MILLARD McCOLLAM ELEMENTARY SCHOOL- HVAC UPGRADES

3311 LUCIAN AVE., SAN JOSE, CA 95127

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

DSA FILE NUMBER 43-04
DSA APPLICATION NUMBER 01-117271
OPSC TRACKING NUMBER 69369-78

GENERAL NOTES

PRE-BID SITE VISIT

CONTRACTOR SHALL VISIT THE PROJECT AREA IN ORDER TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND THE REQUIREMENTS OF THE PROJECT. THE CONTRACTOR MAY CONTACT THE ARCHITECT DURING THE BIDDING PHASE REGARDING CLARIFICATIONS AND PROJECT REQUIREMENTS.

SAFETY

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

DAMAGE TO STRUCTURE OR SYSTEMS TO REMAIN

CONTRACTOR SHALL REIMBURSE THE OWNER FOR REPAIR AND REPLACEMENT, INCLUDING ARCHITECT'S FEES, FOR ANY DAMAGE CAUSED TO STRUCTURES, LANDSCAPE, SITE WORK, OR EXISTING SYSTEMS TO REMAIN, AS THE RESULT OF CONSTRUCTION OPERATIONS.

EXISTING CONDITIONS

ALL EXISTING CONDITIONS ARE SHOWN BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME, BUT WITHOUT GUARANTEE OF ACCURACY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND BUILDING DATA AT THE JOB SITE. ANY DISCREPANCIES REQUIRING MODIFICATION TO THE CONSTRUCTION DOCUMENTS SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY. NO MODIFICATIONS SHALL BE MADE BY THE CONTRACTOR WITHOUT PRIOR APPROVAL FROM THE ARCHITECT.

CONTRACTOR'S EQUIPMENT

COORDINATE WITH OWNER'S REPRESENTATIVE FOR APPROVED LOCATION OF JOB SITE ACCESS, PARKING, AND LOCATION OF CONTRACTOR'S EQUIPMENT AND MATERIAL STORAGE AREA. SEE SITE PLAN FOR ADDITIONAL NOTES.

UTILITY SHUT-DOWNS AND CONNECTIONS

ALL REQUIRED UTILITY SHUT DOWNS SHALL HAVE PRIOR APPROVAL FROM THE OWNER'S REPRESENTATIVE. REQUEST SHALL BE SUBMITTED WITH ADEQUATE ADVANCE NOTICE PER PROJECT REQUIREMENTS.

ASBESTOS AND ASBESTOS PRODUCTS

THE OWNER/OPERATOR AND CONTRACTOR SHALL BE AWARE THAT BUILDINGS CONSTRUCTED PRIOR TO 1978 (OR THERE ABOUT) POSSIBILITY CONTAIN ASBESTOS IN SOME EXISTING CONSTRUCTION MATERIALS, AND WILL LIKELY BE ENCOUNTERED DURING ALTERATIONS OR REMODELING.

UNDER CALIFORNIA TITLE 8, THE OWNER AND CONTRACTOR BOTH HAVE RESPONSIBILITIES TO DETERMINE THE EXISTENCE OF ASBESTOS CONTAINING MATERIALS IN AREAS TO BE ALTERED OR REMODELED PRIOR TO COMMENCEMENT OF WORK AND TO TAKE APPROPRIATE MEASURES TO PROTECT PERSONNEL. CAL-OSHA HAS JURISDICTION OVER ASBESTOS RELATED WORK. ASBESTOS RELATED WORK SHALL BE DONE IN ACCORDANCE WITH CALIFORNIA GENERAL INDUSTRIAL SAFETY ORDERS, TITLE 8, SECTION 341.6 THROUGH 341.14. ASBESTOS IN THE WORK ENVIRONMENT IS REGULATED BY TITLE 8, SECTION 5208.

THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AND DISTRICT REGULATION 11-2-401.3 REQUIRES EVERY RENOVATION INVOLVING THE REMOVAL OF 100 SQ.FT., LN.FT, OR GREATER OF REGULATED ASBESTOS CONTAINING MATERIAL, AND FOR EVERY DEMOLITION (EVEN WHEN NO ASBESTOS IS PRESENT), A NOTIFICATION MUST BE SENT TO THE BAAQMD AT LEAST 10 WORKING DAYS PRIOR TO COMMENCEMENT OF DEMOLITION / RENOVATION.

ALL BUILDING MATERIALS MUST BE ASBESTOS FREE.

THESE DOCUMENTS DO NOT ADDRESS CONTAINMENT FOR EXISTING AREAS OF ASBESTOS WHICH MAY BE DISCOVERED DURING CONSTRUCTION. THE OWNER'S ABATEMENT SUBCONTRACTOR IS SOLELY RESPONSIBLE FOR THE DETECTION, REMOVAL, AND THE DISPOSAL OF ANY EXISTING ASBESTOS MATERIAL. ARCHITECTURAL AND ENGINEERING FEES FOR ADDITIONAL DESIGN EFFORT TO OBTAIN STATE APPROVALS, AS WELL AS THE COST OF ANY REPAIRS, FOR DAMAGE CAUSED OR REPLACEMENT OF EXISTING SYSTEMS TO REMAIN, DUE TO WORK PERFORMED BY THE ASBESTOS ABATEMENT SUBCONTRACTOR, SHALL BE THE RESPONSIBILITY OF SAID SUBCONTRACTOR.

CONSTRUCTION SCHEDULING

CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION OPERATIONS WITH OWNER'S REPRESENTATIVE PRIOR TO SCHEDULING AND START OF THE WORK. CONTRACTOR SHALL PROVIDE PROTECTION TO ALL EXISTING SPACES AND SYSTEMS WHICH ARE IN USE, ADJOINING THE PROJECT, AND NOT PART OF THE PROJECT.

INTERIOR FINISHES

INTERIOR FINISHES AND ALL WALL COVERING MATERIAL SHALL CONFORM TO CCR TITLE 24, PART 2, CHAPTER 8.

TITLE 24 COMPLIANCE

THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS (2016 CBC). SHOULD ANY EXISTING CONDITIONS BE DISCOVERED NOT COVERED BY THE CONTRACT DOCUMENTS WHERE IN THE FINISHED WORK DOES NOT COMPLY WITH 2016 CBC, A CONSTRUCTION CHANGE DOCUMENT OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK, SHALL BE SUBMITTED TO AND APPROVED BY THE DSA BEFORE PROCEEDING WITH THE WORK.

ADMINISTRATIVE REQUIREMENTS FROM PART 1 , TITLE 24, C.C.R.

- ADDENDA AND CHANGES AS PER SECTION 4-338
- INSPECTOR APPROVED BY DSA
- INSPECTOR AND CONTINUOUS INSPECTION OF WORK PER SECTION 4-333 (B) AND 4-342
- TESTS AND TESTING LABORATORY PER SECTION 4-335 (OWNER SHALL PAY THE TESTING LABORATORY)
- SPECIAL INSPECTION PER SECTION 4-333 (C)
- CONTRACTOR SHALL SUBMIT VERIFIED REPORT OR SECTION 4-336 & 4-343 (C)
- ADMINISTRATION OR CONSTRUCTION PER PART 1, TITLE 24, C.C.R.
  - DUTIES OF ARCHITECT, STRUCTURAL ENGINEER, OR PROFESSIONAL ENGINEER PER SECTION 4-333 (A) AND 4-341
  - DUTIES OF CONTRACTOR PER SECTION 4-343
  - VERIFIED REPORTS PER SECTION 4-343 AND 4-336
- A COPY OF PARTS 1 TO 5 OF TITLE 24 SHALL BE KEPT AND AVAILABLE IN THE FIELD DURING CONSTRUCTION
- DSA SHALL BE NOTIFIED AT START OF CONSTRUCTION AND PRIOR TO PLACEMENT OF CONCRETE PER SECTION 4-331
- SUPERVISION BY DSA PER SECTION 4-334
- DSA IS NOT SUBJECT TO ARBITRATION

PIPES, DUCTS AND CONDUIT - SUPPORT AND BRACING

PIPES, DUCTS, AND CONDUITS SHALL BE SUPPORTED AND BRACED PER THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS", OPA 0003 SUPERSTRUT, OPA 0114 B-LINE, OPA 02 MASTER, OR OPA 0485 ISAT SEISMIC RESTRAINT SYSTEMS FOR PIPES AND CONDUITS.

DRILLED-IN EXPANSION ANCHORS

WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER DRIVEN PINS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. WHEN INSTALLING THEM INTO EXISTING PRESTRESSED CONCRETE (PRE- OR POST-TENSIONED), LOCATE THE PRESTRESSED TENDONS BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTALLATION. EXERCISE EXTREME CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.

GENERAL NOTES

ADMINISTRATIVE REQUIREMENTS

- ADDENDA MUST BE SIGNED BY ARCHITECT AND APPROVED BY DSA
- NO CHANGED OR REVISIONS SHALL BE MADE FOLLOWING WRITTEN APPROVAL WHICH AFFECTS ACCESS COMPLIANCE ITEM UNLESS SUCH CHANGES TO REVISIONS ARE SUBMITTED TO DSA FOR APPROVAL.
- SUBSTITUTIONS AFFECTING DSA REGULATED ITEMS SHALL BE SUBMITTED AS A CONSTRUCTION CHANGE DOCUMENT OR ADDENDA, AND SHALL BE APPROVED BY DSA PRIOR TO FABRICATION AND INSTALLATION
- CONSTRUCTION CHANGE DOCUMENTS MUST BE SIGNED BY THE FOLLOWING:
  - -- ARCHITECT OR ENGINEER OF RECORD
  - -- STRUCTURAL ENGINEER (WHEN APPLICABLE)
  - -- DELEGATED PROFESSIONAL ENGINEER
  - -- DSA
- MATERIALS AND THEIR INSTALLATIONS SHALL COMPLY WITH APPLICABLE CODES.
- PER CBC 11B-104.1 "ALL DIMENSIONS ARE SUBJECT TO CONVENTIONAL INDUSTRY TOLERANCES EXCEPT WHERE THE REQUIREMENT IS STATED AS A RANGE WITH SPECIFIC MINIMUM AND MAXIMUM END POINTS.

ABBREVIATIONS

(REFER TO CONSULTANT DRAWINGS FOR ADDITIONAL ABBREVIATIONS)

A.F.F.	ABOVE FINISHED FLOOR	LAB.	LABORATORY
A.P.	ACCESS PANEL	LAM.	LAMINATE
ACT	ACOUSTIC TILE	LAV.	LAVATORY
ADJ.	ADJUSTABLE	M.B.	MACHINE BOLT
ALUM.	ALUMINUM	M.S.	MACHINE SCREW
A.B.	ANCHOR BOLT	M.H.	MANHOLE
APPROX.	APPROXIMATELY	MFG.	MANUFACTURER
ARCH.	ARCHITECT	M.B.	MARKER BOARD
AC	ASPHALTIC CONCRETE	M.O.	MASONRY OPENING
@	AT	MATL.	MATERIAL
B.M.	BENCH MARK	MAX.	MAXIMUM
BLKG.	BLOCKING	MECH.	MECHANICAL
BD.	BOARD	MTL.	METAL
B.W.	BOTH WAYS	MIN.	MINIMUM
BOT.	BOTTOM	MISC.	MISCELLANEOUS
BLDG.	BUILDING	MTD.	MOUNTED
B.U.R.	BUILT-UP ROOFING	MUL.	MULLION
B.B.	BULLETIN BOARD	(N)	NEW
CAB.	CABINET	NOM.	NOMINAL
C.I.	CAST IRON	N.I.C.	NOT IN CONTRACT
C.B.	CATCH BASIN and/or CHALKBOARD	N.T.S.	NOT TO SCALE
CLG.	CEILING	NO. or #	NUMBER
CEM.	CEMENT	OBS.	OBSCURE
C.C or O.C.	CENTER TO CENTER CENTERLINE	OCC.	OCCUPANT(CY)
		O.C.	ON CENTER
CER. TILE	CERAMIC TILE	OPNG.	OPENING
C.O.	CLEANOUT	OPP.	OPPOSITE
C.O.T.G.	CLEANOUT TO GRADE	O.H.	OPPOSITE HAND
CLR.	CLEAR	O.F.O.S.	OUTSIDE FACE OF STUD
C.A.H.R.	CLEAR ALL HEART REDWOOD	O.H.W.S.	OVAL HEAD WOOD SCREW
		O.D.	OVERFLOW DRAIN and/or OUTSIDE DIAMETER
C.W.	COLD WATER		
COL.	COLUMN	O.F.C.I.	OWNER FURNISHED and CONTRACTOR INSTALLED
COM.	COMMON		
CONC.	CONCRETE	PR.	PAIR
C.P.	CONCRETE PIPE	PART.	PARTITION
CONST.	CONSTRUCTION	PL	PLATE
C.H.	CONSTRUCTION HEART	d	PENNY (NAILS)
C.J.	CONSTRUCTION JOINT	PLAS.	PLASTER
CONT.	CONTINUOUS	PLYWD.	PLYWOOD
CONTR.	CONTRACTOR	P.V.C.	POLY VINYL CHLORIDE
CTR.	COUNTER	P.A.F.	POWDER ACTUATED FASTENER
CTSK.	COUNTER SUNK		
DET.	DETAIL	P.T.	PRESSURE TREATED
DIA. or Ø	DIAMETER	P.L.	PROPERTY LINE
DIM.	DIMENSION	R. or RAD.	RADIUS
D.A.	DISABLED ACCESS	R.W.L.	RAIN WATER LEADER
DW	DISHWASHER	RWD./R.W.	REDWOOD
DISP.	DISPOSAL	R.C.P.	REINFORCED CONCRETE PIPE
DO	DITTO	REINF.	REINFORCING
DR.	DOOR	REQ'D	REQUIRED
D.S.	DOWNSPOUT	R.A.G.	RETURN AIR GRILLE
DWG.	DRAWING	R.E.	RIM ELEVATION
D.F.	DRINKING FOUNTAIN and/or DOUGLAS FIR	R.D.	ROOF DRAIN
		RM.	ROOM
EA.	EACH	R.O.	ROUGH OPENING
E.W.	EACH WAY	RND.	ROUND
ELEC.	ELECTRIC or ELECTRICAL	R.H.M.S.	ROUND HEAD METAL SCREW
E.W.C.	ELECTRIC WATER COOLER	R.H.W.S.	ROUND HEAD WOOD SCREW
EL. or ELEV.	ELEVATION	S.D.	SASH DIMENSION
		SSD.	SEE STRUCTURAL DRAWINGS
ENCL.	ENCLOSE and/or ENCLOSURE	S.T.S.M.S.	SELF TAPPING SHEET METAL SCREW
EQ.	EQUAL		
EQUIP.	EQUIPMENT	SHEATH.	SHEATHING
(E)	EXISTING	SHT.	SHEET METAL
EX.	EXPANSION	S.M.	SHEET METAL SCREW
E.J.	EXPANSION JOINT	S.M.S.	
EXP.	EXPOSED	S.O.V.	SHUT OFF VALVE
EXT.	EXTERIOR	SIM.	SIMILAR
F.O.C.	FACE OF CONCRETE	S.C.	SOLID CORE
F.O.M.	FACE OF MASONRY	SPEC.	SPECIFICATION
F.O.S.	FACE OF STUD	SQ.	SQUARE
F.O.F.	FACE OF FINISH	S.F.	SQUARE FEET
FIN.	FINISH	STAG.	STAGGERED
F.F.	FINISHED FLOOR	STD.	STANDARD
F.S.	FINISH SLAB	S.S.	STAINLESS STEEL
F.E.	FIRE EXTINGUISHER	STL.	STEEL
F.E.C.	FIRE EXTINGUISHER CABINET	STOR.	STORAGE
F.H.	FIRE HYDRANT	STRUCT.	STRUCTURAL
F.H.C.	FIRE HOSE CABINET	S.A.G.	SUPPLY AIR GRILLE
F.H.M.S.	FLAT HEAD METAL SCREW	TEL.	TELEPHONE
F.H.W.S.	FLAT HEAD WOOD SCREW	T.T.B.	TELEPHONE TERMINAL BOARD
FL. or FLR.	FLOOR	TERR.	TERRAZZO
F.D.	FLOOR DRAIN	THRES.	THRESHOLD
FTG.	FOOTING	T&G	TONGUE & GROOVE
FND.	FOUNDATION	T.J.	TOOLED JOINT
GALV.	GALVANIZED	T.O.B.	TOP OF BEAM
G.I.	GALVANIZED IRON	T.O.C.	TOP OF CURB or CONCRETE
GA.	GAUGE	T.O.S.	TOP OF STEEL or SHEATHING
GL.	GLASS	T.O.W.	TOP OF WALK
GLU-LAM	GLUE-LAMINATED	TYP.	TYPICAL
GRD.	GRADE	U.O.N.	UNLESS OTHERWISE NOTED
GYP. BD.	GYPSUM BOARD	U.O.S.	UNLESS OTHERWISE SHOWN
HDW.	HARDWARE	V.T.R.	VENT THROUGH ROOF
HT.	HEIGHT	VERT.	VERTICAL
H.C.	HOLLOW CORE	V.G.	VERTICAL GRAIN
H.M.	HOLLOW METAL	V.I.F.	VERIFY IN FIELD
HORIZ.	HORIZONTAL	V.C.T.	VINYL COMPOSITION TILE
H.B.	HOSE BIBB	V.W.C.	VINYL WALL COVERING
HR.	HOUR	V.C.P.	VITRIFIED CLAY PIPE
I.D.	INSIDE DIAMETER	W.C.	WATER CLOSET
INSUL.	INSULATION	W.H.	WATER HEATER
INT.	INTERIOR	WP.	WATERPROOF
INV.	INVERT	W.R.	WATER RESISTANT
JAN.	JANITOR	W.W.M.	WELDED WIRE MESH
JT	JOINT	W.D.	WINDOW DIMENSION
J.H.	JOIST HANGER	W/	WITH
K.D.	KILN DRIED	W/O	WITHOUT
		WD.	WOOD

BUILDING CODES AND STANDARDS:

2016	CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
2016	CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R. (2015 INTERNATIONAL BUILDING CODE, VOLUMES 1 AND 2, WITH 2016 CALIFORNIA AMENDMENTS)
2016	CALIFORNIA ELECTRIC CODE (CEC), PART 3, TITLE 24, C.C.R. (2014 NATIONAL ELECTRIC CODE WITH 2016 CALIFORNIA AMENDMENTS).
2016	CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R. (2015 UNIFORM MECHANICAL CODE WITH 2016 CALIFORNIA AMENDMENTS).
2016	CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R. (2015 UNIFORM PLUMBING CODE WITH 2016 CALIFORNIA AMENDMENTS).
2016	CALIFORNIA ENERGY CODE (CENC), PART 6, TITLE 24, C.C.R.
2016	CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, C.C.R. (2015 INTERNATIONAL FIRE CODE WITH 2016 CALIFORNIA AMENDMENTS).
2016	CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24, C.C.R.
2016	CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24, C.C.R.
2013	ASME A17.1 (W/A17.1a/CSA B44a-08 ADDENDA) SAFETY CODE FOR ELEVATORS AND ESCALATORS
2010	ADA STANDARDS FOR ACCESSIBLE DESIGN (28 CFR PART 35 FOR TITLE II ENTITIES)

CCR TITLE-19, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

NFPA 13	INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 14	INSTALLATION OF STANDPIPE & HOSE SYSTEMS (CA AMENDED)	2013 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS	2013 EDITION
NFPA 17A	WET CHEMICAL EXTINGUISHING SYSTEM	2013 EDITION
NFPA 20	STATIONARY FIRE PUMPS TO FIRE PROTECTION	2016 EDITION
NFPA 22	WATER TANKS FOR PRIVATE FIRE PROTECTION	2013 EDITION
NFPA 24	PRIVATE FIRE SERVICE MAINS (CA AMENDED).	2016 EDITION
NFPA 25	INSPECTION, TESTING AND MAINTENANCE OF WATER BASED FIRE PROTECTION SYSTEMS	2013 CALIFORNIA EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CA AMENDED)	2016 EDITION
NFPA 80	FIRE DOORS AND OTHER OPENING PROTECTIVES	2016 EDITION
NFPA 92	STANDARD FOR SMOKE CONTROL SYSTEMS	2012 EDITION
NFPA 110	EMERGENCY AND STANDBY POWER SYSTEMS	2013 EDITION
NFPA 170	STANDARD FOR FIRE SAFETY AND EMERGENCY SYMBOLS	2013 EDITION
NFPA 253	CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS	2006 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2015 EDITION
ICC 300	STANDARDS FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS	2012 EDITION
SFM 12-10-1	POWER OPERATED EXIT DOORS	
SFM 12-10-2	SINGLE POINT LATCHING OR LOCKING DEVICES	
SFM 12-10-3	EMERGENCY EXIT & PANIC HARDWARE	
UL 38	MANUAL OPERATING SIGNAL BOXES	1999/2005 EDITION
UL 268	SMOKE DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	2009 EDITION
UL 268A	SMOKE DETECTORS DUCT APPLICATIONS	1998/2003 EDITION
UL 300	FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2005 (R2010)
UL 305	PANIC HARDWARE	2012 EDITION
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, AND ACCESSORIES	2003 EDITION
UL 521	HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 EDITION
UL 864	CONTROL UNITS FOR FIRE PROTECTIVE SIGNALING SYSTEMS (W/ REVISIONS THROUGH JULY 14, 2005)	2003 EDITION
UL 1971	SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 EDITION

COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION AND CBC CHAPTER 33, SAFETY DURING CONSTRUCTION WILL BE ENFORCED.

SYMBOLS LEGEND

- SECTION / EXTERIOR ELEVATION — 1 / A8.1 — SECTION IDENTIFICATION; SHEET WHERE SECTION IS DRAWN
- DETAIL — 4 / A9.1 — DETAIL IDENTIFICATION; SHEET WHERE DETAIL IS DRAWN
- INTERIOR ELEVATION — 1 / A7.1 — INDICATES ELEVATION SHOWN; SHEET WHERE ELEVATION IS DRAWN
- ROOM IDENTIFICATION — OFFICE / 102 — ROOM NAME; ROOM NUMBER
- SPECIFIC NOTE — 3
- DOOR DESIGNATION — 102A
- WINDOW DESIGNATION — A
- REVISION — 1 — CLOUD AROUND REVISION
- FINISH NUMBER — 127 — SEE SPECS AND I.E. DWGS.
- EQUIPMENT NUMBER — 116 — SEE EQUIPMENT SCHEDULE
- CEILING HEIGHT — +8'-0"
- WALL TYPE SYMBOL — A
- MATCH LINE
- ELEV. HEIGHT — +8'-0"
- F.O.S., U.O.N.
- FACE OF FINISH

PROJECT SUMMARY

THE FOLLOWING IS A SUMMARY OF THE SCOPE OF WORK:

-HVAC REPLACEMENT IN EXISTING BUILDINGS;
ADMINISTRATION/KINDERGARTEN,CLASSROOMS-A,B,C,D, MULTI-PURPOSE, AND ASSOCIATED SITE WORK RELATED TO THE INSTALLATION OF CONDENSING UNITS/PUMPS INCLUDING PLUMBING, MECHANICAL AND ELECTRICAL WORK.
-INTERIOR LIGHTING AND FIRE ALARM UPGRADES IN BUILDINGS: ADMINISTRATION/KINDERGARTEN, CLASSROOMS-A,B,C,D & MULTIPURPOSE.
-ACCESSIBILITY UPGRADES

THERE ARE NO DEFERRED SUBMITTALS FOR THIS PROJECT.

DESIGN TEAM

ARCHITECT
SUGIMURA FINNEY ARCHITECTS
2155 SOUTH BASCOM AVENUE SUITE 200
CAMPBELL, CALIFORNIA 95008
(408) 879-0600
(408) 377-6066 FAX
ATTN: MARK FINNEY MARK@SUGIMURA.COM

STRUCTURAL ENGINEER
HOHBACH-LEWIN, INC.
545 SANSOME STREET, SUITE 850
SAN FRANCISCO, CA 94111
(415)318-8520 X-310
ATTN: STUART LOWE, SLOWE@HOHBACH-LEWIN.COM

MECHANICAL AND PLUMBING ENGINEER
AXIOM ENGINEERS
22 LOWER RAGSDALE DRIVE, SUITE A
MONTEREY, CALIFORNIA 93940
(831) 649-8000
(831) 649-8038 FAX
ATTN: METINS@AXIOMENGINEERS.COM

ELECTRICAL AND FIRE ALARM ENGINEER
ALFATECH
1321 RIDDER PARK DRIVE, #50
SAN JOSE, CALIFORNIA 95131
(408) 487-1269
(408) 781-7561 FAX
ATTN: JANE CHEN, JANE.CHEN@ATCE.COM

DRAWING INDEX

T1 TITLE SHEET

ARCHITECTURAL

A0.1 SITE PLAN
A0.2 SITE DETAILS
A0.3 SITE DETAILS
A0.4 SITE DETAILS
A0.5 SITE DETAILS
A2.1 DEMOLITION/NEW FLOOR PLANS- ADMIN/KINDERGARTEN
A2.2 DEMOLITION/NEW FLOOR PLANS- MULTIPURPOSE BUILDING
A2.3 DEMOLITION/NEW FLOOR PLANS- BUILDING A
A2.4 DEMOLITION/NEW FLOOR PLANS- BUILDING B
A2.5 DEMOLITION/NEW FLOOR PLANS- BUILDING C
A2.6 DEMOLITION/NEW FLOOR PLANS- BUILDING D
A3.1 REFLECTED CEILING PLAN- ADMIN/KINDERGARTEN
A3.2 REFLECTED CEILING PLAN MULTIPURPOSE BUILDING
A3.3 REFLECTED CEILING PLAN- BUILDING A
A3.4 REFLECTED CEILING PLAN- BUILDING B
A3.5 REFLECTED CEILING PLAN- BUILDING C
A3.6 REFLECTED CEILING PLAN- BUILDING D
A9.1 TYPICAL DETAILS
A9.2 TYPICAL DETAILS
A9.3 TYPICAL DETAILS

STRUCTURAL

S1.0 GENERAL STRUCTURAL NOTES & WOODEN DETAILS
S2.1 PARTIAL FOUNDATION & PARTIAL ROOF FRAMING PLAN

MECHANICAL

M0.1 LEGENDS & NOTES - MECHANICAL
M0.2 SCHEDULES - MECHANICAL
M2.1 FLOOR PLANS BUILDING 1 - MECHANICAL
M2.2 FLOOR PLANS MULTI-PURPOSE - MECHANICAL
M2.3 FLOOR PLANS BUILDING A - MECHANICAL
M2.4 FLOOR PLANS BUILDING B - MECHANICAL
M2.5 FLOOR PLANS BUILDING C - MECHANICAL
M2.6 FLOOR PLANS BUILDING D - MECHANICAL
M3.1 PIPING PLANS BUILDINGS 1 & MP - MECHANICAL
M3.2 PIPING PLANS BUILDINGS A & B - MECHANICAL
M3.3 PIPING PLANS BUILDINGS C & D - MECHANICAL
M5.1 CONTROLS - MECHANICAL
M5.2 CONTROLS - MECHANICAL
M5.3 CONTROLS - MECHANICAL
M6.1 DETAILS - MECHANICAL
M6.2 DETAILS - MECHANICAL
M7.1 TITLE 24 DOCUMENTATION - MECHANICAL

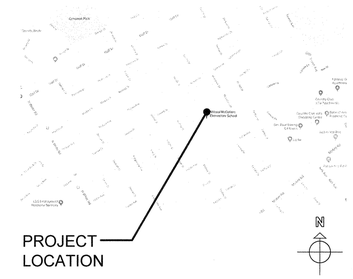
PLUMBING

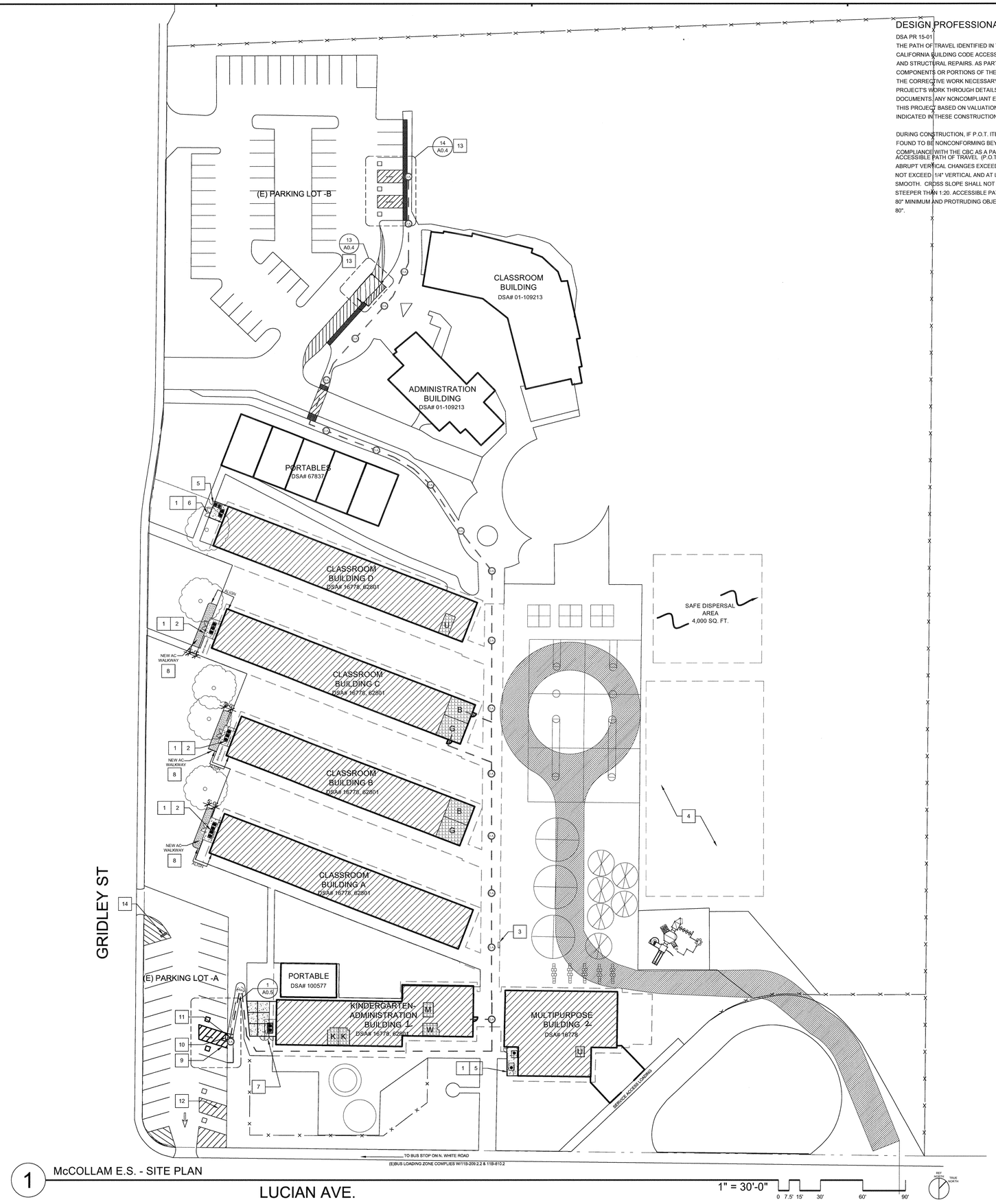
P0.1 LEGENDS, SCHEDULES & NOTES -PLUMBING
P2.1 FLOOR PLANS BUILDING 1 - PLUMBING
P2.2 FLOOR PLANS MULTI-PURPOSE - PLUMBING
P2.3 FLOOR PLANS BUILDING A - PLUMBING
P2.4 FLOOR PLANS BUILDING B - PLUMBING
P2.5 FLOOR PLANS BUILDING C - PLUMBING
P2.6 FLOOR PLANS BUILDING D - PLUMBING

ELECTRICAL

E0.1 ELECTRICAL SYMBOLS, ABBREVIATIONS, GENERAL NOTES AND DRAWING INDEX
E0.2 ELECTRICAL - TITLE 24 COMPLIANCE
E1.1 ELECTRICAL SITE PLAN
E2.1 BUILDING ADMIN-KINDER ELECTRICAL PLANS
E2.2 BUILDING MULTI-USE ELECTRICAL PLANS
E2.3 BUILDING A ELECTRICAL PLANS
E2.4 BUILDING B ELECTRICAL PLANS
E2.5 BUILDING C ELECTRICAL PLANS
E2.6 BUILDING D ELECTRICAL PLANS
E4.1 FIXTURE SCHEDULE AND DETAILS
E4.2 PANEL SCHEDULES
E7.1 FIRE ALARM NOTES AND DETAILS
E7.2 FIRE ALARM CALCULATIONS

VICINITY MAP


PROJECT LOCATION
Millard McCollam Elementary School
Grandvue Park
Sea Breeze Park
Lucian Green Park
Joseph George Middle School
Ocala Middle School
Joseph George Middle School
Ocala Middle School
Sea Breeze Park
Lucian Green Park
Grandvue Park
Millard McCollam Elementary School
Ocala Middle School
Joseph George



1 McCOLLAM E.S. - SITE PLAN

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:

DSA PR 15-01

THE PATH OF TRAVEL IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENT 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 NONCOMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) 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 NONCOMPLIANT 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 THIS PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

ACCESSIBLE PATH OF TRAVEL (P.O.T.), AS INDICATED, IS A COMMON BARRIER FREE ACCESS ROUTE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING A 1/2" BEVELED AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL AND AT LEAST 48" WIDE. THE PATH SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH. CROSS SLOPE SHALL NOT BE STEEPER THAN 1:48 AND SLOPE IN THE DIRECTION OF TRAVEL SHALL NOT BE STEEPER THAN 1:20. ACCESSIBLE PATH 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".

GENERAL NOTES

A. REFER TO MECHANICAL, ELECTRICAL, DRAWINGS FOR EXTENT OF MECHANICAL, ELECTRICAL WORK.
B. PROVIDE TEMPORARY FENCING PERIMETER TYP. AT AREA OF CONSTRUCTION, SEE DETAIL 1/A0.2.
C. REMOVE ALL EXISTING ITEMS/EQUIPMENT TO ALLOW NEW CONSTRUCTION, INCLUDING BUT NOT LIMITED TO TREES, SHRUBS, FENCING, ACCONC. PAVING, STORAGE UNITS
D. GENERAL CONTRACTOR SHALL SURVEY AREA OF SITE CONSTRUCTION PRIOR TO DEMOLITION WORK TO VERIFY LOCATION OF EXISTING UNDERGROUND UTILITIES, RELOCATE UNDERGROUND UTILITIES AS NEEDED TO ALLOW THE NEW WORK
E. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE ON-SITE A/O OFF-SITE STORAGE AND PROPER PROTECTION AGAINST LOSS, DAMAGE OR DETERIORATION OF NEW MATERIALS & EQUIPMENT ACQUIRED PRIOR TO THE START OF CONSTRUCTION. ON-SITE DELIVERY AND INSTALLATION OF PORTABLE CONSTRUCTION STORAGE CONTAINERS MUST BE COORDINATED IN FIELD WITH THE CONSTRUCTION MANAGER.
F. GENERAL CONTRACTOR IS RESPONSIBLE FOR MOVING, STORAGE, AND PROTECTION OF EXISTING FURNITURE AND EQUIPMENT WITHIN THE AREA OF CONSTRUCTION. GC WILL DOCUMENT EXISTING CONDITIONS AND COORDINATE WITH THE CONSTRUCTION MANAGER PRIOR TO START OF CONSTRUCTION

SITE PLAN NOTES

1. MECHANICAL UNIT O/ CONCRETE PAD, SEE SHEET A0.2 DETAIL 7, AND MECHANICAL DRAWINGS.
2. PROVIDE FENCING ENCLOSURE AND GATES, SEE SHEET A0.2 FOR CHAIN LINK FENCE DETAILS 2-5,11, & 13-14/A0.2.
3. REMOVE AND REPLACE (E) DRINKING FOUNTAIN WITH A NEW ACCESSIBLE WALL MOUNTED WATER FOUNTAIN WITH GUARDRAILS SEE DETAILS 2 AND 10/A0.4.
4. AREA FOR STORAGE UNITS. CONTRACTOR SHALL MOVE ALL FURNITURE AND EQUIPMENT FROM ALL ROOMS INTO STORAGE UNITS PRIOR TO CONSTRUCTION WORK AND MOVE BACK AFTER COMPLETION OF WORK. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND REMOVAL OF STORAGE UNITS ON SITE, COORDINATE LOCATION IN FIELD WITH OWNER.
5. NEW CHAIN LINK FENCE AND SINGLE GATE, SEE 4/A0.3 & 2,4,5,11/A0.2.
6. PROVIDE FENCING ENCLOSURE AND GATES, SEE SHEET A0.2 FOR CHAIN LINK FENCE DETAILS 2-5,11, & 3/A0.3.
7. PROVIDE FENCING ENCLOSURE AND GATES, SEE SHEET A0.2 FOR CHAIN LINK FENCE DETAILS 2-5,11, & 1/A0.3 AND 15/A0.2 FOR NEW CONC. PAD.
8. NEW AC WALKWAY, SEE DETAIL 12/A0.2.
9. STRIPE NEW ACCESSIBLE STALLS AND PROVIDE SIGNAGE, SEE DETAIL 1/A0.5 & 18/A0.4
10. REMOVE (E)/CONC. WHEEL STOP.
11. NEW ACCESSIBLE CURB RAMP, SEE DETAIL 2/A0.5.
12. REMOVE ACCESSIBLE STRIPING AND SIGNS.
13. EXISTING ACCESSIBLE PARKING STALLS/LOADING ZONE & SIGNAGE, SEE SHEET A0.4 FOR DETAILS UNDER DSA 01-109213.
14. NEW SIGN PER DETAIL 20/A0.4

GRAPHIC KEY

- EXISTING PROPERTY LINE
- ROOF OVERHANG
- CHAINLINK FENCE
- WOOD FENCE
- DECORATIVE FENCE
- ACCESSIBLE PATH OF TRAVEL
- FIRE DEPARTMENT ACCESS. (FIRE DEPARTMENT ACCESS IS 20'-0" WIDE AND RATED FOR 96,000 LBS.)
- EXISTING BUILDING- AREA OF NEW WORK
- EXISTING BUILDING- NO WORK
- EXISTING RESTROOMS- NO WORK
- (E) DRY STAND PIPE
- DF DRINKING FOUNTAIN
- (E) FIRE HYDRANT
- (E) SIGN
- M (E) MENS TOILET ROOM
- W (E) WOMENS TOILET ROOM
- G (E) GIRLS TOILET ROOM
- B (E) BOYS TOILET ROOM
- S (E) STAFF TOILET ROOM
- U (E) UNISEX TOILET ROOM
- K KINDERGARTEN TOILET ROOM

SAFE DISPERSAL AREA

TOTAL 'E' OCCUPANCY BUILDINGS WITH OCCUPANTS = 15,775 SF
15,775 SF @ 20 SF/OCC = 789 OCCUPANTS
TOTAL 'B' OCCUPANCY BUILDINGS WITH OCCUPANTS = 6,020 SF
6,020 SF @ 100 SF/OCC = 60 OCCUPANTS
TOTAL 'A2.1' OCCUPANCY BUILDINGS WITH OCCUPANTS = 4,303 SF
4,303 SF @ 15 SF/OCC = 287 OCCUPANTS
TOTAL OCCUPANTS = = 1136
MINIMUM DISPERSAL AREA REQUIRED: OCCUPANTS x 3 SF/OCC
1136 X 3 SF = 3,408 SF
AREA PROVIDED = 4,000 SF THEREFORE OK.

PARKING COUNT

PARKING LOT	STANDARD STALLS	ACCESSIBLE STALLS PROVIDED	ACCESSIBLE STALLS REQUIRED	COMPLIANT
				√
A	24	2*	1	√
B	53	3*	3	√
TOTAL	77	5	4	√

PER 2016 CBC,TABLE 11B-208.2
* INCLUDING VAN ACCESSIBLE STALL

BUILDING CODE ANALYSIS

BUILDING	CONSTRUCTION TYPE & OCCUPANCY TYPE	AREA (SQ.FT.)
KINDERGARTEN/ ADMIN	VB - B/E	2,888 1,835
MULTI-PURPOSE	VA - A2.1	4,303
BUILDING 'A' CLASSROOMS	VB - E	5,707
BUILDING 'B' CLASSROOMS	VB - E	5,355
BUILDING 'C' CLASSROOMS	VB - E	5,707
BUILDING 'D' CLASSROOMS	VB - E	5,715
PORTABLE 'P1'	VB - E	960
PORTABLES 'P2 & P6'	VB - E	4,800
CLASSROOM BUILDING	VN-1 - E	5,620
ADMINISTRATION BUILDING	VN-1 - B	3,136

COPYRIGHT © 2017

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

LICENSED ARCHITECT MARK C FINNEY No. C-24673 REN. 8-30-19 STATE OF CALIFORNIA

SITE PLAN

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

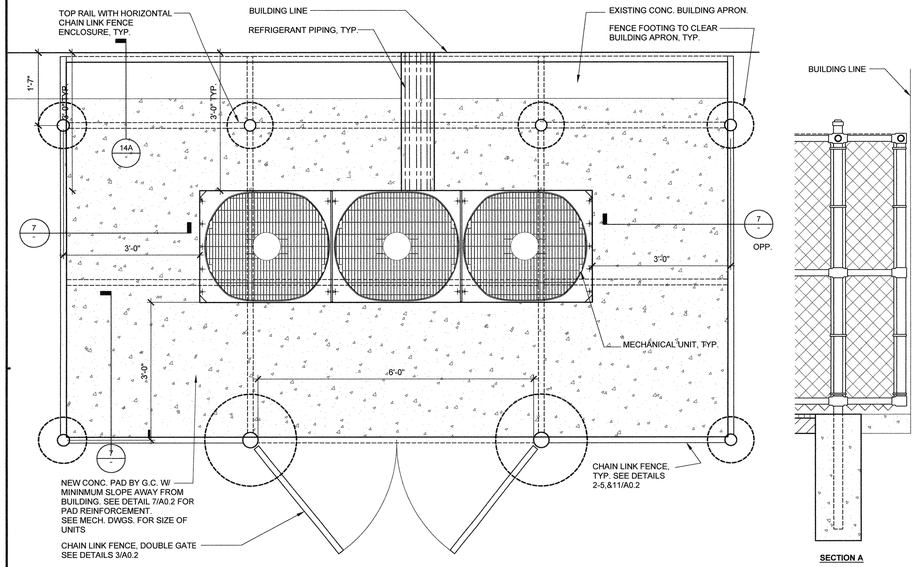
NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
KARLENE GILLONE FLS SS
DATE 5-22-18

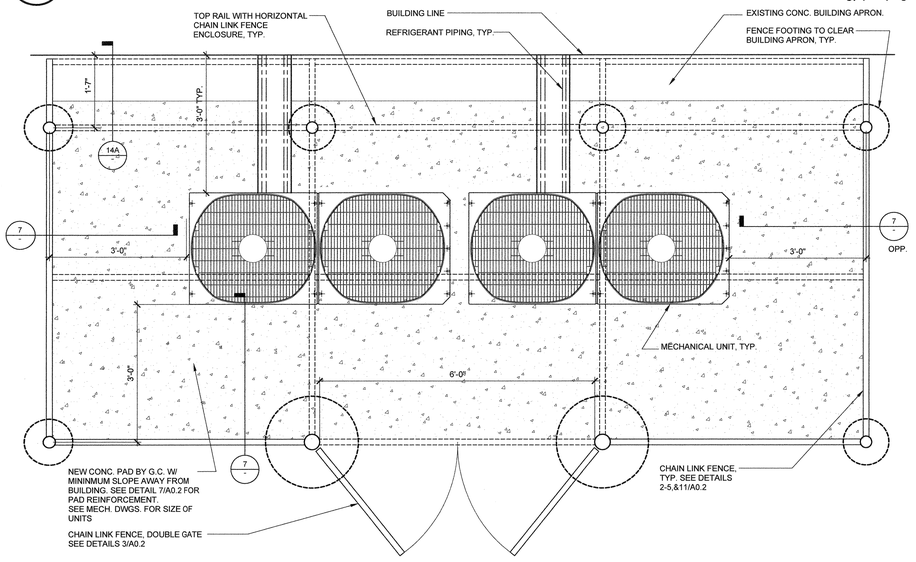
DRAWN BY: NJ
CHECKED BY: MF
JOB NO: 17103
DATE: 10/10/2017

A0.1



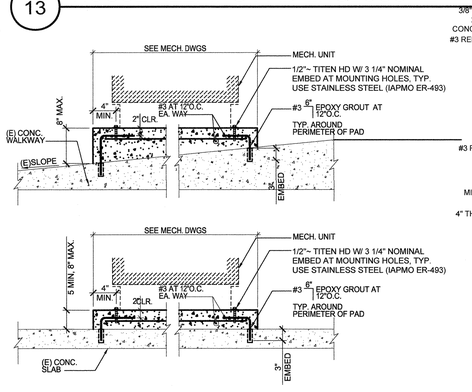
14 HOUSE KEEPING PAD ENCLOSURE

3/4"=1'-0"



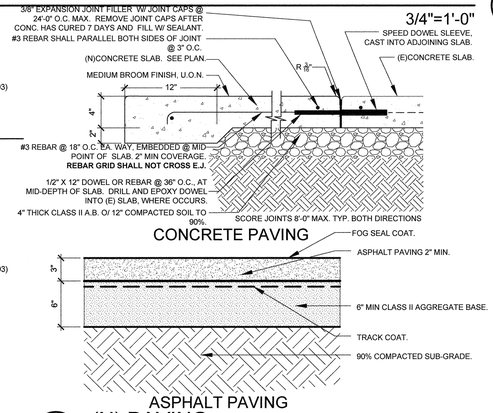
13 HOUSE KEEPING PAD ENCLOSURE

3/4"=1'-0"



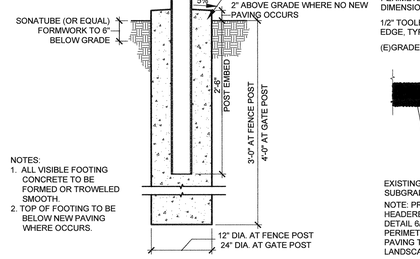
15 HOUSE KEEPING PAD

AT (E) CONCRETE 3/4"=1'-0"



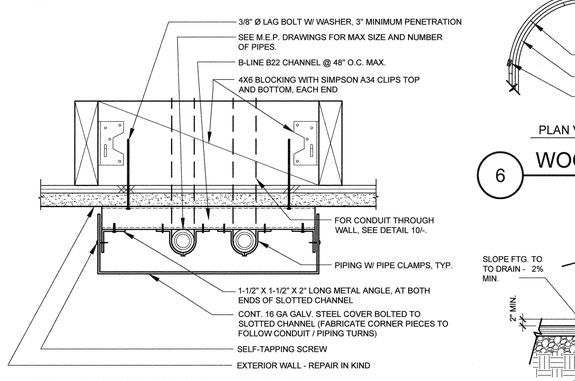
12 (N) PAVING

1-1/2"=1'-0"



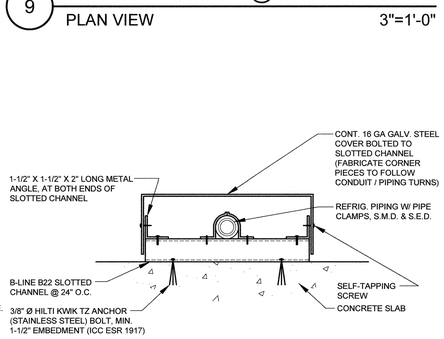
11 TYP. CHAIN LINK FENCE FOOTING

1"=1'-0"



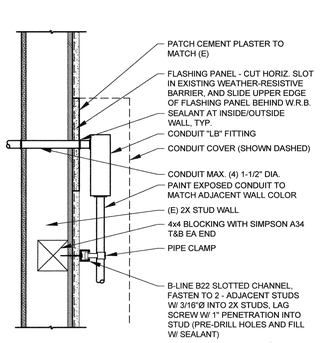
9 CONDUIT COVER @ EXT. WALL

PLAN VIEW 3"=1'-0"



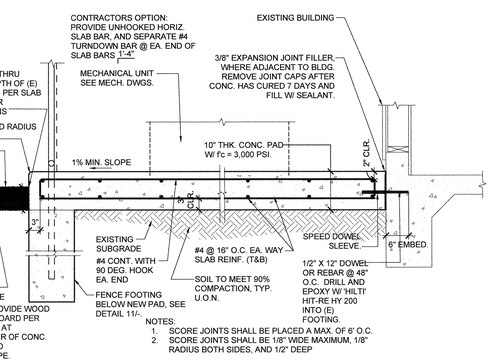
8 CONDUIT COVER SECTION

@ CONCRETE SLAB 3"=1'-0"



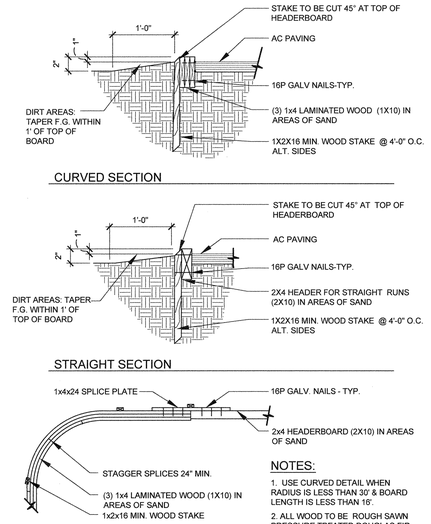
10 CONDUIT THRU WALL

1 1/2"=1'-0"



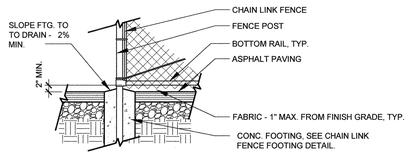
7 HOUSE KEEPING PAD

@ EXISTING PAVING/LANDSCAPE 3/4"=1'-0"

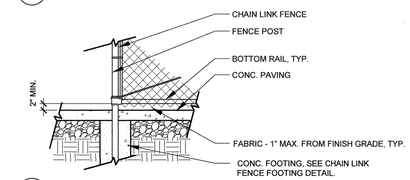


6 WOOD HEADERBOARD

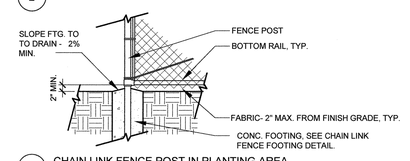
N.T.S



3 CHAIN LINK FENCE POST IN ASPHALT PAVING



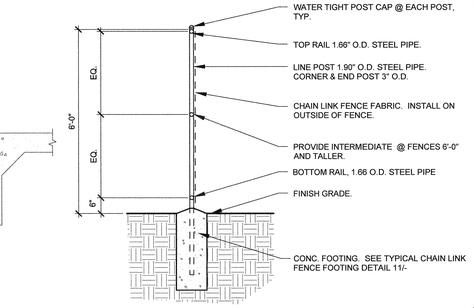
2 CHAIN LINK FENCE POST IN CONCRETE PAVING



1 CHAIN LINK FENCE POST IN PLANTING AREA

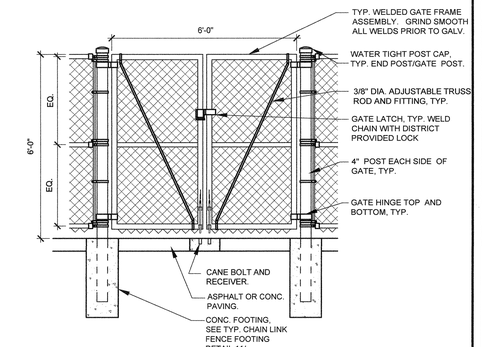
5 CHAIN LINK FENCE CONNECTIONS

1/2"=1'-0"



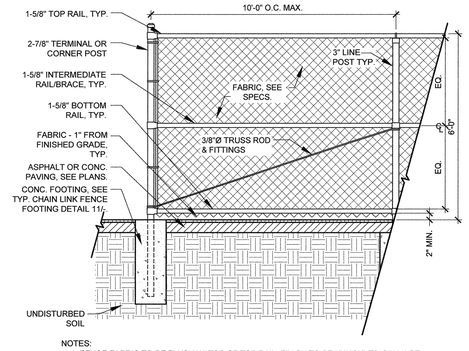
4 TYPICAL CHAIN LINK FENCE

SECTION 1/2"=1'-0"



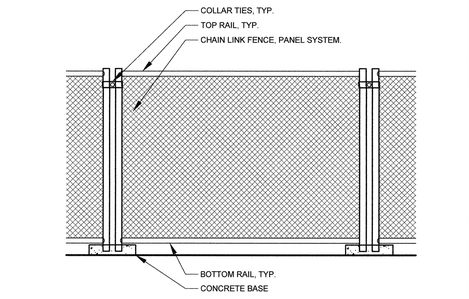
3 CHAIN LINK DOUBLE GATE

1/2"=1'-0"



2 TYPICAL CHAIN LINK FENCE

ELEVATION 1/2"=1'-0"



1 REQ'D TEMPORARY FENCING

CONSTRUCTION FENCING 1/2"=1'-0"

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE. SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

LICENSED ARCHITECT MARK C FINNEY No. C-24873 REN. 9-30-19 STATE OF CALIFORNIA

SITE DETAILS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

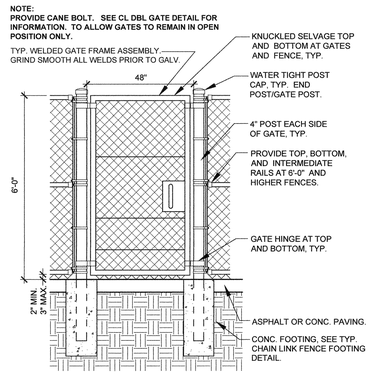
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC FLS SS
DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

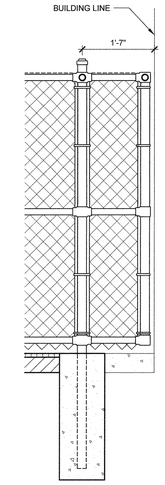
A0.2

COPYRIGHT © 2017

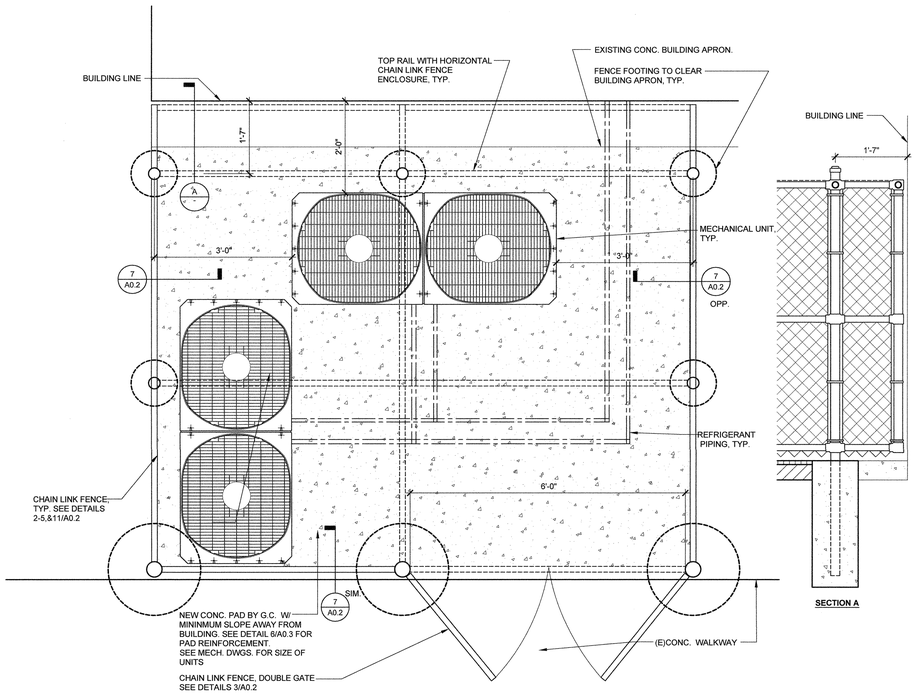


4 CHAIN LINK SINGLE GATE

1/2"=1'-0"

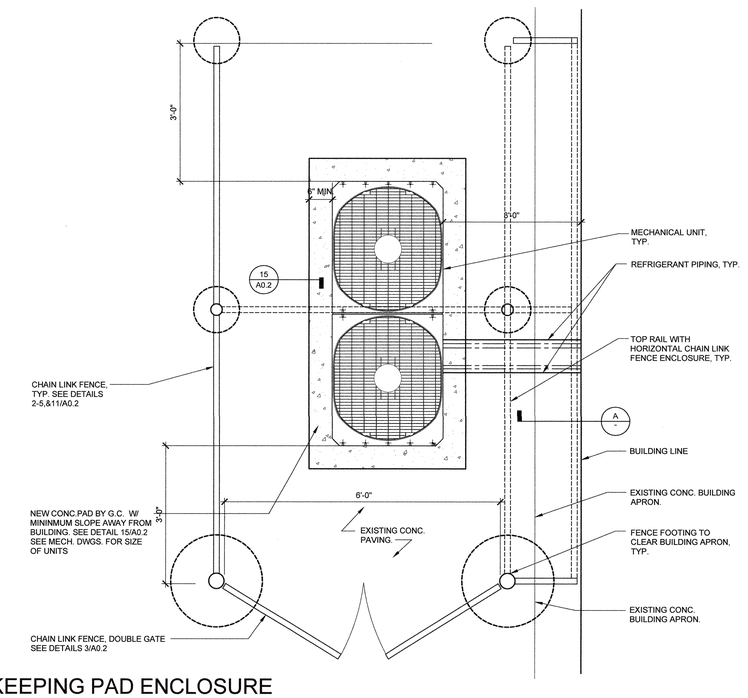


SECTION A



3 HOUSE KEEPING PAD ENCLOSURE

3/4"=1'-0"



1 HOUSE KEEPING PAD ENCLOSURE

3/4"=1'-0"

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-0065

LICENSED ARCHITECT MARK C. FINNEY No. C-24673 REN. 9-30-19 STATE OF CALIFORNIA

SITE DETAILS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

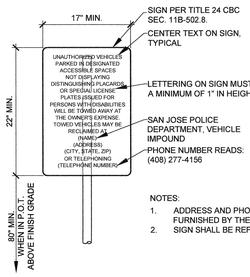
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC 24 FLS MS SS
DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

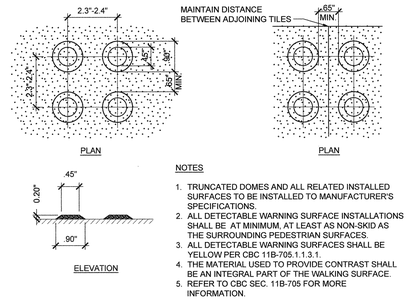
A0.3

COPYRIGHT ©2017



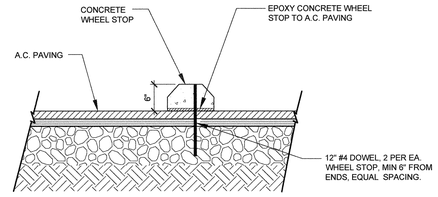
NOTES:
1. ADDRESS AND PHONE NUMBER TO BE FURNISHED BY THE DISTRICT.
2. SIGN SHALL BE REFLECTORIZED FINISH.

20 (N) & (E)ENTRY WARNING SIGN
1"=1'-0"



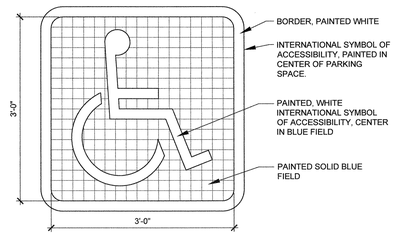
NOTES
1. TRUNCATED DOMES AND ALL RELATED INSTALLED SURFACES TO BE INSTALLED TO MANUFACTURER'S SPECIFICATIONS.
2. ALL DETECTABLE WARNING SURFACE INSTALLATIONS SHALL BE AT MINIMUM, AT LEAST AS NON-SKID AS THE SURROUNDING PEDESTRIAN SURFACES.
3. ALL DETECTABLE WARNING SURFACES SHALL BE YELLOW PER CBC 11B-705.1.1.3.1.
4. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.
5. REFER TO CBC SEC. 11B-705 FOR MORE INFORMATION.

16 TRUNCATED DOMES
1/2"=1'-0"



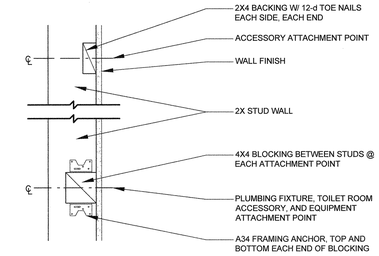
NOTE:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFO. ON WHEEL STOP & EPOXY.

12 WHEEL STOP
1"=1'-0"

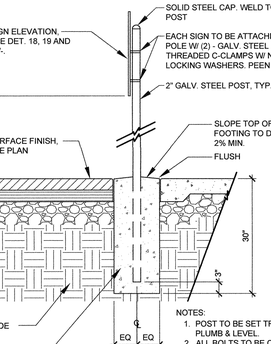


NOTES:
1. GRID LINES ARE SHOWN FOR PROPORTION ONLY AND ARE NOT TO APPEAR AS PART OF SYMBOL.
2. DA SIGNAGE SHALL COMPLY WITH THE CALIFORNIA BUILDING CODE.
3. SYMBOL SHALL BE LOCATED SO THAT IT IS VISIBLE TO A TRAFFIC ENFORCEMENT OFFICER WHEN A VEHICLE IS PARKED IN THE SPACE.
4. PAINT TO BE TRAFFIC PAINT.
5. SYMBOL PROPORTIONS SHALL MATCH CBC FIGURE 11B-703.7.2.1.

8 (N) & (E)INTERNATIONAL SYMBOL FOR ACCESSIBILITY (I.S.A.)
1"=1'-0"

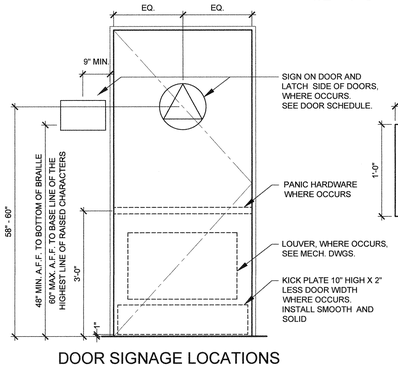


3 TYP. WALL BACKING/ BLOCKING @ 2X STUD WALL
1-1/2"=1'-0"

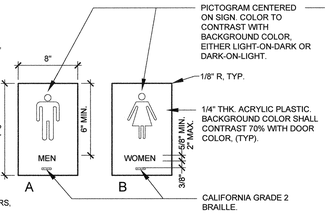


NOTE:
1. FOOTING & ATTACHMENT PER DETAIL 17/-.

19 (E)PASSENGER LOADING ZONE SIGN
ELEVATION 1"=1'-0"



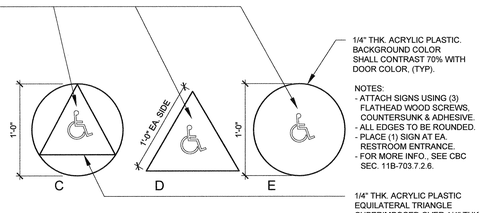
DOOR SIGNAGE LOCATIONS



RESTROOM SIGNS ON WALLS

NOTES:
- ATTACH SIGNS USING (3) FLATHEAD WOOD SCREWS, COUNTERSUNK & ADHESIVE.
- ALL EDGES TO BE ROUNDED.
- PLACE (1) SIGN AT EA. RESTROOM ENTRANCE.
- FOR MORE INFO., SEE CBC SEC. 11B-703.7.2.6.

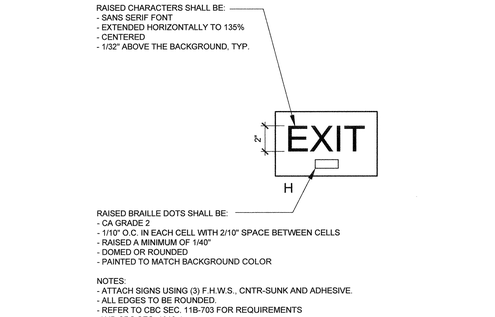
NOTE:
- SIGNS AND IDENTIFICATION REQUIRED BY SECTION 11B-703 AND 1011.4 OF THE CBC SHALL BE INSPECTED PER CBC 11B-703.2.5.



RESTROOM SIGNS ON DOORS

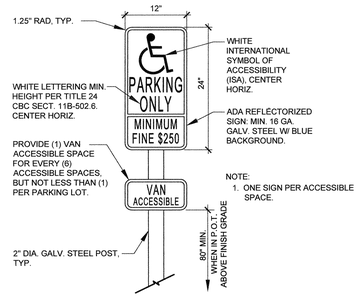
NOTES:
- ATTACH SIGNS USING (3) FLATHEAD WOOD SCREWS, COUNTERSUNK & ADHESIVE.
- ALL EDGES TO BE ROUNDED.
- PLACE (1) SIGN AT EA. RESTROOM ENTRANCE.
- FOR MORE INFO., SEE CBC SEC. 11B-703.7.2.6.

15 TYPICAL SIGNAGE



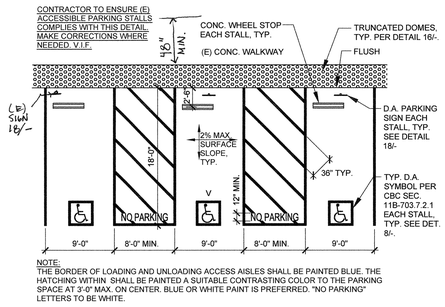
NOTES:
- ATTACH SIGNS USING (3) F.H.W.S., CNTR-SUNK AND ADHESIVE.
- ALL EDGES TO BE ROUNDED.
- REFER TO CBC SEC. 11B-703 FOR REQUIREMENTS AND CBC SEC. 1013.4.
- ALL EDGES TO BE ROUNDED.

1 TACTILE EXIT SIGNAGE
ON INTERIOR WALLS N.T.S.



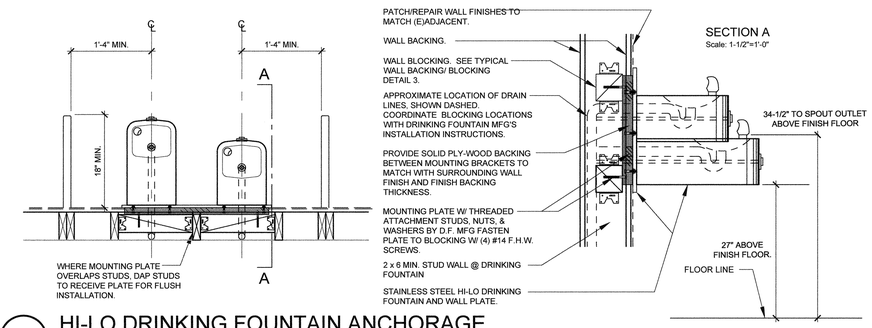
NOTE:
1. ONE SIGN PER ACCESSIBLE SPACE.

18 (E)& (N)ACCESSIBLE PARKING SIGN
ELEVATION 1"=1'-0"

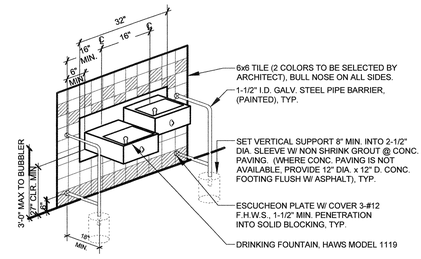


NOTE:
THE BORDER OF LOADING AND UNLOADING ACCESS AISLES SHALL BE PAINTED BLUE. THE HATCHING WITHIN SHALL BE PAINTED A SUITABLE CONTRASTING COLOR TO THE PARKING SPACE AT 3'-0" MAX. ON CENTER. BLUE OR WHITE PAINT IS PREFERRED. "NO PARKING" LETTERS TO BE WHITE.

14 (E)ACCESSIBLE PARKING STALLS
1/8"=1'-0"



10 HI-LO DRINKING FOUNTAIN ANCHORAGE
1"=1'-0"



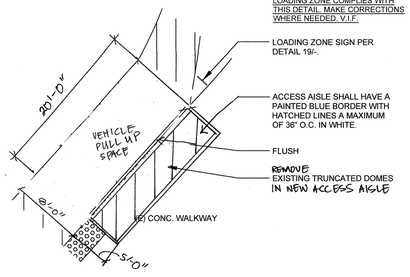
NOTE: REMOVE (E) WALL FINISH AND SHEATHING TO PROVIDE BACKING AND BLOCKING PATCH AS REQUIRED AND FINISH TO MATCH (E) ADJACENT.

2 (N)DRINKING FOUNTAIN
BARRIER-FREE DUAL WALL MOUNT NTS

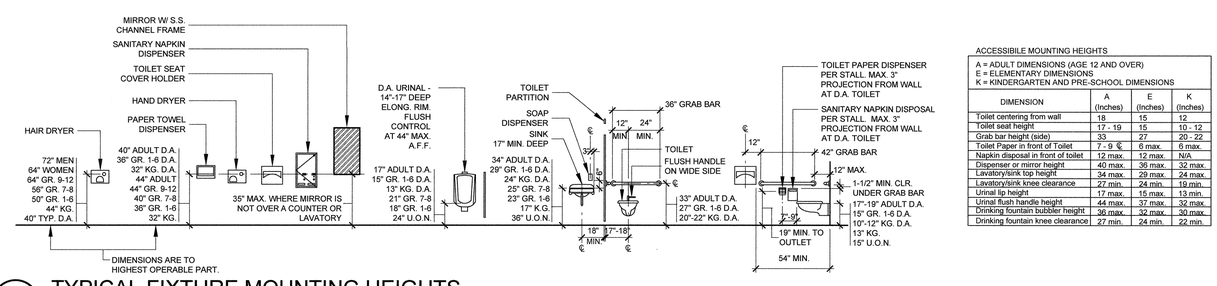
HAWS MODEL 1119 "HI-LO" WALL MOUNTED BARRIER-FREE DRINKING FOUNTAIN SHALL INCLUDE DUAL 18 GAUGE TYPE 304 STAINLESS STEEL SATIN FINISH BASINS, PUSH-BUTTON OPERATED STAINLESS STEEL VALVES WITH FRONT-ACCESSIBLE CARTRIDGE AND FLOW ADJUSTMENT, 100% LEAD-FREE WATERWAYS, POLISHED CHROME-PLATED BRASS VANDAL-RESISTANT BUBBLER HEADS, POLISHED CHROME-PLATED BRASS VANDAL-RESISTANT WASTE STRAINERS, VANDAL-RESISTANT BOTTOM PLATES, STAINLESS STEEL SATIN FINISH BACK PANEL, HIGH AND LOW FOUNTAIN MOUNTING LEVELS, AND 1-1/4" NPT TRAPS.

NOTES:
1. POST TO BE SET TRUE, PLUMB & LEVEL.
2. ALL BOLTS TO BE CUT & PEENED.

17 ACCESSIBLE PARKING SIGN
SECTION 3/4"=1'-0"



13 (E)PASSENGER LOADING ZONE
1/8"=1'-0"



9 TYPICAL FIXTURE MOUNTING HEIGHTS
SCALE: 1/4"=1'-0"

ACCESSIBLE MOUNTING HEIGHTS

A = ADULT DIMENSIONS (AGE 12 AND OVER)
E = ELEMENTARY DIMENSIONS
K = KINDERGARTEN AND PRE-SCHOOL DIMENSIONS

DIMENSION	A (Inches)	E (Inches)	K (Inches)
Toilet centering from wall	18	15	12
Toilet seat height	17 - 19	15	10 - 12
Grab bar height (side)	33	27	20 - 22
Toilet Paper in front of Toilet	7 - 9	6 max.	6 max.
Napkin disposal in front of toilet	12 max.	12 max.	N/A
Dispenser or mirror height	40 max.	36 max.	32 max.
Lavatory/sink top height	34 max.	29 max.	24 max.
Lavatory/sink knee clearance	27 min.	24 min.	19 min.
Urinal lip height	17 max.	15 max.	13 min.
Urinal flush handle height	44 max.	37 max.	32 max.
Drinking fountain bubbler height	36 max.	32 max.	30 max.
Drinking fountain knee clearance	27 min.	24 min.	22 min.

COPYRIGHT©2017

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE. SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-9600
FAX: 408-377-6066

LICENSED ARCHITECT MARK C FINNEY No. C-24573 REN. 9-30-19 STATE OF CALIFORNIA

SITE DETAILS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

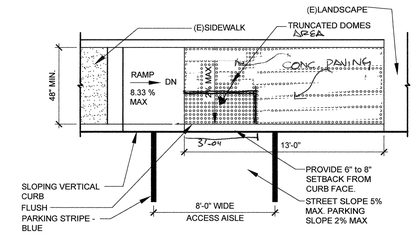
NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
A# KG FLS MB SS
DATE 5-22-18

DRAWN BY: NJ
CHECKED BY: MF
JOB NO: 17103
DATE: 10/10/2017

A0.4

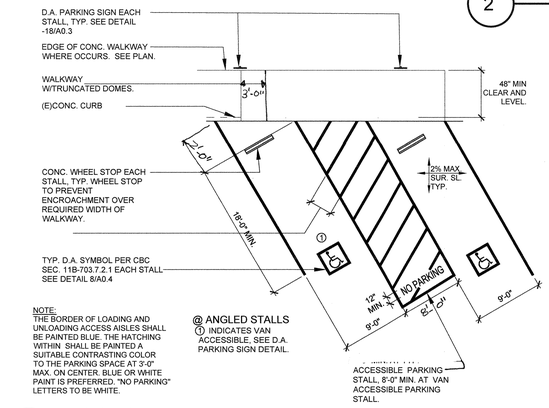


NOTES.

1. TRUNCATED DOMES AND ALL RELATED INSTALLED SURFACES TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
2. ALL DETECTABLE WARNING SURFACE INSTALLATIONS SHALL BE AT A MINIMUM, AT LEAST AS NON-SKID AS THE SURROUNDING PEDESTRIAN SURFACES.

2 ACCESSIBLE CURB RAMP

SCALE: 1/4"=1'-0"



NOTE:
THE BORDER OF LOADING AND UNLOADING ACCESS AISLES SHALL BE PAINTED BLUE. THE HATCHING WITHIN SHALL BE PAINTED A SUITABLE CONTRASTING COLOR TO THE PARKING SPACE AT 3'-0" MAX. ON CENTER. BLUE OR WHITE PAINT IS PREFERRED. "NO PARKING" LETTERS TO BE WHITE.

@ ANGLED STALLS
① INDICATES VAN ACCESSIBLE, SEE D.A. PARKING SIGN DETAIL.

