. 06317

07/20/17

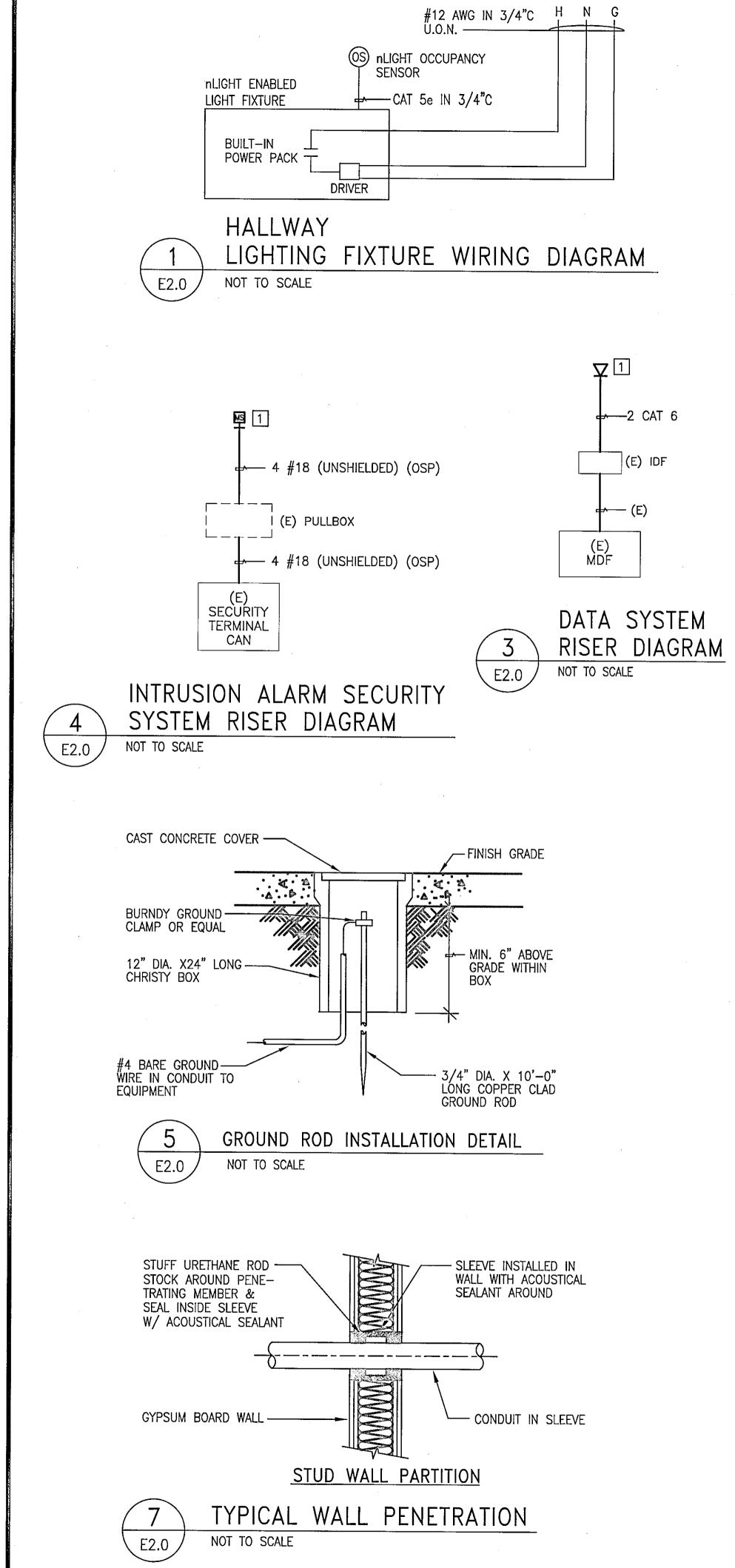


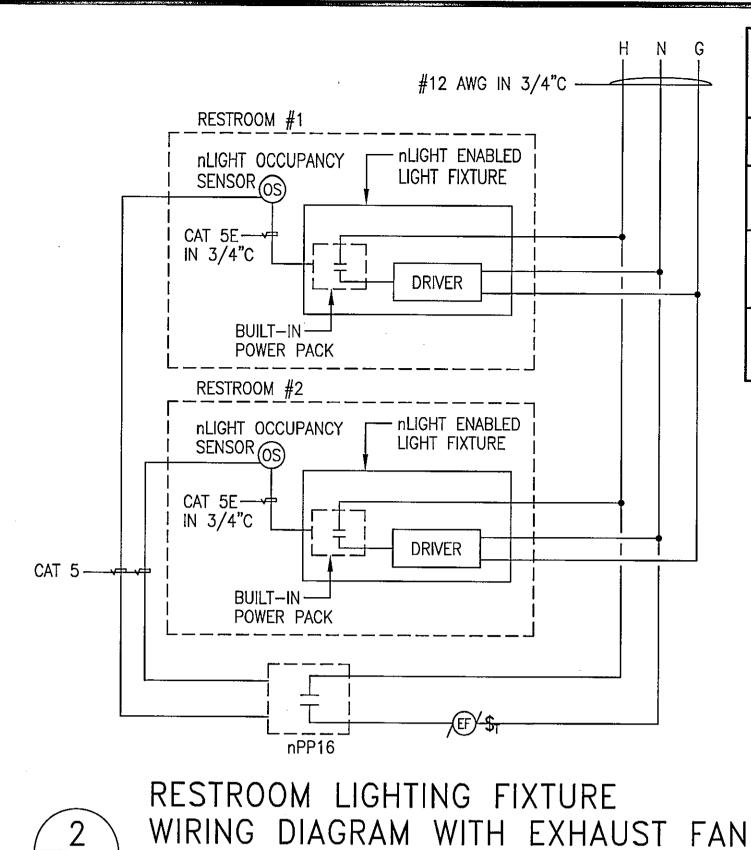
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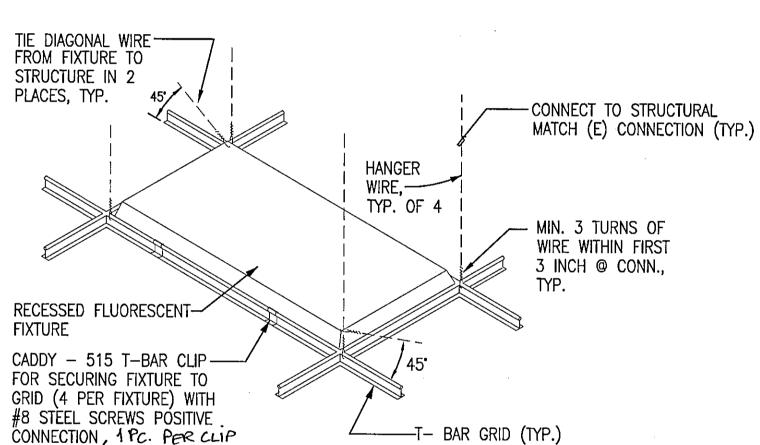


07/20/17

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E2.0

45° STAY WIRE - POSITION @ 45°

TO GRID & 45° TO VERTICAL

HANGER WIRE (TYP. TWO

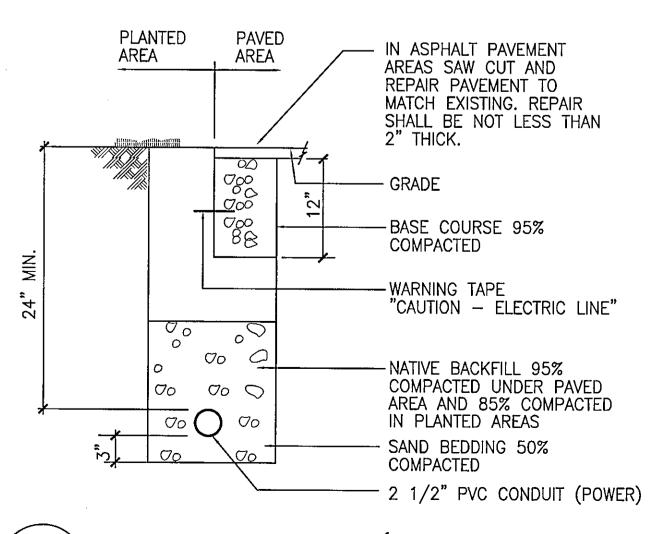
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NOT TO SCALE



TRACE WIRE/3'