1 ACCESSIBLE PARKING STALLS

1/8"=1'-0"

COPYRIGHT©2017

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-0066

LICENSED ARCHITECT
MARK C FINNEY
No. C-24673
REN 9-30-19
STATE OF CALIFORNIA

SITE DETAILS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

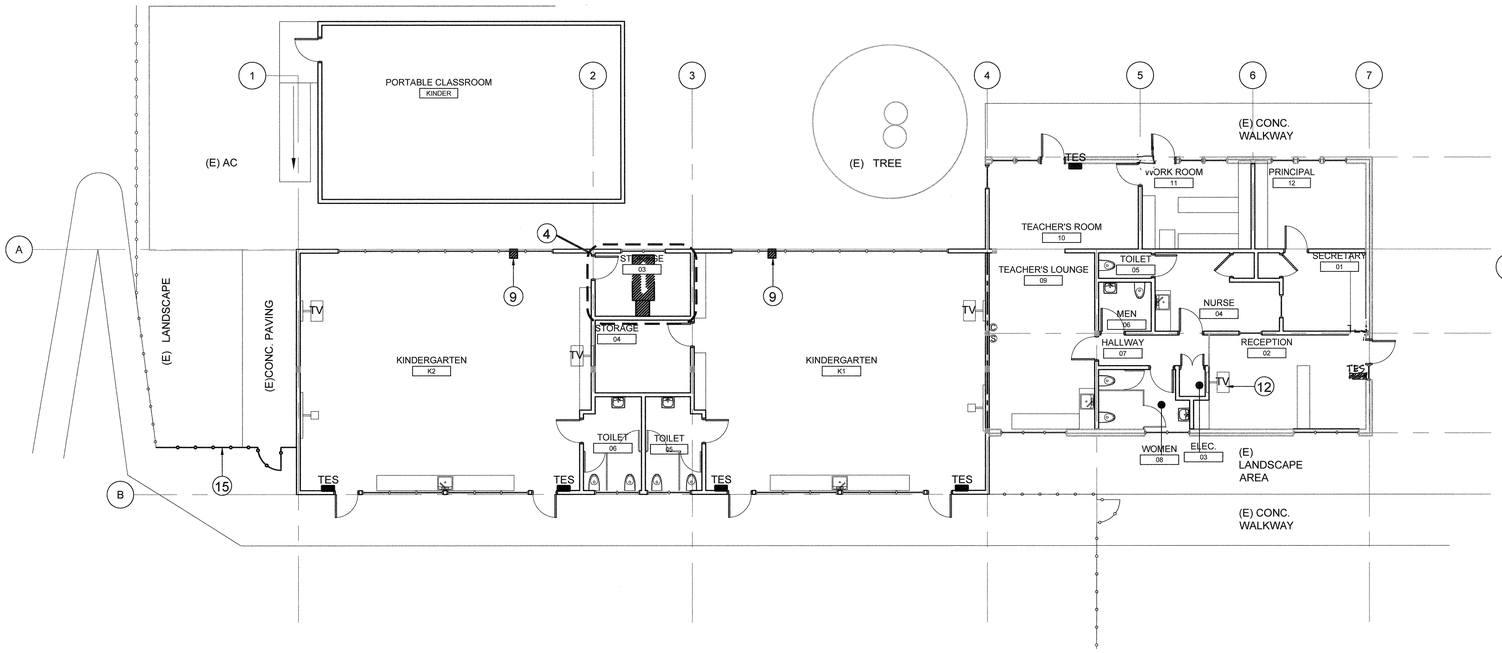
NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC FLS SS
DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A0.5

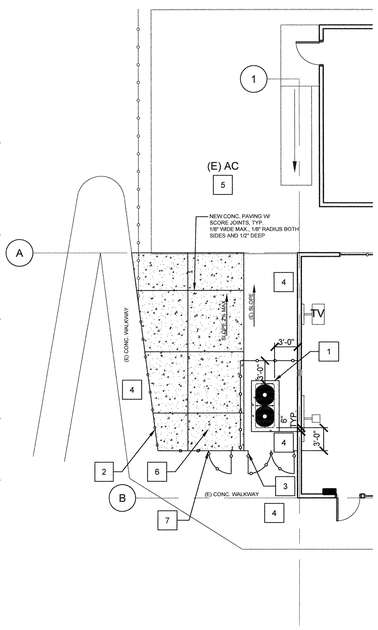


1 DEMOLITION AND NEW FLOOR PLAN - BUILDING 1

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

TRUE NORTH / REF NORTH



GRAPHIC KEY

(E) STUD WALL

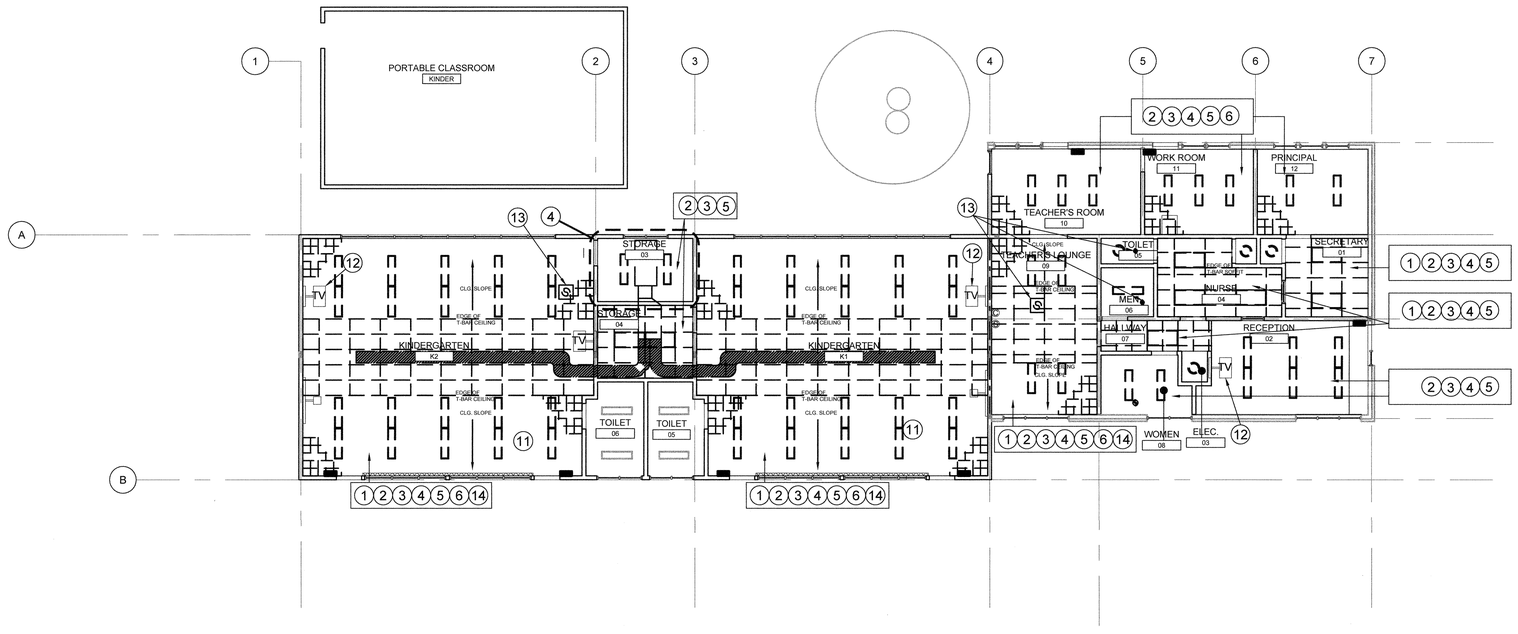
TES (N)TACTILE EXIT SIGN CBC 1013.4 & 11B-703 SEE DETAIL 1/A0.4

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL SURVEY AREA FOR UNDERGROUND UTILITY LOCATIONS PRIOR TO DEMOLITION AND NEW WORK ON SITE.
B. ROOM NAMES AND NUMBERS MAY NOT BE CONSISTENT BETWEEN DEMOLITION FLOOR PLANS AND NEW FLOOR PLANS.
C. REFER TO MECHANICAL/PLUMBING AND ELECTRICAL DRAWINGS FOR EXTENT OF MECHANICAL/PLUMBING AND ELECTRICAL DEMOLITION WORK AND NEW CONSTRUCTION.
D. PAINT ALL EXPOSED CONDUITS, FITTINGS, AND CONDUIT COVERS ASSOCIATED WITH THE NEW WORK TO MATCH EXISTING ADJACENT SURFACE AT BOTH EXTERIOR AND INTERIOR LOCATIONS.
E. REMOVE ALL EXISTING ITEMS TO ALLOW THE NEW WORK, INCLUDING BUT NOT LIMITED TO TREES, SHRUBS, ASPHALT PAVING, FENCING.
F. COORDINATE EXACT LOCATION OF NEW HVAC UNITS IN FIELD WITH THE OWNER AND ARCHITECT PRIOR TO INSTALLATION. PATCH AND REPAIR ADJACENT FLOOR AND WALL SURFACE AREAS ASSOCIATED WITH THE INSTALLATION OF THESE UNITS .
G. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, STORAGE AND REINSTALLATION OF CEILING MOUNTED DEVICES INCLUDING BUT NOT LIMITED TO SPEAKERS, HVAC GRILLES, EXIT SIGNS, FIRE ALARM, CEILING MOUNTED PROJECTORS, U.O.N. VERIFY AND COORDINATE EXISTING CONDITIONS IN FIELD.
H. FOR HVAC UNIT REFRIGERANT LINES THROUGH WALL, SEE MECHANICAL DRAWINGS AND DETAILS 1 & 7/A9.1 FOR CONDUIT SPACING. SPACE PENETRATIONS TO CLEAR STUDS. COORDINATE LAYOUT IN FIELD. PATCH, REPAIR, AND PAINT EXTERIOR WALL SOFFIT, AND INTERIOR CEILING AFTER INSTALLATION TO MATCH EXISTING ADJACENT FINISHES.
I. REMOVE AND REINSTALL PROJECTORS PER DETAIL 16/A9.3.
J. REFER TO SHEET A9.1 FOR TYPICAL FRAMING DETAILS.
K. CONTRACTOR TO PATCH, REPAIR AND PAINT ALL DAMAGED SURFACES AND/OR SURFACES TO BE EXPOSED TO VIEW AS A RESULT OF DEMOLITION WORK. PROTECT FLOOR SURFACES DURING CONSTRUCTION, REPLACE IF DAMAGED AS RESULT OF DEMOLITION/NEW WORK.
L. COORDINATE LOCATION OF NEW THERMOSTATS IN FIELD, AVOID SWING OF DOORS, CASEWORK, AND WALL MOUNTED EQUIPMENT. SEE MECH. DWGS.
M. CONTRACTOR IS RESPONSIBLE FOR REMOVAL/DEMOLITION OF (E) CONCRETE PADS AFTER DEMOLITION OF MECHANICAL/PLUMBING EQUIPMENT AND TO REPAIR/PATCH & INFILL CONCRETE SLAB AS NEEDED.
N. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF PARTIAL ROOF FOR NEW MECHANICAL EQUIPMENT. COORDINATE WITH MECH. PLANS FOR LOCATIONS & WITH GARLAND ROOFING FOR PATCHING OF (E) ROOFING.
O. CONTRACTOR TO REFERENCE DEMOLITION & ABATEMENT REPORT PRIOR TO DEMOLITION WORK.
P. PROVIDE WALL-MOUNTED TACTILE EXIT SIGNS TYPICAL AT ALL EXIT DOORS SEE DETAIL 1/A0.4.
O. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, STORAGE AND RE-INSTALLATION OF ALL WINDOW SHADES AND TRACK SYSTEM, INCLUDING ADJUSTING/CUTTING OF SHADES TO FIT FOR RE-INSTALLAITON AND TO ALLOW THE INSTALLATION OF NEW CEILING SYSTEMS.

DEMOLITION PLAN NOTES

1. REMOVE AND REPLACE EXISTING ACOUSTICAL LAY-IN T-BAR SUSPENDED CEILING SYSTEM.
2. REMOVE AND REPLACE ALL EXISTING LIGHT FIXTURES , REFER TO ELEC. DWGS. FOR EXTENT OF WORK. VERIFY QUANTITIES AND LAYOUT IN FIELD.
3. REMOVE AND REPLACE EXISTING HVAC DUCT, REFER TO MECHANICAL DWGS. FOR EXTENT OF WORK.
4. REMOVE AND REPLACE EXISTING MECHANICAL/PLUMBING EQUIPMENT & PIPING, REFER TO MECHANICAL/PLUMBING DRAWINGS FOR EXTENT OF DEMOLITION AND NEW WORK.
5. REMOVE CEILING SYSTEM AND INSULATION PREPARE FOR NEW.
6. REMOVE EXISTING GLUE-ON ACOUSTICAL TILE CEILING SYSTEM, TO BARE RAFTER, PREPARE FOR NEW CEILING SYSTEM.
7. REMOVE AND REPLACE EXISTING MECHANICAL SYSTEMS, REFER TO MECHANICAL DWGS. FOR THE EXTENT OF DEMOLITION WORK.
8. REMOVE EXISTING HARD CEILING SYSTEM TO BARE RAFTERS, PREPARE FOR NEW CEILING AND INSULATION.
9. REMOVE EXISTING PORTABLE INDOOR AC UNIT SYSTEM, WINDOW MOUNTED EXHAUST VENT AND CONDENSATE DRAIN PIPE, RETURN UNIT TO THE DISTRICT AND INFILL WINDOW FRAME WITH SPANDREL ACOUSTICAL PANEL TO MATCH ADJACENT. TYPICAL AT ALL CLASSROOMS AND WHERE OCCURS, VERIFY QUANTITIES AND LOCATIONS IN FIELD.
10. N/A.
11. REMOVE EXISTING BLINDS AND TRACKS. INSTALL NEW VERTICAL BLINDS, & TRACK SYSTEM AFTER NEW CEILING SYSTEM HAS BEEN INSTALLED.
12. REMOVE EXISTING TV AND MOUNT SYSTEM, STORE AND PREPARE WALL FOR RE-NSTALLATION BELOW NEW CEILING PER DETAIL DETAIL 8/A9.01 TO MEET 2016 CBC ASCE 7-10.
13. CONTRACTOR TO DEMOLISH PARTIAL ROOF TO ALLOW FOR NEW HVAC EQUIPMENT PENETRATION. TO PATCH, REPAIR ROOF TO MATCH EXISITING AFTER INSTALLATION OF MECHANICAL EQUIPMENT. COORDINATE WITH MECHANICAL DRAWINGS FOR DEMOTION AND NEW EQUIPMENT LOCATIONS, SEE DETAIL 4/A9.1. SEE MECH. DWGS. FOR QUANTITIES.
14. REMOVE CLOCK, SPEAKERS OR ANY OTHER EQUIPMENT ON WALLSTHAT MAY INTERFERE WITH DEMOLITON WORK AND NEW CEILING SYSTEM. STORE ITEMS FOR RE-INSTALL AFTER NEW CEILING INSTALLATION.
15. REMOVE AND REPLACE EXISTING CHAIN LINK FENCE AND GATE SYSTEM.



2 DEMOLITION CEILING PLAN - BUILDING 1

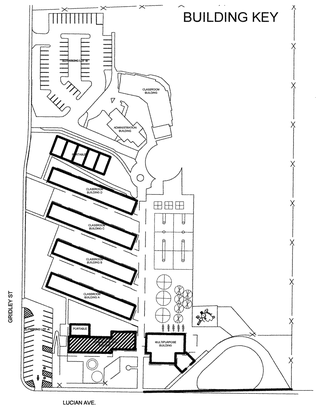
1/8" = 1'-0"

0 2' 4' 8' 16' 24'

TRUE NORTH / REF NORTH

NEW FLOOR PLAN NOTES

1. NEW OUTDOOR HEAT PUMP OVER NEW CONCRETE PAD, O/EXISTING CONC. PAVING. SEE DETAILS15/A0.2,1/A0.3 AND MECHANICAL, PLUMB., ELEC. DRAWINGS.
2. EXISTING CHAIN LINK FENCE.
3. NEW CHAIN LINK FENCE ENCLOSURE SEE DETAIL 1/A0.3 & SEE SHEET A0.2 FOR DETAILS AND MECHANICAL DWGS. FOR SIZE REQUIREMENTS.
4. EXISTING CONCRETE WALKWAY.
5. EXISTING ASPHALT PAVING.
6. NEW CONCRETE PAVING LEVEL TO CONFIRM WITH EXISTING ADJACENT CONC. PAVING SLOPE. SEE CONCRETE PAVING DETAIL 12/A0.2
7. REMOVE AND REPLACE FENCING WITH NEW CHAIN LINK FENCE AND SINGLE FENCE PER DETAILS 2, 4,5,11/A0.2 & 4/A0.3



COPYRIGHT ©2017

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

LICENSED ARCHITECT MARK C. FINNEY No. C-24073 REN. 9-30-19 STATE OF CALIFORNIA

DEMOLITION-NEW FLOOR PLANS
ADMINISTRATION- KINDERGARTEN BUILDING

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

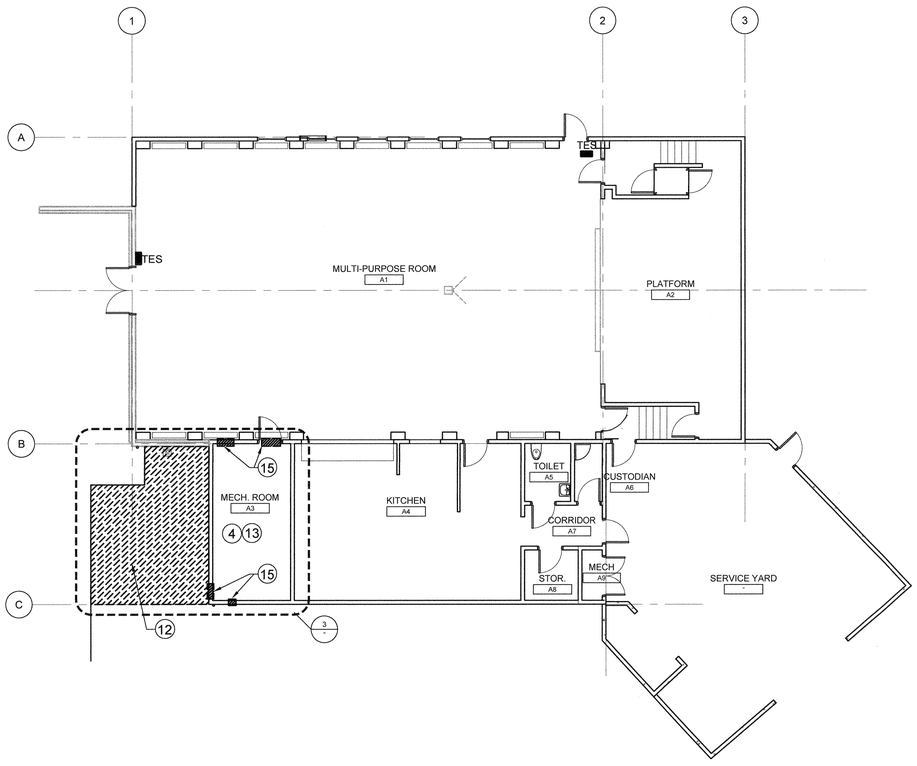
NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

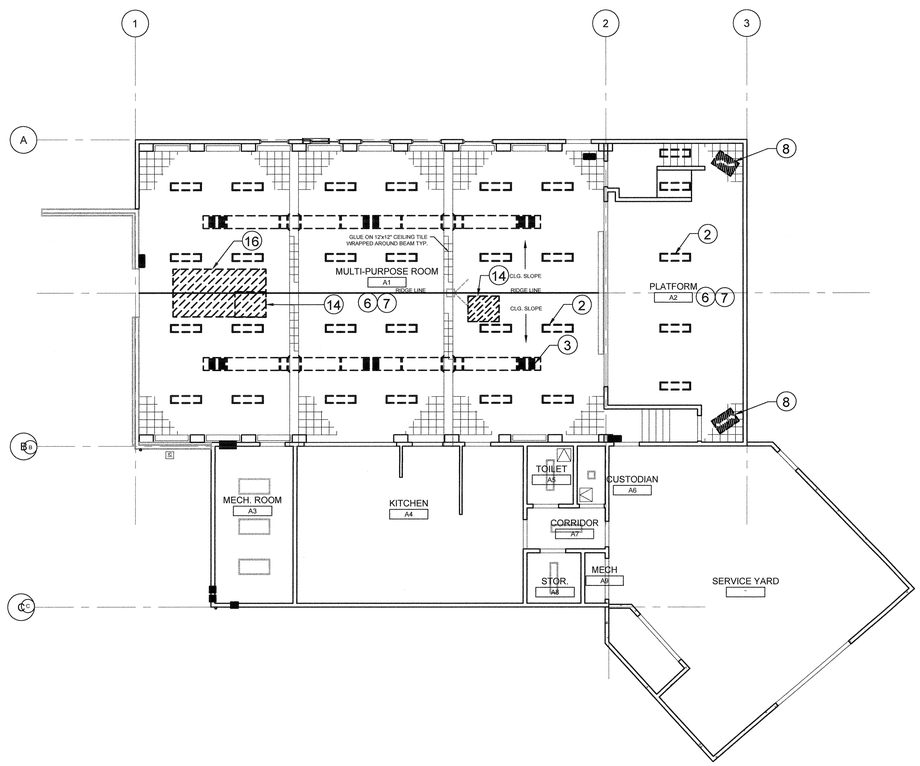
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC RG FLS MK SS LC
DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A2.1





1 DEMOLITION PLAN - MULTI-PURPOSE BUILDING

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

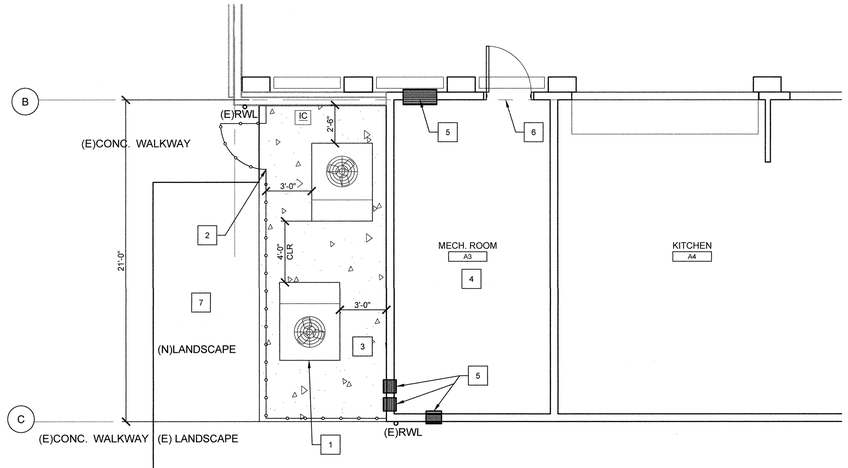
TRUE NORTH / RBF NORTH

2 DEMOLITION CEILING PLAN - MULTI-PURPOSE BUILDING

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

TRUE NORTH / RBF NORTH



3 NEW ENLARGED FLOOR PLAN - MULTI-PURPOSE BUILDING-MECH. ROOM

1/4" = 1'-0"

0 1' 2' 4' 8' 12'

TRUE NORTH / RBF NORTH

NEW ENLARGED FLOOR PLAN NOTES

1. NEW CONDENSING UNITS OVER NEW CONCRETE PAD, SEE MECHANICAL/PLUMB. AND ELEC. DRAWINGS FOR EXTENT OF WORK.
2. NEW CHAIN LINK FENCE ENCLOSURE AND SINGLE GATE SEE SHEET A0.2 FOR FENCING DETAILS, 2-5,11/A0.2 FOR SINGLE GATE AND MECHANICAL DWGS. TO VERIFY UNIT SIZES AND CLEARANCES REQUIRED.
3. NEW CONCRETE PAD SEE DETAIL 7/A0.2.
4. SEE MECH./PLUMB. DWGS. FOR EXTENT OF NEW WORK IN THIS ROOM.
5. NEW FIXED METAL WALL LOUVER, PAINT TO MATCH ADJACENT WALL COLOR. SEE SHEET 5/A9.1 FOR LOUVER DETAILS.
6. NEW FIXED METAL WALL LOUVER ABOVE DOOR, PAINT TO MATCH ADJACENT WALL COLOR. SEE SHEET 5/A9.1 FOR LOUVER DETAILS.
7. NEW LOW MAINTENANCE PLANTS (TOTAL 6) MULCH & EXTENDED IRRIGATION LINE.

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL SURVEY AREA FOR UNDERGROUND UTILITY LOCATIONS PRIOR TO DEMOLITION AND NEW WORK ON SITE.
B. ROOM NAMES AND NUMBERS MAY NOT BE CONSISTENT BETWEEN DEMOLITION FLOOR PLANS AND NEW FLOOR PLANS.
C. REFER TO MECHANICAL/PLUMBING AND ELECTRICAL DRAWINGS FOR EXTENT OF MECHANICAL/PLUMBING AND ELECTRICAL DEMOLITION WORK AND NEW CONSTRUCTION.
D. PAINT ALL EXPOSED CONDUITS, FITTINGS, AND CONDUIT COVERS ASSOCIATED WITH THE NEW WORK TO MATCH EXISTING ADJACENT SURFACE AT BOTH EXTERIOR AND INTERIOR LOCATIONS.
E. REMOVE ALL EXISTING ITEMS TO ALLOW THE NEW WORK, INCLUDING BUT NOT LIMITED TO TREES, SHRUBS, ASPHALT/CONC. PAVING, FENCING.
F. COORDINATE EXACT LOCATION OF NEW HVAC UNITS IN FIELD WITH THE OWNER AND ARCHITECT PRIOR TO INSTALLATION. PATCH AND REPAIR ADJACENT FLOOR AND WALL SURFACE AREAS ASSOCIATED WITH THE INSTALLATION OF THESE UNITS .
G. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, STORAGE AND REINSTALLATION OF CEILING MOUNTED DEVICES INCLUDING BUT NOT LIMITED TO SPEAKERS, HVAC GRILLES, EXIT SIGNS, FIRE ALARM, CEILING MOUNTED PROJECTORS, U.O.N. VERIFY AND COORDINATE EXISTING CONDITIONS IN FIELD.
H. FOR HVAC UNIT REFRIGERANT LINES THROUGH WALL, SEE MECHANICAL DRAWINGS AND DETAILS 1 & 7/A9.1 FOR CONDUIT SPACING. SPACE PENETRATIONS TO CLEAR STUDS. COORDINATE LAYOUT IN FIELD. PATCH, REPAIR, AND PAINT EXTERIOR WALL SOFFIT. AND INTERIOR CEILING AFTER INSTALLATION TO MATCH EXISTING ADJACENT FINISHES.
I. REMOVE AND REINSTALL PROJECTORS PER DETAIL 16/A9.3.
J. REFER TO SHEET A9.1 FOR TYPICAL FRAMING DETAILS.
K. CONTRACTOR TO PATCH, REPAIR AND PAINT ALL DAMAGED SURFACES AND/OR SURFACES TO BE EXPOSED TO VIEW AS A RESULT OF DEMOLITION WORK. PROTECT FLOOR SURFACES DURING CONSTRUCTION. REPLACE IF DAMAGED AS RESULT OF DEMOLITION/NEW WORK.
L. COORDINATE LOCATION OF NEW THERMOSTATS IN FIELD, AVOID SWING OF DOORS, CASEWORK, AND WALL MOUNTED EQUIPMENT. SEE MECH. DWGS.
M. CONTRACTOR IS RESPONSIBLE FOR REMOVAL/DEMOLITION OF (E) CONCRETE PADS AFTER DEMOLITION OF MECHANICAL/PLUMBING EQUIPMENT AND TO REPAIR/PATCH & INFILL CONCRETE SLAB AS NEEDED.
N. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF PARTIAL ROOF AND WALLS FOR NEW MECHANICAL EQUIPMENT. COORDINATE WITH MECH. PLANS FOR LOCATIONS AND ROUGH OPENINGS REQUIRED, AND WITH GARLAND ROOFING FOR PATCHING OF (E) ROOFING.
O. PROVIDE WALL-MOUNTED TACTILE EXIT SIGN AT EXIT DOORS, SEE DETAIL 1/A0.4.
P. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF PARTIAL ROOF FOR NEW MECHANICAL EQUIPMENT. COORDINATE WITH MECH. PLANS FOR LOCATIONS AND WITH GARLAND ROOFING FOR PATCHING OF EXISTING ROOFING.

DEMOLITION PLAN NOTES

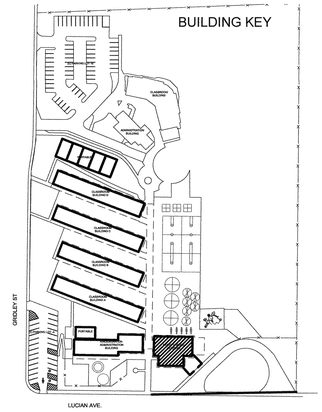
1. REMOVE AND REPLACE EXISTING ACOUSTICAL LAY-IN T-BAR SUSPENDED CEILING SYSTEM.
2. REMOVE AND REPLACE ALL EXISTING LIGHT FIXTURES , REFER TO ELEC. DWGS. FOR EXTENT OF WORK. VERIFY QUANTITIES AND LAYOUT IN FIELD.
3. REMOVE AND REPLACE EXISTING HVAC DUCT, REFER TO MECHANICAL DWGS. FOR EXTENT OF WORK.
4. REFER TO MECHANICAL/PLUMBING DRAWINGS FOR EXTENT OF MECH./PLUMB. DEMOLITION REQUIRED WORK FOR THIS ROOM.
5. N/A.
6. REMOVE AND REPLACE (E)DAMAGED GLUE-ON ACOUSTICAL TILE CEILING SYSTEM, VERIFY IN FIELD.
7. REMOVE EXISTING PARTIAL CEILING TO ALLOW NEW HVAC COMPONENTS AND REPLACEMENT OF LIGHT FIXTURES, PATCH AND REPAIR.
8. REMOVE EXISTING MECHANICAL SYSTEMS, REFER TO MECHANICAL DWGS FOR THE EXTENT OF DEMOLITION WORK.
9. REMOVE EXISTING HARD CEILING SYSTEM TO BARE RAFTERS, PREPARE FOR NEW CEILING AND INSULATION.
10. EXISTING ACOUSTICAL LAY-IN T-BAR SUSPENDED GRID SYSTEM TO REMAIN. REMOVE EXITING ACOUSTICAL TILES TO ALLOW FOR NEW HVAC WORK, STORE CEILING TILES FOR REINSTALLATION, TYP.
11. REMOVE EXISTING PORTABLE INDOOR AC UNIT SYSTEM, WINDOW MOUNTED EXHAUST VENT AND CONDENSATE DRAIN PIPE, RETURN UNIT TO THE DISTRICT AND INFILL WINDOW FRAME WITH SPANDREL ACOUSTICAL PANEL TO MATCH ADJACENT. TYPICAL AT ALL CLASSROOMS AND WHERE OCCURS, VERIFY QUANTITIES AND LOCATIONS IN FIELD.
12. REMOVE EXISTING FENCE, LANDSCAPE, AND RE-ROUTE IRRIGATION LINES TO ALLOW THE NEW WORK, EXISTING GROUND AND WALL MOUNTED UTILITIES BOXES TO REMAIN VERIFY IN FIELD, PROVIDE NEW BOX COVERS TO BE FLUSHED WITH NEW CONC. WORK.
13. REMOVE ALL EXISTING CASE WORK, SHELVING, FURNITURE AND OR EQUIPMENT TO COMPLETELY EVACUATE ROOM PRIOR TO ANY DEMOLITION OR NEW WORK AND RETURN TO DISTRICT.
14. DEMOLISH PARTIAL ROOF SYSTEM TO ALLOW FOR NEW HVAC EQUIPMENT PENETRATION. INFILL, PATCH, AND REPAIR ROOF TO MATCH EXISTING AFTER INSTALLATION OF MECHANICAL EQUIPMENT. COORDINATE WITH MECHANICAL DRAWINGS FOR DEMOLITION AND NEW EQUIPMENT LOCATIONS
15. REMOVE PARTIAL WALL FOR NEW LOUVER/DUCT PENETRATIONS. PATCH AND REPAIR AFTER INSTALLATION TO MATCH ADJACENT INTERIOR AND EXTERIOR FINISHES.
16. REMOVE EXISTING ROOF MOUNTED MECHANICAL EQUIPMENT. INFILL, PATCH, REPAIR CEILING AND ROOF TO MATCH EXISTING. SEE MECH. DWGS FOR EXTENT OF WORK.

GRAPHIC KEY

(E) STUD WALL

TES — (N)TACTILE EXIT SIGN CBC 1013.4 & 11B-703 SEE DETAIL 1/A0.4

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-0060

LICENSED ARCHITECT MARK C. FINNEY No. C-24673 REN 9-30-19 STATE OF CALIFORNIA

DEMOLITION-NEW FLOOR PLANS MULTI-PURPOSE BUILDING

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

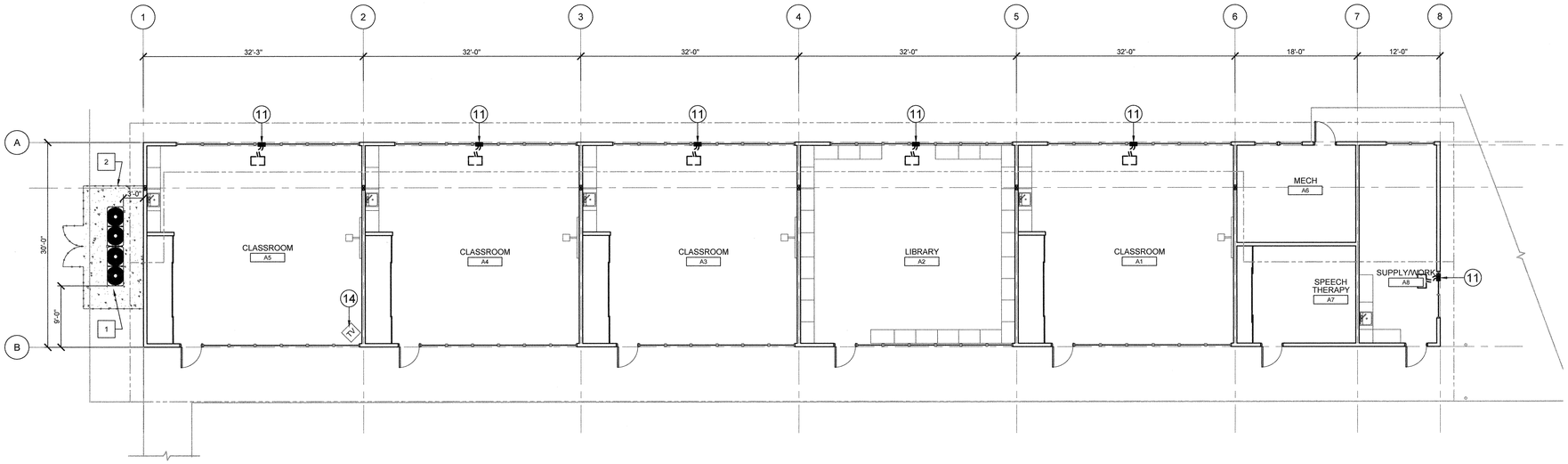
AC KG FLS MG SS LO

DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A2.2

COPYRIGHT © 2017

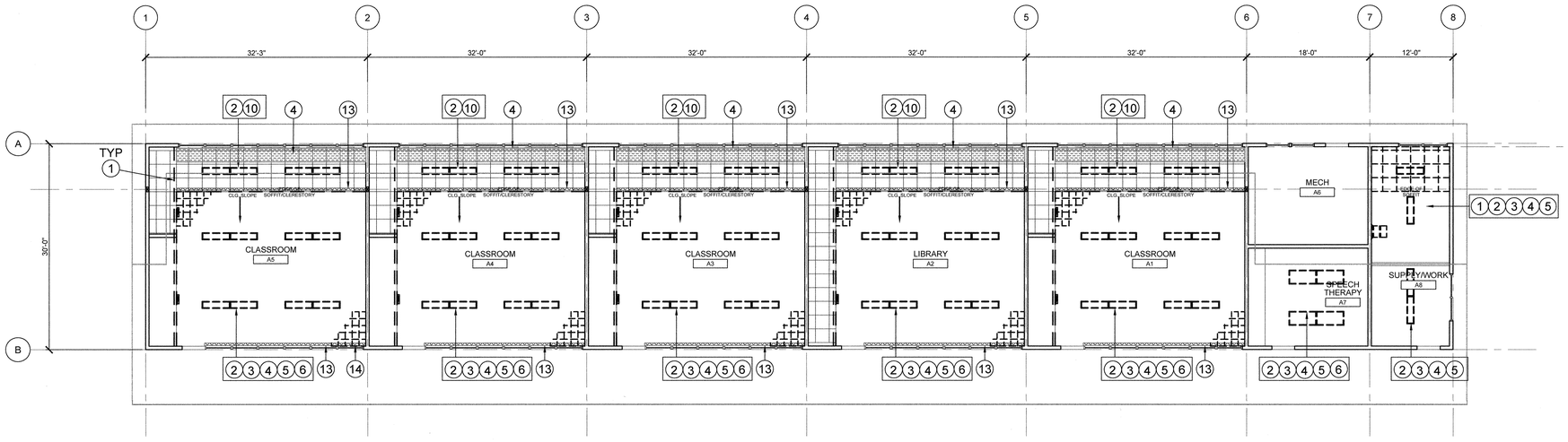


1 DEMOLITION AND NEW FLOOR PLAN - BUILDNG A

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

REF NORTH TRUE NORTH



2 DEMOLITION CEILING PLAN - BUILDING A

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

REF NORTH TRUE NORTH

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL SURVEY AREA FOR UNDERGROUND UTILITY LOCATIONS PRIOR TO DEMOLITION AND NEW WORK ON SITE.
B. ROOM NAMES AND NUMBERS MAY NOT BE CONSISTENT BETWEEN DEMOLITION FLOOR PLANS AND NEW FLOOR PLANS.
C. REFER TO MECHANICAL/PLUMBING AND ELECTRICAL DRAWINGS FOR EXTENT OF MECHANICAL/PLUMBING AND ELECTRICAL DEMOLITION WORK AND NEW CONSTRUCTION.
D. PAINT ALL EXPOSED CONDUITS, FITTINGS, AND CONDUIT COVERS ASSOCIATED WITH THE NEW WORK TO MATCH EXISTING ADJACENT SURFACE AT BOTH EXTERIOR AND INTERIOR LOCATIONS.
E. REMOVE ALL EXISTING ITEMS TO ALLOW THE NEW WORK, INCLUDING BUT NOT LIMITED TO TREES, SHRUBS, ASPHALT PAVING, FENCING.
F. COORDINATE EXACT LOCATION OF NEW HVAC UNITS IN FIELD WITH THE OWNER AND ARCHITECT PRIOR TO INSTALLATION. PATCH AND REPAIR ADJACENT FLOOR AND WALL SURFACE AREAS ASSOCIATED WITH THE INSTALLATION OF THESE UNITS .
G. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, STORAGE AND REINSTALLATION OF CEILING MOUNTED DEVICES INCLUDING BUT NOT LIMITED TO SPEAKERS, HVAC GRILLES, EXIT SIGNS, FIRE ALARM, CEILING MOUNTED PROJECTORS, U.O.N. VERIFY AND COORDINATE EXISTING CONDITIONS IN FIELD.
H. FOR HVAC UNIT REFRIGERANT LINES THROUGH WALL, SEE MECHANICAL DRAWINGS AND DETAILS 1 & 7/A9.1 FOR CONDUIT SPACING. SPACE PENETRATIONS TO CLEAR STUDS. COORDINATE LAYOUT IN FIELD. PATCH, REPAIR, AND PAINT EXTERIOR WALL SOFFIT, AND INTERIOR CEILING AFTER INSTALLATION TO MATCH EXISTING ADJACENT FINISHES.
I. REMOVE AND REINSTALL PROJECTORS PER DETAIL 18/A9.3.
J. REFER TO SHEET A9.1 FOR TYPICAL FRAMING DETAILS.
K. CONTRACTOR TO PATCH, REPAIR AND PAINT ALL DAMAGED SURFACES AND/OR SURFACES TO BE EXPOSED TO VIEW AS A RESULT OF DEMOLITION WORK. PROTECT FLOOR SURFACES DURING CONSTRUCTION, REPLACE IF DAMAGED AS RESULT OF DEMOLITION/NEW WORK.
L. COORDINATE LOCATION OF NEW THERMOSTATS IN FIELD, AVOID SWING OF DOORS, CASEWORK, AND WALL MOUNTED EQUIPMENT. SEE MECH. DWGS.
M. CONTRACTOR IS RESPONSIBLE FOR REMOVAL/DEMOLITION OF (E) CONCRETE PADS AFTER DEMOLITION OF MECHANICAL/PLUMBING EQUIPMENT AND TO REPAIR/PATCH & INFILL CONCRETE SLAB AS NEEDED.
N. CONTRACTOR IS RESPONSIBLE FOR DEMOLTION OF PARTIAL ROOF FOR NEW MECHANICAL EQUIPMENT. COORDINATE WITH MECH. PLANS FOR LOCATIONS & WITH GARLAND ROOFING FOR PATCHING OF (E) ROOFING.
P. PROVIDE WALL-MOUNTED TACTILE EXIT SIGNS TYPICAL AT ALL EXIT DOORS SEE DETAIL 1/A0.4.
O. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, STORAGE AND RE-INSTALLATION OF ALL WINDOW SHADES AND TRACK SYSTEM, INCLUDING ADJUSTING/CUTTING OF SHADES TO FIT FOR RE-INSTALLAITON AND TO ALLOW THE INSTALLATION OF NEW CEILING SYSTEMS.

DEMOLITION PLAN NOTES

1. REMOVE EXISTING T-BAR SOFFIT AND SIDE WIDE ABOVE CLOSET. NEW SOFFIT AND FINISH TO BE INSTALLED.
2. REMOVE AND REPLACE ALL EXISTING LIGHT FIXTURES , REFER TO ELEC. DWGS. FOR EXTENT OF WORK. VERIFY QUANTITIES AND LAYOUT IN FIELD.
3. REMOVE AND REPLACE EXISTING HVAC DUCT, REFER TO MECHANICAL DWGS. FOR EXTENT OF WORK.
4. REMOVE ALL EXISTING MECHANICAL/PLUMBING EQUIPMENT & PIPING, REFER TO MECHANICAL/PLUMBING DRAWINGS FOR EXTENT OF WORK.
5. REMOVE CEILING SYSTEM, SUBSTRATE, AND INSULATION PREPARE FOR NEW.
6. REMOVE EXISTING GLUE-ON ACOUSTICAL TILE CEILING SYSTEM, TO BARE RAFTERS, PREPARE FOR NEW CEILING SYSTEM.
7. REMOVE EXISTING PARTIAL CEILING TO ALLOW NEW HVAC COMPONENTS AND REPLACEMENT OF LIGHT FIXTURES, PATCH AND REPAIR.
8. REMOVE AND REPLACE EXISTING MECHANICAL SYSTEMS, REFER TO MECHANICAL DWGS. FOR THE EXTENT OF DEMOLITION WORK.
9. REMOVE EXISTING HARD CEILING SYSTEM TO BARE RAFTERS, PREPARE FOR NEW CEILING AND INSULATION.
10. EXISTING ACOUSTICAL LAY-IN T-BAR SUSPENDED GRID SYSTEM TO REMAIN, REMOVE EXISTING ACOUSTICAL TILES TO ALLOW FOR NEW HVAC WORK, STORE CEILING TILES FOR REINSTALLATION, TYP.
11. REMOVE EXISTING PORTABLE INDOOR AC UNIT SYSTEM. WINDOW MOUNTED EXHAUST VENT AND CONDENSATE DRAIN PIPE, RETURN UNIT TO THE DISTRICT AND INFILL WINDOW FRAME WITH SPANDREL ACOUSTICAL PANEL TO MATCH ADJACENT. TYPICAL AT ALL CLASSROOMS AND WHERE OCCURS, VERIFY QUANTITIES AND LOCATIONS IN FIELD.
12. N/A.
13. REMOVE EXISTING BLINDS W/TRACKS WITHOUT DAMAGING AND STORE IN SAFE AREA AS NOT TO GET DAMAGED. BLINDS TO BE RE-INSTALLED AFTER NEW CEILING INSTALL. COORDINATE WITH ARCHITECT FOR INSTALLATION LOCATION/INSTRUCTIONS.
14. REMOVE EXITING TV'S TO ALLOW FOR DEMOLITION AND NEW CEILING INSTALLATION. STORE TV'S FOR REINSTALLATION, TYP. SEE DETAIL 8/A9.1.

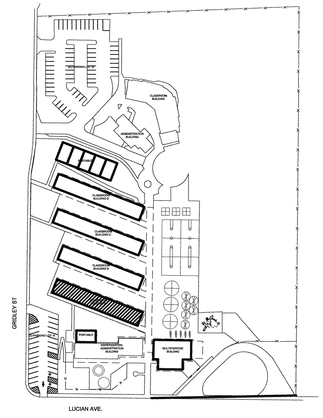
NEW FLOOR PLAN NOTES

1. NEW OUTDOOR HEAT PUMP OVER NEW CONCRETE PAD. SEE DETAIL 7,13/A0.2 AND MECHANICAL, PLUMB., ELEC. DRAWINGS.
2. NEW CHAIN LINK FENCE ENCLOSURE SEE SHEET A0.2 FOR DETAILS AND MECHANICAL DWGS. FOR SIZE REQUIREMENTS.

GRAPHIC KEY

(E) STUD WALL

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-4066

LICENSED ARCHITECT
MARK C. FINNEY
No. C-24673
REN. 9-30-19
STATE OF CALIFORNIA

DEMOLITION-NEW FLOOR PLANS
BUILDING A - CLASSROOMS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

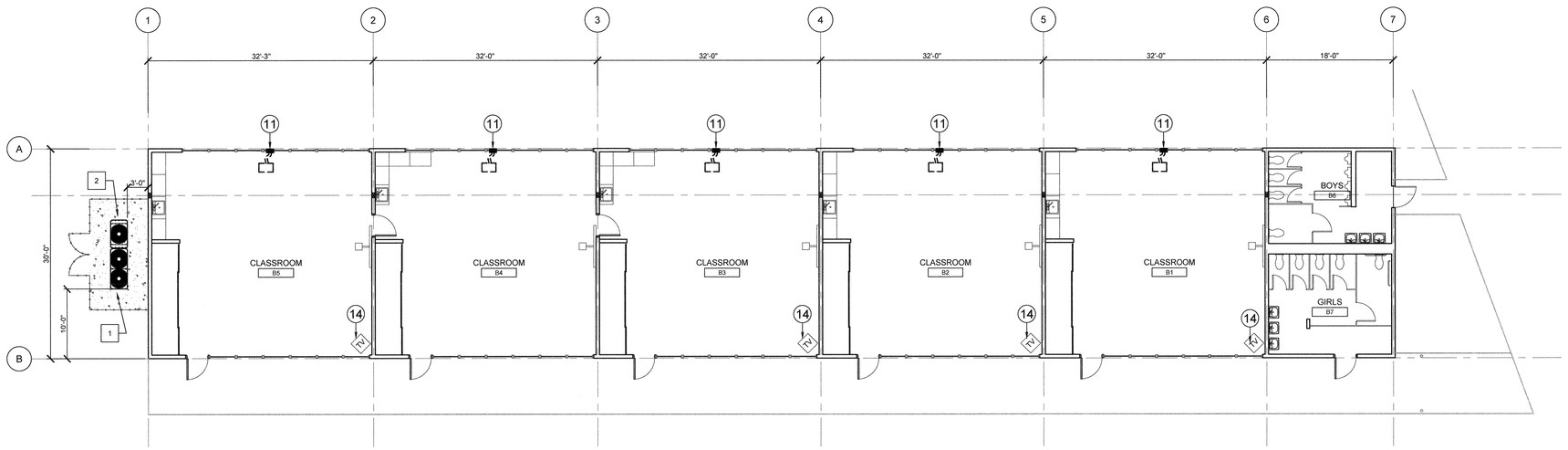
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271
AC KG FLS MC SS
DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A2.3

COPYRIGHT ©2017

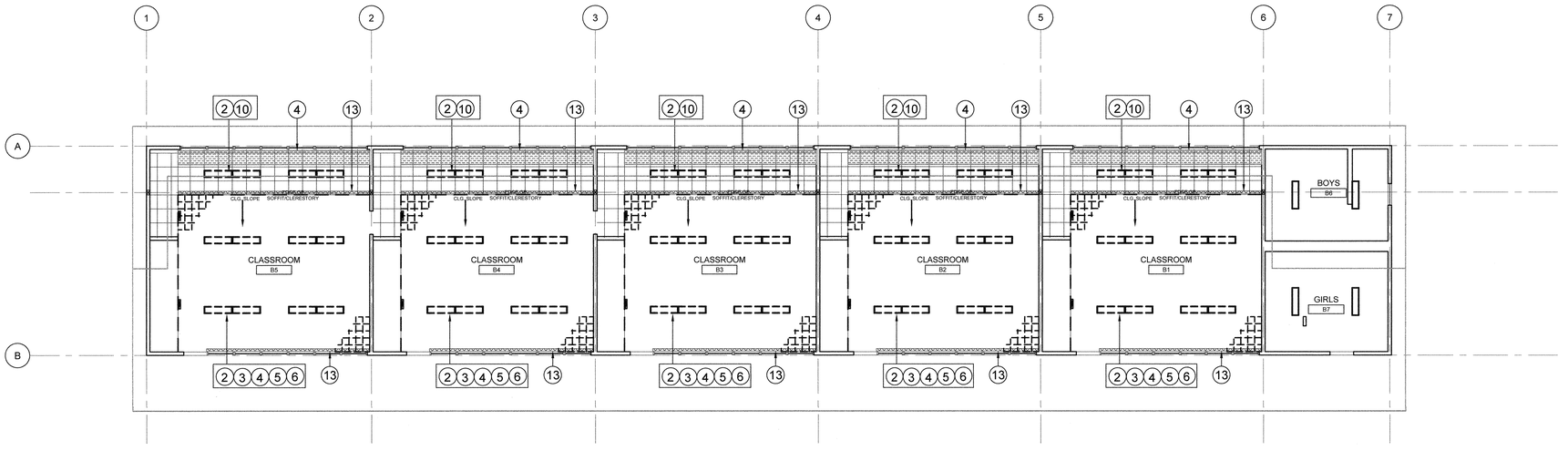


1 DEMOLITION AND NEW FLOOR PLAN - BUILDNG B

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

REF NORTH TRUE NORTH



2 DEMOLITION CEILING PLAN - BUILDING B

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

REF NORTH TRUE NORTH

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL SURVEY AREA FOR UNDERGROUND UTILITY LOCATIONS PRIOR TO DEMOLITION AND NEW WORK ON SITE.
B. ROOM NAMES AND NUMBERS MAY NOT BE CONSISTENT BETWEEN DEMOLITION FLOOR PLANS AND NEW FLOOR PLANS.
C. REFER TO MECHANICAL/PLUMBING AND ELECTRICAL DRAWINGS FOR EXTENT OF MECHANICAL/PLUMBING AND ELECTRICAL DEMOLITION WORK AND NEW CONSTRUCTION.
D. PAINT ALL EXPOSED CONDUITS, FITTINGS, AND CONDUIT COVERS ASSOCIATED WITH THE NEW WORK TO MATCH EXISTING ADJACENT SURFACE AT BOTH EXTERIOR AND INTERIOR LOCATIONS.
E. REMOVE ALL EXISTING ITEMS TO ALLOW THE NEW WORK, INCLUDING BUT NOT LIMITED TO TREES, SHRUBS, ASPHALT PAVING, FENCING.
F. COORDINATE EXACT LOCATION OF NEW HVAC UNITS IN FIELD WITH THE OWNER AND ARCHITECT PRIOR TO INSTALLATION. PATCH AND REPAIR ADJACENT FLOOR AND WALL SURFACE AREAS ASSOCIATED WITH THE INSTALLATION OF THESE UNITS .
G. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, STORAGE AND REINSTALLATION OF CEILING MOUNTED DEVICES INCLUDING BUT NOT LIMITED TO SPEAKERS, HVAC GRILLES, EXIT SIGNS, FIRE ALARM, CEILING MOUNTED PROJECTORS, U.O.N. VERIFY AND COORDINATE EXISTING CONDITIONS IN FIELD.
H. FOR HVAC UNIT REFRIGERANT LINES THROUGH WALL, SEE MECHANICAL DRAWINGS AND DETAILS 1 & 7/A9.1. SPACE PENETRATIONS TO CLEAR STUDS. COORDINATE LAYOUT IN FIELD. PATCH, REPAIR, AND PAINT EXTERIOR WALL SOFFIT, AND INTERIOR CEILING AFTER INSTALLATION TO MATCH EXISTING ADJACENT FINISHES.
I. REMOVE AND REINSTALL PROJECTORS PER DETAIL 16/A9.3.
J. REFER TO SHEET A9.1 FOR TYPICAL FRAMING DETAILS.
K. CONTRACTOR TO PATCH, REPAIR AND PAINT ALL DAMAGED SURFACES AND/OR SURFACES TO BE EXPOSED TO VIEW AS A RESULT OF DEMOLITION WORK. PROTECT FLOOR SURFACES DURING CONSTRUCTION, REPLACE IF DAMAGED AS RESULT OF DEMOLITION/NEW WORK.
L. COORDINATE LOCATION OF NEW THERMOSTATS IN FIELD, AVOID SWING OF DOORS, CASEWORK, AND WALL MOUNTED EQUIPMENT. SEE MECH. DWGS.
M. CONTRACTOR IS RESPONSIBLE FOR REMOVAL/DEMOLITION OF (E) CONCRETE PADS AFTER DEMOLITION OF MECHANICAL/PLUMBING EQUIPMENT AND TO REPAIR/PATCH & INFILL CONCRETE SLAB AS NEEDED.
N. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF PARTIAL ROOF FOR NEW MECHANICAL EQUIPMENT. COORDINATE WITH MECH. PLANS FOR LOCATIONS & WITH GARLAND ROOFING FOR PATCHING OF (E) ROOFING.
P. PROVIDE WALL-MOUNTED TACTILE EXIT SIGNS TYPICAL AT ALL EXIT DOORS SEE DETAIL 1/A0.4.
O. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, STORAGE AND RE-INSTALLATION OF ALL WINDOW SHADES AND TRACK SYSTEM, INCLUDING ADJUSTING/CUTTING OF SHADES TO FIT FOR RE-INSTALLAITON AND TO ALLOW THE INSTALLATION OF NEW CEILING SYSTEMS.

DEMOLITION PLAN NOTES

1. REMOVE EXISTING T-BAR SOFFIT AND SIDE WIDE ABOVE CLOSET. NEW SOFFIT AND FINISH TO BE INSTALLED.
2. REMOVE AND REPLACE ALL EXISTING LIGHT FIXTURES , REFER TO ELEC. DWGS. FOR EXTENT OF WORK. VERIFY QUANTITIES AND LAYOUT IN FIELD.
3. REMOVE AND REPLACE EXISTING HVAC DUCT, REFER TO MECHANICAL DWGS. FOR EXTENT OF WORK.
4. REMOVE ALL EXISTING MECHANICAL/PLUMBING EQUIPMENT & PIPING, REFER TO MECHANICAL/PLUMBING DRAWINGS FOR EXTENT OF WORK.
5. REMOVE CEILING SYSTEM, SUBSTRATE, AND INSULATION PREPARE FOR NEW.
6. REMOVE EXISTING GLUE-ON ACOUSTICAL TILE CEILING SYSTEM, TO BARE RAFTERS, PREPARE FOR NEW CEILING SYSTEM.
7. REMOVE EXISTING PARTIAL CEILING TO ALLOW NEW HVAC COMPONENTS AND REPLACEMENT OF LIGHT FIXTURES, PATCH AND REPAIR.
8. REMOVE AND REPLACE EXISTING MECHANICAL SYSTEMS, REFER TO MECHANICAL DWGS. FOR THE EXTENT OF DEMOLITION WORK.
9. REMOVE EXISTING HARD CEILING SYSTEM TO BARE RAFTERS, PREPARE FOR NEW CEILING AND INSULATION.
10. EXISTING ACOUSTICAL LAY-IN T-BAR SUSPENDED GRID SYSTEM TO REMAIN, REMOVE EXISTING ACOUSTICAL TILES TO ALLOW FOR NEW HVAC WORK, STORE CEILING TILES FOR REINSTALLATION, TYP.
11. REMOVE EXISTING PORTABLE INDOOR AC UNIT SYSTEM, WINDOW MOUNTED EXHAUST VENT AND CONDENSATE DRAIN PIPE, RETURN UNIT TO THE DISTRICT AND INFILL WINDOW FRAME WITH SPANDREL ACOUSTICAL PANEL TO MATCH ADJACENT. TYPICAL AT ALL CLASSROOMS AND WHERE OCCURS, VERIFY QUANTITIES AND LOCATIONS IN FIELD.
12. N/A.
13. REMOVE EXISTING BLINDS W/TRACKS WITHOUT DAMAGING AND STORE IN SAFE AREA AS NOT TO GET DAMAGED. BLINDS TO BE RE-INSTALLED AFTER NEW CEILING INSTALL. COORDINATE WITH ARCHITECT FOR INSTALLATION LOCATION/INSTRUCTIONS.
14. REMOVE EXITING TV'S TO ALLOW FOR DEMOLITION AND NEW CEILING INSTALLATION. STORE TV'S FOR REINSTALLATION, TYP. SEE DETAIL 8/A9.1.

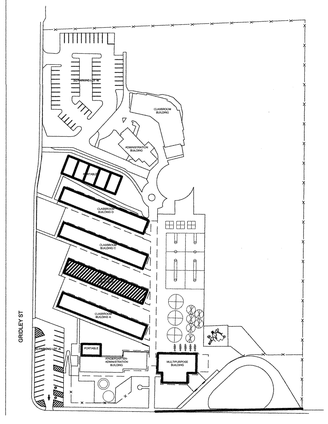
NEW FLOOR PLAN NOTES

1. NEW OUTDOOR HEAT PUMP OVER NEW CONCRETE PAD. SEE DETAIL 7,14/A0.2 AND MECHANICAL, PLUMB., ELEC. DRAWINGS.
2. NEW CHAIN LINK FENCE ENCLOSURE SEE SHEET A0.2 FOR DETAILS AND MECHANICAL DWGS. FOR SIZE REQUIREMENTS.

GRAPHIC KEY

(E) STUD WALL

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

LICENSED ARCHITECT
MARK C FINNEY
No. C-24673
REN 9-30-19
STATE OF CALIFORNIA

DEMOLITION-NEW FLOOR PLANS
BUILDING B - CLASSROOMS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

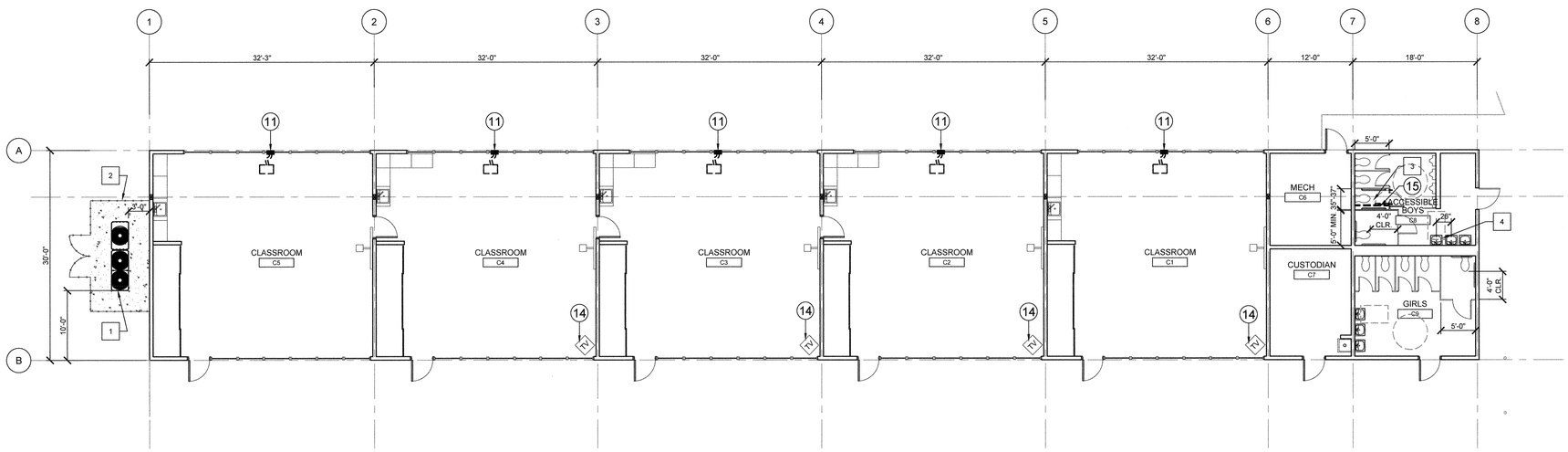
AC KG FLS MS SS

DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A2.4

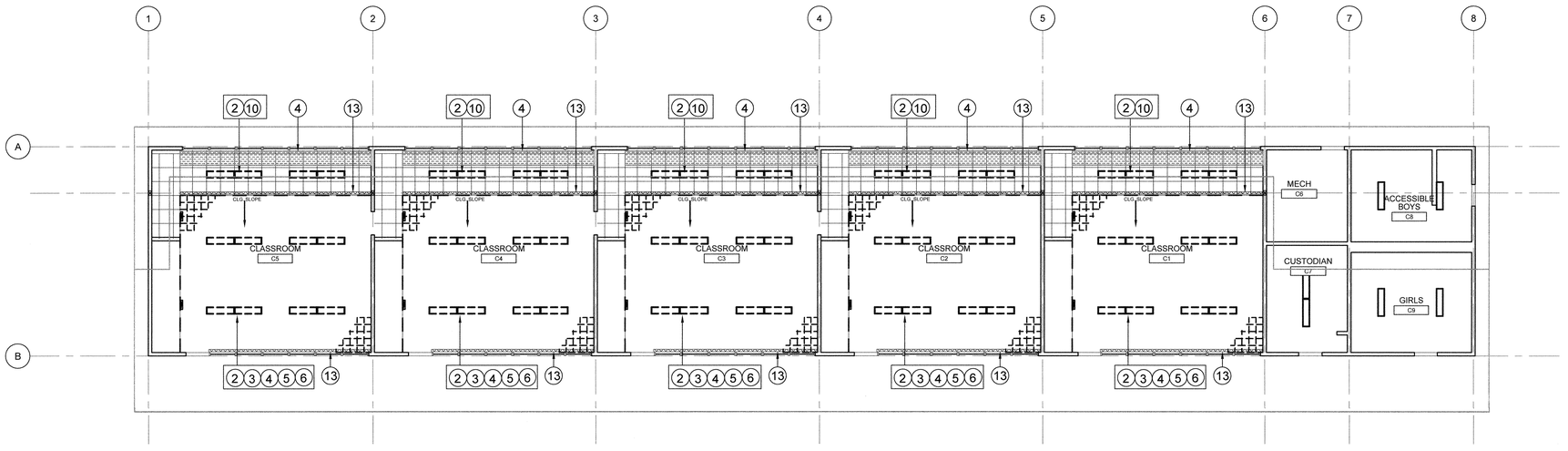
COPYRIGHT©2017



1 DEMOLITION AND NEW FLOOR PLAN - BUILDNG C

1/8" = 1'-0"

0 2' 4' 8' 16' 24'



2 DEMOLITION CEILING PLAN - BUILDING C

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL SURVEY AREA FOR UNDERGROUND UTILITY LOCATIONS PRIOR TO DEMOLITION AND NEW WORK ON SITE.
B. ROOM NAMES AND NUMBERS MAY NOT BE CONSISTENT BETWEEN DEMOLITION FLOOR PLANS AND NEW FLOOR PLANS.
C. REFER TO MECHANICAL/PLUMBING AND ELECTRICAL DRAWINGS FOR EXTENT OF MECHANICAL/PLUMBING AND ELECTRICAL DEMOLITION WORK AND NEW CONSTRUCTION.
D. PAINT ALL EXPOSED CONDUITS, FITTINGS, AND CONDUIT COVERS ASSOCIATED WITH THE NEW WORK TO MATCH EXISTING ADJACENT SURFACE AT BOTH EXTERIOR AND INTERIOR LOCATIONS.
E. REMOVE ALL EXISTING ITEMS TO ALLOW THE NEW WORK, INCLUDING BUT NOT LIMITED TO TREES, SHRUBS, ASPHALT PAVING, FENCING.
F. COORDINATE EXACT LOCATION OF NEW HVAC UNITS IN FIELD WITH THE OWNER AND ARCHITECT PRIOR TO INSTALLATION. PATCH AND REPAIR ADJACENT FLOOR AND WALL SURFACE AREAS ASSOCIATED WITH THE INSTALLATION OF THESE UNITS .
G. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, STORAGE AND REINSTALLATION OF CEILING MOUNTED DEVICES INCLUDING BUT NOT LIMITED TO SPEAKERS, HVAC GRILLES, EXIT SIGNS, FIRE ALARM, CEILING MOUNTED PROJECTORS, U.O.N. VERIFY AND COORDINATE EXISTING CONDITIONS IN FIELD.
H. FOR HVAC UNIT REFRIGERANT LINES THROUGH WALL, SEE MECHANICAL DRAWINGS AND DETAILS 1 & 7/A9.1 FOR CONDUIT SPACING. SPACE PENETRATIONS TO CLEAR STUDS. COORDINATE LAYOUT IN FIELD. PATCH, REPAIR, AND PAINT EXTERIOR WALL SOFFIT, AND INTERIOR CEILING AFTER INSTALLATION TO MATCH EXISTING ADJACENT FINISHES.
I. REMOVE AND REINSTALL PROJECTORS PER DETAIL 16/A9.3.
J. REFER TO SHEET A9.1 FOR TYPICAL FRAMING DETAILS.
K. CONTRACTOR TO PATCH, REPAIR AND PAINT ALL DAMAGED SURFACES AND/OR SURFACES TO BE EXPOSED TO VIEW AS A RESULT OF DEMOLITION WORK. PROTECT FLOOR SURFACES DURING CONSTRUCTION, REPLACE IF DAMAGED AS RESULT OF DEMOLITION/NEW WORK.
L. COORDINATE LOCATION OF NEW THERMOSTATS IN FIELD, AVOID SWING OF DOORS, CASEWORK, AND WALL MOUNTED EQUIPMENT. SEE MECH. DWGS.
M. CONTRACTOR IS RESPONSIBLE FOR REMOVAL/DEMOLITION OF (E) CONCRETE PADS AFTER DEMOLITION OF MECHANICAL/PLUMBING EQUIPMENT AND TO REPAIR/PATCH & INFILL CONCRETE SLAB AS NEEDED.
N. CONTRACTOR IS RESPONSIBLE FOR DEMOLTION OF PARTIAL ROOF FOR NEW MECHANICAL EQUIPMENT. COORDINATE WITH MECH. PLANS FOR LOCATIONS & WITH GARLAND ROOFING FOR PATCHING OF (E) ROOFING.
O. FOR ACCESSIBLE RESTROOMS, RE-MOUNT PLUMBING FIXTURES TO ACCESSIBLE HEIGHT WHERE NECESSARY PER DETAIL 9/A0.4.
P. PROVIDE WALL-MOUNTED TACTILE EXIT SIGNS TYPICAL AT ALL EXIT DOORS SEE DETAIL 1/A0.4.
O. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, STORAGE AND RE-INSTALLATION OF ALL WINDOW SHADES AND TRACK SYSTEM, INCLUDING ADJUSTING/CUTTING OF SHADES TO FIT FOR RE-INSTALLAITON AND TO ALLOW THE INSTALLATION OF NEW CEILING SYSTEMS.

DEMOLITION PLAN NOTES

1. REMOVE EXISTING T-BAR SOFFIT AND SIDE WIDE ABOVE CLOSET. NEW SOFFIT AND FINISH TO BE INSTALLED.
2. REMOVE AND REPLACE ALL EXISTING LIGHT FIXTURES , REFER TO ELEC. DWGS. FOR EXTENT OF WORK. VERIFY QUANTITIES AND LAYOUT IN FIELD.
3. REMOVE AND REPLACE EXISTING HVAC DUCT, REFER TO MECHANICAL DWGS. FOR EXTENT OF WORK.
4. REMOVE ALL EXISTING MECHANICAL/PLUMBING EQUIPMENT & PIPING, REFER TO MECHANICAL/PLUMBING DRAWINGS FOR EXTENT OF WORK.
5. REMOVE CEILING SYSTEM, SUBSTRATE, AND INSULATION PREPARE FOR NEW.
6. REMOVE EXISTING GLUE-ON ACOUSTICAL TILE CEILING SYSTEM, TO BARE RAFTERS, PREPARE FOR NEW CEILING SYSTEM.
7. REMOVE EXISTING PARTIAL CEILING TO ALLOW NEW HVAC COMPONENTS AND REPLACEMENT OF LIGHT FIXTURES, PATCH AND REPAIR.
8. REMOVE AND REPLACE EXISTING MECHANICAL SYSTEMS, REFER TO MECHANICAL DWGS. FOR THE EXTENT OF DEMOLITION WORK.
9. REMOVE EXISTING HARD CEILING SYSTEM TO BARE RAFTERS, PREPARE FOR NEW CEILING AND INSULATION.
10. EXISTING ACOUSTICAL LAY-IN T-BAR SUSPENDED GRID SYSTEM TO REMAIN, REMOVE EXISTING ACOUSTICAL TILES TO ALLOW FOR NEW HVAC WORK, STORE CEILING TILES FOR REINSTALLATION, TYP.
11. REMOVE EXISTING PORTABLE INDOOR AC UNIT SYSTEM, WINDOW MOUNTED EXHAUST VENT AND CONDENSATE DRAIN PIPE, RETURN UNIT TO THE DISTRICT AND INFILL WINDOW FRAME WITH SPANDREL ACOUSTICAL PANEL TO MATCH ADJACENT. TYPICAL AT ALL CLASSROOMS AND WHERE OCCURS, VERIFY QUANTITIES AND LOCATIONS IN FIELD.
12. N/A.
13. REMOVE EXISTING BLINDS W/TRACKS WITHOUT DAMAGING AND STORE IN SAFE AREA AS NOT TO GET DAMAGED. BLINDS TO BE RE-INSTALLED AFTER NEW CEILING INSTALL. COORDINATE WITH ARCHITECT FOR INSTALLATION LOCATION/INSTRUCTIONS.
14. REMOVE EXITING TV'S TO ALLOW FOR DEMOLITION AND NEW CEILING INSTALLATION. STORE TV'S FOR REINSTALLATION, TYP. SEE DETAIL 8/A9.1
15. REMOVE AND REINSTALL PARTITION DOOR TO SWING OUTWARD.

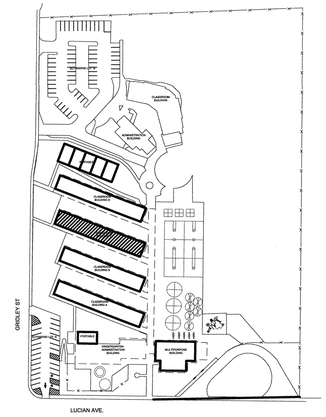
NEW FLOOR PLAN NOTES

1. NEW OUTDOOR HEAT PUMP OVER NEW CONCRETE PAD. SEE DETAIL 7, 14/A0.2 AND MECHANICAL, PLUMB., ELEC. DRAWINGS.
2. NEW CHAIN LINK FENCE ENCLOSURE SEE SHEET A0.2 FOR DETAILS AND MECHANICAL DWGS. FOR SIZE REQUIREMENTS.
3. AMBULATORY STALL. REVISE TOILET PARTITION LAYOUT TO MEET DIMENSION CLEARANCES AS SHOWN AND SWING DOOR OUT. INSTALL GRAB BARS AND MOUNT PER DETAIL 9/A0.4.
4. REINSTALL LAVATORY TO MEET ACCESSIBLE CLEARANCES.

GRAPHIC KEY

(E) STUD WALL

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE, SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-0668

LICENSED ARCHITECT MARK C. FINNEY No. C-24673 REN. 9-30-19 STATE OF CALIFORNIA

DEMOLITION-NEW FLOOR PLANS BUILDING C - CLASSROOMS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

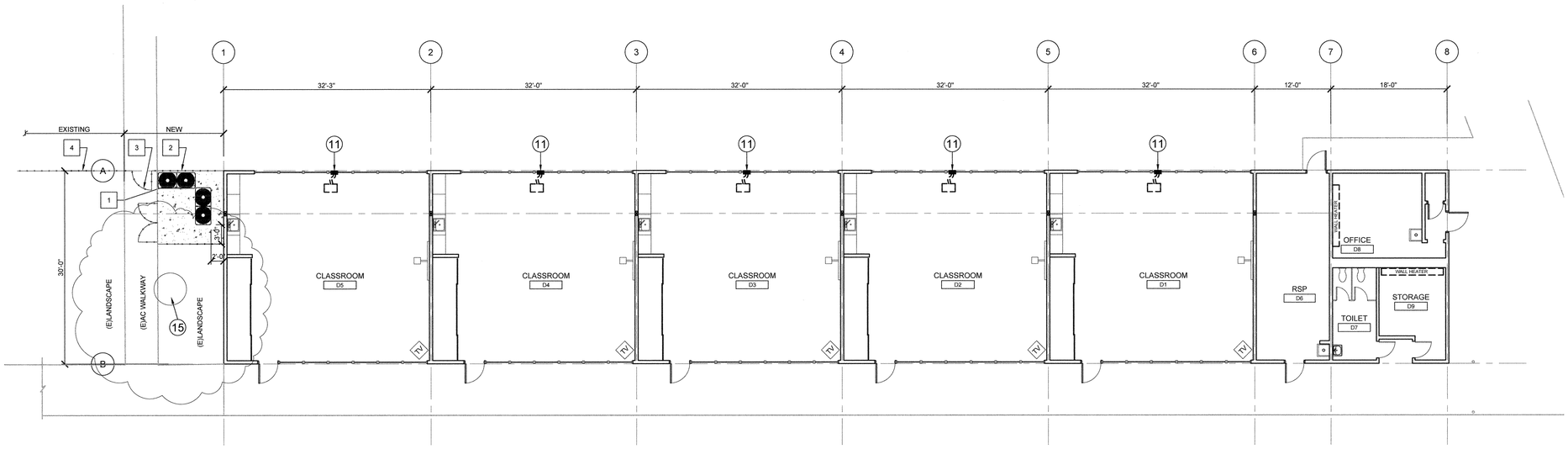
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC KG FLS MK SS 122
DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A2.5

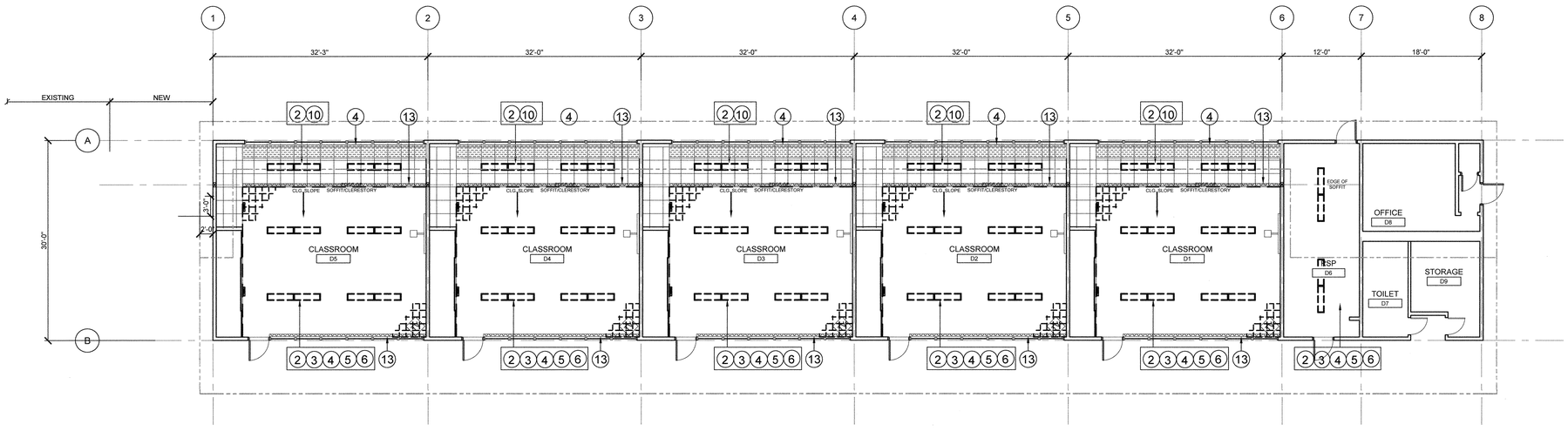
COPYRIGHT ©2017



1 DEMOLITION AND NEW FLOOR PLAN - BUILDNG D

1/8" = 1'-0"

0 2' 4' 8' 16' 24'



2 DEMOLITION CEILING PLAN - BUILDING D

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

COPYRIGHT © 2017

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL SURVEY AREA FOR UNDERGROUND UTILITY LOCATIONS PRIOR TO DEMOLITION AND NEW WORK ON SITE.
B. ROOM NAMES AND NUMBERS MAY NOT BE CONSISTENT BETWEEN DEMOLITION FLOOR PLANS AND NEW FLOOR PLANS.
C. REFER TO MECHANICAL/PLUMBING AND ELECTRICAL DRAWINGS FOR EXTENT OF MECHANICAL/PLUMBING AND ELECTRICAL DEMOLITION WORK AND NEW CONSTRUCTION.
D. PAINT ALL EXPOSED CONDUITS, FITTINGS, AND CONDUIT COVERS ASSOCIATED WITH THE NEW WORK TO MATCH EXISTING ADJACENT SURFACE AT BOTH EXTERIOR AND INTERIOR LOCATIONS.
E. REMOVE ALL EXISTING ITEMS TO ALLOW THE NEW WORK, INCLUDING BUT NOT LIMITED TO TREES, SHRUBS, ASPHALT PAVING, FENCING.
F. COORDINATE EXACT LOCATION OF NEW HVAC UNITS IN FIELD WITH THE OWNER AND ARCHITECT PRIOR TO INSTALLATION. PATCH AND REPAIR ADJACENT FLOOR AND WALL SURFACE AREAS ASSOCIATED WITH THE INSTALLATION OF THESE UNITS .
G. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, STORAGE AND REINSTALLATION OF CEILING MOUNTED DEVICES INCLUDING BUT NOT LIMITED TO SPEAKERS, HVAC GRILLES, EXIT SIGNS, FIRE ALARM, CEILING MOUNTED PROJECTORS, U.O.N. VERIFY AND COORDINATE EXISTING CONDITIONS IN FIELD.
H. FOR HVAC UNIT REFRIGERANT LINES THROUGH WALL, SEE MECHANICAL DRAWINGS AND DETAILS 1 & 7/A9.1. SPACE PENETRATIONS TO CLEAR STUDS. COORDINATE LAYOUT IN FIELD. PATCH, REPAIR, AND PAINT EXTERIOR WALL SOFFIT, AND INTERIOR CEILING AFTER INSTALLATION TO MATCH EXISTING ADJACENT FINISHES.
I. REMOVE AND REINSTALL PROJECTORS PER DETAIL 16/A9.3.
J. REFER TO SHEET A9.1 FOR TYPICAL FRAMING DETAILS.
K. CONTRACTOR TO PATCH, REPAIR AND PAINT ALL DAMAGED SURFACES AND/OR SURFACES TO BE EXPOSED TO VIEW AS A RESULT OF DEMOLITION WORK. PROTECT FLOOR SURFACES DURING CONSTRUCTION, REPLACE IF DAMAGED AS RESULT OF DEMOLITION/NEW WORK.
L. COORDINATE LOCATION OF NEW THERMOSTATS IN FIELD, AVOID SWING OF DOORS, CASEWORK, AND WALL MOUNTED EQUIPMENT. SEE MECH. DWGS.
M. CONTRACTOR IS RESPONSIBLE FOR REMOVAL/DEMOLITION OF (E) CONCRETE PADS AFTER DEMOLITION OF MECHANICAL/PLUMBING EQUIPMENT AND TO REPAIR/PATCH & INFILL CONCRETE SLAB AS NEEDED.
N. CONTRACTOR IS RESPONSIBLE FOR DEMOLTION OF PARTIAL ROOF FOR NEW MECHANICAL EQUIPMENT. COORDINATE WITH MECH. PLANS FOR LOCATIONS & WITH GARLAND ROOFING FOR PATCHING OF (E) ROOFING.
P. PROVIDE WALL-MOUNTED TACTILE EXIT SIGNS TYPICAL AT ALL EXIT DOORS SEE DETAIL 1/A0.4.
O. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, STORAGE AND RE-INSTALLATION OF ALL WINDOW SHADES AND TRACK SYSTEM, INCLUDING ADJUSTING/CUTTING OF SHADES TO FIT FOR RE-INSTALLAITON AND TO ALLOW THE INSTALLATION OF NEW CEILING SYSTEMS.

DEMOLITION PLAN NOTES

1. REMOVE EXISTING T-BAR SOFFIT AND SIDE WIDE ABOVE CLOSET. NEW SOFFIT AND FINISH TO BE INSTALLED.
2. REMOVE AND REPLACE ALL EXISTING LIGHT FIXTURES , REFER TO ELEC. DWGS. FOR EXTENT OF WORK. VERIFY QUANTITIES AND LAYOUT IN FIELD.
3. REMOVE AND REPLACE EXISTING HVAC DUCT, REFER TO MECHANICAL DWGS. FOR EXTENT OF WORK.
4. REMOVE ALL EXISTING MECHANICAL/PLUMBING EQUIPMENT & PIPING, REFER TO MECHANICAL/PLUMBING DRAWINGS FOR EXTENT OF WORK.
5. REMOVE CEILING SYSTEM, SUBSTRATE, AND INSULATION PREPARE FOR NEW.
6. REMOVE EXISTING GLUE-ON ACOUSTICAL TILE CEILING SYSTEM, TO BARE RAFTERS, PREPARE FOR NEW CEILING SYSTEM.
7. REMOVE EXISTING PARTIAL CEILING TO ALLOW NEW HVAC COMPONENTS AND REPLACEMENT OF LIGHT FIXTURES, PATCH AND REPAIR.
8. REMOVE AND REPLACE EXISTING MECHANICAL SYSTEMS, REFER TO MECHANICAL DWGS. FOR THE EXTENT OF DEMOLITION WORK.
9. REMOVE EXISTING HARD CEILING SYSTEM TO BARE RAFTERS, PREPARE FOR NEW CEILING AND INSULATION.
10. EXISTING ACOUSTICAL LAY-IN T-BAR SUSPENDED GRID SYSTEM TO REMAIN, REMOVE EXISTING ACOUSTICAL TILES TO ALLOW FOR NEW HVAC WORK, STORE CEILING TILES FOR REINSTALLATION, TYP.
11. REMOVE EXISTING PORTABLE INDOOR AC UNIT SYSTEM, WINDOW MOUNTED EXHAUST VENT AND CONDENSATE DRAIN PIPE, RETURN UNIT TO THE DISTRICT AND INFILL WINDOW FRAME WITH SPANDREL ACOUSTICAL PANEL TO MATCH ADJACENT. TYPICAL AT ALL CLASSROOMS AND WHERE OCCURS, VERIFY QUANTITIES AND LOCATIONS IN FIELD.
12. N/A
13. REMOVE EXISTING BLINDS W/TRACKS WITHOUT DAMAGING AND STORE IN SAFE AREA AS NOT TO GET DAMAGED. BLINDS TO BE RE-INSTALLED AFTER NEW CEILING INSTALL.
14. REMOVE EXITING TV'S TO ALLOW FOR DEMOLITION AND NEW CEILING INSTALLATION. STORE TV'S FOR REINSTALLATION, TYP. SEE DETAIL 8/A9.1.
15. EXISTING TREE,STUMP,ROOTS TO BE REMOVED, COORDINATE WITH CONSTRUCTION MANAGER IF CAN BE SALVAGED AND ALLOW FOR THE NEW WORK.