E2.0



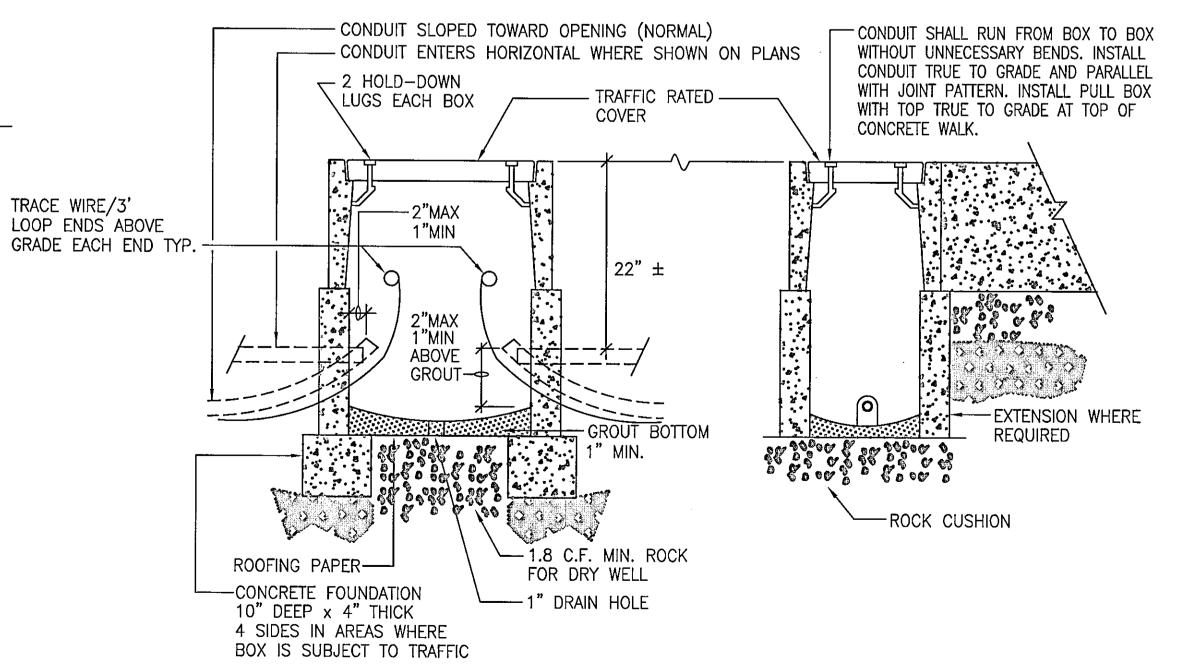
TRENCH DETAIL (PRIMARY CONDUIT) NOT TO SCALE

LIGHTING FIXTURE SCHEDULE

MARK	MANUFACTURERS		LAMPS		VOLTS	MOUNTING	DESCRIPTION AND REMARKS	
	MODEL NO.	QTY.	TYPE	WATTS	, 02.0		DECOM HOW AND INCINING	
A	LITHONIA CAT #TL4 40L LFW-A12LP835-N80	_	LED	40	MULTI	RECESSED	2'x4' LED LIGHT FIXTURE WITH A HIGH PERFORMANCE OPTICAL SYSTEM	
(A1)	LITHONIA CAT #TL4 40L LFW—A12LP835—N80 EL14L	:					SAME AS TYPE "A" LIGHT FIXTURE EXCEPT WITH EMERGENCY BATTERY PACK	
$\langle x \rangle$	LITHONIA CAT #LED SW16-120-ELNSD	_	LED	10.2	120	UNIVERSE	LED EXIT LIGHT FIXTURE WITH GREEN LETTERS ON WHITE BACKGROUND	

(E)PANEL # C	LOCAT	ION	-			FEEDER SIZE -						
VOLTS 120/240V, 1PH, 3W	MLO	X	FEE	D THR	U LUG	3 [] FLUS	FLUSH [SURFACE	X
AMPS	мсв		MCE	AMP:	S -		NEM	A 1	X		NEMA 3R	
AIC RATING 10K	BUS AN	MPS	100									
DESCRIPTION	V	/A	BKR	/	CKT	BKF	7	VA			C TO 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
	A	—В—	POLI	≣	No	-POL	EA-	— В	DE	SCRIPTION		····
LIGHTING			20/1	1	2	20/			LIC	SHTING		
LIGHTING				3	4							
FURNACE				5	6					<u> </u>		
WIREMOLD				7	- 8				FIF	RE ALARM		•
RECEPTACLE	360			9	10				RE	CEPT		
				11	12	\prod			RE	CEPT		
SUBTOTAL	360				1	, V		,				SUBTOTA
TOTAL LOAD	0.	36	KVA;	@	240	ı V	DLTS =	1.5	. AM	IPS		

(N) PANEL #"LL"	LOCA	LOCATION					FEEDER SIZE SEE			SEE S	INGLE LINE DIAGRAM
VOLTS 120/208V,3PH,4W AMPS 225 AIC RATING 10K	MLO MCB BUS A		FEED MCB A		LUGS			FLUSH SURF			
	LC	DAD (V	A)	BKR/	С	KT	BKR/	L	OAD (V	4)	
DESCRIPTION	A	B	—c—	POLE	N	io .	POLE	—A—	—В—	—C-	DESCRIPTION-
RANGE	6750	0750		50/2	1	2	40/2	4000		-	INSTANT WATER HEATER (EWH-2)
WASHER		6750		20/4	3	4			4000	4000	
	2392		500	20/1	5 7	6 8	40/2	4000		4000	4 1
DRYER	2002	2392		30/2	9	10	1010	4000	4000		
RECEPTACLE			360	20/1	11	12	40/2			4000	
FRIDGE	1000			20/1	13	14	40/2	4500			INSTANT MATER LIEATER (FIALLA)
HOOD		200			15	16	40/2		4500		INSTANT WATER HEATER (EWH-1)
DISHWASHER			_1000		17	18	40/2			_4500	
FOOD WASTE DISPOSAL	400				19	20	40/2	4500			1 ↓
SPARE					21	22	20/1		1400		HAND DRYER
<u> </u>				\downarrow	23	24				1400	\
SPACE				•	25	26	-				SPACE
				-	27	28	-				
<u> </u>				-	29	30	-				↓ ↓
SUBTOTAL	10542	9342	1860					17000	13900	13900	SUBTOTA
TOTAL ADDED LOA	ND 66.	54	KVA;	@	208	VOL	TS =	184.8	AMPS		

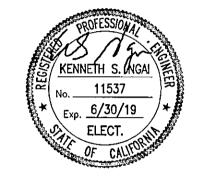


CONCRETE PULLBOX INSTALLATION NOT TO SCALE

394-A Umbarger Rd San Jose, CA 95111 Phone 408.224.9890 408.224.9891 www.ArtikA3.com

Consultant Seal





Key Plan PERSHING AVE. SCOPE OF WORK

Project Title

HESTER SCHOOL **RESTROOMS & LIFE LAB**

1480 THE ALAMEDA SAN JOSE, CA 95126

Revisions/Submissions

07/20/17

SANTA CLARA COUNTY OFFICE OF EDUCATION

Date

1	DSA SUBMITTAL		07/20/2017
2	DSA BACKCHECK SUBMIT	ΓAL	10/05/2017
_			
Drawir	ng Title		
SCI	HEDULE AND DETA	II S	
001	ILDOLL / (I/O DL I/)		
Regula	atory Agency Approval	Architect Seal	-//
_		TED.	ARC
D	IDENTIFICATION STAMP IV. OF THE STATE ARCHITECT	ACELLIAN.	90.6
OF	FICE OF REGULATION SERVICES		
	01-116879	No. C	2-23919
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Project	t No. 06317	Street, Street,	U
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OPERATING CONDITION.

SHALL BE 3/4".

THE FOLLOWING CRITERIA:

STATE ARCHITECT.

ADJACENT WALL OR CEILING.