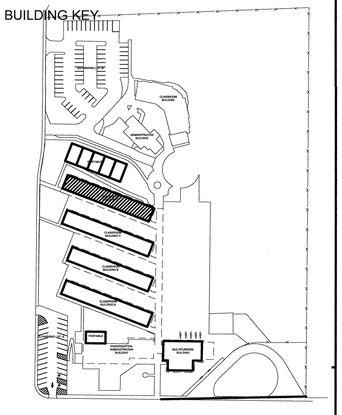
NEW FLOOR PLAN NOTES

1. NEW OUTDOOR HEAT PUMP OVER NEW CONCRETE PAD. SEE DETAIL 7/A0.2 AND MECHANICAL, PLUMB., ELEC. DRAWINGS.
2. NEW CHAIN LINK FENCE ENCLOSURE WITH DOUBLE GATES SEE SHEET A0.2 AND 3/A0.3 FOR DETAILS AND MECHANICAL DWGS. FOR SIZE REQUIREMENTS.
3. REPLACE EXISTING SINGLE GATE WITH NEW, SEE DETAIL 4/A0.3
4. EXISTING CHAIN LINK FENCE TO REMAIN.

GRAPHIC KEY

(E) STUD WALL

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

LICENSED ARCHITECT
MARK C. FINNEY
No. C24673
REN. 9-30-19
STATE OF CALIFORNIA

DEMOLITION-NEW FLOOR PLANS
BUILDING D - CLASSROOMS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

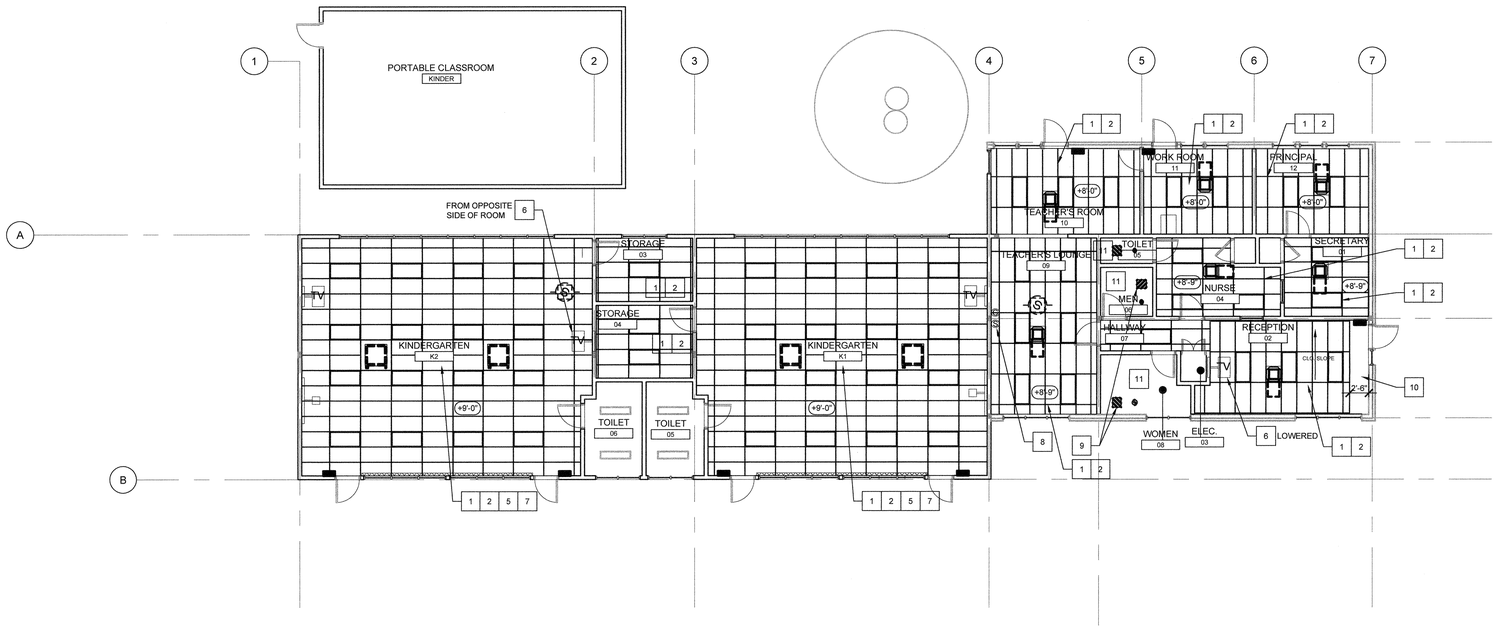
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271
AC 26 FLS NR SS 10
DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A2.6



1 REFLECTED CEILING PLAN - ADMIN./KINDERGARTEN BUILDING

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

TRUE NORTH / REF NORTH

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL SURVEY AREA FOR UNDERGROUND UTILITY LOCATIONS PRIOR TO DEMOLITION AND NEW WORK ON SITE
B. PROVIDE NEW CEILING / ROOF FRAMING R-30 INSULATION WHERE NEW CEILING SYSTEM OCCURS.
C. INSTALL NEW CEILING SYSTEMS AT SAME HEIGHT OF EXISTING, V.I.F.
D. COORDINATE LOCATION OF NEW THERMOSTATS IN FIELD, AVOID SWING OF DOORS, CASEWORK, AND WALL MOUNTED EQUIPMENT. SEE MECH. DWGS.
L. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE T-BAR CEILING GRID & PANEL MODIFICATIONS AND NEW SUSPENSION FRAME SYSTEM ACCESSORIES FOR THE INSTALLATION OF THE INDOOR CASSETTE SUPPLY UNITS, COORDINATE WITH AC AND CEILING MANUFACTURER FOR REQUIREMENTS.

REFLECTED CEILING PLAN NOTES

1. NEW LAY-IN ACOUSTICAL PANEL, T-BAR GRID SUSPENDED CEILING SYSTEM, TYP. SEE SHEET A9.2 & A9.3 FOR DETAILS.
2. NEW LIGHT FIXTURE TYP., SEE ELEC. DWGS.
3. NEW SURFACE MOUNTED LIGHT FIXTURE, TYP. SEE ELECTRICAL DRAWINGS FOR TYPE AND EXTENT OF WORK.
4. PATCH AND PAINT EXISTING GYP. BD. CEILING.
5. CASSETTE TYPE FAN COIL UNIT WITH BOTTOM FLUSH WITH FINISHED CEILING, TYP. SEE MECH. DRAWINGS.
6. EXISTING TV RELOCATED/MOVE TO CLEAR NEW CEILING.
7. INSTALL NEW BLINDS IN ROOM K1 AND K2.
8. RELOCATE CLOCK AND SPEAKER TO CLEAR NEW CEILING.
9. NEW EXHAUST FANS, ROOF MOUNT. CONTRACTOR TO PATCH, REPAIR CEILING AND ROOF PENETRATIONS TO MATCH ADJACENT. SEE MECH. DWGS, SEE DETAIL 14/A9.3.
10. NEW SUSPENDED GYP. BD. SOFFIT PAINTED, TO CLEAR (E)WINDOW HEAD.
11. NEW GYP. CEILING, PAINTED, TYP.

GRAPHIC KEY

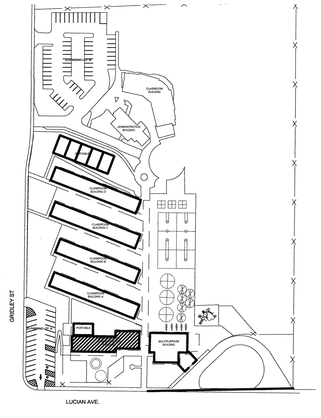
MECHANICAL

- SUPPLY DIFFUSER
- RETURN AIR GRILLE
- EXHAUST GRILLE
- CASSETTE SUPPLY UNIT

ELECTRICAL

- SURFACE MOUNTED LIGHT FIXTURE
- 2' X 4' LIGHT FIXTURE
- 2' X 2' LIGHT FIXTURE
- RECESSED DOWNLIGHT
- EXIT SIGN
- SMOKE DETECTOR
- TELEVISION AND BRACKET
- SPEAKER
- CLOCK

BUILDING KEY



COPYRIGHT ©2017

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

LICENSED ARCHITECT MARK C FINNEY No. C-24673 REN. 8-30-19 STATE OF CALIFORNIA

REFLECTED CEILING PLAN- ADMINISTRATION/KINDERGARTEN BUILDING

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

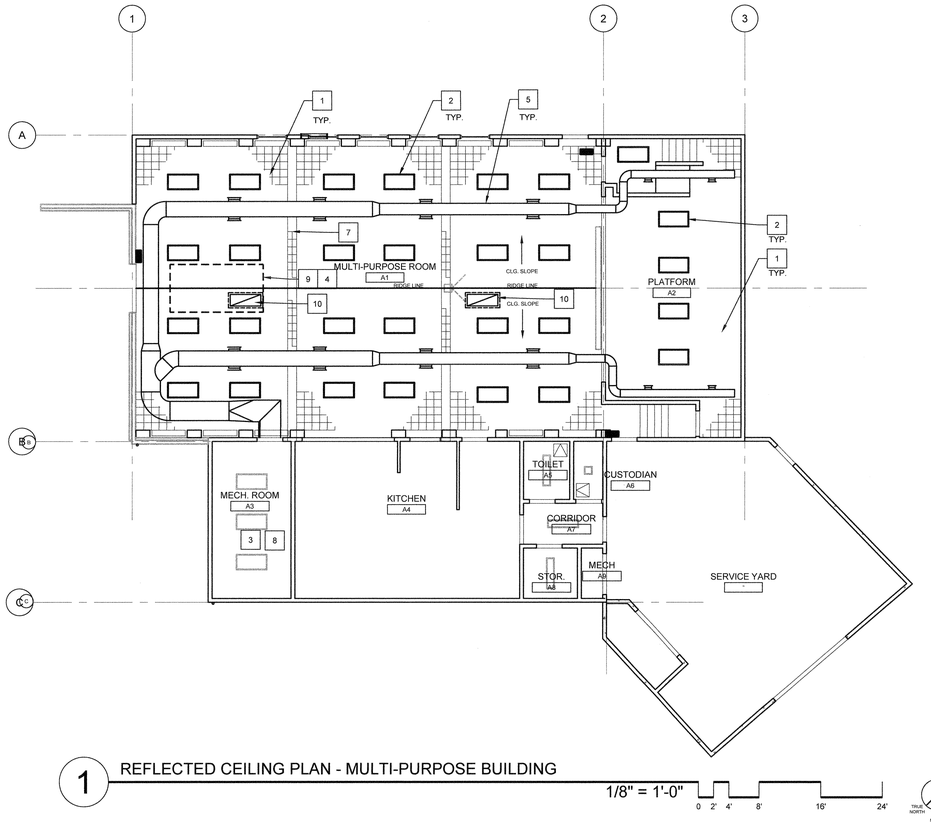
APPL 01-117271

AC XG FLS MS SS LM

DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A3.1



1 REFLECTED CEILING PLAN - MULTI-PURPOSE BUILDING

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

TRUE NORTH / REF NORTH

GENERAL NOTES

A. PROVIDE NEW CEILING / ROOF FRAMING R-30 INSULATION WHERE NEW CEILING SYSTEM OCCURS.
B. INSTALL NEW CEILING SYSTEMS AT SAME HEIGHT OF EXISTING, V.I.F.
C. COORDINATE LOCATION OF NEW THERMOSTATS IN FIELD, AVOID SWING OF DOORS, CASEWORK, AND WALL MOUNTED EQUIPMENT. SEE MECH. DWGS.

REFLECTED CEILING PLAN NOTES

1. PATCH AND PAINT EXISTING GLUE-ON ACOUSTICAL CEILING TILE
2. NEW LIGHT FIXTURE, TYP. SEE ELECTRICAL DRAWINGS FOR TYPE AND EXTENT OF WORK.
3. PATCH AND PAINT EXISTING GYP. BD. CEILING.
4. GLUED-ON ACOUSTICAL TILE O/GYP. BD. PAINTED
5. NEW EXPOSED DUCT TO RUN BELOW EXISTING BEAMS, PAINT TYP, SEE MECH. DWGS. FOR MOUNTING DETAILS.
6. NEW LOUVER, PATCH AND REPAIR INTERIOR AND EXTERIOR TO MATCH ADJACENT.
7. PATCH, REPLACE AND PAINT ALL EXISTING CEILING TILES ON (E) BEAMS.
8. NEW MECHANICAL EQUIPMENT, SEE MECHANICAL DRAWINGS FOR EXTENT OF WORK.
9. INFILL EXISTING ROOF OPENING, PATCH AND REPAIR ROOF TO MATCH EXISTING, COORDINATE WITH GARLAND ROOFING INC., PROVIDE NEW CEILING TO MATCH ADJACENT.
10. NEW ROOF HOOD,SEE MECHANICAL DRAWINGS & DETAIL 14/A9.3.

GRAPHIC KEY

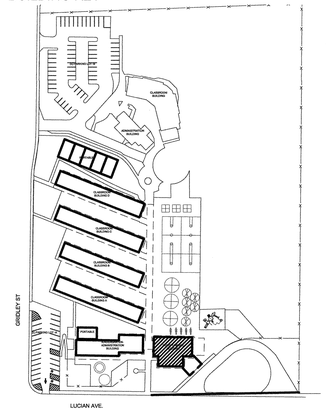
MECHANICAL

- SUPPLY DIFFUSER
- RETURN AIR GRILLE
- EXHAUST GRILLE

ELECTRICAL

- SURFACE MOUNTED LIGHT FIXTURE
- SURFACE MOUNTED LIGHT FIXTURE
- RECESSED DOWNLIGHT
- EXIT SIGN
- SD SMOKE DETECTOR
- TV TELEVISION AND BRACKET
- S SPEAKER

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

LICENSED ARCHITECT MARK C. FINNEY RENEWAL 9-30-19 LIC. NO. C-24573 STATE OF CALIFORNIA

REFLECTED CEILING PLAN
MULTIPURPOSE BUILDING

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

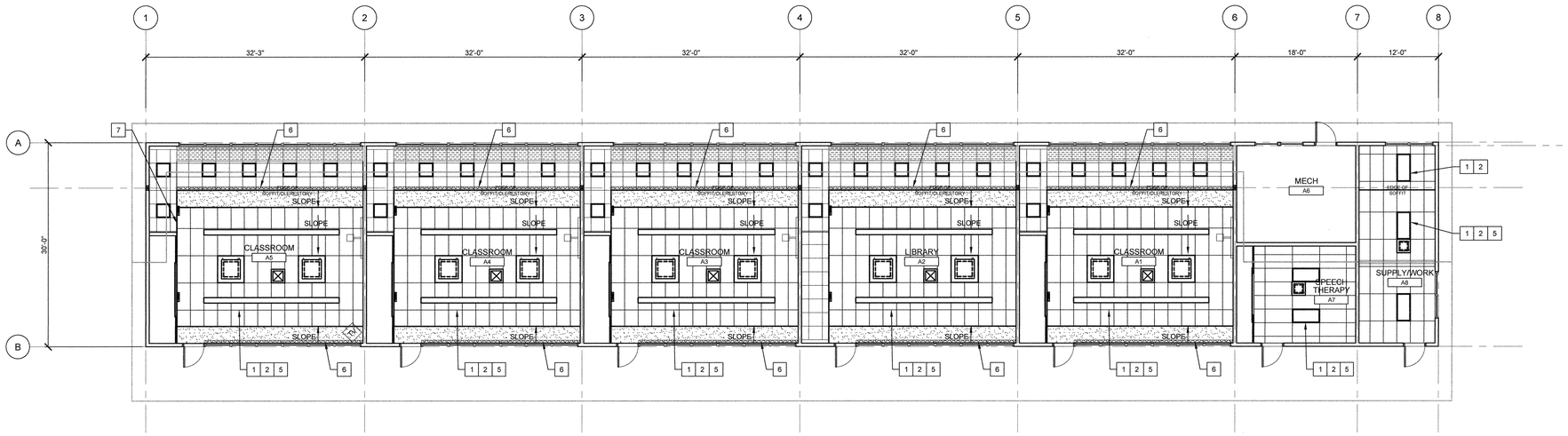
APPL 01-117271

AP FLS SS
DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A3.2

COPYRIGHT ©2017



1 REFLECTED CEILING PLAN - BUILDING A

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

GENERAL NOTES

A. PROVIDE NEW CEILING / ROOF FRAMING R-30 INSULATION WHERE NEW CEILING SYSTEM OCCURS.
B. INSTALL NEW CEILING SYSTEMS TO CLEAR NEW HVAC SYSTEMS, COORDINATE WITH HVAC MANUF. FOR REQUIRED CLEARANCE.
C. COORDINATE LOCATION OF NEW THERMOSTATS IN FIELD, AVOID SWING OF DOORS, CASEWORK, AND WALL MOUNTED EQUIPMENT. SEE MECH. DWGS.
L. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE T-BAR CEILING GRID & PANEL MODIFICATIONS AND NEW SUSPENSION FRAME SYSTEM ACCESSORIES FOR THE INSTALLATION OF THE INDOOR CASSETTE SUPPLY UNITS, COORDINATE WITH AC AND CEILING MANUFACTURER FOR REQUIREMENTS.

REFLECTED CEILING PLAN NOTES

1. NEW LAY-IN ACOUSTICAL PANEL, T-BAR GRID SUSPENDED CEILING SYSTEM, TYP. SEE SHEET A9.2 & A9.3 FOR DETAILS.
2. NEW LIGHT FIXTURE TYP., SEE ELEC. DWGS.
3. NEW SURFACE MOUNTED LIGHT FIXTURE, TYP. SEE ELECTRICAL DRAWINGS FOR TYPE AND EXTENT OF WORK.
4. PATCH AND PAINT EXISTING GYP. BD. CEILING.
5. CASSETTE TYPE FAN COIL UNIT WITH BOTTOM FLUSH WITH FINISHED CEILING, TYP. SEE MECH. DRAWINGS, 1/M6.1.
6. RE-INSTALL BLINDS. BLINDS TO BE INSTALLED AFTER NEW CEILING INSTALL. COORDINATE WITH ARCHITECT FOR INSTALLATION INSTRUCTIONS.
7. NEW GYP BD. O/ NEW 2x SOFFIT FRAMING.

GRAPHIC KEY

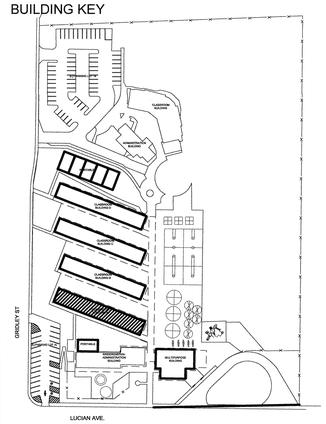
MECHANICAL

- WALL MTD GRILLE
- SUPPLY DIFFUSER
- RETURN AIR GRILLE
- EXHAUST GRILLE
- CASSETTE SUPPLY UNIT

ELECTRICAL

- SURFACE MOUNTED LIGHT FIXTURE
- 2' X 4' LIGHT FIXTURE
- 2' X 2' LIGHT FIXTURE
- RECESSED DOWNLIGHT
- EXIT SIGN
- SD SMOKE DETECTOR
- TV TELEVISION AND BRACKET
- S SPEAKER

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

LICENSED ARCHITECT MARK C. FINNEY No. C-24673 REN. 9-30-19 STATE OF CALIFORNIA

REFLECTED CEILING PLAN- BUILDING A - CLASSROOMS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

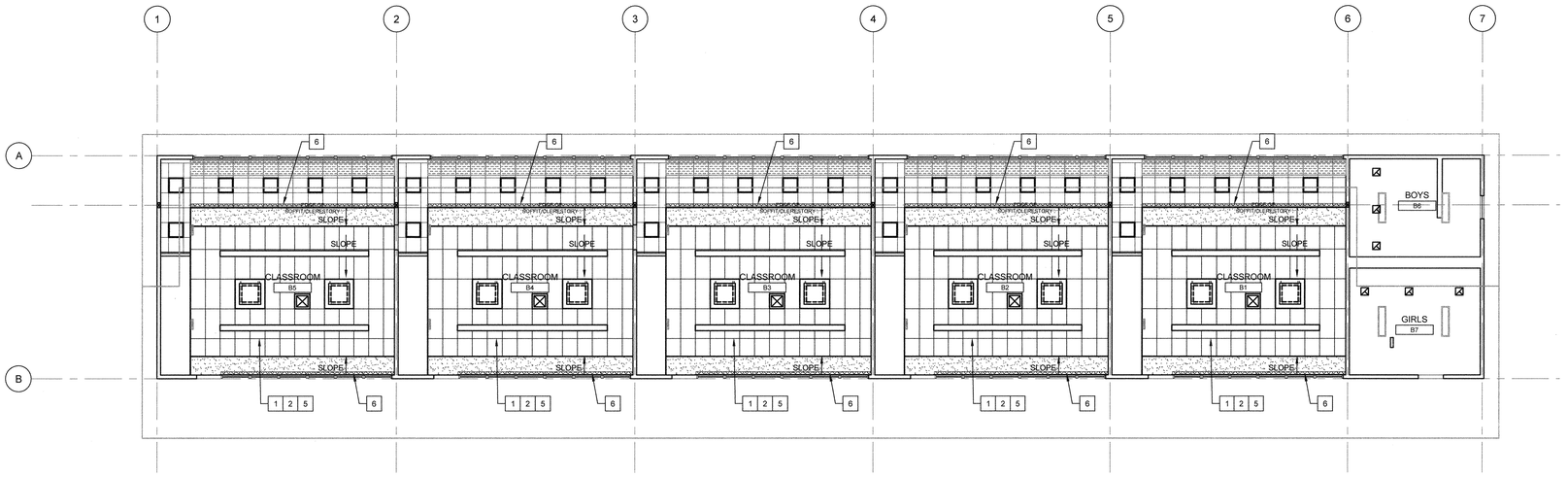
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271
ACC FLS MS SS
DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A3.3

COPYRIGHT ©2017



1 REFLECTED CEILING PLAN - BUILDING B

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

REF. NORTH TRUE NORTH

GENERAL NOTES

A. PROVIDE NEW CEILING / ROOF FRAMING R-30 INSULATION WHERE NEW CEILING SYSTEM OCCURS.
B. INSTALL NEW CEILING SYSTEMS TO CLEAR NEW HVAC SYSTEMS, COORDINATE WITH HVAC MANUF. FOR REQUIRED CLEARANCE.
C. COORDINATE LOCATION OF NEW THERMOSTATS IN FIELD, AVOID SWING OF DOORS, CASEWORK, AND WALL MOUNTED EQUIPMENT. SEE MECH. DWGS.
L. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE T-BAR CEILING GRID & PANEL MODIFICATIONS AND NEW SUSPENSION FRAME SYSTEM ACCESSORIES FOR THE INSTALLATION OF THE INDOOR CASSETTE SUPPLY UNITS, COORDINATE WITH AC AND CEILING MANUFACTURER FOR REQUIREMENTS.

REFLECTED CEILING PLAN NOTES

1. NEW LAY-IN ACOUSTICAL PANEL, T-BAR GRID SUSPENDED CEILING SYSTEM, TYP. SEE SHEET A9.2 & A9.3 FOR DETAILS.
2. NEW LIGHT FIXTURE TYP., SEE ELEC. DWGS.
3. NEW SURFACE MOUNTED LIGHT FIXTURE, TYP. SEE ELECTRICAL DRAWINGS FOR TYPE AND EXTENT OF WORK.
4. PATCH AND PAINT EXISTING GYP. BD. CEILING.
5. CASSETTE TYPE FAN COIL UNIT WITH BOTTOM FLUSH WITH FINISHED CEILING, TYP. SEE MECH. DRAWINGS.
6. REINSTALL BLINDS. BLINDS TO BE INSTALLED AFTER NEW CEILING INSTALLATION.

GRAPHIC KEY

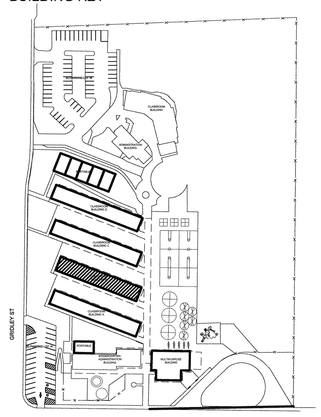
MECHANICAL

- WALL MTD GRILLE
- SUPPLY DIFFUSER
- RETURN AIR GRILLE
- EXHAUST GRILLE
- CASSETTE SUPPLY UNIT

ELECTRICAL

- SURFACE MOUNTED LIGHT FIXTURE
- 2' X 4' LIGHT FIXTURE
- 2' X 2' LIGHT FIXTURE
- RECESSED DOWNLIGHT
- EXIT SIGN
- SD — SMOKE DETECTOR
- TV — TELEVISION AND BRACKET
- S — SPEAKER

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

LICENSED ARCHITECT
MARK C. FINNEY
No. C-24873
REN. 9-30-19
STATE OF CALIFORNIA

REFLECTED CEILING PLAN-
UNIT B - CLASSROOMS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

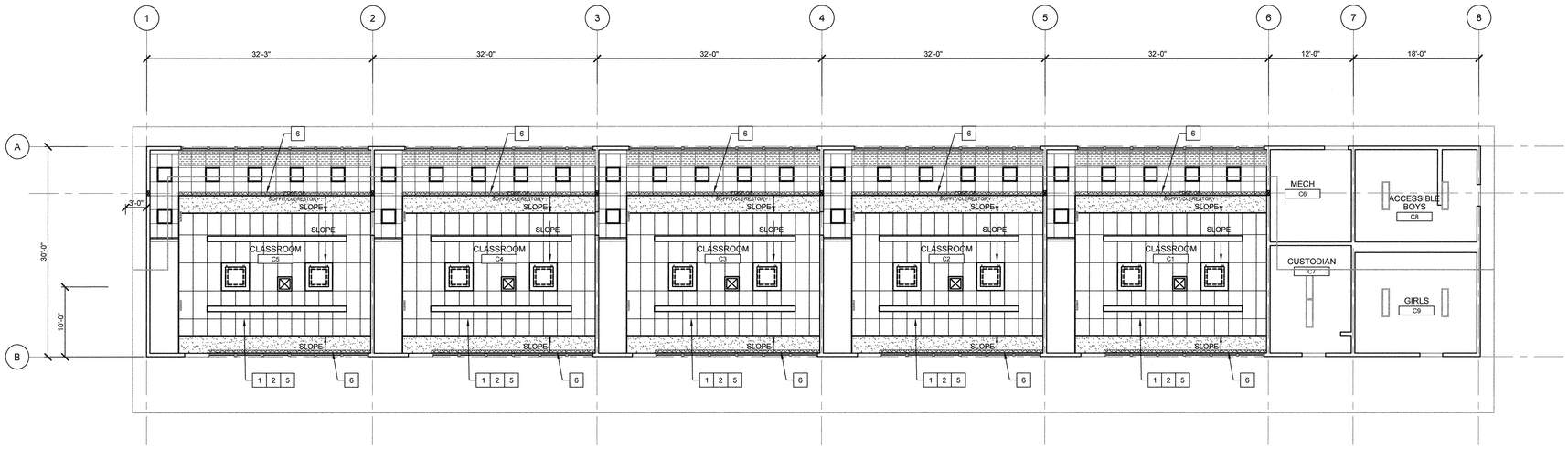
APPL 01-117271

ACC FLS MS SS
DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A3.4

COPYRIGHT ©2017



1 REFLECTED CEILING PLAN - BUILDING C

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

REF NORTH TRUE NORTH

GENERAL NOTES

A. PROVIDE NEW CEILING / ROOF FRAMING R-30 INSULATION WHERE NEW CEILING SYSTEM OCCURS.
B. INSTALL NEW CEILING SYSTEMS TO CLEAR NEW HVAC SYSTEMS, COORDINATE WITH HVAC MANUF. FOR REQUIRED CLEARANCE.
C. COORDINATE LOCATION OF NEW THERMOSTATS IN FIELD, AVOID SWING OF DOORS, CASEWORK, AND WALL MOUNTED EQUIPMENT. SEE MECH. DWGS.
L. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE T-BAR CEILING GRID & PANEL MODIFICATIONS AND NEW SUSPENSION FRAME SYSTEM ACCESSORIES FOR THE INSTALLATION OF THE INDOOR CASSETTE SUPPLY UNITS, COORDINATE WITH AC AND CEILING MANUFACTURER FOR REQUIREMENTS.

REFLECTED CEILING PLAN NOTES

1. NEW LAY-IN ACOUSTICAL PANEL, T-BAR GRID SUSPENDED CEILING SYSTEM, TYP. SEE SHEET A9.2 & A9.3 FOR DETAILS.
2. NEW LIGHT FIXTURE TYP., SEE ELEC. DWGS.
3. NEW SURFACE MOUNTED LIGHT FIXTURE, TYP. SEE ELECTRICAL DRAWINGS FOR TYPE AND EXTENT OF WORK.
4. PATCH AND PAINT EXISTING GYP. BD. CEILING.
5. CASSETTE TYPE FAN COIL UNIT WITH BOTTOM FLUSH WITH FINISHED CEILING, TYP. SEE MECH. DRAWINGS. 1/M6.1.
6. REINSTALL BLINDS AFTER NEW CEILING INSTALLATION.

GRAPHIC KEY

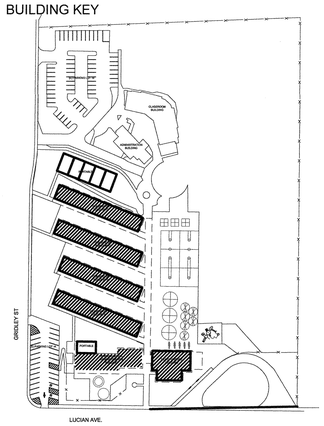
MECHANICAL

- WALL MTD GRILLE
- SUPPLY DIFFUSER
- RETURN AIR GRILLE
- EXHAUST GRILLE
- CASSETTE SUPPLY UNIT

ELECTRICAL

- SURFACE MOUNTED LIGHT FIXTURE
- 2' X 4' LIGHT FIXTURE
- 2' X 2' LIGHT FIXTURE
- RECESSED DOWNLIGHT
- EXIT SIGN
- SMOKE DETECTOR
- TELEVISION AND BRACKET
- SPEAKER

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-9600
FAX: 408-377-6066

LICENSED ARCHITECT MARK C FINNEY No. C-24673 REN. 9-30-19 STATE OF CALIFORNIA

REFLECTED CEILING PLAN- UNIT C - CLASSROOMS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

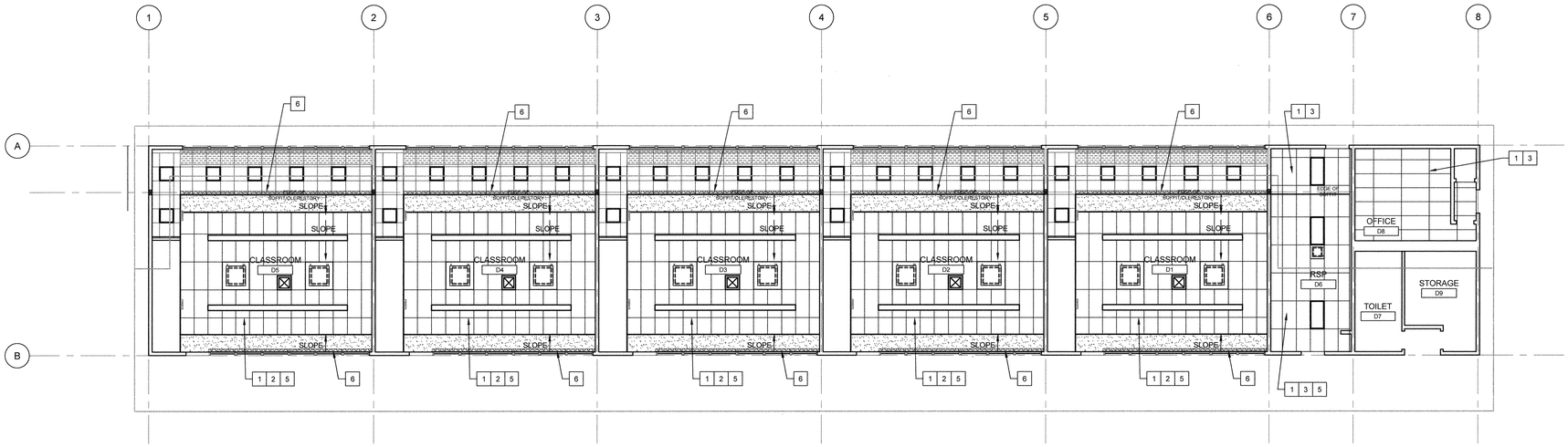
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271
AC FLS MS SS
DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A3.5

COPYRIGHT © 2017



1 REFLECTED CEILING PLAN - BUILDING D

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

REF NORTH TRUE NORTH

GENERAL NOTES

A. PROVIDE NEW CEILING / ROOF FRAMING R-30 INSULATION WHERE NEW CEILING SYSTEM OCCURS.
B. INSTALL NEW CEILING SYSTEMS TO CLEAR NEW HVAC SYSTEMS, COORDINATE WITH HVAC MANUF. FOR REQUIRED CLEARANCE.
C. COORDINATE LOCATION OF NEW THERMOSTATS IN FIELD, AVOID SWING OF DOORS, CASEWORK, AND WALL MOUNTED EQUIPMENT. SEE MECH. DWGS.
L. GENERAL CONTRACTOR IS RESPONSIBLE FOR THE T-BAR CEILING GRID & PANEL MODIFICATIONS AND NEW SUSPENSION FRAME SYSTEM ACCESSORIES FOR THE INSTALLATION OF THE INDOOR CASSETTE SUPPLY UNITS, COORDINATE WITH AC AND CEILING MANUFACTURER FOR REQUIREMENTS.

REFLECTED CEILING PLAN NOTES

1. NEW LAY-IN ACOUSTICAL PANEL, T-BAR GRID SUSPENDED CEILING SYSTEM, TYP. SEE SHEET A9.2 & A9.3 FOR DETAILS.
2. NEW LIGHT FIXTURE TYP., SEE ELEC. DWGS.
3. NEW SURFACE MOUNTED LIGHT FIXTURE, TYP. SEE ELECTRICAL DRAWINGS FOR TYPE AND EXTENT OF WORK.
4. PATCH AND PAINT EXISTING GYP. BD. CEILING.
5. CASSETTE TYPE FAN COIL UNIT WITH BOTTOM FLUSH WITH FINISHED CEILING, TYP. SEE MECH. DRAWINGS, 1/M6.1.
6. REINSTALL BLINDS. BLINDS TO BE INSTALLED AFTER NEW CEILING INSTALLATION.

GRAPHIC KEY

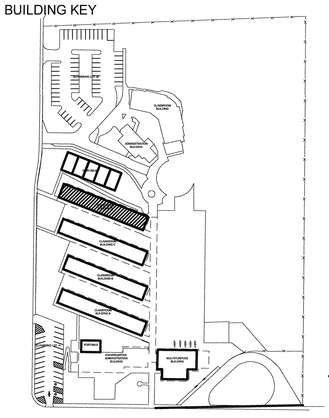
MECHANICAL

- WALL MTD GRILLE
- SUPPLY DIFFUSER
- RETURN AIR GRILLE
- EXHAUST GRILLE
- CASSETTE SUPPLY UNIT

ELECTRICAL

- SURFACE MOUNTED LIGHT FIXTURE
- 2' X 4' LIGHT FIXTURE
- 2' X 2' LIGHT FIXTURE
- RECESSED DOWNLIGHT
- EXIT SIGN
- SD SMOKE DETECTOR
- TV TELEVISION AND BRACKET
- S SPEAKER

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

LICENSED ARCHITECT MARK C FINNEY No. C-24673 REN 9-30-19 STATE OF CALIFORNIA

REFLECTED CEILING PLAN- UNIT D - CLASSROOMS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

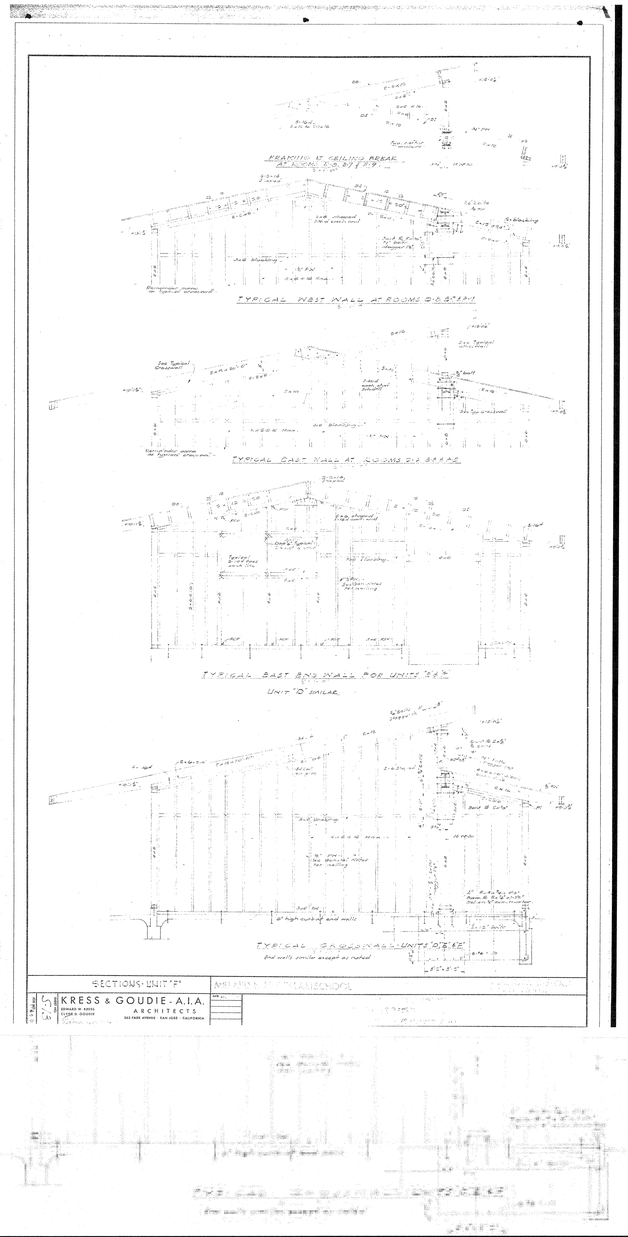
AC FLS MS SS

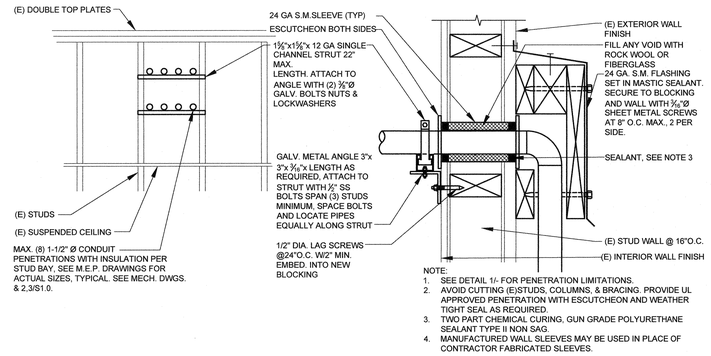
DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

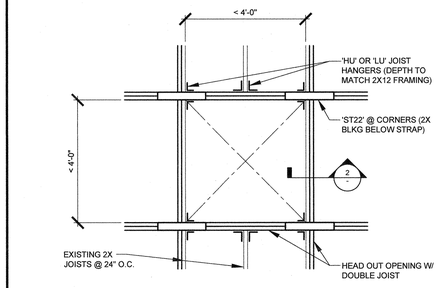
A3.6

COPYRIGHT ©2017

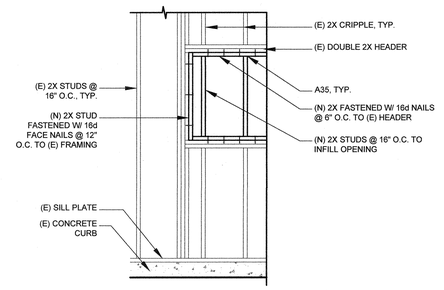




7 CONDUIT SPACING
THRU WALLS 3/4"=1'-0"

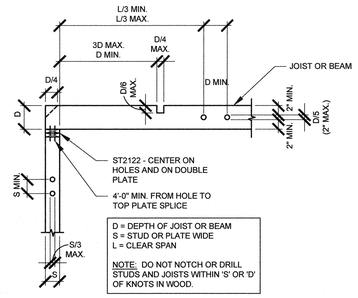


4 TYPICAL ROOF FRAMED OPENING
1/2"=1'-0"

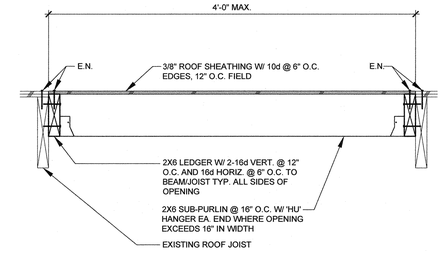


3 INFILL @ (E) WALL OPENING
1/2"=1'-0"

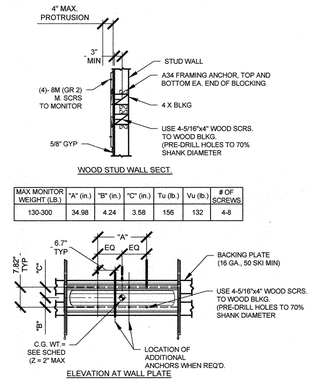
LOUVER OPENING
@ HEAD 3"=1'-0"



6 HOLES & NOTCHES IN WOOD STUDS, JOISTS, BEAMS & PLATES
1/2"=1'-0"



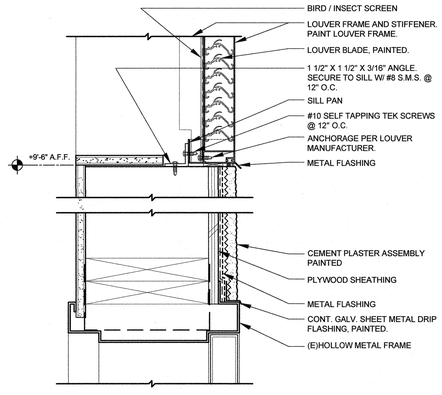
2 (N) INFILL AT (E) ROOF OPENING
1-1/2"=1'-0"



MAX. MONITOR WEIGHT (LB.)	"A" (in.)	"B" (in.)	"C" (in.)	Tu (lb.)	Vu (lb.)	# OF SCREWS
130-300	34.98	4.24	3.58	156	132	4-8

NOTES:
1. FORCES ARE DETERMINED PER 2016 CBC AND ASCE 7-10.
2. MOUNT TV WITH A MAX. OF 4" PROTRUSION AND 27" A.F.F. MIN. IF MORE THAN 4" PROTRUSION, MOUNT TV 80" MIN. A.F.F. - CBC 11B-307.2

8 TV/MONITOR WALL MOUNTING
1"=1'-0"



5 LOUVER OPENING
ABOVE DOOR @ SILL 3"=1'-0"

COPYRIGHT ©2017

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-0060

LICENSED ARCHITECT MARK C. FINNEY REG. NO. C-24673 STATE OF CALIFORNIA REN 9-30-19

TYPICAL DETAILS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

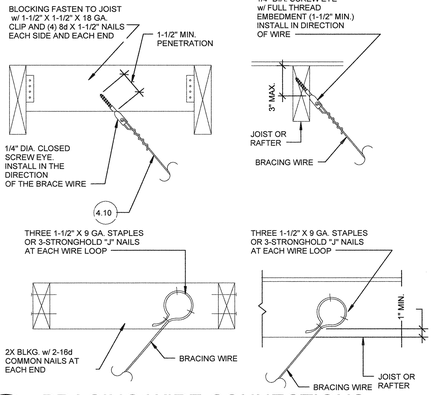
NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC ZG FLS MF SS
DATE 5-22-18

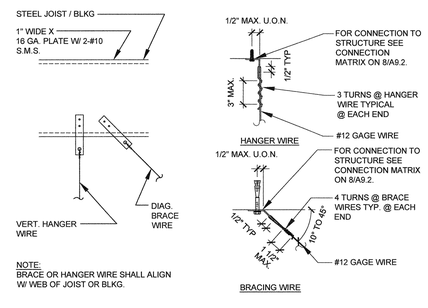
DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A9.1



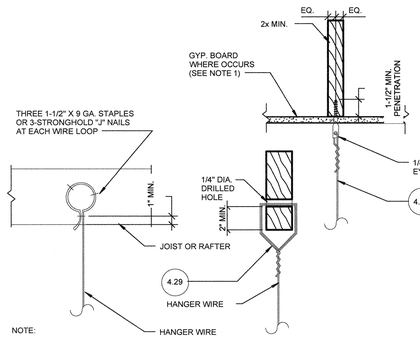
15 BRACING WIRE CONNECTIONS

(ACOUSTICAL T-BAR) 4.35 1-1/2"=1'-0"



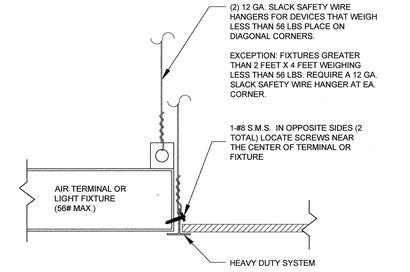
11 WIRE CONNECTIONS

DSA (SHEET #4.10) 1-1/2"=1'-0"



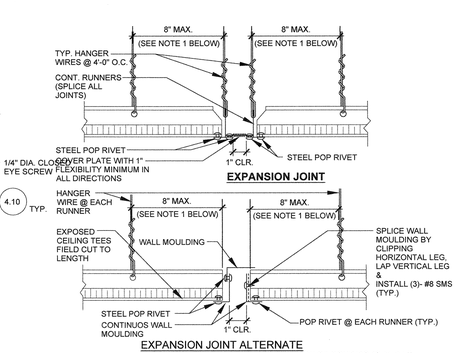
8 HANGER WIRE CONNECTIONS

(ACOUSTICAL T-BAR) 4.25 1-1/2"=1'-0"



7 DIAGRAMATIC ATTACHMENT

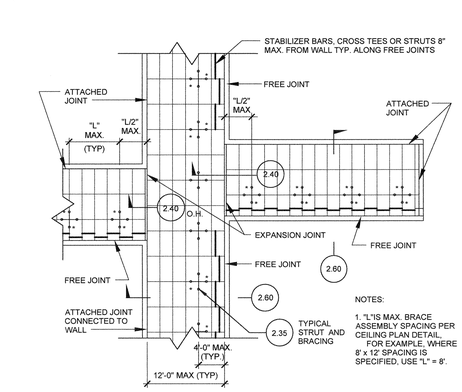
PER DSA IR 25-2.13 (SHEET # 2.80) 3"=1'-0"



NOTES:
1. 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 LESS, FOR THE PERIMETER OF THE CEILING AREA. PERIMETER WIRES ARE NOT REQUIRED WHEN THE LENGTH OF THE END TEE IS EIGHT (8) INCHES OR LESS.

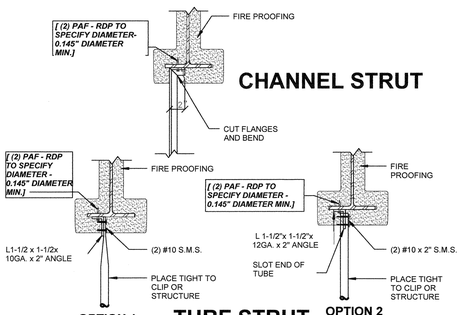
4 DIAGRAMATIC ATTACHMENT

PER DSA IR 25-2.13 (SHEET # 2.40) 3"=1'-0"



2 EXPANSION / SLIP JOINTS IN CORRIDORS

PER DSA IR 25-2.13 (SHEET # 2.30) NTS



NOTES:
1. STRUCTURAL STEEL MEMBER SHALL NOT BE LESS THAN 3/16".
2. RDP IN RESPONSIBLE CHARGE, I.O.R. AND CONTRACTOR SHALL VERIFY THAT NO PAF IS INSTALLED IN THE PROTECTED ZONE OF ANY STEEL MEMBER. SEE ANSI/AISC 341-10.
3. REFER TO 5.20 AND 5.30 FOR ADDITIONAL INFORMATION.

14 STRUT CONNECTION

TO STRUCT. STEEL (SHEET # 5.40) 1-1/2"=1'-0"

COMPRESSION STRUT TABLE 3.21

EMT COMPRESSION STRUT	MAXIMUM LENGTH
1/2" DIAMETER EMT (0.042" WALL THICKNESS)	5'-10"
3/4" DIAMETER EMT (0.049" WALL THICKNESS)	7'-8"
1" DIAMETER EMT (0.057" WALL THICKNESS)	9'-9"
1 1/4" DIAMETER EMT (0.065" WALL THICKNESS)	12'-9"
1 1/2" DIAMETER EMT (0.065" WALL THICKNESS)	14'-9"
2" DIAMETER EMT (0.065" WALL THICKNESS)	18'-10"

NOTES:
1. MACHINE BOLT IS NOT REQUIRED ON OPTION 3
2. APPLICABLE TO SAWN TIMBER WITHOUT GYPSUM BOARD ONLY.

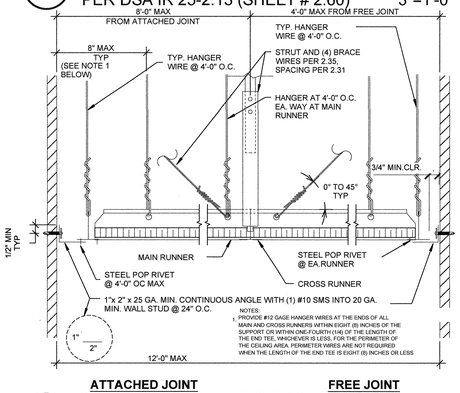
10 CEILING CONNECTIONS

(ACOUSTICAL T-BAR) 3"=1'-0"

NOTES:
1. 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 LESS, FOR THE PERIMETER OF THE CEILING AREA. PERIMETER WIRES ARE NOT REQUIRED WHEN THE LENGTH OF THE END TEE IS EIGHT (8) INCHES OR LESS.
2. NAILS AT ENDS OF HORIZONTAL STABILIZERS ARE TO BE PLACED WITH NAIL HEAD TOWARD CENTER LINE OF SPAN OF STRUT.
3. STABILIZER BAR MAY BE SLOTTED APPROVED ANGLES OR CHANNELS WITH "DIAMOND POINTS" OF SPRING STEEL WHICH SNAP TIGHT TO PREVENT MOVEMENT OF STRUT.
4. (1) #10 SMS TO 20 GA. MIN. WALL STUD @ 24" O.C.

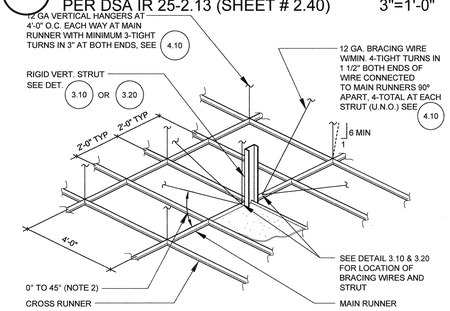
6 DIAGRAMATIC ATTACHMENT

PER DSA IR 25-2.13 (SHEET # 2.60) 3"=1'-0"



3 DIAGRAMATIC ATTACHMENT

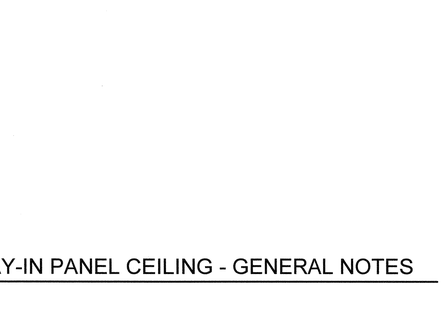
PER DSA IR 25-2.13 (SHEET # 2.35) 3"=1'-0"



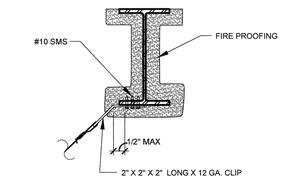
NOTES:
1. STRUTS SHALL NOT REPLACE HANGER WIRES.
2. THE MINIMUM ACCEPTABLE ANGLE IS DETERMINED SUCH THAT THE WIRES DO NOT INTERFER WITH THE RUNNERS, LIGHT FIXTURES, ETC. AND REMAIN STRAIGHT AND UNOBSTRUCTED.

1 DIAGRAMATIC CEILING PLAN

PER DSA IR 25-2.13 (SHEET # 2.12) 1/8"=1'-0"



NOTE:
BRACING WIRES AND COMP. STRUT SHALL OCCUR AT EVERY 144 SQ. FT. MAX. IN ROOMS OVER 144 SQ. FT.

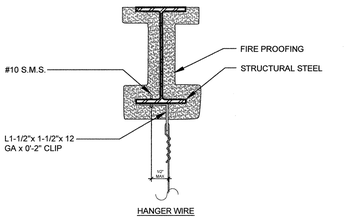


BRACING WIRE

NOTES :
1. BEAM FLANGE THICKNESS SHALL NOT BE LESS THAN 3/16".
2. RDP IN RESPONSIBLE CHARGE, IOR, AND CONTRACTOR SHALL VERIFY THAT NO PAF IS INSTALLED IN THE PROTECTED ZONE OF ANY STEEL MEMBER. SEE ANSI/AISC 341-10
3. REFER TO 4.10 FOR ADDITIONAL DETAILS

13 BRACING WIRE CONNECTION

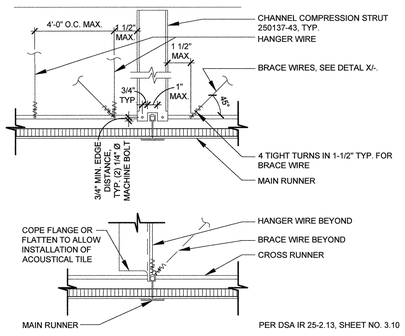
TO STRUCT. STEEL (SHEET # 4.33) 1-1/2"=1'-0"



NOTES :
1. BEAM FLANGE THICKNESS SHALL NOT BE LESS THAN 3/16".
2. RDP IN RESPONSIBLE CHARGE, IOR AND CONTRACTOR SHALL VERIFY THAT NO PAF IS INSTALLED IN THE PROTECTED ZONE OF ANY STEEL MEMBER. SEE ANSI/AISC 341-10
3. REFER TO 4.10 FOR ADDITIONAL DETAILS

12 HANGER WIRE CONNECTION

TO STRUCT. STEEL (SHEET # 4.23) 1-1/2"=1'-0"



PER DSA IR 25-2.13, SHEET NO. 3.10

9 SUSPENDED ACT CEILING

CHANNEL TYPE STRUT (SHEET #3.10) 3"=1'-0"

5 CEILING CONNECTIONS

(ACOUSTICAL T-BAR) EXITWAY CORRIDOR DETAILS 3"=1'-0"

METAL SUSPENSION SYSTEMS FOR LAY-IN PANEL CEILING - GENERAL NOTES

(ACT) PER DSA IR 25-2.13

NOTES PER IR 25-2.13 SHEET 1.00

1. **CEILING SYSTEM GENERAL NOTES:**
   - 1.1. CEILING SYSTEM COMPONENT SHALL COMPLY WITH ASTM C635-07 AND SECTIONS 5.1 ASTM E580-10a.
   - 1.2. THE CEILING GRID SYSTEM MUST BE RATED HEAVY DUTY AS DEFINED BY ASTM C635-08.
   - 1.3. CEILING SYSTEMS. THE FOLLOWING CEILING SYSTEMS ARE PART OF THE SCOPE OF THIS PROJECT: 1200 SEISMIC, HEAVY DUTY, 15/16" FACE, EXPOSE T.
   - 1.4. SEISMIC WALL CLIP.
   - 1.5. CEILING PANELS SHALL NOT SUPPORT ANY LIGHT FIXTURES, AIR TERMINALS OR DEVICES.
   - 1.6. FOR CEILING INSTALLATIONS UTILIZING ACOUSTICAL TILE PANELS OF MINERAL OR GLASS FIBERS, IT IS NOT MANDATORY TO PROVIDE 3/4" CLEARANCE BETWEEN THE ACOUSTICAL TILE PANELS AND THE WALL ON THE SIDES OF THE CEILING WHICH AREA FREE TO SLIP. FOR ALL OTHER CEILING PANEL TYPES, PROVIDE 3/4" CLEARANCE BETWEEN THE CEILING PANEL AND THE WALL ON THE SIDES OF THE CEILING FREE TO SLIP.
2. **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 2007, INCLUDING SUPPLEMENT 2 DATED 2010 (AISI S100-07/S2-10). MATERIAL 43 MIL (18 GAGE) AND LIGHTER SHALL HAVE MINIMUM YIELD STRENGTH OF 33 KSI. MATERIAL 54 MIL (16 GAGE) AND HEAVIER SHALL HAVE A MINIMUM YIELD STRENGTH OF 50 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, AND CONDUIT, ETC.
   - 3.2. HANGER AND BRACING WIRES SHALL NOT ATTACH TO OR BEND AROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO: PIPING, DUCTWORK, CONDUIT AND EQUIPMENT.
   - 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 ANCHORAGE 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 THREE EXPOSED THREADS.
   - 4.2. POWER-ACTUATED FASTENERS SHALL BE: N/A
   - 4.3. IF NOT OTHERWISE SPECIFIED IN THE EVALUATION REPORT, POWER-ACTUATED FASTENERS INSTALLED IN STEEL SHALL BE INSTALLED SO THE ENTIRE POINTED END OF THE FASTER IS DRIVEN THROUGH THE STEEL MEMBER.
   - 4.4. 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.
6. **LIGHT FIXTURES:**
   - 6.1. ALL LIGHT FIXTURES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS 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, SECTION 5.3.1.
   - 6.2. SURFACE-MOUNTED LIGHT FIXTURES SHALL BE ATTACHED TO THE MAIN RUNNER WITH AT LEAST 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 CATCHES DO NOT COMPLY. A #12 GAGE SLACK SAFETY WIRE SHALL BE CONNECTED FROM EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE. PROVIDE ADDITIONAL SUPPORTS WHEN LIGHT FIXTURES ARE EIGHT (8) FEET OR LONGER OR EXCEED 56 LBS. MAXIMUM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED EIGHT (8) FEET.
   - 6.3. LIGHT FIXTURES WEIGHING LESS THAN OR EQUAL TO 10 LBS. SHALL HAVE A MINIMUM OF ONE (1) #12 GAGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE.
     EXCEPTION: ALL LIGHT FIXTURES GREATER THAN TWO BY FOUR FEET WEIGHING LESS THAN 56 LBS. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE AT EACH CORNER.
   - 6.4. ALL LIGHT FIXTURES WEIGHT GREATER THAN 56 LBS 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.
7. **SERVICES WITHIN THE CEILING:**
   - 7.1. ALL FLEXIBLE SPRINKLER HOSE FITTING MOUNTING BRACKETS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS. SCREWS OR APPROVED FASTENERS ARE REQUIRED. A MINIMUM OF TWO ATTACHMENTS ARE REQUIRE AT EACH COMPONENT.
   - 7.2. CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING LESS THAN OR EQUAL TO 20 LBS. SHALL HAVE ONE (1) #12 GAGE SLACK SAFETY WIRE ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.
   - 7.3. FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING MORE THAN 20 LBS. BUT LESS THAN OR EQUAL TO 56 LBS. SHALL HAVE TWO (2) #12 GAGE SLACK SAFETY WIRES (AT DIAGONAL CORNERS) CONNECTED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.
   - 7.4. FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING MORE THAN 56 LBS. 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.
8. **OTHER DEVICES WITHIN THE CEILING:**
   - 8.1. ALL LIGHTWEIGHT 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 LBS. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE ANCHORED TO THE STRUCTURE ABOVE. DEVICES WEIGHING MORE THAN 20 LBS. SHALL BE SUPPORTED INDEPENDENTLY FROM THE STRUCTURE ABOVE.

COPYRIGHT ©2017

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

LICENSED ARCHITECT MARK C. FINNEY No. C-24673 REN. 9-30-19 STATE OF CALIFORNIA

TYPICAL DETAILS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

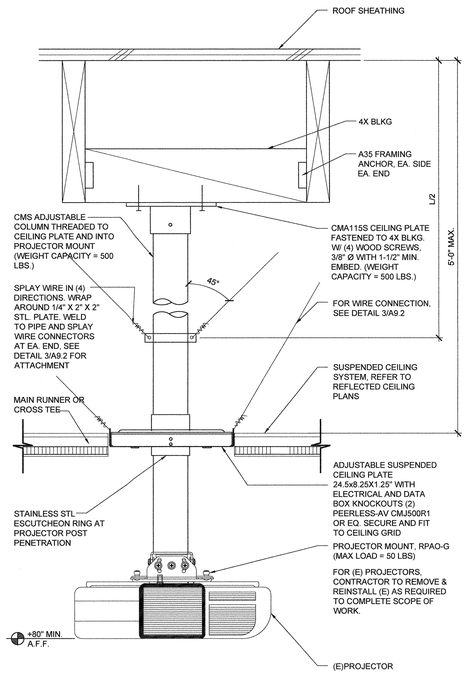
NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC 2G FLS MS GS CD
DATE 5-22-18

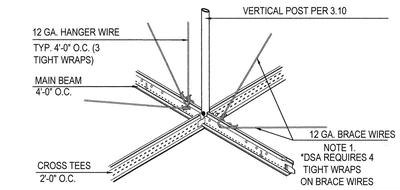
DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A9.2

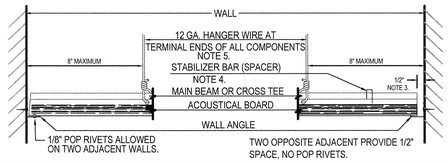


16 PROJECTOR
CEILING CONNECTION 3"=1'-0"

14 EXHAUST FAN
3"=1'-0"



1. BRACING WIRES TO BE ATTACHED A MAXIMUM OF 45° TO THE PLANE OF THE CEILING AND PARALLEL TO THE COMPONENTS AT THE BRACING POINT. BRACE WIRES TO BE TAUT AND TIED BOTH ENDS WITH THREE TIGHT WRAPS.

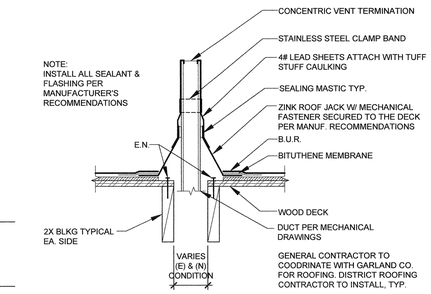


PERIMETER NOTES

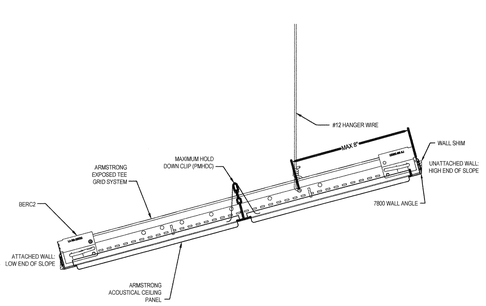
3. THE UNATTACHED PERIMETER SHALL HAVE A MINIMUM OF 1/2" CLEARANCE AT ENDS OF COMPONENTS.
4. CONTINUOUS SPACER BAR TO BE LOCKED TO COMPONENTS ON UNATTACHED WALL.

5. COMPONENT TERMINAL ENDS MUST BE SUPPORTED BY A 12 GA. HANGER WIRE ON ALL WALLS.

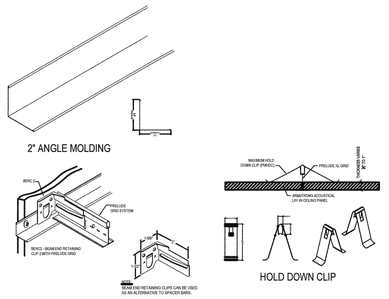
9 DIAGRAMATIC ATTACHMENT
SLOPED CEILINGS NTS



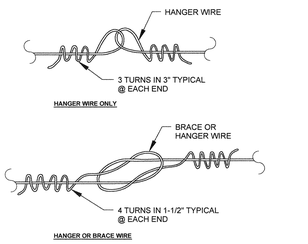
3 DUCT THROUGH ROOF
1 1/2"=1'-0"



8 SLOPED CEILING DETAIL
NTS

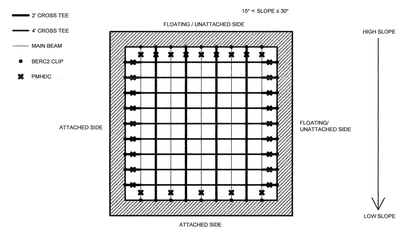


6 CLIPS AND MOLDINGS
SLOPED CEILINGS NTS



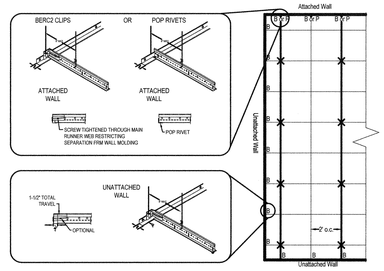
NOTES:
WIRE SPLICES ARE SHOWN LOOSELY TIED FOR ILLUSTRATIVE PURPOSES ONLY AND SHALL BE DRAWN TIGHT TO COMPLETE INSTALLATION WHEN CONSTRUCTED.

2 CEILING WIRE SPLICES
(SHEET # 6.10) 3"=1'-0"

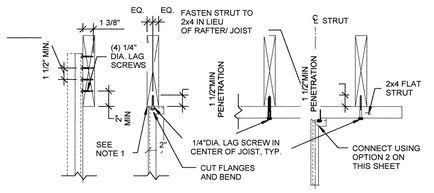


MAINS SHOULD RUN PARALLEL TO THE SLOPE.

7 DIAGRAMATIC CEILING PLAN
SLOPED CEILING LAYOUT 1/8"=1'-0"



5 DIAGRAMATIC ATTACHMENT
SLOPED CEILING LAYOUT 1"=1'-0"



NOTES:
1. WEB OF CHANNEL TO BEAR WITHIN WIDTH OF WOOD MEMBER.
2. VERTICAL LEG OF MEMBER TO FALL WITHIN THE WIDTH OF THE WOOD MEMBER.

1 CHANNEL/TUBE STRUT CONNECTION
TO SAWN TIMBER 1-1/2"=1'-0"

COPYRIGHT ©2017

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE. SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

LICENSED ARCHITECT ZORAN C. FINNEY No. C-24673 REN. 9-30-19 STATE OF CALIFORNIA

TYPICAL DETAILS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC RG FLS MC SS
DATE 5-22-18

DRAWN BY:	NJ
CHECKED BY:	MF
JOB NO:	DATE:
17103	10/10/2017

A9.3

GENERAL STRUCTURAL NOTES

- GENERAL

A. THESE DRAWINGS ARE COPY RIGHTED INSTRUMENTS OF SERVICE OF HOHBACH-LEWIN, INC. FOR USE ONLY ON THIS PROJECT.

B. CONTRACTOR RESPONSIBILITY - CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, SEQUENCES AND SAFETY PRECAUTIONS, INCLUDING BUT NOT LIMITED TO SHORING AND TEMPORARY BRACING.

C. DIMENSIONS - USE WRITTEN DIMENSIONS ONLY. VERIFY ALL DIMENSIONS AT JOB SITE BEFORE COMMENCING WORK AND REPORT ANY DISCREPANCIES. WHERE NO DIMENSIONS ARE PROVIDED, OBTAIN CLARIFICATION PRIOR TO PROCEEDING WITH WORK.

D. COORDINATION - OPENINGS THROUGH WALLS AND FLOORS FOR MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE COORDINATED BY CONTRACTOR AND CONSTRUCTED PER TYPICAL DETAILS SHOWN IN THESE DOCUMENTS. NO MECHANICAL OR ELECTRICAL SYSTEM COMPONENTS SHALL BE EMBEDDED IN SLABS OR WALLS UNLESS SPECIFICALLY DETAILED IN THESE DOCUMENTS.

E. OMISSIONS AND CONFLICTS - OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE CONSTRUCTION DOCUMENTS SHOULD BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM. IF CERTAIN FEATURES ARE NOT FULLY DELINEATED IN THE CONSTRUCTION DOCUMENTS, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE DELINEATED.

F. STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING SUCH REQUIREMENTS INTO THEIR SHOP DRAWINGS AND WORK.

G. THERE SHALL BE NO CHANGE IN SIZE OR DIMENSION OF A STRUCTURAL MEMBER, NOR SHALL ANY OPENINGS BE MADE IN ANY STRUCTURAL MEMBER, WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.

H. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED UPON THE STRUCTURE. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE STRUCTURE AT THE TIME THE LOADS ARE IMPOSED.

I. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS.

J. SEE DRAWINGS OTHER THAN STRUCTURAL FOR: TYPES OF FLOOR FINISH AND J. THEIR LOCATION, DEPRESSIONS IN FLOOR SLABS, OPENINGS IN WALLS AND FLOORS REQUIRED BY ARCHITECTURAL AND MECHANICAL FEATURES, AND ROADWAY PAVING, WALKS, RAMPS, STAIRS, CURBS, ETC.

- EXISTING CONSTRUCTION/ CONDITIONS:

A. SHORING: THE CONTRACTOR SHALL PROVIDE SHORING WHEREVER NECESSARY TO ALLOW INSTALLATION OF THE WORK. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE DESIGN, INSTALLATION AND MAINTENANCE OF ALL SHORING AND TEMPORARY WORK REQUIRED THROUGHOUT THE PROGRESS OF THE WORK.

B. EXISTING CONSTRUCTION: EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS WAS OBTAINED FROM LIMITED VISUAL OBSERVATIONS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND SHALL NOTIFY THE STRUCTURAL ENGINEER OF RECORD OF ALL EXCEPTIONS AND RECEIVE DIRECTION PRIOR TO PROCEEDING WITH THE WORK IN QUESTION.

C. DEMOLITION: THE REMOVAL, CUTTING, DRILLING, ETC. OF EXISTING WORK SHALL BE PERFORMED WITH GREAT CARE AND WITH APPROPRIATE TOOLS IN ORDER TO NOT JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING. SEE ARCHITECTURAL DRAWINGS FOR REQUIRED DEMOLITION.

- DESIGN BASIS (NEW CONSTRUCTION ONLY)

A. APPLICABLE CODE: CALIFORNIA BUILDING CODE (CBC), 2016 EDITION.

B. VERTICAL LOADS:
1. ROOF DEAD LOAD: 20 psf
2. ROOF LIVE LOAD: VARIES WITH SLOPE (20 psf max.)

C. LATERAL LOADS:
1. DESIGN WIND CRITERIA: PER ASCE 7-10
NOMINAL DESIGN WIND SPEED: 115 mph
WIND EXPOSURE: C
2. DESIGN SEISMIC CRITERIA:
SITE CLASS: D
S_{DS} = 1.04g
S_{D1} = 0.60g
IMPORTANCE FACTOR, I= 1.25
SEISMIC DESIGN CATEGORY= D
RISK CATEGORY = III
RESPONSE MODIFICATION COEFF., R= 6.5
DESIGN SEISMIC COEFF., V= 0.200W (STRENGTH)

- EPOXY ANCHORS (CONCRETE INSTALLATION ONLY)

A. EPOXY ADHESIVE SHALL BE SIMPSON "SET-XP" ADHESIVE ANCHOR (ESR-2508) OR EQUAL PRODUCT. ALTERNATE PRODUCTS MUST BE SUBMITTED TO E.O.R. FOR SUBSTITUTION PRIOR TO INSTALLATION PER SPECIFICATIONS.

B. INSTALLATION: INSTALL THE EPOXY ANCHORS IN ACCORDANCE WITH THE REQUIREMENTS GIVEN IN MANUFACTURER'S RECOMMENDATIONS FOR THE SPECIFIC ANCHOR.

C. SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 1704 OF THE CBC. (1704A OF THE CBC FOR DSA PROJECTS)

D. NOTIFY ARCHITECT IMMEDIATELY IF ELEMENTS WITH EXISTING STRUCTURE PREVENT DRILLING IN THE LOCATIONS SHOWN ON THE DRAWINGS.

E. EPOXIED DOWELS DO NOT SUBSTITUTE FOR HOOKED BARS. CONTRACTOR TO NOTIFY ENGINEER OF EPOXIED DOWEL LOCATIONS.

F. WHEN EPOXY ANCHORS ARE USED FOR SILL PLATE BOLTING, 10% OF THE ANCHORS SHALL BE TENSION TESTED. FOR ALL OTHER STRUCTURAL APPLICATIONS, ALL SUCH EPOXY ANCHOR SHALL BE TENSION TESTED. WHEN EPOXY ANCHORS ARE USED FOR NON-STRUCTURAL APPLICATIONS, 50% OF ANCHORS SHALL BE TENSION TESTED. IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS OF THE SAME TYPE NOT PREVIOUSLY TESTED UNTIL 20 CONSECUTIVE ANCHORS PASS. (PER IR-19.1 FOR DSA PROJECTS ONLY)

G. CONCRETE AT TIME OF INSTALLATION SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI AND SHALL HAVE A MINIMUM AGE OF 21 DAYS

MIN. WITH f'c= 2500 PSI CONCRETE (NORMAL WEIGHT CONCRETE) VERIFY MINIMUM EXISTING CONCRETE STRENGTH IN FIELD. **

REINF. DOWEL	THREADED ANCHOR ROD	HOLE DIAMETER	MIN. EMBED.	MIN. EDGE DISTANCE *	MIN. SPACING	TENSION TEST VALUE ***
#4	1/2"ø	5/8"ø	2 3/4"	1 3/4"	8"	1,675#
#4	1/2"ø	5/8"ø	4"	4 1/2"	12"	3,840#
#5	5/8"ø	3/4"ø	5"	4 3/4"	15"	3,750#
#6	3/4"ø	7/8"ø	6"	5 1/2"	18"	6,475#
#7	7/8"ø	1"ø	8"	T'	24"	6,400#
#8	1"ø	1 1/8"ø	8 1/2"	T'	26"	10,260#

MIN. WITH f'c= 3000 PSI CONCRETE (NORMAL WEIGHT CONCRETE) VERIFY MINIMUM EXISTING CONCRETE STRENGTH IN FIELD. **

REINF. DOWEL	THREADED ANCHOR ROD	HOLE DIAMETER	MIN. EMBED.	MIN. EDGE DISTANCE *	MIN. SPACING	TENSION TEST VALUE ***
#4	1/2"ø	5/8"	2 3/4"	1 3/4"	8"	1,840#
#4	1/2"ø	5/8"	4"	4 1/2"	12"	3,840#
#5	5/8"ø	3/4"	5"	4 3/4"	15"	3,750#
#6	3/4"ø	7/8"	6"	5 1/2"	18"	7,100#
#7	7/8"ø	1"	8"	T'	24"	6,400#
#8	1"ø	1 1/8"	8 1/2"	T'	26"	11,240#

* MINIMUM EDGE DISTANCE LIMITATION ASSUMED FROM ONE EDGE ONLY.

** FOR SINGLE ANCHORS WITH NO ADDITIONAL EDGE DISTANCE OR SPACING REDUCTIONS. FOR OTHER CASES, REDUCTION OF VALUES CALCULATED PER ACI 318 IS REQUIRED.

*** TENSION TEST VALUES CORRESPOND WITH 1.5x CRACKED CONCRETE SEISMIC TENSION LOADS (STRENGTH).

- EXPANSION ANCHORS (SIMPSON)

A. EXPANSION BOLTS SHALL BE SIMPSON STRONG BOLT 2 CARBON STEEL ANCHOR (ESR-3037) OR EQUAL PRODUCTS. ALTERNATE PRODUCTS MUST BE SUBMITTED TO E.O.R. FOR SUBSTITUTION PRIOR TO INSTALLATION PER SPECIFICATIONS.

B. INSTALLATION: INSTALL THE EXPANSION ANCHORS IN ACCORDANCE WITH THE REQUIREMENTS GIVEN MANUFACTURER'S RECOMMENDATIONS FOR THE SPECIFIC ANCHOR.

C. SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 1704 OF THE CBC. (1704A OF THE CBC FOR DSA PROJECTS)

D. WHEN EXPANSION ANCHORS ARE USED FOR SILL PLATE BOLTING, 10% OF THE ANCHORS SHALL BE TENSION TESTED. FOR ALL OTHER STRUCTURAL APPLICATIONS, ALL SUCH EXPANSION ANCHOR SHALL BE TENSION TESTED. WHEN EXPANSION ANCHORS ARE USED FOR NON-STRUCTURAL APPLICATIONS, 50% OF ANCHORS SHALL BE TENSION TESTED. IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS OF THE SAME TYPE NOT PREVIOUSLY TESTED UNTIL 20 CONSECUTIVE ANCHORS PASS. (PER IR-19.1 FOR DSA PROJECTS ONLY)

E. CONCRETE AT TIME OF INSTALLATION SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI AND SHALL HAVE A MINIMUM AGE OF 21 DAYS

MIN. f'c = 2500 PSI (NORMAL WEIGHT CONCRETE) VERIFY MINIMUM EXISTING CONCRETE STRENGTH IN FIELD. *

DIA.	MIN. EMBED = MIN. HOLE DEPTH	MIN. EDGE DISTANCE	MIN. SPACING	TENSION TEST VALUE **
1/2"	3 7/8"	7 7/8"	11 5/8"	2,200#
5/8"	5 1/8"	9 5/8"	15 3/8"	3,800#
3/4"	5 3/4"	11 3/4"	17 1/4"	5,800#
1"	9 3/4"	19 1/2"	29 1/4"	6,900#

* FOR SINGLE ANCHORS WITH NO EDGE DISTANCE OR SPACING REDUCTIONS. FOR OTHER CASES, REDUCTION OF VALUES CALCULATED PER ACI 318 IS REQUIRED

** TENSION TEST VALUES ONLY AND CORRESPOND WITH 1.5x CRACKED CONCRETE SEISMIC TENSION LOADS.

- WOOD

A. FRAMING LUMBER - DOUGLAS FIR U.O.N.;
1. JOISTS AND RAFTERS: NO. 1
2. POSTS, BEAMS, AND HEADERS: NO. 1
3. STUDS, PLATES, BLOCKS, LIGHT FRAMING AND MISC: NO. 1
4. ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY TO BE PRESERVATIVE TREATED.
5. THE MOISTURE CONTENT OF ALL LUMBER 4x OR GREATER SHALL BE VERIFIED BY PROJECT INSPECTOR AT THE TIME OF FRAMING.
6. MOISTURE CONTENT SHALL NOT EXCEED 19% FOR ROOF SUPPORT MEMBERS AND SHALL NOT EXCEED 15% FOR WALL STRUCTURAL MEMBERS (i.e. HEADERS, TOP PLATES, SILLS AND STUDS. 2x MEMBERS SHALL BE STAMPED "S-DRY". RWT PRE-MANUFACTURED MEMBERS PER IR 23-10 IS AN ACCEPTABLE ALTERNATE TO SOLID SAWN LUMBER.