FIRE ALARM L E G E N D **GENERAL NOTES** THE COMPLETE ELECTRICAL INSTALLATION SHALL BE IN **WIRING** FIRE ALARM SYSTEM ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA ELECTRICAL CODE. SPECIFICATIONS AND STANDARD, THE LATEST SYMBOL DESCRIPTION SYMBOL DESCRIPTION RULES AND REGULATIONS OF THE SAFETY ORDERS ISSUED BY THE DIVISION OF INDUSTRIAL SAFETY, THE NATIONAL BOARD OF WIRING CONCEALED IN CEILING OR WALL. LINE WEIGHT TOP TO BOTTOM= NEW, EXISTING FIRE UNDERWRITERS AND ALL APPLICABLE STATE AND LOCAL FIRE ALARM CONTROL PANEL AND ASSOCIATED CODES ISSUED BY AUTHORITIES HAVING JURISDICTION. COMPONENTS. PROVIDE 120V POWER AS REQUIRE TO REMAIN, FUTURE OR AS INDICATED. PRIOR TO SUBMITTING PROPOSAL, BIDDER SHALL EXAMINE ALL WIRING CONCEALED IN FLOOR OR UNDER GRADE OR ROUTED IN CEILING SPACE OF FLOOR BELOW. LINE WEIGHT TOP TO BOTTOM= NEW, EXISTING TO REMAIN, FUTURE _____ GENERAL CONSTRUCTION DRAWINGS. VISIT CONSTRUCTION SITE ______ ANN ANNUNCIATOR AND ATTEND THE PRE-BID MEETING TO BE FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL HAVE TO OPERATE AND WHICH WILL IN ANYWAY AFFECT THE WORK UNDER THIS SMOKE DETECTOR WIRING EXPOSED. LINE WEIGHT TOP TO BOTTOM= NEW, EXISTING TO REMAIN, FUTURE CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS _------CONNECTION IN BEHALF OF THE CONTRACTOR FOR ANY ERROR ABOVE CELING HEAT DETECTOR OR NEGLIGENCE ON HIS PART. 44444 EXISTING ITEM TO BE REMOVED FIELD VERIFY TO CONFIRM ALL FIRE RATED CEILINGS AND WALLS. PROVIDE FIRE STOP SEALS PER UNIFORM BUILDING CODE FOR CONDUIT __ LV ___ LOW VOLTAGE CABLE IN CONDUIT PENETRATION THROUGH FIRE RATED FLOORS, WALLS AND CEILINGS. **STROBE** STROKES INDICATE QUANTITY OF #12 AWG. CONDUCTORS ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED -----HORN/STROBE IF MORE THAN 3, UON. NOTE: WIRING STROKES FOR BY UNDERWRITER'S LABORATORIES AND BEAR THEIR LABEL. 20A BRANCH CIRCUITS ARE NOT SHOWN ON CONDUIT ROUTING SHOWN IS ESSENTIALLY DIAGRAMMATIC. DRAWINGS. CONTRACTOR SHALL USE INFORMATION HORN - WEATHERPROOF CONTRACTOR SHALL LAYOUT RUNS TO SUIT FIELD CONDITIONS IN PANEL AND BRANCH CIRCUIT SCHEDULES TO AND THE COORDINATION REQUIREMENTS OF OTHER TRADES. ALL PROVIDE REQUIRED CIRCUITING. ALL SHARED NEUTRAL EXPOSED CONDUIT, BOXES, FITTINGS, SUPPORT, ETC. SHALL BE SHALL BE #10 U.O.N. PAINTED TO MATCH ADJACENT SURFACES. GROUND GROUND, ISOLATED THE CONTRACTOR SHALL CONSULT THE ARCHITECTURAL MECHANICAL AND OTHER DRAWINGS RELATED TO THIS PROJECT HOT NEUTRAL FOR ADDITIONAL WORK TO BE PROVIDED. HOME RUN WIRING TO INDICATED DESTINATION. THE OWNER RETAINS FIRST SALVAGE RIGHTS TO ALL EXISTING 3/4"C. MIN. OR AS OTHERWISE NOTED. CONTRACTOR EQUIPMENT REMOVED UNDER THIS CONTRACT. THE ELECTRICAL SHALL USE CIRCUIT SIZES NOTED IN RESPECTIVE L1A - 1.3CONTRACTOR SHALL CONSULT WITH THE OWNER FOR DISPOSITION SCHEDULES AND INFORMATION IN THE FEEDER AND OF THE EXISTING EQUIPMENT TO BE REMOVED BY HIM. THE HD1A CONTRACTOR SHALL INCLUDE IN HIS BID PROPOSAL ALL COSTS BRANCH CIRCUIT SCHEDULES. RELATED TO THE DISPOSAL OF EXISTING EQUIPMENT REMOVED CONDUIT RUN TURNED UP THROUGH FLOOR OR CEILING. CORE & FIREPROOF AS REQUIRED. 8. ANY POWER SHUTDOWN SHALL BE COORDINATED WITH SCHOOL CONDUIT RUN TURNED DOWN THROUGH FLOOR OR DISTRICT PROJECT MANAGER. A SHUTDOWN SCHEDULE CEILING. CORE & FIREPROOF AS REQUIRED. SHALL BE PRESENTED TO SCHOOL DISTRICT FOR APPROVAL TWO WEEKS PRIOR TO COMMENCEMENT OF WORK. SHUTDOWN SHALL BE CONDUIT STUBBED OUT AT LOCATION SHOWN. PERFORMED IN OVERTIME HOURS IF SO DIRECTED BY SCHOOL DISTRICT PROVIDE INSULATED BUSHING & PULLROPE. DEMOLITION WORK SHALL BE PROVIDED AS REQUIRED TO RACEWAY STUBBED OUT FOR FUTURE ACCOMPLISHED NEW WORK CALLED FOR AND AS NOTED, WORK CONTINUATION; CAP, MARK AND RECORD SHALL BE PERFORMED CAREFULLY TO AVOID DAMAGE TO SURFACES. STRUCTURES, AND EQUIPMENT NOT BEING REMOVED. EXISTING JUNCTION BOXES, WALL, CEILING AND FLUSH FLOOR MOUNTED. 4" SQ. BOX MIN., LARGER IF REQUIRED EQUIPMENT AND/OR ELECTRICAL WIRING WHICH IS TO REMAIN. $\Theta \odot \Box$ BUT HAS BEEN REMOVED TO FACILITATE THE INSTALLATION OF THE NEW EQUIPMENT, SHALL BE RESTORED TO ITS ORIGINAL WIRING EXTENSION POINT - CONDUIT TO MC CABLE OR MANUFACTURED WIRING SYSTEM J-BOX ABOVE ACCESSIBLE CEILINGS AREAS, OR EXTEND CONDUIT & WIRE IN EXPOSED OR "HARD" CEILING AREAS. SHADED= ON ALT. POWER SOURCE (EMERG, UPS, ETC.) 10. BLANK COVERS SHALL BE INSTALLED WHEREVER DEVICE IS REMOVED AND OUTLET BOX REMAINS IN PLACE. 11. UNLESS OTHERWISE INDICATED. THE MINIMUM SIZE OF CONDUCTORS ΡВ SHALL BE 12 AWG THWN STRANDED COPPER ONLY. PULL BOX, MIN. SIZE PER NEC., UON. 12. UNLESS OTHERWISE INDICATED, THE MINIMUM SIZE OF CONDUIT ~~~~ FLEXIBLE CONDUIT CONNECTION 13. GREEN INSULATED GROUND CONDUCTORS SHALL BE INSTALLED POWER CONNECTION TO DIV 15 FIRE/SMOKE DAMPER. REFER TO FSD CONNECTION DETAIL IF NOT SHOWN IN ALL FEEDER AND BRANCH CIRCUIT WIRING. 14. PROVIDE LABELS ON ALL EQUIPMENT AND DEVICES. LABELS SHALL LOW VOLTAGE SYSTEM GROUND CONNECTION BE SELF-ADHESIVE PHENOLIC TYPE AND WHITE LETTER ON BLACK BACKGROUND, PROVIDE BRADY OR DYMO TYPE LABELS (CIRCUIT GROUND ROD CONNECTION IDENTIFICATION) FOR ALL SWITCHES AND RECEPTACLES. GROUND ROD CONNECTION WITH TEST WELL BOX 15. THE CONTRACTOR SHALL PROVIDE TYPEWRITTEN DIRECTORIES FOR ALL ELECTRICAL PANELS INVOLVED IN THIS PROJECT. THE PANEL LIGHTNING SYSTEM AIR TERMINAL DIRECTORIES SHALL REFLECT THE AS-BUILT CIRCUITS. ONE COPY OF THE SCHEDULE SHALL BE TAPED TO THE INSIDE OF THE PANEL DOOR, AND ONE COPY SHALL BE SUBMITTED TO THE ENGINEER AS AN "AS-BUILT" DRAWING. 16. ALL ELECTRICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A SEISMIC FORCE ACTING IN ANY DIRECTION USING FIRE ALARM SCOPE OF WORK APPLICABLE CODES a. THE TOTAL DESIGN LATERAL SEISMIC FORCE SHALL BE THE INTENT OF THIS PROJECT IS TO PROVIDE A COMPLETE FIRE DETERMINED PER CALIFORNIA BUILDING CODE 2016 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE (CBC) 2013. FORCES SHALL BE APPLIED IN THE ALARM SYSTEM FOR THE RESTROOM AND LIFE LAB ALTERATION CODE (PART 1, TITLE 24, CCR) HORIZONTAL DIRECTIONS, WHICH RESULT IN THE MOST CRITICAL LOADING FOR DESIGN. 2016 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 & 2 (PART 2, TITLE 24, CCR) b. THE VALUE OF Ap(COMPONENT AMPLIFICATION FACTOR), Rp (COMPONENT RESPONSE MODIFICATION FACTOR), 2016 CALIFORNIA ELECTRICAL CODE (PART 3, TITLE 24, CCR) Ca(SEISMIC COEFFICIENT) AND ID(SEISMIC IMPORTANCE FACTOR) BE DETERMINED PER CALIFORNIA BUILDING CODE (CBC) 2013. FIRE ALARM SYSTEM GENERAL NOTI 2016 CALIFORNIA MECHANICAL CODE (PART 4, TITLE 24, CCR) WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS. THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL 2016 CALIFORNIA PLUMBING CODE OF THE FIELD REPRESENTATIVE OF THE DIVISION OF THE (PART 5, TITLE 24, CCR) 2016 CALIFORNIA ENERGY CODE CENTRAL MONITORING STATION. 17. CERTAIN REMODELING OF ELECTRICAL FACILITIES WILL BE (PART 6, TITLE 24, CCR) REQUIRED IN THE EXISTING BUILDING. THE DRAWINGS SHOWING LOCATION OF EQUIPMENT IN EXISTING AREAS ARE APPROXIMATE 2016 CALIFORNIA FIRE CODE ONLY. THE CONTRACTOR SHALL CONCEAL ALL WORK; IF THIS NOT (PART 9, TITLE 24, CCR) POSSIBLE, SURFACE RACEWAY SUCH AS WIREMOLD SHALL BE USED ONLY WITH THE APPROVAL OF THE ARCHITECT AND OWNER. 2016 CALIFORNIA REFERENCED STANDARDS CODE (PART 12, TITLE 24, CCR) THE CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR THE PROPER RESTORATION OF ALL EXISTING SURFACES REQUIRING NFPA 13, 2016 EDITION, THE INSTALLATION OF PATCHING, PLASTERING PAINTING AND/OR OTHER REPAIRS DUE AUTOMATIC SPRINKLER SYSTEMS, AS AMENDED TO THE INSTALLATION OF ELECTRICAL WORK UNDER THE TERMS OF THIS SPECIFICATION. CLOSE ALL OPENINGS, REPAIR ALL SURFACES, ETC., AS REQUIRED. THIS SHALL INCLUDE ALL WALLS, CEILINGS, ROOFS, PAVEMENT, PLANTERS, ETC. NFPA 14, 2016 EDITION, THE INSTALLATION OF STANDPIPE, PRIVATE HYDRANT AND HOSE SYSTEMS NFPA 24, 2016 EDITION, THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES 19. OUTLETS MOUNTED ON WALL BACK TO BACK SHALL MAINTAIN A MINIMUM HORIZONTAL DISTANCE OF 24" OR BE SEPARATED BY A STUD.