B. SHEATHING:
1. ROOF SHEATHING STRUCTURAL 1: 15/32 INCH APA RATED 24/0 EXPOSURE 1. (4 PLY MIN.) S.A.D. WHEN RADIANT BARRIER SHEATHING'S REQUIRED.
2. WALL SHEATHING STRUCTURAL 1: 15/32 INCH APA C-D, INTERIOR WITH EXTERIOR GLUE. (4 PLY MIN.)

C. FRAMING HARDWARE: AS MANUFACTURED BY SIMPSON, OR ALTERNATE APPROVED BY THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT. SIMPSON DESIGNATIONS USED.

D. NAILS:
1. COMMON WIRE GAGE U.O.N. NAILING TO CONFORM TO CBC TABLE 2304.10.1 U.O.N.
2. MACHINE APPLIED NAILS: USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOB SITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL BY THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. MACHINE NAILING WILL NOT BE APPROVED IN 5/16" PLYWOOD. IF NAIL HEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER 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 DETECTED BY VISUAL OBSERVATION. FOR DOUBLE SIDED PLYWOOD SHEARWALL, USE HAND NAILING FOR SECOND SIDE OF PLYWOOD.
3. GALVANIZED NAILS SHALL BE HOT-DIPPED WHERE OCCURS.

E. BOLTS: ASTM A307. PROVIDE WASHER UNDER HEADS AND NUTS.

F. PROVIDE LATERAL SUPPORT FOR BEAMS, JOISTS AND RAFTERS PER CBC SECTION 2308.4.6.

G. 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.

H. HOLDOWNS: AS MANUFACTURED BY SIMPSON OR APPROVED EQUIVALENT.

I. PRESSURE TREATED LUMBER:
1. PRESSURE TREATED D.F. SHALL BE AMPB STAMPED. AMMONIACAL COPPER QUAT (ACQ), COPPER BORON AZOLE (CBA), OR BORATE TREATED AMPA STANDARD C2, MINIMUM 0.40 INCH. PENETRATION INGRED.
2. ALL PRESERVATIVE TREATED LUMBER SHALL BE FIELD-APPLIED WITH PRESERVATIVE WHERE CUT AND DRILLED ON SITE WITH COPPER NAPHATHENATE (2% COPPER AS METAL).
3. USE HOT DIPPED GALVANIZED HARDWARE, IE. BOLTS, NAIL, ETC. FOR ALL ATTACHMENT TO ACQ OR CBA TREATED MEMBERS.

NAILING SCHEDULE (CBC TABLE 2304.10.1)

CONNECTION [1]	NAILING [2]	NAILING [3]
1. Blocking between ceiling joists, rafters or trusses to top plate or other framing below (Roof)	(3) 8d	Ea. end, toenail
2. Ceiling joist to top plate	(3) 8d	Toenail
3. Ceiling joist not attached to parallel rafter, laps over partitions	(3) 16d	Face nail
4. Collar tie to rafter	(3) 10d	Face nail
5. Rafter or roof truss to top plate	(3) 10d	Toenail
6. Roof rafters to ridge valley or hip rafters; or roof rafter to 2 inch ridge beam.	(2) 16d	End nail
	(3) 10d	Toenail
7. Stud to stud (not a braced wall panels)	16d	24" o.c face nail
8. Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d	16" o.c face nail
9. Built-up header (2" to 2" header)	16d	16" o.c each edge, face nail
10. Continuous header to stud	(4) 8d	Toenail
11. Top plate to top plate	16d	16" o.c face nail
12. Top plate to top plate, at end joists	(8) 16d	Each side of end joist
13. Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d	12" o.c face nail
14. Bottom plate to joist, rim joist, band joist or blocking at braced wall panels	(2) 16d	16" o.c face nail
15. Stud to bottom plate	(4) 8d	Toenail
16. Top plate to stud	(2) 16d	End nail
17. Top plates, laps at corners and intersections	(2) 16d	Face nail
18. Joist to sill, top plate, or girder	(3) 8d	Toenail
19. Rim joist, band joist, or blocking to top plate, sill or other framing below	8d	6" o.c toenail
20. 2" planks (plank & beam - floor & roof)	(2) 16d	Each bearing
21. Built-up girders and beams, 2" lumber layers	20d	32" o.c face nail at top and bottom staggered on sides.
	(2) 20d	Ends and at each splice, face nail
22. Ledger strip supporting joists or rafters	(3) 16d	Each joist or rafter, face nail
23. Joists to band joist or rim joist	(3) 16d	End nail
24. Bridging or blocking to joist, rafter or truss (floor)	(2) 8d	Each end toe nail

NOTES:
1. NAILING PER SCHEDULE ABOVE IS TO BE USED WHERE NAILING IS NOT SPECIFIED ON PLANS OR DETAILS. NAILING PER PLANS AND DETAILS SUPERCEDE NAILING SCHEDULE UNLESS APPROVED BY ENGINEER.
2. NAIL SPECIFIED ARE COMMON: 8d= 2 1/2"x0.131"
10d= 3"x0.148"
16d= 3 1/2"x0.162"
FOR ALTERNATE NAILING AND INFORMATION NOT SHOWN, SEE COMPLETE TABLE CBC 2304.10.1

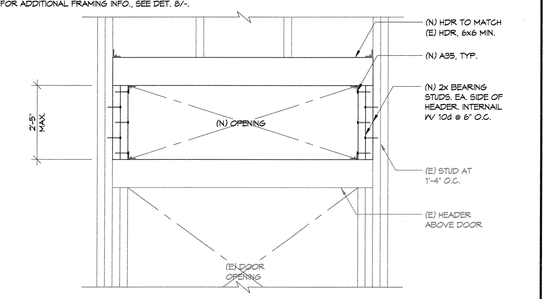
NOTES:
1. UNLESS OTHERWISE NOTED ON PLANS USE CBC 2013 TABLE 2304.10.1 FOR OTHER NAILING REQUIREMENTS NOT NOTED.
2. FOR ADDITIONAL FRAMING INFO., SEE DET. 1/-.

MAX. OPENING WIDTH	EXTERIOR WALL					INTERIOR WALL			
	BEARING STUD	KING STUD	MIN. HEADER SIZE(1)	WINDOW SILL	FRAMING CLIPS	BEARING STUD	KING STUD	MIN. HEADER SIZE	WINDOW SILL
4'-0"	2x6	2x6	6x6	2x6	NONE	2x4	2x4	4x6	2x4
6'-0"	2x6	2x6	6x6	2x6	NONE	2x4	2x4	4x8	2x4
8'-0"	(2) 2x6	(2) 2x6	6x8	(2) 2x6	A35'S WHERE SHOWN	2x4	2x4	4x10	(2) 2x4

8 WINDOW/ DOOR FRAMING SCHEDULE

N.T.S.

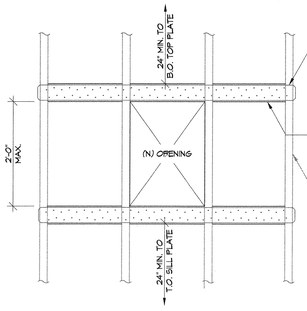
NOTES:
1. FOR ADDITIONAL FRAMING INFO., SEE DET. 8/-.



1 (N) OPENING IN (E) WALL ABOVE DOOR

1"=1'-0"

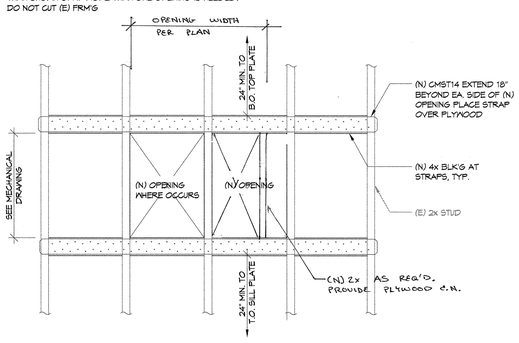
NOTES:
1. PLYWOOD NOT SHOWN FOR CLARITY.
2. G.C. TO NOTIFY HOHBACH-LEWIN INC. IF OPENING IS LARGER THAN SHOWN OR IF MORE THAN ONE OPENING IS NEEDED.
3. DO NOT CUT (E) FRMG



2 (N) SMALL OPENING IN (E) SHEAR WALL

1"=1'-0"

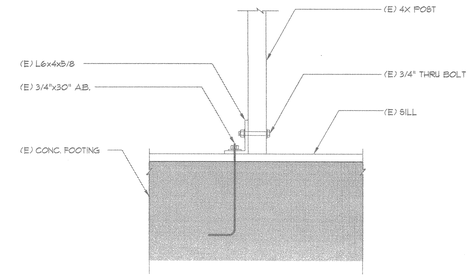
NOTES:
1. PLYWOOD NOT SHOWN FOR CLARITY.
2. G.C. TO NOTIFY HOHBACH-LEWIN INC. IF OPENING IS LARGER THAN SHOWN OR IF MORE THAN ONE OPENING IS NEEDED.
3. DO NOT CUT (E) FRMG



3 (N) MULTIPLE OPENINGS IN (E) SHEAR WALL

1"=1'-0"

NOTES:
1. PULL TEST TO 4400#, PER WHERE OCCURS ON PLAN
2. G.C. TO VERIFY ALL COMPONENTS



4 (E) TIE DOWN

1"=1'-0"

STRUCTURAL SHEET INDEX

S1.0	GENERAL STRUCTURAL NOTES & TYPICAL WOOD DETAILS
S2.1	PARTIAL FOUNDATION & PARTIAL ROOF FRAMING PLAN

ABBREVIATIONS

&	AND	LONG.	LONGITUDINAL
@	AT	L.V.F.	LOW-VELOCITY FASTENER
A.B.	ANCHOR BOLT		
ARCH.	ARCHITECTURAL	MAX.	MAXIMUM
AYC	ALASKAN YELLOW CEDAR	M.B.	MACHINE BOLTS (UNFINISHED)
		MIN.	MINIMUM
BLDG.	BUILDING		
BLKG.	BLOCKING	(N)	NEW
BM.	BEAM	N.S.	NEAR SIDE
B.N.	BOUNDARY NAIL	NTS.	NOT TO SCALE
B.O.C.	BOTTOM OF CONCRETE	O.C.	ON CENTER
BOT.	BOTTOM	OPP.	OPPOSITE
℄	CENTER LINE		
C.G.S.	CENTER OF GRAVITY OF POST-TENSIONING STRAND	ℙ	PLATE
		PLY.	PLYWOOD
		P/T	POST TENSIONING
C.J.	CONTROL JOINT		
CLR.	CLEAR COVER	R.C.J.	ROUGHENED CONSTRUCTION JOINT
COL.	COLUMN	REINF.	REINFORCEMENT
CONC.	CONCRETE	REQD.	REQUIRED
CONT.	CONTINUOUS		
		S.A.D.	SEE ARCHITECTURAL DRAWINGS
DBL.	DOUBLE	S.C.D.	SEE CIVIL DRAWINGS
DBO.	DRAWING BY OTHER	SCHED.	SCHEDULE
DET.	DETAIL	S.D.B.O.	SEE DRAWINGS BY OTHERS
D.C.	DEMAND CRITICAL	SIM.	SIMILAR
D.F.	DOUGLAS FIR	S.J.	SEISMIC JOINT
DWG.	DRAWING	S.L.R.S.	SEISMIC LOAD RESISTING SYSTEM
		S.M.D.	SEE MECHANICAL DRAWINGS
(E)	EXISTING	SPEC.	SPECIFICATION
EA.	EACH	SQ.	SQUARE
EL.	ELEVATION	SYM.	SYMMETRICAL
E.N.	EDGE NAIL		
E.W.	EACH WAY	T&B	TOP AND BOTTOM
EXT.	EXTERIOR	T&G	TONGUE AND GROOVE
		T.D.	TIE DOWN
FDN.	FOUNDATION	T.O.C.	TOP OF CONCRETE
F.F.	FINISH FLOOR	T.O.F.	TOP OF FOOTING
FLR.	FLOOR	T.O.S.	TOP OF STEEL FRAMING
F.N.	FIELD NAIL	T.P.	TOP OF PLATE
F.O.C.	FACE OF CONCRETE	TRAN.	TRANSVERSE
F.O.S.	FACE OF STUD	TYP.	TYPICAL
F.S.	FAR SIDE		
FTG.	FOOTING	U.O.N.	UNLESS OTHERWISE NOTED
G.C.	GENERAL CONTRACTOR	VERT.	VERTICAL
H.D.	HOLD DOWN	V.I.F.	VERIFY IN FIELD
HDR.	HEADER		
HORIZ.	HORIZONTAL	W/	WITH
HSS	HOLLOW STEEL SECTION	W/O	WITHOUT
		J.H.	JOIST HANGER

SYMBOLS

- DETAIL NUMBER
- SHEET NUMBER
- DROP IN ELEVATION, S.A.D.
- NEW CONTINUOUS FOUNDATION UNDER STRUCTURAL WALL
- CONCRETE CURB OR HIGH STEM
- S —— S STEP IN FOOTING
- HD HOLD DOWN OR TIE DOWNS
- CONTINUOUS WOOD MEMBER IN SECTION
- WOOD BLOCKING MEMBER IN SECTION
- POST BELOW FRAMING
- SHEAR WALL ABOVE SEE DET. " # " DENOTES EDGE NAILING. IN ADDITION TO THE SPECIFIC LOCATIONS SHOWN ON THE PLANS, ALL THE EXTERIOR WALLS SHALL BE SHEATHED WITH PLYWOOD INCLUDING ABOVE AND BELOW ALL WALL OPENINGS, AND INCLUDING GABLE WALLS. NAIL PER MARK " 6 " X= MIN. CALCULATED SHEAR WALL LENGTH
- STRAPPED SHEAR WALL ABOVE X= MIN. CALCULATED SHEAR WALL LENGTH
- SHEARWALL BELOW, SEE FLOOR PLAN BELOW FOR NAILING INFORMATION
- FRAMING MEMBER
- DIAGRAMMATIC EXTENT OF FRAMING
- DBL. DOUBLE JOISTS OR RAFTER
- HANGER
- HDR HEADER BELOW FRAMING USE TYP.
- BEARING WALL BELOW, U.O.N. ON PLAN

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6060

Architect Of Record

REGISTERED PROFESSIONAL ENGINEER STUART A. LOWE S 5166 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED: 5/21/2018

Consultant's Stamp

HOHBACH-LEWIN, INC.
STRUCTURAL & CIVIL ENGINEERS
545 Sansome Street, Suite 850
San Francisco, CA 94111
(415) 788-5600

Consultant's Logo

GENERAL STRUCTURAL NOTES & TYPICAL WOOD DETAILS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

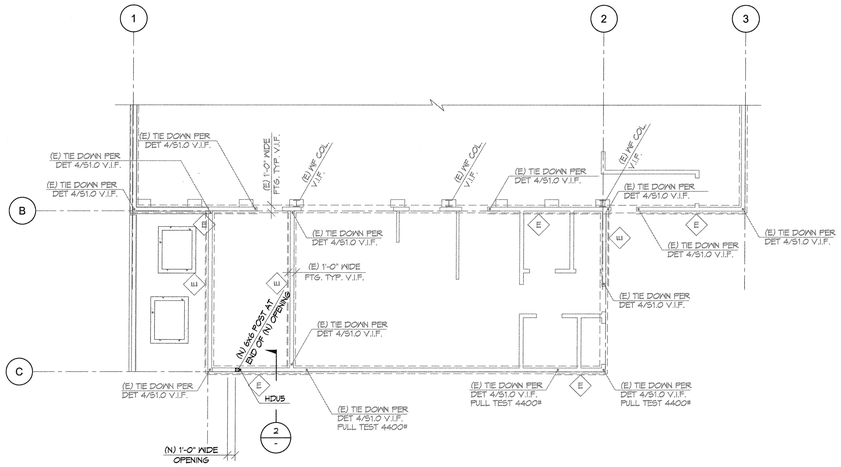
AC — FLS — SS CD
DATE 5-22-18

DRAWN BY:	JC
CHECKED BY:	SAL
JOB NO:	DATE:
17103	10/10/2017

S1.0

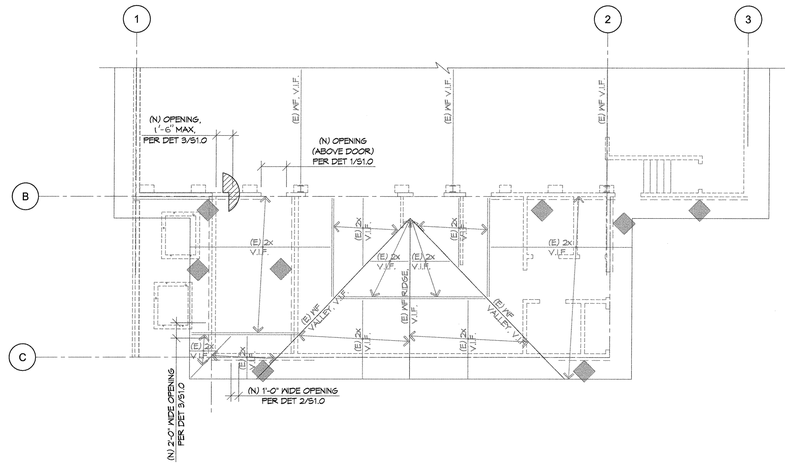
HOHBACH-LEWIN #12481

COPYRIGHT ©2017 5/21/2018 1:33 PM T:\12481\STRUCT\12481S10.DWG



PARTIAL FOUNDATION PLAN

1/8"=1'-0"



PARTIAL ROOF FRAMING PLAN

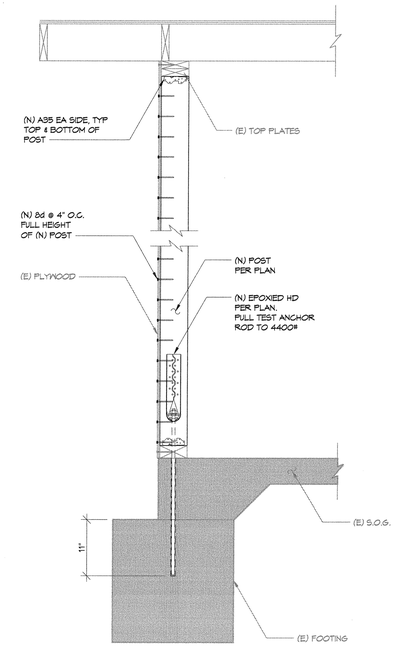
1/8"=1'-0"

FOUNDATION NOTES

1. SEE SHEET S1.0 FOR GENERAL NOTES.
2. GENERAL CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AS SHOWN ON THIS PLAN. CONTACT HOHBACH-LEWIN, INC. IF ANY DISCREPANCIES ARE ENCOUNTERED.
3. EXCAVATIONS SHALL BE MADE AS NEAR AS POSSIBLE TO THE NEAT LINES REQUIRED BY THE SIZE AND SHAPE OF THE STRUCTURE. NO MATERIAL IS TO BE EXCAVATED UNNECESSARILY.
4. VERIFY LOCATION OF UNDERGROUND UTILITIES BEFORE EXCAVATION. NOTIFY ARCHITECT PRIOR TO EXCAVATION IN THE EVENT SUCH UTILITIES ARE ENCOUNTERED.
5. FOR DRAINAGE DETAILS, PITS, DAMP PROOFING, TRENCHES, CURBS, EXTERIOR WALKS, UTILITIES, EQUIPMENT DETAILS, STEPS, ETC., SEE DRAWINGS OTHER THAN STRUCTURAL.
6. SEE ARCHITECTURAL DRAWING FOR DIMENSIONS NOT SHOWN.
7. (E) DENOTES EXISTING 1/2" PLYWOOD SHEAR WALL WITH 8d AT 4" O.C., V.I.F.

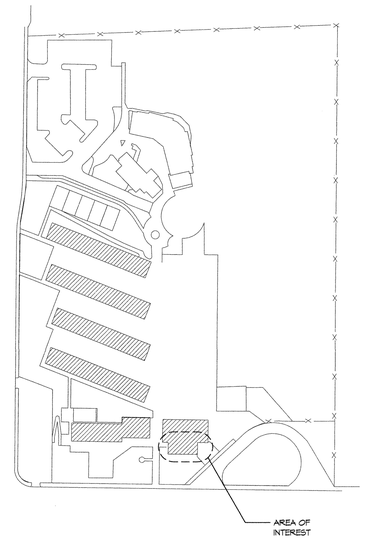
ROOF FRAMING NOTES:

1. SEE SHEET S1.0 FOR GENERAL NOTES.
2. GENERAL CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AS SHOWN ON THIS PLAN. CONTACT HOHBACH-LEWIN, INC. IF ANY DISCREPANCIES ARE ENCOUNTERED.
3. NOTIFY HOHBACH-LEWIN, INC OF ANY ADDITIONAL MECHANICAL EQUIPMENT AND SPRINKLERS TO BE HUNG FROM ROOF. ALL MECHANICAL EQUIPMENT AND SPRINKLERS SHALL BE REVIEWED AND APPROVED BY HOHBACH-LEWIN, INC. PRIOR TO INSTALLATION.
4. EXACT LOCATIONS OF ALL MECHANICAL UNITS TO BE COORDINATED WITH DRAWINGS OTHER THAN STRUCTURAL DRAWINGS FOR DEPRESSIONS, CURBS, MECHANICAL, ELECTRICAL AND SHAFT OPENINGS, ETC.
5. SEE DRAWINGS OTHER THAN STRUCTURAL FOR DEPRESSIONS, CURBS, MECHANICAL, ELECTRICAL, SHAFT OPENINGS, ETC.
6. SEE ARCHITECTURAL DRAWING FOR INFORMATION NOT SHOWN.



2 HOLDDOWN DETAIL

1"=1'-0"



KEY PLAN

4 KEY PLAN

N.T.S.

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

Architect Of Record

REGISTERED PROFESSIONAL ENGINEER
STUART A. LOWE
S 5166
STRUCTURAL
STATE OF CALIFORNIA

DATE SIGNED: 5/21/2018

Consultant's Stamp

HOHBACH-LEWIN, INC.
STRUCTURAL & CIVIL ENGINEERS
545 Sansome Street, Suite 850
San Francisco, CA 94111
(415) volunteer-8520

Consultant's Logo

PARTIAL FOUNDATION AND PARTIAL ROOF FRAMING PLAN

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

AC — FLS — SS LP
DATE 5-22-18

DRAWN BY:	JC
CHECKED BY:	SAL
JOB NO:	DATE:
17103	10/10/2017

S2.1

HOHBACH-LEWIN # 12481

COPYRIGHT © 2017
5/21/2018 1:33 PM T:\12481STRUC\12481S21.DWG

THESE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE, EQUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC— LEE & ASSOCIATES CONSULTING ENGINEERS
May 14, 2018 9:21:45 AM
Drawing: H:\PROJECT\2017\17029\DWG\ARCHITECTURAL\M0.1.DWG
Plotted: MAY-14-2018 09:21AM

GENERAL NOTES:

1. THIS PROJECT IS A REMODEL. THE PLANS AND SPECIFICATIONS INDICATE THE GENERAL EXTENT OF THE WORK BASED ON OWNER PROVIDED RECORD DRAWINGS AND LIMITED FIELD VERIFICATION. CONTRACTOR SHALL VISIT SITE, VERIFY EXISTING CONDITIONS, AND REPORT ANY DISCREPANCIES NOTED TO THE ARCHITECT PRIOR TO SUBMITTING A BID. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISCONNECTION AND RECONNECTION OF MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS NECESSARY TO ACCOMPLISH THE WORK WHETHER OR NOT SPECIFIED AND/OR INDICATED.
2. CUTTING OR CORING OF STRUCTURAL MEMBERS OR FOOTINGS IS PROHIBITED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER AND THE ARCHITECT.
3. CONTRACTOR SHALL VERIFY THAT THE ELECTRICAL CONNECTIONS TO THE UNITS, INCLUDING CIRCUIT PROTECTION, CONFORM TO UNIT LABELS AND MANUFACTURER'S DIRECTIONS. WHERE WIRE SIZES SHOWN ON DRAWING EXCEED MANUFACTURER'S RECOMMENDATIONS, THE DRAWINGS SHALL GOVERN. ALL WIRING SHALL BE PER THE NATIONAL ELECTRICAL CODE. AS AMENDED AND ENFORCED BY JURISDICTIONAL AUTHORITY.
4. PROVIDE SHOP DRAWINGS OF ALL MECHANICAL LAYOUTS SHOWING EQUIPMENT, DUCTWORK, REGISTERS, PIPING, FILTER RACKS, CONTROL DAMPERS, LIGHTS, ACCESS PANELS AND ACCESS SPACES, ETC.. OBTAIN AND COORDINATE WITH APPROVED FIRE SPRINKLER PLUMBING, ELECTRICAL, CASE WORK AND OTHER TRADES SHOP DRAWINGS PRIOR TO MECHANICAL DRAWING SUBMITTAL.
5. COORDINATE EXACT GRILLE, DIFFUSER AND ACCESS DOOR LAYOUT WITH LIGHTS AND CEILING MOUNTED APPLIANCES.
6. PROVIDE STEEL DUCTS ABOVE RATED CEILINGS AND MINIMUM 18" BEYOND RATED WALLS.
7. SUPPORT DUCTS TIGHT BELOW STRUCTURE WHEREVER POSSIBLE.
8. PROVIDE ACOUSTICAL LINING IN ALL DUCTS WITHIN 15 FEET OF UNITS. PROVIDE FLEXIBLE CONNECTION ON INLET AND OUTLET DUCT CONNECTIONS TO EQUIPMENT.
9. FLASHING AND WEATHERPROOFING AT EXTERIOR PENETRATIONS ARE SHOWN ON THE ARCHITECTURAL DRAWINGS.
10. COORDINATE WITH OWNER ON SPACE REQUIRED AND TIME SCHEDULE FOR DELIVERY OF ALL ITEMS WHICH ARE TO BE GIVEN TO THE OWNER FOR HIS DISPOSITION.
11. FOR ROOF PENETRATIONS WITHOUT CURBS, PROVIDE WEATHERPROOF FLASHING PER SMACNA ARCHITECTURAL SHEET METAL MANUAL AND DRAWING NOTES.
12. ALL TRANSITIONS IN DUCTWORK SHALL BE MADE AT 15 DEGREES MAXIMUM EACH FACE UNLESS OTHERWISE NOTED OR SPECIFICALLY APPROVED.
13. ALL DUCTWORK IS CONCEALED UNLESS OTHERWISE NOTED.
14. LABEL ALL PIECES OF EQUIPMENT WITH MARK MATCHING SCHEDULE OR EQUIPMENT LIST WITH ENGRAVED PLASTIC LABELS WITH MINIMUM 1/4" HIGH LETTERS. LABELS EXPOSED TO WEATHER SHALL BE ENGRAVED BRASS.
15. PRIME AND PAINT ALL EXPOSED DUCTWORK PER ARCHITECTURAL SPECIFICATIONS. PAINT SHALL NOT EXCEED THE FOLLOWING VOLATILE ORGANIC COMPOUND CONTENT LIMITS: FLATS < 50 GRAMS PER LITER, NON-FLATS < 100 GRAMS PER LITER.
16. ALL DUCTS, REGISTERS, EQUIPMENT, ETC. SHOWN IS NEW UNLESS OTHERWISE NOTED.
17. THE HEATING, VENTILATION AND AIR CONDITIONING SYSTEM(S) FOR THE BUILDING(S) WERE DESIGNED IN COMPLIANCE WITH THE LATEST EDITIONS OF THE CALIFORNIA CODES, STANDARDS AND REGULATIONS INCLUDING BUT NOT LIMITED TO CALIFORNIA MECHANICAL CODE (CMC), CALIFORNIA ENERGY CODE (CEC — TITLE 24, PART 6), AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS (ASHRAE) AND SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA).

    THE INDOOR AND OUTDOOR DESIGN CONDITIONS ARE THOSE ESTABLISHED FOR SAN JOSE BY THE CALIFORNIA ENERGY CODE AS FOLLOWS:
    1. OUTDOOR CONDITIONS
        SUMMER: 86°F DB/68°F WB
        WINTER: 29°F DB
    2. INDOOR CONDITIONS
        SUMMER: 74°F DB ±2°F
        WINTER: 70°F DB ±2°F

    IF THE OUTDOOR TEMPERATURES ARE HIGHER OR LOWER THAN DESIGN TEMPERATURES ESTABLISHED BY THE CALIFORNIA ENERGY CODE, THERE IS THE POTENTIAL THAT THE INSTALLED HVAC SYSTEM WILL NOT BE ABLE TO MAINTAIN THE DESIRED INDOOR TEMPERATURE. THE INCREASE OR DECREASE OF INDOOR TEMPERATURE COULD BE AS HIGH AS THE DIFFERENCE BETWEEN THE ACTUAL OUTDOOR TEMPERATURE AND THE DESIGN CONDITION.
18. ADHESIVES, SEALANTS AND CAULKS USED INDOORS SHALL NOT EXCEED THE FOLLOWING VOLATILE ORGANIC COMPOUND LIMITS PER TITLE 24, PART 11, SECTION 5.504.
    - METAL TO METAL < 30 GRAMS PER LITER
    - FIBERGLASS < 80 GRAMS PER LITER
    - CONTACT ADHESIVE < 80 GRAMS PER LITER
    - MASTICS < 100 GRAMS PER LITER
    - ZINC-RICH PRIMERS < 340 GRAMS PER LITER
    - FIRE RESISTANT COATINGS < 350 GRAMS PER LITER
19. HVAC EQUIPMENT SHALL NOT CONTAIN CFC'S OR HALONS PER TITLE 24, PART 11, SECTION 5.508.
20. AT THE TIME OF ROUGH INSTALLATION, OR DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING AND COOLING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENTS OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC OR SHEET METAL TO PROTECT THE AIR DISTRIBUTION SYSTEM FROM CONTAMINATION WITH DUST AND DEBRIS.
21. ALL DUCT MOUNTED SMOKE DETECTORS SHALL BE ADDRESSABLE TYPE AND COMPATIBLE WITH FIRE ALARM SYSTEM. DUCT SMOKE DETECTORS SHALL BE PROVIDED, INSTALLED AND WIRED BY FIRE ALARM CONTRACTOR. ENTIRE SYSTEM SHALL COMPLY WITH THE CALIFORNIA MECHANICAL CODE, THE CALIFORNIA FIRE CODE, AND THE NATIONAL FIRE PROTECTION ASSOCIATION.

LIST OF GOVERNING CODES:

2016 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, C.C.R.
2016 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R.
2016 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24, C.C.R.
2016 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R.
2016 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R.
2016 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24, C.C.R.
2016 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, C.C.R.
2016 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24, C.C.R.
2016 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24, C.C.R.
TITLE 19, C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

ALL SECTION NUMBERS BELOW REFER TO GROUP 1, CHAPTER 4, PART 1, TITLE 24, C.C.R.
1. ADDENDA, CONSTRUCTION CHANGES PER SECTION 4–338.
2. INSPECTOR APPROVED BY DSA. INSPECTOR AND CONTINUOUS INSPECTION OF WORK PER SECTION 4–333(b) AND 4–342.
3. TESTS AND TESTING LABORATORY PER SECT. 4–335.
4. SPECIAL INSPECTION PER SECT. 4–333(d).
5. CONTRACTOR SHALL SUBMIT VERIFIED REPORTS PER SECT. 4–336 AND 4–343(c).
6. ADMINISTRATION OF CONSTRUCTION PER PART 1, TITLE 24, C.C.R. – DUTIES OF ARCHITECT, STRUCTURAL ENGINEER OR PROFESSIONAL ENGINEER PER SECT. 4–333(a) AND 4–341.
7. GOVERNING CODES: TITLE 24.
8. A COPY OF PARTS 1, 2, 3, 4, AND 5 OF TITLE 24 SHALL BE KEPT AVAILABLE IN THE FIELD DURING CONSTRUCTION.
9. DSA SHALL BE NOTIFIED OF START OF CONSTRUCTION PER SECT. 4–331.
10. SUPERVISION BY THE OFFICE OF REGULATION SERVICE PER SECT. 4–334.

HVAC DUCT LEGEND

	SINGLE LINE SYMBOL	DOUBLE LINE SYMBOL	DESCRIPTION
1			LONG SWEEP 90° ELBOW – RECTANGULAR, ROUND OR OVAL
2			SHORT SWEEP 90° ELBOW – RECTANGULAR, ROUND OR OVAL
3			45° ELBOW – RECTANGULAR, ROUND OR OVAL
4			30° ELBOW – RECTANGULAR, ROUND OR OVAL
5			90° ELBOW – RECTANGULAR DUCT (NO DUCT TURN)
6			90° ELBOW – RECTANGULAR DUCT WITH TURNING VANES
7			45° LATERAL – ROUND TO ROUND OR OVAL TO OVAL
8			90° TAKEOFF WITH 45° TAPER – RECTANGULAR TO RECTANGULAR (FOR BRANCH TAKEOFF LONGER THAN 50'-0", USE 15)
9			90° TAKEOFF WITH 45° ELONGATED TEE – ROUND TO ROUND
10			90° CONICAL TEE – ROUND TO ROUND OR OVAL TO OVAL
11			SPIN-IN WITH BALANCE DAMPER – RECTANGULAR TO ROUND OR RECTANGULAR TO OVAL
12			90° TEE – RECTANGULAR TO ROUND OR RECTANGULAR TO OVAL
13			EXTRACTOR AND BRANCH DUCT – RECTANGULAR TO RECTANGULAR (FOR BRANCH TAKEOFFS LONGER THAN 10'-0", USE 8)
14			Y BRANCH – ROUND OR OVAL DUCT
15			90° RADIUS SPLIT – RECTANGULAR DUCT, PROVIDE SPLITTER DAMPER, X/Y PROPORTIONAL SPLIT
16			90° RECTANGULAR SPLIT – RECTANGULAR DUCT, PROVIDE SPLITTER DAMPER, X/Y PROPORTIONAL SPLIT
17			TRANSITION – RECTANGULAR TO ROUND OR RECTANGULAR TO OVAL

	SINGLE LINE SYMBOL	DOUBLE LINE SYMBOL	DESCRIPTION
18			SECTION AT SUPPLY AIR OR MAKE-UP AIR DUCT UP
19			SECTION AT RETURN AIR OR COMBUSTION AIR DUCT UP
20			SECTION AT EXHAUST AIR OR RELIEF AIR DUCT UP
21			SUPPLY AIR DUCT DOWN RETURN AIR DUCT DOWN EXHAUST AIR DUCT DOWN
22			ROUND DUCT UP – SUPPLY, RETURN OR EXHAUST
23			ROUND DUCT DOWN – SUPPLY, RETURN OR EXHAUST
24			CEILING DIFFUSER – ONE, TWO, THREE AND FOUR WAY THROW
25			CEILING – RETURN AND EXHAUST REGISTERS
26			SIDEWALL – SUPPLY DIFFUSER, RETURN AND EXHAUST REGISTERS
27			RETURN AND EXHAUST REGISTER CONNECTION – ELBOW DOWN OR ROUND TAP OUT OF RECTANGULAR DUCT, TAP SAME SIZE AS NECK
28			SUPPLY DIFFUSER AND RETURN REGISTER CONNECTION – TAP DOWN SAME SIZE AS NECK
29	UP UP DN	UP DN	DUCT RISE IN THE DIRECTION OF AIR FLOW DUCT DROP IN THE DIRECTION OF AIR FLOW
30			MANUAL BALANCE DAMPER WITH DUCT ACCESS DOOR
31		M M	MOTORIZED BALANCE DAMPER WITH DUCT ACCESS DOOR
32	F/D F/SD	F/D F/SD	FIRE DAMPER WITH DUCT ACCESS DOOR FIRE/SMOKE DAMPER WITH DUCT ACCESS DOOR
33			ACOUSTICALLY LINED DUCT
34	12x12 CD (300)	REGISTER NECK SIZE AND MARK DESIGN CFM PANEL AT T-BAR CEILING	

HVAC LEGEND

SYMBOL	ABBRV.	IDENTIFICATION	ABBRV.	IDENTIFICATION
		REMOVE EXISTING	FT	FEET
		ABANDON IN PLACE	FTR	FLUE THRU ROOF
		AIR DUCT	GPM	GALLONS PER MINUTE
		FLEXIBLE AIR DUCT	GA	GAUGE
	BD	BALANCING DAMPER	HP	HORSEPOWER
		RATED WALL, SEE ARCHITECTS DRAWINGS	HR	HOUR
		AIR FROM DEVICE	HTG	HEATING
		AIR TO DEVICE	HZ	HERTZ
		SECTION THROUGH SUPPLY	IN	INCH
		SECTION THROUGH RETURN	KW	KILOWATTS
		SECTION THROUGH EXHAUST	LAT	LEAVING AIR TEMPERATURE
T		THERMOSTAT AT 48" AFF	LBS	POUNDS
C		CO2 SENSOR	LRA	LOCKED ROTOR AMPS
F/SD	F/SD	VERTICAL FIRE/SMOKE DAMPER	LVG	LEAVING
F/SD	F/SD	HORIZONTAL FIRE/SMOKE DAMPER	LWB	LEAVING WET BULB
$	SW	SWITCH AT 48" AFF	MAX	MAXIMUM
℄		CENTERLINE	MBH	1000 BTU PER HOUR
	P.O.C.	POINT OF CONNECTION	MCA	MINIMUM CIRCUIT AMPS
	&	AND	MECH	MECHANICAL
	@	AT	MFR	MANUFACTURER
	°F	DEGREES FAHRENHEIT	MIN	MINIMUM
	AC	AIR CONDITIONER	MOCP	MAXIMUM OVERCURRENT PROTECTION
	AC/H	AIR CHANGES PER HOUR	(N)	NEW
	AFF	ABOVE FINISH FLOOR	NIC	NOT IN CONTRACT
	AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	NTS	NOT TO SCALE
	AL	ACOUSTICALLY LINED	OA	OUTSIDE AIR
	AMB	AMBIENT	OC	ON CENTER
	AMP	AMPERE	PD	PRESSURE DROP
	APPROX	APPROXIMATE	PH	PHASE
	ARCH	ARCHITECT/ARCHITECTURAL	P/N	PART NUMBER
	BHP	BRAKE HORSEPOWER	PRESS	PRESSURE
	BLDG	BUILDING	PSI	POUNDS PER SQUARE INCH
	BTUH	BRITISH THERMAL UNITS PER HOUR	P/T	PRESSURE/TEMPERATURE
	CA	COMBUSTION AIR	QTY	QUANTITY
	CFM	CUBIC FEET PER MINUTE	RA	RETURN AIR
	CIRC	CIRCULATING	REQD	REQUIRED
	CLG	CEILING	REQS	REQUIREMENTS
	CONN	CONNECTION	RLA	RATED/RUNNING LOAD AMPS
	CONT	CONTINUED, CONTINUATION	RM	ROOM
	COOL	COOLING	RPM	REVOLUTIONS PER MINUTE
	COORD	COORDINATE	RRL	RECIRCULATED REFRIGERATION LIQUID
	COP	COEFFICIENT OF PERFORMANCE	RRS	RECIRCULATED REFRIGERATION SUCTION
	DB	DRY BULB	SA	SUPPLY AIR
	DN	DOWN	SC	SENSIBLE COOLING
	DWGS	DRAWINGS	SEER	SEASONAL ENERGY EFFICIENCY RATIO
	(E)	EXISTING	SP	STATIC PRESSURE
	EA	EXHAUST AIR	SPEC	SPECIFICATION
	EAT	ENTERING AIR TEMPERATURE	SQ	SQUARE
	EER	ENERGY EFFICIENCY RATIO	STD	STANDARD
	ELEC	ELECTRICAL	STRUCT	STRUCTURAL
	ELEV	ELEVATION	STSL	STAINLESS STEEL
	ENT	ENTERING	TEMP	TEMPERATURE
	EQUIP	EQUIPMENT	TSP	TOTAL STATIC PRESSURE
	ESP	EXTERNAL STATIC PRESSURE	TV	TURNING VANES
	EWB	ENTERING WET BULB	TYP	TYPICAL
	EXP	EXPANSION	UCD	UNDERCUT DOOR
	EXT	EXTERIOR	UL	UNDERWRITER'S LABORATORIES
	FFE	FINISHED FLOOR ELEVATION	UON	UNLESS OTHERWISE NOTED
	FLA	FULL LOAD AMPS	V	VOLT
	FLEX	FLEXIBLE	W/	WITH
	FLR	FLOOR	WB	WET BULB
	FPM	FEET PER MINUTE	WC	WATER COLUMN
			WT	WEIGHT

DSA GENERAL NOTES

1. THE INTENT OF THE CONTRACT DOCUMENTS IS TO MODERNIZE AN EXISTING BUILDING. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS, A CONSTRUCTION CHANGE DOCUMENT DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.
2. LATERAL SUPPORT FOR PIPE AND DUCTS TO COMPLY WITH SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING SYSTEMS".
3. THE SEISMIC SUPPORT AND ANCHORAGE OF THE EQUIPMENT DESCRIBED ON THESE DRAWINGS HAVE BEEN ENGINEERED BY THE ENGINEER OF RECORD FOR CONFORMANCE WITH APPROPRIATE BUILDING CODES. THE ENGINEER OF RECORD WAS NOT RESPONSIBLE FOR THE EQUIPMENT DESIGN.
4. ALL MECHANICAL AND PLUMBING EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION USING THE CRITERIA FROM CHAPTER 16A CALIFORNIA BUILDING CODE (CBC) 2016.
5. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER AND THE FIELD REPRESENTATIVE OF THE DIVISION OF THE STATE ARCHITECT.

COMPONENT ANCHORAGE NOTES

ALL MECHANICAL AND PLUMBING 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 REQUIREMENTS PRESCRIBED IN THE 2016 CBC, SECTIONS 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7–10 CHAPTERS 13, 26, AND 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (EG HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICAL, 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 ATTACHMENT OF THE FOLLOWING MECHANICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.

1. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4'–0" OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORTS THE EQUIPMENT.
2. 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 OF RECORD 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 AND DUCTWORK DISTRIBUTION SYSTEM BRACING NOTES

PIPING AND DUCTWORK 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., 13.6.8, 13.6.7, AND 2016 CBC, SECTIONS 1616A.1.23, 1616A.1.24, 1616A.1.25, AND 1616A.1.26.

THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAILED ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE OSHPD PRE–APPROVALS (OPA #) AS MODIFIED TO SATISFY ANCHORAGE REQUIREMENTS OF ACI 318–14, CHAPTER 17.

COPIES OF THE MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF HANGING AND BRACING OF THE PIPING AND DUCTWORK DISTRIBUTION SYSTEMS.

THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

COPYRIGHT © 2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE, EQUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC— LEE & ASSOCIATES CONSULTING ENGINEERS

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE · INTERIORS · PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

PROFESSIONAL ENGINEER
REGISTERED
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

email: mail@axiomengineers.com
tel. (831) 646-8500
fx. (831) 646-8538
AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr, Suite A
Monterey, California 93940-5786

AE Project # : 20170291

LEGEND, SCHEDULES AND NOTES - MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
ACKQ FLS MC SS LG
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

M0.1

EXHAUST FANS

MARK	CFM	ESP	SONES	MOTOR HP	MOTOR V/PH	FAN RPM	WT LBS	MAKE & MODEL	REMARKS
EF-1-1	55	0.25"	0.7	13 WATTS	115/1	950	15	GREENHECK SP-A70	(2) (3) (4)
EF-1-2	75	0.25"	0.6	18 WATTS	115/1	884	20	GREENHECK SP-A110	(2) (3) (4)
EF-1-3	150	0.25"	1.1	26 WATTS	115/1	709	25	GREENHECK SP-A200	(2) (3) (4)
EF-D-1	200	0.25"	5.0	1/10	115/1	1641	42	GREENHECK G-065-VG	(1) (3) (5)

(1) WITH UL705 LISTING, NEMA-3R DISCONNECT SWITCH, GRAVITY OPERATED BACKDRAFT DAMPER, 14" TALL GREENHECK GPIP CURB, AND CURB SEAL.

(2) WITH UL507 LISTING, UNIT MOUNTED SPEED CONTROL, AND ISOLATION KIT.

(3) SWITCH WITH LIGHTS.

(4) FOR MOUNTING, SEE 6/M6.1

(5) FOR MOUNTING, SEE 7/M6.1

SUPPLY FANS

MARK	CFM	ESP	SONES	MOTOR WATTS	MOTOR V/PH	FAN RPM	WT LBS	MAKE & MODEL	REMARKS
SF-1-1	450	0.25"	0.4	153	115/1	870	40	GREENHECK CSP-A710	(1) (2)
SF-1-2	450	0.25"	0.4	153	115/1	870	40	GREENHECK CSP-A710	(1) (2)
SF-1-3	250	0.25"	0.5	62	115/1	805	40	GREENHECK CSP-A410	(1) (2)
SF-A-1	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-A-2	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-A-3	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-A-4	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-A-5	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-A-6	85	0.25"	<0.3	14	115/1	850	20	GREENHECK CSP-A110	(1) (2)
SF-B-1	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-B-2	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-B-3	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-B-4	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-B-5	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-C-1	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-C-2	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-C-3	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-C-4	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-C-5	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-D-1	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-D-2	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-D-3	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-D-4	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-D-5	400	0.25"	<0.3	126	115/1	823	40	GREENHECK CSP-A710	(1) (2)
SF-D-6	70	0.25"	<0.3	11	115/1	795	20	GREENHECK CSP-A110	(1) (2)

(1) WITH UL507 LISTING, UNIT MOUNTED SPEED CONTROL, BACKDRAFT DAMPER, AND ISOLATION KIT.

(2) FOR MOUNTING, SEE 5/M6.1

ROOF HOODS

MARK	CFM	THROAT AREA SF	THROAT VELOCITY	THROAT SIZE	HOOD SIZE	CURB CAP SIZE	WT LBS	MAKE & MODEL	REMARKS
IH-1	900	1.83	432 FPM	18"ø	36"ø	30" x 30"	45	GREENHECK GRSI 18	(1) (2)
IH-2	250	0.57	439 FPM	10"ø	20"ø	19" x 19"	25	GREENHECK GRSI 10	(1) (2)
NOT USED	–	–	–	–	–	–	–		
RH-2-1	3000	6.25	480 FPM	18" x 48"	30" x 60"	24" x 54"	105	GREENHECK FGR 18X48	(2) (3)

(1) WITH GREENHECK GPIP ROOF CURB AND CURB SEAL, ALL ALUMINUM CONSTRUCTION, AND BIRD SCREEN.

(2) FOR MOUNTING, SEE 7/M6.1

(3) WITH GREENHECK GPIP ROOF CURB, CURB SEAL, BIRD SCREEN, AND GRAVITY OPERATED DAMPER.

AIR DISTRIBUTION

MARK	TYPE	MAKE & MODEL	REMARKS
HSS-1	HIGH SIDEWALL SUPPLY	TITUS 300RL	(1) (2)
LSR-1	LOW SIDEWALL RETURN	TITUS 350RS	(1) (3)
CD-1	CEILING DIFFUSER	TITUS MCD	(4) (5)
RG-1	RETURN GRILLE	TITUS 8R	(1) (6)

(1) WITH BORDER TYPE 1 SURFACE MOUNT.

(2) FOR MOUNTING, SEE 11/M6.1

(3) FOR MOUNTING, SEE 14/M6.1

(4) FOR MOUNTING, SEE 16/M6.1

(5) WITH BORDER TYPE 3 (LAY-IN).

(6) FOR MOUNTING, SEE 3/M6.2

VRF INDOOR FAN COILS (CONTINUED)

MARK	CONNECTS TO	COOL MBH	HEAT MBH	CFM TOTAL	CFM OSA	CFM ESP	MOCP	V/PH	MCA	WT LBS	LINE SIZE GAS	LINE SIZE LIQ	MAKE & MODEL	REMARKS
FC-D-1A	HP-D-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-D-1B	HP-D-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-D-2A	HP-D-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-D-2B	HP-D-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-D-3A	HP-D-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-D-3B	HP-D-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-D-4A	HP-D-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-D-4B	HP-D-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-D-5A	HP-D-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-D-5B	HP-D-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-D-6	HP-D-1	12	13	390	35	–	15	208/1	0.35	44	1/2"	1/4"	MITSUBISHI PLFY-P12NCMU-ER4	(1) (2) (4) (5) (8)
FC-D-7	HP-D-1	12	13	390	35	–	15	208/1	0.35	44	1/2"	1/4"	MITSUBISHI PLFY-P12NCMU-ER4	(1) (2) (4) (5) (8)

(1) NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COAL EAT OF 80/67°F (DB/WB), OUTDOOR OF 95°F (DB). NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°F (WB).

(2) OUTSIDE AIR IS PROVIDED BY SF-X-X. SEE FLOOR PLANS AND SUPPLY FANS SCHEDULE.

(3) WITH MITSUBISHI PLFY-1TP1 TRIM PANEL FOR INSTALLATION IN 48" x 48" SUSPENDED T-BAR CEILING.

(4) FOR MOUNTING, SEE 1/M6.1

(5) CONTRACTOR SHALL PROVIDE SHOP DRAWINGS SHOWING UNIT LOCATIONS, REFRIGERANT PIPE ROUTING, REFRIGERANT CIRCUIT DIAGRAMS, REFRIGERANT PIPE SIZES, VALVE LOCATIONS, ACCESS PANELS, AND SUPPORT DETAILS. SYSTEM SHALL BE DESIGNED BY MITSUBISHI DIAMOND DESIGNER AND INSTALLED BY A CONTRACTOR THAT HAS SUCCESSFULLY COMPLETED THE MITSUBISHI ELECTRIC THREE DAY COURSE.

(6) FOR MOUNTING, SEE 4/M6.2

(7) PROVIDE MITSUBISHI PAC-SJ427M-E MULTI-FUNCTION CASEMENT WITH MERV 13 FILTER.

(8) PROVIDE 1" MERV 8 FILTER FOR CONTRACTOR INSTALL

GAS FIRED EQUIPMENT

MARK	HEAT MBH IN	HEAT MBH OUT	CFM TOTAL	CFM ESP	CFM OA	FAN RPM	MOTOR HP	MOTOR V/PH	WT LBS	AFUE	MAKE & MODEL	REMARKS
F-2-1	250	200	3000	0.8"	800	MEDIUM	(2) 1	208/3	380	80%	REZNOR CAUA 250	(1) (2)
F-2-2	250	200	3000	0.8"	800	MEDIUM	(2) 1	208/3	380	80%	REZNOR CAUA 250	(1) (2)

(1) WITH TWO STAGE GAS VALVE, VERTICAL CONCENTRIC COMBUSTION AIR KIT, AND DIRECT DRIVE BLOWER MOTORS.

(2) FOR MOUNTING SEE 13/M6.1

CONDENSING UNITS AND COOLING COILS

MARK	COOL TC	COOL MBH SC	MCA	FAN RPM	FAN HP	V/PH	COMP RLA	FAN FLA	WT LBS	EER SEER	LINE SIZE GAS	LINE SIZE LIQ	MAKE & MODEL	REMARKS
CU-2-1	90.7	65.9	42.6	–	0.5	208/3	32.9	8	465	13.0	7/8"	1/2"	REZNOR MASA 090	(1) (2) (3)
CC-2-1			–	–	–	–	–	–	110	–	7/8"	(2) 3/8"	REZNOR ACUB 090	(1)
CU-2-2	90.7	65.9	42.6	–	0.5	208/3	32.9	8	465	13.0	7/8"	1/2"	REZNOR MASA 090	(1) (2) (3)
CC-2-2			–	–	–	–	–	–	110	–	7/8"	(2) 3/8"	REZNOR ACUB 090	(1)

(1) COOLING CAPACITIES ARE AT 95° FAHRENHEIT AMBIENT, 80° FAHRENHEIT DRY BULB/67° FAHRENHEIT WET BULB ENTERING AIR TEMPERATURE.

(2) WITH ANTI-SHORT CYCLE TIMER AND CONDENSER COIL GUARD.

(3) FOR MOUNTING, SEE 9/M6.1.

VRF OUTDOOR HEAT PUMPS

MARK	COOL MBH	HEAT MBH	MOCP	V/PH	MCA	WT LBS	EER IEER	LINE SIZE GAS	LINE SIZE LIQ	MAKE & MODEL	REMARKS
HP-1-1	168	188	110	208/3	68	702	11.2 19.6	1 1/8"	7/8"	MITSUBISHI PURY-P168TLMU-A	(2) (3) (4)
HP-A-1	240	270	60 60	208/3	42 42	1390	12.9 22.3	1 3/8"	1 1/8"	MITSUBISHI PURY-P240TSLMU-A	(2) (3) (4)
HP-B-1	216	243	60 50	208/3	42 33	1198	12.4 22.9	1 1/8"	1 1/8"	MITSUBISHI PURY-P216TSLMU-A	(1) (3) (4)
HP-C-1	216	243	60 50	208/3	42 33	1198	12.4 22.9	1 1/8"	1 1/8"	MITSUBISHI PURY-P216TSLMU-A	(1) (3) (4)
HP-D-1	240	270	60 60	208/3	42 42	1390	12.9 22.3	1 3/8"	1 1/8"	MITSUBISHI PURY-P240TSLMU-A	(2) (3) (4)

(1) WITH MITSUBISHI CMB-P1010NU-HA1 MAIN BRANCH CIRCUIT (BC) CONTROLLER, 208V/1PH, 1.60 MCA. WEIGHT = 131 LBS. SEE FLOOR PLANS FOR LOCATION. PROVIDE WITH BLUE DIAMOND CONDENSATE PUMP.

(2) WITH MITSUBISHI CMB-P1013NU-GA1 MAIN BRANCH CIRCUIT (BC) CONTROLLER, 208V/1PH, 1.08 MCA. WEIGHT = 148 LBS. SEE FLOOR PLANS FOR LOCATION. PROVIDE WITH BLUE DIAMOND CONDENSATE PUMP.

(3) CONTRACTOR SHALL PROVIDE SHOP DRAWINGS SHOWING UNIT LOCATIONS, REFRIGERANT PIPE ROUTING, REFRIGERANT CIRCUIT DIAGRAMS, REFRIGERANT PIPE SIZES, VALVE LOCATIONS, ACCESS PANELS, AND SUPPORT DETAILS. SYSTEM SHALL BE DESIGNED BY MITSUBISHI DIAMOND DESIGNER AND INSTALLED BY A CONTRACTOR THAT HAS SUCCESSFULLY COMPLETED THE MITSUBISHI ELECTRIC THREE DAY COURSE.

(4) FOR MOUNTING, SEE 3/M6.1

VRF INDOOR FAN COILS

MARK	CONNECTS TO	COOL MBH	HEAT MBH	CFM TOTAL	CFM OSA	CFM ESP	MOCP	V/PH	MCA	WT LBS	LINE SIZE GAS	LINE SIZE LIQ	MAKE & MODEL	REMARKS
FC-1-1A	HP-1-1	30	34	812	225	–	15	208/1	0.57	66	5/8"	3/8"	MITSUBISHI PLFY-EP30NEMU-E	(1) (2) (3) (4) (5) (7)
FC-1-1B	HP-1-1	30	34	812	225	–	15	208/1	0.57	66	5/8"	3/8"	MITSUBISHI PLFY-EP30NEMU-E	(1) (2) (3) (4) (5) (7)
FC-1-2A	HP-1-1	30	34	812	225	–	15	208/1	0.57	66	5/8"	3/8"	MITSUBISHI PLFY-EP30NEMU-E	(1) (2) (3) (4) (5) (7)
FC-1-2B	HP-1-1	30	34	812	225	–	15	208/1	0.57	66	5/8"	3/8"	MITSUBISHI PLFY-EP30NEMU-E	(1) (2) (3) (4) (5) (7)
FC-1-3	HP-1-1	12	13	390	50	–	15	208/1	0.35	44	1/2"	1/4"	MITSUBISHI PLFY-P12NCMU-ER4	(1) (2) (4) (5) (8)
FC-1-4	HP-1-1	12	13	390	50	–	15	208/1	0.35	44	1/2"	1/4"	MITSUBISHI PLFY-P12NCMU-ER4	(1) (2) (4) (5) (8)
FC-1-5	HP-1-1	8	9	350	25	–	15	208/1	0.29	41	1/2"	1/4"	MITSUBISHI PLFY-P08NCMU-ER4	(1) (2) (4) (5) (8)
FC-1-6	HP-1-1	8	9	350	25	–	15	208/1	0.29	41	1/2"	1/4"	MITSUBISHI PLFY-P08NCMU-ER4	(1) (2) (4) (5) (8)
FC-1-7	HP-1-1	8	9	350	25	–	15	208/1	0.29	41	1/2"	1/4"	MITSUBISHI PLFY-P08NCMU-ER4	(1) (2) (4) (5) (8)
FC-1-8	HP-1-1	8	9	350	25	–	15	208/1	0.29	41	1/2"	1/4"	MITSUBISHI PLFY-P08NCMU-ER4	(1) (2) (4) (5) (8)
FC-1-9	HP-1-1	15	17	390	50	–	15	208/1	0.35	44	1/2"	1/4"	MITSUBISHI PLFY-P15NCMU-ER4	(1) (2) (4) (5) (8)
FC-A-1A	HP-A-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-A-1B	HP-A-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-A-2A	HP-A-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-A-2B	HP-A-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-A-3A	HP-A-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-A-3B	HP-A-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-A-4A	HP-A-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-A-4B	HP-A-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-A-5A	HP-A-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-A-5B	HP-A-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-A-6	HP-A-1	12	13	390	35	–	15	208/1	0.35	44	1/2"	1/4"	MITSUBISHI PLFY-P12NCMU-ER4	(1) (2) (4) (5) (8)
FC-A-7	HP-A-1	15	17	390	50	–	15	208/1	0.35	44	1/2"	1/4"	MITSUBISHI PLFY-P15NCMU-ER4	(1) (2) (4) (5) (8)
FC-B-1A	HP-B-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-B-1B	HP-B-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-B-2A	HP-B-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-B-2B	HP-B-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-B-3A	HP-B-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-B-3B	HP-B-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-B-4A	HP-B-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-B-4B	HP-B-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-B-5A	HP-B-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-B-5B	HP-B-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-C-1A	HP-C-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-C-1B	HP-C-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-C-2A	HP-C-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-C-2B	HP-C-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-C-3A	HP-C-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-C-3B	HP-C-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-C-4A	HP-C-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-C-4B	HP-C-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-C-5A	HP-C-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)
FC-C-5B	HP-C-1	24	27	812	200	–	15	208/1	0.54	66	5/8"	3/8"	MITSUBISHI PLFY-EP24NEMU-E	(1) (2) (5) (6) (7)

(1) NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR COAL EAT OF 80/67°F (DB/WB), OUTDOOR OF 95°F (DB). NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR COIL EAT OF 70°F (DB), OUTDOOR OF 43°F (WB).

(2) OUTSIDE AIR IS PROVIDED BY SUPPLY FAN, SEE FLOOR PLANS AND SUPPLY FANS SCHEDULE.

(3) WITH MITSUBISHI PLFY-1TP1 TRIM PANEL FOR INSTALLATION IN 48" x 48" SUSPENDED T-BAR CEILING.

(4) FOR MOUNTING, SEE 1/M6.1

(5) CONTRACTOR SHALL PROVIDE SHOP DRAWINGS SHOWING UNIT LOCATIONS, REFRIGERANT PIPE ROUTING, REFRIGERANT CIRCUIT DIAGRAMS, REFRIGERANT PIPE SIZES, VALVE LOCATIONS, ACCESS PANELS, AND SUPPORT DETAILS. SYSTEM SHALL BE DESIGNED BY MITSUBISHI DIAMOND DESIGNER AND INSTALLED BY A CONTRACTOR THAT HAS SUCCESSFULLY COMPLETED THE MITSUBISHI ELECTRIC THREE DAY COURSE.

(6) FOR MOUNTING, SEE 4/M6.2

(7) PROVIDE MITSUBISHI PAC-SJ42TM-E MULTI-FUNCTION CASEMENT WITH MERV 13 FILTER.

(8) PROVIDE 1" MERV 8 FILTER FOR CONTRACTOR INSTALL

COPYRIGHT©2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC.- LEE & ASSOCIATES CONSULTING ENGINEERS
Drawing: H:\PROJECTS\2017\17031\DRAWINGS\17031_M0.2.DWG
Date: 4/9/2018 8:31:07 AM
Name: MASE-BROOME

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
Matthew Hartmann
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

email: mail@axiomengineers.com
tel. (831) 646-8020
fx. (831) 646-8038
AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
SM
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5786

AE Project # : 20170291

SCHEDULES - MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

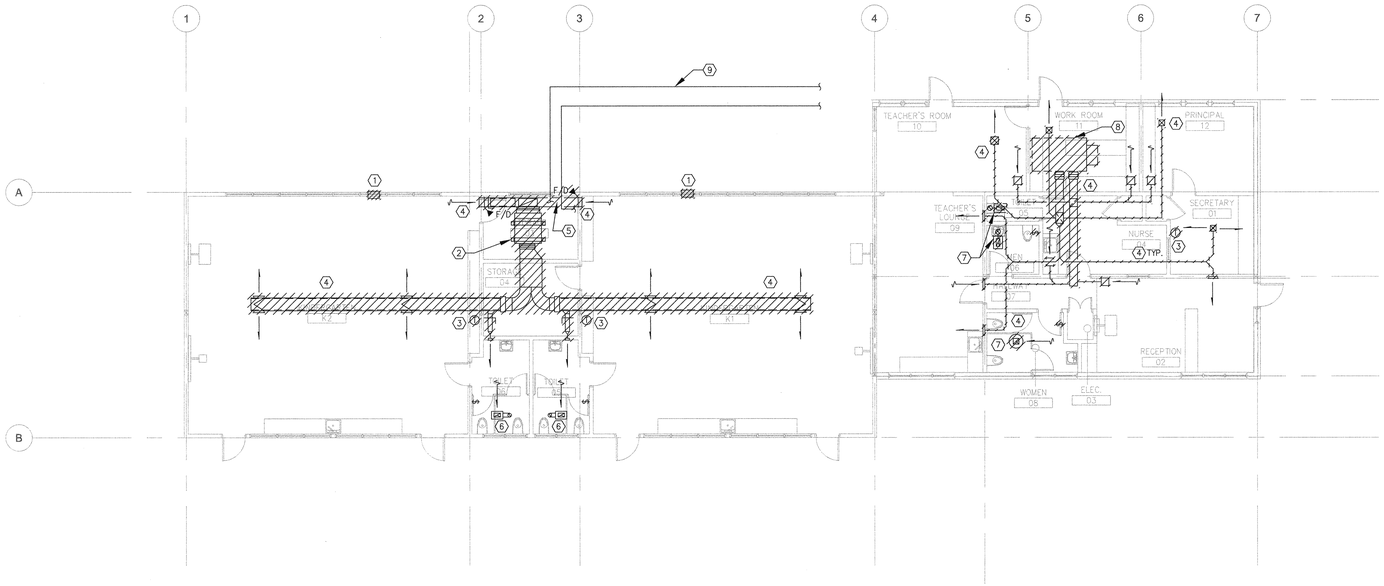
NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC KG FLS MS SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

M0.2



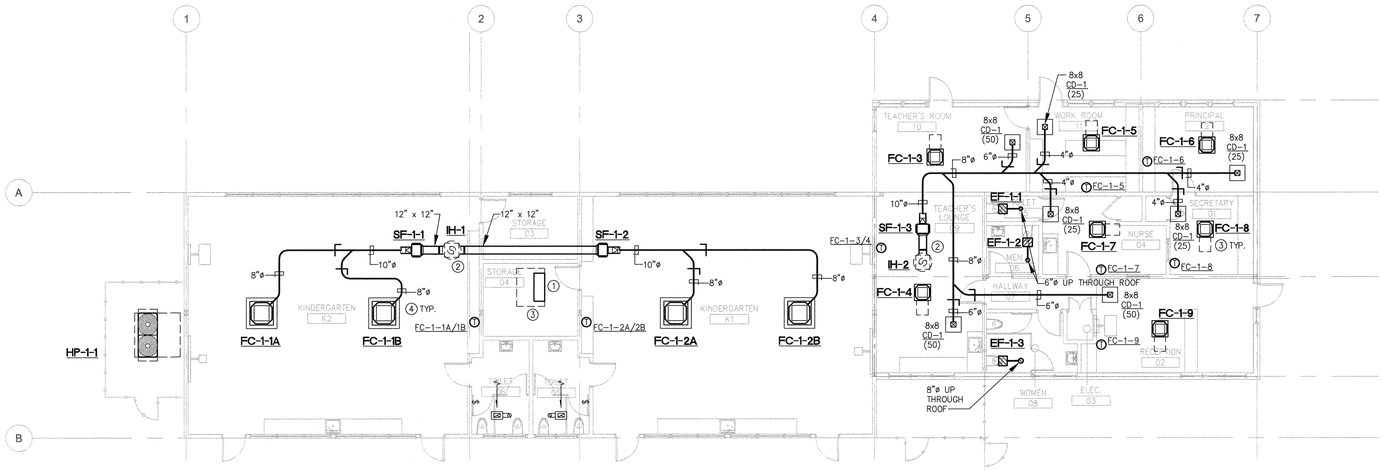
BUILDING 1 - MECHANICAL DEMOLITION

SCALE: 1/8" = 1'-0"

TRUE NORTH
REF NORTH

DEMOLITION NOTES:

1. REMOVE (E) PORTABLE AC LOUVER COMPLETE. SEE ARCHITECT'S DRAWINGS FOR INFILL. (E) PORTABLE AC TO BE RETURNED TO DISTRICT.
2. REMOVE (E) FAN COIL UNIT AND SUPPORTS COMPLETE.
3. REMOVE (E) THERMOSTATS AND WIRING COMPLETE.
4. REMOVE (E) SUPPLY AND RETURN DUCTWORK, REGISTERS AND SUPPORTS COMPLETE. SEE ARCHITECT'S DRAWINGS FOR INFILL.
5. REMOVE (E) HOT WATER SUPPLY AND RETURN PIPING AND SUPPORTS COMPLETE INSIDE BUILDING.
6. (E) EXHAUST FAN TO REMAIN. REPLACE REGISTER AND CLEAN DUCTWORK.
7. REMOVE (E) EXHAUST FAN AND SUPPORTS COMPLETE.
8. REMOVE (E) ROOFTOP HEAT PUMP UNIT AND SUPPORTS COMPLETE. SEE ARCHITECT'S DRAWINGS FOR INFILL.
9. CAP (E) UNDERGROUND HOT WATER PIPE AT GRADE AND ABANDON IN PLACE.



BUILDING 1 - MECHANICAL

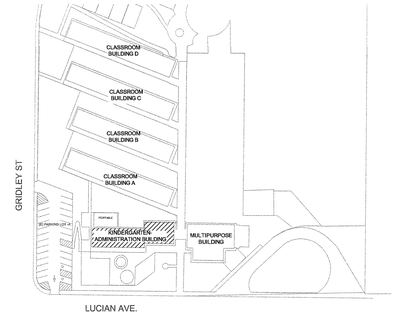
SCALE: 1/8" = 1'-0"

TRUE NORTH
REF NORTH

NEW NOTES:

1. BRANCH CIRCUIT CONTROLLER ABOVE CEILING. FOR MOUNTING SEE 2/M6.1. FOR REFRIGERANT ROUTING, SEE M3.1.
2. INSTALL AIR INTAKE HOOD ON ROOF, MINIMUM 10'-0" AWAY FROM ANY PLUMBING VENTS OR EXHAUST OUTLETS. FOR DUCT CONNECTION AND FILTER BOX, SEE 7/M6.1.
3. REQUIRED ACCESS CLEARANCE.
4. USE FLEX DUCT FOR LAST 5'-0" OF CONNECTION TO UNIT.

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE · INTERIORS · PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
Scott Baltzman
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5788
email: mail@axiomengineers.com
SM
vc. (831) 646-8000
fx. (831) 646-8008
AE Project # : 20170291

ADMINISTRATION-KINDERGARTEN BUILDING 1 - FLOOR PLANS MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

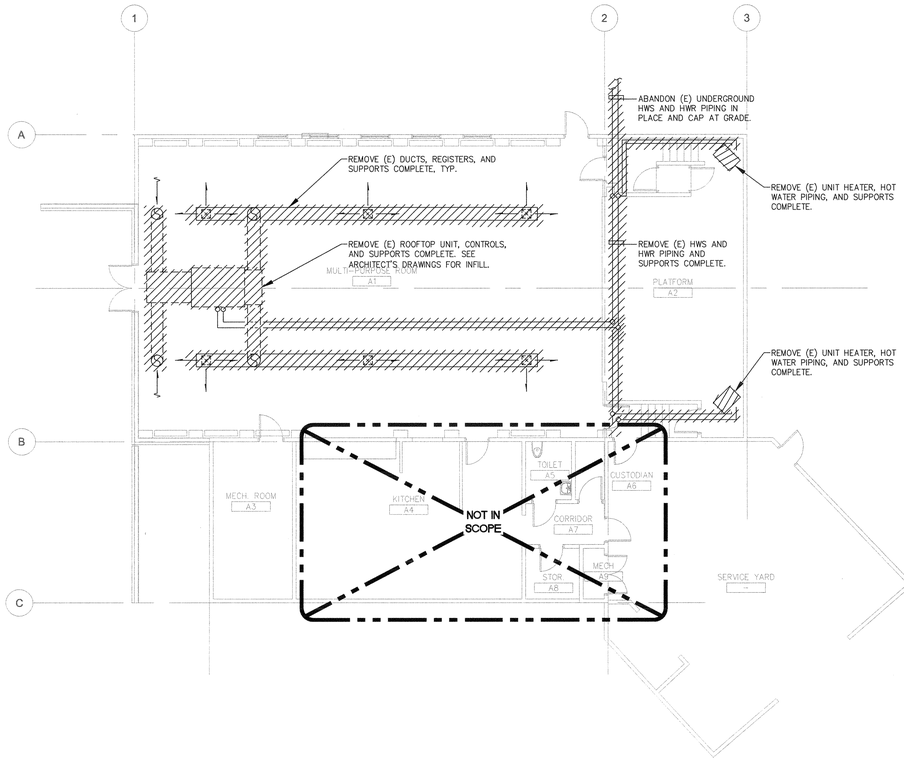
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AP ZG FLS MC SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

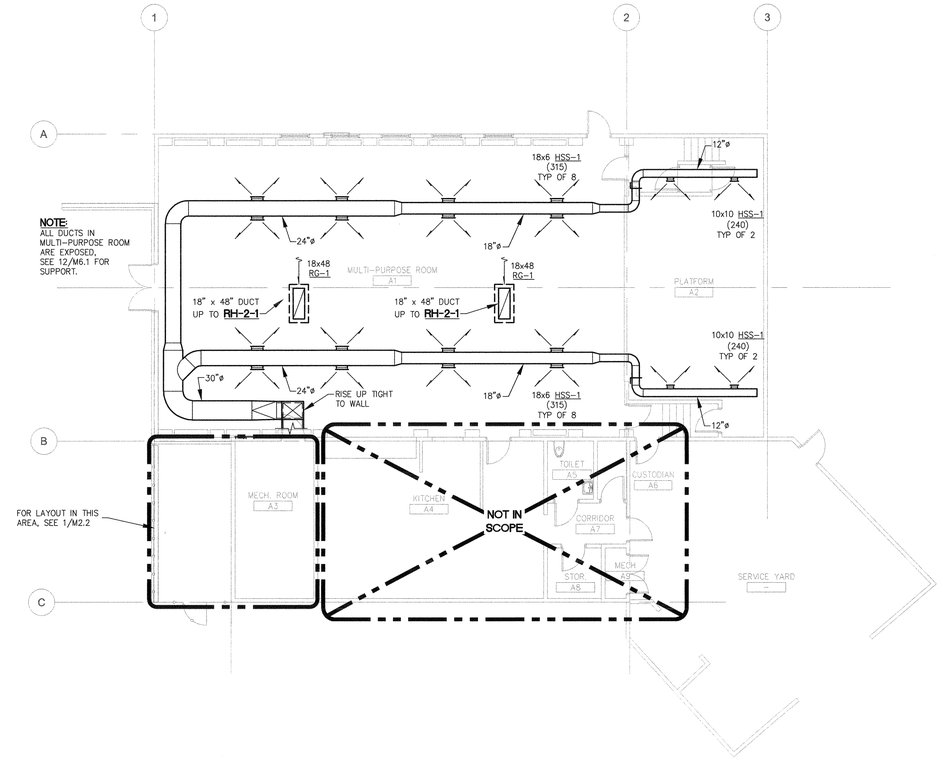
M2.1

Drawings: H:\PROJECTS\2017\20170291\DRAWINGS\CAD\M\M2.1-M2.2 MECH.dwg
Xrefs: XYZ-HATCHING, XLSFT-SQUARE, XLSFT-SQUARE_BASE-BOUNDING
THESE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC.- LEE & ASSOCIATES CONSULTING ENGINEERS
COPYRIGHT©2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND



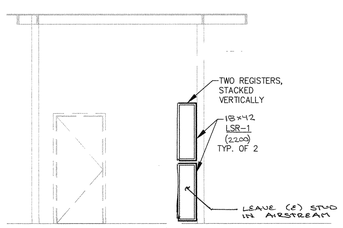
MULTI-PURPOSE BUILDING - MECHANICAL DEMOLITION

SCALE: 1/8" = 1'-0"



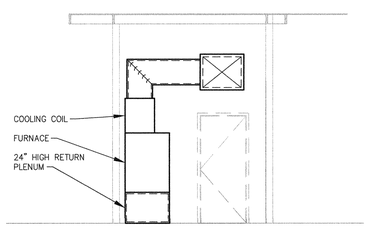
MULTI-PURPOSE BUILDING - MECHANICAL

SCALE: 1/8" = 1'-0"



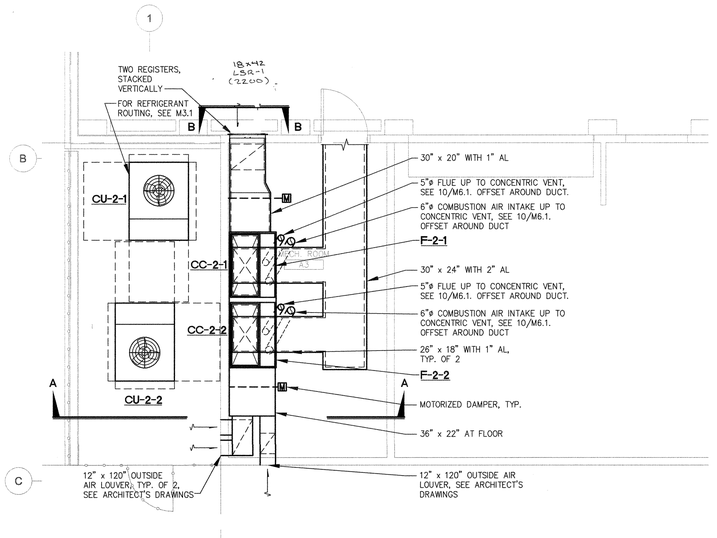
B-B / M2.2 MECHANICAL ROOM SECTION - MECHANICAL

SCALE: 1/4" = 1'-0"



A-A / M2.2 MECHANICAL ROOM SECTION - MECHANICAL

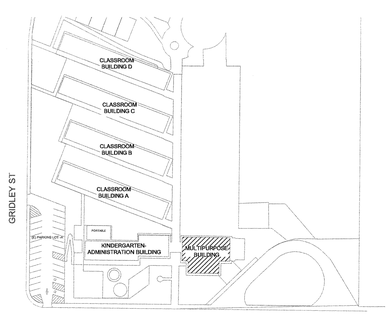
SCALE: 1/4" = 1'-0"



1 / M2.2 MECHANICAL ROOM PLAN - MECHANICAL

SCALE: 1/4" = 1'-0"

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
Matthew Lee
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr, Suite A
Monterey, California 93940-5786
email: mail@axiomengineers.com
vc. (831) 444-8000
fx. (831) 444-8036
AE Project # : 20170291

MULTI-PURPOSE BUILDING - FLOOR PLANS MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

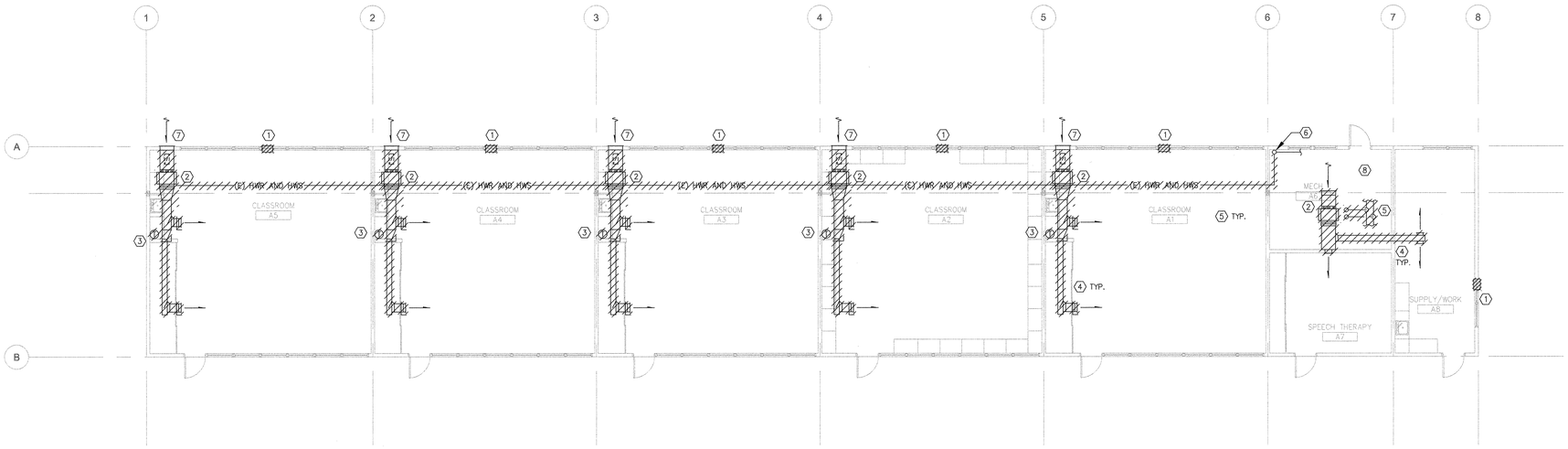
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC ZG FLS MS SS 1/2
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

M2.2

COPYRIGHT©2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC. - LEE & ASSOCIATES CONSULTING ENGINEERS
Drawing: H:\PROJECTS\20170291\DRAWINGS\M\M2.2-MECH-MULTI-PURPOSE BUILDING.DWG
Xrefs: 10x10 HSS-1 (240) TYP OF 2.dwg, 18x6 HSS-1 (315) TYP OF 8.dwg

Drawing: H:\PROJECTS\20170291\DRAWINGS\ARCH\M2.3.DWG
Plotted: May 14, 2018 9:40:23 AM
Xrefs: HVAC-MAIN.DWG, MASK-BRICK.DWG, MASK-BRICK.DWG



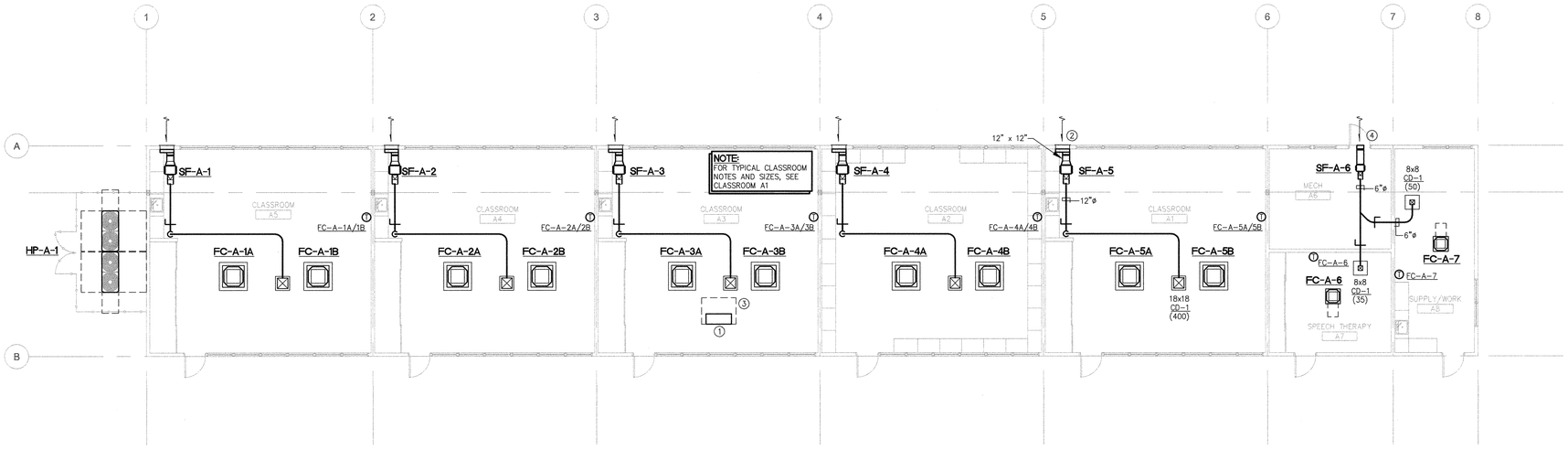
BUILDING A - MECHANICAL DEMOLITION

SCALE: 1/8" = 1'-0"

TRUE NORTH

DEMOLITION NOTES:

1. REMOVE (E) PORTABLE AC LOUVER COMPLETE. SEE ARCHITECT'S DRAWINGS FOR INFILL. (E) PORTABLE AC TO BE RETURNED TO DISTRICT.
2. REMOVE (E) FAN COIL UNIT AND SUPPORTS COMPLETE.
3. REMOVE (E) THERMOSTATS AND WIRING COMPLETE.
4. REMOVE (E) SUPPLY AND RETURN DUCTWORK, REGISTERS AND SUPPORTS COMPLETE. SEE ARCHITECT'S DRAWINGS FOR INFILL.
5. REMOVE (E) HOT WATER SUPPLY AND RETURN PIPING AND SUPPORTS COMPLETE INSIDE BUILDING.
6. CAP (E) UNDERGROUND HOT WATER PIPE AT GRADE AND ABANDON IN PLACE.
7. (E) OUTSIDE AIR LOUVER TO REMAIN.
8. REMOVE ALL (E) MECHANICAL EQUIPMENT IN THIS ROOM, INCLUDING BOILERS, PUMPS, PIPING, SUPPORTS AND HOUSEKEEPING PAD.



BUILDING A - MECHANICAL

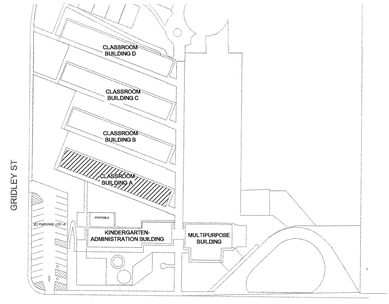
SCALE: 1/8" = 1'-0"

TRUE NORTH

NEW NOTES:

1. BRANCH CIRCUIT CONTROLLER ABOVE CEILING. FOR MOUNTING SEE 2/M6.1. FOR REFRIGERANT ROUTING, SEE M3.2.
2. CONNECT TO (E) 24" x 24" OUTSIDE AIR LOUVER. INSTALL FILTER BOX WITH 1" PLEATED FILTER IN SUPPLY DUCT.
3. REQUIRED ACCESS CLEARANCE.
4. 12" x 12" OUTSIDE AIR LOUVER WITH PLENUM BOX. INSTALL 1" PLEATED FILTER IN PLENUM.

BUILDING KEY



COPYRIGHT©2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC.- LEE & ASSOCIATES CONSULTING ENGINEERS

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

STATE OF CALIFORNIA — REGISTERED PROFESSIONAL ENGINEER
No. M31059
EXP. JUNE 30, 2019
MECHANICAL

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5786
tel. (831) 646-8020
fx. (831) 646-8038
email: mail@axiomengineers.com
SM
AE Project #: 20170291

BUILDING A CLASSROOMS - FLOOR PLANS MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

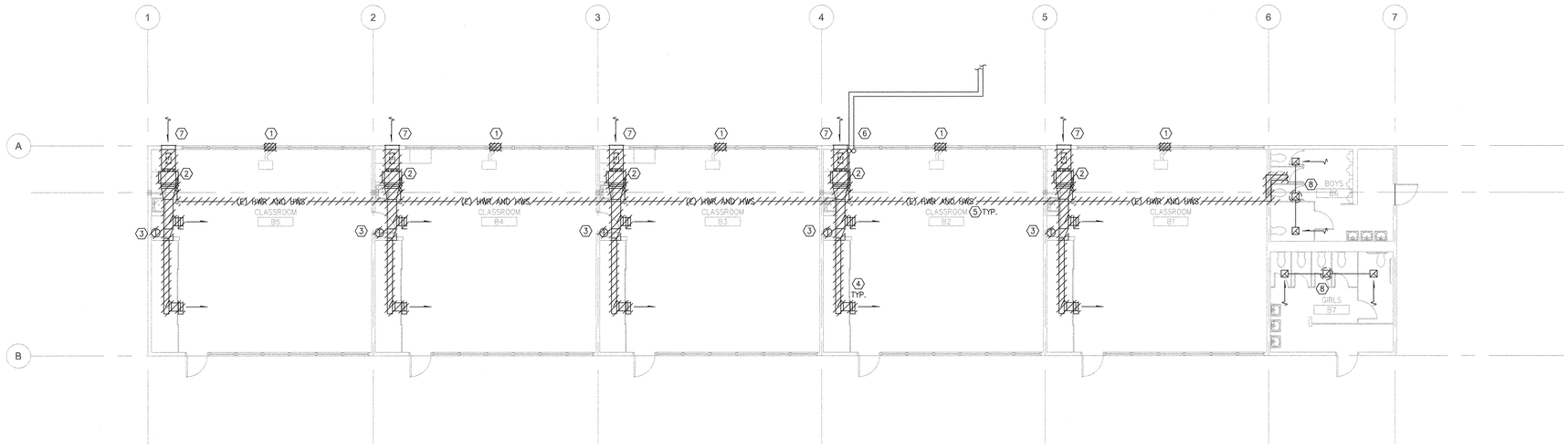
AC RG FLS MS SS VP

DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO: 17103	DATE: 04/09/2018

M2.3

ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC.– LEE & ASSOCIATES CONSULTING ENGINEERS SHALL NOT BE RESPONSIBLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE
Drawing: H:\PROJECTS\2017\20171091\GRAPHICS\CAD\M2.4-BUILDING B CLASSROOMS - FLOOR PLANS MECHANICAL.DWG, 8.24.2018 8:24:54 AM, Xrefs: HVAC-BASE.DWG, MASS-BASE.DWG, MASS-BSMT.DWG, MASS-ROOF.DWG



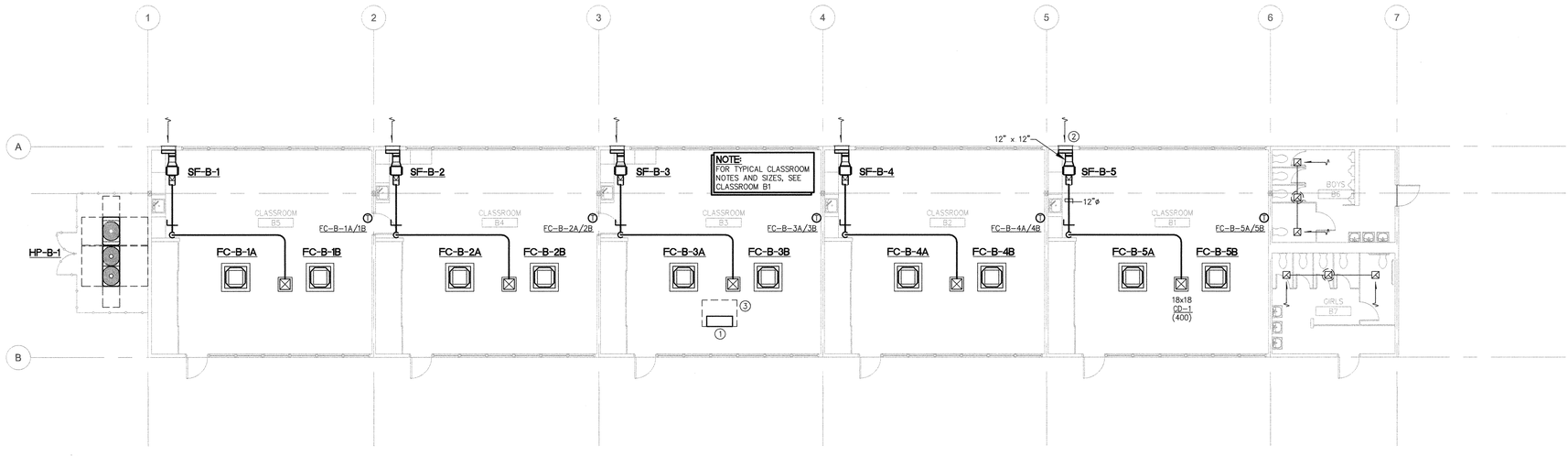
BUILDING B - MECHANICAL DEMOLITION

SCALE: 1/8" = 1'-0"

TRUE REF. NORTH

DEMOLITION NOTES:

1. REMOVE (E) PORTABLE AC LOUVER COMPLETE. SEE ARCHITECT'S DRAWINGS FOR INFILL. (E) PORTABLE AC TO BE RETURNED TO DISTRICT.
2. REMOVE (E) FAN COIL UNIT AND SUPPORTS COMPLETE.
3. REMOVE (E) THERMOSTATS AND WIRING COMPLETE.
4. REMOVE (E) SUPPLY AND RETURN DUCTWORK, REGISTERS AND SUPPORTS COMPLETE. SEE ARCHITECT'S DRAWINGS FOR INFILL.
5. REMOVE (E) HOT WATER SUPPLY AND RETURN PIPING AND SUPPORTS COMPLETE INSIDE BUILDING.
6. CAP (E) UNDERGROUND HOT WATER PIPE AT GRADE AND ABANDON IN PLACE.
7. (E) OUTSIDE AIR LOUVER TO REMAIN.
8. (E) EXHAUST FANS, DUCT AND REGISTERS TO REMAIN.



BUILDING B - MECHANICAL

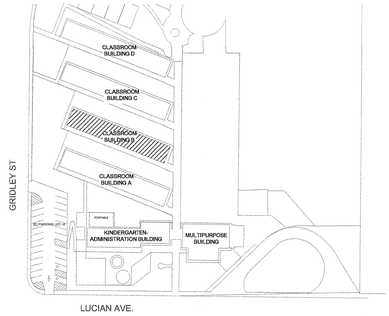
SCALE: 1/8" = 1'-0"

TRUE REF. NORTH

NEW NOTES:

1. BRANCH CIRCUIT CONTROLLER ABOVE CEILING. FOR MOUNTING SEE 2/M6.1. FOR REFRIGERANT ROUTING, SEE M3.2.
2. CONNECT TO (E) 24" x 24" OUTSIDE AIR LOUVER. INSTALL FILTER BOX WITH 1" PLEATED FILTER IN SUPPLY DUCT.
3. REQUIRED ACCESS CLEARANCE.

BUILDING KEY



SUGIHARA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

AXIOM ENGINEERS SM
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-7086
email: mail@axiomengineers.com
vc. (831) 648-8000
fx. (831) 648-8038
AE Project # : 20170291

BUILDING B CLASSROOMS - FLOOR PLANS MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

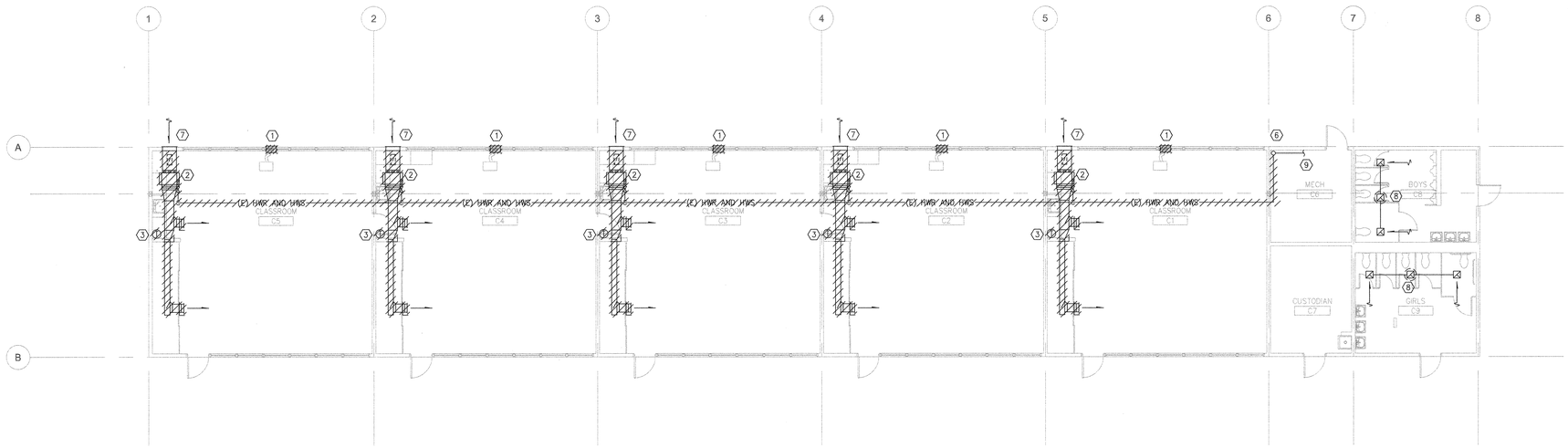
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC 2G FLS MS SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

M2.4

COPYRIGHT © 2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND

Drawing: H:\PROJ\2017\20171029\1\DRAWINGS\LHA-FLS-M1A-425.DWG
Mar 14, 2018 at 2:53 pm
Xrefs: M1A-ARCH.DWG, M1A-SHELL.DWG, M1A-S-BUILDING.DWG

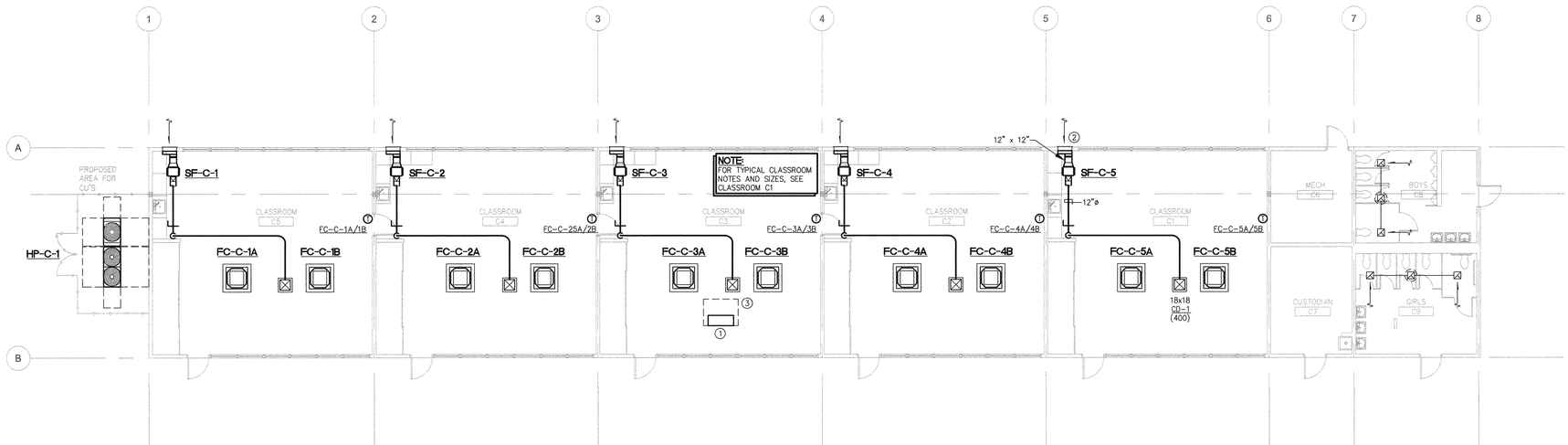


BUILDING C - MECHANICAL DEMOLITION

SCALE: 1/8" = 1'-0"

DEMOLITION NOTES:

1. REMOVE (E) PORTABLE AC LOUVER COMPLETE. SEE ARCHITECT'S DRAWINGS FOR INFILL. (E) PORTABLE AC TO BE RETURNED TO DISTRICT.
2. REMOVE (E) FAN COIL UNIT AND SUPPORTS COMPLETE.
3. REMOVE (E) THERMOSTATS AND WIRING COMPLETE.
4. REMOVE (E) SUPPLY AND RETURN DUCTWORK, REGISTERS AND SUPPORTS COMPLETE. SEE ARCHITECT'S DRAWINGS FOR INFILL.
5. REMOVE (E) HOT WATER SUPPLY AND RETURN PIPING AND SUPPORTS COMPLETE INSIDE BUILDING.
6. CAP (E) UNDERGROUND HOT WATER PIPE AT GRADE AND ABANDON IN PLACE.
7. (E) OUTSIDE AIR LOUVER TO REMAIN.
8. (E) EXHAUST FAN, DUCT, AND REGISTER TO REMAIN.
9. REMOVE ALL (E) MECHANICAL EQUIPMENT IN THIS ROOM, INCLUDING BOILERS, PUMPS, PIPING, SUPPORTS AND HOUSEKEEPING PAD. RETURN (E) BOILER AND PUMPS TO SCHOOL DISTRICT.



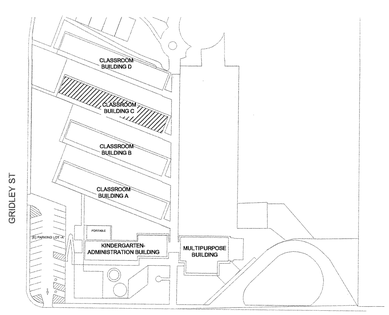
BUILDING C - MECHANICAL

SCALE: 1/8" = 1'-0"

NEW NOTES:

1. BRANCH CIRCUIT CONTROLLER ABOVE CEILING. FOR MOUNTING SEE 2/M6.1. FOR REFRIGERANT ROUTING, SEE M3.3.
2. CONNECT TO (E) 24" x 24" OUTSIDE AIR LOUVER. INSTALL FILTER BOX WITH 1" PLEATED FILTER IN SUPPLY DUCT.
3. REQUIRED ACCESS CLEARANCE.

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE · INTERIORS · PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
Matthew Sullivan
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
SM
22 Lower Ragsdale Dr. Suite A
Monterey, California 93940-5788
tel. (831) 646-8500
fx. (831) 646-8538
email: mail@axiomengineers.com
AE Project # : 20170291

BUILDING C CLASSROOMS - FLOOR PLANS MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

AC MS FLS MS SS MS
DATE 5-22-18

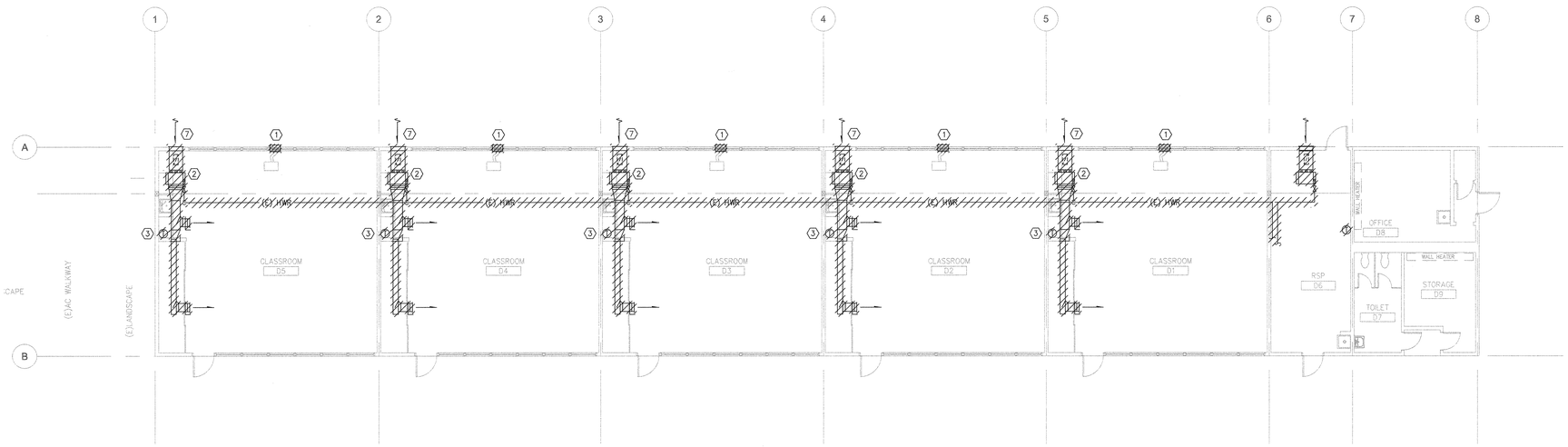
DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

M2.5

COPYRIGHT © 2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC. - LEE & ASSOCIATES OWNS THE ENGINEER

COPYRIGHT © 2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC.- LEE & ASSOCIATES CONSULTING ENGINEERS

Drawing: H:\PROJECTS\2017\17103\DRAWINGS\17103_M2.6_BLDG D MECH DEMO.DWG
Xrefs: HVAC-MAN.DWG, MASS-BRICS.DWG, MASS-BGND.DWG
Plotted: 9/3/2018 8:23:54 AM



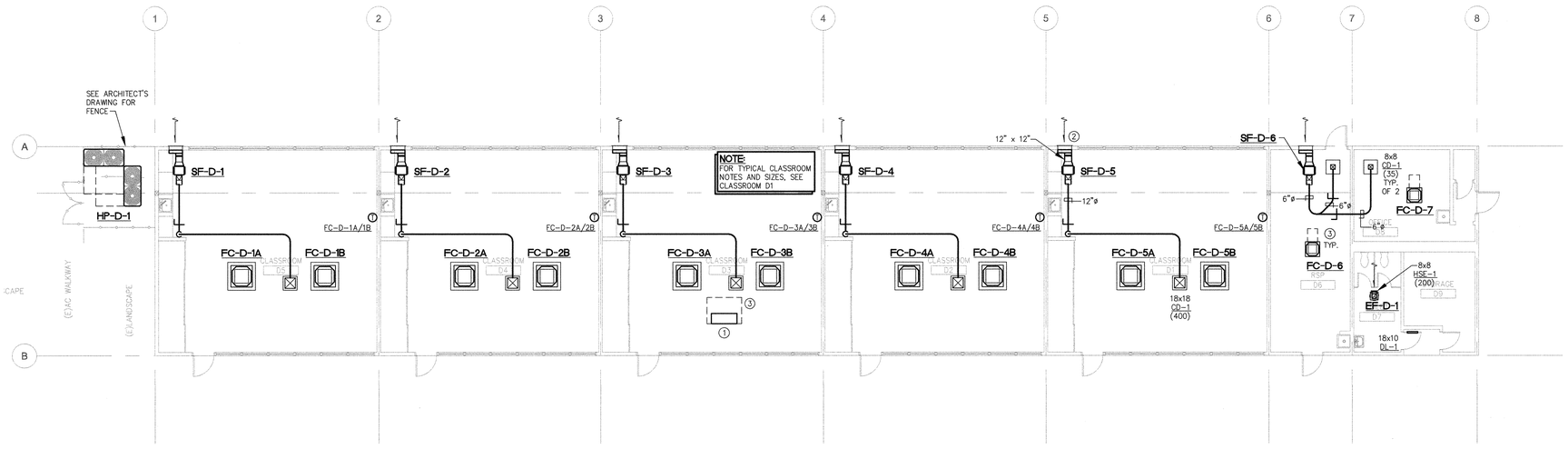
BUILDING D - MECHANICAL DEMOLITION

SCALE: 1/8" = 1'-0"

TRUE REF. NORTH

DEMOLITION NOTES:

1. REMOVE (E) PORTABLE AC LOUVER COMPLETE. SEE ARCHITECT'S DRAWINGS FOR INFILL. (E) PORTABLE AC TO BE RETURNED TO DISTRICT.
2. REMOVE (E) FAN COIL UNIT AND SUPPORTS COMPLETE.
3. REMOVE (E) THERMOSTATS AND WIRING COMPLETE.
4. REMOVE (E) SUPPLY AND RETURN DUCTWORK, REGISTERS AND SUPPORTS COMPLETE. SEE ARCHITECT'S DRAWINGS FOR INFILL.
5. REMOVE (E) HOT WATER SUPPLY AND RETURN PIPING AND SUPPORTS COMPLETE INSIDE BUILDING.
6. CAP (E) UNDERGROUND HOT WATER PIPE AT GRADE AND ABANDON IN PLACE.
7. (E) OUTSIDE AIR LOUVER TO REMAIN.



BUILDING D - MECHANICAL

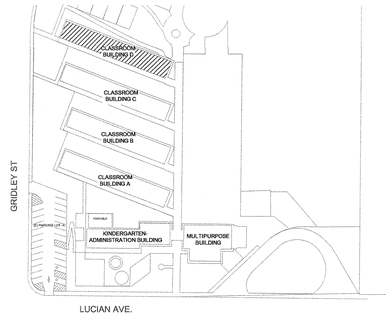
SCALE: 1/8" = 1'-0"

TRUE REF. NORTH

NEW NOTES:

1. BRANCH CIRCUIT CONTROLLER ABOVE CEILING. FOR MOUNTING SEE 2/M6.1. FOR REFRIGERANT ROUTING, SEE M3.3.
2. CONNECT TO (E) 24" x 24" OUTSIDE AIR LOUVER. INSTALL FILTER BOX WITH 1" PLEATED FILTER IN SUPPLY DUCT.
3. REQUIRED ACCESS CLEARANCE.

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE · INTERIORS · PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5786
email: mail@axiomengineers.com
SM
ph. (831) 648-8020
fx. (831) 648-8038
AE Project # : 20170291

BUILDING D CLASSROOMS - FLOOR PLANS MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

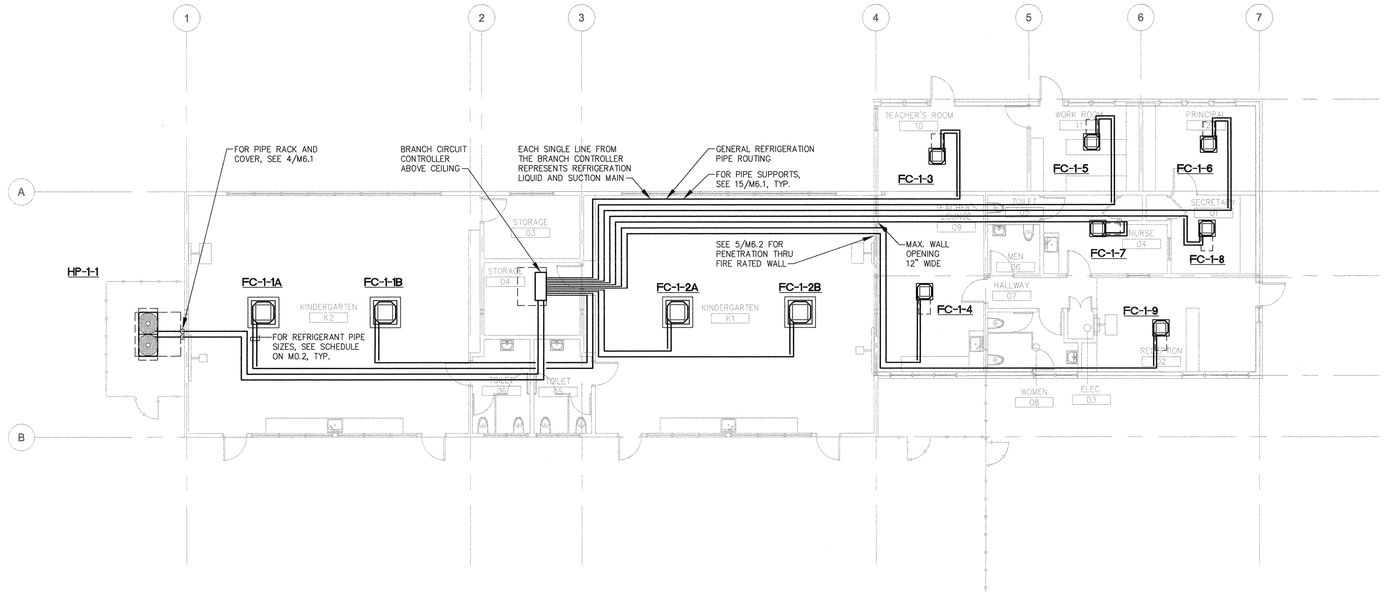
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

AC KG FLS MB SS
DATE 5-22-18

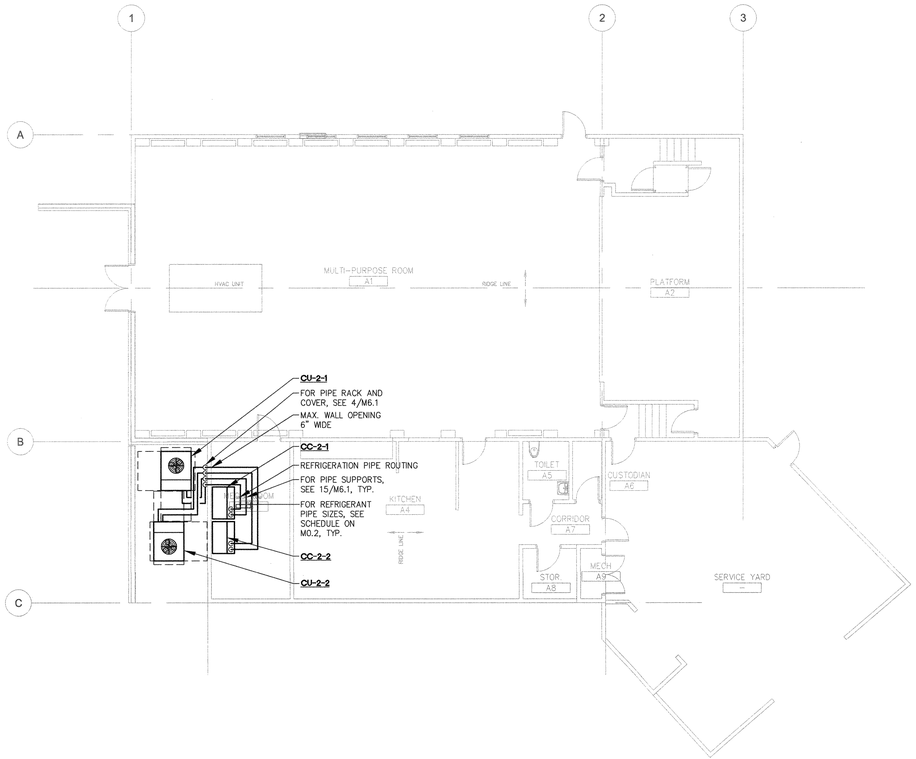
DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

M2.6



BUILDING 1 - MECHANICAL

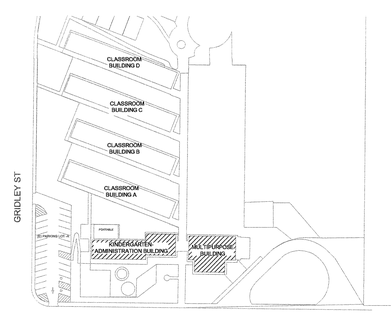
SCALE: 1/8" = 1'-0"



MULTI-PURPOSE BUILDING - MECHANICAL

SCALE: 1/8" = 1'-0"

BUILDING KEY



COPYRIGHT © 2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC - LEE & ASSOCIATES CONSULTING ENGINEERS
Drawing: N:\PROJECT\2017\20170291\DRAWINGS\M\M3.1.DWG
Date: 4/9/2018 8:43:15 AM
Xrefs: M:\MSMP-BRG1.DWG, H:\HVAC-1&2A.DWG, M:\M3-BRG2.DWG, M:\M3-BRG3.DWG

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
SEAL
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

tel. (831) 649-8020
fx. (831) 646-3038
email: mail@axiomengineers.com
AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
SM
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5786
AE Project # : 20170291

ADMINISTRATION-KINDERGARTEN & MULTI-PURPOSE BUILDING - PIPING PLANS MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

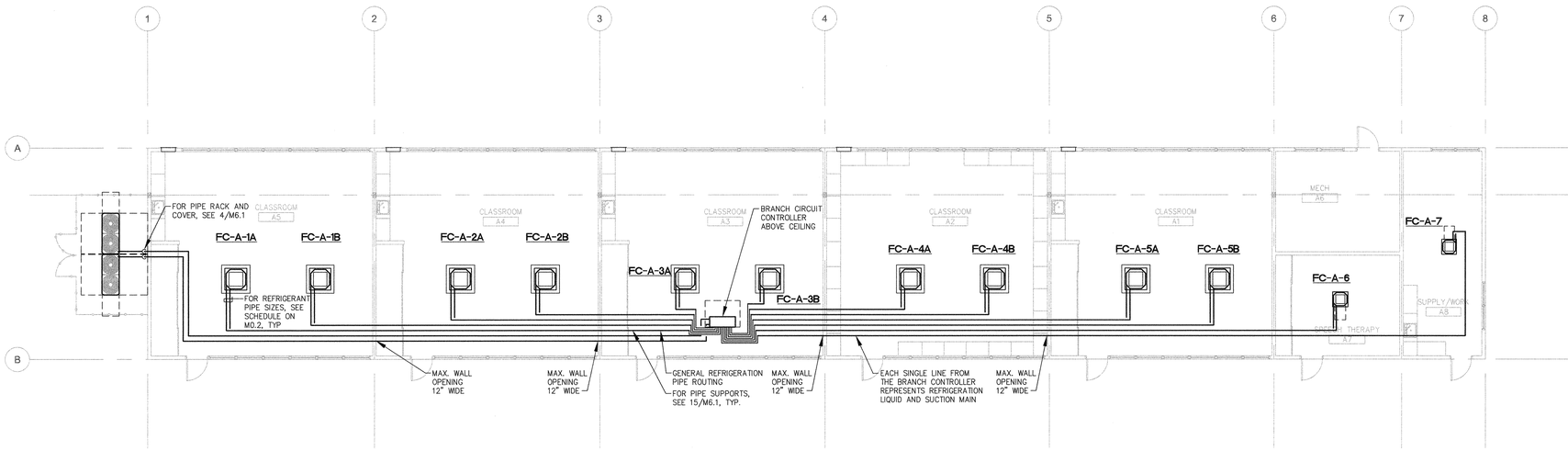
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC FLS MB SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

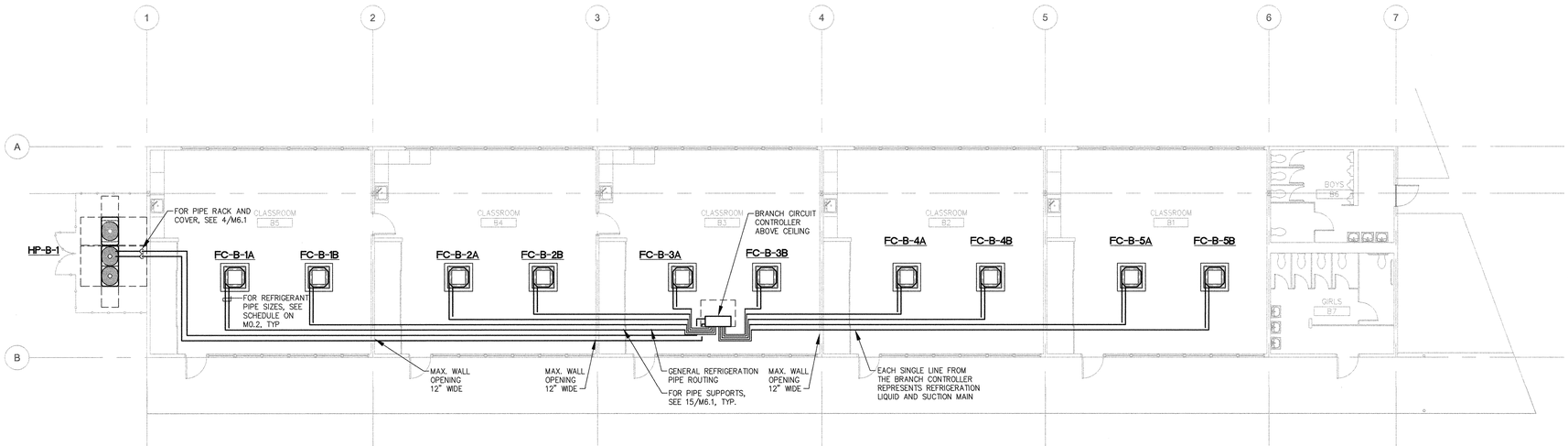
M3.1

Drawing: H:\PROJ\2017\2017029\DRAWINGS\LNA-FLS1-A1A3.DWG
Xrefs: HVAC-MAIN.DWG, MASB-SHELL.DWG, HVAC-MAIN.DWG, MASB-SHELL.DWG, MASB-SHELL.DWG



BUILDING A - MECHANICAL

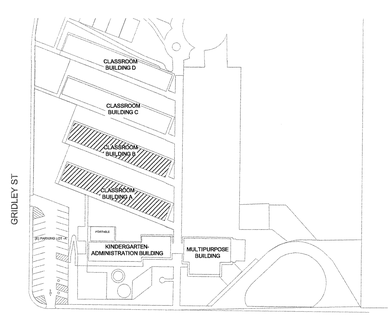
SCALE: 1/8" = 1'-0"



BUILDING B - MECHANICAL

SCALE: 1/8" = 1'-0"

BUILDING KEY



COPYRIGHT©2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC - LEE & ASSOCIATES CONSULTING ENGINEERS

SUGIMURA SAKIET ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
Matthew Sallmann
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

email: mail@axiomengineers.com
tel. (831) 646-8900
fx. (831) 646-8038
AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr.,Suite A
Monterey, California 93940-5785
AE Project # : 20170291

BUILDING A & BUILDING B CLASSROOMS - PIPING PLANS MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

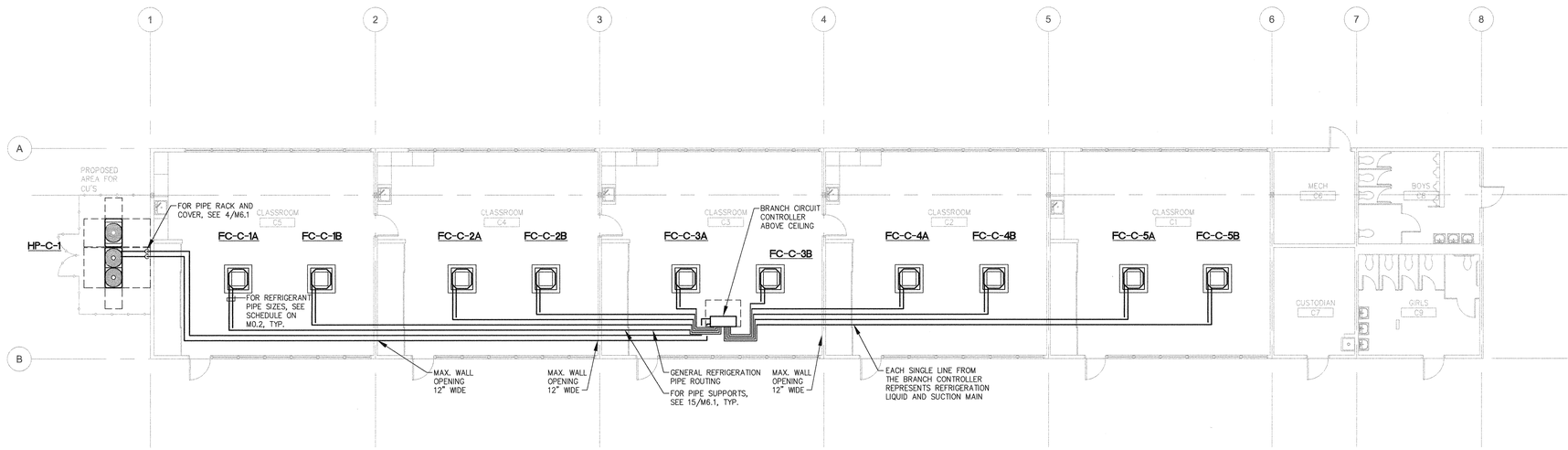
AC 26 FLS MS SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

M3.2

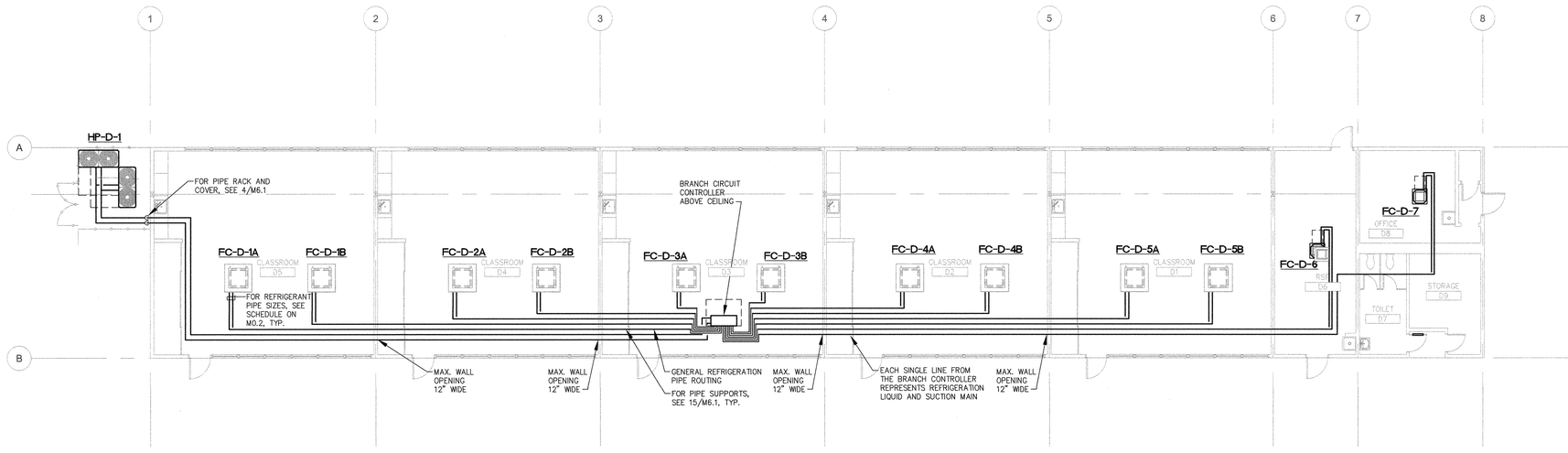
COPYRIGHT ©2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC - LEE & ASSOCIATES CONSULTING ENGINEERS

Drawing: H:\PROJECTS\20170291\DRAWINGS\ARCHITECTURAL\M3.3.DWG
Xrefs: M4GS-BKGD.DWG, M1A2-BKGD.DWG, HVAC-BKGD.DWG, M4GS-BKGD.DWG, M4GS-BKGD.DWG



BUILDING C - MECHANICAL

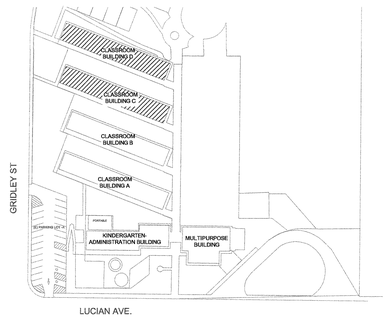
SCALE: 1/8" = 1'-0"



BUILDING D - MECHANICAL

SCALE: 1/8" = 1'-0"

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
email: mail@axiomengineers.com
tel. (831) 646-8000
fx. (831) 646-8038
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5786
AE Project # : 20170291

BUILDING C & BUILDING D CLASSROOMS - PIPING PLANS MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

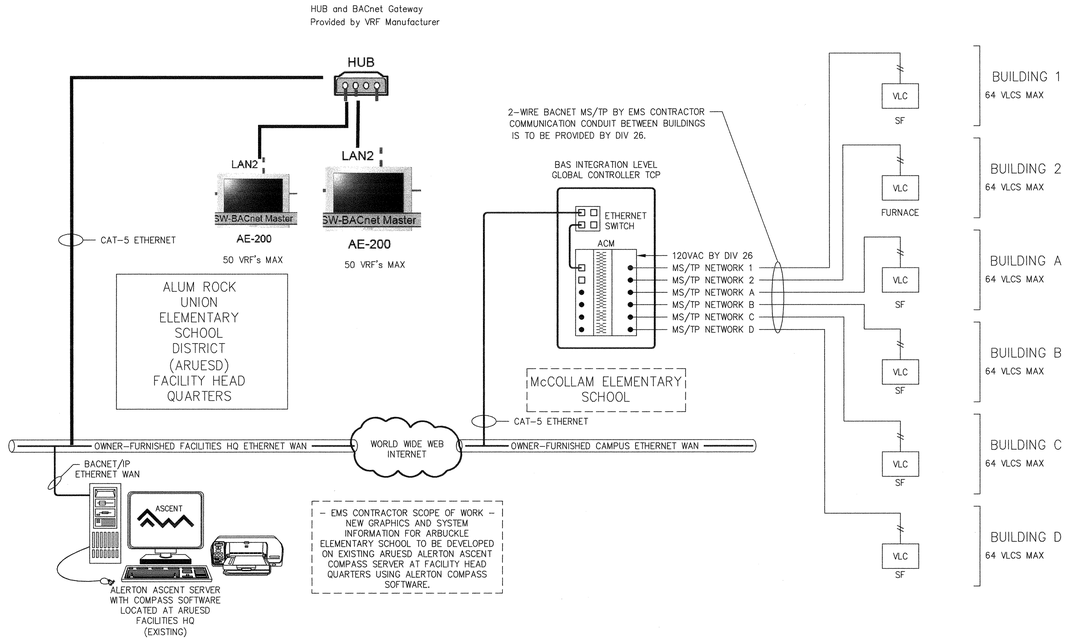
NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
FLS MS SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

M3.3



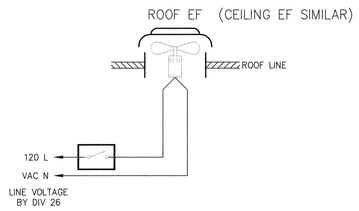
1 / M5.1

ALERTON BACNET EMS SYSTEM

SCALE: NONE

SEQUENCE OF OPERATION

1. THE EXHAUST FAN STARTS WHEN LIGHT SWITCH IS ON.
2. EXHAUST FAN STOPS WHEN LIGHT SWITCH IS OFF.



2 / M5.1

BATHROOM EXHAUST FAN

SCALE: NONE

EQUIPMENT INTERLOCK/CONTROLS

BUILDING	EQUIPMENT	CONTROL	INTERLOCK	REMARKS
BUILDING D	FC-D-1A	(1)	HP-D-1 SF-D-1	(3)
	FC-D-1B	(1)	HP-D-1 SF-D-1	(3)
	FC-D-2A	(1)	HP-D-1 SF-D-2	(3)
	FC-D-2B	(1)	HP-D-1 SF-D-2	(3)
	FC-D-3A	(1)	HP-D-1 SF-D-3	(3)
	FC-D-3B	(1)	HP-D-1 SF-D-3	(3)
	FC-D-4A	(1)	HP-D-1 SF-D-4	(3)
	FC-D-4B	(1)	HP-D-1 SF-D-4	(3)
	FC-D-5A	(1)	HP-D-1 SF-D-5	(3)
	FC-D-5B	(1)	HP-D-1 SF-D-5	(3)
	FC-D-6	(1)	HP-D-1 SF-D-6	(3)
	FC-D-7	(1)	HP-D-1 SF-D-6	(3)
	EF-D-1	(2)	–	

(1) VRF SYSTEMS WILL OPERATE UNDER INTERNAL MITSUBISHI CONTROLS. EMS SYSTEM WILL COMMUNICATE WITH CENTRALIZED CONTROLLER THROUGH BACNET TO PROGRAM SCHEDULES AND SETPOINTS, AND ENABLE / DISABLE UNITS. BMS WILL MONITOR ROOM TEMPERATURE THROUGH CENTRALIZED CONTROLLER BACNET POINTS.

(2) SWITCH WITH LIGHTS.

(3) SUPPLY FAN OPERATION WILL BE CONTROLLED BY EMS SYSTEM.

EQUIPMENT INTERLOCK/CONTROLS

BUILDING	EQUIPMENT	CONTROL	INTERLOCK	REMARKS
BUILDING 1	FC-1-1A	(1)	HP-1-1 SF-1-1	(3)
	FC-1-1B	(1)	HP-1-1 SF-1-1	(3)
	FC-1-2A	(1)	HP-1-1 SF-1-2	(3)
	FC-1-2B	(1)	HP-1-1 SF-1-2	(3)
	FC-1-3	(1)	HP-1-1 SF-1-3	(3)
	FC-1-4	(1)	HP-1-1 SF-1-3	(3)
	FC-1-5	(1)	HP-1-1 SF-1-3	(3)
	FC-1-6	(1)	HP-1-1 SF-1-3	(3)
	FC-1-7	(1)	HP-1-1 SF-1-3	(3)
	FC-1-8	(1)	HP-1-1 SF-1-3	(3)
	FC-1-9	(1)	HP-1-1 SF-1-3	(3)
	FC-1-8	(1)	HP-1-1 SF-1-3	(3)
	FC-1-9	(1)	HP-1-1 SF-1-3	(3)
	EF-1-1	(2)	–	
	EF-1-2	(2)	–	
	EF-1-3	(2)	–	
BUILDING 2	F-2-1	(4)	CU-2-1	
	F-2-2	(4)	CU-2-2	
BUILDING A	FC-A-1A	(1)	HP-A-1 SF-A-1	(3)
	FC-A-1B	(1)	HP-A-1 SF-A-1	(3)
	FC-A-2A	(1)	HP-A-1 SF-A-2	(3)
	FC-A-2B	(1)	HP-A-1 SF-A-2	(3)
	FC-A-3A	(1)	HP-A-1 SF-A-3	(3)
	FC-A-3B	(1)	HP-A-1 SF-A-3	(3)
	FC-A-4A	(1)	HP-A-1 SF-A-4	(3)
	FC-A-4B	(1)	HP-A-1 SF-A-4	(3)
	FC-A-5A	(1)	HP-A-1 SF-A-5	(3)
	FC-A-5B	(1)	HP-A-1 SF-A-5	(3)
	FC-A-6	(1)	HP-A-1 SF-A-6	(3)
	FC-A-7	(1)	HP-A-1 SF-A-6	(3)
BUILDING B	FC-B-1A	(1)	HP-B-1 SF-B-1	(3)
	FC-B-1B	(1)	HP-B-1 SF-B-1	(3)
	FC-B-2A	(1)	HP-B-1 SF-B-2	(3)
	FC-B-2B	(1)	HP-B-1 SF-B-2	(3)
	FC-B-3A	(1)	HP-B-1 SF-B-3	(3)
	FC-B-3B	(1)	HP-B-1 SF-B-3	(3)
	FC-B-4A	(1)	HP-B-1 SF-B-4	(3)
	FC-B-4B	(1)	HP-B-1 SF-B-4	(3)
	FC-B-5A	(1)	HP-B-1 SF-B-5	(3)
	FC-B-5B	(1)	HP-B-1 SF-B-5	(3)
BUILDING C	FC-C-1A	(1)	HP-C-1 SF-C-1	(3)
	FC-C-1B	(1)	HP-C-1 SF-C-1	(3)
	FC-C-2A	(1)	HP-C-1 SF-C-2	(3)
	FC-C-2B	(1)	HP-C-1 SF-C-2	(3)
	FC-C-3A	(1)	HP-C-1 SF-C-3	(3)
	FC-C-3B	(1)	HP-C-1 SF-C-3	(3)
	FC-C-4A	(1)	HP-C-1 SF-C-4	(3)
	FC-C-4B	(1)	HP-C-1 SF-C-4	(3)
	FC-C-5A	(1)	HP-C-1 SF-C-5	(3)
	FC-C-5B	(1)	HP-C-1 SF-C-5	(3)

(1) VRF SYSTEMS WILL OPERATE UNDER INTERNAL MITSUBISHI CONTROLS. EMS SYSTEM WILL COMMUNICATE WITH CENTRALIZED CONTROLLER THROUGH BACNET TO PROGRAM SCHEDULES AND SETPOINTS, AND ENABLE / DISABLE UNITS. BMS WILL MONITOR ROOM TEMPERATURE THROUGH CENTRALIZED CONTROLLER BACNET POINTS.

(2) SWITCH WITH LIGHTS.

(3) SUPPLY FAN OPERATION WILL BE CONTROLLED BY EMS SYSTEM.

(4) CONTROLLED BY EMS SYSTEM.

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5786
email: mail@axiomengineers.com
tel. (831) 648-8000
fx. (831) 648-8038
AE Project # : 20170291

CONTROLS - MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

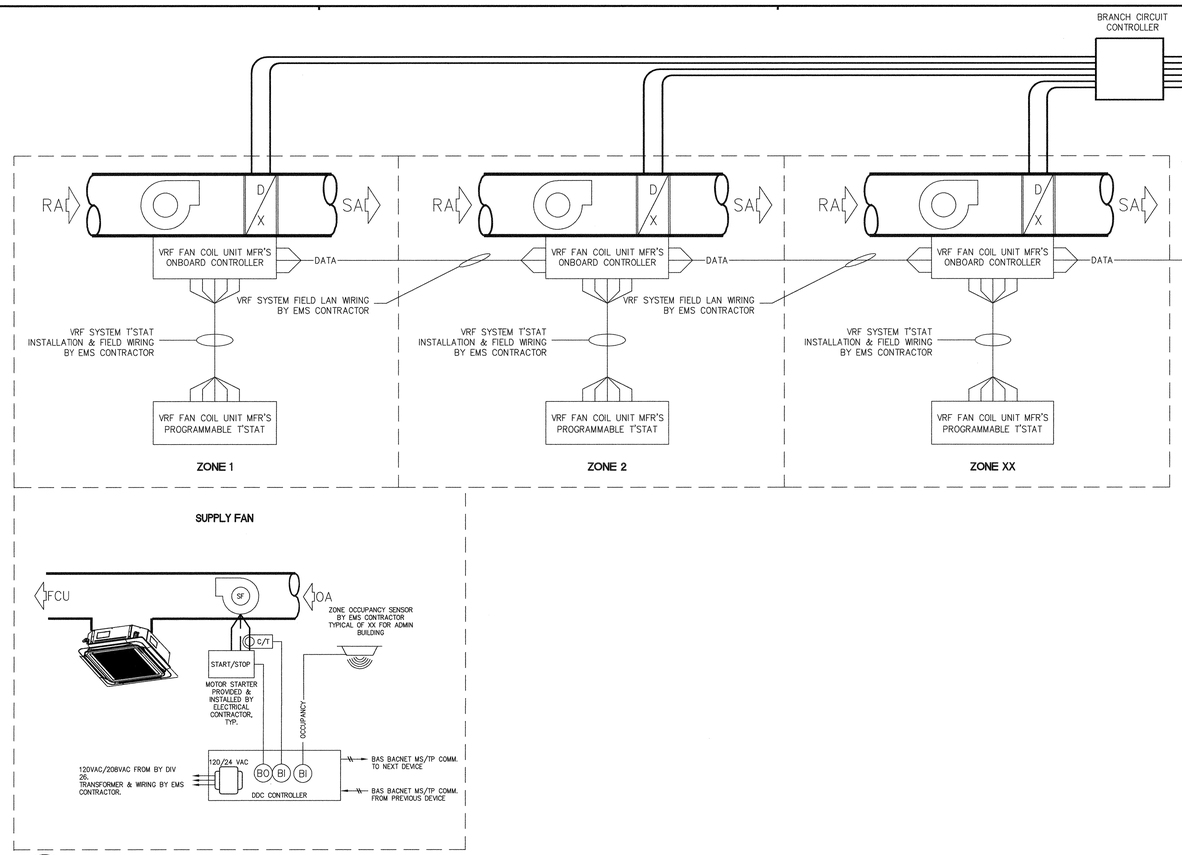
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC FLS MS SS
DATE 5-22-18

DRAWN BY: CADD
CHECKED BY: MS
JOB NO: 17103
DATE: 04/09/2018

M5.1

COPYRIGHT ©2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE, OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS, INC. - LEE & ASSOCIATES CONSULTING ENGINEERS
Drawing: N:\PROJECT\2017\20170291\WORKING\CAD\M5.1.DWG Mar 30, 2018 - 4:47pm
Xrefs: M5-BASE.DWG



1 M5.2

ADMIN VRF FAN COIL SYSTEM - EMS FIELD WIRING DIAGRAM

SCALE: NONE

VRF SYSTEM SEQUENCE OF OPERATION

1. VRF SYSTEM OUTDOOR HEAT PUMP, BRANCH CONTROLLER, AND FAN COILS WILL OPERATE UNDER OWN MITSUBISHI CONTROLS AND THERMOSTAT TO MAINTAIN ROOM TEMPERATURE SETPOINT.
2. EMS SYSTEM SHALL TIE INTO MITSUBISHI CENTRALIZED CONTROLLER THROUGH BACNET TO SET THERMOSTAT SCHEDULE AND HEAT / COOL SETPOINTS. FAN COILS WILL OPERATE DURING NORMAL BUILDING OPERATING HOURS.

NORMALLY OCCUPIED HOURS:

3. VRF FAN COILS WILL OPERATE AT MINIMUM FAN SPEED IF ROOM TEMPERATURE SETPOINT HAS BEEN MET.
4. IF ROOM IS UNOCCUPIED BASED ON OCCUPANCY SENSOR STATUS AND ROOM TEMPERATURE SETPOINT HAS BEEN MET, FAN COIL SHALL TURN OFF.

UNOCCUPIED HOURS:

5. VRF FAN COIL WILL TURN ON TO MAINTAIN ROOM SETPOINT IF AFTER-HOURS OVERRIDE BUTTON AT THERMOSTAT IS PUSHED.THE AFTER-HOURS OVERRIDE DURATION SHALL HAVE THE ABILITY TO BE LIMITED AT THE FRONT-END.

MORNING WARMUP:

6. VRF FAN COILS WILL TURN ON TO MAINTAIN ROOM TEMPERATURE SETPOINT ONE HOUR PRIOR TO NORMAL BUILDING OPERATING HOURS.

MONITORING:

7. EMS SYSTEM SHALL MONITOR CURRENT ROOM TEMPERATURE AND TEMPERATURE SETPOINT THROUGH BACNET AND DISPLAY ON GRAPHICS SCREEN.

SUPPLY FAN SEQUENCE OF OPERATION

1. SUPPLY FAN WILL BE SCHEDULED SAME TIME AS ANY ZONE VRF SYSTEM. THE VRF OCCUPANCY SCHEDULE WILL BE AVAILABLE THROUGH THE BACNET INTERFACE, WHILE SUPPLY FAN WILL BE SCHEDULED THROUGH THE DDC CONTROLLER. THE SUPPLY FAN AND VRF FCs WILL OPERATE DURING NORMAL BUILDING OPERATING HOURS THROUGH EMS TIME-CLOCK.
2. DDC CONTROLLER MONITORS OCCUPANCY SENSOR STATUS OF ALL ZONES IN ADMIN BUILDING.

NORMALLY OCCUPIED HOURS:

3. SUPPLY FAN SHALL BE ON DURING SCHEDULED HOURS UNLESS ALL ZONES ARE UNOCCUPIED.
4. IF ALL ZONES ARE UNOCCUPIED BASED ON OCCUPANCY SENSOR STATUS DURING NORMALLY SCHEDULED HOURS, THE SUPPLY FAN WILL TURN OFF.
5. IF ALL ZONES REMAIN UNOCCUPIED DURING SCHEDULED HOURS FOR MORE THAN ONE HOUR, SUPPLY FAN SHALL CYCLE ON TO PROVIDE OUTSIDE AIR FOR 15 MINUTES.

UNOCCUPIED HOURS:

6. SUPPLY FAN SHALL BE OFF DURING SCHEDULED BUILDING UNOCCUPIED HOURS.
7. SUPPLY FAN WILL TURN ON IF AFTER-HOURS OVERRIDE BUTTON IS PUSHED AT THERMOSTAT AND STAY ON FOR DURATION OF AFTER-HOURS OVERRIDE.

PRE-OCCUPANCY PURGE:

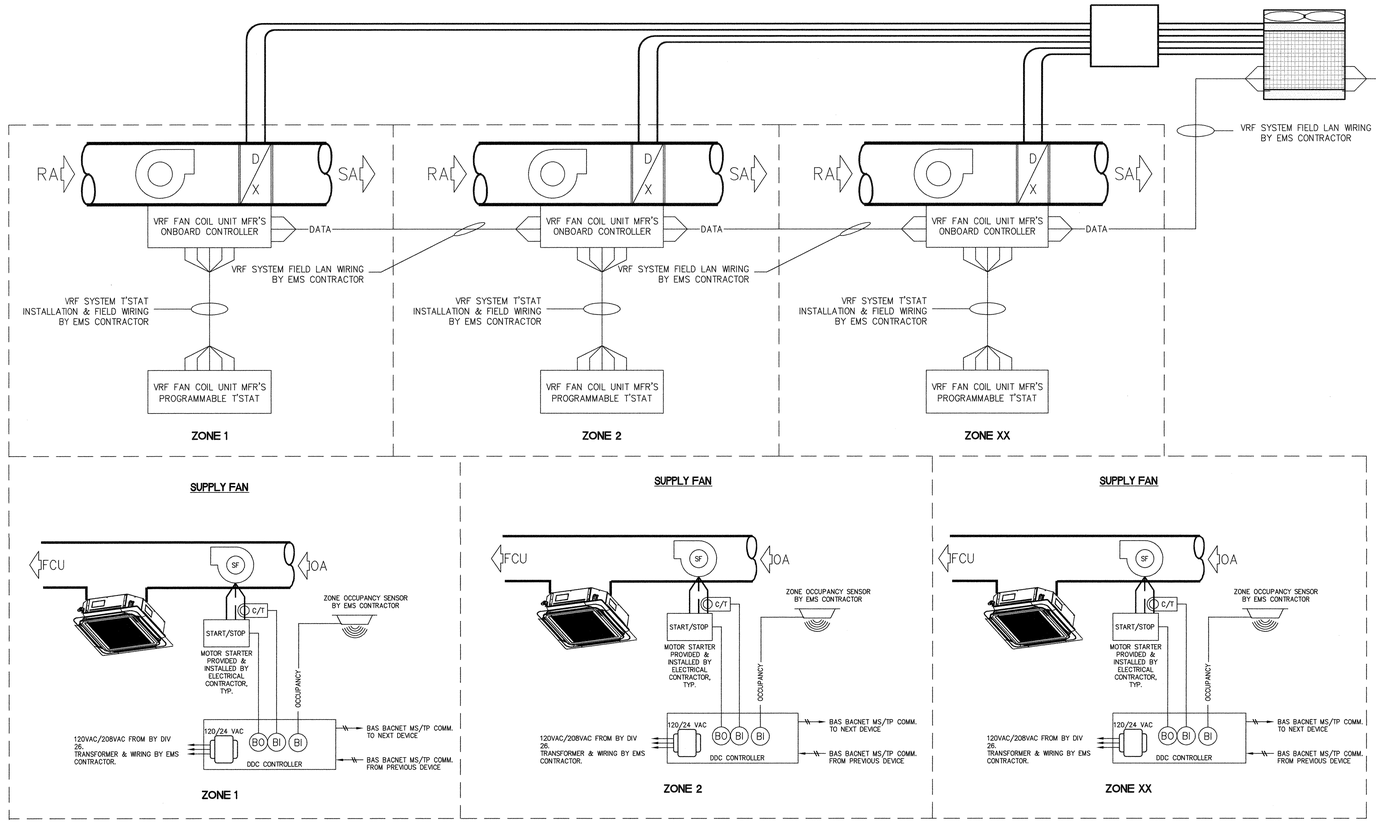
8. EMS SYSTEM WILL COMMAND SUPPLY FAN TO TURN ON ONE HOUR PRIOR TO SCHEDULED NORMAL BUILDING OPERATING HOURS.

MONITORING:

9. THE FOLLOWING CONDITIONS SHALL BE MONITORED:
   a. STATUS OF SUPPLY FAN.
   b. OCCUPANCY SENSOR STATUS

ALARMS:

9. IF THE SUPPLY FAN FAN RUNS WHILE COMMANDED BY THE EMS TO THE OFF STATE OR IF IT FAILS TO RUN WHILE COMMANDED TO THE ON STATE, AN ALARM SHALL BE DISPLAYED.



2 M5.2

CLASSROOM VRF FAN COIL SYSTEM - EMS FIELD WIRING DIAGRAM

SCALE: NONE

VRF SYSTEM SEQUENCE OF OPERATION

1. VRF SYSTEM OUTDOOR HEAT PUMP, BRANCH CONTROLLER, AND FAN COILS WILL OPERATE UNDER OWN MITSUBISHI CONTROLS AND THERMOSTAT TO MAINTAIN ROOM TEMPERATURE SETPOINT.
2. EMS SYSTEM SHALL TIE INTO MITSUBISHI CENTRALIZED CONTROLLER THROUGH BACNET TO SET THERMOSTAT SCHEDULE AND HEAT / COOL SETPOINTS. FAN COILS WILL OPERATE DURING NORMAL BUILDING OPERATING HOURS.

NORMALLY OCCUPIED HOURS:

3. VRF FAN COILS WILL OPERATE AT MINIMUM FAN SPEED IF ROOM TEMPERATURE SETPOINT HAS BEEN MET.
4. IF ROOM IS UNOCCUPIED BASED ON OCCUPANCY SENSOR STATUS AND ROOM TEMPERATURE SETPOINT HAS BEEN MET, FAN COIL SHALL TURN OFF.
5. IF ROOM REMAINS UNOCCUPIED FOR MORE THAN ONE HOUR, FAN COIL SHALL TURN ON FOR 15 MINUTES.

UNOCCUPIED HOURS:

6. VRF FAN COIL WILL TURN ON TO MAINTAIN ROOM SETPOINT IF AFTER-HOURS OVERRIDE BUTTON AT THERMOSTAT IS PUSHED.THE AFTER-HOURS OVERRIDE DURATION SHALL HAVE THE ABILITY TO BE LIMITED AT THE FRONT-END.

MORNING WARMUP:

7. VRF FAN COILS WILL TURN ON TO MAINTAIN ROOM TEMPERATURE SETPOINT ONE HOUR PRIOR TO NORMAL BUILDING OPERATING HOURS.

MONITORING:

8. EMS SYSTEM SHALL MONITOR CURRENT ROOM TEMPERATURE AND TEMPERATURE SETPOINT THROUGH BACNET AND DISPLAY ON GRAPHICS SCREEN.

SUPPLY FAN SEQUENCE OF OPERATION

1. SUPPLY FAN WILL BE SCHEDULED SAME TIME AS ANY ZONE VRF SYSTEM. THE VRF OCCUPANCY SCHEDULE WILL BE AVAILABLE THROUGH THE BACNET INTERFACE, WHILE SUPPLY FAN WILL BE SCHEDULED THROUGH THE DDC CONTROLLER. THE SUPPLY FAN AND VRF FCs WILL OPERATE DURING NORMAL BUILDING OPERATING HOURS THROUGH EMS TIME-CLOCK.
2. SUPPLY FAN WILL NOT RUN UNLESS VRF FAN COIL IS ALSO ON.
3. DDC CONTROLLER MONITORS OCCUPANCY SENSOR STATUS OF ALL ZONES IN ADMIN BUILDING.

NORMALLY OCCUPIED HOURS:

4. SUPPLY FAN SHALL BE ON DURING SCHEDULED HOURS UNLESS CLASSROOM IS UNOCCUPIED.
5. IF CLASSROOM IS UNOCCUPIED BASED ON OCCUPANCY SENSOR STATUS DURING NORMALLY SCHEDULED HOURS, THE SUPPLY FAN WILL TURN OFF.
6. IF CLASSROOM REMAINS UNOCCUPIED DURING SCHEDULED HOURS FOR MORE THAN ONE HOUR, SUPPLY FAN SHALL CYCLE ON TO PROVIDE OUTSIDE AIR FOR 15 MINUTES.

UNOCCUPIED HOURS:

7. SUPPLY FAN SHALL BE OFF DURING SCHEDULED BUILDING UNOCCUPIED HOURS.
8. SUPPLY FAN WILL TURN ON IF AFTER-HOURS OVERRIDE BUTTON IS PUSHED AT THERMOSTAT AND STAY ON FOR DURATION OF AFTER-HOURS OVERRIDE.

PRE-OCCUPANCY PURGE:

9. EMS SYSTEM WILL COMMAND SUPPLY FAN TO TURN ON ONE HOUR PRIOR TO SCHEDULED NORMAL BUILDING OPERATING HOURS.

MONITORING:

10. THE FOLLOWING CONDITIONS SHALL BE MONITORED:
    a. STATUS OF SUPPLY FAN.
    b. OCCUPANCY SENSOR STATUS

ALARMS:

9. IF THE SUPPLY FAN FAN RUNS WHILE COMMANDED BY THE EMS TO THE OFF STATE OR IF IT FAILS TO RUN WHILE COMMANDED TO THE ON STATE, AN ALARM SHALL BE DISPLAYED.

COPYRIGHT ©2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC.- LEE & ASSOCIATES CONSULTING ENGINEERS
Drawing: H:\PROJECTS\2017\17103\DRAWINGS\M5.2.DWG
Date: 8/31/2018 8:45:15 AM
Layout: M5.2-SHACKLE
Plotted: 9/4/2018 8:45:21 AM

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER
No. M31059
EXP. JUNE 30, 2019
MECHANICAL

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5786
ph. (831) 649-8020
fx. (831) 649-8038
email: mail@axiomengineers.com
SM
AE Project # : 20170291

CONTROLS
MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

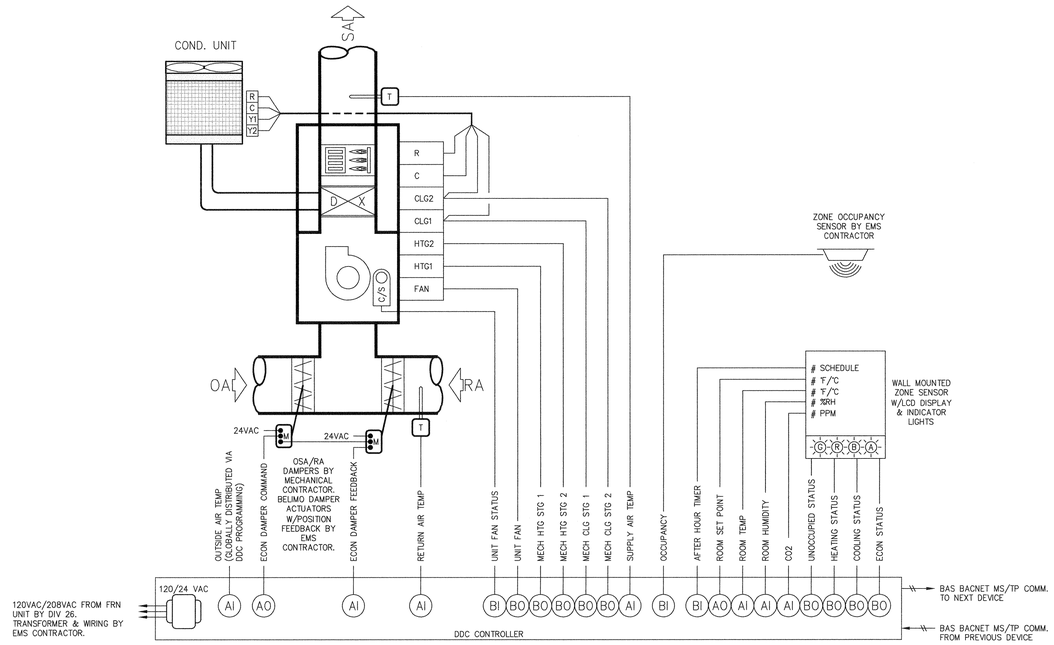
NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC FLS MS SS
DATE 5-22-18

DRAWN BY: CADD
CHECKED BY: MS
JOB NO: 17103
DATE: 04/09/2018

M5.2



FURNACE WITH DX COOLING, ECONOMIZER, DVC, AND ZONE OCCUPANCY MONITORING SEQUENCE OF OPERATION

1. SYSTEM OVERVIEW
   - A. EACH FURNACE AND CONDENSING UNIT UNIT WILL BE DIRECTLY CONTROLLED BY ITS OWN DEDICATED EMS (ENERGY MANAGEMENT SYSTEM) UNITARY CONTROLLER.
   - B. EMS UNITARY CONTROLLER WILL BE CONNECTED TO A WALL MOUNTED ELECTRONIC ZONE TEMPERATURE SENSOR WITH INTEGRAL CO2 SENSOR.
   - C. ELECTRONIC ZONE TEMPERATURE SENSOR SHALL HAVE A TOUCH SCREEN LCD INTERFACE WHICH INCLUDES: 1) DIGITAL PUSHBUTTONS FOR WARMER/COOLER SETPOINT CONTROL; 2) VISUAL DISPLAY OF ROOM TEMPERATURE, ROOM HUMIDITY, ROOM CO2 AND AMBIENT OSA TEMPERATURE; AND 3) DIGITAL PUSHBUTTON AFTER-HOURS OVERRIDE TIMER CONTROL, WITH USER ADJUSTABLE DURATION. THE AFTER-HOURS OVERRIDE DURATION SHALL HAVE THE ABILITY TO BE LIMITED FROM THE FRONT-END.
2. OCCUPANCY/VACANCY MONITORING
   - A. EMS CONTRACTOR SHALL PROVIDE ZONE OCCUPANCY SENSOR FOR OCCUPANCY MONITORING.
3. UNIT FAN OPERATION
   - A. WHEN THE ZONE IS IN OCCUPIED MODE OR IN AFTERHOURS MODE, THE LEAD FAN SHALL RUN CONTINUOUSLY, UNLESS VACANT MODE HAS BEEN TRIGGERED. LEAD/LAG ON THE FANS WILL ALTERNATE ON WEEKLY BASIS TO EQUALIZE RUNTIME. IF THE LEAD SUPPLY FAN RUNS WHILE COMMANDED BY THE EMS TO THE OFF STATE OR IF IT FAILS TO RUN WHILE COMMANDED TO THE ON STATE, AN ALARM SHALL BE DISPLAYED AND ANNUNCIATED AT THE OPERATOR'S CONSOLE AND LAG SUPPLY FAN WILL BE ENABLED.
   - B. DURING THE UNOCCUPIED MODE AS DETERMINED BY EMS TIME SCHEDULE, THE UNIT FAN CYCLES WITH DEMAND AND THE TEMPERATURE IS CONTROLLED BY THE UNOCCUPIED SPACE TEMPERATURE HEATING AND COOLING SETPOINTS.
4. MINIMUM OUTDOOR AIR VENTILATION
   - A. DURING OCCUPIED MODE OR AFTERHOURS MODE, THE ECONOMIZER DAMPER SHALL BE COMMANDED BY THE EMS UNITARY CONTROLLER TO MAINTAIN A POSITION WHICH SATISFIES THE MINIMUM OUTDOOR AIR VENTILATION REQUIREMENTS FOR THE ZONE. DAMPER POSITION(S) DETERMINED BY AIR BALANCING CONTRACTOR.
5. DEMAND CONTROL VENTILATION
   - A. EMS UNITARY CONTROLLER WILL BE CONNECTED TO A WALL MOUNTED CO2 SENSOR TO MONITOR ZONE CO2 CONCENTRATION.
   - B. DURING OCCUPIED MODE OR AFTERHOURS MODE, THE EMS UNITARY CONTROLLER SHALL RESET THE OUTSIDE AIR DAMPER MINIMUM POSITION TO MAINTAIN THE CO2 CONCENTRATION BELOW 1,000 PPM.
6. AUTOMATIC DEMAND REDUCTION CONTROLS
   - A. EMS SHALL BE PROGRAMMED WITH CAPABILITY TO IMPLEMENT CENTRALIZED DEMAND SHED FOR ALL NON-CRITICAL ZONES UPON CALL FOR AUTOMATIC DEMAND REDUCTION. CRITICAL ZONES SHALL NOT BE IMPACTED BY DEMAND SHED CONSERVATION MEASURES.
7. VACANT MODE CONTROL
   - A. WHEN THE ZONE HAS BEEN SCHEDULED FOR OCCUPANCY FOR AT LEAST ONE HOUR AND THE OCCUPANCY SENSOR HAS CONFIRMED THAT ZONE HAS BEEN VACANT FOR 5 MINUTES (ADJUSTABLE: MAXIMUM 30 MINUTES), ZONE SHALL BE PLACED INTO VACANT MODE.
   - B. RESET COOLING AND HEATING SETPOINTS UP AND DOWN BY 2°F (ADJUSTABLE) OR MORE.
   - C. MINIMUM OUTDOOR AIR VENTILATION REQUIREMENTS IN THE ZONE NEED ONLY BE MAINTAINED 15 MINUTES OUT OF EVERY 60 MINUTES WHILE THE ZONE IS IN VACANT MODE.
   - D. UPON DETECTION OF OCCUPANCY, VACANT MODE SHALL BE CLEARED.
8. ZONE PRE-OCCUPANCY PURGE
   - A. THE EMS SHALL SCHEDULE THE ZONE TO BE IN OCCUPIED MODE ONE HOUR PRIOR TO THE ACTUAL TIME OF ANTICIPATED OCCUPANCY.
9. ECONOMIZER CONTROL
   - A. EMS UNITARY CONTROLLER SHALL BE DIRECTLY CONNECTED TO DISCHARGE AIR AND RETURN AIR TEMPERATURE SENSORS. GLOBAL DDC PROGRAMMING SHALL BE USED TO BROADCAST CENTRALIZED AMBIENT OUTSIDE AIR TEMPERATURE.
   - B. EMS UNITARY CONTROLLER SHALL ALSO BE DIRECTLY CONNECTED TO ECONOMIZER (OUTSIDE/RETURN AIR) DAMPER ACTUATOR, INCLUDING POSITION FEEDBACK SIGNAL.
   - C. SEE MINIMUM OUTDOOR AIR VENTILATION FOR OUTSIDE AIR DAMPER MIN CFM SETPOINT.
   - D. THE EMS UNITARY CONTROLLER SHALL CONTINUOUSLY COMPARE THE CURRENT OSA TEMPERATURE TO THE ESTABLISHED AIR ECONOMIZER HIGH LIMIT SHUT OFF (ECON LOCK OUT) TEMPERATURE SET POINT (ADJUSTABLE) AND RETURN AIR TEMPERATURE.
   - E. WHEN CURRENT OSA TEMP IS LESS THAN OR EQUAL TO ECON LOCK OUT TEMP AND THE RETURN AIR TEMPERATURE, EMS UNITARY CONTROLLER SHALL USE THE OUTSIDE AIR FOR FREE COOLING.
   - F. THE ECONOMIZER WILL REMAIN IN USE DURING MECHANICAL COOLING AS LONG AS DISCHARGE AIR TEMPERATURE REMAINS ABOVE 45°F (ADJUSTABLE) AND CURRENT OSA TEMP IS LESS THAN OR EQUAL TO ECON LOCK OUT TEMP AND RETURN AIR TEMP.
   - G. WHEN OSA TEMP IS ABOVE ECON LOCK OUT TEMP OR RETURN AIR TEMP, ECONOMIZER WILL BE DEACTIVATED AND ECONOMIZER SHALL BE COMMANDED TO MIN CFM SETPOINT.
   - H. ECONOMIZER WILL BE COMMANDED TO MIN CFM SETPOINT WHEN UNIT IS IN HEATING MODE.
   - I. WHEN UNIT FAN IS NOT OPERATING, OUTSIDE AIR DAMPER SHALL BE COMMANDED CLOSED.
10. HEATING OPERATION
    - A. THE CONTROLLER COMPARES THE HEATING SETPOINT WITH THE SPACE TEMPERATURE AND DETERMINES A NEED-HEATING CONTROL SIGNAL TO STAGE A GAS REGULATING VALVE ON THE UNIT.
    - B. ECONOMIZER TO BE COMMANDED TO MIN OUTSIDE AIR CFM SETPOINT AND MECHANICAL COOLING TO BE LOCKED OUT DURING HEATING MODE.
    - C. IF THE LEAD FURNACE IS NOT ABLE TO SATISFY THE HEATING SETPOINT, LAG FURNACE WILL BE TURNED ON TO SATISFY HEATING SETPOINT.
11. COOLING OPERATION
    - A. THE CONTROLLER COMPARES THE COOLING SETPOINT WITH THE SPACE TEMPERATURE AND DETERMINES A NEED-COOLING SIGNAL.
    - B. THE FIRST STAGE OF COOLING WILL ENABLE THE ECONOMIZER TO PROVIDE FREE COOLING FOR AS LONG AS POSSIBLE.
    - C. THE SECOND STAGE WILL ENABLE THE COMPRESSOR(S) TO MAINTAIN THE ROOM SET POINT.
    - D. MECHANICAL HEATING TO BE LOCKED OUT DURING COOLING MODE.
    - E. IF THE LEAD FURNACE IS NOT ABLE TO SATISFY THE COOLING SETPOINT, LAG FURNACE WILL BE TURNED ON TO SATISFY COOLING SETPOINT.
12. FAULT DETECTION DIAGNOSTICS
    - A. THE EMS DDC CONTROLLER SHALL MONITOR THE FOLLOWING ECONOMIZER ACTUATOR FAULT DETECTION DIAGNOSTIC CONDITIONS AND BROADCAST RESULTS VIA EMS NETWORK:
      - i. TEMPERATURE SENSOR FAILURE/FAULT
      - ii. ECONOMIZER NOT ECONOMIZING WHEN ENABLED
      - iii. ECONOMIZER ECONOMIZING WHEN DISABLED
      - iv. ECONOMIZER DAMPER MODULATION FAILURE
      - v. EXCESS OUTDOOR AIR
13. MONITORING – THE FOLLOWING CONDITIONS SHALL BE MONITORED AND DISPLAYED AT EMS OPERATOR WORKSTATION/GRAPHICAL USER INTERFACE:
    - A. SUPPLY AIR TEMPERATURE.
    - B. ROOM TEMPERATURE.
    - C. ROOM HUMIDITY.
    - D. ROOM CO2 CONCENTRATION.
    - E. ROOM OCCUPANCY STATUS.
    - F. CURRENT MODE (HEATING/COOLING/FAN).
    - G. SUPPLY AIR TEMPERATURE ATTAINED LAST TIME UNIT WAS IN HEATING.
    - H. SUPPLY AIR TEMPERATURE ATTAINED LAST TIME UNIT WAS IN COOLING.
    - I. CURRENT COMMAND STATUS OF FAN, ECONOMIZER, COMPRESSOR AND GAS VALVE.
    - J. RUN TIME METERS ON FAN, COMPRESSOR, AND HEAT.
    - K. FAN STATUS THRU CURRENT SWITCH.
    - L. ECONOMIZER ACTUATOR FEEDBACK STATUS.