	A	BBREVIATIONS
ED	(R) (RL) AB ACU AC	EXISTING TO BE RELOCATED ABOVE COUNTER BACKSPLASH AIR CONDITIONING UNIT ALTERNATING CURRENT AMPERES AMPERE (RATED) FUSE OR CB FRAME ABOVE FINISHED FLOOR ABOVE FINISHED GRADE ALUMINUM (ALLOY)
	AUTO AUX AWG B BAT BG	CIRCUIT BRKR TRIP SETTING (AMPS) AUTOMATIC TRANSFER SWITCH AUTOMATIC AUXILIARY AMERICAN WIRE GAUGE BELL (FIRE ALARM) BATTERY BELOW GRADE
	CKT CLG CO CU DC DIV DPST DWG	CIRCUIT CEILING CONDUIT ONLY COPPER DIRECT CURRENT DIVISION
	FA FAA FSD GND K MAX	FIRE ALARM FIRE ALARM ANNUNCIATOR FIRE/SMOKE DAMPER GROUND KEY OPERATED MAXIMUM MINIMUM
	MTD MTR NC NEC NO NTS NP OC	MOUNTED MOTOR NORMALLY CLOSED NATIONAL ELECTRICAL CODE NORMALLY OPEN NOT TO SCALE NAMEPLATE ON CENTER
!	+,POS REQD RNC RSE	PANEL POSITIVE REQUIRED RIGID NON-METALLIC CONDUIT (PVC) REMOTE SIGNAL EXPANDER REMOTE STATION TRANSMITTER SEE ARCHITECTURAL DRAWINGS
	TYP UL UON UPS	TYPICAL UNDERWRITERS LAB UNLESS OTHERWISE NOTED UNINTERRUPTIBLE POWER SUPPLY
Έ	Name of School: Campus Address: Building Designation Applicable Codes an 2016 Calif 2016 Calif 2016 Calif CCR Title NEPA 72, Na UL 39, Manu UL 268A, Sm	omia Building Code (CBC), Part 2, Title 24, C.C.R. (2015 IBC with 2016 California Amendments) ornia Electric Code (CEC), Part 3, Title 24, C.C.R. (2014 NEC with 2018 California Amendments) ornia Firo Code (CFC), Part 9, Title 24, C.C.R. (2015 IFC with 2016 California Amendments) -19, Public Safety, State Fire Morshal Regulations tional Fire Alarm and Signaling Code, 2018 edition (CA Amended) al Operating Signal Boxes, 2008 edition oke Detectors Outt Applications, 2008 edition ble Signal Appliances, 2016 edition
	UL 864, Con	

Building Construction Type(s): Type IA Type IB Type IIA Type IIB ☐ Type IIIA ☐ Type IIIB ☐ Type IV ☐ Type VA ☐ Type VB System Classification: Emergency Communication System One-way Emergency Communication System Distributed Recipient Mass Notification System ☐ In-building Mass Notification System ☐ In-building Fire Emergency/Voice Communication System ☐ Wide Area Mass Notification System Two-way Emergency Communication System · ☐ In-building Emergency Communication System ☐ Commercial Light & Power ☐ Emergency Generator Pathways/Circuits (Class) IDC'S CI Class A 28 Class B Class C Class C Class D Class E C Class X SLC'S Class A Class B Class C Class D Class D Class E Class X

FIRE ALARM DRAWING LIST

FIRE ALARM COVER SHEET FIRE ALARM SITE PLAN FIRE ALARM DEMOLITION PLAN, FIRE ALARM PLAN AND

LEGEND AND EQUIPMENT LIST

FIRE ALARM SYSTEM NOTES

ALL WIRING SHALL BE IN CONDUIT, U.O.N. MINIMUM CONDUIT

POWER SUPPLY, RELAYS, ZONE MODULES, CARDS, SWITCHES

ETC. FOR A COMPLETE AND OPERABLE FIRE ALARM SYSTEM.

3. ALL REQUIREMENT OF CONTRACT SPECIFICATIONS AND DRAWING APPLY.

5. TEE-TAP INSIDE BUILDING IN JUNCTION BOX, USE TERMINAL BLOCKS.

7. 120VAC 60Hz INPUT POWER FOR FIRE ALARM CONTROLS SHALL

FROM LINE OF MAIN DISCONNECT" OR "EMERGENCY POWER".

120VAC IS NOT PERMITTED IN SAME CONDUIT WITH LOW VOLTAGE WIRING.

FACTORY-TRAINED FIRE ALARM TECHNICAL REPRESENTATIVE.

THE SIDE PANELS OR THROUGH THE BOTTOM OF ALL CONTROL

THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE THAT MEETS

NFPA STROBE INTENSITY REQUIREMENTS WHICH VARIES WITH

14. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER-TIGHT

15. AUDIBLE DEVICE(S) TO BE AT LEAST 15dBA ABOVE THE EQUIVALENT SOUND LEVEL BUT NOT LESS THAN 75dBA AT 10'

16. AUDIBLE DEVICE SHALL SOUND THE CALIFORNIA UNIFORM FIRE

17. FINAL FIRE ALARM TEST SHALL BE MADE WITH THE DSA

AND SHALL ASSIST/WITNESS SUCH TESTING WHEN ABLE.

18. FIRE ALARM CONTRACTOR SHALL PROVIDE A COMPLETED AND

19. PROVIDE TEMPORAL THREE DISTINCTIVE FIRE ALARM SOUND

20. POWER SERVICE SHALL BE ON A DEDICATED BRANCH CIRCUIT

21. WIRING AND MATERIALS SHALL BE PER CEC/NEC ART. 760.

WITH RED MARKING AND IDENTIFIED PER NFPA SEC 10.6.5.2.2

24. THE DOCUMENT CABINET SHALL BE PROMINENTLY LABELED SYSTEM

22. A DOCUMENTATION CABINET SHALL BE INSTALLED PROXIMAL TO THE FACU.

23. ALL RECORD DOCUMENTATION SHALL BE STORED IN THE DOCUMENT CABINET.

(CFC SEC. 907.5.2.1.3 NFPA 72 SEC. 18.4.2.1)

RECORD DOCUMENT (NFPA 72, 7.7.2.4.)

SIGNED" CERTIFICATE OF COMPLETION" AFTER COMPLETION OF

OPERATIONAL ACCEPTANCE TESTS. (NFPA 72 SEC. 7.8.2 &

FITTINGS AND WIRES TO BE APPROVED FOR WET LOCATIONS.

OR MORE THAN 110dBA AT THE MINIMUM HEARING DISTANCE.

INSPECTOR OF RECORD (IOR). LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF DATA AND TIME OF FINAL FIRE ALARM TESTING

11. THERE WILL BE NO CONDUIT ENTRY ALLOWED 18" OR LOWER ON

8. ALL WIRING INCLUDING SHIELDS MUST BE DRY AND FREE OF

10. DO NOT APPLY POWER EXCEPT IN THE PRESENCE OF A

12. ALL VISUAL ALARM IN EVERY ROOMS OR EXTERIOR WHERE

13. VISUAL DEVICE SHOULD NOT EXCEED 2 FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN 1 FLASH EVERY SECOND.

BE A DEDICATED, LOCKING BREAKER PROPERLY LABELED "SOURCE

6. FIRE ALARM FIELD WIRING SPECIFICATIONS FOR ADDITIONAL

2. PROVIDE AND INSTALL ALL CONDUIT, BOXES, CONDUCTORS,

4. INSTALLATION SHALL CONFORM TO REQUIREMENTS OF

RISER DIAGRAM

FIRE ALARM VOLTAGE DROP, BATTERY CALCULATION.

FIRE ALARM DETAILS

SIZE SHALL BE 3/4"C.

APPLICABLE ELECTRICAL CODES.

INSTALLATION REQUIREMENTS.

SHORTS AND GROUNDS.

EQUIPMENT BACKBOXES.

ALARM SIGNAL.

(NFPA 72, 7.7.2.2)

OCCUR SHALL BE SYNCHRONIZED.

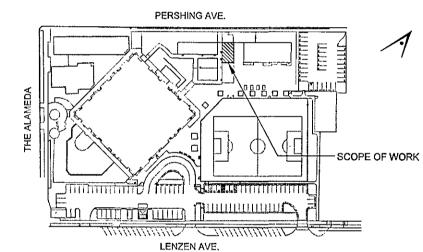
VIEWING CONDITIONS AND ROOM SIZES.