1 M5.3 FURNACE WITH SPLIT SYSTEM DX COOLING WITH ECONOMIZER, DEMAND CONTROL VENTILATION AND OCCUPANCY MONITORING

SCALE: NONE

COPYRIGHT © 2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC - LEE & ASSOCIATES CONSULTING ENGINEERS
Drawing: H:\PROJECTS\2017\2017-LEA\WORKING\17103-FLES-M5.3.DWG
Date: Mar 09, 2018 - 8:50:29AM

SUCHMURA SHIELDS ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
Matthew Sullivan
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
email: mail@axiomengineers.com
tel. (831) 484-8000
fx. (831) 484-8008
22 Lower Ragsdale Dr. Suite A
Monterey, California 93940-7086
AE Project # : 20170291

CONTROLS
MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

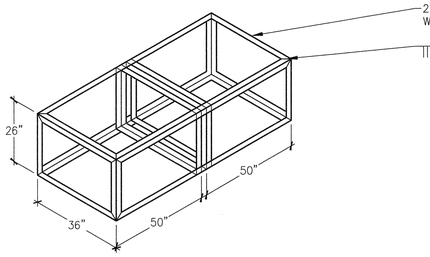
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

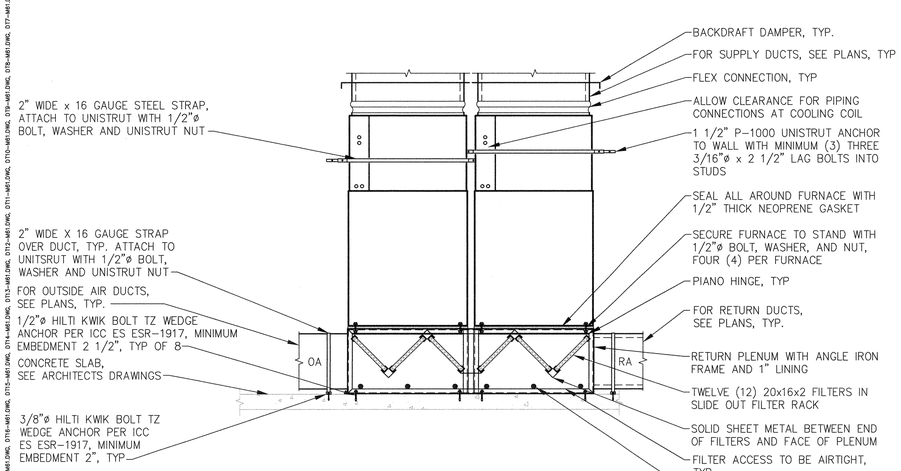
APPL 01-117271
AC JG FLS MS SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

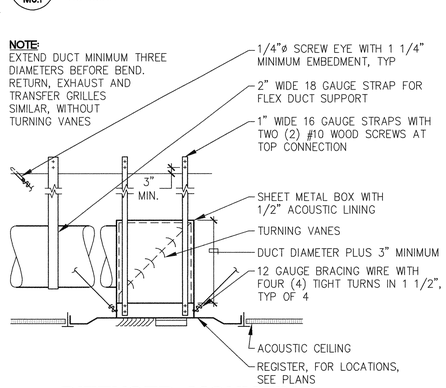
M5.3



FRAME AT PLENUM

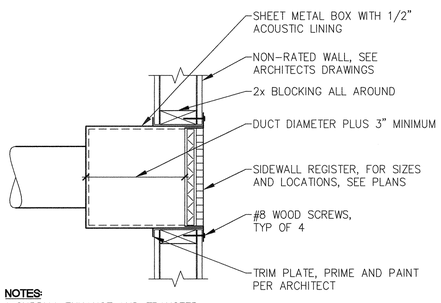


13 M6.1 **FURNACE AND COIL MOUNTING**
NO SCALE



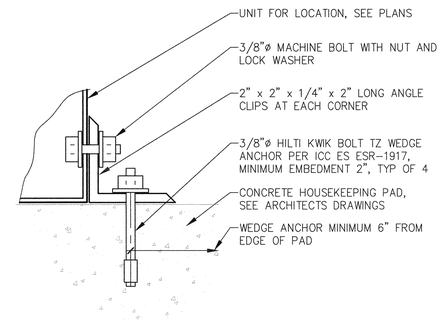
NOTE:
EXTEND DUCT MINIMUM THREE DIAMETERS BEFORE BEND. RETURN, EXHAUST AND TRANSFER GRILLES SIMILAR, WITHOUT TURNING VANES

16 M6.1 **DIFFUSER MOUNTING T-BAR CEILING**
NO SCALE

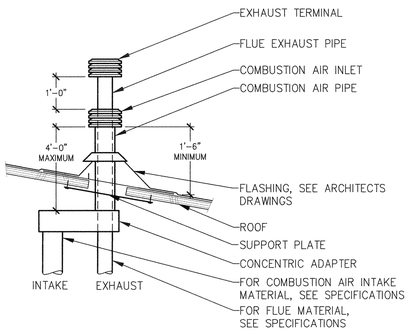


NOTES:
1. SUPPLY, EXHAUST AND TRANSFER GRILLES SIMILAR.
2. EXTEND DUCT MINIMUM THREE DIAMETERS BEFORE BEND.

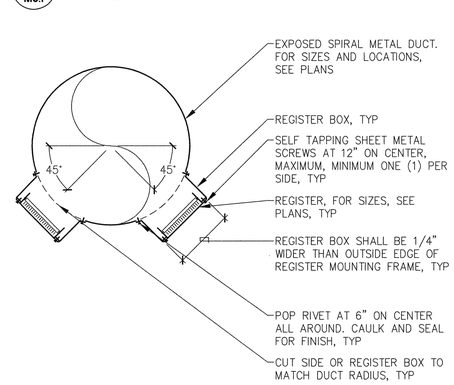
14 M6.1 **SIDEWALL MOUNTING**
NO SCALE



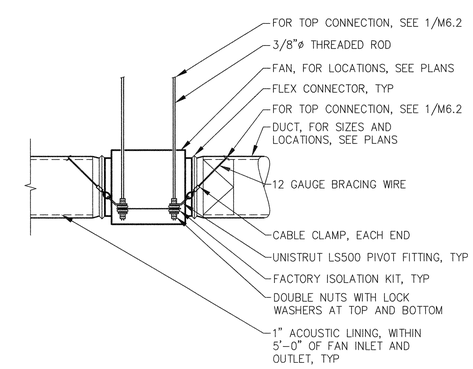
9 M6.1 **CONDENSING UNIT MOUNTING**
NO SCALE



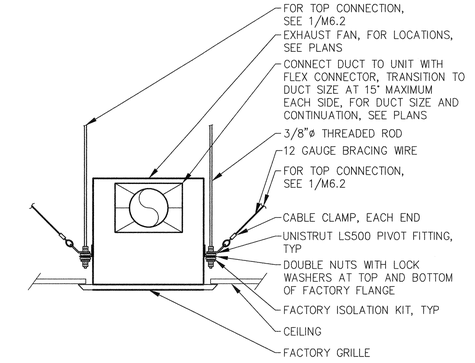
10 M6.1 **CONCENTRIC VENT THROUGH ROOF**
NO SCALE



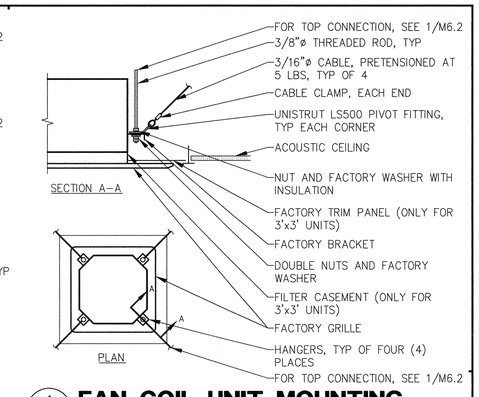
11 M6.1 **DUCT MOUNTED REGISTER**
NO SCALE



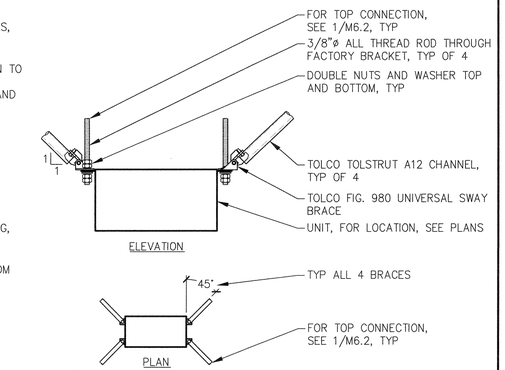
5 M6.1 **INLINE FAN MOUNTING**
NO SCALE



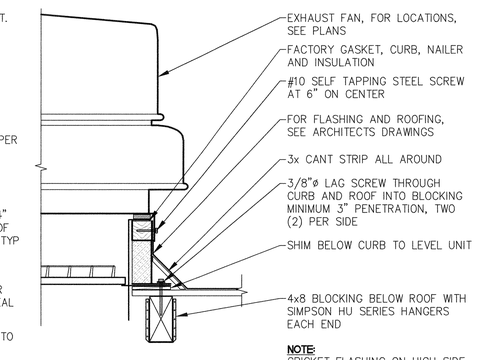
6 M6.1 **CEILING MOUNTED FAN**
NO SCALE



1 M6.1 **FAN COIL UNIT MOUNTING**
NO SCALE



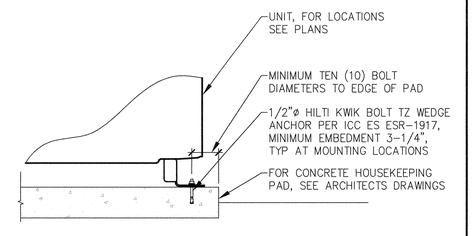
2 M6.1 **CONTROLLER MOUNTING**
NO SCALE



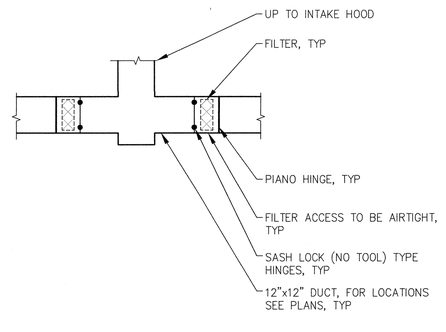
NOTE:
CRICKET FLASHING ON HIGH SIDE OF CURB AND SLOPE TO DRAIN

7 M6.1 **ROOF MOUNTED FAN**
NO SCALE
(HOODS AND CAPS SIMILAR)

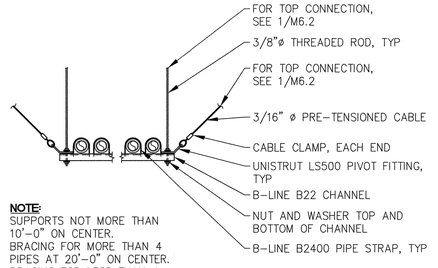
NOTE:
HP-1-1 – TYP. OF 6 MOUNTING LOCATIONS
HP-A-1 – TYP. OF 12 MOUNTING LOCATIONS
HP-B-1 – TYP. OF 10 MOUNTING LOCATIONS
HP-C-1 – TYP. OF 10 MOUNTING LOCATIONS
HP-D-1 – TYP. OF 12 MOUNTING LOCATIONS



3 M6.1 **HEAT PUMP MOUNTING**
NO SCALE

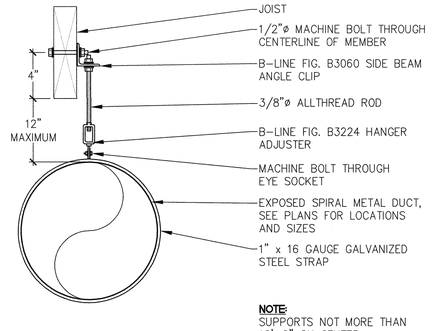


17 M6.1 **DUCT TRANSITION AT INTAKE HOOD AND FILTER BOX**
NO SCALE



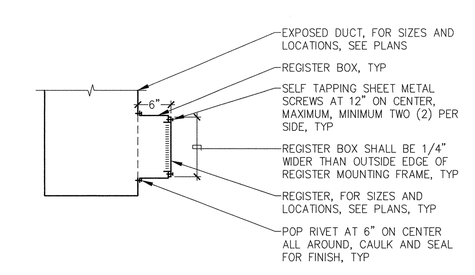
NOTE:
SUPPORTS NOT MORE THAN 10'-0" ON CENTER.
BRACING FOR MORE THAN 4 PIPES AT 20'-0" ON CENTER.
BRACING FOR LESS THAN 4 PIPES AT 40'-0" ON CENTER.

15 M6.1 **REFRIGERANT PIPE SUPPORTS**
NO SCALE

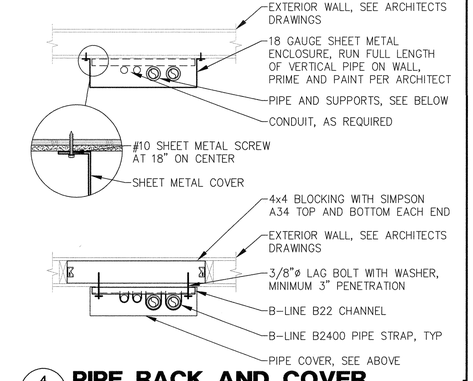


NOTE:
SUPPORTS NOT MORE THAN 12'-0" ON CENTER.
PROVIDE SEISMIC BRACING AS REQUIRED, SEE SPECIFICATIONS.

12 M6.1 **EXPOSED DUCT SUPPORT**
NO SCALE



8 M6.1 **DUCT MOUNTED REGISTER**
NO SCALE



4 M6.1 **PIPE RACK AND COVER**
NO SCALE

COPYRIGHT © 2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC. - LEE & ASSOCIATES CONSULTING ENGINEERS
May 16, 2018 9:24:24 am
Drawing: H:\PROJECTS\2017\2017029\DWG\M6.1.DWG, M6-1-DWG, 017-M61.DWG, 016-M61.DWG, 015-M61.DWG, 014-M61.DWG, 013-M61.DWG, 012-M61.DWG, 011-M61.DWG, M6A-8060.DWG,

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

PROFESSIONAL ENGINEER
STEPHEN M. HARTMANN
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

email: mail@axiomengineers.com
tel. (831) 646-8000
fx. (831) 646-8038
AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5786
AE Project # : 20170291

DETAILS
MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

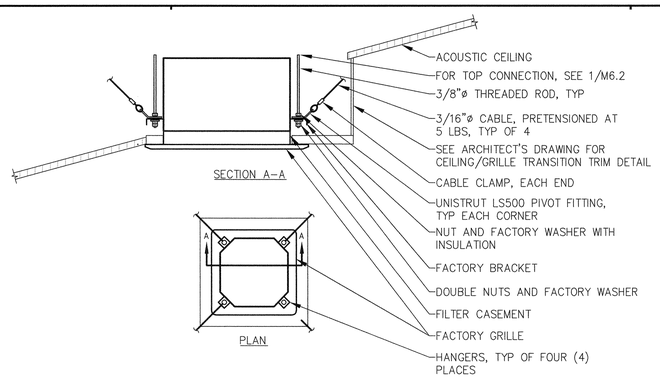
NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
ACCESS FLS MS SS
DATE 5-22-18

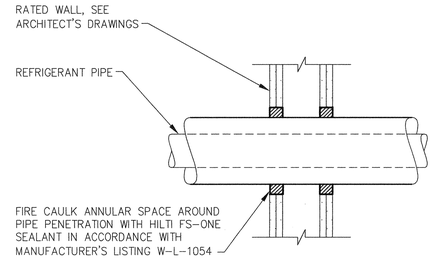
DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

M6.1



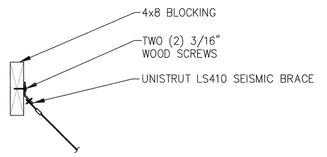
4 M6.2 FAN COIL UNIT MOUNTING

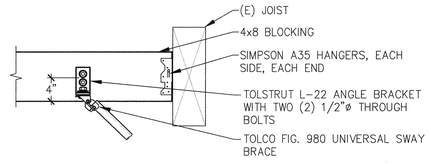
NO SCALE

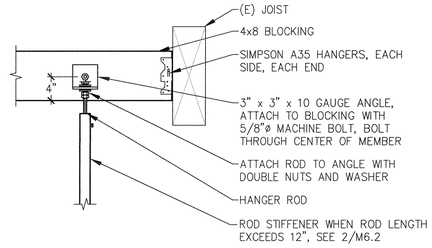


5 M6.2 PIPE THRU RATED WALL

NO SCALE

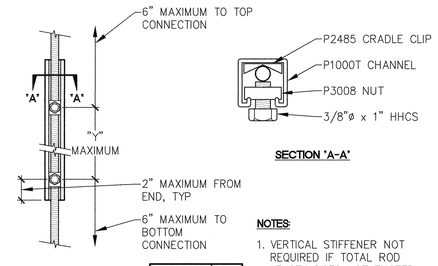






1 M6.2 TOP CONNECTIONS

NO SCALE



HANGER ROD	"Y"
3/8"ø	12.7"
1/2"ø	16.7"
5/8"ø	21.1"
3/4"ø	25.8"

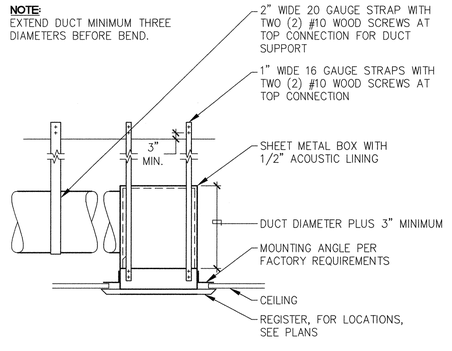
NOTES:

1. VERTICAL STIFFENER NOT REQUIRED IF TOTAL ROD LENGTH DOES NOT EXCEED THE "Y" DIMENSION.
2. MINIMUM OF STIFFENER ASSEMBLY CLAMPS AS REQUIRED BY MANUFACTURER.
3. ALL PART NUMBERS ARE UNISTRUT.

2 M6.2 ROD STIFFENER

NO SCALE

NOTE:
EXTEND DUCT MINIMUM THREE DIAMETERS BEFORE BEND.



3 M6.2 REGISTER MOUNTING

NO SCALE

THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC.- LEE & ASSOCIATES CONSULTING ENGINEERS

Drawing: L:\PROJECT\2017\17103\DRAWINGS\A4-FLLYLA4FLR.DWG
Xrefs: 017-MR2.DWG, 017-MR2.DWG, 017-MR2.DWG, 017-MR2.DWG, 017-MR2.DWG, 017-MR2.DWG, 017-MR2.DWG

COPYRIGHT©2017

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

STATE OF CALIFORNIA PROFESSIONAL ENGINEER
Matthew Hartmann
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
SM
email: mail@axiomengineers.com
tel. (831) 449-8020
fx. (831) 646-8038
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5786
AE Project # : 20170291

DETAILS
MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

AC FLS MS SS
DATE 5-22-18

DRAWN BY: CADD
CHECKED BY: MS
JOB NO: 17103
DATE: 04/09/2018

M6.2

Drawing: H:\PROJECTS\2017\2017035\DRAWINGS\CAL-ES\17035-MCH-01E.DWG
Date: 4/9/2018 8:43:20 AM

STATE OF CALIFORNIA
MECHANICAL SYSTEMS
CEC-NRCC-MCH-01-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-01-E
Mechanical Systems	Page 1 of 3
Project Name: MILLARD MCCOLLAM ELEMENTARY SCHOOL - HVAC UPGRADES	Date Prepared: JANUARY 22, 2018

A. MECHANICAL COMPLIANCE DOCUMENTS & WORKSHEETS (check box if worksheet is included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, refer to the 2016 Nonresidential Manual
Note: The Enforcement Agency may require all forms to be incorporated onto the building plans.

YES	NO	Comp. Doc./Worksheet #	Title
◉	○	NRCC-MCH-01-E (Part 1 of 3)	Certificate of Compliance, Declaration. Required on plans for all submittals.
◉	○	NRCC-MCH-01-E (Part 2 of 3)	Certificate of Compliance, Required Acceptance Tests (MCH-02-A to 11-A). Required on plans for all submittals.
◉	○	NRCC-MCH-01-E (Part 3 of 3)	Certificate of Compliance, Required Acceptance Tests (MCH-12-A to 18-A). Required on plans where applicable.
○	◉	NRCC-MCH-02-E (Part 1 of 2)	Mechanical Dry Equipment Summary is required for all submittals with Central Air Systems. It is optional on plans.
○	◉	NRCC-MCH-02-E (Part 2 of 2)	Mechanical Wet Equipment Summary is required for all submittals with chilled water, hot water or condenser water systems. It is optional on plans.
○	◉	NRCC-MCH-03-E	Mechanical Ventilation and Reheat is required for all submittals with multiple zone heating and cooling systems. It is optional on plans.
○	◉	NRCC-MCH-07-E (Part 1 of 2)	Power Consumption of Fans. Required on plans where applicable
○	◉	NRCC-MCH-07-E (Part 2 of 2)	Power Consumption of Fans, Declaration. Required on plans where applicable

B. MECHANICAL HVAC ACCEPTANCE FORMS (check box for required compliance documents)

Test Performed By:

Designer:
This compliance document is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for HVAC systems. The designer is required to check the applicable boxes for all acceptance tests that apply and list all equipment that requires an acceptance test. All equipment of the same type that requires a test, list the equipment description and the number of systems.

Installing Contractor:
The contractor who installed the equipment is responsible to either conduct the acceptance test themselves or have a qualified entity run the test for them. If more than one person has responsibility for the acceptance testing, each person shall sign and submit the Certificate of Acceptance applicable to the portion of the construction or installation for which they are responsible.

Enforcement Agency:
Plancheck - The NRCC-MCH-01-E compliance document is not considered a completed document and is not to be accepted by the building department unless the correct boxes are checked.
Inspector - Before occupancy permit is granted all newly installed process systems must be tested to ensure proper operations.

Test Description		MCH-02-A	MCH-03-A	MCH-04-A	MCH-05-A	MCH-06-A	MCH-07-A	MCH-08-A	MCH-09-A	MCH-10-A	MCH-11-A
Equipment Requiring Testing or Verification	# of Units	Outdoor Air	Single Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Controlled Ventilation (DCV)	Supply Fan VAV	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Automatic Demand Shed Control
VRF FAN COILS / HEAT PUMPS	55 / 5	☑	☑	☐	☐	☐	☐	☐	☐	☐	☐
FURNACE WITH DX COOLING	2	☑	☑	☑	☑	☑	☐	☐	☐	☐	☐

Add Row | Remove Last

STATE OF CALIFORNIA
MECHANICAL SYSTEMS
CEC-NRCC-MCH-01-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-01-E
Mechanical Systems	Page 2 of 3
Project Name: MILLARD MCCOLLAM ELEMENTARY SCHOOL - HVAC UPGRADES	Date Prepared: JANUARY 22, 2018

C. MECHANICAL HVAC ACCEPTANCE FORMS (check box for required compliance documents)

Test Performed By:

Designer:
This compliance document is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for HVAC systems. The designer is required to check the applicable boxes for all acceptance tests that apply and list all equipment that requires an acceptance test. All equipment of the same type that requires a test, list the equipment description and the number of systems.

Installing Contractor:
The contractor who installed the equipment is responsible to either conduct the acceptance test themselves or have a qualified entity run the test for them. If more than one person has responsibility for the acceptance testing, each person shall sign and submit the Certificate of Acceptance applicable to the portion of the construction or installation for which they are responsible.

Enforcement Agency:
Plancheck - The NRCC-MCH-01-E compliance document is not considered a completed document and is not to be accepted by the building department unless the correct boxes are checked.
Inspector - Before occupancy permit is granted all newly installed process systems must be tested to ensure proper operations.

Test Description		MCH-12-A	MCH-13-A	MCH-14-A	MCH-15-A	MCH-16-A	MCH-17-A	MCH-18-A
Equipment Requiring Testing or Verification	# of Units	Fault Detection & Diagnostics for DX Units	Automatic Fault Detection & Diagnostics for Air & Zone	Distributed Energy Storage DX AC Systems	Thermal Energy Storage (TES) Systems	Supply Air Temperature Reset Controls	Condenser Water Reset Controls	ECMS
VRF FAN COILS / HEAT PUMPS	55 / 5	☑	☐	☐	☐	☐	☐	☑
FURNACE WITH DX COOLING	2	☑	☐	☐	☐	☐	☐	☑

Add Row | Remove Last

STATE OF CALIFORNIA
MECHANICAL SYSTEMS
CEC-NRCC-MCH-01-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-01-E
Mechanical Systems	Page 3 of 3
Project Name: MILLARD MCCOLLAM ELEMENTARY SCHOOL - HVAC UPGRADES	Date Prepared: JANUARY 22, 2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: CHAHAN SHAH	Documentation Author Signature: Chahan Shah
Company: AXIOM ENGINEERS	Signature Date: JANUARY 29, 2018
Address: 22 LOWER RAGSDALE DR., SUITE A	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: MONTEREY, CA, 93940	Phone: 8316498000

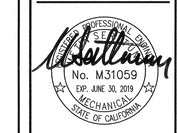
RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: METIN SERTTUNC	Responsible Designer Signature:
Company: AXIOM ENGINEERS	Date Signed: JANUARY 29, 2018
Address: 22 LOWER RAGSDALE DR., SUITE A	License: M-31059
City/State/Zip: MONTEREY, CA, 93940	Phone: 8316498000

COPYRIGHT © 2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC – LEE & ASSOCIATES CONSULTING ENGINEERS

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE · INTERIORS · PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066



AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale, Ste Suite A
Monterey, California 93940-5786
vc. (831) 644-8000
fx. (831) 644-8036
email: mail@axiomengineers.com
AE Project # : 20170291

TITLE 24 DOCUMENTATION - MECHANICAL

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

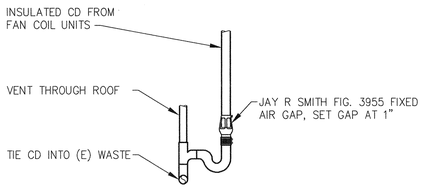
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

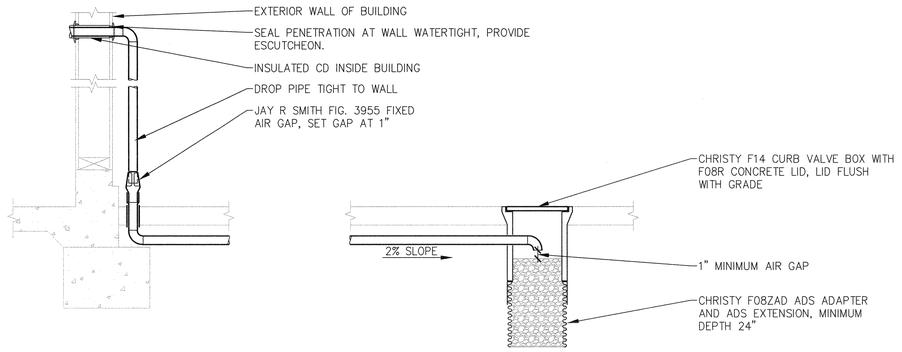
APPL 01-117271
AC ZG FLS MC SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO: 17103	DATE: 04/09/2018

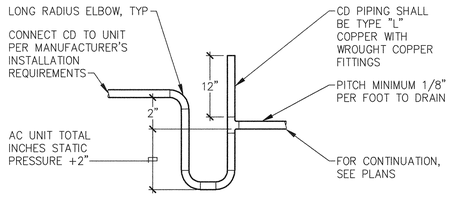
M7.1



4 FIXED AIR GAP CONDENSATE
P0.1 NO SCALE

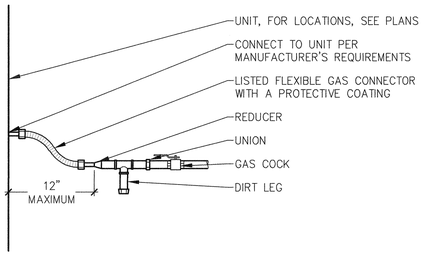


1 CONDENSATE DRY WELL
P0.1 NO SCALE



NOTES:
1. CD PIPE SIZE SHALL NOT BE SMALLER THAN UNIT DRAIN CONNECTION SIZE.
2. FOR PIPE SIZES AND LOCATIONS, SEE PLANS.

3 COOLING COIL CONDENSATE TRAP
P0.1 NO SCALE



2 GAS CONNECTION AT UNIT
P0.1 NO SCALE

PLUMBING LEGEND

SYMBOL	ABBRV.	IDENTIFICATION	ABBRV.	IDENTIFICATION
	CW	COLD WATER (DOMESTIC)	COORD	COORDINATE
	HW	HOT WATER	CONST	CONSTRUCTION
	HWR	HOT WATER RETURN	DN	DOWN
	V	VENT	DWGS	DRAWINGS
TP	TP	TRAP PRIMER LINE	(E)	EXISTING
G	G	GAS (7"WC)	ELEC	ELECTRICAL
MPG	MPG	MEDIUM PRESSURE GAS	ELEV	ELEVATION
W	S OR W	SOIL OR WASTE ABOVE GRADE	EMBT	EMBEDMENT
W	S OR W	SOIL OR WASTE BELOW GRADE	EQUIP	EQUIPMENT
RWL	RWL	RAIN WATER LEADER	FFE	FINISHED FLOOR ELEVATION
RD	RD	ROOF DRAIN	FLA	FULL LOAD AMPS
CD	CD	CONDENSATE DRAIN	FLEX	FLEXIBLE
		CAP	FLR	FLOOR
	CONT	CONTINUATION	FT	FEET
OR		GATE VALVE	FT HD	FEET HEAD
			GPM	GALLONS PER MINUTE
	SOV	SHUT-OFF VALVE	HP	HORSEPOWER
		BUTTERFLY VALVE	HR	HOUR
		BALL VALVE	HZ	HERTZ
	T&PRV	TEMP. & PRESS. RELIEF VALVE	IE	INVERT ELEVATION
			IN	INCH
OR		ANGLE VALVE	INV	INVERT
			KW	KILOWATTS
	CKV	CHECK VALVE	LBS	POUNDS
			LRA	LOCKED ROTOR AMPS
		STRAINER	MAX	MAXIMUM
OR	GC	GAS COCK	MBH	1000 BTU PER HOUR
			MCA	MINIMUM CIRCUIT AMPS
	GPR	GAS PRESSURE REGULATOR	MFR	MANUFACTURER
		UNION	MIN	MINIMUM
	FC	FLEXIBLE CONNECTION	MOCP	MAXIMUM OVERCURRENT PROTECTION
	WHA	WATER HAMMER ARRESTOR	(N)	NEW
	HB	HOSE BIBB	NC	NORMALLY CLOSED
	GCO/FCO	GRADE CLEANOUT/FLOOR CLEANOUT	NO	NORMALLY OPEN
	WCO	WALL CLEANOUT	NTS	NOT TO SCALE
		CIRCULATION PUMP (DOMESTIC)	PD	PRESSURE DROP
		THERMOMETER	PH	PHASE
			PRESS	PRESSURE
		RATED WALL, SEE ARCHITECTS DRAWINGS	PSI	POUNDS PER SQUARE INCH
		CONDENSATE CLEAN OUT	QTY	QUANTITY
T		TEMPERATURE GAUGE	REQD	REQUIRED
	P.O.C.	POINT OF CONNECTION	REQS	REQUIREMENTS
℄		CENTERLINE	RM	ROOM
	&	AND	RPM	REVOLUTIONS PER MINUTE
	@	AT	SOV	SHUT-OFF VALVE
	°F	DEGREES FAHRENHEIT	SPEC	SPECIFICATION
	AC	AIR CONDITIONER	SQ	SQUARE
	AFF	ABOVE FINISH FLOOR	STD	STANDARD
	AGGR	AGGREGATE	STRUCT	STRUCTURAL
	AMP	AMPERE	STSL	STAINLESS STEEL
	APPROX	APPROXIMATE	TDH	TOTAL DYNAMIC HEAD
	ARCH	ARCHITECT/ARCHITECTURAL	TEMP	TEMPERATURE
	BHP	BRAKE HORSEPOWER	TYP	TYPICAL
	BJ	BETWEEN JOISTS	UL	UNDERWRITER'S LABORATORIES
	BLDG	BUILDING	UON	UNLESS OTHERWISE NOTED
	BTU	BRITISH THERMAL UNIT	V	VOLT
	CFH	CUBIC FEET PER HOUR	VTR	VENT THROUGH ROOF
	CIRC	CIRCULATING	W/	WITH
	CLG	CEILING	WC	WATER COLUMN
	CONC	CONCRETE	WT	WEIGHT
	CONN	CONNECTION		

LIST OF GOVERNING CODES:

2016 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, C.C.R.
2016 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R.
2016 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24, C.C.R.
2016 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R.
2016 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R.
2016 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24, C.C.R.
2016 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, C.C.R.
2016 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24, C.C.R.
2016 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24, C.C.R.
TITLE 19, C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

ALL SECTION NUMBERS BELOW REFER TO GROUP 1, CHAPTER 4, PART 1, TITLE 24, C.C.R.
1. ADDENDA, CONSTRUCTION CHANGES PER SECTION 4-338.
2. INSPECTOR APPROVED BY DSA. INSPECTOR AND CONTINUOUS INSPECTION OF WORK PER SECTION 4-333(b) AND 4-342.
3. TESTS AND TESTING LABORATORY PER SECT. 4-335.
4. SPECIAL INSPECTION PER SECT. 4-333(d).
5. CONTRACTOR SHALL SUBMIT VERIFIED REPORTS PER SECT. 4-336 AND 4-343(c).
6. ADMINISTRATION OF CONSTRUCTION PER PART 1, TITLE 24, C.C.R. – DUTIES OF ARCHITECT, STRUCTURAL ENGINEER OR PROFESSIONAL ENGINEER PER SECT. 4-333(a) AND 4-341.
7. GOVERNING CODES: TITLE 24.
8. A COPY OF PARTS 1, 2, 3, 4, AND 5 OF TITLE 24 SHALL BE KEPT AVAILABLE IN THE FIELD DURING CONSTRUCTION.
9. DSA SHALL BE NOTIFIED OF START OF CONSTRUCTION PER SECT. 4-331.
10. SUPERVISION BY THE OFFICE OF REGULATION SERVICE PER SECT. 4-334.

GENERAL NOTES:

1. THIS PROJECT IS NEW CONSTRUCTION AT AN EXISTING CAMPUS. THE PLANS AND SPECIFICATIONS INDICATE THE GENERAL EXTENT OF THE WORK BASED ON OWNER PROVIDED RECORD DRAWINGS AND LIMITED FIELD VERIFICATION. CONTRACTOR SHALL VISIT SITE, VERIFY EXISTING CONDITIONS, AND REPORT ANY DISCREPANCIES NOTED TO THE ARCHITECT PRIOR TO SUBMITTING A BID. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISCONNECTION AND RECONNECTION OF MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS NECESSARY TO ACCOMPLISH THE WORK WHETHER OR NOT SPECIFIED AND/OR INDICATED.
2. CUTTING OR CORING OF STRUCTURAL MEMBERS OR FOOTINGS IS PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF THE STRUCTURAL ENGINEER AND THE ARCHITECT.
3. CONTRACTOR SHALL VERIFY THAT THE ELECTRICAL CONNECTIONS TO THE UNITS, INCLUDING CIRCUIT PROTECTION, CONFORM TO UNIT LABELS AND MANUFACTURER'S DIRECTIONS. WHERE WIRE SIZES SHOWN ON DRAWING EXCEED MANUFACTURER'S RECOMMENDATIONS, THE DRAWINGS SHALL GOVERN. ALL WIRING SHALL BE PER THE NATIONAL ELECTRICAL CODE.
4. FLASHING AND WEATHERPROOFING AT EXTERIOR PENETRATIONS ARE SHOWN ON THE ARCHITECTURAL DRAWINGS.
5. COORDINATE WITH OWNER ON SPACE REQUIRED AND TIME SCHEDULE FOR DELIVERY OF ALL ITEMS WHICH ARE TO BE GIVEN TO THE OWNER FOR HIS DISPOSITION.
6. FOR ROOF PENETRATIONS WITHOUT CURBS, PROVIDE WEATHERPROOF FLASHING PER SMACNA ARCHITECTURAL SHEET METAL MANUAL AND DRAWING NOTES.
7. LABEL ALL PIECES OF EQUIPMENT WITH MARK MATCHING SCHEDULE OR EQUIPMENT LIST WITH ENGRAVED PLASTIC LABELS WITH MINIMUM 1/4" HIGH LETTERS. LABELS EXPOSED TO WEATHER SHALL BE ENGRAVED BRASS.
8. PRIME AND PAINT ALL EXPOSED PIPING PER ARCHITECTURAL SPECIFICATIONS. PAINT SHALL NOT EXCEED THE FOLLOWING VOLATILE ORGANIC COMPOUND CONTENT LIMITS: FLATS < 50 GRAMS PER LITER, NON-FLATS < 100 GRAMS PER LITER.
9. COORDINATE WITH ELECTRICAL ON REQUIRED POWER OUTLETS AND LIGHT SWITCHES NEAR PLUMBING EQUIPMENT.
10. BRACE ALL PIPING IN MECHANICAL ROOMS THAT IS 1 1/4" NOMINAL OR LARGER. BRACE ALL PIPING 2 1/2" NOMINAL OR LARGER PIPING SUSPENDED BY INDIVIDUAL HANGERS 12" OR LESS IN LENGTH, AS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE SUPPORT WHERE THE HANGER IS ATTACHED, NEED NOT BE BRACED.
11. ALL PIPING, VALVES, EQUIPMENT, ETC. SHOWN IS NEW UNLESS OTHERWISE NOTED.

PLUMBING GENERAL NOTES:

1. SEE ARCHITECTS PLANS AND DETAILS FOR ACCESSIBLE PLUMBING FIXTURE MOUNTING HEIGHTS, ETC.
2. ACCESSIBLE FIXTURES SHALL HAVE LEVER OR PUSH TYPE OPERATORS THAT REQUIRE LESS THAN FIVE (5) POUNDS FORCE TO ACTIVATE.
3. OPERATING CONTROLS FOR ACCESSIBLE FIXTURES TO BE OPERABLE WITH ONE HAND, NO TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST.
4. FAUCETS WITH SELF-CLOSING VALVES SHALL REMAIN OPEN FOR NO LESS THAN 10 SECONDS AND NO MORE THAN 15 SECONDS.
5. INSULATE ALL PIPING UNDER ACCESSIBLE FIXTURES AND COVER ANY SHARP OR ABRASIVE SURFACES WITH PROTECTIVE PIPE COVERS.
6. ALL PLUMBING VENTS THROUGH ROOF SHALL OFFSET ABOVE CEILING AND NOT PENETRATE WALL TOP PLATE.
7. MAXIMUM DEPTH OF ACCESSIBLE SINKS SHALL BE 6 1/2".

DSA GENERAL NOTES

1. THE INTENT OF THE CONTRACT DOCUMENTS IS TO MODERNIZE AN EXISTING BUILDING. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS, A CONSTRUCTION CHANGE DOCUMENT DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.
2. LATERAL SUPPORT FOR PIPE AND DUCTS TO COMPLY WITH SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING SYSTEMS".
3. THE SEISMIC SUPPORT AND ANCHORAGE OF THE EQUIPMENT DESCRIBED ON THESE DRAWINGS HAVE BEEN ENGINEERED BY THE ENGINEER OF RECORD FOR CONFORMANCE WITH APPROPRIATE BUILDING CODES. THE ENGINEER OF RECORD WAS NOT RESPONSIBLE FOR THE EQUIPMENT DESIGN.
4. ALL MECHANICAL AND PLUMBING EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION USING THE CRITERIA FROM CHAPTER 16A CALIFORNIA BUILDING CODE (CBC) 2016.
5. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER AND THE FIELD REPRESENTATIVE OF THE DIVISION OF THE STATE ARCHITECT.

COMPONENT ANCHORAGE NOTES

ALL MECHANICAL AND PLUMBING 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 REQUIREMENTS PRESCRIBED IN THE 2016 CBC, SECTIONS 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7-10 CHAPTERS 13, 26, AND 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (EG HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICAL, 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 ATTACHMENT OF THE FOLLOWING MECHANICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.

1. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4'-0" OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORTS THE EQUIPMENT.
2. 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 OF RECORD 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 AND DUCTWORK DISTRIBUTION SYSTEM BRACING NOTES

PIPING AND DUCTWORK 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., 13.6.8, 13.6.7, AND 2016 CBC, SECTIONS 1616A.1.23, 1616A.1.24, 1616A.1.25, AND 1616A.1.26.

THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAILED ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE OSHPD PRE-APPROVALS (OPA #) AS MODIFIED TO SATISFY ANCHORAGE REQUIREMENTS OF ACI 318-14, CHAPTER 17.

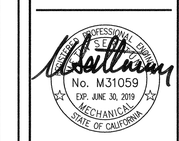
COPIES OF THE MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF HANGING AND BRACING OF THE PIPING AND DUCTWORK DISTRIBUTION SYSTEMS.

THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

COPYRIGHT ©2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC – LEE & ASSOCIATES CONSULTING ENGINEERS

Drawing: H:\PROJECTS\2017\20170291\DRAWINGS\ARCH\17103-P0-LEGEND, SCHEDULES AND NOTES.DWG
Xrefs: D:\H-PROJECTS\MCL\17103-P0-LEGEND, SCHEDULES AND NOTES.DWG

SUGIMURA SHIMETA ARCHITECTS
SFA
ARCHITECTURE · INTERIORS · PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066



AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
email: mail@axiomengineers.com
22 Lower Ragsdale Dr. Suite A
Monterey, California 93940-3186
tel. (831) 646-8000
fx. (831) 646-8008
AE Project # : 20170291

LEGEND, SCHEDULES AND NOTES - PLUMBING

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

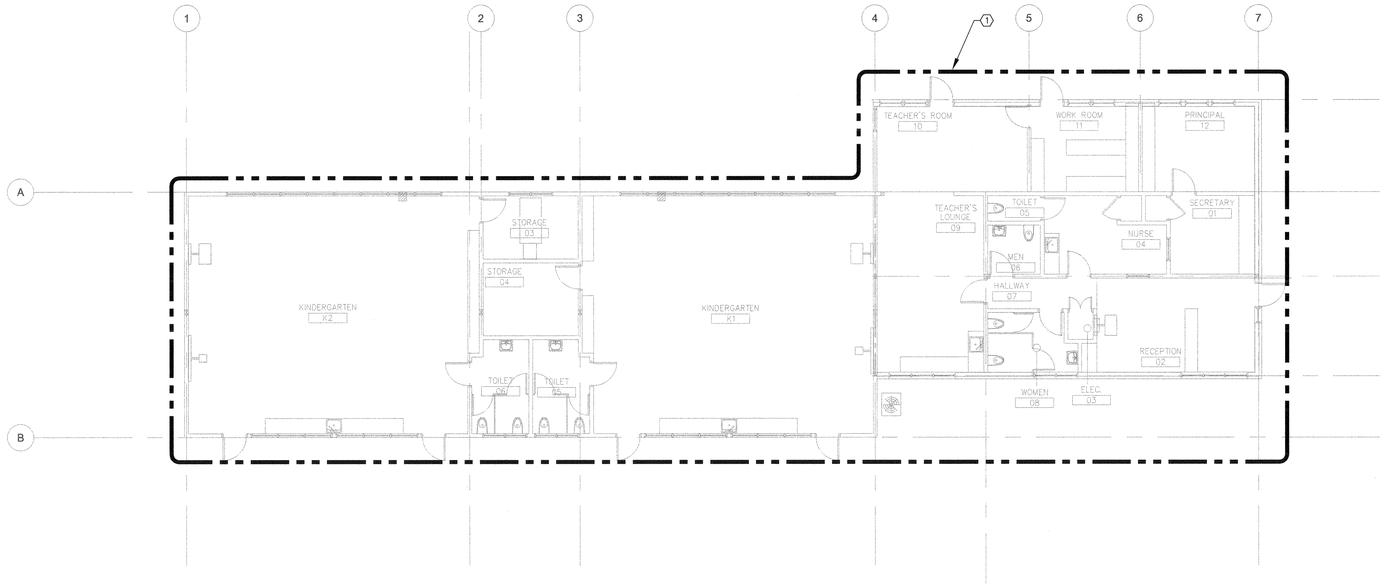
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AG FLS MS SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

P0.1

COPYRIGHT ©2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC.- LEE & ASSOCIATES CONSULTING ENGINEERS
Drawing: H:\PROJECT\2017\03\17103\DRAWINGS\17103-P2.1.DWG
Date: Plot=04/09/2018, Last=08/28/2018, Mark=08/28/2018



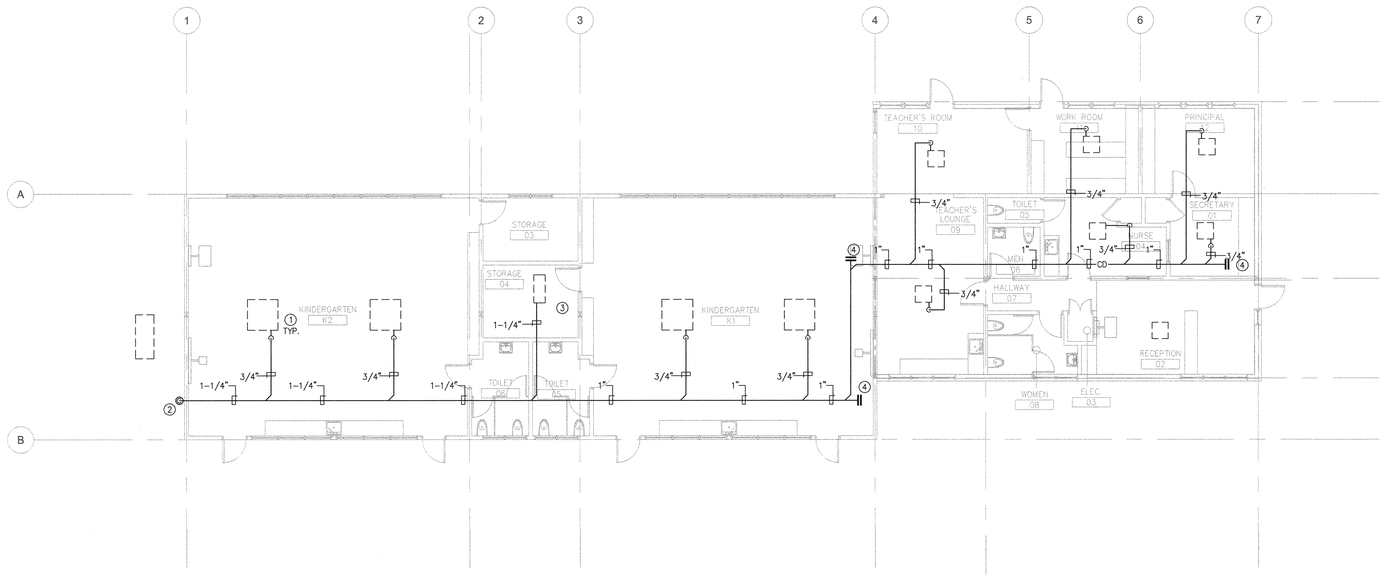
BUILDING 1 - PLUMBING DEMOLITION

SCALE: 1/8" = 1'-0"

TRUE NORTH
REF NORTH

DEMOLITION KEY NOTES:

(1) ALL DEMOLITION SHOWN ON MECHANICAL DRAWINGS. NO DEMOLITION WORK RELATED TO PLUMBING.



BUILDING 1 - PLUMBING

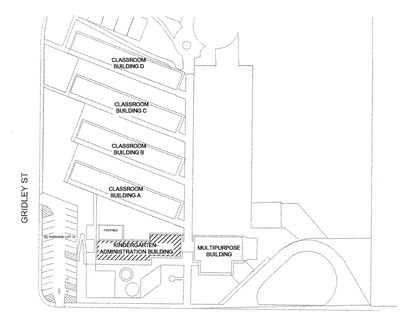
SCALE: 1/8" = 1'-0"

TRUE NORTH
REF NORTH

KEY NOTES:

(1) FAN COIL UNIT, SEE MECHANICAL DRAWINGS.
(2) DROP CONDENSATE TO DRY WELL, SEE DETAIL 1/P0.1.
(3) BRANCH CONTROLLER, SEE MECHANICAL DRAWINGS.
(4) CONDENSATE CLEAN OUT

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr, Suite A
Monterey, California 93940-5788
email: mail@axiomengineers.com
SM
vc. (831) 648-8000
fx. (831) 648-8036
AE Project # 20170291

ADMINISTRATION-KINDERGARTEN BUILDING 1 - FLOOR PLANS PLUMBING

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

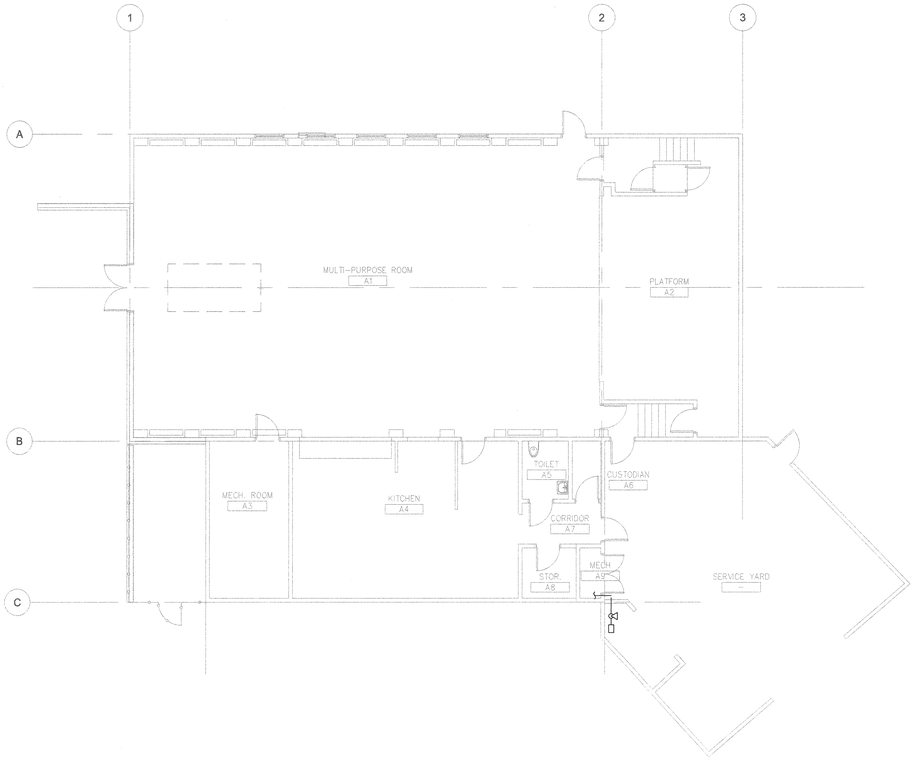
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC FLS MS SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

P2.1

COPYRIGHT © 2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC.- LEE & ASSOCIATES CONSULTING ENGINEERS

Drawing: H:\PROJECTS\2017\20170291\DRAWING\20170291_P2.2_P2.3.DWG
Xrefs: TILEBF-ARCHITRAC, TILEBMP-BRICKWAL, MASP-BRICKWAL



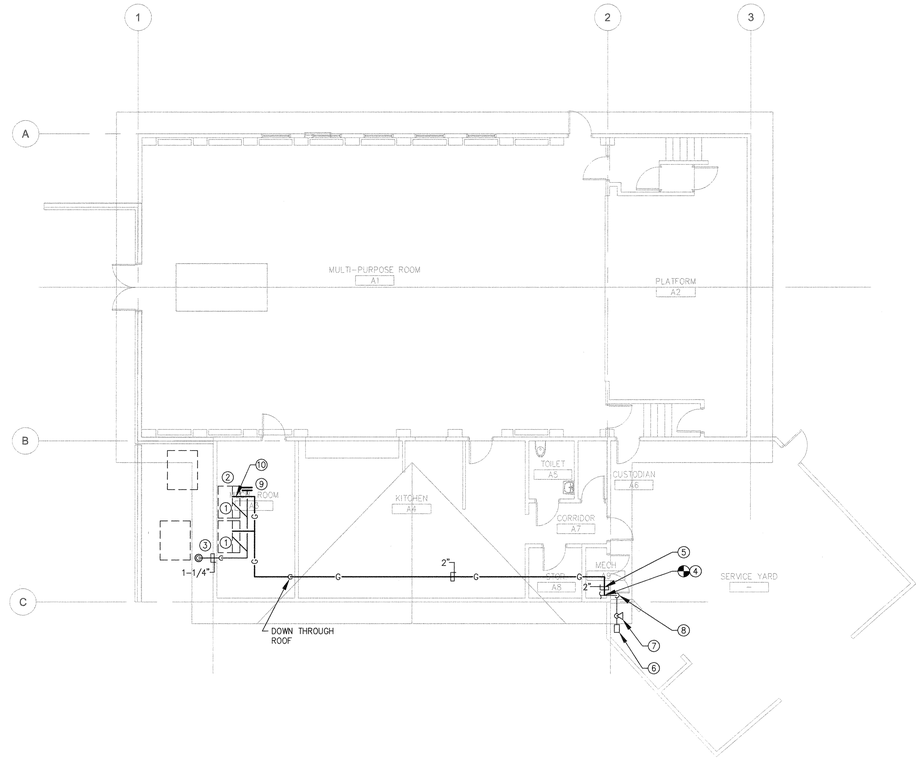
MULTI-PURPOSE BUILDING - PLUMBING DEMOLITION

SCALE: 1/8" = 1'-0"

TRUE NORTH
REF NORTH

DEMOLITION KEY NOTES:

1. DISCONNECT (E) GAS FROM (E) HEATER AND REMOVE (E) GAS AND CAP ON ROOF.



MULTI-PURPOSE BUILDING - PLUMBING

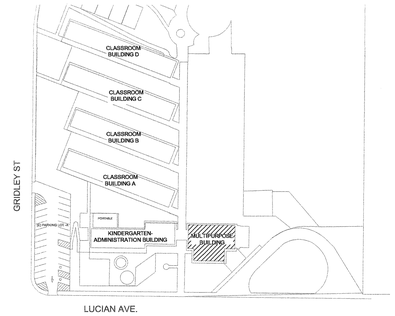
SCALE: 1/8" = 1'-0"

TRUE NORTH
REF NORTH

KEY NOTES:

1. ALL CD PIPING TO INDIVIDUAL UNITS SHALL BE 1", TYP.
2. MECHANICAL EQUIPMENT, SEE MECHANICAL DRAWINGS
3. DROP CONDENSATE TO DRY WELL, SEE DETAIL 1/P0.1
4. POINT OF CONNECTION TO (E) GAS
5. RUN GAS ON ROOF ABOVE KITCHEN
6. (E) GAS METER
7. (E) GAS BUILDING SHUT-OFF VALVE
8. (E) GAS TO ROOF
9. CONDENSATE CLEANOUT
10. FOR GAS CONNECTION TO UNIT, SEE 2/P0.1

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE · INTERIORS · PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
STEVEN A. HARTMANN
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5786
tel. (831) 648-8020
fx. (831) 646-8038
email: mail@axiomengineers.com
SM

AE Project # : 20170291

MULTI-PURPOSE BUILDING - FLOOR PLANS PLUMBING

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

AC KG FLS MB SS CG
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

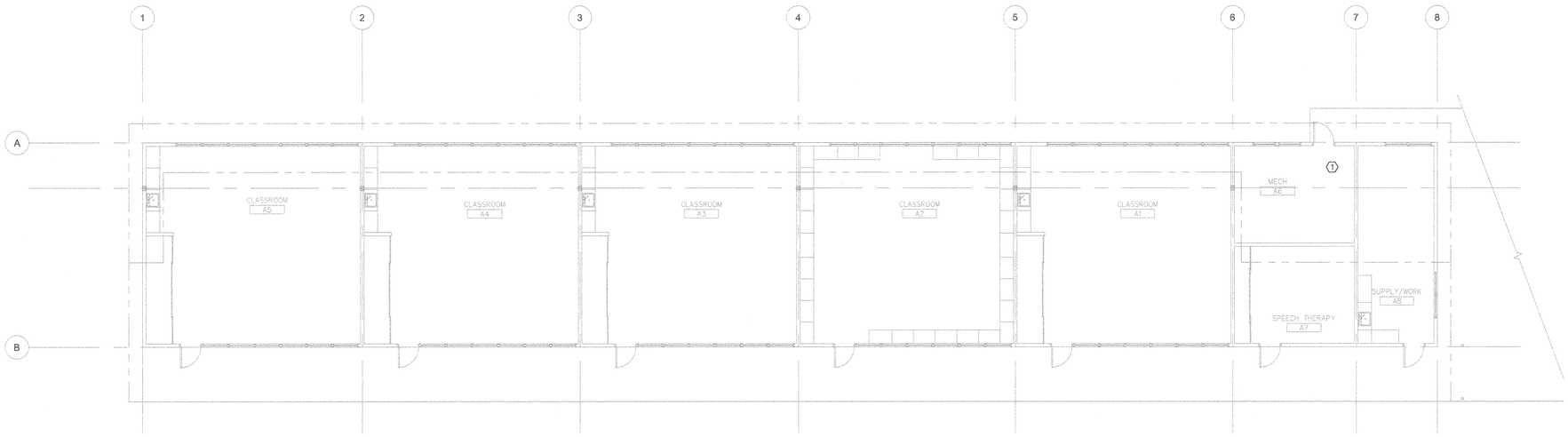
P2.2

COPYRIGHT © 2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC. - LEE & ASSOCIATES CONSULTING ENGINEERS

Drawing: H:\PROJECT\2017\2017\DRAWINGS\Arch - ES\17-P2.3.dwg
Xrefs: P:\Arch-Electrical\Base-Sheets\17-ES-B-P2.3.dwg

DEMOLITION KEY NOTES:

1. DISCONNECT (E) GAS FROM (E) EQUIPMENT REMOVED FROM THIS ROOM, SEE MECHANICAL DRAWINGS. REMOVE (E) GAS AND CAP ON ROOF.



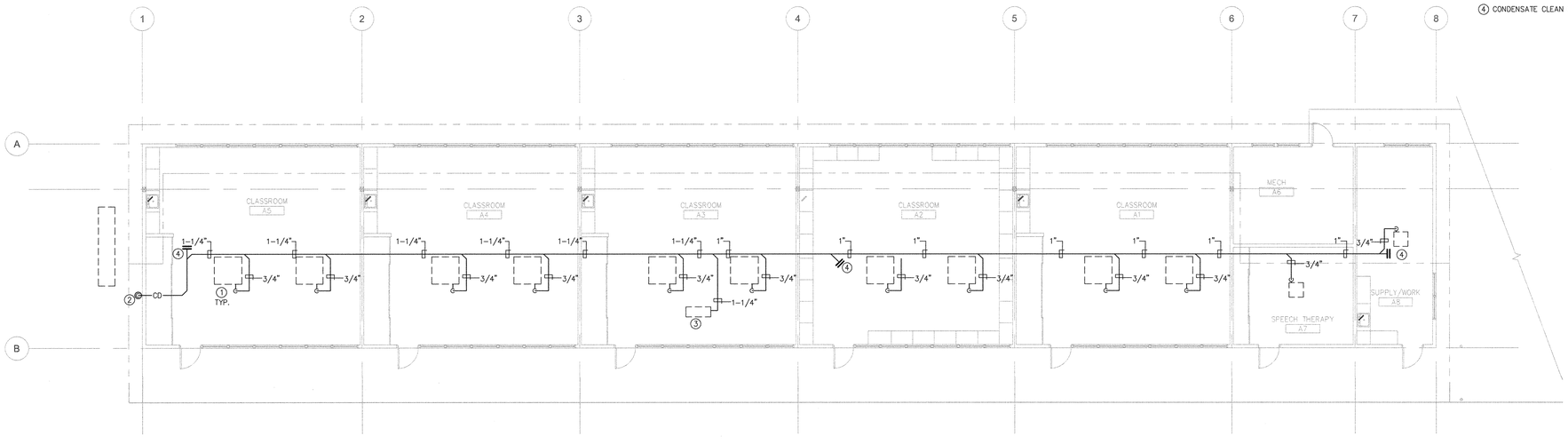
BUILDING A - PLUMBING DEMOLITION

SCALE: 1/8" = 1'-0"

TRUE REF. NORTH

KEY NOTES:

1. FAN COIL UNIT, SEE MECHANICAL DRAWINGS.
2. DROP CONDENSATE TO DRY WELL, SEE DETAIL 1/P0.1.
3. BRANCH CONTROLLER, SEE MECHANICAL DRAWINGS.
4. CONDENSATE CLEAN OUT

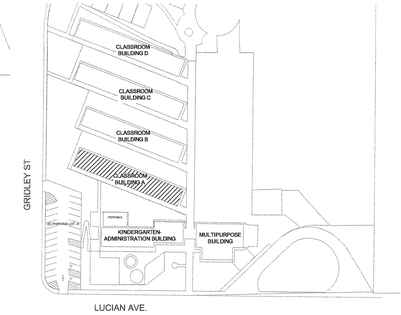


BUILDING A - PLUMBING

SCALE: 1/8" = 1'-0"

TRUE REF. NORTH

BUILDING KEY



SUGIMURA SNIDER ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr. Suite A
Monterey, California 93940-5788
email: mail@axiomengineers.com
tel. (831) 646-8900
fx. (831) 646-8936
AE Project # : 20170291

BUILDING A CLASSROOMS - FLOOR PLANS PLUMBING

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

AC XG FLS MS SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

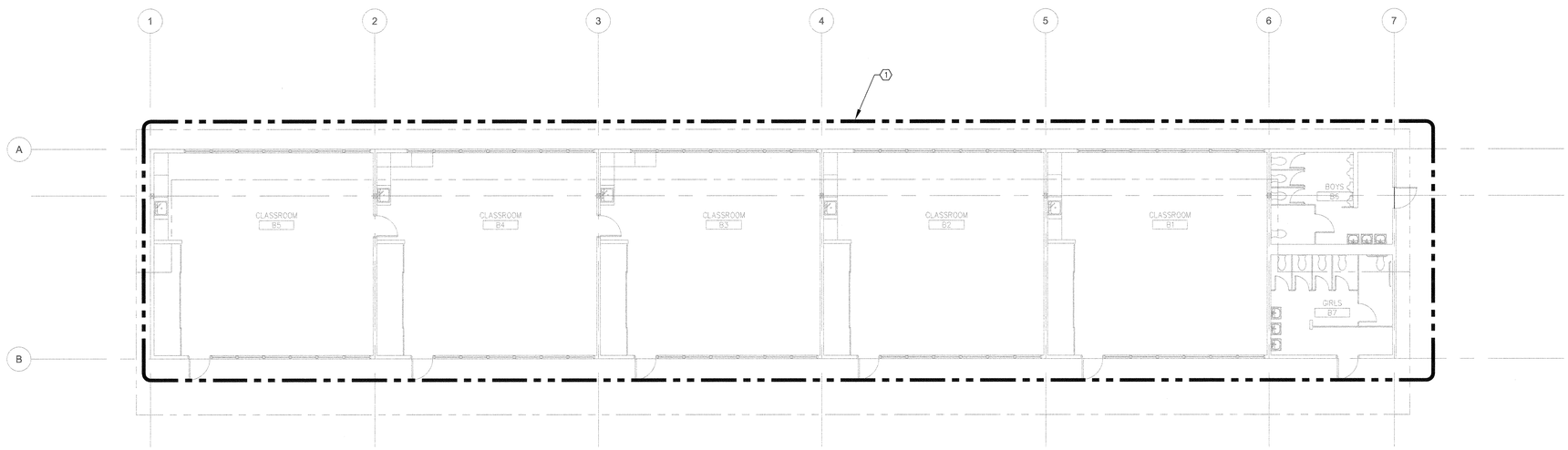
P2.3

COPYRIGHT©2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC - LEE & ASSOCIATES CONSULTING ENGINEERS

Drawing: H:\PROJECT\2017\20170291\DRAWINGS\CAD\PLUMBING\P2.4 PLAN-BUILDING B CLASSROOMS.DWG
Xrefs: PLAN-BUILDING B CLASSROOMS.DWG, A-BASE-BUILDING B.DWG, A-BASE-BUILDING B.DWG

DEMOLITION KEY NOTES:

1. ALL DEMOLITION SHOWN ON MECHANICAL DRAWINGS. NO DEMOLITION WORK RELATED TO PLUMBING.



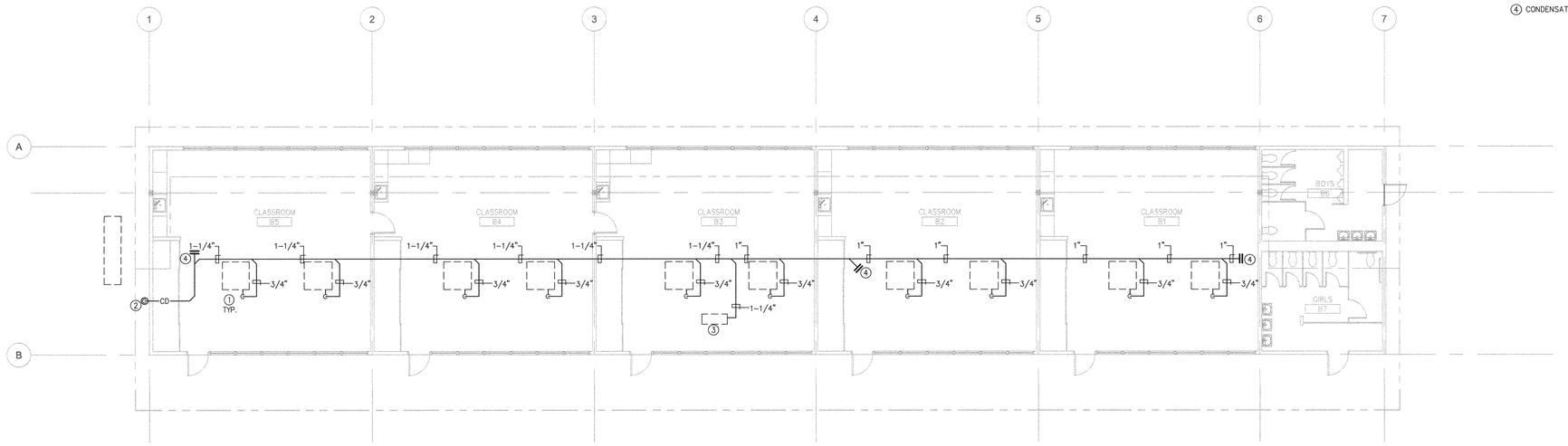
BUILDING B - PLUMBING DEMOLITION

SCALE: 1/8" = 1'-0"

TRUE NORTH / GRID NORTH

KEY NOTES:

1. FAN COIL UNIT, SEE MECHANICAL DRAWINGS.
2. DROP CONDENSATE TO DRY WELL, SEE DETAIL 1/P0.1.
3. BRANCH CONTROLLER, SEE MECHANICAL DRAWINGS.
4. CONDENSATE CLEAN OUT

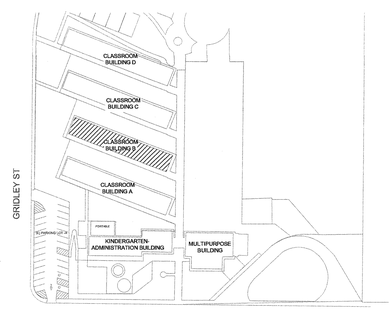


BUILDING B - PLUMBING

SCALE: 1/8" = 1'-0"

TRUE NORTH / GRID NORTH

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

STATE OF CALIFORNIA — PROFESSIONAL ENGINEER — No. M31059 — EXP. JUNE 30, 2019 — MECHANICAL

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5788
email: mail@axiomengineers.com
vc. (831) 646-8000
fx. (831) 646-8038
AE Project # : 20170291

BUILDING B CLASSROOMS - FLOOR PLANS PLUMBING

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC KG FLS MK SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

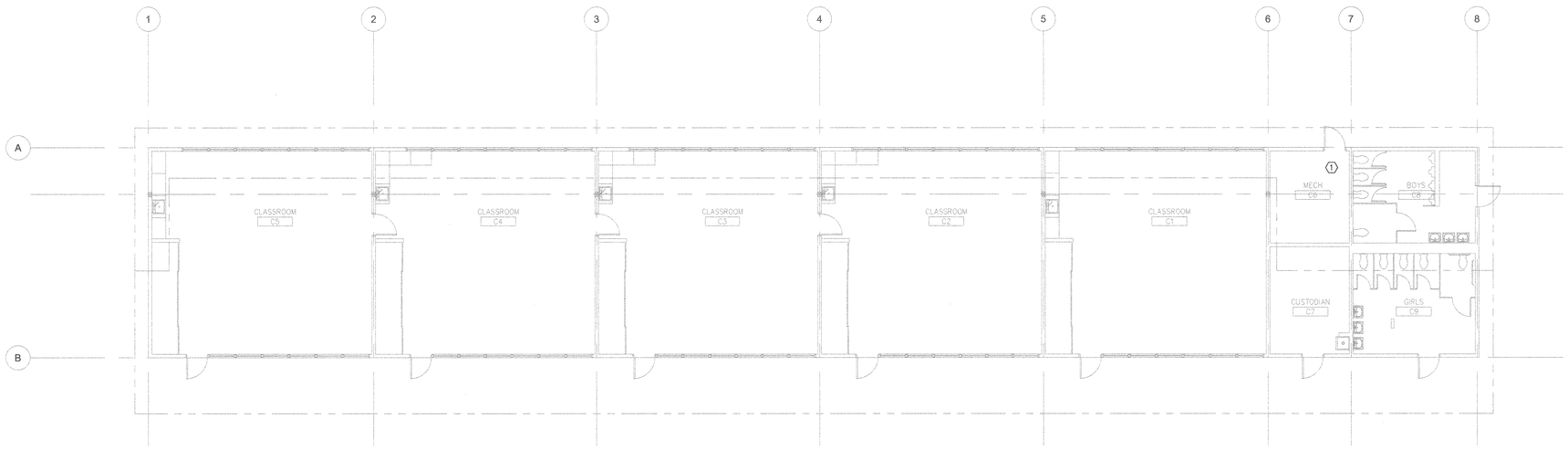
P2.4

COPYRIGHT © 2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC. - LEE & ASSOCIATES CONSULTING ENGINEERS

Drawing: H:\PROJECTS\2017\03\Working\Dwg\17103-P2.5.dwg
Date: Feb 08, 2018 - 8:53:37 AM
Style: P&A-ARKITEKTURA, MODEL-SHEET-PROCTAB

DEMOLITION KEY NOTES:

1. DISCONNECT (E) GAS FROM (E) EQUIPMENT REMOVED FROM THIS ROOM, SEE MECHANICAL DRAWINGS. REMOVE (E) GAS AND CAP ON ROOF.



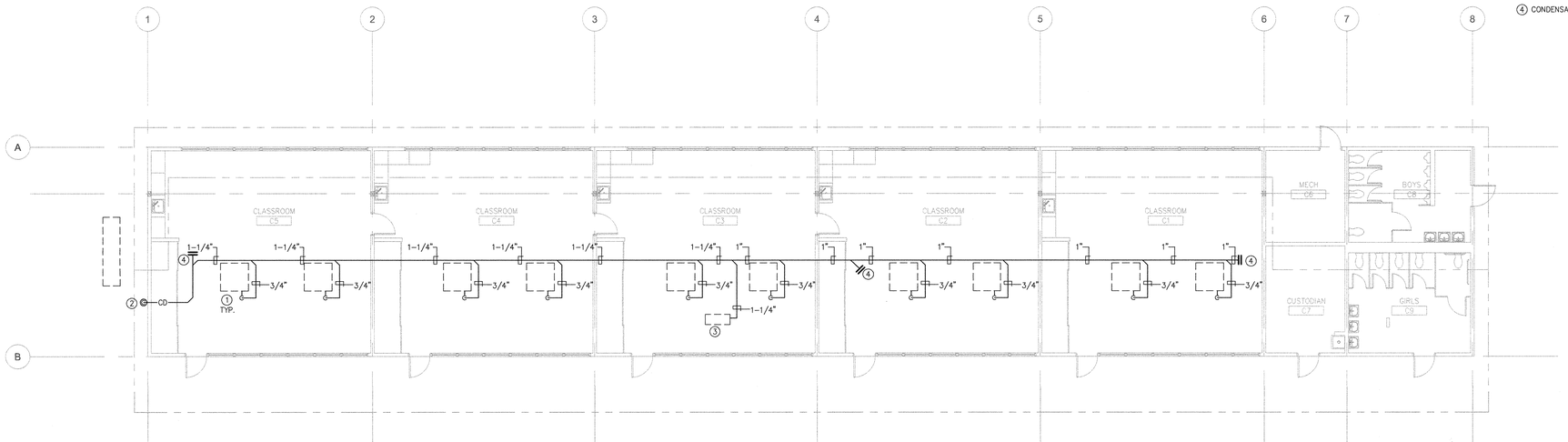
BUILDING C - PLUMBING DEMOLITION

SCALE: 1/8" = 1'-0"

TRUE NORTH

KEY NOTES:

1. FAN COIL UNIT, SEE MECHANICAL DRAWINGS.
2. DROP CONDENSATE TO DRY WELL, SEE DETAIL 1/P0.1.
3. BRANCH CONTROLLER, SEE MECHANICAL DRAWINGS.
4. CONDENSATE CLEAN OUT

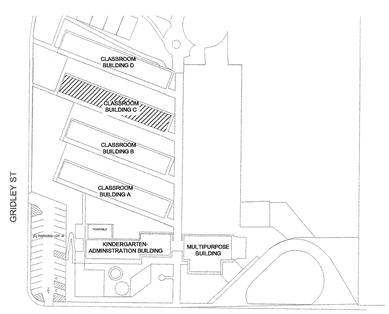


BUILDING C - PLUMBING

SCALE: 1/8" = 1'-0"

TRUE NORTH

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
SM
email: mail@axiomengineers.com
tel. (831) 646-8000
fx. (831) 646-8036
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5786
AE Project # : 20170291

BUILDING C CLASSROOMS - FLOOR PLANS PLUMBING

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

AP KG FLS MS SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

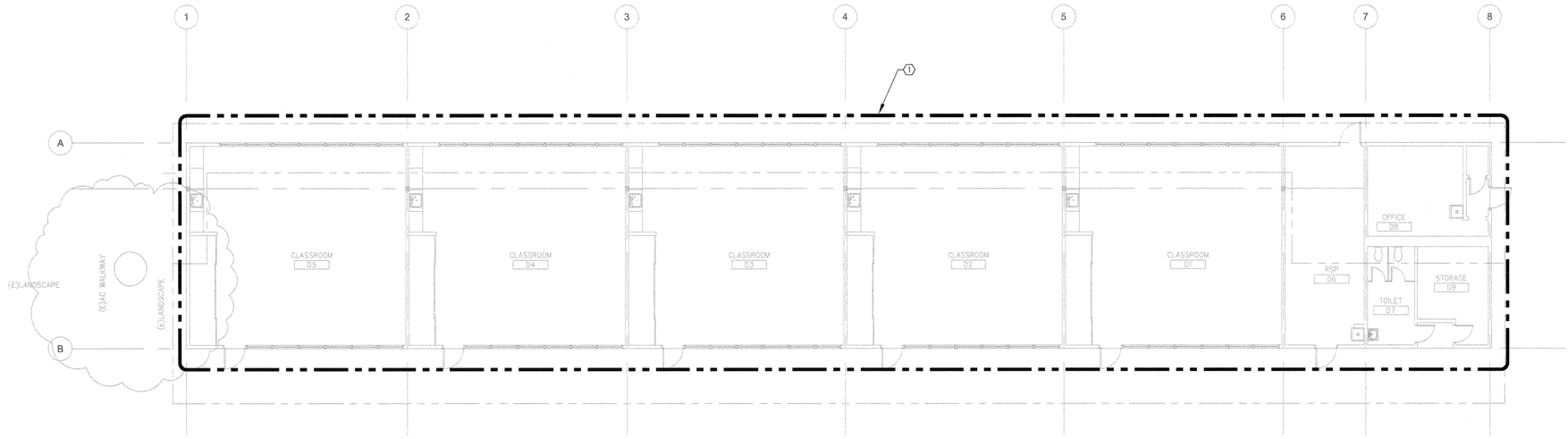
P2.5

COPYRIGHT ©2017
THE USE OF THESE PLANS AND SPECIFICATIONS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED AND PUBLICATION THEREOF IS EXPRESSLY LIMITED TO SUCH USE. RE-USE, REPRODUCTION, OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED. TITLE TO THE PLANS AND SPECIFICATIONS REMAINS WITH THE ENGINEER WITHOUT PREJUDICE. VISUAL CONTACT WITH THESE PLANS AND SPECIFICATIONS SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF THE ACCEPTANCE OF THESE RESTRICTIONS. AXIOM ENGINEERS INC – LEE & ASSOCIATES CONSULTING ENGINEERS

May 14, 2018 8:27:50 AM
Drawing: H:\PROJECT\20170291\DRAWING\ARCH\20170291_MASE-BDMD.DWG
Xrefs: PLBE-MAIN.DWG, MASE-BDMD.DWG, MASE-BDRD.DWG

DEMOLITION KEY NOTES:

1. ALL DEMOLITION SHOWN ON MECHANICAL DRAWINGS. NO DEMOLITION WORK RELATED TO PLUMBING.



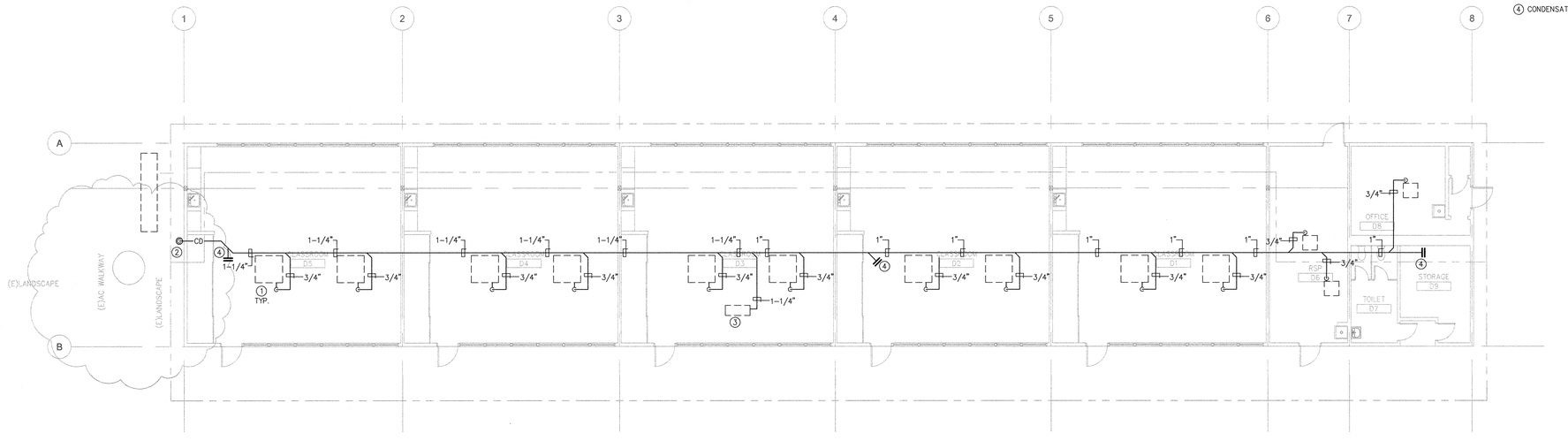
BUILDING D - PLUMBING DEMOLITION

SCALE: 1/8" = 1'-0"

TRUE NORTH
REF. NORTH

KEY NOTES:

1. FAN COIL UNIT, SEE MECHANICAL DRAWINGS.
2. DROP CONDENSATE TO DRY WELL, SEE DETAIL 1/P0.1.
3. BRANCH CONTROLLER, SEE MECHANICAL DRAWINGS.
4. CONDENSATE CLEAN OUT

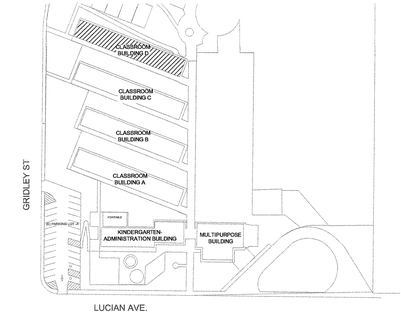


BUILDING D - PLUMBING

SCALE: 1/8" = 1'-0"

TRUE NORTH
REF. NORTH

BUILDING KEY



SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE · INTERIORS · PLANNING
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6966

REGISTERED PROFESSIONAL ENGINEER
SEAL
No. M31059
EXP. JUNE 30, 2019
MECHANICAL
STATE OF CALIFORNIA

AXIOM ENGINEERS
LEE & ASSOCIATES
CONSULTING ENGINEERS
22 Lower Ragsdale Dr., Suite A
Monterey, California 93940-5786
ph. (831) 649-8000
fx. (831) 646-8038
email: mail@axiomengineers.com
SM
AE Project # : 20170291

BUILDING D CLASSROOMS - FLOOR PLANS PLUMBING

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-09-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC RG FLS MS SS
DATE 5-22-18

DRAWN BY:	CADD
CHECKED BY:	MS
JOB NO:	DATE:
17103	04/09/2018

P2.6

ELECTRICAL SYMBOLS

- SURFACE OR PENDANT MOUNTED FIXTURE AND OUTLET
- WALL MOUNTED FIXTURE AND OUTLET
- CEILING RECESS MOUNTED FIXTURE AND OUTLET
- CEILING RECESS MOUNTED WALL WASHER FIXTURE

(REFER TO FIXTURE SCHEDULE FOR EXACT TYPE)

- LIGHT FIXTURE
- STRIP FIXTURE

(DENOTES FIXTURE W/BATTERY PACK BACK-UP UNIT (EMERGENCY LIGHT))

- UNIVERSAL MOUNTED EXIT FIXTURE AND OUTLET
- WALL RECESS OR SURFACE MOUNTED EXIT FIXTURE AND OUTLET.

(PROVIDE ARROW AND NUMBER OF FACES AS REQUIRED "L" DENOTES LOW LEVEL)

- FIXTURE IDENTIFICATION TAG – SEE SCHEDULE
- 1 POLE, 20A SPECIFICATION GRADE SWITCH. MOUNTED +44" U.O.N. a INDICATES LAMP SWITCHING.
- 3 3 WAY, 20A SPECIFICATION GRADE SWITCH MOUNTED +44" U.O.N.
- 4 4 WAY, 20A SPECIFICATION GRADE SWITCH MOUNTED +44" U.O.N.
- M MOMENTARY CONTACT SWITCH MOUNTED +44" U.O.N.
- K KEY OPERATED SWITCH
- T MANUAL MOTOR STARTER SWITCH FOR 3/4HP MOTORS AND BELOW
- D LED 0–10v DIMMING SWITCH WATT STOPPER DCLV1 WITH BZ POWER PACK OR EQUAL MOUINTED +44" U.O.N.
- LED 0–10V LUTRON DIMMING SWITCH WATT STOPPER LMDM–101 MOUINTED +44" U.O.N.
- RC DIGITAL ROOM CONTROLLER MOUNTED ABOVE CEILING. WATT STOPPER LMRC–212/213
- PC PHOTOELECTRIC CONTROL
- DS W CEILING MOUNTED OCCUPANCY SENSOR WITH POWER PACK, W DENOTES WALL MOUNTED AT +8' AFF U.O.N..
- DS W CEILING MOUNTED OCCUPANCY SENSOR WITH NO POWER PACK, W DENOTES WALL MOUNTED AT +8' AFF U.O.N.
- DIM WALL MOUNTED OCCUPANCY SENSOR WITH OVERRIDE DIMMING SWITCH. MOUNTED +44" U.O.N. LUTRON MS–Z101–WH OR EQUAL
- DS WALL MOUNTED OCCUPANCY SENSOR WITH DUAL OVERRIDE SWITCHES. MOUNTED +44" U.O.N.
- DS WALL MOUNTED OCCUPANCY SENSOR WITH SINGLE ON/OFF SWITCH. MOUNTED +44" U.O.N.
- PP OCCUPANCY SENSOR POWER PACK
- J JUNCTION BOX WITH COVER
- SPECIAL RECEPTACLE OUTLET. AMPERE, VOLTAGE, PHASE AND NEMA RATING AS NOTED ON THE DRAWINGS
- 20A–120V DUPLEX RECEPTACLE OUTLET, NEMA 520R SPECIFICATION GRADE. WALL MOUNTED +18" U.O.N.
- 20A–120V DUPLEX RECEPTACLE OUTLET, NEMA 520R SPECIFICATION GRADE. MOUNTED ABOVE COUNTER SPLASH
- 20A–120V QUADRUPLEX RECEPTACLE OUTLET, NEMA 520R SPECIFICATION GRADE. MOUNTED ABOVE COUNTER SPLASH
- 20A–120V CEILING MOUNTED DUPLEX RECEPTACLE OUTLET, NEMA 520R SPECIFICATION GRADE
- 20A–120V CEILING MOUNTED QUADRUPLEX RECEPTACLE OUTLET NEMA 520R SPECIFICATION GRADE
- 20A–120V DUPLEX FLOOR RECEPTACLE OUTLET
- 20A–120V TWO DUPLEX RECEPTACLE OUTLET IN ONE COVER PLATE. WALL MOUNTED +18" U.O.N.
- 20A–120V DUPLEX RECEPTACLE OUTLET FLUSH MOUNTED ON WIREMOLD.
- 20A–120V TWO DUPLEX RECEPTACLE OUTLET FLUSH MOUNTED ON WIREMOLD.
- FLOOR MOUNTED POWER FEED MONUMENT OR POKE THROUGH
- — PD — SURFACE MOUNTED NON–METALIC RACEWAY, 2 SECTION, 5 1/4" HIGH X 1 3/4" DEEP WITH COVER, WIREMOLD 5400 SERIES OR HUBBELL EQUAL WITH INLINE DUPLEX RECEPTACLES AND DATA OUTLET AS SHOWN AND ENTRANCE END FITTING ACCESSORIES FOR CONCEALED CONDUIT CONNECTION, U.O.N. MOUNT BOTTOM OF WIREMOLD AT +30" AFF.
- MECHANICAL EQUIPMENT TAG – SEE MECHANICAL EQUIPMENT SCHEDULE
- MOTOR CONNECTION
- COMBINATION MAGNETIC MOTOR STARTER WITH NON–AUTOMATIC CIRCUIT BREAKER
- COMBINATION MAGNETIC MOTOR STARTER WITH FUSED DISCONNECT SWITCH
- HEAVY–DUTY FUSED DISCONNECT SWITCH, N.F. DENOTES NON FUSED, MOUNTED +6'–6" MAXIMUM
- MECHANICAL PACKAGED EQUIPMENT WITH INTEGRAL STARTER AND CONTROL PANEL
- VFD VARIABLE FREQUENCY DRIVE CONTROLLER, PROVIDED BY MECH.
- FLUSH MOUNTED PANELBOARD – SEE SCHEDULES
- SURFACE MOUNTED PANELBOARD – SEE SCHEDULES
- SWITCHBOARD, DISTRIBUTION PANEL, MCC – SEE SINGLE LINE DIAGRAM
- RECESS MOUNTED TERMINAL CABINET/CONTROL PANEL
- SURFACE MOUNTED TERMINAL CABINET/CONTROL PANEL
- T TRANSFORMER
- PC PHOTOELECTRIC CONTROL
- P POWER PULL BOX
- S SIGNAL PULL BOX

- CIRCUIT BREAKER
- CIRCUIT BREAKER WITH CURRENT LIMITING FUSES – SIZE AS SHOWN ON PLANS
- CT'S CURRENT TRANSFORMER
- WH WATT/HOUR METER
- VA VOLT/AMP METER
- NEUTRAL LINK
- TRANSFORMER
- COPPER WELD GROUND ROD AND INSPECTION WELL – SEE TYPICAL DETAIL ON PLANS
- G BARE COPPER GROUND CABLE BURRIED 24" MINIMUM BELOW FINISH GRADE U.O.N.
- CONDUIT AND CONDUCTORS INSTALLED UNDERGROUND OR BELOW SLAB
- CONDUIT AND CONDUCTORS CONCEALED IN WALL OR CEILING
- CONDUIT AND CONDUCTORS INSTALLED EXPOSED
- A–1 HOMERUN TO SWITCHBOARD, PANELBOARD, TERMINAL CABINET, ETC.
- WIRING TURNED UP
- WIRING TURNED DOWN
- CONDUIT OR DUCT STUB AND CAP
- CONDUIT SEAL CROUSE–HINDS "EYS"

(DENOTES GROUND WIRE)

(CROSS LINES DENOTES QUANTITY OF #12 CONDUCTORS UNLESS NOTED OTHERWISE)

(NO CROSS LINES DENOTES 2#12 & 1#12 G UNLESS NOTED OTHERWISE)

- FLEXIBLE RACEWAY
- W SINGLE JACK DATA OUTLET, CEILING MOUNTED FOR WIRELESS ACCESS WITH (1) CAT 6 CABLE TO BUILDING MDF/IDF AS SHOWN.
- DUAL JACKS DATA OUTLET, CEILING MOUNTED WITH (2) CAT 6 CABLES TO BUILDING MDF/IDF AS SHOWN.
- MS CEILING MOUNTED SECURITY MOTION SENSOR
- FSD FIRE SMOKE DAMPER
- RM FIRE SMOKE RELAY CONTROL MODULE
- FIRE ALARM STROBE.
- WP FIRE ALARM SPEAKER, OUTDOOR TYPE MOUNTED MIN. OF 90" AFF.
- FIRE ALARM SPEAKER/STROBE
- SMOKE DETECTOR
- HEAT DETECTOR
- 1 SHEET NOTE IDENTIFICATION TAG, SEE RESPECTIVE "SHEET NOTES"

SCHOOL EQUIPMENT ANCHORAGE NOTE

ALL 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 REQUIREMENTS PRESCRIBED IN THE 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 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 ATTACHMENT OF THE FOLLOWING ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED 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 THESE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD AND THE DSA DISTRICT STRUCTURAL ENGINEER. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

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, SECTIONS 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 BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAILED ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE OSHPD PRE–APPROVALS (OPM OR OSP) AS MODIFIED TO SATISFY ANCHORAGE REQUIREMENTS OF ACI 318, APPENDIX D.

ELECTRICAL DISTRIBUTION SYSTEM:

- [X] OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
- [ ] OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE–APPROVAL (OPM #) # _____.
- [ ] 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 LEVEL _____ FOR THE PROJECT AND CONDITIONS.

ABBREVIATIONS

A, AMPS	AMPERES
A/C	AIR CONDITIONER
AC	ALTERNATE CURRENT
AF	AMPERE FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTION CURRENT
AL	ALUMINUM
APP.	APPROXIMATE
ARCH	ARCHITECT/ARCHITECTURAL
AT	AMPERES TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BC	BARE COPPER
BKBD	BACKBOARD
BKR	BREAKER
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CC	CENTER TO CENTER
CAB.	CABINET
CKT	CIRCUIT
CL	CENTER LINE
CLG	CEILING
CLR	CLEAR
CO	CONDUIT ONLY
CTR	CENTER
CU	COPPER
DC	DIRECT CURRENT
DET.	DETAIL
DIA	DIAMETER
DIST	DISTRIBUTION
DN	DOWN
DP	DISTRIBUTION PANEL
DWG	DRAWING
EMERG	EMERGENCY
EMS	ENERGY MANAGEMENT SYSTEM
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE/ENCLOSED
ELR	END–OF–LINE RESISTOR
EPO	EMERGENCY POWER OFF
EQ	EQUAL
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
<E>	EXISTING TO REMAIN
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPERES
FLEX	FLEXIBLE
FUT, <F>	FUTURE
G	GROUND
GALV	GALVANIZED
GRS	GALVANIZED RIGID STEEL
GFI	GROUND FAULT INTERRUPTER
HD	HEAT DETECTOR
HH	HANDHOLE
HID	HIGH INTENSITY DISCHARGE
HO	HIGH OUTPUT
HOA	HAND–OFF–AUTO
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HSP	HOUSE SERVICE PANEL
HV	HIGH VOLTAGE
HZ	HERTZ
IC	INTERCOM
ISC	INTERRUPTING SHORT CIRCUIT
IG	ISOLATED GROUND
INST	INSTANTANEOUS
JB	JUNCTION BOX
KCMIL	KILO CIRCULAR MILLS
KV	KILOVOLTS
KVA	KILOVOLT–AMPERES
KW	KILOWATTS
KWH	KILOWATT–HOURS
LCP	LIGHTING CONTROL PANEL
LPS	LOW PRESSURE SODIUM
LTG	LIGHTING
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MFG	MANUFACTURING
MFR	MANUFACTURER
MECH	MECHANICAL
MH	MANHOLE
MIC	MICROPHONE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MTD	MOUNTED
MTG. HT.	MOUNTING HEIGHT
MSB	MAIN SWITCHBOARD
MSG	MAIN SWITCH GEAR
<N>	NEW
N	NEUTRAL
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN, NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OH	OVERHEAD
P	POLE
PH, ø	PHASE
PA	PUBLIC ADDRESS
PB	PUSHBUTTON
PDU	POWER DISTRIBUTION UNIT
PNL	PANEL
PVC	POLYVINYL CHLORIDE
<R>	REMOVED
<RE>	NEW LOCATION OF RELOCATED DEVICE
REC	RECEPTACLE
REQ'D	REQUIRED
<RL>	EXISTING TO BE RELOCATED
RS	RAPID START
RSC	RIGID STEEL CONDUIT
SEC	SECONDARY
SN	SOLID NEUTRAL
SPECS	SPECIFICATIONS
STD	STANDARD
SWBD	SWITCHBOARD
TEL	TELEPHONE
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES
UON	UNLESS OTHERWISE NOTED
V	VOLTS
VA	VOLT–AMPERES
W	WATTS, WIRE
WH	WATER HEATER
WP	WEATHERPROOF
WT	WATERTIGHT
XFMR	TRANSFORMER
XP	EXPLOSION PROOF
+4–6"	TYPICAL MOUNTING HEIGHT 4'–6" ABOVE FLOOR OR GRADE TO CENTER OF BOX

GENERAL NOTES

1. ALL ELECTRICAL WORK SHALL COMPLY WITH THE CURRENT APPROVED EDITION OF THE NATIONAL ELECTRICAL CODE, AS ACCEPTED AND AMENDED BY LOCAL ORDINANCES.
2. ANY EQUIPMENT AND MATERIALS FURNISHED BY THE CONTRACTOR SHALL BE NEW, UNUSED AND FREE FROM DEFECTS.
3. CONTRACTOR SHALL VERIFY FINAL PLACEMENT AND CONNECTION REQUIREMENTS PRIOR TO ROUGHING IN EQUIPMENT UTILITIES.
4. FINAL ACCEPTANCE OF WORK IN PLACE SHALL BE SUBJECT TO APPROVAL BY OWNER'S REPRESENTATIVE AND ARCHITECT/ENGINEER. INSTALLATION APPROVAL SHALL BE BASED ON APPROVED SUBMITTAL, SHOP DRAWINGS AND LOCAL INSPECTIONS.
5. ALL WORK SHOWN ON DRAWINGS IS IN PART SCHEMATIC, INTENDED TO CONVEY SCOPE OF WORK AND GENERAL LAYOUT. VERIFY ALL EXISTING CONDITIONS AND MAKE ADJUSTMENTS AS REQUIRED.
6. CONTRACTOR SHALL PROVIDE UPDATED/CORRECTED PANEL DIRECTORIES WITHIN EACH PANELBOARD PRIOR TO FINAL ACCEPTANCE OF WORK IN PLACE.
7. BRANCH CIRCUIT RACEWAY SHALL BE A MINIMUM OF 3/4" ELECTRICAL METALLIC TUBING (EMT) UNLESS OTHERWISE NOTED. RACEWAYS IN RAISED FLOOR OR IN PLENUM SPACE SHALL BE A MINIMUM OF 3/4" RIGID GALVANIZED STEEL (RGS) OR RIGID ALUMINUM (RAL) UNLESS OTHERWISE NOTED. RACEWAY BETWEEN RECESSED LIGHT FIXTURES SHALL BE A MINIMUM OF 1/2" FLEXIBLE STEEL METAL CONDUIT UNLESS OTHERWISE NOTED.
8. ALL INTERIOR OUTLETS, JUNCTION AND PULL BOXES SHALL BE METALLIC, SIZED PER CODE FOR THE NUMBER OF CONDUCTORS THEREIN.
9. ALL ELECTRICAL RACEWAYS SHALL BE CONCEALED IN THE WALLS AND ABOVE SUSPENDED CEILING OR BELOW RAISED FLOOR UNLESS OTHERWISE NOTED.
10. ALL CONDUCTORS SHALL BE #12 AWG MINIMUM TYPE THHN/THWN UNLESS NOTED OTHERWISE.
11. PROVIDE AND INSTALL MISCELLANEOUS STEEL FOR PROPER INSTALLATION OF THE ELECTRICAL EQUIPMENT. DETAILS OF THE STEEL SUPPORTS SHALL BE INDICATED ON THE SHOP DRAWINGS SUBMITTED FOR APPROVAL.
12. MC CABLE IS NOT ACCEPTABLE FOR ANY ELECTRICAL INSTALLATION.

DRAWING INDEX

E0.1	ELECTRICAL SYMBOLS, ABBREVIATIONS, GENERAL NOTES AND DRAWING INDEX
E0.2	ELECTRICAL – TITLE 24 COMPLIANCE
E1.1	ELECTRICAL SITE PLAN
E2.1	BUILDING ADMIN–KINDER ELECTRICAL PLANS
E2.2	BUILDING MULTI–USE ELECTRICAL PLANS
E2.3	BUILDING A ELECTRICAL PLANS
E2.4	BUILDING B ELECTRICAL PLANS
E2.5	BUILDING C ELECTRICAL PLANS
E2.6	BUILDING D ELECTRICAL PLANS
E4.1	FIXTURE SCHEDULE AND DETAILS
E4.2	PANEL SCHEDULES
E7.1	FIRE ALARM NOTES AND DETAILS
E7.2	FIRE ALARM CALCULATIONS

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE. SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER J. MARK FISHER E16525 Exp. 12-31-19 ELECTRICAL STATE OF CALIFORNIA

Date Signed 05/22/2018

ALFATECH
1321 RIDDER PARK DRIVE, SUITE 50, SAN JOSE, CALIFORNIA 95131
408–487–1200 FAX: 408–487–1422
SAN JOSE • SAN FRANCISCO • THAILAND • SINGAPORE
SYDNEY • MELBOURNE • DUBAI • CHINA • LONDON • DUBAI
PROJECT # 217276

ELECTRICAL SYMBOLS, ABBREVIATIONS, GENERAL NOTES AND DRAWING INDEX

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-06-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271

AC KG FLS MC SS CH

DATE 5-22-18

DRAWN BY:	AT
CHECKED BY:	AT
JOB NO:	DATE:
17103	05/22/18

E0.1

COPYRIGHT©2017

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 1 of 6)

Project Name: Millard McCollam Elementary School - HVAC Upgrades — Date Prepared: 1/22/2018

A. General Information

Climate Zone: 4	Conditioned Floor Area: 22,952						
	Unconditioned Floor Area: 0						
Building Type:	☑	Nonresidential	☐	High-Rise Residential	☐	Hotel/Motel	
☐ Schools	☐	Relocatable Public Schools	☑	Conditioned Spaces	☐	Unconditioned Spaces	
Phase of Construction:	☐	New Construction	☐	Addition	☑	Alteration	
Method of Compliance:	☐	Complete Building	☑	Area Category	☐	Tailored	

Project Address: 3311 Lucian Avenue, San Jose, CA, 95127

B. Lighting Compliance Documents (select yes for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

YES	NO	COMP. DOC.	TITLE
☑	☐	NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
☑	☐	NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
☑	☐	NRCC-LTI-03-E	Indoor Lighting Power Allowance
☐	☑	NRCC-LTI-04-E	Tailored Method Worksheets
☐	☑	NRCC-LTI-05-E	Line Voltage Track Lighting Worksheets
☐	☐	NRCC-LTI-06-E	Indoor Lighting Existing Conditions

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 2 of 6)

Project Name: Millard McCollam Elementary School - HVAC Upgrades — Date Prepared: 1/22/2018

C. Summary of Allowed Lighting Power

Conditioned and Unconditioned space Lighting must not be combined for compliance

	Indoor Lighting Power for Conditioned Spaces		Watts		Indoor Lighting Power for Unconditioned Spaces		Watts
01	**Installed** Lighting NRCC-LTI-01-E, Table H, page 5	+	18,868	**Installed** Lighting NRCC-LTI-01-E, Table H, page 5	+	0
02	Portable Only for Offices NRCC-LTI-01-E, Table G, page 4	+				
03	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	0	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	0
04	Adjusted **Installed** Lighting Power (row 1 plus row 2 minus row 3)	=	18,868	Adjusted **Installed** Lighting Power (row 1 minus row 3)	=	0
	Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)			Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)		
05	**Allowed** Lighting Power Conditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least 50/35% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		26,898	**Allowed** Lighting Power Unconditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least 50/35% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		0

D. Declaration of Required Certificates of Installation

Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Compliance Document/Title	
☑	☐	NRCI-LTI-01-E - Must be submitted for all buildings	☐ Field Inspector
☑	☐	NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐ Field Inspector
☐	☑	NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	☐ Field Inspector
☐	☑	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	☐ Field Inspector
☐	☑	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐ Field Inspector
☐	☑	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐ Field Inspector

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 3 of 6)

Project Name: Millard McCollam Elementary School - HVAC Upgrades — Date Prepared: 1/22/2018

E. Declaration of Required Certificates of Acceptance

Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Compliance Document/Title	
☑	☐	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐ Field Inspector
☑	☐	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐ Field Inspector
☐	☑	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐ Field Inspector
☐	☑	NRCA-LTI-05-A – Must be submitted for institutional tuning power adjustment factor (PAF).	☐ Field Inspector

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☐ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

F. Indoor Lighting Schedule and Field Inspection Energy Checklist

☐ The actual indoor lighting power listed on the next 2 pages includes all installed permanent and planned portable lighting systems.
☐ When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
☐ When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function area on separate lines
☐ Also include track lighting in schedule, and submit the track lighting compliance document (NRCC-LTI-05-E) when line-voltage track lighting is installed.

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 4 of 6)

Project Name: Millard McCollam Elementary School - HVAC Upgrades — Date Prepared: 1/22/2018

G. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)

☐ This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance document.
☐ This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office
☐ Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule								Office Location	Field Inspector	
1	2	3	4	5	6	7	8	9	10	
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Number of Luminaires	Installed portable luminaire watts in this office (G02 x G03)	Square feet of this office	Watts per square foot (G04 / G05)	If G06 ≤ 0.3, enter zero; If G06 > 0.3, (G06-0.3)	(G05 x G07)	Identify Office area in which these portable luminaires are installed	Pass	Fail
									☐	☐
									☐	☐
									☐	☐
									☐	☐
									☐	☐
Total installed portable luminaire watts that are greater than 0.3 W/ft² per office:								Enter sum total of all pages into NRCC-LTI-01-E; Page 1		

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 5 of 6)

Project Name: Millard McCollam Elementary School - HVAC Upgrades — Date Prepared: 1/22/2018

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☑ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

H. Indoor Lighting Schedule and Field Inspection Energy Checklist

Luminaire Schedule							Installed Watts			Location	Field Inspector[1]	
01	02			03	04	05	06		07	08		
Name or Item Tag	Complete Luminaire Description (i.e, 3 lamp fluorescent troffer, FS278, one dimmable electronic ballat)			Watts per Luminaire	How wattage was determined CEC Default Table 140.6-B	According to §130.0(c)	Number Luminaires	Total Installed Watts (Col 03 x Col 05)	Primary Function area in which these luminaires are installed	Pass	Fail
A	2x4 Recessed Led			41.0	☑	☐	7	287	Office > 250 sqft	☐	☐
A/A1	2x4 Recessed Led			41.0	☑	☐	12	492	Office <= 250 sqft	☐	☐
A/A1	2x4 Recessed Led			41.0	☑	☐	32	1,312	Classroom, Lecture, Training	☐	☐
A/A1	2x4 Recessed Led			41.0	☑	☐	6	246	Lounge, Recreation	☐	☐
A1	2x4 Recessed Led			41.0	☑	☐	1	41	Corridor/Restroom/Support	☐	☐
A3	2X2 Recessed Led			43.0	☑	☐	120	5,160	Classroom, Lecture, Training	☐	☐
C	Indirect/indirect Suspended Led			55.0	☑	☐	6	330	Lobby, Main Entry	☐	☐
C	Indirect/indirect Suspended Led			55.0	☑	☐	200	11,000	Classroom, Lecture, Training	☐	☐
					☐	☐				☐	☐
					INSTALLED WATTS PAGE TOTAL:			18,868	Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 03/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 1 of 3)

Project Name: Millard McCollam Elementary School - HVAC Upgrades — Date Prepared: 1/22/2018

A. Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Control Requirements
☑	☐	Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section 110.9.
☑	☐	Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
☐	☑	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
☐	☑	A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 110.9 and Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
☐	☐	All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
☐	☐	All luminaires shall be functionally controlled with manually switched ON and OFF lighting controls in accordance with Section 130.1(a).
☑	☐	General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4.
☑	☐	The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
☑	☐	All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
☐	☐	Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
☐	☐	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
☐	☐	Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4.(a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 03/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 2 of 3)

Project Name: Millard McCollam Elementary School - HVAC Upgrades — Date Prepared: 1/22/2018

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☑ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

B. Mandatory and Prescriptive Indoor Lighting Control Schedule, PAF Calculation, and Field Inspection Checklist

Lighting Control Schedule			Standards Complying With [1] (✓ all that apply, or enter 'E' if Exempted)								PAF Credit Calculation [2]					
01	02	03	04	05	06	07	08	09	10		11	12	13	14	15	
Location in Building	Type/Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc...)	# of Units	§130.1(a)	§130.0(b)	§130.1(b)	§130.1(c)	§130.1(d)	§130.1(e)	§140.6(d)	§140.6(d)	Watts of Controlled Lighting	PAF	Control (C x L)	✓ if Acceptance Test Required	Field Inspector	
															Pass	Fail
Bldg. Admin, A,B,C,D	Multi Level	1	☐	☑	☐	☐	☐	☐	☐					✓	☐	☐
Bldg. Admin, A,B,C,D	Occupancy Sensor	1	☐	☐	☐	☑	☐	☐	☐					✓	☐	☐
Bldg. Admin, A,B,C,D	Automatic Time Switch	1	☐	☐	☐	☐	☑	☐	☐					✓	☐	☐
Bldg. Admin, A,B,C,D	Automatic Daylighting	1	☐	☐	☐	☑	☐	☐	☐					✓	☐	☐
Bldg. Admin, A,B,C,D	Secondary Daylighting	1	☐	☐	☐	☐	☐	☐	☐					✓	☐	☐
Bldg. Admin, A,B,C,D	Manual Area	1	☑	☐	☐	☐	☐	☐	☐					✓	☐	☐
										Control Credit PAGE TOTAL (Sum of Column 13):				0		
										IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column 13):				0		
														Enter Control Credit total into NRCC-LTI-01-E; Page 1.		

1. §130.1(a) = Manual area controls; §130.0(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §140.6(d) = Additional lighting controls installed to earn a PAF; §140.6(d) = Prescriptive Secondary Sidelit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 6 of 6)

Project Name: Millard McCollam Elementary School - HVAC Upgrades — Date Prepared: 1/22/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Mark Fisher	Documentation Author Signature:	
Company:	Alfa Tech	Signature Date:	1/22/2018
Address:	1321 Ridder Park Drive, No. 50	CEA Certification Identification (if applicable):	E16525
City/State/Zip:	San Jose, CA 95131	Phone:	(408)487-1200

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Mark Fisher	Responsible Designer Signature:	
Company:	ALFATECH	Date Signed:	01-29-18
Address:	1321 Ridder Park Drive, No. 50	License:	E16525
City/State/Zip:	San Jose, CA 95131	Phone:	(408)487-1200

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 1 of 4)

Project Name: Millard McCollam Elementary School - HVAC Upgrades — Date Prepared: 1/22/2018

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☑ CONDITIONED spaces ☐ UNCONDITIONED spaces

A. SUMMARY TOTALS OF LIGHTING POWER ALLOWANCES

☐ If using Complete Building Method for compliance, use only the total in column (a) as total allowed building watts.
☐ If using Area Category Method, Tailored Method, or a combination of Area Category and Tailored Method for compliance, use only the total in column (b) as the total allowed building watts

	(a)	(b)
01 Complete Building Method Allowed Watts. Documented in section B of NRCC-LTI-03-E (below on this page)		
02 Area Category Method Allowed Watts. Documented in section C-1 of NRCC-LTI-03-E (below on this page)		26,898
03 Tailored Method Allowed Watts. Documented in section A of NRCC-LTI-04-E		0
TOTAL ALLOWED BUILDING WATTS. Enter number into correct cell on NRCC-LTI-01, Page 2, Row 1		26,898

☐ Check here if building contains both conditioned and unconditioned areas.

B. COMPLETE BUILDING METHOD LIGHTING POWER ALLOWANCE

01	02		03		04
TYPE OF BUILDING (From §140.6 Table 140.6-B)	WATTS PER ft²	X	COMPLETE BLDG. AREA	=	ALLOWED WATTS
Total Area:					
Total Watts. Enter Total Watts into section A, row 1 (Above on this page)					

C -1 AREA CATEGORY METHOD TOTAL LIGHTING POWER ALLOWANCES

	Watts
Total from section C-2.	26,898
Total from section C-3.	0
Total Watts. Enter Total Watts into section A, row 2 (Above on this page).	26,898
For Alterations Only – Reduced lighting power option (Total Allowed Watts x 0.85). Enter this value into section A, row 2 if using this option.	

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 2 of 4)

Project Name: Millard McCollam Elementary School - HVAC Upgrades — Date Prepared: 1/22/2018

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☑ CONDITIONED spaces ☐ UNCONDITIONED spaces

C -2 AREA CATEGORY METHOD GENERAL LIGHTING POWER ALLOWANCE

☐ Do not include portable lighting for offices. Portable lighting for offices shall be documented only in Section G of NRCC-LTI-01-E.
☐ Separately list lighting for each primary function area as defined in §100.1 of the Standards.

01		02		03		04
AREA CATEGORY (From §140.6 Table 140.6-C)		WATTS PER ft²	X	AREA (ft²)	=	ALLOWED WATTS
Location in Building	Primary Function Area per Table 140.6-C					
Classrooms	Classroom, Lecture, Training	1.20		20,876		25,051
Lounge	Lounge, Recreation	0.90		319		287
Reception	Lobby, Main Entry	0.95		261		248
Offices <250 sqft	Office <= 250 sqft	1.00		793		793
Offices >250 sqft	Office > 250 sqft	0.75		646		485
Corridors/Restrooms/Supports	Corridor/Restroom/Support	0.60		57		34
				TOTALS		
Enter sum total Area Category allowed watts into section C-1 of NRCC-LTI-03-E (this compliance document)						26,898
						WATTS

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 3 of 4)

Project Name: Millard McCollam Elementary School - HVAC Upgrades — Date Prepared: 1/22/2018

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☑ CONDITIONED spaces ☐ UNCONDITIONED spaces

C-3 AREA CATEGORY METHOD ADDITIONAL LIGHTING WATTAGE ALLOWANCE (from Table 140.6-C Footnotes)

01	02	03 [3]	04	05	06	07
Primary Function	Sq Ft or Linear ft [1]	Additional Watts Allowed	Wattage Allowance (02 x 03)	Description(s) and Quantity of Special Luminaire Types in each Primary Function Area	Total Design Watts [2]	ALLOWED WATTS Smaller of 04 or 06
				TOTALS – Enter into TOTAL AREA CATEGORY METHOD ADDITIONAL ALLOWANCES – Section C-1		0

1. Use linear feet only for additional allowance for white board or chalk board. All other additional Area Category allowances shall use watts per square foot.
2. Additional watts are available only when allowed according to the footnotes on bottom of Table 140.6-C, which include: Specialized task work; Ornamental lighting; Precision commercial and industrial work; Per linear foot of white board or chalk board; Accent, display and feature lighting; and Videoconferencing studio lighting..
3. Luminaire classification and wattage shall be determined in accordance with §130.0(c) of the Standards.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 03/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 3 of 3)

Project Name: Millard McCollam Elementary School - HVAC Upgrades — Date Prepared: 1/22/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Mark Fisher	Documentation Author Signature:	
Company:	Alfa Tech	Signature Date:	1/22/2018
Address:	1321 Ridder Park Drive, No. 50	CEA Certification Identification (if applicable):	E16525
City/State/Zip:	San Jose, CA 95131	Phone:	(408)487-1200

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Mark Fisher	Responsible Designer Signature:	
Company:	ALFATECH	Date Signed:	01-29-18
Address:	1321 Ridder Park Drive, No. 50	License:	E16525
City/State/Zip:	San Jose, CA 95131	Phone:	(408)487-1200

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 4 of 4)

Project Name: Millard McCollam Elementary School - HVAC Upgrades — Date Prepared: 1/22/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Mark Fisher	Documentation Author Signature:	
Company:	Alfa Tech	Signature Date:	1/22/2018
Address:	1321 Ridder Park Drive, No. 50	CEA Certification Identification (if applicable):	E16525
City/State/Zip:	San Jose, CA 95131	Phone:	(408)487-1200

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Mark Fisher	Responsible Designer Signature:	
Company:	ALFATECH	Date Signed:	01-29-18
Address:	1321 Ridder Park Drive, No. 50	License:	E16525
City/State/Zip:	San Jose, CA 95131	Phone:	(408)487-1200

COPYRIGHT ©2017

L:\2017\217276 ARUSD McCollam HVAC Upgrade Electrical Design\CAD\276E02.dwg TIME: May08, 18–08:15AM LOGIN: janec

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-9600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER — S. MARK FISHER — E16525 — Exp. 12-31-19 — ELECTRICAL — STATE OF CALIFORNIA

Date Signed 05/22/2018

ALFATECH
1321 RIDDER PARK DRIVE, SUITE 50 — 408-487-1200
SAN JOSE SAN FRANCISCO • THAILAND SINGAPORE DUBAI
SYDNEY MELBOURNE • DUBLIN • CORK LONDON
PROJECT # 217276

ELECTRICAL TITLE 24 COMPLIANCE

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

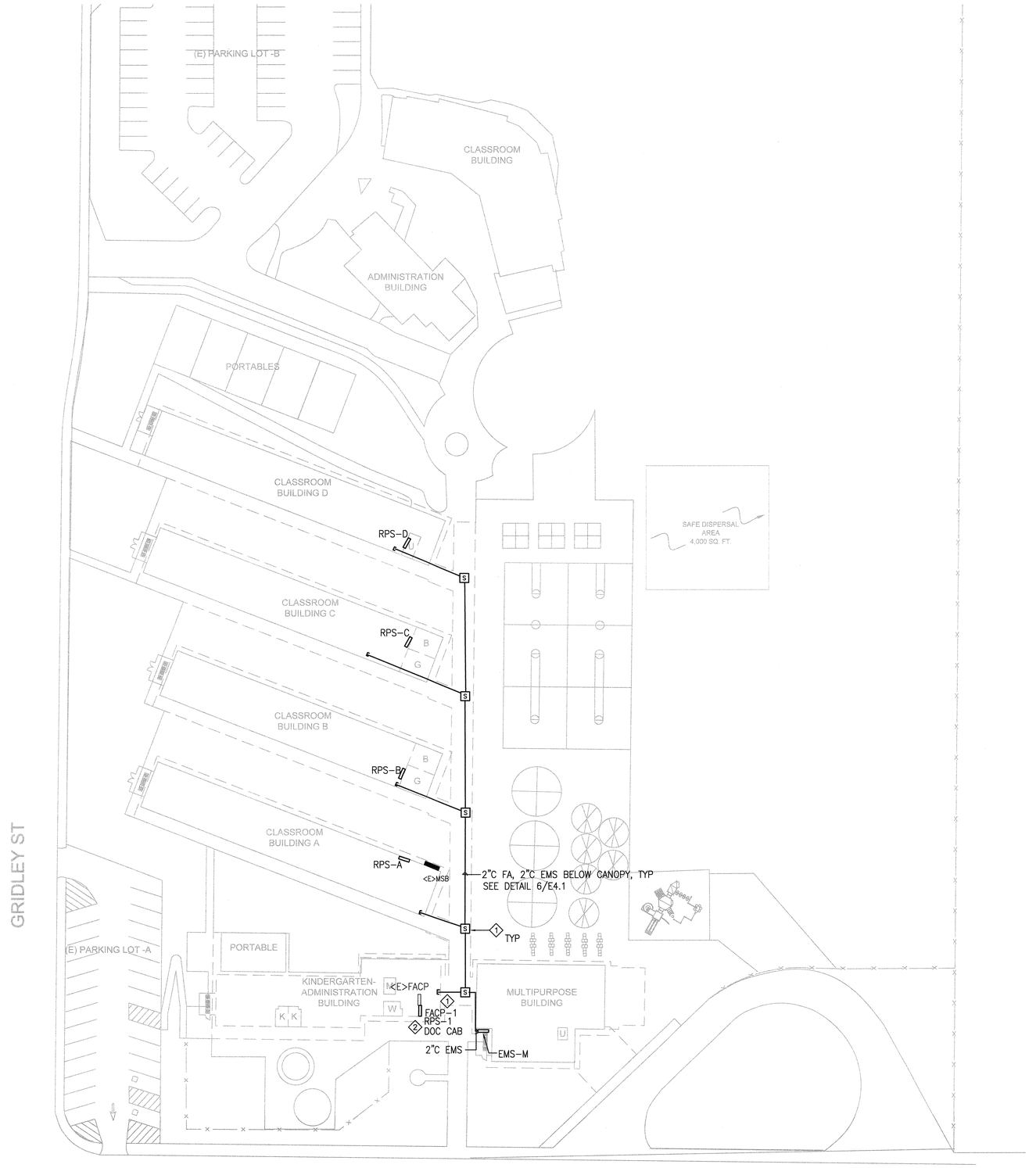
NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-06-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC 29 FLS MS SS
DATE 5-22-18

DRAWN BY: AT
CHECKED BY: AT
JOB NO: 17103
DATE: 05/22/18

E0.2



ELECTRICAL SITE PLAN
SCALE: 1" = 30'-0"

GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AN INDEPENDANT UTILITY LOCATER TO IDENTIFY ALL <E> UTILITIES PRIOR TO TRENCHING / BORING.
2. REFER TO WIRING DIAGRAMS FOR CABLE INFORMATION.

SHEET NOTES

1. 12"x12"x6" WP PULL BOX MOUNTED BELOW CANOPY FOR EMS/FA CABLING.

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6056

REGISTERED PROFESSIONAL ENGINEER
S. MARK FISHER
E16525
Exp. 10-31-19
ELECTRICAL
STATE OF CALIFORNIA

Date Signed 05/22/2018

ALFATECH
1321 RUDDER PARK DRIVE, SUITE 50 408-487-1200
SANTA CLARA, CA 95051 FAX: 408-487-1222
SAN JOSE SAN FRANCISCO • THAILAND SINGAPORE
SYDNEY MELBOURNE • DUBLIN • CORK LONDON DUBAI
PROJECT # 217276

ELECTRICAL SITE PLAN

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-05-18
	DSA BACKCHECK	05-22-18

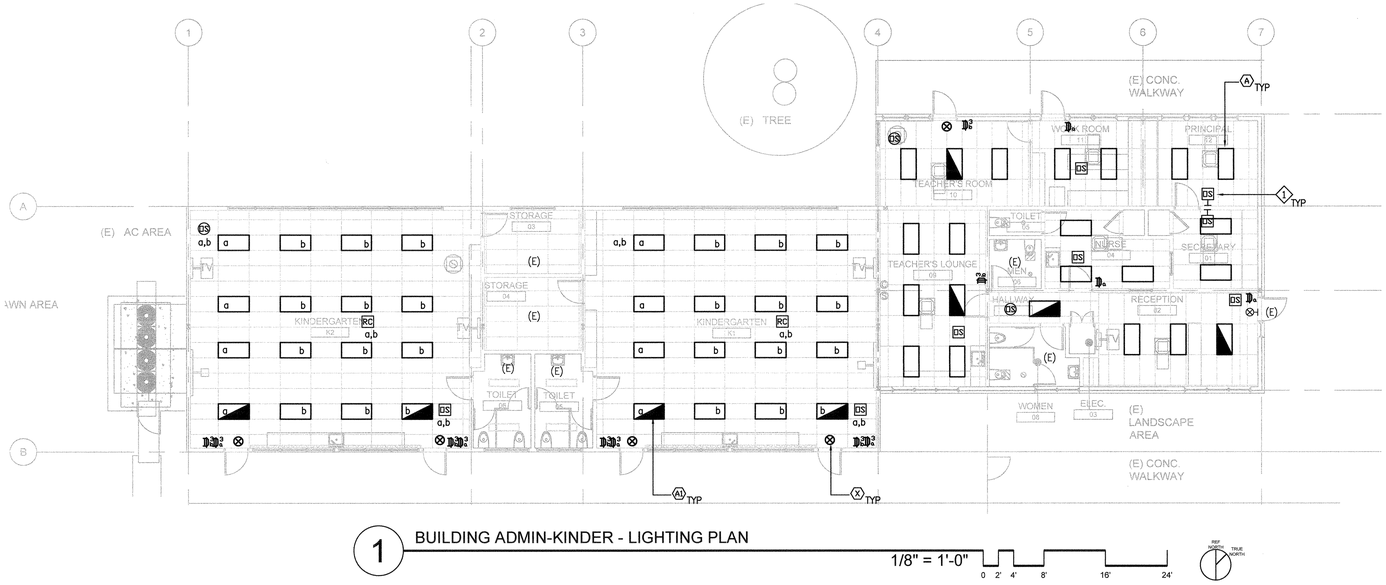
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC FLS MS SS
DATE 5-22-18

DRAWN BY:	AT
CHECKED BY:	AT
JOB NO:	DATE:
17103	05/22/18

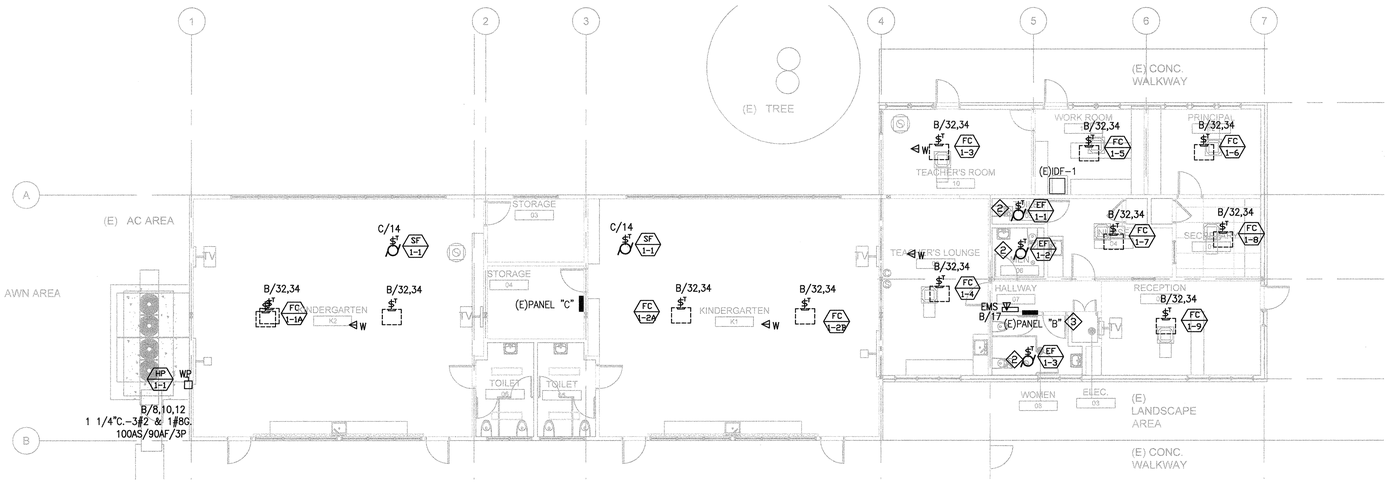
E1.1

COPYRIGHT ©2017



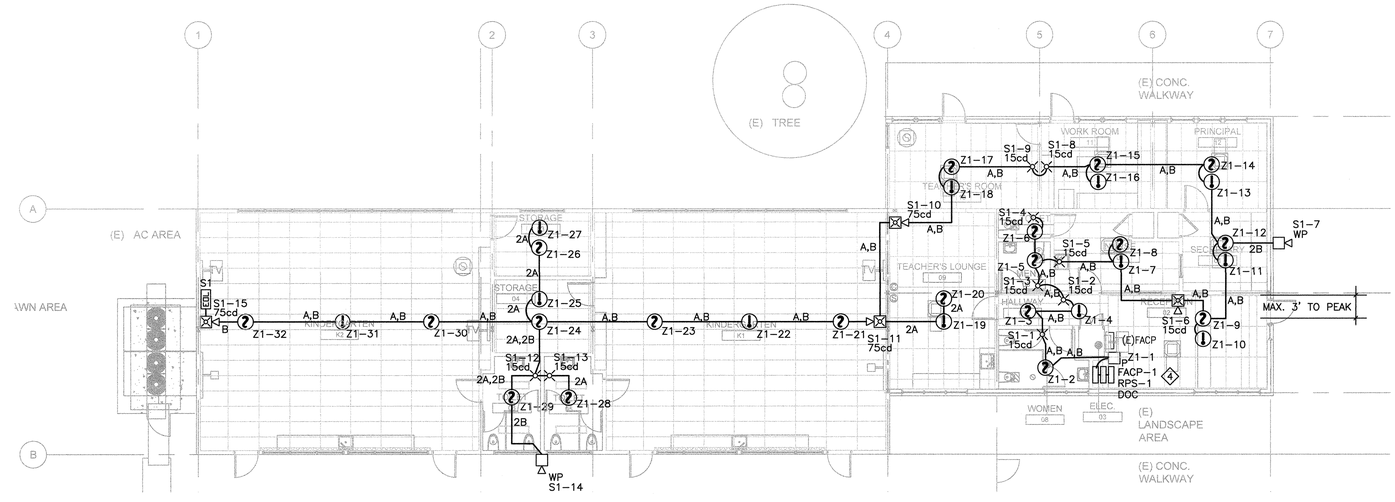
1 BUILDING ADMIN-KINDER - LIGHTING PLAN

1/8" = 1'-0"



2 BUILDING ADMIN-KINDER - ELECTRICAL PLAN

1/8" = 1'-0"



3 BUILDING ADMIN-KINDER - FIRE ALARM PLAN

1/8" = 1'-0"

DEMOLITION NOTES:

1. DISCONNECT AND REMOVE ALL EXISTING LIGHT FIXTURES AND CONTROL FOR INSTALLATION OF NEW FIXTURE/CONTROL AS SHOWN AT NEW CEILING AREA, U.O.N. RETAIN AND MODIFY <E> CIRCUITRY FOR RECONNECTION OF NEW FIXTURES WITH SWITCHING ZONES AS SHOWN. CONNECT EMERGENCY LIGHT AND EXIT SIGN TO <E> UN-SWITCHED CIRCUIT IN THE AREA.
2. DISCONNECT AND REMOVE EXISTING CEILING MOUNTED WIRELESS ACCESS DATA JACK AS SHOWN. RETAIN <E> JACKS / CABLES FOR REINSTALLATION AND RECONNECTION AT NEW CEILING. PROVIDE TESTING TO ENSURE PROPER OPERATION.
3. DISCONNECT AND REMOVE <E> FA DEVICES AND CABLES IN THE SCOPE AREA. REMOVE WIRES BACK TO THE NEAREST SOURCE. PROVIDE BLANK COVERS PLATE AT REMOVED DEVICES. RETAIN <E> CONDUIT FOR INSTALLATION OF NEW CABLES.
4. COORDINATE WITH MECH TO DISCONNECT AND REMOVE <E> POWER CONNECTIONS OF REMOVED MECH UNITS. REMOVE CONDUITS AND WIRES BACK TO SOURCE.
5. DISCONNECT AND REMOVE <E> UN-USED SURFACE MOUNTED RACEWAY / WIREMOLD BACK TO THE NEAREST SOURCE.

GENERAL NOTES:

1. SEE WIRING DIAGRAM FOR LIGHTING CONTROL REQUIREMENT.
2. PROVIDE SURFACE WIREMOLD 2300 AT NON-ACCESSIBLE WALL /CEILING SURFACE FOR CABLING AS NEEDED.
3. ALL CONDUITS SHALL BE CONCEALED IN WALLS, ABOVE CEILING AND NOT ALLOWED ON ROOF, U.O.N.

SHEET NOTES:

1. REPLACE <E> SWITCHES WITH NEW CONTROL AS SHOWN.
2. CONNECT EXHAUST FAN TO <E> LIGHTING CIRCUIT VIA LIGHTING CONTROL.
3. REPLACE <E> 40A/3P BREAKER WITH 90A/3P BREAKER. MODIFITY CKT 30,32,34 CONNECTIONS AND 20A/1P BREAKERS TO INSTALL (1) 20A/2P BREAKER. THE NEW BREAKERS SHALL BE COMPATIBLE WITH THE <E> PANEL A/C RATING. PROVIDE LABELS AT NEW BREAKERS.
4. CONNECT NEW FACP-1 TO <E> FACP DEDICATED 20A CIRCUIT.

FA CABLE LEGEND

INITIATION
'A' = WEST PENN 994 – ABOVE GRADE
WEST PENN AQ226 – BELOW GRADE

VISUAL NOTIFICATION
'B' = 2 EACH THHN #12 – RACEWAY
2 EACH THWN #12 – BELOW GRADE
WEST PENN 998 – ABOVE GRADE WITHOUT RACEWAY

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
S. MARK FISHER
E16525
Exp. 12-31-19
ELECTRICAL
STATE OF CALIFORNIA

Date Signed 05/22/2018

ALFATECH
1321 RIDDER PARK DRIVE SUITE 50
SAN JOSE, CALIFORNIA 95131
408-487-1200
FAX: 408-487-1422
SAN JOSE • SAN FRANCISCO • THAILAND SINGAPORE
SOUTH KOREA • MUMBAI • DUBLIN • CORK LONDON DUBAI
PROJECT # 217276

BUILDING ADMIN-KINDER - ELECTRICAL PLANS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-06-18
	DSA BACKCHECK	05-22-18

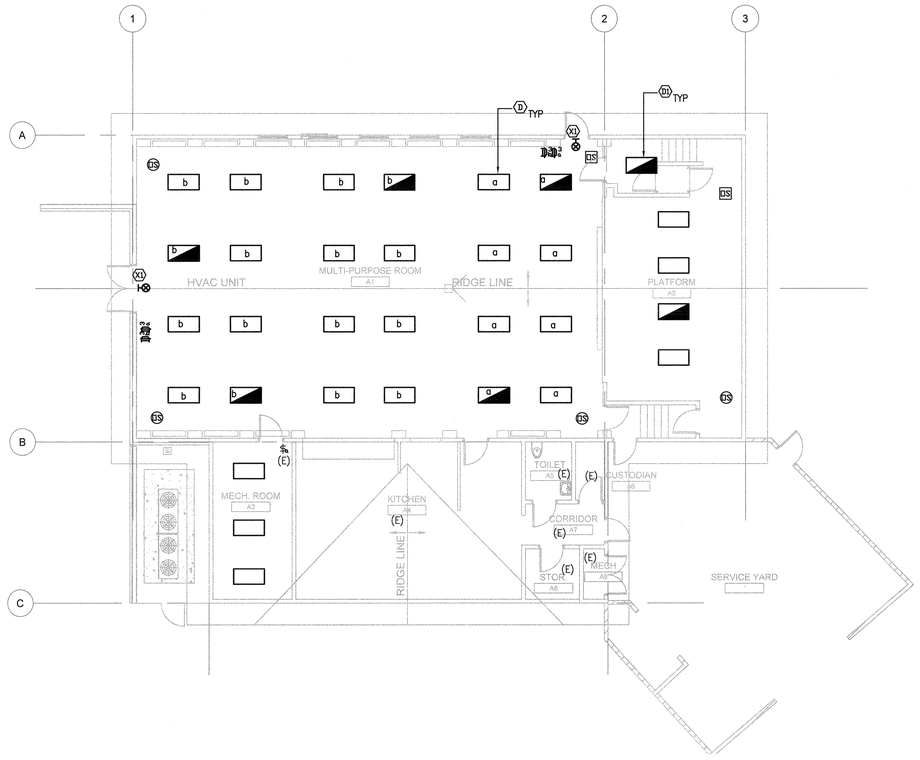
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC 25 FLS MS SS
DATE 5-22-18

DRAWN BY:	AT
CHECKED BY:	AT
JOB NO:	DATE:
17103	05/22/18

E2.1

COPYRIGHT©2017

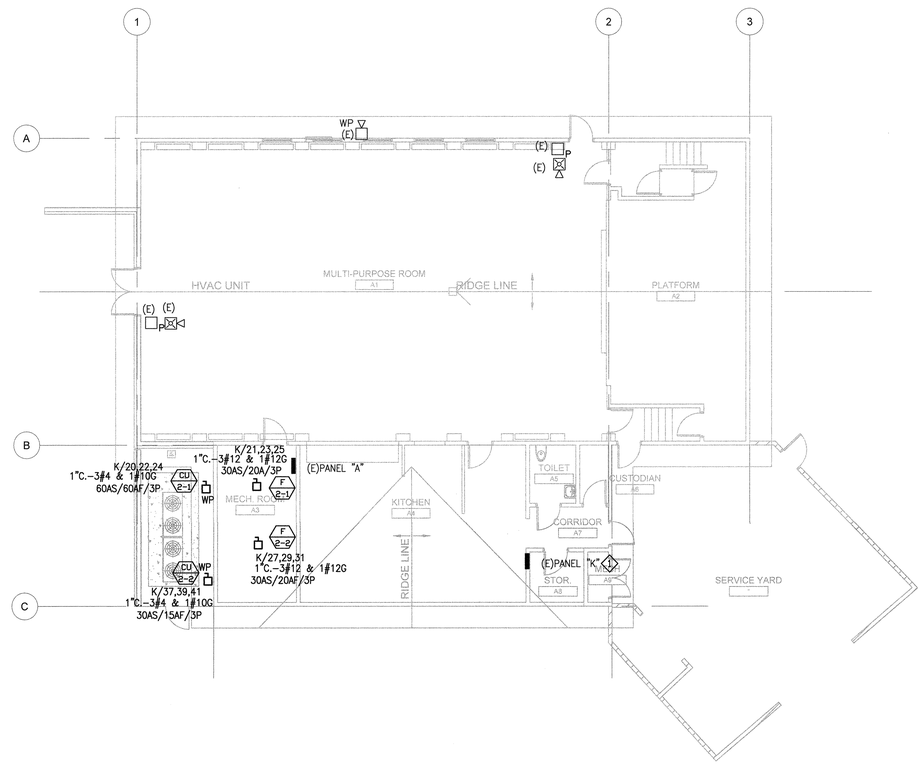


1 BUILDING MULTI-USE - LIGHTING PLAN

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

TRUE NORTH GRID NORTH



1 BUILDING MULTI-USE - ELECTRICAL PLAN

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

TRUE NORTH GRID NORTH

DEMOLITION NOTES:

1. COORDINATE WITH MECH TO DISCONNECT AND REMOVE <E> POWER CONNECTIONS OF REMOVED MECH UNITS. REMOVE CONDUITS AND WIRES BACK TO SOURCE.

GENERAL NOTES:

1. SEE WIRING DIAGRAM FOR LIGHTING CONTROL REQUIREMENT.
2. PROVIDE SURFACE WIREMOLD 2300 AT NON-ACCESSIBLE WALL /CEILING SURFACE FOR CABLING AS NEEDED.
3. ALL CONDUITS SHALL BE CONCEALED IN WALLS, ABOVE CEILING AND NOT ALLOWED ON ROOF, U.O.N.

SHEET NOTES:

1. PROVIDE (2) 60A/3P BREAKERS AT AVAILABLE SPACES. THE NEW BREAKERS SHALL BE COMPATIBLE WITH THE <E> PANEL AIC RATING. PROVIDE LABELS AT NEW BREAKERS.

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
S. MARK FISHER
E16525
Exp. 12-31-19
ELECTRICAL
STATE OF CALIFORNIA

Date Signed 05/22/2018

ALFATECH
1321 RIDDER PARK DRIVE SUITE 50
SAN JOSE, CALIFORNIA 95131
408-487-1200
FAX: 408-487-1422
SAN JOSE • SAN FRANCISCO • THAILAND • SINGAPORE
SYDNEY • MELBOURNE • DUBLIN • CORK • LONDON • DUBAI
PROJECT # 217276

BUILDING MULTI-USE - ELECTRICAL PLANS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-06-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

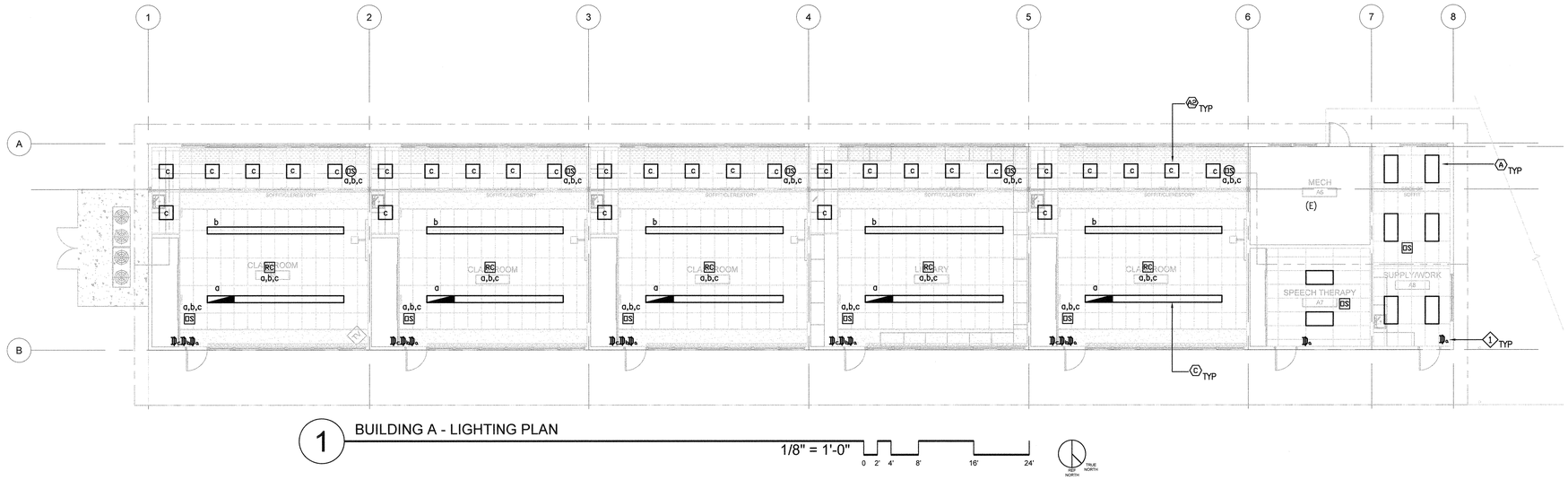
APPL 01-117271

DATE 5-22-18

DRAWN BY:	AT
CHECKED BY:	AT
JOB NO:	DATE:
17103	05/22/18

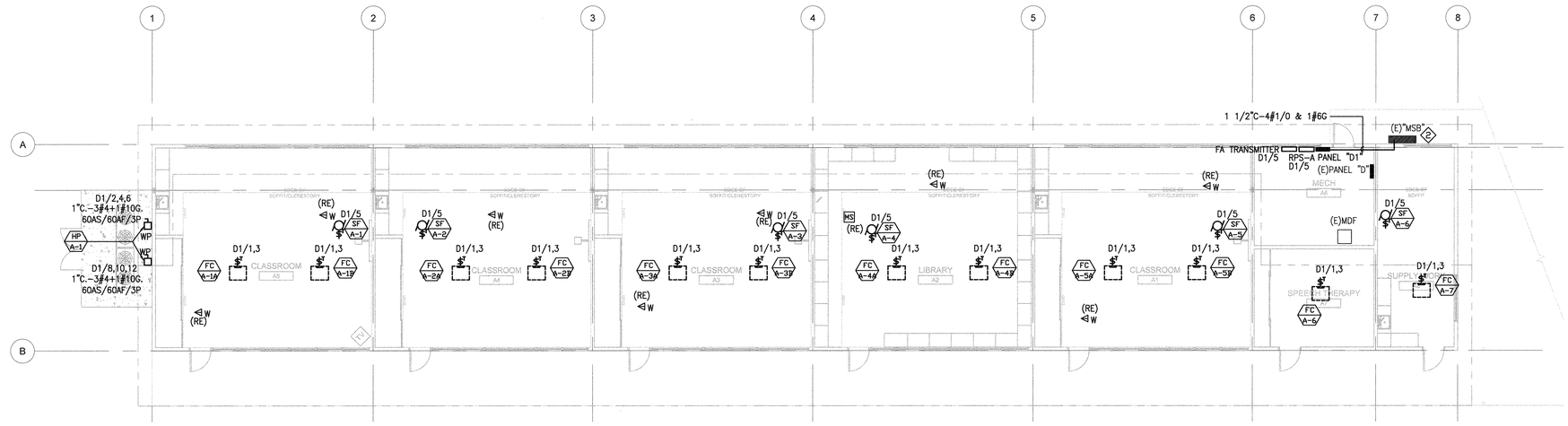
E2.2

COPYRIGHT©2017



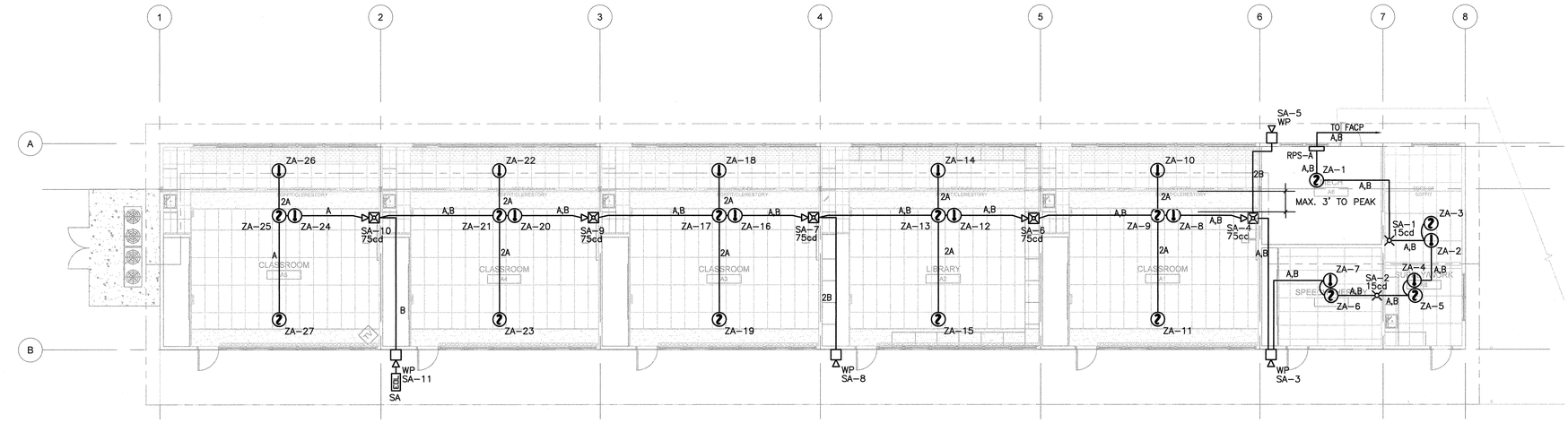
1 BUILDING A - LIGHTING PLAN

1/8" = 1'-0"



2 BUILDING A - ELECTRICAL PLAN

1/8" = 1'-0"



3 BUILDING A - FIRE ALARM PLAN

1/8" = 1'-0"

DEMOLITION NOTES:

1. DISCONNECT AND REMOVE ALL EXISTING LIGHT FIXTURES AND CONTROL FOR INSTALLATION OF NEW FIXTURE/CONTROL AS SHOWN AT NEW CEILING AREA, U.O.N. RETAIN AND MODIFY <E> CIRCUITRY FOR RECONNECTION OF NEW FIXTURES WITH SWITCHING ZONES AS SHOWN. CONNECT EMERGENCY LIGHT AND EXIT SIGN TO <E> UN-SWITCHED CIRCUIT IN THE AREA.
2. DISCONNECT AND REMOVE EXISTING CEILING MOUNTED WIRELESS ACCESS DATA JACK AS SHOWN. RETAIN <E> JACKS / CABLES FOR REINSTALLATION AND RECONNECTION AT NEW CEILING. PROVIDE TESTING TO ENSURE PROPER OPERATION.
3. DISCONNECT AND REMOVE <E> FA DEVICES AND CABLES IN THE SCOPE AREA. REMOVE WIRES BACK TO THE NEAREST SOURCE. PROVIDE BLANK COVERS PLATE AT REMOVED DEVICES. RETAIN <E> CONDUIT FOR INSTALLATION OF NEW CABLES.
4. COORDINATE WITH MECH TO DISCONNECT AND REMOVE <E> POWER CONNECTIONS OF REMOVED MECH UNITS. REMOVE CONDUITS AND WIRES BACK TO SOURCE.
5. DISCONNECT AND REMOVE <E> UN-USED SURFACE MOUNTED RACEWAY / WIREMOLD BACK TO THE NEAREST SOURCE.
6. DISCONNECT AND REMOVE <E> SECURITY MOTION SENSOR FOR REINSTALLATION AND RECONNECTION AFTER NEW CEILING IS COMPLETE. PROVIDE SYSTEM TESTING TO ENSURE PROPER OPERATION.

GENERAL NOTES:

1. SEE WIRING DIAGRAM FOR LIGHTING CONTROL REQUIREMENT.
2. PROVIDE SURFACE WIREMOLD 2300 AT NON-ACCESSIBLE WALL /CEILING SURFACE FOR CABLING AS NEEDED.
3. ALL CONDUITS SHALL BE CONCEALED IN WALLS, ABOVE CEILING AND NOT ALLOWED ON ROOF, U.O.N.

SHEET NOTES:

1. REPLACE <E> SWITCHES WITH NEW CONTROL AS SHOWN.
2. PROVIDE (1) 150A/3P BREAKER AT AVAILABLE SPACES. THE NEW BREAKERS SHALL BE COMPATIBLE WITH THE <E> PANEL AIC RATING. PROVIDE LABELS AT NEW BREAKERS.