394-A Umbarger Rd San Jose, CA 95111 Phone 408.224.9890 408.224.9891 www.ArtikA3.com

Consultant Seal





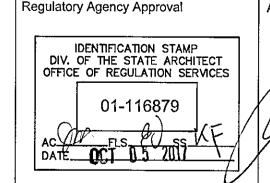


HESTER SCHOOL

SANTA CLARA COUNTY OFFICE OF EDUCATION

No	Revisions/Submissions	Date
1	DSA SUBMITTAL	07/20/2017
2	DSA BACKCHECK SUBMITTAL	10/05/2017

FIRE ALARM COVER SHEET



Drawing No

06317

No. C-23919 PEN. 9-30-19

NFPA 72 REQUIREMENTS

POWER SERVICE SHALL BE ON A DEDICATED BRANCH CIRCUIT WITH A RED MARKING AND IDENTFIED PER (NFPA 72 SEC. 10.6.5.2.2)

2. PROVIDE TEMPORAL THREE DISTINCTIVE FIRE ALARM SOUND. (CFC SEC. 907.5.2.1.3, NFPA 72 SEC. 18.4.2.1).

3. AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15 DBA ABOVE THE AVERAGE AMBIENT SOUND LEVEL IN ALL OCCUPINABLE AREAS, (NFPA 72 SEC. 18.4.3.1). (IE. CLASSROOM AVERAGE AMBIENT ROOM NOISE IS 45 DBA PLUS 15 DBA EQUALS = 60 DBA MINIMUM ALARM TONE REQUIRED)

4. STROBES SHALL FLASH AT A RATE OF NOT EXCEEDING TWO FLASHES PER SECOND NOR BELESS THAN ONE FLASH EVERY SECOND, (2013 NFPA 72 SEC. 18.5.3.1).

5. FINAL FIRE ALARM TEST SHALL BE MADE WITH THE DSA INSPECTOR OF RECORD (IOR). LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF THE DATE AND TIME OF FINAL FIRE ALARM TESTING AND SHALL ASSIST/WITNESS SUCH TESTING WHEN ABLE.

6. FIRE ALARM CONTRACTOR SHALL PROVIDE A "RECORD OF COMPLETION" TO THE INSPECTOR OF RECORD (IOR)/DSA AFTER COMPLETION OF OPERATIONAL ACCEPTANCE TESTS, (2013 NFPA 72 SEC. 7.8.2 AND FIGURE 7.8.2).

PROJECT NO. 175-17-05

Project Title

Drawing Title

RESTROOMS & LIFE LAB

1480 THE ALAMEDA SAN JOSE, CA 95126

Re	gulatory Agency Approvat		Architect Seal
	IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES 01-116879 AC FLS CONTROL OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES		MO OF
File	e Number	Dra	awing No

Application Number

Project No.

07/20/17

20. ALL EXPOSED CONDUITS, BOXES AND CABINETS INSTALLED IN

FINISHED AREAS SHALL BE PAINTED TO MATCH COLOR OF

SHALL REFLECT ALL APPROVED CHANGES TO THE DESIGN

THE PROGRESS PAYMENT IS TIED TO THEIR COMPLETION. 22. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL

21. THE CONTRACTOR SHALL MAINTAIN AT THE JOB SITE, AN UP TO

DATE "AS BUILT" DRAWING SET. THE "AS BUILT" DRAWING SET

DRAWINGS. THE "AS BUILT" DRAWING SET SHALL BE KEPT CLEAN

AND IN GOOD CONDITION AND SHALL BE TURNED OVER TO THE

OWNER AT THE COMPLETION OF THE PROJECT. THESE DRAWINGS SHALL BE UPDATED DAILY AND BE CHECKED WEEKLY BY IOR.

SCHEDULE AND PERFORM A COMPLETE FUNCTIONAL TEST TO DEMONSTRATE TO THE OWNER THAT THE NEW INSTALLATION IS OPERATING AS INTENDED. ANY DEFECTS OR DEFICIENCIES IN THE MATERIALS OR WORK SHALL CORRECTED IMMEDIATELY BY AND AT THE CONTRACTOR'S EXPENSE.

23. PROVIDE ACCESSIBLE PANEL FOR HEAT DETECTOR ABOVE CEILING WHERE REQUIRED.

FIRE ALARM SYSTEM MANUAL PULL STATION.

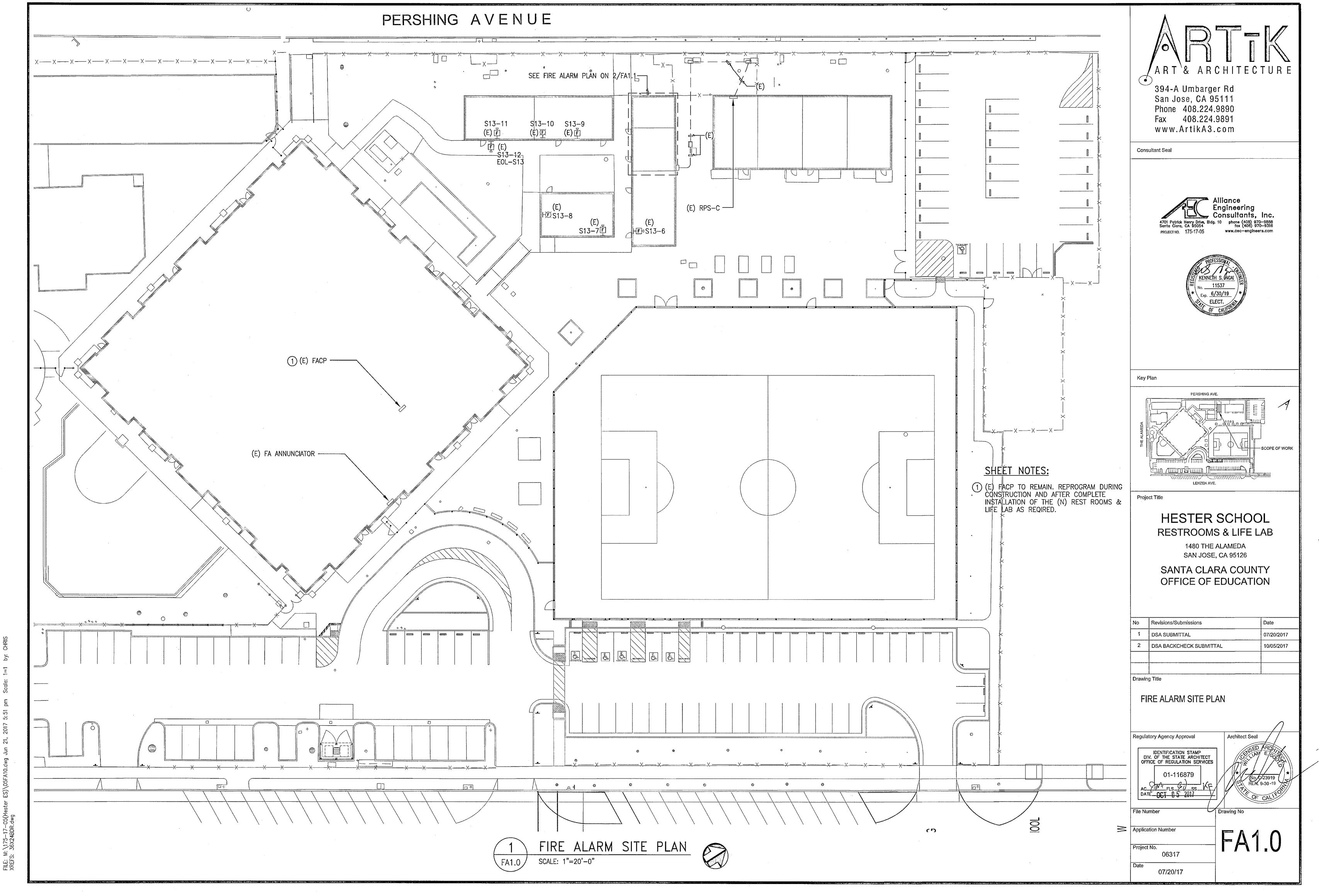
NFPA 72, 2016 EDITION, NATIONAL FIRE ALARM CODE.

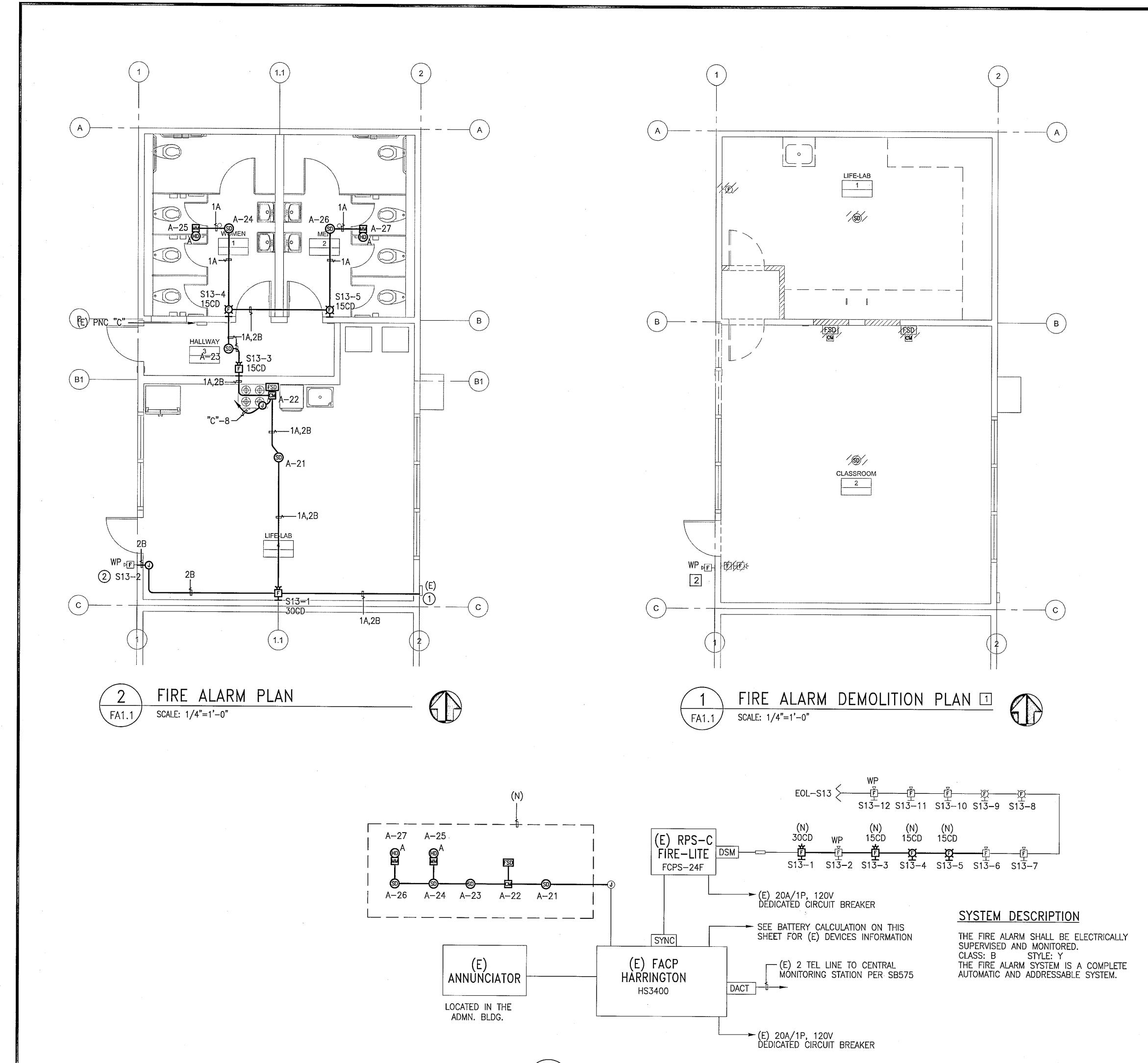
AS AMENDED

13. 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.

THE FIRE DETECTION AND ALARM SYSTEM, UPON ACTIVATION OF AN INITIATING DEVICE, SHALL ALERT ALL OCCUPANTS AND SHALL TRANSMIT THE ALARM SIGNAL TO AN APPROVED SUPERVISING

NAC's Class A Class B Class C Class D Class E





DEMOLITION NOTES:

- ALL ELECTRICAL ITEMS INCLUDING WIRES AND CONDUIT SHOWN ON THIS DRAWING SHALL BE DISCONNECTED AND REMOVED UP TO SOURCE OR THE NEXT JUNCTION BOX, UON.
- 2 ELECTRICAL ITEM TO REMAIN. SEE NOTE 2 FOR WORK REQUIRED.

SHEET NOTE:

- 1) INSTALL CONDUIT INTO (E) PULLBOX TERMINATE (N) WIRES TO (E).
- 2 TERMINATE (N) WIRE TO (E) TO PUT IT BACK IN SERVICE.

GENERAL NOTE:

RE-PROGRAM (E) FACP DURING AND AFTER CONSTRUCTION AS REQUIRED.



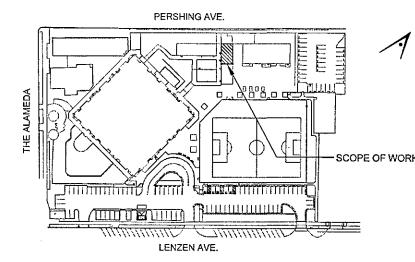
394-A Umbarger Rd San Jose, CA 95111 Phone 408.224.9890 Fax 408.224.9891 www.ArtikA3.com

Consultant Seal





Key Plan



Project Title

HESTER SCHOOL RESTROOMS & LIFE LAB

1480 THE ALAMEDA SAN JOSE, CA 95126

SANTA CLARA COUNTY OFFICE OF EDUCATION

No	Revisions/Submissions	Date
1	DSA SUBMITTAL	07/20/2017
2	DSA BACKCHECK SUBMITTAL	10/05/2017

Drawing Title

FIRE ALARM DEMOLITION PLAN, FIRE ALARM PLAN AND RISER DIAGRAM

Architect Seal

No. C.23919

RED. 9-30-19

Drawing No.

Application Number

06317

07/20/17

File Number

FA1.1

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ST-75cd Strobe	0	Х	Alarm	0.135	Α		0.000	F
ST-110cd Strobe	0	Х	Alarm	0.182	А		0.000	F
HS-15cd Horn/Strobe	0	Х	Alarm	0.082	Α	基中的中国主义的	0.000	F
HS-30cd Horn/Strobe	0	х	Alarm	0.102	·A	主义是学学课程建 集和	0.000	F
HS-75cd Horn/Strobe	0	X	Alarm	0.148	Α	表表表表表表现的	0.000	F
HS-110cd Horn/Strobe	0	х	Alarm	0.197	Α	化多效性 医高度黄疸	0.000	F
AH-24WP Weatherproof Horn	0	X	Alarm	0.080	Α	THE PARTY	0.000	F
NH-24R Horn, Low	0	х	Alarm	0.018	Α	法共享的证据的	0.000	F
DSM-24R	0	x	Alarm	0.055	Α	生物物物性水解毒素	0.000	F
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Total Alarm Current				• •		的物理等的 是需要。	7.723	
							·	
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E Minute of Alama and Alama						(0.000011		
5 Minute of Alarm operation per NFPA 72 S	tandard	IS		X	5min.	(0.0833 Hours)	1 222	
Total A.H required for Alarm:							0.643	Ał
Add total standby current and alarm currer							I	
ADD TOTAL STANDOV CUTTENT AND AIATM CUTTET	π:					·	7.19	Αŀ
De-rating factor (20% extra insurance to m		.in ~ -1	narfarra -			. X	1.20%	

Notes:

- An additional multiplier is included to compensate for the higher discharge rate in alarm. Battery capacity decreases with age
- A 4-year old battery can lose up to 50% of its capacity. Compensations should be made to allow for this loss.
- The Standby current + Alarm current must never exceed 4.66 Amps.

4 (E) Battery set is 12 AH

VOLTAGE DROP (VD) CALCULATION

PROJ. NAME---- HESTER SCHOOL

SIG CKT#——	S13												
DEVICE#	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	1	60	60	60	20	30	30	30	30	20	30	30	40
AMPS @ DEVICE	0.102	0.027	0.027	0.041	0.041	0.027	0.027	0.041	0.027	0.041	0.027	0.027	0.08
AMPS DEVELOPED	0.535	0.433	0.406	0.379	0.338	0.297	0.27	0.243	0.202	0.175	0.134	0.107	0.08
VOLT DROP	0.0017013	0.0826164	0.0774648	0.0723132	0.0214069	0.0363336	0.025759	0.0021022	0.0102709	0.01112	0.0407000	0.0402070	0.0101

SIGNAL CIRCUIT # S13

TOTAL CKT V.D.= 0.3964347

CKT VOLTAGE= 20.4

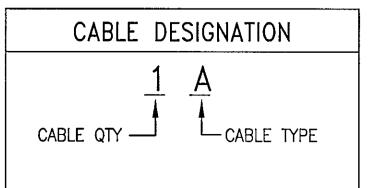
VOLTAGE AT

FINAL DEVICE= 20.003565

% VOLTAGE DROP= 1.9433074

INITIATING DEVICE LABEL
INITIATING DEVICE CIRCUIT NUMBER

NAC DE	VICE	LABEL	•
NOTIFICATION — APPLIANCE ZONE CIRCUIT NUMBER	-	2	DEVICE NUMBER



		EQUIPMENT LIST	
MANUFACTURER	MODEL	DESCRIPTION	CSFM NUMBER
Harrington	HS-3400	(E) Fire Alarm Control Panel	7165-0476:0114
Firelite	FCPS-24F	(E) Fire Alarm Power Supply	7315-0075:0176
Harrington	2251	Smoke Detector Head, Photoelectric, Analog	7272-1209:0160
Harrington	B501	Base, Detector, Addressable	7300-1209:0128
Harrington	м500	Monitor Module	7300-1209:0104
Harrington	M500R	Control Module	7300-1209:0104
System Sensor	5602	Heat Detector	7270-1653:0167
Wheelock	HS	Horn Strobe	7125-0785:0168
Wheelock	ST	Strobe	7125-0785:0168
Wheelock	AH-24WP-R	Horn, Weatherproof	7125-0785:0131
Wheelock	WBB-R	Back Box, Exterior	
West Penn	D990	Cable, 1 PR 16 AWG Twisted pair Type FPL	7161-0859:0101
West Penn	998S	Cable, 1 PR 12 AWG Twisted pair Type FPL	7161-0859:0101
	THHN/THWN	#12 SOLID, BLACK	
	THHN/THWN	#12 SOLID, RED	

FA	SYSTEM C	PERAT	IONAL I	MATRIX			 ,
	Annunciate Alarm Condition at New FACP, Annunciator	Annunciate Trouble Condition at New FACP*, Annunciator	Activate Fire Alarm Visual/Audible Notification Device	Annunciate Supervisory Condtion New FACP, Annunciator	HVAC Unit Shut Down	Smoke Fire Damper Closing	
Manual Pull Station	X	X	Х				
Smoke Detector	X	X	Х				
Heat Detector	X	X	X				
System Trouble		Х					
Flow Switch	X	X	Х				
Smoke Duct Detector	X	Х	Х		Х		
Snoke Duct detector Intergrate with FSD	X	Х	Х		X	Х	