FA CABLE LEGEND

INITIATION
'A' = WEST PENN 994 – ABOVE GRADE
WEST PENN AQ226 – BELOW GRADE

VISUAL NOTIFICATION
'B' = 2 EACH THHN #12 – RACEWAY
2 EACH THWN #12 – BELOW GRADE
WEST PENN 998 – ABOVE GRADE WITHOUT RACEWAY

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6065

REGISTERED PROFESSIONAL ENGINEER
S. MARK FISHER
E16525
Exp. 12-31-19
ELECTRICAL
STATE OF CALIFORNIA

Date Signed 05/22/2018

ALFATECH
1321 RIDDER PARK DRIVE, SUITE 50
SAN JOSE, CALIFORNIA 95131
SAN JOSE • SAN FRANCISCO • THAILAND • SINGAPORE
SYDNEY • MELBOURNE • DUBLIN • CORK • LONDON • DUBAI
PROJECT # 217276
408-487-1200
408-487-1222

BUILDING A - ELECTRICAL PLANS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-06-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

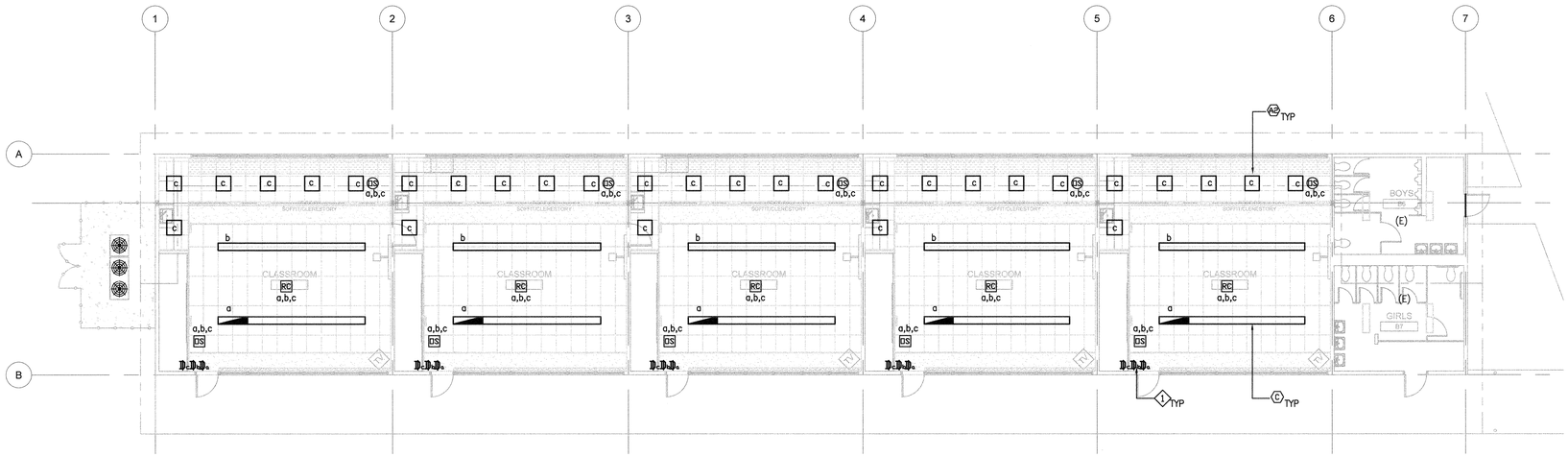
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APPL 01-117271
AC FLS SS
DATE 5-22-18

DRAWN BY:	AT
CHECKED BY:	AT
JOB NO:	DATE:
17103	05/22/18

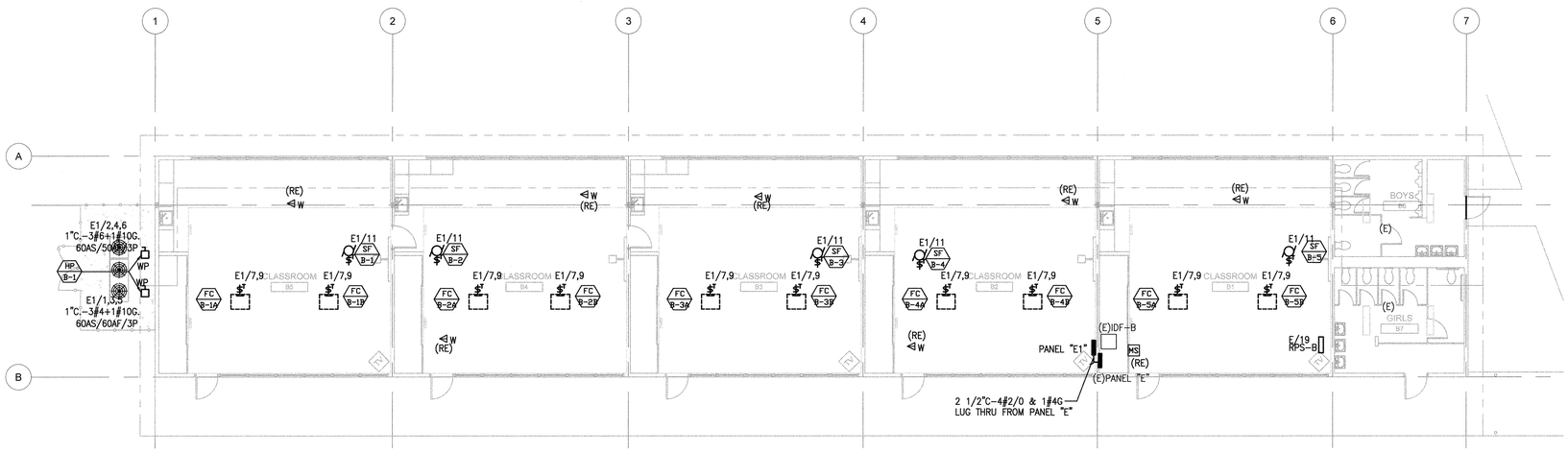
E2.3

COPYRIGHT ©2017



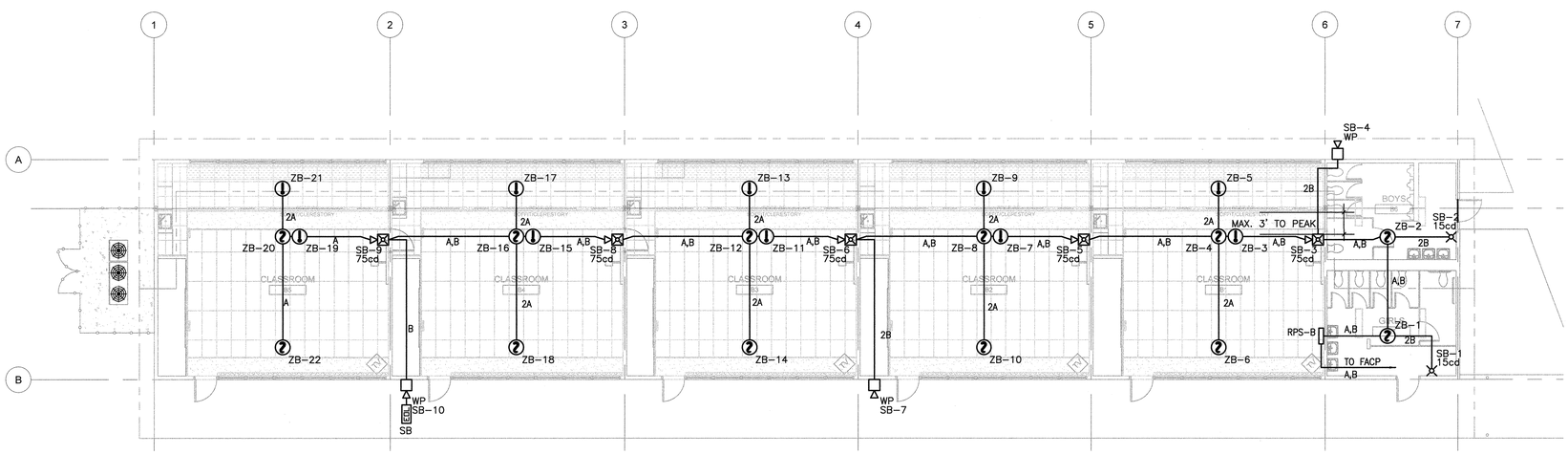
1 BUILDING B - LIGHTING PLAN

1/8" = 1'-0"



2 BUILDING B - ELECTRICAL PLAN

1/8" = 1'-0"



3 BUILDING B - FIRE ALARM PLAN

1/8" = 1'-0"

DEMOLITION NOTES:

1. DISCONNECT AND REMOVE ALL EXISTING LIGHT FIXTURES AND CONTROL FOR INSTALLATION OF NEW FIXTURE/CONTROL AS SHOWN AT NEW CEILING AREA, U.O.N. RETAIN AND MODIFY <E> CIRCUITRY FOR RECONNECTION OF NEW FIXTURES WITH SWITCHING ZONES AS SHOWN. CONNECT EMERGENCY LIGHT AND EXIT SIGN TO <E> UN-SWITCHED CIRCUIT IN THE AREA.
2. DISCONNECT AND REMOVE EXISTING CEILING MOUNTED WIRELESS ACCESS DATA JACK AS SHOWN. RETAIN <E> JACKS / CABLES FOR REINSTALLATION AND RECONNECTION AT NEW CEILING. PROVIDE TESTING TO ENSURE PROPER OPERATION.
3. DISCONNECT AND REMOVE <E> FA DEVICES AND CABLES IN THE SCOPE AREA. REMOVE WIRES BACK TO THE NEAREST SOURCE. PROVIDE BLANK COVERS PLATE AT REMOVED DEVICES. RETAIN <E> CONDUIT FOR INSTALLATION OF NEW CABLES.
4. COORDINATE WITH MECH TO DISCONNECT AND REMOVE <E> POWER CONNECTIONS OF REMOVED MECH UNITS. REMOVE CONDUITS AND WIRES BACK TO SOURCE.
5. DISCONNECT AND REMOVE <E> UN-USED SURFACE MOUNTED RACEWAY / WIREMOLD BACK TO THE NEAREST SOURCE.
6. DISCONNECT AND REMOVE <E> SECURITY MOTION SENSOR FOR REINSTALLATION AND RECONNECTION AFTER NEW CEILING IS COMPLETE. PROVIDE SYSTEM TESTING TO ENSURE PROPER OPERATION.

GENERAL NOTES:

1. SEE WIRING DIAGRAM FOR LIGHTING CONTROL REQUIREMENT.
2. PROVIDE SURFACE WIREMOLD 2300 AT NON-ACCESSIBLE WALL /CEILING SURFACE FOR CABLING AS NEEDED.
3. ALL CONDUITS SHALL BE CONCEALED IN WALLS, ABOVE CEILING AND NOT ALLOWED ON ROOF, U.O.N.

SHEET NOTES:

1. REPLACE <E> SWITCHES WITH NEW CONTROL AS SHOWN.

FA CABLE LEGEND

INITIATION
'A' = WEST PENN 994 – ABOVE GRADE
WEST PENN AQ226 – BELOW GRADE

VISUAL NOTIFICATION
'B' = 2 EACH THHN #12 – RACEWAY
2 EACH THWN #12 – BELOW GRADE
WEST PENN 998 – ABOVE GRADE WITHOUT RACEWAY

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
S. MARK FISHER
E16525
Exp. 12-31-19
ELECTRICAL
STATE OF CALIFORNIA

Date Signed 05/22/2018

ALFATECH
1321 RIDDER PARK DRIVE, SUITE 50 408-487-1200
SAN JOSE, CALIFORNIA 95131 FAX: 408-487-1222
SAN JOSE • SAN FRANCISCO • THAILAND • SINGAPORE
SYDNEY • MELBOURNE • DUBLIN • CORK • LONDON • DUBAI
PROJECT # 217276

BUILDING B - ELECTRICAL PLANS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-06-18
	DSA BACKCHECK	05-22-18

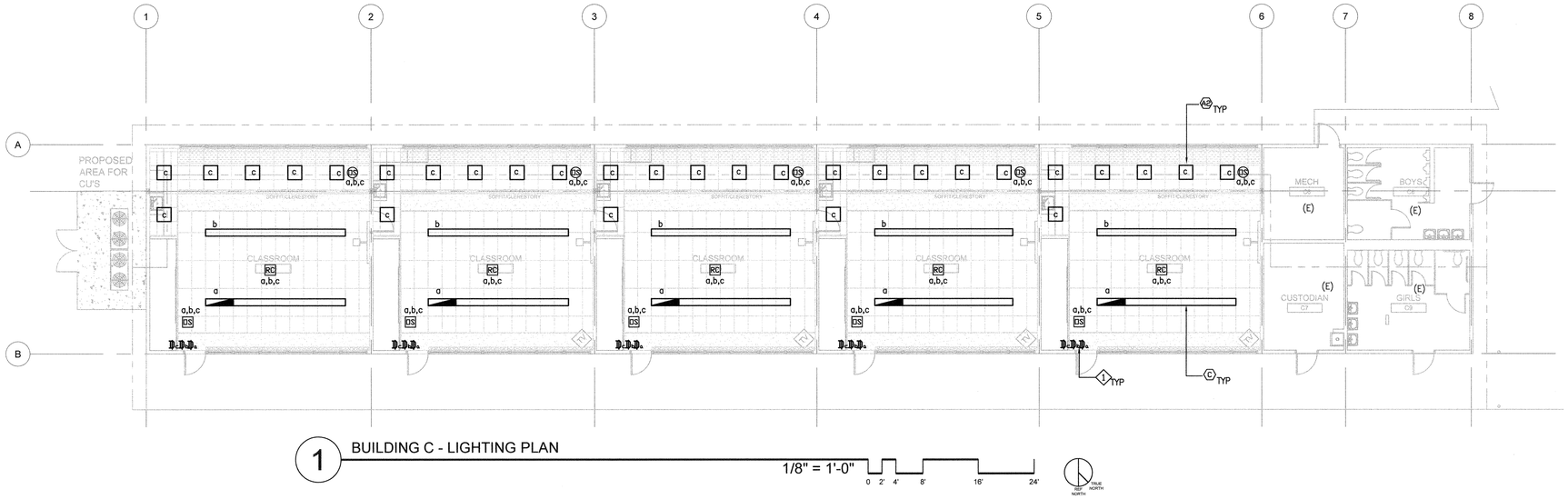
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC 26 FLS MS SS MS
DATE 5-23-18

DRAWN BY:	AT
CHECKED BY:	AT
JOB NO:	DATE:
17103	05/22/18

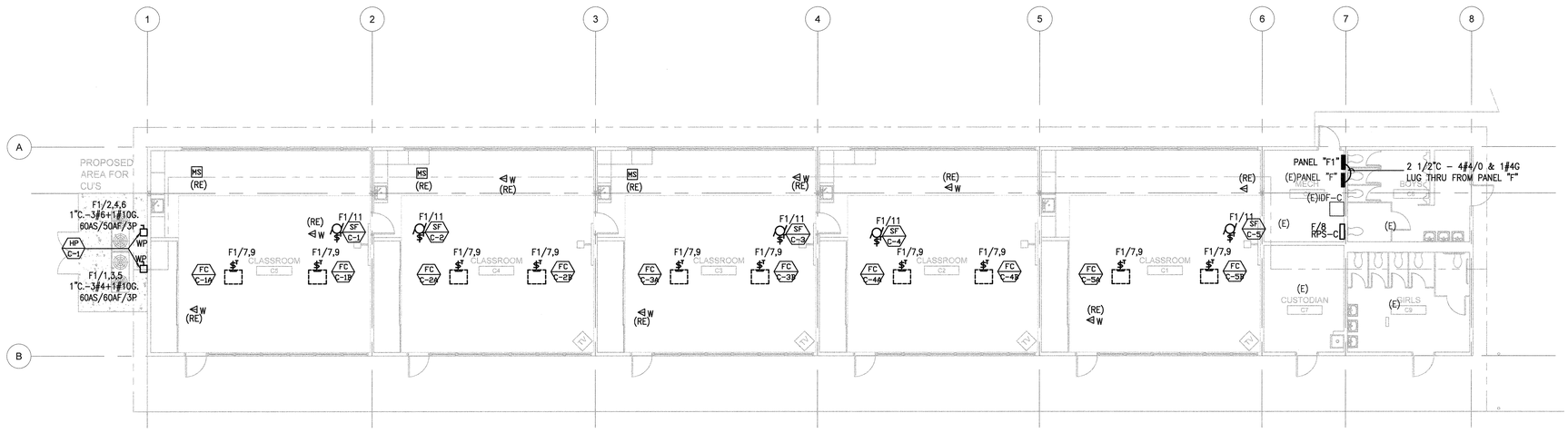
E2.4

COPYRIGHT ©2017



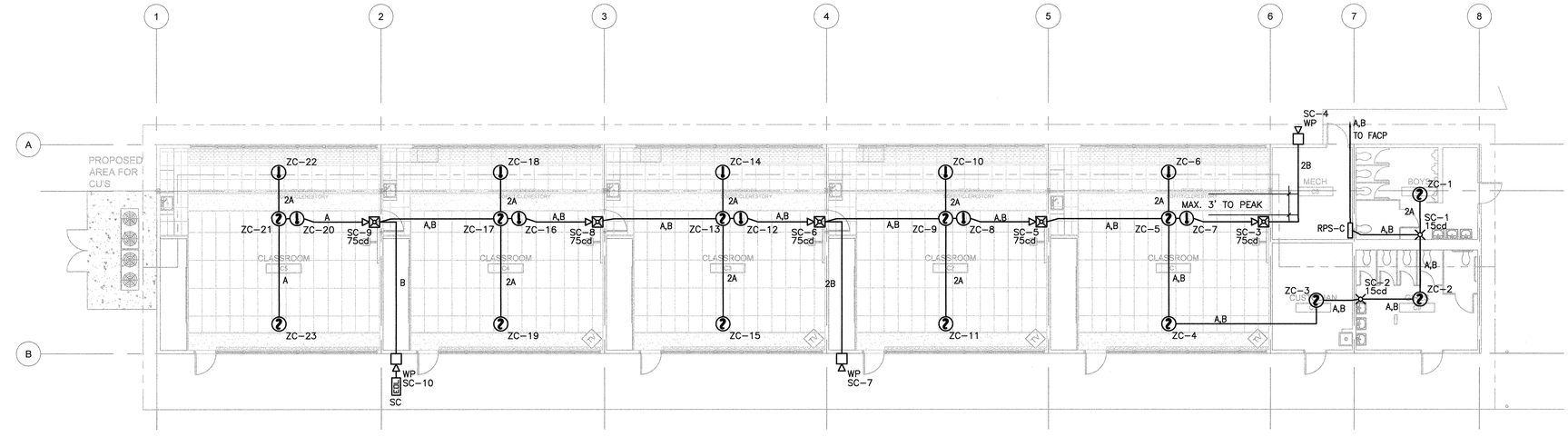
1 BUILDING C - LIGHTING PLAN

1/8" = 1'-0"



2 BUILDING C - ELECTRICAL PLAN

1/8" = 1'-0"



3 BUILDING C - FIRE ALARM PLAN

1/8" = 1'-0"

DEMOLITION NOTES:

1. DISCONNECT AND REMOVE ALL EXISTING LIGHT FIXTURES AND CONTROL FOR INSTALLATION OF NEW FIXTURE/CONTROL AS SHOWN AT NEW CEILING AREA, U.O.N. RETAIN AND MODIFY <E> CIRCUITRY FOR RECONNECTION OF NEW FIXTURES WITH SWITCHING ZONES AS SHOWN. CONNECT EMERGENCY LIGHT AND EXIT SIGN TO <E> UN-SWITCHED CIRCUIT IN THE AREA.
2. DISCONNECT AND REMOVE EXISTING CEILING MOUNTED WIRELESS ACCESS DATA JACK AS SHOWN. RETAIN <E> JACKS / CABLES FOR REINSTALLATION AND RECONNECTION AT NEW CEILING. PROVIDE TESTING TO ENSURE PROPER OPERATION.
3. DISCONNECT AND REMOVE <E> FA DEVICES AND CABLES IN THE SCOPE AREA. REMOVE WIRES BACK TO THE NEAREST SOURCE. PROVIDE BLANK COVERS PLATE AT REMOVED DEVICES. RETAIN <E> CONDUIT FOR INSTALLATION OF NEW CABLES.
4. COORDINATE WITH MECH TO DISCONNECT AND REMOVE <E> POWER CONNECTIONS OF REMOVED MECH UNITS. REMOVE CONDUITS AND WIRES BACK TO SOURCE.
5. DISCONNECT AND REMOVE <E> UN-USED SURFACE MOUNTED RACEWAY / WIREMOLD BACK TO THE NEAREST SOURCE.
6. DISCONNECT AND REMOVE <E> SECURITY MOTION SENSOR FOR REINSTALLATION AND RECONNECTION AFTER NEW CEILING IS COMPLETE. PROVIDE SYSTEM TESTING TO ENSURE PROPER OPERATION.

GENERAL NOTES:

1. SEE WIRING DIAGRAM FOR LIGHTING CONTROL REQUIREMENT.
2. PROVIDE SURFACE WIREMOLD 2300 AT NON-ACCESSIBLE WALL /CEILING SURFACE FOR CABLING AS NEEDED.
3. ALL CONDUITS SHALL BE CONCEALED IN WALLS, ABOVE CEILING AND NOT ALLOWED ON ROOF, U.O.N.

SHEET NOTES:

1 REPLACE <E> SWITCHES WITH NEW CONTROL AS SHOWN.

FA CABLE LEGEND

INITIATION
'A' = WEST PENN 994 - ABOVE GRADE
WEST PENN AQ226 - BELOW GRADE

VISUAL NOTIFICATION
'B' = 2 EACH THHN #12 - RACEWAY
2 EACH THWN #12 - BELOW GRADE
WEST PENN 998 - ABOVE GRADE WITHOUT RACEWAY

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-4066

REGISTERED PROFESSIONAL ENGINEER
S. MARK FINNEY
E16525
Exp. 12-31-19
ELECTRICAL
STATE OF CALIFORNIA

Date Signed 05/22/2018

ALFATECH
1321 RODGER PARK DRIVE SUITE 50
SAN JOSE, CALIFORNIA 95131
SAN JOSE • SAN FRANCISCO • THAILAND SINGAPORE
SYDNEY • MELBOURNE • DUBLIN • CORK LONDON DUBAI
PROJECT # 217276
PH: 408-487-1200
FAX: 408-487-1422

BUILDING C - ELECTRICAL PLANS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-06-18
	DSA BACKCHECK	05-22-18

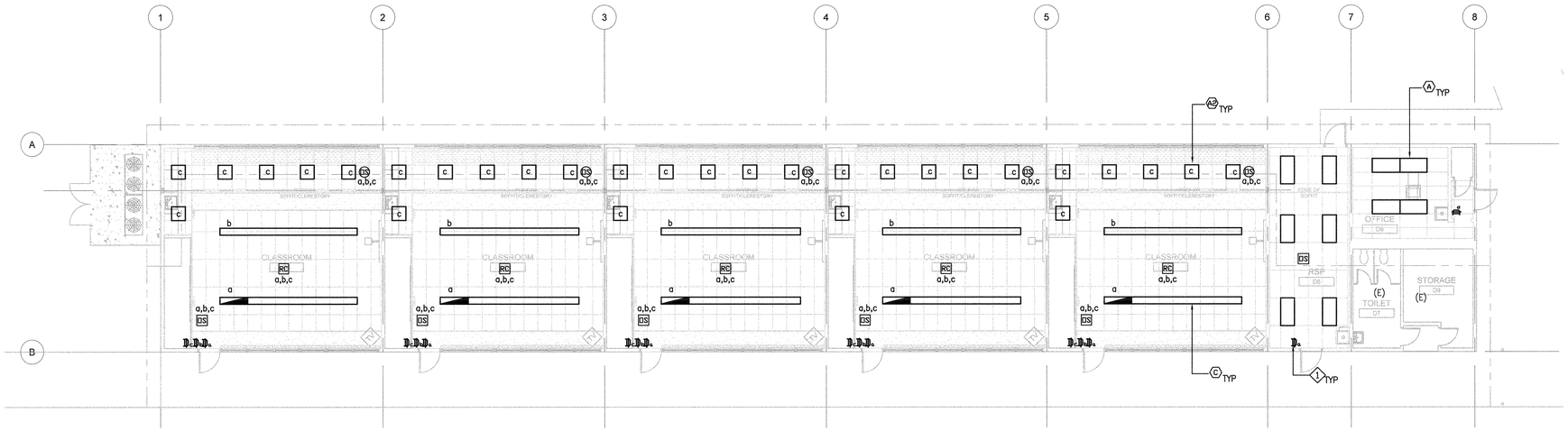
DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC FLS SS
DATE 5-22-18

DRAWN BY:	AT
CHECKED BY:	AT
JOB NO:	DATE:
17103	05/22/18

E2.5

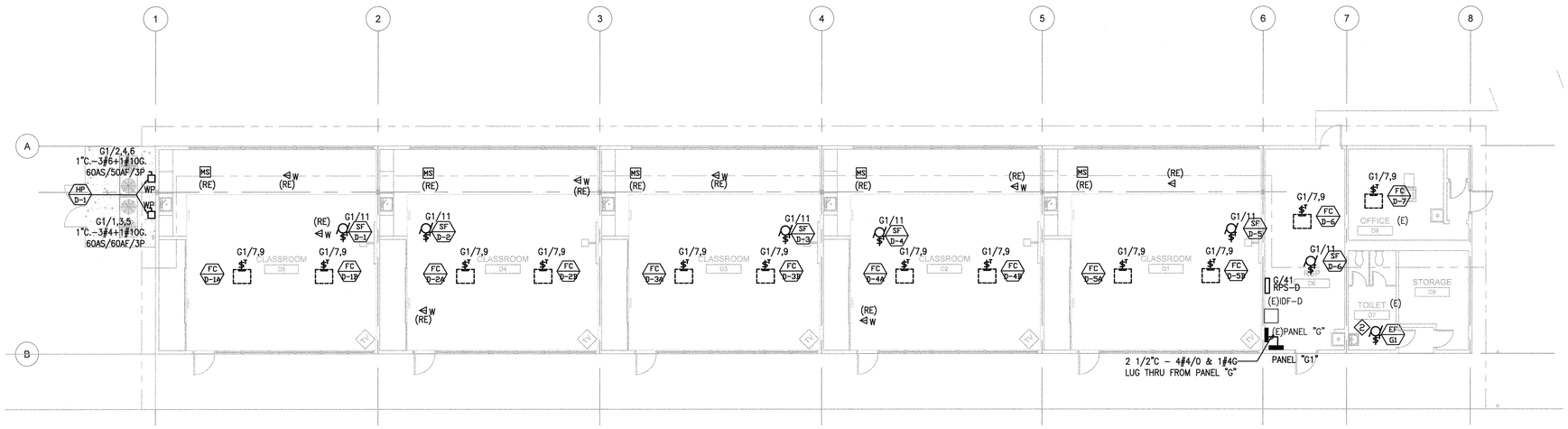
COPYRIGHT ©2017



1 BUILDING D - LIGHTING PLAN

1/8" = 1'-0"

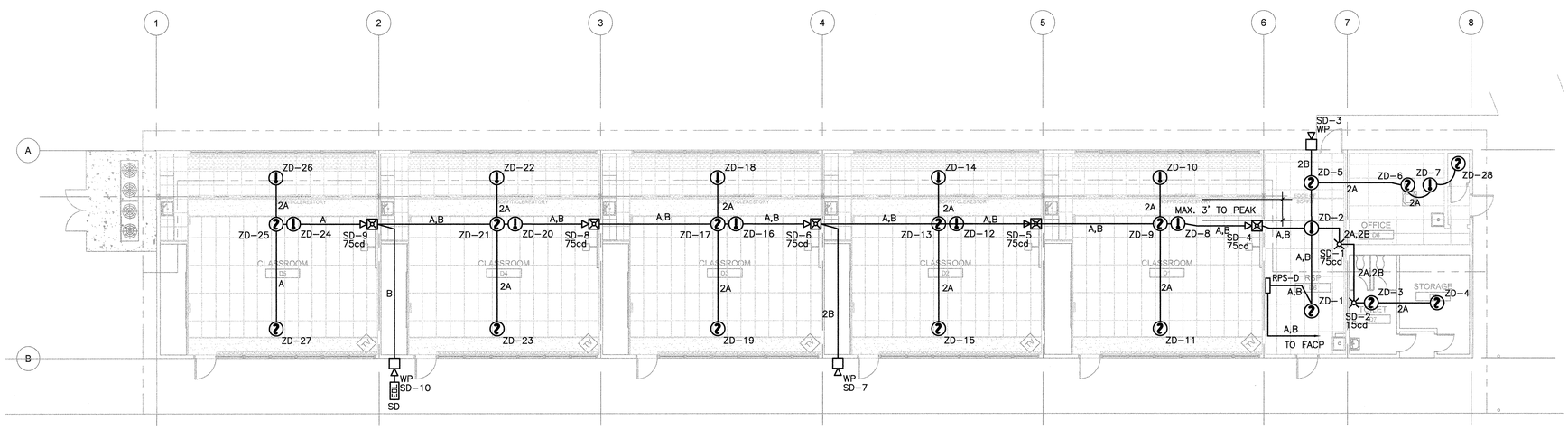
0 2' 4' 8' 16' 24'



2 BUILDING D - ELECTRICAL PLAN

1/8" = 1'-0"

0 2' 4' 8' 16' 24'



3 BUILDING D - FIRE ALARM PLAN

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

DEMOLITION NOTES:

1. DISCONNECT AND REMOVE ALL EXISTING LIGHT FIXTURES AND CONTROL FOR INSTALLATION OF NEW FIXTURE/CONTROL AS SHOWN AT NEW CEILING AREA, U.O.N. RETAIN AND MODIFY <E> CIRCUITRY FOR RECONNECTION OF NEW FIXTURES WITH SWITCHING ZONES AS SHOWN. CONNECT EMERGENCY LIGHT AND EXIT SIGN TO <E> UN-SWITCHED CIRCUIT IN THE AREA.
2. DISCONNECT AND REMOVE EXISTING CEILING MOUNTED WIRELESS ACCESS DATA JACK AS SHOWN. RETAIN <E> JACKS / CABLES FOR REINSTALLATION AND RECONNECTION AT NEW CEILING. PROVIDE TESTING TO ENSURE PROPER OPERATION.
3. DISCONNECT AND REMOVE <E> FA DEVICES AND CABLES IN THE SCOPE AREA. REMOVE WIRES BACK TO THE NEAREST SOURCE. PROVIDE BLANK COVERS PLATE AT REMOVED DEVICES. RETAIN <E> CONDUIT FOR INSTALLATION OF NEW CABLES.
4. COORDINATE WITH MECH TO DISCONNECT AND REMOVE <E> POWER CONNECTIONS OF REMOVED MECH UNITS. REMOVE CONDUITS AND WIRES BACK TO SOURCE.
5. DISCONNECT AND REMOVE <E> UN-USED SURFACE MOUNTED RACEWAY / WIREMOLD BACK TO THE NEAREST SOURCE.
6. DISCONNECT AND REMOVE <E> SECURITY MOTION SENSOR FOR REINSTALLATION AND RECONNECTION AFTER NEW CEILING IS COMPLETE. PROVIDE SYSTEM TESTING TO ENSURE PROPER OPERATION.

GENERAL NOTES:

1. SEE WIRING DIAGRAM FOR LIGHTING CONTROL REQUIREMENT.
2. PROVIDE SURFACE WIREMOLD 2300 AT NON-ACCESSIBLE WALL /CEILING SURFACE FOR CABLING AS NEEDED.
3. ALL CONDUITS SHALL BE CONCEALED IN WALLS, ABOVE CEILING AND NOT ALLOWED ON ROOF, U.O.N.

SHEET NOTES:

1. REPLACE <E> SWITCHES WITH NEW CONTROL AS SHOWN.
2. CONNECT EXHAUST FAN TO <E> LIGHTING CIRCUIT VIA LIGHTING CONTROL.

FA CABLE LEGEND

INITIATION
'A' = WEST PENN 994 - ABOVE GRADE
WEST PENN AQ226 - BELOW GRADE

VISUAL NOTIFICATION
'B' = 2 EACH THHN #12 - RACEWAY
2 EACH THWN #12 - BELOW GRADE
WEST PENN 998 - ABOVE GRADE WITHOUT RACEWAY

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
S. MARK FISHER
E16525
Exp. 12-31-19
ELECTRICAL
STATE OF CALIFORNIA

Date Signed 05/22/2018

ALFATECH
1321 RIDDER PARK DRIVE SUITE 50
SAN JOSE, CALIFORNIA 95131
SAN JOSE SAN FRANCISCO • THAILAND SINGAPORE
SYDNEY MELBOURNE • DUBLIN • CORK LONDON DUBAI
PROJECT # 217276
408-487-1200
FAX: 408-487-1222

BUILDING D - ELECTRICAL PLANS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-06-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

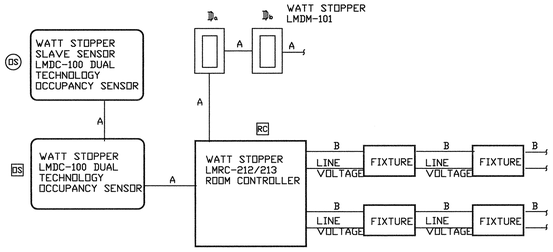
APPL 01-117271

AP FLS MS SS
DATE 5-22-18

DRAWN BY:	AT
CHECKED BY:	AT
JOB NO:	DATE:
17103	05/22/18

E2.6

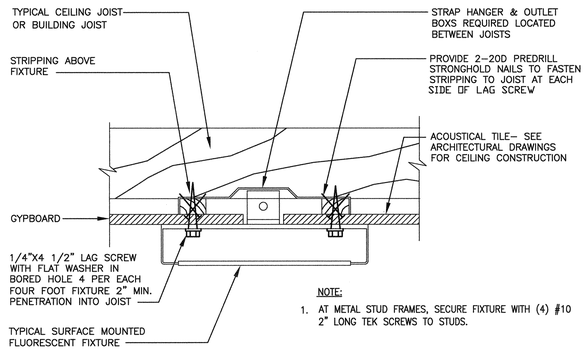
COPYRIGHT ©2017



NOTE:
1. REFER TO PLAN FOR EXACT LOCATION AND ZONE CONTROL REQUIREMENT.
2. CONTRACTOR SHALL PROVIDE ALL COMPONENT REQUIRED FOR DIGITAL CONTROL SYSTEM IN EACH AREA.
3. CONTRACTOR SHALL SCHEDULE A PRE-INSTALLATION SITE VISIT WITH WATT STOPPER REPRESENTATIVE AFTER RECEIPT OF APPROVED SUBMITTAL FOR THE CONTROL FUNCTION OVERVIEW AND INSTALLATION REQUIREMENTS.

CABLE LEGEND:
A = WATT STOPPER LMRJ CABLE
B = CLASS 2 0-10V CONTROL CABLE

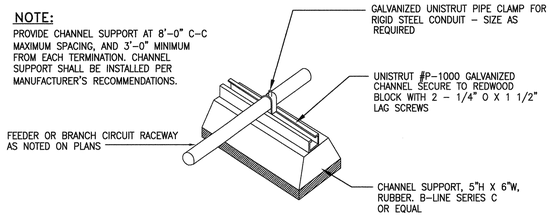
5 DIGITAL CONTROL DIAGRAM
SCALE: NOT TO SCALE



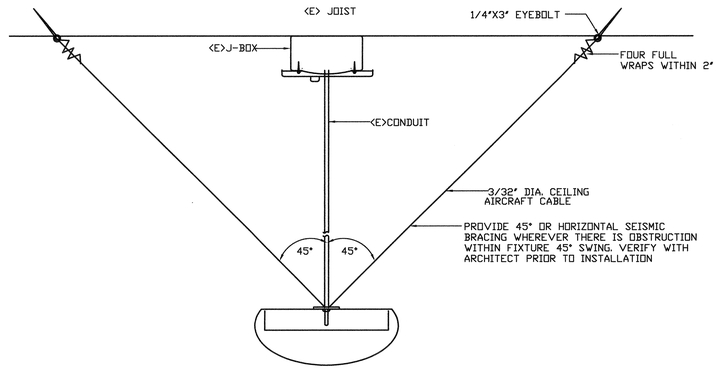
NOTE:
1. AT METAL STUD FRAMES, SECURE FIXTURE WITH (4) #10 2" LONG TEK SCREWS TO STUDS.

2 SURFACE MOUNTED FIXTURE
SCALE: NOT TO SCALE

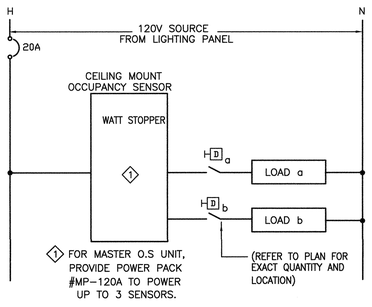
NOTE:
PROVIDE CHANNEL SUPPORT AT 8'-0" C-C MAXIMUM SPACING, AND 3'-0" MINIMUM FROM EACH TERMINATION. CHANNEL SUPPORT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.



6 ROOF SLEEPER/CONDUIT SUPPORT
SCALE: NOT TO SCALE



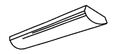
3 PENDANT MOUNTED FIXTURE
SCALE: NOT TO SCALE



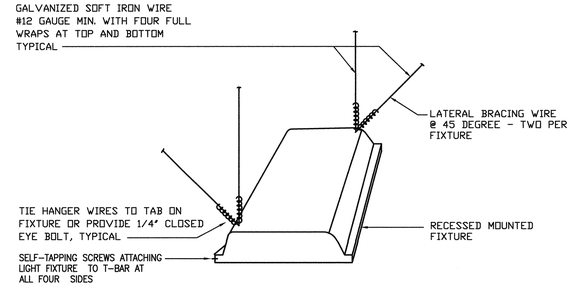
NOTE:
1. CONFIRM WITH WATT STOPPER FOR APPROPRIATE SENSOR USED IN EACH AREA SHOWN ON THE PLANS PRIOR TO ORDERING. PROVIDE ALL NECESSARY POWER PACK FOR A COMPLETE DIMMING CONTROL SYSTEM.

4 CEILING-MOUNTED OS WITH WALL MOUNTED DIMMER CONTROL
SCALE: NOT TO SCALE

FIXTURE SCHEDULE-INTERIOR

TYPE	SKETCH	DESCRIPTION	FINISH	MANUFACTURER	LAMP
A		2'X4' T BAR LAY IN LED LUMINAIRE WITH COLD ROLLED STEEL HOUSING, REFLECTORS, DIFFUSE CENTER OPTIC IMPACT RESISTANT FROSTED WAVE ACRYLIC LENS, 0-10V LED DIMMING DRIVER. 120VAC	WHITE	FINELITE HPR-LED-WAV2X4-DCO-HO-3500K-120V-SC-C1	41W LED 3500K 90 CRI
A1		SIMILAR TO TYPE "A" EXCEPT WITH 1700 LUMEN EMERGENCY BATTERY PACK.	WHITE	FINELITE HPR-LED-WAV2X4-DCO-HO-3500K-120V-SC-C1-EM	41W LED 3500K 90 CRI
A2		SIMILAR TO TYPE "A" EXCEPT 2'X2'.	WHITE	FINELITE HPR-LED-WAV2X2-DCO-HO-3500K-120V-SC-C1	43W LED 3500K 90 CRI
B		4' SURFACE MOUNTED LED WRAPAROUND WITH COLD GAUGE STEEL HOUSING, ACRYLIC PRISMATIC DIFFUSER, IRON PHOSPHATE FINISH, CURVED PRISMATIC DIFFUSER LENS, LED DRIVERS. 120VAC	WHITE	WILLIAMS 394-L52-835-DRV-UNV OR DAYBRITE, METALUX EQUAL	51W LED 3500K
B1		SIMILAR TO TYPE "B" EXCEPT WITH EMERGENCY BATTERY PACK.	WHITE	WILLIAMS 394-L52-835-EM-DRV-UNV OR DAYBRITE, METALUX EQUAL	51W LED 3500K
C		HIGH PERFORMANCE LED INDIRECT/INDIRECT AIRCRAFT CABLE SUSPENDED FIXTURE, EXTRUDED ALUMINUM BODY OF LENGTH AS SHOWN ON PLAN, DIE FORMED 20 GAUGE CRS REFLECTOR, FROSTED SHANP-IN LENS, 120V DIMMING DRIVER AND EMERGENCY BATTERY PACK AT LOCATION AS SHOWN ON PLAN	WHITE	FINELITE HP-4ID-XX-SO-HO-3500K-TG-120V-FA-SC-C1 OR APPROVAL EQUAL	55W LED 3500K
D		2'X4' SURFACE MOUNTED LED LUMINAIRE WITH COLD ROLLED STEEL POST PAINTED HOUSING, FROSTED ACRYLIC LENS, FLAT DOOR FRAME, LED DIMMING DRIVER. 120VAC	WHITE	WILLIAMS 124-L52/935-FAF12125-DIM-120V OR APPROVED EQUAL	59W LED 3500K 90 CRI
D1		SIMILAR TO TYPE "D" EXCEPT WITH EMERGENCY BATTERY PACK.	WHITE	WILLIAMS 124-L52/935-FAF12125-EM-DIM-120V OR APPROVED EQUAL	59W LED 3500K 90 CRI
X	EXIT	WALL MOUNTED LED EXIT SIGN WITH GREEN LETTERS ON WHITE BACKGROUND, THERMOPLASTIC HOUSING, INDICATING ARROWS AS SHOWN AND EMERGENCY BATTERY PACK. 277VAC	WHITE W/GREEN LETTERS	SURE-LITES LPX SERIES LPX70DG-WH EMERGI-LITE OR APPROVED EQUAL	LED

GENERAL NOTES:
1. ALL LED FIXTURES SHALL HAVE EFFICACY OF 85 LUMEN/WATT MIN. AND 85 CRI MIN. TO QUALIFY FOR UTILITY ENGERGY REBATE.
2. EMERGENCY FIXTURE SHALL BE WIRED TO BE SWITCH & SHALL NOT BE WIRED AS NIGHT LIGHT.



1 TYPICAL RECESSED FIXTURE IN T-BAR CEILING
SCALE: NOT TO SCALE

COPYRIGHT ©2017

L:\2017\217276 ARUSD McCollam HVAC Upgrade Electrical Design\CAD\276E41.dwg TIME: May08, 18-08:25AM LOGIN: janec

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE. SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER S. MARK FINNEY E16525 Exp. 10-31-19 ELECTRICAL STATE OF CALIFORNIA

Date Signed 05/22/2018

ALFATECH
1321 ROGER PARK DRIVE SUITE 50 SAN JOSE, CALIFORNIA 95131
408-487-1200 FAX: 408-487-1222
SAN JOSE • SAN FRANCISCO • THAILAND • SINGAPORE
SAN JOSE • MELBOURNE • DUBLIN • CORK • LONDON • DUBAI
PROJECT # 217276

FIXTURE SCHEDULE AND DETAILS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-06-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
AC FLS SS
DATE 5-22-18

DRAWN BY:	AT
CHECKED BY:	AT
JOB NO:	DATE:
17103	05/22/18

E4.1

PANEL "G1" — LOCATION: BLDG. D

TYPE	DESCRIPTION	LOAD	BKR	CIR	A	B	C	CIR	BKR	LOAD	DESCRIPTION	TYPE
M3	HP-D-1	5000	60/3	1	9000			2	50/3	4000	HP-D-2	M3
M3	-	5000	-	3		9000		4	-	4000	-	M3
M3	-	5000	-	5			9000	6	-	4000	-	M3
M2	FC-D-1A TO FA-3-5B	800	20/2	7	800			8	20/1		SPARE	
M2	-	800	-	9		800		10	20/1		SPARE	
M1	SF-D-1 TO SF-D-5	800	20/1	11			800	12	20/1		SPARE	
	SPARE		20/1	13	0			14	20/1		SPARE	
	SPARE		20/1	15		0		16	20/1		SPARE	
	SPARE		20/1	17			0	18	20/1		SPARE	
	SPARE		20/1	19	0			20	20/1		SPARE	
	SPARE		20/1	21		0		22	20/1		SPARE	
	SPARE		20/1	23			0	24	20/1		SPARE	
	SPACE			25	0			26			SPACE	
	SPACE			27		0		28			SPACE	
	SPACE			29			0	30			SPACE	
	SPACE			31	0			32			SPACE	
	SPACE			33		0		34			SPACE	
	SPACE			35			0	36			SPACE	
	SPACE			37	0			38			SPACE	
	SPACE			39		0		40			SPACE	
	SPACE			41			0	42			SPACE	
				VA	9800	9800	9800					
				AMPS	82	82	82					

BUS RATING:	225	GROUND:	BUS	NOTES:
VOLTAGE:	208 /120V	MOUNTING:	SURFACE	
PHASE:	3	ENCLOSURE:	NEMA 1	
WIRE:	4	FEED:		
MCB OR LUGS:	225 MLO 80%	CONNECTED KVA:	29.4	
AIC RATING:	10K	CONNECTED AMPS:	81.6	
BUS:	225	R - RECEPTACLE KVA LOAD:	0.0	
NEUTRAL:	100%	L - LIGHTING KVA LOAD:	0.0	
MAX. ALLOWED AMPS	180	M1, M2 OR M3 - MOTOR KVA LOAD:	33.2	
		O - OTHER KVA LOAD:	0.0	
		FEEDER LOAD AMP:	92.0	

PANEL "D1" — LOCATION: BLDG A

TYPE	DESCRIPTION	LOAD	BKR	CIR	A	B	C	CIR	BKR	LOAD	DESCRIPTION	TYPE
M2	FC-A/1A THRU FA-A11	500	20/2	1	5500			2	60/3	5000	HP-A1	M3
M2	-	500	-	3		5500		4	-	5000	-	M3
M1	SF-A	800	20/1	5			5800	6	-	5000	-	M3
R	RPS-A	200	*20/1	7	5200			8	60/3	5000	HP-A1	M3
	SPARE		20/1	9		5000		10	-	5000	-	M3
	SPARE		20/1	11			5000	12	-	5000	-	M3
	SPARE		20/1	13	0			14	20/1		SPARE	
	SPARE		20/1	15		0		16	20/1		SPARE	
	SPARE		20/1	17			0	18	20/1		SPARE	
	SPARE		20/1	19	0			20	20/1		SPARE	
	SPARE		20/1	21		0		22	20/1		SPARE	
	SPARE		20/1	23			0	24	20/1		SPARE	
	SPACE			25	0			26			SPACE	
	SPACE			27		0		28			SPACE	
	SPACE			29			0	30			SPACE	
	SPACE			31	0			32			SPACE	
	SPACE			33		0		34			SPACE	
	SPACE			35			0	36			SPACE	
	SPACE			37	0			38			SPACE	
	SPACE			39		0		40			SPACE	
	SPACE			41			0	42			SPACE	
				VA	10700	10500	10800					
				AMPS	89	87	90					

BUS RATING:	225	GROUND:	BUS	NOTES:
VOLTAGE:	208 /120V	MOUNTING:	SURFACE	* PROVIDE LOCK ON
PHASE:	3	ENCLOSURE:	NEMA 1	DEVICE
WIRE:	4	FEED:		
MCB OR LUGS:	150 MCB 80%	CONNECTED KVA:	32.0	
AIC RATING:	10K	CONNECTED AMPS:	88.8	
BUS:	150	R - RECEPTACLE KVA LOAD:	0.2	
NEUTRAL:	100%	L - LIGHTING KVA LOAD:	0.0	
MAX. ALLOWED AMPS	120	M1, M2 OR M3 - MOTOR KVA LOAD:	35.6	
		O - OTHER KVA LOAD:	0.0	
		FEEDER LOAD AMP:	99.2	

PANEL "E1" — LOCATION: BLDG. B

TYPE	DESCRIPTION	LOAD	BKR	CIR	A	B	C	CIR	BKR	LOAD	DESCRIPTION	TYPE
M3	HP-B-1	5000	60/3	1	9000			2	50/3	4000	HP-B-2	M3
M3	-	5000	-	3		9000		4	-	4000	-	M3
M3	-	5000	-	5			9000	6	-	4000	-	M3
M2	FC-B-1A TO FA-B-5B	800	20/2	7	800			8	20/1		SPARE	
M2	-	800	-	9		800		10	20/1		SPARE	
M1	SF-B-1 TO SF-B-5	500	20/1	11			500	12	20/1		SPARE	
	SPARE		20/1	13	0			14	20/1		SPARE	
	SPARE		20/1	15		0		16	20/1		SPARE	
	SPARE		20/1	17			0	18	20/1		SPARE	
	SPARE		20/1	19	0			20	20/1		SPARE	
	SPARE		20/1	21		0		22	20/1		SPARE	
	SPARE		20/1	23			0	24	20/1		SPARE	
	SPACE			25	0			26			SPACE	
	SPACE			27		0		28			SPACE	
	SPACE			29			0	30			SPACE	
	SPACE			31	0			32			SPACE	
	SPACE			33		0		34			SPACE	
	SPACE			35			0	36			SPACE	
	SPACE			37	0			38			SPACE	
	SPACE			39		0		40			SPACE	
	SPACE			41			0	42			SPACE	
				VA	9800	9800	9500					
				AMPS	82	82	79					

BUS RATING:	225	GROUND:	BUS	NOTES:
VOLTAGE:	208 /120V	MOUNTING:	SURFACE	
PHASE:	3	ENCLOSURE:	NEMA 1	
WIRE:	4	FEED:		
MCB OR LUGS:	150 MLO 80%	CONNECTED KVA:	29.1	
AIC RATING:	10K	CONNECTED AMPS:	80.8	
BUS:	200	R - RECEPTACLE KVA LOAD:	0.0	
NEUTRAL:	100%	L - LIGHTING KVA LOAD:	0.0	
MAX. ALLOWED AMPS	120	M1, M2 OR M3 - MOTOR KVA LOAD:	32.9	
		O - OTHER KVA LOAD:	0.0	
		FEEDER LOAD AMP:	91.2	

PANEL "F1" — LOCATION: BLDG. C

TYPE	DESCRIPTION	LOAD	BKR	CIR	A	B	C	CIR	BKR	LOAD	DESCRIPTION	TYPE
M3	HP-C-1	5000	60/3	1	9000			2	50/3	4000	HP-C-2	M3
M3	-	5000	-	3		9000		4	-	4000	-	M3
M3	-	5000	-	5			9000	6	-	4000	-	M3
M2	FC-C-1A TO FA-C-5B	800	20/2	7	800			8	20/1		SPARE	
M2	-	800	-	9		800		10	20/1		SPARE	
M1	SF-C-1 TO SFC-5	800	20/1	11			800	12	20/1		SPARE	
	SPARE		20/1	13	0			14	20/1		SPARE	
	SPARE		20/1	15		0		16	20/1		SPARE	
	SPARE		20/1	17			0	18	20/1		SPARE	
	SPARE		20/1	19	0			20	20/1		SPARE	
	SPARE		20/1	21		0		22	20/1		SPARE	
	SPARE		20/1	23			0	24	20/1		SPARE	
	SPACE			25	0			26			SPACE	
	SPACE			27		0		28			SPACE	
	SPACE			29			0	30			SPACE	
	SPACE			31	0			32			SPACE	
	SPACE			33		0		34			SPACE	
	SPACE			35			0	36			SPACE	
	SPACE			37	0			38			SPACE	
	SPACE			39		0		40			SPACE	
	SPACE			41			0	42			SPACE	
				VA	9800	9800	9800					
				AMPS	82	82	82					

BUS RATING:	225	GROUND:	BUS	NOTES:
VOLTAGE:	208 /120V	MOUNTING:	SURFACE	
PHASE:	3	ENCLOSURE:	NEMA 1	
WIRE:	4	FEED:		
MCB OR LUGS:	225 MLO 80%	CONNECTED KVA:	29.4	
AIC RATING:	10K	CONNECTED AMPS:	81.6	
BUS:	225	R - RECEPTACLE KVA LOAD:	0.0	
NEUTRAL:	100%	L - LIGHTING KVA LOAD:	0.0	
MAX. ALLOWED AMPS	180	M1, M2 OR M3 - MOTOR KVA LOAD:	33.2	
		O - OTHER KVA LOAD:	0.0	
		FEEDER LOAD AMP:	92.0	

COPYRIGHT ©2017

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE. SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER — S. MARK FISHER — E16525 — Exp. 12-31-19 — ELECTRICAL — STATE OF CALIFORNIA

Date Signed 05/22/2018

ALFATECH
1321 REDDER PARK DRIVE, SUITE 20 GARLAND, TEXAS 75042
SAN JOSE SAN FRANCISCO • THAILAND SINGAPORE
SYDNEY MELBOURNE • DUBLIN • CORK LONDON DUBAI
PROJECT # 217276
408-487-1200
FAX: 408-487-1201

PANEL SCHEDULES

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-06-18
	DSA BACKCHECK	05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
APP'D [signature] FLS MS SS
DATE 5-22-18

DRAWN BY:	AT
CHECKED BY:	AT
JOB NO:	DATE:
17103	05/22/18

E4.2

FIRE ALARM MATERIAL LIST

SYMBOL	NAME	DESCRI PTI ON	CALIFORNIA STATE FIRE MARSHAL LISTING
FACP	FIRE ALARM CONTROL PANEL ADDRESSIBLE WITH UDACT AND CELLUAR TRANSMITTER	GAMEWELL/FCI S3 CONTROL PANEL IPGSM-4G	7165-1703:0176
RPS	NEW FIRE ALARM REMOTE POWER SUPPLY WITH 8 AMP BATTERY BACK-UP	GAMEWELL/FCI HPF24S8	7315-1637:0102
	FIRE ALARM STROBE LIGHT WITH CANDELLA AS NOTED	WHEELOCK STR	7125-0785:0168
	FIRE ALARM HORN/STROBE WITH CANELLA AS NOTED	WHEELOCK HS	7125-0785:0168
WP	FIRE ALARM EXTERIOR HORN WITH WEATHERPROOF BACK-BOX	WHEELOCK AH-24WP-R	7125-0785:0131
P	FIRE ALARM ADDRESSABLE MANUAL PULL STATION	GAMEWELL/FCI MS-7AF	7150-1703:0109
	FIRE ALARM PHOTOELECTRONIC SMOKE DETECTOR 30 FT. RECOMMENDED SPACING	GAMEWEEL/FCI #ASD-PL2F/ADB-FLF	7272-1703:0121 7300-1703:0103
	FIRE ALARM HEAT DETECTOR ABOVE CEILING, "c" INDICATES BELOW CEILING	GAMEWELL/FCI #ATD-HL2F/ADB-FLF	7270-1703:0115 7300-1703:0103
MM	MONITOR MODULE	GAMEWELL/FCI #AMM-2F	7300-1703:0102
RM	RELAY MODULE	GAMEWELL/FCI #AOM-2RF	7300-1703:0102
DOC	RECORD DOCUMENT CABINET	SPACE AGE SRD	7300-0553:0110
EOL	END OF LINE DEVICE		

INITIATION
'A' = WEST PENN 994 - ABOVE GRADE
WEST PENN AQ226 - BELOW GRADE

VISUAL NOTIFICATION
'B' = 2 EACH THHN #12 - RACEWAY
2 EACH THWN #12 - BELOW GRADE
WEST PENN 998 - ABOVE GRADE WITHOUT RACEWAY

APPLICABLE CODES:

2016 BUILDING STANDARDS' ADMINISTRATIVE CODE, PART 1, TITLE 24, C.C.R.
2016 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R.
(2015 INTERNATIONAL BUILDING CODE AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24, C.C.R.
(2011 NATIONAL ELECTRICAL CODE AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R.
(2015 UNIFORM MECHANICAL CODE AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R.
(2015 UNIFORM PLUMBING CODE AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA ENERGY CODE, PART 6, TITLE 24, C.C.R.
2016 CALIFORNIA FIRE CODE, PART 9, TITLE 24, C.C.R.
(2015 INTERNATIONAL FIRE CODE AND 2016 CALIFORNIA AMENDMENTS)
TITLE 19 C.C.R. PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
PARTIAL LIST OF APPLICABLE STANDARDS:

NFPA 13 AUTOMATIC SPRINKLER SYSTEMS 2016 EDITION
NFPA 14 STANDPIPE SYSTEMS (CA AMENDED) 2013 EDITION
NFPA 17A WET CHEMICAL SYSTEMS 2013 EDITION
NFPA 24 PRIVATE FIRE MAINS (CA AMENDED) 2016 EDITION
NFPA 72 NATIONAL FIRE ALARM CODE (CA AMENDED) 2016 EDITION
REFERENCE CODE SECTION FOR NFPA STANDARDS, 2016 CBC (SFM) CHAPTER 35.

SCOPE OF WORK :

PROVIDE NEW ADDRESSABLE, AUTOMATIC FIRE ALARM DEVICES AND CABLING AT ADMIN-KINDER, BLDG. A, B, C, D NEW CEILING AREAS WITH CROSS TRIP CONNECTION TO <E> CAMPUS FIRE ALARM SYSTEM.

THE NEW FIRE ALARM SYSTEM COMPLIES WITH GREEN OAKS FAMILY ACADEMY ELEMENTRY SCHOOL FIRE PROTECTION ACT (SB 575)

CLASSROOMS DO NOT CONTAIN FUEL-BURNING APPLIANCE, FUEL BURNING FIREPLACE OR GAS FIRED FORCED-AIR FURNACE HENCE CARBON MONOXIDE DETECTION IS NOT REQUIRED.

TYPE OF SYSTEM

THIS IS A MANUAL / AUTOMATIC ADDRESSABLE FIRE ALARM SYSTEM.

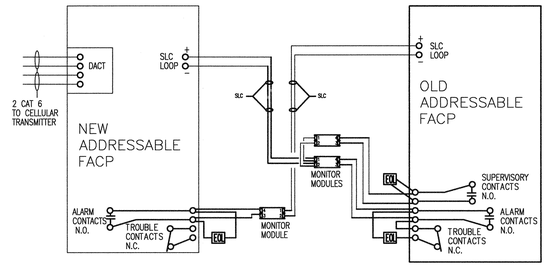
CLASS "B" PER 2016 NFPA 72 SECTION 12.3.2.

FIRE ALARM NOTES

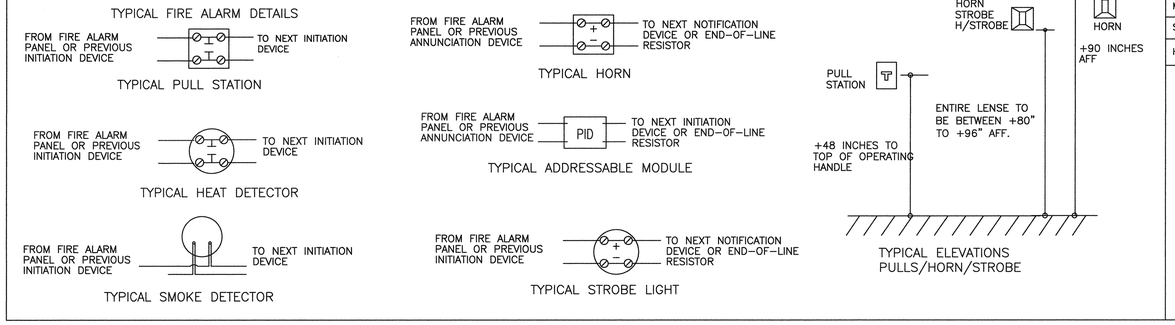
1. POWER SERVICE SHALL BE ON A DEDICATED BRANCH CIRCUIT WITH A RED MARKING AND IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL".
2. PROVIDE TEMPORAL-THREE DISTINCTIVE FIRE ALARM SOUND.
3. AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15 dBA ABOVE THE AVERAGE AMBIENT SOUND LEVEL IN ALL OCCUPIABLE AREAS. (I.E. 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 BE LESS THAN ONE FLASH EVERY SECOND.
5. AUDIBLE SIGNALS INTENDED FOR OPERATION IN THE PUBLIC MODE SHOULD HAVE A SOUND LEVEL OF NOT LESS THAN 75 dBA AT 10 FEET OR MORE THAN 100 dBA AT THE MINIMUM HEARING DISTANCE FROM THE AUDIBLE APPLIANCE.
6. FINAL FIRE ALARM TEST SHALL BE MADE WITH THE DSA INSPECTOR OF RECORD (IOR). LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF DATE AND TIME OF FINAL FIRE ALARM TESTING AND SHALL ASSIST/WITNESS SUCH TESTING AT THEIR DISCRETION.
7. FIRE ALARM CONTRACTOR SHALL PROVIDE A "RECORD OF COMPLETION" TO THE INSPECTOR OF RECORD (IOR)/DSA AFTER COMPLETION OF OPERATIONAL ACCEPTANCE TEST.
8. FINAL FIRE ALARM TEST SHALL BE MADE WITH DSA INSPECTOR OF RECORD. LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF DATE AND TIME OF FINAL FIRE ALARM TESTING AND SHALL ASSIST/WITNESS SUCH TESTING WHEN AVAILABLE.
9. ALL FIRE ALARM WIRE SHALL BE INSTALLED IN CONDUIT MIN. SIZE 3/4" OR 800 WIREMOLD AT FINISHED AREA UNLESS OTHERWISE NOTED. EXTERIOR AND UNDERGROUND CONDUITS SHALL HAVE WATER TIGHT FITTINGS. (CEC 110-11 AND 300-6). FIRE RATED CABLE MAY BE ROUTED IN OPEN AIR ABOVE T-BAR CEILING WITHOUT CONDUITS.
10. CONTRACTOR SHALL VERIFY EXACT DEVICE AND CABLE TYPE WITH FACP MANUFACTURER TO ENSURE COMPATIBILITY PRIOR TO ORDERING.PROVIDE ALL NECESSARY MODULES, RELAYS, ETC TO ENSURE A COMPLETE OPERATING SYSTEM.

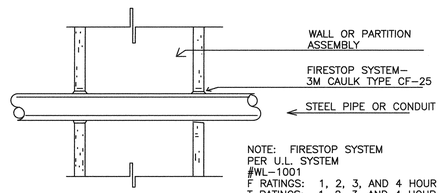
OPERATION MATRIX

	ACTUATE COMMON ALARM SIGNAL INDICATOR	ACTUATE AUDIBLE ALARM SIGNAL	ACTUATE COMMON AUXILIARY SIGNAL INDICATOR	ACTUATE AUDIBLE SUPERVISORY SIGNAL	TRANSMIT ALARM SIGNAL TO SUPERVISING STATION		
MANUAL STATIONS	X	X			X		
SMOKE DETECTOR	X	X			X		
HEAT DETECTOR	X	X			X		



TYPICAL FACP CROSS CONNECT CIRCUIT DETAIL





CONDUIT PENETRATION
U.L. SYSTEM #WL-1001

FACP **CONTROL PANEL BATTERY CALCULATION**

QTY <N>	QTY <E>	PRODUCT ID	DESCRIPTION	STANDBY EACH	STANDBY TOTAL	ALARM EACH	ALARM TOTAL
1	0	S3	CONTROL PANEL	0.125000	0.125000	0.171000	0.171000
1	0	ILI-MB-E3	ANALOG MODULE	0.055000	0.055000	0.055000	0.055000
57	0	AST-HL2F	HEAT DETECTORS	0.000300	0.017100	0.006500	0.370500
0	0	DNR	DUCT SMOKE DETECTORS	0.000300	0.000000	0.006500	0.000000
74	0	ASD-PL2F	SMOKE DETECTORS	0.000300	0.022200	0.006500	0.481000
0	0	MS-7AF	PULL STATION	0.000300	0.000000	0.010000	0.000000
0	0	AMM-2F	MONITOR MODULE	0.000375	0.000000	0.000600	0.000000
2	0	AOM-2RF	RELAY CONTROL MODULE	0.000375	0.000750	0.000600	0.001200
			TOTAL STANDBY CURRENT		0.220050		
			X 24 HOURS STANDBY		5.281200		
			TOTAL ALARM CURRENT				1.078700
			5 MINUTES OF ALARM (X .83)				0.089532
			TOTAL BATTERY WITH 20% SPARE				6.444879
			BATTERY SUPPLIED				17 AH

RPS-1 **BATTERY CALCULATION**

QTY	PRODUCT ID	DESCRIPTION	STANDBY EACH	STANDBY TOTAL	ALARM EACH	ALARM TOTAL
1	HPF24S8	POWER SUPPLY	0.040000	0.040000	0.050000	0.050000
1	HS-2415	HORN/STROBE 15cd	0.000000	0.000000	0.082000	0.082000
0	HS-2430	HORN/STROBE 30cd	0.000000	0.000000	0.102000	0.000000
3	HS-2475	HORN/STROBE 75cd	0.000000	0.000000	0.148000	0.444000
0	HS-24110	HORN/STROBE 110cd	0.000000	0.000000	0.197000	0.000000
9	ST-2415	STROBE 15cd	0.000000	0.000000	0.057000	0.513000
0	ST-2430	STROBE 30cd	0.000000	0.000000	0.085000	0.000000
0	ST-2475	STROBE 75cd	0.000000	0.000000	0.135000	0.000000
0	ST-24110	STROBE 110cd	0.000000	0.000000	0.182000	0.000000
2	AH-24WP	EXTERIOR HORN	0.000000	0.000000	0.080000	0.160000
		TOTAL DEVICE STANDBY CURRENT		0.040000		
		X 24 HOURS STANDBY		0.960000		
		TOTAL DEVICE ALARM CURRENT				1.089000
		TOTAL ALARM CURRENT				1.089000
		5 MINUTES OF ALARM (X .083)				0.090387
		TOTAL BATTERY WITH 20% SPARE				1.260464
		BATTERY SUPPLIED				7AH

RPS-A **BATTERY CALCULATION**

QTY	PRODUCT ID	DESCRIPTION	STANDBY EACH	STANDBY TOTAL	ALARM EACH	ALARM TOTAL
1	HPF24S8	POWER SUPPLY	0.040000	0.040000	0.050000	0.050000
0	HS-2415	HORN/STROBE 15cd	0.000000	0.000000	0.082000	0.000000
0	HS-2430	HORN/STROBE 30cd	0.000000	0.000000	0.102000	0.000000
5	HS-2475	HORN/STROBE 75cd	0.000000	0.000000	0.148000	0.740000
0	HS-24110	HORN/STROBE 110cd	0.000000	0.000000	0.197000	0.000000
2	ST-2415	STROBE 15cd	0.000000	0.000000	0.057000	0.114000
0	ST-2430	STROBE 30cd	0.000000	0.000000	0.085000	0.000000
0	ST-2475	STROBE 75cd	0.000000	0.000000	0.135000	0.000000
0	ST-24110	STROBE 110cd	0.000000	0.000000	0.182000	0.000000
3	AH-24WP	EXTERIOR HORN	0.000000	0.000000	0.080000	0.240000
		TOTAL DEVICE STANDBY CURRENT		0.040000		
		X 24 HOURS STANDBY		0.960000		
		TOTAL DEVICE ALARM CURRENT				0.904000
		TOTAL ALARM CURRENT				0.904000
		5 MINUTES OF ALARM (X .083)				0.075032
		TOTAL BATTERY WITH 20% SPARE				1.242038
		BATTERY SUPPLIED				7AH

RPS-B **BATTERY CALCULATION**

QTY	PRODUCT ID	DESCRIPTION	STANDBY EACH	STANDBY TOTAL	ALARM EACH	ALARM TOTAL
1	HPF24S8	POWER SUPPLY	0.040000	0.040000	0.050000	0.050000
0	HS-2415	HORN/STROBE 15cd	0.000000	0.000000	0.082000	0.000000
0	HS-2430	HORN/STROBE 30cd	0.000000	0.000000	0.102000	0.000000
5	HS-2475	HORN/STROBE 75cd	0.000000	0.000000	0.148000	0.740000
0	HS-24110	HORN/STROBE 110cd	0.000000	0.000000	0.197000	0.000000
2	ST-2415	STROBE 15cd	0.000000	0.000000	0.057000	0.114000
0	ST-2430	STROBE 30cd	0.000000	0.000000	0.085000	0.000000
0	ST-2475	STROBE 75cd	0.000000	0.000000	0.135000	0.000000
0	ST-24110	STROBE 110cd	0.000000	0.000000	0.182000	0.000000
3	AH-24WP	EXTERIOR HORN	0.000000	0.000000	0.080000	0.240000
		TOTAL DEVICE STANDBY CURRENT		0.040000		
		X 24 HOURS STANDBY		0.960000		
		TOTAL DEVICE ALARM CURRENT				0.904000
		TOTAL ALARM CURRENT				0.904000
		5 MINUTES OF ALARM (X .083)				0.075032
		TOTAL BATTERY WITH 20% SPARE				1.242038
		BATTERY SUPPLIED				7AH

RPS-C **BATTERY CALCULATION**

QTY	PRODUCT ID	DESCRIPTION	STANDBY EACH	STANDBY TOTAL	ALARM EACH	ALARM TOTAL
1	HPF24S8	POWER SUPPLY	0.040000	0.040000	0.050000	0.050000
0	HS-2415	HORN/STROBE 15cd	0.000000	0.000000	0.082000	0.000000
0	HS-2430	HORN/STROBE 30cd	0.000000	0.000000	0.102000	0.000000
5	HS-2475	HORN/STROBE 75cd	0.000000	0.000000	0.148000	0.740000
0	HS-24110	HORN/STROBE 110cd	0.000000	0.000000	0.197000	0.000000
2	ST-2415	STROBE 15cd	0.000000	0.000000	0.057000	0.114000
0	ST-2430	STROBE 30cd	0.000000	0.000000	0.085000	0.000000
0	ST-2475	STROBE 75cd	0.000000	0.000000	0.135000	0.000000
0	ST-24110	STROBE 110cd	0.000000	0.000000	0.182000	0.000000
3	AH-24WP	EXTERIOR HORN	0.000000	0.000000	0.080000	0.240000
		TOTAL DEVICE STANDBY CURRENT		0.040000		
		X 24 HOURS STANDBY		0.960000		
		TOTAL DEVICE ALARM CURRENT				0.904000
		TOTAL ALARM CURRENT				0.904000
		5 MINUTES OF ALARM (X .083)				0.075032
		TOTAL BATTERY WITH 20% SPARE				1.242038
		BATTERY SUPPLIED				7AH

RPS-D **BATTERY CALCULATION**

QTY	PRODUCT ID	DESCRIPTION	STANDBY EACH	STANDBY TOTAL	ALARM EACH	ALARM TOTAL
1	HPF24S8	POWER SUPPLY	0.040000	0.040000	0.050000	0.050000
0	HS-2415	HORN/STROBE 15cd	0.000000	0.000000	0.082000	0.000000
0	HS-2430	HORN/STROBE 30cd	0.000000	0.000000	0.102000	0.000000
5	HS-2475	HORN/STROBE 75cd	0.000000	0.000000	0.148000	0.740000
0	HS-24110	HORN/STROBE 110cd	0.000000	0.000000	0.197000	0.000000
2	ST-2415	STROBE 15cd	0.000000	0.000000	0.057000	0.114000
0	ST-2430	STROBE 30cd	0.000000	0.000000	0.085000	0.000000
0	ST-2475	STROBE 75cd	0.000000	0.000000	0.135000	0.000000
0	ST-24110	STROBE 110cd	0.000000	0.000000	0.182000	0.000000
3	AH-24WP	EXTERIOR HORN	0.000000	0.000000	0.080000	0.240000
		TOTAL DEVICE STANDBY CURRENT		0.040000		
		X 24 HOURS STANDBY		0.960000		
		TOTAL DEVICE ALARM CURRENT				0.904000
		TOTAL ALARM CURRENT				0.904000
		5 MINUTES OF ALARM (X .083)				0.075032
		TOTAL BATTERY WITH 20% SPARE				1.242038
		BATTERY SUPPLIED				7AH

VOLTAGE DROP (VD) CALCULATION
PROJ. NAME------- MILLARD McCOLLAM ELEMENTARY SCHOOL - HVAC UPGRADES
SIG CKT #-------- S1

DEVICE #	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	31	33	23	30	29	40	45	59	22	47	33	73	22	38	88
AMPS @ DEVICE	0.057	0.057	0.057	0.057	0.057	0.082	0.08	0.057	0.057	0.148	0.148	0.057	0.057	0.08	0.148
AMPS DEVELOPE	1.199	1.142	1.085	1.028	0.971	0.914	0.832	0.752	0.695	0.638	0.49	0.342	0.285	0.228	0.148
VOLT. DROP	0.11819742	0.11984148	0.0793569	0.0980712	0.08954562	0.1162608	0.1190592	0.14109024	0.0486222	0.0953555	0.0514206	0.0793919	0.0196386	0.0275515	0.0414163

** FORMULA **
I X FEET X OHMS/ /FT

SIGNAL CIRCUIT =S1
TOTAL CKT V.D.= 1.17615162
CKT VOLTAGE= 20.4
VOLTAGE AT
FINAL DEVICE= 19.22384838

% VOLTAGE DR 5.76544912

WIRE SIZE	RESIS. /M FT.	CIRC. MILS.
10	1.21	10380
12	1.59	6530
14	2.52	4110
16	4.02	2580
18	6.39	1620
20	10.1	1020
22	16.2	640
24	25.7	404

VOLTAGE DROP (VD) CALCULATION
PROJ. NAME------- MILLARD McCOLLAM ELEMENTARY SCHOOL - HVAC UPGRADES
SIG CKT #-------- SA

DEVICE #	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	44	42	48	41	33	65	52	42	73	52	42
AMPS @ DEVICE	0.057	0.057	0.08	0.148	0.08	0.148	0.148	0.08	0.148	0.148	0.08
AMPS DEVELOPE	1.174	1.117	1.06	0.98	0.832	0.752	0.604	0.456	0.376	0.228	0.08
VOLT. DROP	0.16426608	0.14918852	0.1617964	0.1277724	0.08731008	0.1554384	0.0986774	0.06090336	0.0872846	0.0377021	0.0106848

** FORMULA **
I X FEET X OHMS/ /FT

SIGNAL CIRCUIT =SA
TOTAL CKT V.D.= 1.1422242
CKT VOLTAGE= 20.4
VOLTAGE AT
FINAL DEVICE= 19.2577758

% VOLTAGE DR 5.59913824

WIRE SIZE	RESIS. /M FT.	CIRC. MILS.
10	1.21	10380
12	1.59	6530
14	2.52	4110
16	4.02	2580
18	6.39	1620
20	10.1	1020
22	16.2	640
24	25.7	404

VOLTAGE DROP (VD) CALCULATION
PROJ. NAME------- MILLARD McCOLLAM ELEMENTARY SCHOOL - HVAC UPGRADES
SIG CKT #-------- SB

DEVICE #	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	40	54	38	33	65	52	41	73	52	42
AMPS @ DEVICE	0.057	0.057	0.148	0.08	0.148	0.148	0.08	0.148	0.148	0.08
AMPS DEVELOPE	1.094	1.037	0.98	0.832	0.752	0.604	0.456	0.376	0.228	0.08
VOLT. DROP	0.13915868	0.17807364	0.1184232	0.08731008	0.1554384	0.096877	0.0594533	0.0872846	0.0377022	0.0106848

** FORMULA **
I X FEET X OHMS/ /FT

SIGNAL CIRCUIT =SB
TOTAL CKT V.D.= 0.97340436
CKT VOLTAGE= 20.4
VOLTAGE AT
FINAL DEVICE= 19.42659564

% VOLTAGE DR 4.77159

WIRE SIZE	RESIS. /M FT.	CIRC. MILS.
10	1.21	10380
12	1.59	6530
14	2.52	4110
16	4.02	2580
18	6.39	1620
20	10.1	1020
22	16.2	640
24	25.7	404

VOLTAGE DROP (VD) CALCULATION
PROJ. NAME------- MILLARD McCOLLAM ELEMENTARY SCHOOL - HVAC UPGRADES
SIG CKT #-------- SC

DEVICE #	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	30	38	80	35	68	52	41	52	52	41
AMPS @ DEVICE	0.057	0.057	0.148	0.08	0.148	0.148	0.08	0.148	0.148	0.08
AMPS DEVELOPE	1.094	1.037	0.98	0.832	0.752	0.604	0.456	0.376	0.228	0.08
VOLT. DROP	0.1043676	0.12531108	0.249312	0.0926016	0.16261248	0.099877	0.0594533	0.0621754	0.0377021	0.0104304

** FORMULA **
I X FEET X OHMS/ /FT

SIGNAL CIRCUIT =SC
TOTAL CKT V.D.= 1.00384332
CKT VOLTAGE= 20.4
VOLTAGE AT
FINAL DEVICE= 19.39615668

% VOLTAGE DR 4.92080059

WIRE SIZE	RESIS. /M FT.	CIRC. MILS.
10	1.21	10380
12	1.59	6530
14	2.52	4110
16	4.02	2580
18	6.39	1620
20	10.1	1020
22	16.2	640
24	25.7	404

VOLTAGE DROP (VD) CALCULATION
PROJ. NAME------- MILLARD McCOLLAM ELEMENTARY SCHOOL - HVAC UPGRADES
SIG CKT #-------- SD

DEVICE #	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	48	30	38	49	52	52	41	73	52	41
AMPS @ DEVICE	0.057	0.057	0.08	0.148	0.148	0.148	0.08	0.148	0.148	0.08
AMPS DEVELOPE	1.094	1.037	0.98	0.9	0.752	0.604	0.456	0.376	0.228	0.08
VOLT. DROP	0.16698816	0.0989298	0.1184232	0.140238	0.12435072	0.099877	0.0594533	0.0872846	0.0377021	0.0104304

** FORMULA **
I X FEET X OHMS/ /FT

SIGNAL CIRCUIT =SD
TOTAL CKT V.D.= 0.94367772
CKT VOLTAGE= 20.4
VOLTAGE AT
FINAL DEVICE= 19.45632228

% VOLTAGE DR 4.62587118

WIRE SIZE	RESIS. /M FT.	CIRC. MILS.
10	1.21	10380
12	1.59	6530
14	2.52	4110
16	4.02	2580
18	6.39	1620
20	10.1	1020
22	16.2	640
24	25.7	404

COPYRIGHT©2017

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE. SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
E16525
Exp. 12-31-19
ELECTRICAL
STATE OF CALIFORNIA

Date Signed 05/22/2018

ALFATECH
1321 RIDDER PARK DRIVE, SUITE 50 408-487-1200
SAN JOSE, CALIFORNIA 95131 FAX: 408-487-1222
SAN JOSE • SAN FRANCISCO • THAILAND • SINGAPORE
SYDNEY • MELBOURNE • DUBLIN • CORK • LONDON • DUBAI
PROJECT # 217276

FIRE ALARM NOTES AND DETAILS

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE, CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

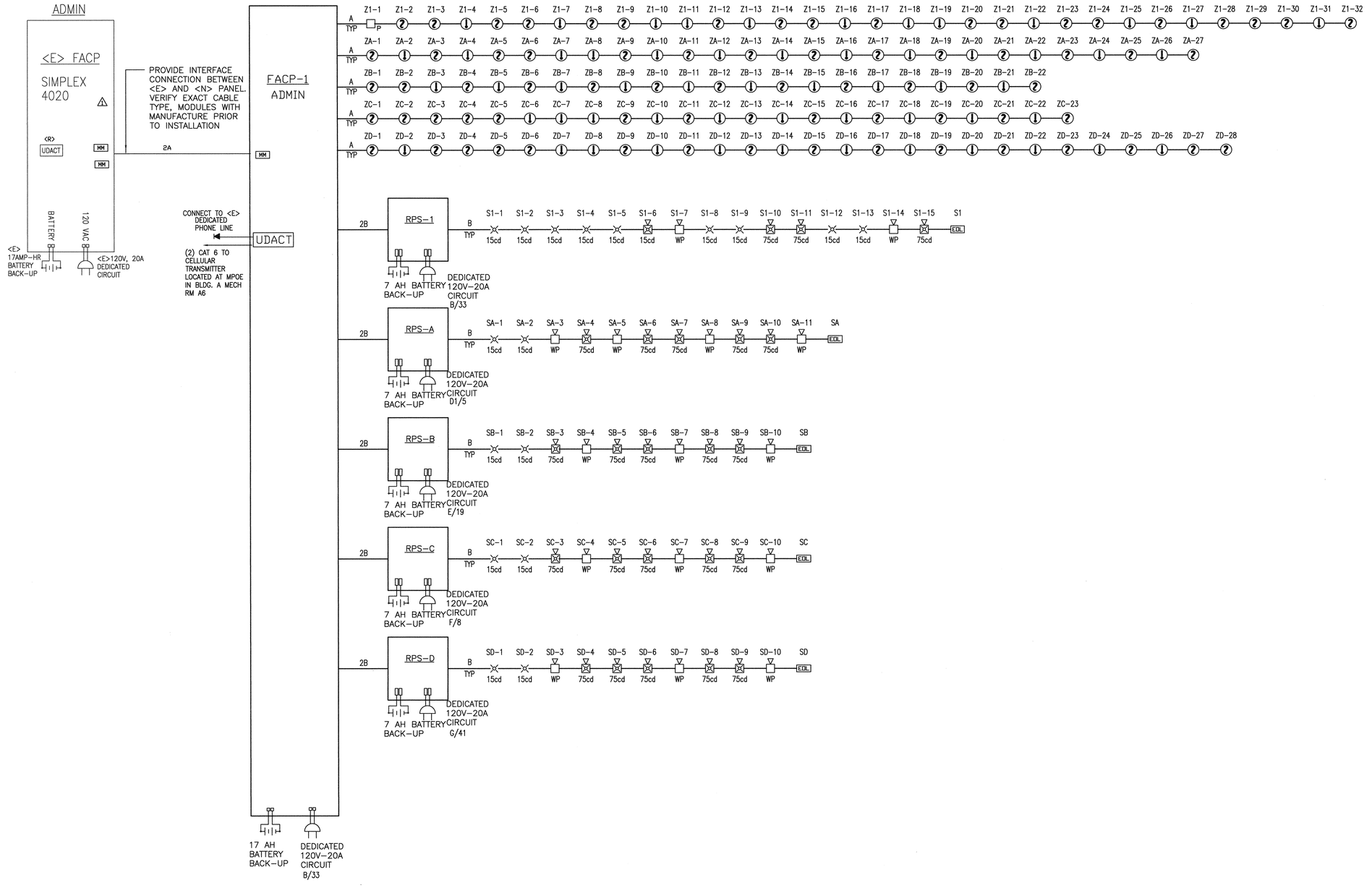
NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-06-18
1	DSA/BACKCHECK	~~04-06-18~~ 05-22-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
APP'D KG FLS MS SS
DATE 5-22-18

DRAWN BY: AT
CHECKED BY: AT
JOB NO: 17103
DATE: 05/22/18

E7.1



COPYRIGHT ©2017

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE. SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-0600
FAX: 408-377-6066

REGISTERED PROFESSIONAL ENGINEER
G. MARK FISHER
E16525
Rev. 12-31-19
ELECTRICAL
STATE OF CALIFORNIA

Date Signed 05/22/2018

ALFATECH
1321 RIDDER PARK DRIVE, SUITE 50, SAN JOSE, CALIFORNIA 95131
SAN JOSE, SAN FRANCISCO • THAILAND SINGAPORE
SAN JOSE, MELBOURNE, DUBLIN • CORK LONDON DUBAI
PROJECT # 217276
408-487-1200
FAX: 408-487-1422

FIRE ALARM RISER DIAGRAM

MILLARD McCOLLAM ELEMENTARY SCHOOL
3311 LUCIAN AVE., SAN JOSE,CA 95127
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
	DD SUBMITTAL	12-8-17
	DSA SUBMITTAL	01-31-18
	BID SET	04-06-18
1	DSA BACKCHECK ADD	05-18-18

DSA FILE NUMBER 43-04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APPL 01-117271
APP'D JG FLS MS SS
DATE 5-22-18

DRAWN BY:	AT
CHECKED BY:	AT
JOB NO:	DATE:
17103	05/22/18

E7.2