(E) RPS-C Battery Calculation Work Sheet

ranga ng pangga ng p	475				r de c	Standby Curre	nt (A)	Alarm Current	t (A)
FCPS-24S6				· · · · · · · · · · · · · · · · · · ·		0.065	Α	0.145	- /
Auxiliary Devices			s steknik ofervið sekkildski	eranis is is	1 g: 41 A				4 2
Catalog Number	Qty								
		×	Standby		Α	0.000	Α	THE SECOND CO. PROPERTY.	og. g
Door Holders	***			E Produced				医骨膜 电影 电阻制	
Catalog Number				Turke Filtright 14					N. P. Y
		х	Standby		Α	0.000	Α		1797.00
Notification Appliances	de di qui	yan da		laitaa		学员地开展通道	er Ar alguera		
Catalog Number	Qty				14 1 J.			(建建)建设。	
ST-24-15cd Strobe	0	×	Alarm	0.041	Α	The state of the s		0.000	
HS-15cd Horn/Strobe	0	х	Alarm	0.082	Α		4.50	0.000	
HS-30cd Horn/Strobe	1	х	Alarm	0.102	Α	自由 电影性 野 藤	W. A. A.	0.102	
HS-75cd Horn/Strobe	1	×	Alarm	0.148	А			0.148	
HS-110cd Horn/Strobe	0	х	Alarm	0.197	A			0.000	/
AH-24WP Weatherproof Horn	3	х	Alarm	0.08	A	or in the second	dian.	0.240	
Existing Mini Horn NH-24	10	Х	Alarm	0.027	Α	\$P\$	-AT WILL	0.270	
						子事實施事業	olimaz, d		
					,	非性性格面型 湖			
Total Standby Current						0.07	Α		
Total Alarm Current							r h istoria	0.145	- 1
Hours of Standby required by NFF	A 72 Stan	dar	ds, (4,24 or 60)	Х	24	HOURS		<u></u>	
Total A.H required for standby	/ :							1.56	Αl
5 Minute of Alarm operation per NF	PA 72 Sta	anda	ards	X	5min.	(0.0833 Hou	rs)		
Total A.H required for Alarm:								0.01	Α
Add total standby current and alar	m current							1.57	Α
De-rating factor (20% extra insura			esired performan	ice			x	1.20%	
- '	back-up	J. U	colleg portornal.					1.20/0	

Notes:

The alarm current must never exceed 6.14 Amps.

2 Supplied Battery Set 7.0AH

OTES:

Supervising Station.

The alarm current must never exceed 6.14 Amps
 (E) Supplied Battery Set 7.0AH

FIRE ALARM WIRING LEGEND				
SYMBOL	WIRE TYPE	USED ON		
A	2-CONDUCTOR, #16 TWISTED PAIR UNSHIELDED (D990)	ADDRESSABLE ALARM INITIATING DEVICES: — SMOKE DETECTORS — INTERFACE MODULES — PULL STATION		
AA	2-CONDUCTOR, #16 TWISTED PAIR UNSHIELDED (AQ225)	ADDRESSABLE ALARM INITIATING DEVICES: — SMOKE DETECTORS — INTERFACE MODULES — PULL STATION		
B	2-CONDUCTOR, #12 AWG UNSHIELDED (998S)	AUDIO/VISUAL FROM NAC INDICATING DEVICES: — (SYNC HORN/STROBE CIRCUITS)		
	2-CONDUCTOR, #12 AWG SOLID, THWN (GROUNDED WIRE)	120 VAC POWER WIRING TO: - F.A. CONTROL PANEL POWER SUPPLY PANEL		

SHEET NOTES:

- 1 THE (E) FIRE ALARM SYSTEM WERE DONE ON CLASSROOM MODERNIZATION PROJECTS WITH DSA APP # 01-106785 AND 01-102072.
- 2) THIS RESTROOM & LIFE LAB ALTERATION WORK DOES NOT INCLUDE REPLACEMENT OF THE ENTIRE FIRE ALARM SYSTEM. THEREFORE, RETROFIT FOR EVAC DOES NOT REQUIRE PER DSA IN F-1.



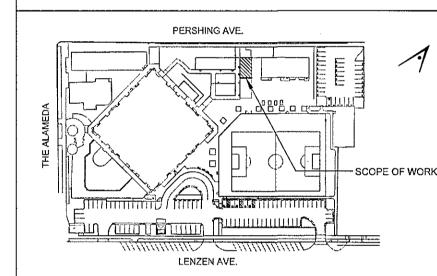
394-A Umbarger Rd San Jose, CA 95111 Phone 408.224.9890 Fax 408.224.9891 www.ArtikA3.com

Consultant Seal





Key Plan



Project Title

HESTER SCHOOL RESTROOMS & LIFE LAB

1480 THE ALAMEDA SAN JOSE, CA 95126

SANTA CLARA COUNTY OFFICE OF EDUCATION

No	Revisions/Submissions	Date
1	DSA SUBMITTAL	07/20/2017
2	DSA BACKCHECK SUBMITTAL	10/05/2017

Drawing Ti

FIRE ALARM VOLTAGE DROP, BATTERY CALCULATION, LEGEND AND EQUIPMENT LIST

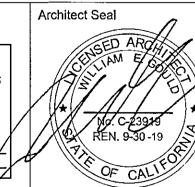
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES

01-116879

AC FLS SS ATT
DATE OCT 8 5 2017

06317

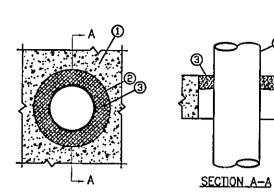
07/20/17



File Number

Application Number

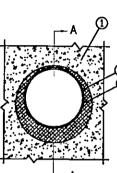
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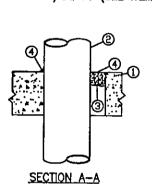




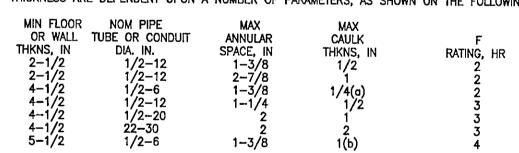
- SEE CONCRETE BLOCKS (CAZT) CATEGORY IN FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS. . PIPE OR CONDUIT - NOM. 10 IN. DIA. (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE, NOM 6 IN. DIA. (OR SMALLER) RIGID STEEL CONDUIT, NOM 4 IN. DIA. (OR SMALLER) STEEL EMT OR NOM 3 IN. DIA. (OR SMALLER). TYPE L (OR HEAVIER) COPPER PIPE. MAX ONE PIPE OR CONDUIT PER THROUGH OPENING. MAX ANNULAR SPACE BETWEEEN PIPE OR CONDUIT AND EDGE OF OPENING IS 3/4 IN. MIN ANULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF OPENING IS 0 IN. (POINT CONTACT). PIIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
- FILL VOID OR CAVITY MATERIALS PUTTY-MOLDABLE PUTTY MATERIAL KNEEDED BY HAND AND APPLIED TO FILL ANNULAR SPACE TO A MIN DEPTH OF 1 IN FLUSH WITH TOP SURFACE OF FLOOR. IN WALL ASSEMBLIES, REQUIRED PUTTTY THICKNESS TO BE INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL. MINNESOTA MINING & MFG. CO.- MPS-2+. BEARING THE UL CLASSIFICATION MARKING.

SYSTEM NO. CAJ1044 (Formerly System No. 319) T RATING - 0 HR L RATING AT AMBIENT - 2 CFM/SQ FT (SEE ITEM 4) L RATING AT 400 F - LESS THAN 1 CFM/SQ FT (SEE ITEM 4)





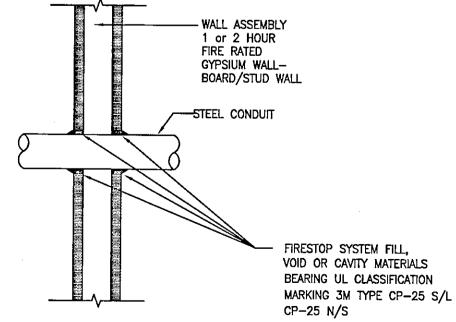
- 1. FLOOR WALL ASSEMBLY-LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. EXCEPT AS NOTED IN TABLE UNDER ITEM 4, MIN THICKNESS OF SOLID CONCRETE FLOOR OR WALL ASSEMBLY IS 4-1/2 IN. FLOOR MAY ALSO BE CONSTRUCTED OF ANY MIN 6 IN. THICK UL CLASSIFIED HOLLOW-CORE, PRECOAT CONCRETE UNITS. WHEN FLOOR IS CONSTRUCTED OF HOLLOW-CORE PRECOAT CONCETE UNITS, PACKING MATERIALS (ITEM 3) AND CAULK FILL MATERIAL (ITEM 4) TO BE INSTALLED SYMETRYCALLY ON BOTH SIDES OF THE FLOOR, FLUSH WITH FLOOR SURFACE. WALL ASSEMBLY MAY ALSO BE CONSTRUCTED OF CLASSIFIED CONCRETE BLOCKS. MAX DIA. OF OPENING IS 32 IN. SEE CONCTRETE BLOCKS (CAZT) AND PRECAST CONCRETE UNITS (CFTV) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURER
- 1A. STEEL SLEVE (OPTIONAL NOT SHOWN) NOM 16 IN. (OR SMALLER) SCHEDULE 10 (ORHEAVIER) STEEL SLEEVE CAST OR GROUTED INTO FLOOR OR WALL ASSEMBLY. SLEEVE MAY EXTEND A MAX OF 2 IN. ABOVE TOP FLOOR OR BEYOND EITHER SURFACE OF WALL.
- 2. PIPE OR CONDUIT NOM 30 IN.DIA. (OR SMALLER) CAST IRON OR SCHEDULE 10 (OR HEAVIER) STEEL PIPE, NOM 6 IN. DIA. (OR SMALLER) STEEL CONDUIT, NOM 3 IN. DIA. (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBE OR NOM 4 IN. DIA. (OR SMALLER) STEEL ELECTRICAL METALIC TUBING. MAX ANNU; AR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF THROUGH OPENING NOT TO EXCEED 2 IM. MIN ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF THROUGH OPENING IS O IN. (POINT CONTACT). PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDE OF FLOOR OR WALL ASSEMBLY.
- PACKING MATERIAL POLYETHYLENE BACKER ROD OR NOM 1 IN. THICKNESS OF THIGHTLY-PACKED MINERAL WOOL BATT OR GLASS FIBER INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OF FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL (ITEM 4).
- 4. FILL, VOID OR CAVITY MATERIAL -- CAULK -- APPLIED TO FILL THE ANNULAR SPACE FLUSH WITH TOP SURFACE OF FLOOR. IN WALL ASSEMBLIES, REQUIRED CAULK THICKNESS TO BE INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL, FLUSH WITH WALL SURFACE. THE HOURLY F RATING AND THE MIN REQUIRED CAULK THICKNESS ARE DEPENDENT UPON A NUMBER OF PARAMETERS, AS SHOWN ON THE FOLLOWING TABLE.



(a) MIN 2 IN THICKNESS OF MINERAL—WOOL BATT INSULATION REQUIRED IN ANNULAR SPACE.
(b) MIN 1 IN. THICKNESS OF MINERAL—WOOL BATT INSULATION REQUIRED IN ANNULAR SPACE ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY, MIN 1IN. THICKNESS OF CAULK TO BE INSTALLED FLUSH WITH EACH SURFACE

MINNESOTA MINING & MANUKACTURING CO - TYPES CP-25 WB, CP-25 WB+.
(NOTE: L RATING AND OR USE OF OPTIONAL SLEEVE APPLY ONLY WHEN TYPE CP-25WB+ CAULK IS USED).

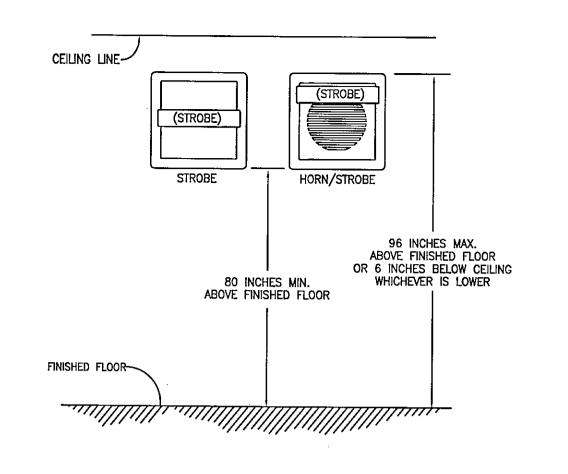
SYSTEM NO. WL1001 (Formerly System No. 147) F RATING - 1 & 2 HOUR T RATING - 0, 1, 1-1/2 & 2 HOUR



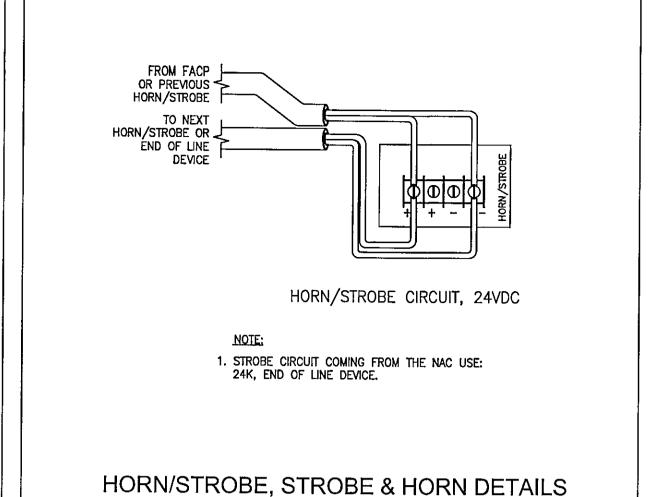
1. SEAL ALL PENETRATIONS IN ACCORDANCE WITH APPLICABLE CODES TO PRESERVE ORIGINAL FIRE HOUR RESISTANCE OF WALLS, FLOORS OR CEILINGS. USE UL DIRECTOY ASSEMBLY NOS. 49 & 328, AS APPLICABLE FOR ALL FIRE WALL PENETRATIONS.

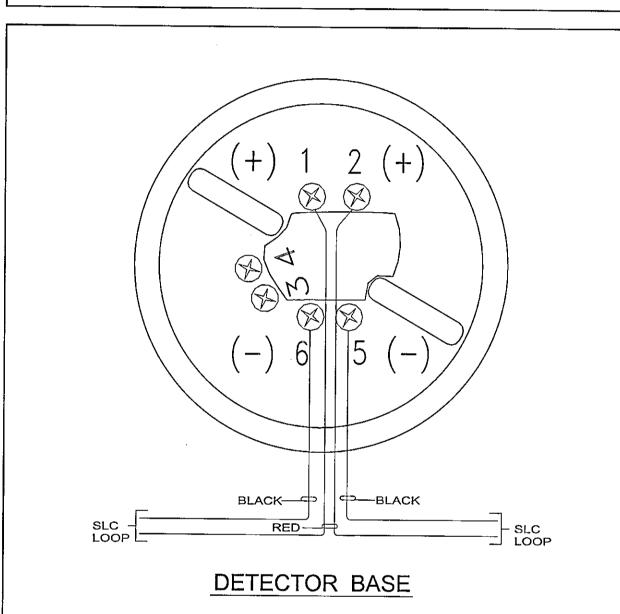
2. AT FIRE SEPARATION WALLS, WRAP CONDUIT WITH 3M CONDUIT WRAP F3-195 TO WITHIN 1/4" OF OPENING; FILL THE GAP AND COVER EDGE OF WRAP WITH 3M-CP25 CAULK AND/OR #303 PUTTY.

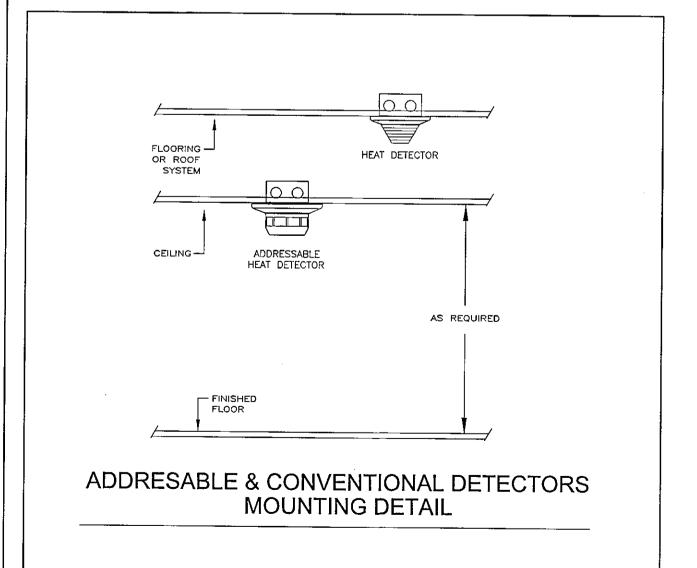
MISCELLANEOUS DETAILS



TYPICAL MOUNTING ELEVATION DETAIL OF STROBE & HORN/STROBE









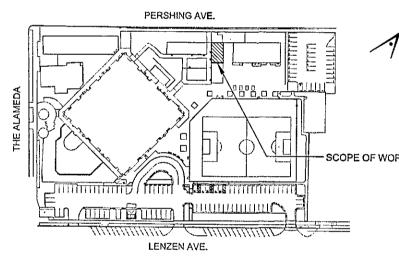
394-A Umbarger Rd San Jose, CA 95111 Phone 408.224.9890 Fax 408.224.9891 www.ArtikA3.com

Consultant Seal





Key Plan



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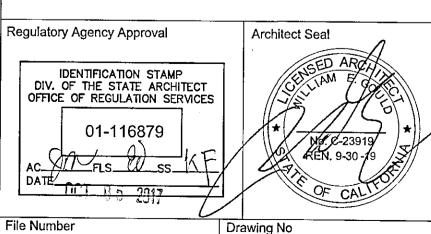
HESTER SCHOOL **RESTROOMS & LIFE LAB**

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SANTA CLARA COUNTY OFFICE OF EDUCATION

Date
07/20/2017
10/05/2017

FIRE ALARM DETAILS



File Number

Drawing Title

Application Number Project No.

06317

07/20/17